Note:
Before using this information and the product it supports, read the information in Chapter 26, "Notices," on page 661.
## Chapter 5. Issuing CAS commands
- Running a CAS command........................................... 31
- CAS command options............................................. 31
- Using CAS display primary commands.......................... 32

## Chapter 6. Searching for Objects
- Searching for a Catalog............................................. 33
  - Specifying catalog search criteria.......................... 33
  - Viewing the catalog display.................................. 33
- Searching for a DASD Volume...................................... 38
  - Specifying volume search criteria.......................... 38
  - Viewing the volume display.................................. 38
- Searching for a Storage Group.................................... 40
  - Specifying storage group search criteria.................. 40
  - Viewing the storage group display.......................... 41

## Chapter 7. Running Advanced Catalog Management Commands
- General command usage guidelines........................... 43
  - Simulation mode.................................................. 43
  - Include and Exclude Processing.............................. 43
  - Continuing lines.................................................. 43
  - Changing Keyword Default Values.......................... 45
  - Extended ACS masking characters........................... 45
- Running commands using the ISPF interface.................... 46
- Saving generated JCL and control statements................... 46
- Creating a commands library.................................... 47
- Product Build Information in SYSPRINT Output................ 50

## Chapter 8. ALTER - Clean or Repair an ICF Catalog
- ALTER BCS-BACK-POINTERS..................................... 51
- ALTER BCS-DEVICETYPE.......................................... 53
- ALTER BCS-VOLSER................................................ 56
- ALTER NONVSAM.................................................... 59
- ALTER SYS1-VVDS.................................................. 64

## Chapter 9. BACKUP - Backup ICF Catalogs or VSAM Data Sets
- BACKUP BCS......................................................... 67
- BACKUP DSN......................................................... 73
- BACKUP VVDS....................................................... 78

## Chapter 10. CATSCRUB - Synchronize Catalogs and Volumes for Disaster Recovery

## Chapter 11. DIAGNOSE - Find and Fix ICF Catalog Errors
- DIAGNOSE ALIAS.................................................... 91
- DIAGNOSE BCS....................................................... 94
- DIAGNOSE BCS-VVDS.............................................. 96
- DIAGNOSE VOLUME-BCS......................................... 101
- DIAGNOSE VVDS-VTOC........................................... 106

## Chapter 12. EXPLORE - Search ICF Catalogs for Data Sets
Chapter 13. GENERATE - Create IDCAMS Commands ........................................ 129
Chapter 14. LISTSMF - Extract and Print SMF Dump Data Set Records ...................... 137
Chapter 15. MAP - Map ICF Catalogs or VSAM KSDSs ................................................. 143
Chapter 16. MERGECAT - Merge, Split, or Copy ICF Catalogs ........................................ 145
Chapter 17. RECOVER - Recover ICF Catalogs or VSAM Data Sets .............................. 153
  RECOVER BCS .................................................. 153
  RECOVER DSN .................................................. 162
  RECOVER LIST ................................................. 170
  RECOVER VVDS ............................................... 171
Chapter 18. REORG - Reorganize an Open BCS .................................................. 175
Chapter 19. REPORT - Design Custom Reports .................................................. 189
Chapter 20. SUPERCLIP - Change a DASD Volser ............................................... 195
Chapter 21. ZAP - Change ICF Catalog, VTOC, and VSAM Data Set Records ............... 199
  ZAP BCS DELETE .............................................. 199
  ZAP BCS PATCH ............................................... 201
  ZAP BCS PRINT ................................................. 203
  ZAP DSN DELETE .............................................. 206
  ZAP DSN PATCH ............................................... 208
  ZAP DSN PRINT ............................................... 210
  ZAP VTOC DELETE .............................................. 212
  ZAP VTOC PATCH ............................................... 213
  ZAP VTOC PATCH–with CHANGED-BIT ....................... 214
  ZAP VTOC PRINT ................................................. 215
  ZAP VTOC RENAME .............................................. 217
  ZAP VVDS DELETE .............................................. 218
  ZAP VVDS PATCH ............................................... 220
  ZAP VVDS PRINT ............................................... 223
Chapter 22. Tape Audit Feature .......................................................... 227
  Running an Audit Procedure ........................................ 227
  Including and Excluding Catalogs ........................................ 227
  Correcting Errors ............................................... 228
    Automatic Error Correction .................................. 228
    Analyzing and Correcting Errors Manually .................... 230
    Browsing Audit Results ...................................... 231
    Modifying Audit Results .................................... 231
Chapter 23. Multi-Purpose Query and Format Language .................................... 233
  The Query Language Feature ...................................... 233
    Query Language Guidelines .................................. 233
    CREATE ...................................................... 235
    FROM .......................................................... 235
    FROMKEY ...................................................... 235
    JOIN .......................................................... 236
    ORDER BY ...................................................... 240
    SELECT ........................................................ 240
    TOKEY ........................................................ 242
Chapter 24. CKMINI Configuration Values

ACM_OPTIONS ........................................... 260
ALTER_SYS1_VVDS_OPTIONS ............................. 262
BACKUP_BCS_OPTIONS .................................. 262
BACKUP_DSN_OPTIONS .................................. 263
BACKUP_VVDS_OPTIONS ................................ 263
CKM00930_VALUES .................................... 263
CATSCRUB_OPTIONS ................................... 264
  Non-VSAM Data Set Defaults .......................... 264
  Non-VSAM Alias Defaults ................................ 266
  VSAM Data Set Defaults ................................ 267
  Generation Data Set Defaults ........................... 268
  Object Access Method (OAM) Defaults .................. 272
  Fatal Catalog Error Default .......................... 272
DIAG_BCS_VVDS_OPTIONS .................................. 273
DIAGNOSE_ALIAS_OPTIONS ................................ 274
DIAGNOSE_BCS-VVDS_OPTIONS ........................... 275
DIAGNOSE_ICFCAT_OPTIONS .............................. 275
DIAGNOSE_VOLUME-BCS_OPTIONS .......................... 275
DIAGNOSE_VVDS_OPTIONS ................................ 276
DIAG_VOLUME_BCS_OPTIONS ................................ 276
DIAG_VVDS_VTOC_OPTIONS ................................ 277
EXPLORE_OPTIONS .......... .............................. 277
EXPLORE_OPTIONS_ISPF ................................ 278
GENERATE_BCS-UNLOAD_OPTIONS .......................... 278
GENERATE_OPTIONS ..................................... 279
GLOBAL_EXCLUDE ..................................... 279
INIMERGE_VALUES ..................................... 281
INSTALLATION_DATASETS ................................ 281
JCLBUILD_ALLOC_PARMS ................................ 282
JCLBUILD_CKM_DATASETS ................................ 282
JCLBUILD_COMMAND_VALUES .............................. 282
JCLBUILD_JOB_PARMS ................................... 283
JCLBUILD_PROC_PARMS .................................. 283
JCLBUILD_VENDOR_DATASETS ............................. 283
LISTSMF_OPTIONS ...................................... 283
MERGECAT_OPTIONS ................................... 284
NONSMS_POOLS ......................................... 284
PRODUCT_INFO ......................................... 285
PROGRAM_CONTROL ..................................... 285
RECOVER_BCS_OPTIONS .................................. 285
RECOVER_DSN_OPTIONS .................................. 287
RECOVER_LIST_OPTIONS .................................. 288
RECOVER_SYNC_SMF_TIME ................................ 288
RECOVER_VVDS_OPTIONS ................................ 290
REORG_BCS_OPTIONS ................................... 290
REPORT_OPTIONS ....................................... 291
RESOURCE_SERIALIZE ................................... 291
SI027_VALUES .......................................... 291
SI040_VALUES ........................................... 291
SUPERCLIP_OPTIONS ................................ 292
ZAP_OPTIONS ............................................ 292

Chapter 25. Messages and Codes for Advanced Catalog Management ....... 293
Messages ................................................................ 293
  Product Error Messages ......................................... 293
  Audit Diagnostic Messages ..................................... 655

Chapter 26. Notices ............................................. 661
Trademarks ......................................................... 663
About this information

This user’s guide provides instructions for using IBM® Tivoli® Advanced Catalog Management for z/OS®. To use the procedures in this user’s guide, you must have already installed Advanced Catalog Management using the SMP/E installation process that came with the product.

This document provides instructions for installing, configuring, and using IBM Tivoli Advanced Catalog Management for z/OS. This information is designed to help system administrators and system programmers perform the following tasks:

- Plan for and install Advanced Catalog Management
- Configure Advanced Catalog Management
- Use Advanced Catalog Management to manage your ICF catalog environment

Who should read this book

This book is intended for Storage Administrators and System Programmers responsible for performing, managing, and monitoring catalog backup and maintenance functions.

The authors of this book assume that most readers are data processing professionals.

Service updates and support information

To find service updates and support information, including software fix packs, PTFs, Frequently Asked Question (FAQs), technical notes, troubleshooting information, and downloads, refer to the following Web page:

www.ibm.com/software/sysmgmt/products/support/

The IBM Tivoli Advanced Catalog Management for z/OS Library Web page provides current product documentation that you can view, print, and download. To locate publications with the most up-to-date information, refer to the following Web page:

www.ibm.com/software/tivoli/sw-library/

How to look up message explanations

You can use any of the following methods to search for messages and codes:

Searching an information center

In the search box that is located in the top left toolbar of any Eclipse help system, such as the IBM Information Management Software for z/OS Solutions Information Center, enter the number of the message that you want to locate. For example, you can enter DFS1065A in the search field.

Use the following tips to help you improve your message searches:

- You can search for information on codes by entering the code; for example, enter -327.
- Enter the complete or partial message number. You can use wild cards (* or ?) in the message number to broaden your search; for example, DFS20??i.
The information center contains the latest message information for all of the information management products that are included in the information center.

**Using a Web search**

You can use any of the popular search engines that are available on the Web to search for message explanations. When you type the specific message number or code into the search engine, you will be presented with links to the message information in IBM information centers.

**Using LookAt**

LookAt is an online facility that you can use to look up explanations for most of the IBM messages you encounter, as well as for some system abends and codes. Using LookAt to find information is faster than a conventional search because in most cases LookAt goes directly to the message explanation.

You can use LookAt from the following locations to find IBM message explanations for z/OS elements and features, z/VM®, VSE/ESA™, and Clusters for AIX® and Linux®:

- Your z/OS TSO/E host system. You can install code on your z/OS or z/OSe systems to access IBM message explanations, using LookAt from a TSO/E command line (for example, TSO/E prompt, ISPF, or z/OS UNIX® System Services running OMVS).
- Your Microsoft® Windows® workstation. You can install code to access IBM message explanations on the z/OS Collection (SK3T-4269) using LookAt from a Microsoft Windows command prompt (also known as the DOS command line).
- Your wireless handheld device. You can use the LookAt Mobile Edition with a handheld device that has wireless access and an Internet browser (for example, Internet Explorer for Pocket PCs, Blazer, or Eudora for Palm OS, or Opera for Linux handheld devices). Link to the LookAt Mobile Edition from the LookAt Web site.

You can obtain code to install LookAt on your host system or Microsoft Windows workstation from a disk on your z/OS Collection (SK3T-4269) or from the LookAt Web site (click Download, and select the platform, release, collection, and location that suit your needs). More information is available in the LOOKAT.ME files available during the download process.

**How to send your comments**

Your feedback is important in helping to provide the most accurate and high-quality information. If you have any comments about this book or any other IBM Tools documentation, use either of the following options:

- Use the online reader comment form, which is located at: [www.ibm.com/software/data/rcf/](http://www.ibm.com/software/data/rcf/)
- Send your comments by e-mail to comments@us.ibm.com. Be sure to include the name of the book, the part number of the book, the version of Advanced Catalog Management and, if applicable, the specific location of the text you are commenting on (for example, a page number or table number).
Figures
Tables

1. Configuration Steps .................................. 7
2. SAF Class Profiles .................................. 16
3. SAF Control by Command ............................ 18
4. Data set name changes .............................. 22
5. Program name changes .............................. 22
6. Parmlib member name changes ....................... 22
7. Invoking the ISPF Component ......................... 23
8. Extended ACS Masking Characters ................. 45
9. SCKMPARM Members Referred to by the SELECTS DD Statement .................................. 230
10. Boolean Operators .................................. 244
11. Extended Boolean Operators ....................... 244
12. Argument Literals .................................. 245
13. Error message severity codes ....................... 293
Chapter 1. Introduction to Advanced Catalog Management

These topics introduce you to the functionality that is provided with IBM Tivoli Advanced Catalog Management for z/OS, including its major components and some of the key benefits of using it.

What does Advanced Catalog Management do?

IBM Tivoli Advanced Catalog Management for z/OS delivers powerful features to help you audit, diagnose, recover, manage, and access your data assets, even in the event of unforeseen problems ranging from human errors to natural disasters.

24X7 data access that can help you:
- Backup, recover, and forward recover integrated catalog facility (ICF) catalogs and virtual storage access method (VSAM) volume data sets (VVDS) quickly, safely, and comprehensively.
- Achieve significantly better VSAM performance and identify direct access storage device (DASD) space savings by utilizing the MAP command for both VSAM KSDS and ICF catalogs.
- Clean hundreds of thousands of catalog entries in a few minutes and save hours at the recovery site by using the versatile CATSCRUB command.
- Audit your basic catalog structure (BCS), VVDS, and volume table of contents (VTOC) structures with fix commands automatically generated for correction of all identified error conditions.
- Backup and recover VSAM data sets and repair corrupted VSAM data sets.

Effective day-to-day ICF catalog management that can help you:
- Search across catalogs, volumes, or system-wide using over 100 data set attributes.
- Create data set reports from catalog and VTOC information with ease.
- SIMULATE major commands, such as forward recovery and MERGECAT, to document procedures and verify results before executing.
- Ensure security of powerful catalog management commands utilizing the SAF security controls. Utilize the Catalog Address Space (CAS) and hardware coupling facility interfaces to practically guarantee ICF catalog integrity.
- Utilize the familiar and easy-to-use interactive system productivity facility (ISPF) interface to help create commands and batch jobs.
- Merge, split, or clone catalogs at many times the speed of IDCAMS REPRO MERGECAT and relax knowing that you have full restart or backout capabilities.

Correlation of entries in the tape management catalog with ICF catalogs that can help identify and resolve:
- Tape data not cataloged in tape management catalogs.
- Tape data cataloged on tapes in scratch status.
- Tape data cataloged in catalogs not connected to the master catalog.
- Data in ICF catalogs not found in the tape management catalog.
- Missing catalog records for tape data by building new entries.
Summary of changes

Advanced Catalog Management V2.2 contains these enhancements and changes:

**MERGECAT-WHILE-OPEN**
Allows catalog entries which may be in use to be moved non-disruptively.

**DIAGNOSE-BCS**
Diagnoses the logical structure in catalogs, and created fixes to repair problems that are found.

**BACKUP**
Changed to use half-track blocking on DASD for all BACKUP functions to improve DASD space usage.

**EXPLORE**
Added detailed help panels for all criteria keywords and added filters for symbolic volume and data set names.

**REPORT**
Added the following functionality:
- Subtotaling and grand totalling
- Field breaks by high level qualifier
- Date formatting support
- Warnings when input data values do not fit into the report column width
- Report break rather than a page break
- Sub-totals prior to the break upon user request

**DATE-FORMAT keyword**
Added ISPF support for DATE-FORMAT keyword in REPORT.

**Symbolically related aliases**
Added support for symbolically related aliases in ISPF Search for Catalog option, EXPLORE and DIAGNOSE commands.

**Multiple master catalog support**
Added support to DIAGNOSE ALIAS when there are more than 2 master catalogs.

**DIAGNOSE VVDS-BCS**
Removed the obsolete command–DIAGNOSE VVDS-BCS.

**BACKUP DSN**
Reduced the backup file size when records are not greater than 32K.

**EXAMINE and DIAGNOSE**
Added BACKUP BCS and DSN support for execution of EXAMINE and DIAGNOSE without taking a backup.

**BACKUP DSN and BACKUP BCS**
Made performance improvements to BACKUP DSN and BACKUP BCS to reduce the number of EXCPs issued against the input object.

**Exception Exit**
Changed BACKUP DSN to save the Exception Exit attribute, and RECOVER DSN to allow Exception Exit to be changed or removed.

**Allow LOGICAL or PHYSICAL backups**
Provided an option to BACKUP DSN to allow LOGICAL or PHYSICAL backups to be taken.
New keyword for BACKUP
   Added a new keyword, TERSE, for BACKUP that suppresses the majority of informational messages produced.

Add support to RECOVER
   Added support to RECOVER to allow a percentage change request on space allocations.

MAP
   MAP now reports a non-extended format file that surpasses the non-extended format addressability limit.

Added VOLCAT fields to ZAP BCS PRINT
   Added VOLCAT fields to ZAP BCS PRINT so that library and volume cells can be printed in batch or viewed in ISPF.

ZAP VTOC
   Added ZAP VTOC viewing support and the ability to toggle the "changed bit" in the Format 1 DSCB.

ZAP VVDS PRINT FORMAT
   Added ZAP VVDS PRINT FORMAT support for cells 2A, 2B and 2C.

ZAP PRINT DSN
   ZAP PRINT DSN issues IEC161I 008-0571 messages whenever the dataset is VSAM and is not RLS. The message does not indicate a problem, but is a nuisance.

Added Tape Audit feature
   Added Tape Audit feature to provide diagnostics to compare BCS and tape management data set entries.

Prerequisites
   Advanced Catalog Management requires z/OS 1.8 or higher.

Accessibility features
   Accessibility features help a user who has a physical disability, such as restricted mobility or limited vision, to use a software product successfully.

   The major accessibility features in Advanced Catalog Management enable users to:
   • Use assistive technologies such as screen readers and screen magnifier software. Consult the assistive technology documentation for specific information when using it to access z/OS interfaces.
   • Customize display attributes such as color, contrast, and font size.
   • Operate specific or equivalent features by using only the keyboard. Refer to the following publications for information about accessing ISPF interfaces:
     – z/OS ISPF User’s Guide, Volume 1
     – z/OS TSO/E Primer
     – z/OS TSO/E User’s Guide

   These guides describe how to use ISPF, including the use of keyboard shortcuts or function keys (PF keys), include the default settings for the PF keys, and explain how to modify their functions.

How to read the syntax diagrams
   The following rules apply to the syntax diagrams used in this book.
• Read the syntax diagrams from left to right, from top to bottom, following the path of the line. The following conventions are used:
  – The >>-- symbol indicates the beginning of a syntax diagram.
  – The ---> symbol indicates that the syntax diagram is continued on the next line.
  – The >--- symbol indicates that the syntax diagram is continued from the previous line.
  – The --->< symbol indicates the end of the syntax diagram.
• Required items appear on the horizontal line (the main path).

  \[ \text{REQUARED-ITEM} \]

• Required items with multiple choices appear on the main path and the remaining choices are shown below.

  \[ \text{REQUARED-ITEM(} \]

• Optional items appear below the main path.

  \[ \text{REQUARED-ITEM} \]

• If you can choose from two or more items, they appear vertically in a stack.
  If you \textit{must} choose one of the items, one item of the stack appears on the main path.

  \[ \text{REQUARED-ITEM} \]

  If choosing one of the items is optional, the entire stack appears below the main path.

  \[ \text{optional-choice1} \]

  \[ \text{optional-choice2} \]

• An arrow returning to the left, above the main line, indicates that an item can be repeated.

  \[ \text{REQUARED-ITEM} \]
If the repeat arrow contains a comma, you must separate repeated items with a comma.

A repeat arrow above a stack indicates that you can specify more than one of the choices in the stack.

- A word or words, bracketed by vertical lines, is a placeholder for additional syntax statements that replace the word or words. The additional syntax statements diagram follows the main syntax diagram. This is done because of limited page space and to make the syntax diagrams easier to read.

- Keywords must be spelled exactly as shown. Their minimum abbreviations, if applicable, appear in uppercase. For example, the minimum abbreviation for REQuired-Item would be REQI, without the dash.

- Variables appear in all lowercase italic letters (for example, column-name). They represent user-supplied names or values.

- Separate keywords and parameters by at least one space if no intervening punctuation is shown in the diagram.

- Enter punctuation marks, parentheses, arithmetic operators, and other symbols exactly as shown in the diagram.

- Footnotes are shown by a number in parentheses, for example (1).
Chapter 2. Advanced Catalog Management Configuration

After you install Advanced Catalog Management using the installation instructions provided in the IBM Tivoli Advanced Catalog Management for z/OS Installation and Maintenance Guide that is included with the product, you must configure Advanced Catalog Management for your environment.

Important: These configuration steps are only for first time installations of Advanced Catalog Management. If you are migrating from a prior release, you must follow the conversion steps in "Configuration When Migrating From Releases Prior to 2.1" on page 21.

Configuration Summary

This table summarizes the steps that are required to configure Advanced Catalog Management.

Some of these steps are optional or might not apply to your environment.

Important:

- Do not add your own local JCL members into the Mainstar JCL library. This causes JCLBUILD to fail. Only product members should be in the JCL library.
- These configuration steps are only for first time installations of Advanced Catalog Management. If you are migrating from a prior release, you must follow the conversion steps in "Configuration When Migrating From Releases Prior to 2.1" on page 21.

Table 1. Configuration Steps

<table>
<thead>
<tr>
<th>Step</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Run CKMJLRUN.</td>
</tr>
<tr>
<td>2</td>
<td>Run CKMJINIM.</td>
</tr>
<tr>
<td>3</td>
<td>Update the variables in the CKMINI member of SCKMPARM.</td>
</tr>
<tr>
<td>4</td>
<td>Prepare environment.</td>
</tr>
<tr>
<td>5</td>
<td>Customize JCL members in hlq.SCKMCNTRL.</td>
</tr>
<tr>
<td>6</td>
<td>APF Authorize SCKMLOAD library on all systems.</td>
</tr>
<tr>
<td>7</td>
<td>Authorize program CKM01IKB under TSO.</td>
</tr>
<tr>
<td>8</td>
<td>Customize member CKMJMAIN</td>
</tr>
<tr>
<td>9</td>
<td>Customize member CKMSYS00</td>
</tr>
<tr>
<td>10</td>
<td>Define System Authorization Facility (SAF) class profiles.</td>
</tr>
<tr>
<td>11</td>
<td>Update ACF$CMDS system security table (for ACF2 users).</td>
</tr>
<tr>
<td>12</td>
<td>Update BRMINI parameter member (for Mainstar Backup and Recovery Manager users)</td>
</tr>
<tr>
<td>13</td>
<td>Update BKMINI parameter member (for IBM Tivoli Advanced Backup and Recovery users)</td>
</tr>
<tr>
<td>14</td>
<td>Optional. Customize the CKMISPF2 CLIST.</td>
</tr>
<tr>
<td>15</td>
<td>Verify EBCDIC code tables impact.</td>
</tr>
<tr>
<td>16</td>
<td>Verify ISPF component.</td>
</tr>
</tbody>
</table>
Table 1. Configuration Steps (continued)

<table>
<thead>
<tr>
<th>Step</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>17</td>
<td>Start the CKMJMAIN task</td>
</tr>
</tbody>
</table>

**Step 1: Run CKMJLRUN**

CKMJLRUN creates a set of runtime libraries using the SMP target libraries as the source.

The JCL to run CKMJLRUN can be found in the data set hlq.SCKMCNTL(CKMJLRUN). To edit the JCL and submit the job:

1. Provide a valid job card statement.
2. Change the `PPFX=PPFX` on the `//CKMJLRUN` statement to `PPFX=desired.runtime.hlq`.
3. Change the `TGTHLQ=TGTHLQ` on the `//CKMJLRUN` statement to `TGTHLQ =smp.target.hlq`.
4. Submit the job. Ensure that it ends with a completion code of 0 before proceeding to the next task.

If the job terminates with a non-zero completion code, first check to see if any error messages indicate a situation that is easily correctable. CKMJLRUN can be rerun if you delete the runtime libraries that it created. If the situation does not appear to be easily correctable, please contact Technical Support before proceeding to the next configuration step.

**Important:** All references to the HLQ in the following steps refer to your runtime HLQ created by CKMJLRUN.

**Step 2: Run CKMJINIM**

CKMJINIM merges your existing CKMINI values with the new INI# member, generating a new CKMINI2.

The JCL to run CKMJINIM can be found in the data set hlq.SCKMCNTL(CKMJINIM).

**Note:** Do not alter the contents of the CKMINI# as it will be replaced with each new release or potentially with some maintenance.

- If this is the first time that this product is being installed (there is no prior CKMINI), then:
  1. Copy CKMINI# into CKMINI.
  2. Proceed to the next configuration step.

- If you have a prior CKMINI that you wish to have merged with the new model CKMINI#, then do the following:
  1. Copy the prior CKMINI member to hlq.SCKMPARM.
  2. Edit hlq.SCKMCNTL(CKMJINIM) JCL:
     a. Provide a valid job card statement.
     b. Change the `PPFX=PPFX` on the `//CKMPROC` statement to `PPFX=your.runtime.hlq`.
  3. Submit the job and ensure that it ends with a completion code 0.
  4. Copy member SCKMPARM(CKMINI2) to CKMINI with replace.
5. Proceed to the next configuration step.

If the job terminates with a non-zero completion code, first check to see if any error messages indicate a situation that is easily correctable. CKMJINIM can be rerun. If the situation does not appear to be easily correctable, please contact Technical Support before proceeding to the next configuration step.

**Step 3: Update variables in the CKMINI member of SCKMPARM**

This topic describes how to modify values in the CKMINI member of SCKMPARM, which controls many product functions and processing, such as ISPF field defaults, batch command processing defaults, data set allocations, and so on.

If you are running Advanced Catalog Management on several systems, you can manage the CKMINI member by:

- Using separate copies of the CKMINI, editing them independently, and running CKMJINIM on each individually.
- Using the same text (multi-image INI) for all systems. This requires replicating sections with sysplex and/or system names qualifications for those sections that need token/values unique to an image. Use the CKMJINV member of SCKMCNTL data set to view the contents of the multi-image INI that will be used by any image.

To update CKMINI SCKMPARM:

1. Use ISPF Edit to update the configuration values in the CKMINI member of SCKMPARM. Be sure to review all of the tokens in the CKMINI member and set appropriate values for your installation. The tokens to pay particular attention to are:
   - The SPACE_MANAGEMENT token of the ACM_OPTIONS section
   - The INSTALLATION_DATASETS, JCLBUILD_CKM_DATASETS, and JCLBUILD_VENDOR_DATASETS sections
   - The specific sections that set ISPF interface defaults
2. After you have made all your edits, save your updated CKMINI.

After you have completed the customization process for the CKMINI member, the SCKMPARM data set should be read-only.

**Step 4: Prepare environment**

Complete these steps to prepare your environment.

Be sure that the CKMINI values are set as desired before completing this configuration step.

1. Edit the CKMJCLBD member of the SCKMCNTL library. See the comments at the beginning of the member.
   a. Provide a valid job card statement.
   b. Change the PFX=PPFX on the //CKMPROC statement to PFX=your.runtime.hql.
2. Run the CKMJCLBD JCL. This substitutes variables specified in the CKMINI into the SCKMCNTL members. You can run CKMJCLBD multiple times.
3. Run the member CKMSYMBL to update the CKMMQLS member of the hlq.SCKMPARM library. Be sure to add the proper JOBCard information.
4. Run the member CKMPLANS of the SCKMCNTL library to create a PLANS library that contains PLANS and FIXES used when auditing tapes.

5. Create a member in the SCKMCNTL library with the name useridJ for each user who will submit tape audit jobs.

**Step 5: Customize JCL Members in hlq.SCKMCNTL**

Modify all JCL members in the SCKMCNTL library

1. Optionally, modify DDs for SYSOUT, as appropriate for your installation standards, and add DDs that are significant to other unrelated program products, such as those performing ABEND analysis or alternative sort options.

2. Modify the SYSPROC statement in member CKMBTTSO so that ppfx is the product prefix assigned to Advanced Catalog Management by your installation.

3. Change the AUDIT statement in member CKMTMSBQ to the CA1 AUDIT data set name installed in your system. In a typical CA1 installation, there is no need to specify the AUDIT DSNName. If your installation does not use CA1, then ignore this step.

4. After running CKMJCLBD, make the following changes to the batch cataloged procedures CKMAUDxx:
   a. Change the JOB control statement to suit your environment.
   b. Choose a JOB CLASS that allows about five minutes of processing time (it takes a while to capture and analyze all of the information in an entire installation).

**Step 6: APF Authorize SCKMLOAD Library on all Systems**

Consult your Systems Programmer to have the SCKMLOAD library for Advanced Catalog Management added into the APF list and ensure appropriate access controls have been established.

Unless you have a requirement, it is recommended that the product modules not be placed in LINKLST because:
- It is possible to introduce problems with incompatible code when multiple products are in use.
- It could introduce a member name conflict with another product.

**Step 7: Authorize Program CKM01IKB Under TSO/E**

Consult your Systems Programmer to have program CKM01IKB added to the list of authorized programs in the AUTHTSF section of the system PARMLIB concatenation member (IKJTSOnn).

Program CKM01IKB is used by any Advanced Catalog Management function running under ISPF that needs authorization.

**Step 8: Customize member CKMJMAIN**

You must customize the SCKMCNTL library member CKMJMAIN by updating the value for “HLQ=” in the PROC statement to be the prefix for your Advanced Catalog Management runtime libraries.

If you changed the low-level qualifiers, then make the appropriate changes in the CKMJMAIN procedure.
Copy member CKMJMAIN from the SCKMCNTL runtime library into a system procedure library such as SYS1.PROCLIB.

Step 9: Customize member CKMSYS00

You must update member CKMSYS00 in SCKMPARM using the information provided in the following sections to tailor the keywords.

CKMSYS00 configuration values

This section describes the structure of the CKMSYS00 member, its syntax rules, and its keyword syntax and descriptions.

Note: If you change any of the configuration values in this SCKMPARM member, you must issue a REFRESH TYPE=CMD command to the CKMJMAIN started task before the changes will take effect.

Member CKMSYS00 consists of token assignment statements that are organized by sections.

The general format for a token statement is one of the following:

- Keyword = Parameter
- Keyword = (Parameter1, Parameter2, ..., ParameterN)

Leading blanks from the beginning of the logical card-image records are allowed for all statements. Syntax scan processing locates the first non-blank character in each logical record. The entire length of the 80-byte logical record is considered for valid data. Do not renumber the CKMSYS00 member as sequence numbers assigned in columns 73 through 80 will cause errors.

Continuation is assumed to occur whenever data crosses from one line to another, such as when you specify multiple values for the same parameter. An example of this situation follows:

```
ParameterKeyword=(value1, value2, value3, value4, value5)
```

Both line-mode and block-mode commenting is supported as follows:

- An asterisk (*) in column-1 marks the entire line as a comment. A line that is entirely blank is also considered to be a comment.
- Entire lines, blocks of lines, or portions of a line can be commented by beginning the comment with a ‘/*’ and terminating the comment with a ‘*/’.

CKMSYS00 keyword syntax and descriptions

**PLIB_DSN**

Name(s) of the product library containing ISPF panels

Default value

None

Syntax

```
PLIB_DSN=hlq.SCKMPENU
```

Acceptable values

Any valid data set name
Example
   PLIB_DSN=CKM.SCKMPENU

MLIB_DSN
   Name(s) of the product library containing ISPF messages
   Default value
      None
   Syntax
      MLIB_DSN=hlq.SCKMMENU
   Acceptable values
      Any valid data set name
   Example
      PLIB_DSN=CKM.SCKMMENU

PORTNUM
   Port number to be used for cross system communications. The port number
   selected should be the same on every system.
   Default value
      27010
   Syntax
      PORTNUM=number
   Acceptable values
      Any integer in the range 5001-65534
   Example
      PORTNUM=27010
      (For more information see the z/OS Communications Server IP
       Configuration Guide section on configuring PROFILE.TCPIP.)

LOCALCONN
   Local connection IP address or DNS name. This entry should also have a
   corresponding CONNECTION statement.
   Default value
      None
   Syntax
      LOCALCONN=ip address
   Acceptable values
      Any valid IP address or DNS name up to a length of 250 characters
   Example
      LOCALCONN=111.222.333.444

CONNECTION
   Connection IP address or DNS name. One CONNECTION statement is
   required for each system that is to be part of this network. A CONNECTION
   statement will also be required for the local system connection.
   Default value
      None
   Syntax
      CONNECTION=ip address
Acceptable values
Any valid IP address or DNS name, or a list of valid IP addresses or DNS names enclosed within parentheses up to a length of 250 characters

Example
CONNECTION=111.222.333.444
CONNECTION=(111.222.333.444, 555.666.777.888)

TIMEOUT
Timeout value, in seconds, to be used to determine when a connection is not responding.

Default value
60

Syntax
TIMEOUT=number

Acceptable values
Any integer in the range 1-600

Example
TIMEOUT=30

USERWAIT
Timeout value, in minutes, to wait for a response from a remote system. If no response is received within this time limit, the user request is aborted.

Default value
5

Syntax
USERWAIT=number

Acceptable values
Any integer in the range 1-1800

Example
USERWAIT=5

SYSCHKINTVL
System check interval wait time, in minutes, to check availability of system connections.

Default value
15

Syntax
SYSCHKINTVL=number

Acceptable values
Any integer in the range 1-240

Example
SYSCHKINTVL=15

JOBCARD1
First line to be used when creating JCL. If no jobname is placed in this line, then one is dynamically added at job submittal time.

Default value
'"JOB '"&GP.Job'"',CLASS=A,MSGCLASS=X,,'

Chapter 2. Advanced Catalog Management Configuration 13
Syntax
  JOBCARD1=’jobcard data’

Acceptable values
  3 to 60 bytes of data delimited by single quote (’) marks

Example
  JOBCARD1= ’// JOB ’&GP.Job’,CLASS=A,MSGCLASS=X,’

JOBCARD2
  Second line to be used when creating JCL.

Default value
  ’// MSGLEVEL=(1,1),NOTIFY=&&SYSUID’

Syntax
  JOBCARD2=’jobcard data’

Acceptable values
  3 to 60 bytes of data delimited by single quote (’) marks

Example
  JOBCARD2= ’// MSGLEVEL=(1,1),NOTIFY=&&SYSUID’

Optional parameters:

IF_SYSNAME
  If this member will be used for multiple systems, use this keyword to define
  the LOCALCONN for each individual system.

Default value
  None

Syntax
  IF_SYSNAME=sysname

Acceptable values
  A valid system ID or system symbolic

Example
  IF_SYSNAME=SYSA

JOBCARD3
  Third line to be used when creating JCL.

Default value
  None

Syntax
  JOBCARD3=’jobcard data’

Acceptable values
  3 to 60 bytes of data delimited by single quote (’) marks

Example
  JOBCARD3=’/*’

JOBCARD4
  Fourth line to be used when creating JCL.

Default value
  None

Syntax
  JOBCARD4=’jobcard data’
Acceptable values
3 to 60 bytes of data delimited by single quote ('') marks

Example
JOBCARD4='/*'

JOBCARD5
Fifth line to be used when creating JCL.

Default value
None

Syntax
JOBCARD5='jobcard data'

Acceptable values
3 to 60 bytes of data delimited by single quote ('') marks

Example
JOBCARD5='/*'

Step 10: Define System Authorization Facility (SAF) Class Profiles

You can control a user’s access to specific Advanced Catalog Management commands through FACILITY class profiles that are recognized by RACF®, ACF2, and Top Secret.

You can restrict the use of specific commands to only a subset of users. Until you create any FACILITY class profiles, all commands are available to all users. It is recommended that you first deny access to IBMTIVOLI.ACM and then add access to IBMTIVOLI.ACM to everyone who will have access to all of the commands. For those users who will have access to only some commands, add access to just those individual commands and the prior denial of access to IBMTIVOLI.ACM will restrict access to all of the other commands.

How command profiles work
To illustrate how the security profiles work, consider the following example:

ZAP BCS(<dsn>) DELETE(KEY(<record key value>))

The ZAP processor checks the profile from the table for ZAP and BCS DELETE. If the profile is not explicitly allowed or denied, the right-most node is removed to find the next profile to check. Profile checking occurs for each of the following profiles:

IBMTIVOLI.ACM.ZAP.BCS.DELETE
IBMTIVOLI.ACM.ZAP.BCS
IBMTIVOLI.ACM.ZAP
IBMTIVOLI.ACM

If access is explicitly allowed for that profile, the command will be executed, if access is denied, the command will be terminated; otherwise, the next profile is checked. If the all of the profiles are checked and no explicit acceptance or denial is found, the command will be run.

SAF class profiles
This topic lists the available SAF class profiles.

The length of this list is intentionally long, and while it is not expected that any installation would define even a fraction of these profiles, they are provided for maximum flexibility of command protection.
<table>
<thead>
<tr>
<th>Command</th>
<th>Keywords</th>
<th>Facility</th>
</tr>
</thead>
<tbody>
<tr>
<td>All</td>
<td>All IBMTIVOLI.ACM</td>
<td></td>
</tr>
<tr>
<td>ALTER</td>
<td>All ALTER keywords</td>
<td>IBMTIVOLI.ACM.ALTER</td>
</tr>
<tr>
<td>ALTER</td>
<td>BCS-BACK-POINTER</td>
<td>IBMTIVOLI.ACM.ALTER.BCS-BACK-POINTER</td>
</tr>
<tr>
<td>ALTER</td>
<td>BCS-DEVICETYPE</td>
<td>IBMTIVOLI.ACM.ALTER.BCS-DEVICETYPE</td>
</tr>
<tr>
<td>ALTER</td>
<td>BCS-VOLSER</td>
<td>IBMTIVOLI.ACM.ALTER.BCS-VOLSER</td>
</tr>
<tr>
<td>ALTER</td>
<td>NONVSAM</td>
<td>IBMTIVOLI.ACM.ALTER.NONVSAM</td>
</tr>
<tr>
<td>ALTER</td>
<td>SYS1-VVDS</td>
<td>IBMTIVOLI.ACM.ALTER.SYS1-VVDS</td>
</tr>
<tr>
<td>BACKUP</td>
<td>All BACKUP keywords</td>
<td>IBMTIVOLI.ACM.BACKUP</td>
</tr>
<tr>
<td>BACKUP</td>
<td>BCS</td>
<td>IBMTIVOLI.ACM.BACKUP.BCS</td>
</tr>
<tr>
<td>BACKUP</td>
<td>DSN</td>
<td>IBMTIVOLI.ACM.BACKUP.DSN</td>
</tr>
<tr>
<td>BACKUP</td>
<td>VVDS</td>
<td>IBMTIVOLI.ACM.BACKUP.VVDS</td>
</tr>
<tr>
<td>CATSCRUB</td>
<td></td>
<td>IBMTIVOLI.ACM.CATSCRUB</td>
</tr>
<tr>
<td>DIAGNOSE</td>
<td>All DIAGNOSE keywords</td>
<td>IBMTIVOLI.ACM.DIAGNOSE</td>
</tr>
<tr>
<td>DIAGNOSE</td>
<td>ALIAS</td>
<td>IBMTIVOLI.ACM.DIAGNOSE.ALIAS</td>
</tr>
<tr>
<td>DIAGNOSE</td>
<td>BCS</td>
<td>IBMTIVOLI.ACM.DIAGNOSE.BCS</td>
</tr>
<tr>
<td>DIAGNOSE</td>
<td>BCS-VVDS</td>
<td>IBMTIVOLI.ACM.DIAGNOSE.BCS-VVDS</td>
</tr>
<tr>
<td>DIAGNOSE</td>
<td>VOLUME-BCS</td>
<td>IBMTIVOLI.ACM.DIAGNOSE.VOLUME-BCS</td>
</tr>
<tr>
<td>DIAGNOSE</td>
<td>VVDS-VTOC</td>
<td>IBMTIVOLI.ACM.DIAGNOSE.VVDS-VTOC</td>
</tr>
<tr>
<td>EXPLORE</td>
<td></td>
<td>IBMTIVOLI.ACM.EXPLORE</td>
</tr>
<tr>
<td>GENERATE</td>
<td>All GENERATE keywords</td>
<td>IBMTIVOLI.ACM.GENERATE</td>
</tr>
<tr>
<td>GENERATE</td>
<td>BCS-UNLOAD</td>
<td>IBMTIVOLI.ACM.GENERATE.BCS-UNLOAD</td>
</tr>
<tr>
<td>LISTSMF</td>
<td></td>
<td>IBMTIVOLI.ACM.LISTSMF</td>
</tr>
<tr>
<td>MAP</td>
<td>All MAP keywords</td>
<td>IBMTIVOLI.ACM.MAP</td>
</tr>
<tr>
<td>MAP</td>
<td>BCS</td>
<td>IBMTIVOLI.ACM.MAP.BCS</td>
</tr>
<tr>
<td>MAP</td>
<td>DSN</td>
<td>IBMTIVOLI.ACM.MAP.DSN</td>
</tr>
<tr>
<td>MERGECAT</td>
<td></td>
<td>IBMTIVOLI.ACM.MERGECAT</td>
</tr>
<tr>
<td>RECOVER</td>
<td>All RECOVER keywords</td>
<td>IBMTIVOLI.ACM.RECOVER</td>
</tr>
<tr>
<td>RECOVER</td>
<td>BCS</td>
<td>IBMTIVOLI.ACM.RECOVER.BCS</td>
</tr>
<tr>
<td>RECOVER</td>
<td>DSN</td>
<td>IBMTIVOLI.ACM.RECOVER.DSN</td>
</tr>
<tr>
<td>RECOVER</td>
<td>VVDS</td>
<td>IBMTIVOLI.ACM.RECOVER.VVDS</td>
</tr>
<tr>
<td>REORG</td>
<td></td>
<td>IBMTIVOLI.ACM.REORG</td>
</tr>
<tr>
<td>SUPERCLIP</td>
<td></td>
<td>IBMTIVOLI.ACM.SUPERCLIP</td>
</tr>
<tr>
<td>ZAP</td>
<td>All ZAP keywords</td>
<td>IBMTIVOLI.ACM.ZAP</td>
</tr>
<tr>
<td>ZAP</td>
<td>All ZAP BCS keywords</td>
<td>IBMTIVOLI.ACM.ZAP.BCS</td>
</tr>
<tr>
<td>ZAP</td>
<td>BCS.DELETE</td>
<td>IBMTIVOLI.ACM.ZAP.BCS.DELETE</td>
</tr>
<tr>
<td>ZAP</td>
<td>BCS.PATCH</td>
<td>IBMTIVOLI.ACM.ZAP.BCS.PATCH</td>
</tr>
<tr>
<td>ZAP</td>
<td>BCS.PRINT</td>
<td>IBMTIVOLI.ACM.ZAP.BCS.PRINT</td>
</tr>
<tr>
<td>ZAP</td>
<td>All ZAP DSN keywords</td>
<td>IBMTIVOLI.ACM.ZAP.DSN</td>
</tr>
<tr>
<td>ZAP</td>
<td>DSN.DELETE</td>
<td>IBMTIVOLI.ACM.ZAP.DSN.DELETE</td>
</tr>
<tr>
<td>ZAP</td>
<td>DSN.PATCH</td>
<td>IBMTIVOLI.ACM.ZAP.DSN.PATCH</td>
</tr>
</tbody>
</table>
Table 2. SAF Class Profiles (continued)

<table>
<thead>
<tr>
<th>Command</th>
<th>Keywords</th>
<th>Facility</th>
</tr>
</thead>
<tbody>
<tr>
<td>ZAP</td>
<td>DSN.PRINT</td>
<td>IBMTIVOLI.ACM.ZAP.DSN.PRINT</td>
</tr>
<tr>
<td>ZAP</td>
<td>All ZAP VTOC keywords</td>
<td>IBMTIVOLI.ACM.ZAP.VTOC</td>
</tr>
<tr>
<td>ZAP</td>
<td>VTOC.DELETE</td>
<td>IBMTIVOLI.ACM.ZAP.VTOC.DELETE</td>
</tr>
<tr>
<td>ZAP</td>
<td>VTOC.PATCH</td>
<td>IBMTIVOLI.ACM.ZAP.VTOC.PATCH</td>
</tr>
<tr>
<td>ZAP</td>
<td>VTOC.PRINT</td>
<td>IBMTIVOLI.ACM.ZAP.VTOC.PRINT</td>
</tr>
<tr>
<td>ZAP</td>
<td>VTOC.RENAME</td>
<td>IBMTIVOLI.ACM.ZAP.VTOC.RENAME</td>
</tr>
<tr>
<td>ZAP</td>
<td>All ZAP VVDS keywords</td>
<td>IBMTIVOLI.ACM.ZAP.VVDS</td>
</tr>
<tr>
<td>ZAP</td>
<td>VVDS.DELETE</td>
<td>IBMTIVOLI.ACM.ZAP.VVDS.DELETE</td>
</tr>
<tr>
<td>ZAP</td>
<td>VVDS.PATCH</td>
<td>IBMTIVOLI.ACM.ZAP.VVDS.PATCH</td>
</tr>
<tr>
<td>ZAP</td>
<td>VVDS.PRINT</td>
<td>IBMTIVOLI.ACM.ZAP.VVDS.PRINT</td>
</tr>
</tbody>
</table>

Verifying SAF permissions for command profiles

There are two methods you can use to check the class profiles.

Using the SAF Permissions Option

To examine the permissions granted to your specific user name, select the SAF Permissions option from the pull-down menu on the Advanced Catalog Management main menu.

You can also select this option by entering the command CKMPERM on the command line. After you select SAF Permissions, Advanced Catalog Management displays a pop-up panel that requests whether to list the SAF Permissions in the background by submitting a batch job, or to display them on an ISPF panel.

Note: Technical Support may request this information when ISPF or batch problems are reported.

Using the OPTIONS PERMISSIONS Command

You can use the OPTIONS command with the PERMISSIONS parameter in a job to check the command profiles.

To obtain a current list of these profiles, run a job with the following step:

```assemble
//XXX EXEC PGM=CKM00010
...
//SYSIN DD *
OPTIONS DD *
OPTIONS PERMISSIONS
//
```

A list of FACILITY class profiles that correlate with command and subcommand names are displayed in a report.

SAF control by command

This topic lists each Advanced Catalog Management command and the SAF Access Control.

If the Access Control column has the text “Future” listed, then the access control for that command will be implemented at a future date.
### Table 3. SAF Control by Command

<table>
<thead>
<tr>
<th>Command</th>
<th>Access Control</th>
</tr>
</thead>
</table>
| ALTER BCS-VOLSER         | • CONTROL access to BCS or if there is no profile - processing applies to all data sets  
• UPDATE access to BCS - allows processing of data sets user has at least UPDATE access  
• READ access or no access, that the catalog is not processed. |
| ALTER BCS-DEVICETYPE     | • CONTROL access to BCS or if there is no profile - processing applies to all data sets  
• UPDATE access to BCS - allows processing of data sets user has at least UPDATE access  
• READ access or no access, that the catalog is not processed. |
| ALTER BCS-BACK-POINTERS  | • CONTROL access to VVDS or if there is no profile - processing applies to all data sets  
• UPDATE access to VVDS - allows processing of data sets user has at least UPDATE access  
• READ access or no access to the VVDS, that the VVDS is not processed on that volume |
| ALTER SYS1-VVDS          | DASDVOL ALTER unless processing SMF file option                                                                                                                                                               |
| ALTER NONVSAM            | • Scratch - ALTER access to data set, and for SMS managed volumes, FACILITY STGADMIN.ADR.STGADMIN.DUMP.DELETE  
• Rename - ALTER access to data set, and for SMS managed volumes, FACILITY STGADMIN.ADR.STGADMIN.DUMP.RENAME  
• No-ENQ Checks FACILITY STGADMIN.DPDSRN.olddsname  
• NO BCS Check, tests FACILITY STGADMIN.IGG.DELNVR.NOBCSCHK  
• Storage class name change, tests FACILITY STGADMIN.IGG.ALTER.SMS and to the new storage class  
• Management class name change, tests FACILITY STGADMIN.IGG.ALTER.SMS and to the new Management class |
| BACKUP BCS               | Future - Validate that user has READ access to catalogs                                                                                                                                                       |
| BACKUP DSN               | Future - Validate that user has at least READ access to data set                                                                                                                                               |
| BACKUP VVDS              | Future - Validate that user has READ access to VVDS                                                                                                                                                           |
| CATSCRUB                 | Future - Validate that user has CONTROL access to catalogs                                                                                                                                                     |
| DIAGNOSE ALIAS           | Future - Validate that user has READ access to catalogs                                                                                                                                                       |
| DIAGNOSE BCS-VVDS       | Future - Validate that user has READ access to catalogs                                                                                                                                                       |
| DIAGNOSE VOLUME-BCS     | Future - Validate that user has READ access to catalogs                                                                                                                                                       |
### Table 3. SAF Control by Command (continued)

<table>
<thead>
<tr>
<th>Command</th>
<th>Access Control</th>
</tr>
</thead>
<tbody>
<tr>
<td>DIAGNOSE VVDS-VTOC</td>
<td>- CONTROL access to VVDS or if there is no profile - processing applies to all data sets</td>
</tr>
<tr>
<td></td>
<td>- UPDATE access to VVDS - allows processing of data sets user has at least UPDATE access</td>
</tr>
<tr>
<td></td>
<td>- READ access or no access to VVDS, that the VVDS is not processed on that volume</td>
</tr>
<tr>
<td>EXPLORE</td>
<td>READ access to catalogs</td>
</tr>
<tr>
<td>GENERATE</td>
<td>Future - Validate that user has READ access to catalogs</td>
</tr>
<tr>
<td>LISTSMF</td>
<td>Standard MVS™ OPEN on dumped SMF data sets</td>
</tr>
<tr>
<td>MAP BCS/MAP DSN</td>
<td>READ access to catalogs or data set</td>
</tr>
<tr>
<td>MERGE Cat</td>
<td>Future - Validates that the user has CONTROL access to the affected catalogs</td>
</tr>
<tr>
<td>RECOVER BCS</td>
<td>UPDATE to the master catalog and CONTROL for the user catalog Checks IGG.CATLOCK</td>
</tr>
<tr>
<td>RECOVER DSN</td>
<td>UPDATE access to the catalog and UPDATE access to the data set</td>
</tr>
<tr>
<td>RECOVER LIST</td>
<td>Standard MVS OPEN on backup file</td>
</tr>
<tr>
<td>RECOVER VVDS</td>
<td>Future Validates that the user has CONTROL access to the affected VVDS</td>
</tr>
<tr>
<td>REORG</td>
<td>UPDATE to catalog, even in SIMULATE mode</td>
</tr>
<tr>
<td>SUPERCLIP</td>
<td>UPDATE access to those catalogs altered except for catalogs on the target volume</td>
</tr>
<tr>
<td>ZAP BCS PRINT</td>
<td>Future - READ access to BCS and READ access to DSN</td>
</tr>
<tr>
<td>ZAP BCS PATCH</td>
<td>Future - UPDATE access to BCS and UPDATE access to DSN</td>
</tr>
<tr>
<td>ZAP BCS DELETE</td>
<td>Future - UPDATE access to BCS and UPDATE access to DSN</td>
</tr>
<tr>
<td>ZAP DSN PRINT</td>
<td>Future - READ access to data set</td>
</tr>
<tr>
<td>ZAP DSN PATCH</td>
<td>Future - UPDATE access to data set</td>
</tr>
<tr>
<td>ZAP DSN DELETE</td>
<td>Future - UPDATE access to data set</td>
</tr>
<tr>
<td>ZAP VTOC PRINT</td>
<td>Future - READ access to DASDVOL</td>
</tr>
<tr>
<td>ZAP VTOC PATCH</td>
<td>Future - UPDATE access to DASDVOL</td>
</tr>
<tr>
<td>ZAP VTOC DELETE</td>
<td>Future - UPDATE access on DASDVOL and CONTROL access to the data set</td>
</tr>
<tr>
<td>ZAP VTOC RENAME</td>
<td>Future - UPDATE access on DASDVOL and CONTROL access to the data set</td>
</tr>
<tr>
<td>ZAP VVDS PRINT</td>
<td>Future - READ access to VVDS</td>
</tr>
<tr>
<td>ZAP VVDS PATCH</td>
<td>Future - UPDATE access to VVDS and UPDATE access to the data set</td>
</tr>
<tr>
<td>ZAP VVDS DELETE</td>
<td>Future - UPDATE access on VVDS and CONTROL access to the data set</td>
</tr>
</tbody>
</table>
**Step 11: Update ACF$CMDS System Security Table (for ACF2 Users)**

If your installation uses the Computer Associates product ACF2, and uses the Restricted Commands List feature that controls which commands can be executed in TSO, then a $TSOCMD entry for the program name CKM00500 needs to be added to the appropriate CMDLIST (ACF$CMDS) modules in the system LINKLIST.

Attempts to start the product before CKM00500 is added to the CMDLIST module will fail with “COMMAND CKM00500 NOT FOUND”. CKM00500 is not an authorized program. Do NOT add it to the system PARMLIB concatenation member (IKJTSOnn).

*Note:* The default name for the CMDLIST module is ACF$CMDS. A commonly used naming standard is TSOCMDnn.

**Step 12: Update BRMINI parameter member (for Mainstar Backup and Recovery Manager users)**

You must customize your BRMINI parameter member in your BRM PARMLIB data set to ensure that it is using the correct Advanced Catalog Management program name.

1. In the :PROCESS_OPTIONS section set the Advanced Catalog Management program name prefix as follows:
   
   CR+PROGNAME_PREFIX = CKM

2. Ensure that the Advanced Catalog Management library names are specified in the following keywords:
   
   CR+PARMLIB = Advanced Catalog Management parameter library name
   CR+LOADLIB = Advanced Catalog Management load library name

3. Run the BRM INIMERGE job to update INI specified parameters in the product JCL library.

**Step 13: Update BKMINI parameter member (for IBM Tivoli Advanced Backup and Recovery users)**

You must customize your BKMINI parameter member in your Advanced Backup and Recovery SBKMPARM data set to ensure that it is using the correct Advanced Catalog Management program name.

1. In the :PROCESS_OPTIONS section set the Advanced Catalog Management program name prefix as follows:
   
   CR+PROGNAME_PREFIX = CKM

2. Ensure that the Advanced Catalog Management library names are specified in the following keywords:
   
   CR+PARMLIB = Advanced Catalog Management parameter library name
   CR+LOADLIB = Advanced Catalog Management load library name

3. Run the Advanced Backup and Recovery BKMIMERG job to update INI specified parameters in the product JCL library.

**Step 14: (Optional) Customize the CKMISPF2 CLIST**

If you intend to have users invoke the Advanced Catalog Management ISPF component from a primary option panel, the hlq.SCKMPARM(CKMISPF2) member can be copied and tailored into a common SYSPROC or CLIST library to conform to your product installation methodologies.
It is mandatory that the CKMISPF REXX™ EXEC resides in the Advanced Catalog Management installation SCKMPARM data set along with the CKMINI member.

### Step 15: Verify EBCDIC code tables impact

Advanced Catalog Management uses the U.S.A. EBCDIC code set for specification and display of EBCDIC characters and for the extended ACS masking characters used for filtering.

If the code tables used by your installation are different, then you need to enter the EBCDIC character specific to your code tables that results in the binary value for the EBCDIC character specified in the product.

- Data supplied as input to batch programs or input to ISPF panels
  
  For product code shipped in binary, when specifying input where the product takes special action based on specific characters, you must enter the EBCDIC character peculiar to your code tables that results in the binary value for the EBCDIC character specified in the product manuals, according to the U.S.A. EBCDIC code set.

  For example, if an exclamation mark (!) is used and your code tables do not translate the ! character to a hexadecimal 5A, you must enter the character that your code table will translate to a 5A.

- Interface panels
  
  Do not change distributed ISPF panels. Program code may reference ISPF panel attribute bytes. A panel change that affects an attribute byte may cause a program error.

- Example product output
  
  Depictions of product output shown as examples are based on the U.S.A. EBCDIC code set. Actual output may vary if your EBCDIC code tables are different

- Extended ACS masking characters
  
  Your installation may need to specify different masking characters to achieve the desired result if your code tables are different from the U.S.A. EBCDIC code set.

### Step 16: Verify ISPF Component

To verify that all licensed ISPF functionality is successfully installed, configured, and accessible, go to TSO ISPF Option 6 and use the following command to invoke the ISPF component EX ‘hlq.SCKMPARM(CKMISPF)’.

*hlq* is your installation's high level qualifier for Advanced Catalog Management. The Advanced Catalog Management main menu appears.

### Step 17: Start the CKMJMAIN task

Start the CKMJMAIN started task on every system in the sysplex. You should add the startup of this address space into your automated IPL procedures.

### Configuration When Migrating From Releases Prior to 2.1

This procedure is to be followed when migrating from a prior release of Advanced Catalog Management that is older than release 2.1. It does not apply for first time installations of the product or for periodic maintenance for existing release 2.1 environments.
1. APF authorize the SCKMLOAD library on all systems. When the hlq.SCKMLOAD library is added to the APF list, the old hlq.LOAD library may be removed.

2. Add program CKM01IKB to the list of authorized programs in the AUTHTSF section of member SYS1.PARMLIB(IKJTSOnn). When CKM01IKB is added to the IKJTSOnn SYS1.PARMLIB member, CAT01IKB may be removed. If SI067DC0 is listed in the AUTHTSF section of the IKJTSOnn member, and no other Mainstar products are installed, it, too, may be removed.

3. Run CKMJINIM to update your old CATINI member and create a new CKMINI member in SCKMPARM.

4. Make updates to CKMINI to change the library names for the new Advanced Catalog Management libraries.

5. Make changes to saved JCL or procedures to reflect new library, parameter and program names.

   The following tables show the old and new names that will need to be updated in any saved JCL or procedures.

### Data set name changes

The low-level qualifiers for the Advanced Catalog Management data sets have changed. The old and new names are shown below:

*Table 4. Data set name changes*

<table>
<thead>
<tr>
<th>Old library name</th>
<th>New library name</th>
</tr>
</thead>
<tbody>
<tr>
<td>CNTL</td>
<td>SCKMCNTL</td>
</tr>
<tr>
<td>LOAD</td>
<td>SCKMLOAD</td>
</tr>
<tr>
<td>ISPMLIB</td>
<td>SCKMMENU</td>
</tr>
<tr>
<td>ISPPLIB</td>
<td>SCKMPENU</td>
</tr>
<tr>
<td>MESSAGES</td>
<td>SCKMMGS</td>
</tr>
<tr>
<td>PARMLIB</td>
<td>SCKMPARM</td>
</tr>
</tbody>
</table>

### Program name changes

*Table 5. Program name changes*

<table>
<thead>
<tr>
<th>Old program name</th>
<th>New program name</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAT00010</td>
<td>CKM00010</td>
</tr>
<tr>
<td>CAT03PLA</td>
<td>CKM03PLA</td>
</tr>
<tr>
<td>CAT01IKB</td>
<td>CKM01IKB</td>
</tr>
<tr>
<td>INIMERGE</td>
<td>CKMJINIM</td>
</tr>
<tr>
<td>RPTWRTR</td>
<td>CKM00010</td>
</tr>
</tbody>
</table>

### Parmlib member name changes

*Table 6. Parmlib member name changes*

<table>
<thead>
<tr>
<th>Old member name</th>
<th>New member name</th>
</tr>
</thead>
<tbody>
<tr>
<td>CATINI</td>
<td>CKMINI</td>
</tr>
<tr>
<td>CATINI#</td>
<td>CKMINI#</td>
</tr>
</tbody>
</table>
### Table 6. Parmlib member name changes (continued)

<table>
<thead>
<tr>
<th>Old member name</th>
<th>New member name</th>
</tr>
</thead>
<tbody>
<tr>
<td>RWDICT#</td>
<td>CKMPEXRW</td>
</tr>
<tr>
<td>MQLSYMB</td>
<td>CKMMQLS</td>
</tr>
<tr>
<td>DEFAULTS</td>
<td>CKMMQLD</td>
</tr>
<tr>
<td>EXMQLMAP</td>
<td>CKMPEXMQ</td>
</tr>
<tr>
<td>EXDSECT</td>
<td>CKMPEXD</td>
</tr>
<tr>
<td>RXDSECT</td>
<td>CKMPEXRD</td>
</tr>
<tr>
<td>DCVOLMAP</td>
<td>CKMDCMAP</td>
</tr>
</tbody>
</table>

### Invoking the ISPF Component

### Table 7. Invoking the ISPF Component

<table>
<thead>
<tr>
<th>Old name</th>
<th>New name</th>
</tr>
</thead>
<tbody>
<tr>
<td>CRPLUS</td>
<td>CKMISPF</td>
</tr>
</tbody>
</table>
Chapter 3. IBM Tivoli Advanced Catalog Management for z/OS

Started Task

IBM Tivoli Advanced Catalog Management for z/OS has a persistent started task that uses TCP/IP services to communicate with the corresponding IBM Tivoli Advanced Catalog Management for z/OS address spaces on other systems.

Usage Considerations

Using simple definitions, a few or many systems can be tied together for joint processing. Among the services provided is the ability to coordinate work on multiple systems and the distribution or retrieval of information across the multi-system complex.

With this release, MERGECAT is the first function to exploit the IBM Tivoli Advanced Catalog Management for z/OS address space. Other functions will also take advantage of the started task features in the future.

1. It is highly recommended that the IBM Tivoli Advanced Catalog Management for z/OS address space be active on each system at all times where catalogs and DASD are shared. Ensure that every sharing system is defined in the CKMSYS00 member of SCKMPARM data set as described in the configuration procedure.

2. When starting the IBM Tivoli Advanced Catalog Management for z/OS address space, the timing of the startup between each system should be staggered. Delaying the startup by one minute between systems should be sufficient time to allow all TCP/IP services to become active within the IBM Tivoli Advanced Catalog Management for z/OS address space before the next address space starts.

3. After the IBM Tivoli Advanced Catalog Management for z/OS address space has been stopped, it is important to wait between 60-120 seconds before attempting to restart the address space. This time is required to allow all cross-system communications to drain from TCP/IP.

4. Upon startup of the IBM Tivoli Advanced Catalog Management for z/OS address space, TCP/IP initialization errors may occur. Message CKMM011W is issued for these errors if they should occur. These messages may be caused by a delay in TCP/IP draining its resources related to the previous IBM Tivoli Advanced Catalog Management for z/OS address space. A simple shutdown and restart of the IBM Tivoli Advanced Catalog Management for z/OS address space may clear up this problem. This error can also be caused by the port number referenced in the CKMSYS00 member of SCKMPARM being used by another application. If the port number is in use by another application, a different port number should be selected for use.

5. Each system running the IBM Tivoli Advanced Catalog Management for z/OS address space should use the same port number and IP address/DNS references as the other systems. Mismatches in port number or IP address usage can cause a loss of communication. To help ensure consistency, IBM Tivoli Advanced Catalog Management for z/OS supports the use of a single CKMSYS00 member for all systems. Refer to the IF_SYSNAME parameter in Chapter 2 for more information. The CKMSYS00 sample member shipped in SCKMPARM has an example of how to properly set up the member for use on more than one system.
6. One CONNECTION= statement is required for each system that is to be included in
the multi-system complex. There should also be one for the local system.

7. A LOCALCONN= statement is required to identify the IP address or DNS of the
local system. This is to help properly match incoming and outgoing requests.
Chapter 4. Getting Started

This chapter helps you start using Advanced Catalog Management and describes other general topics about its use.

About the Advanced Catalog Management ISPF interface

Advanced Catalog Management provides an ISPF-based interface that allows you to easily do the following tasks:

- Tailor job card options.
- Reset profile options.
- Issue CAS commands.
- Search for catalogs, DASD volumes, and storage groups.
- Define command statements and run them.

Starting the Advanced Catalog Management interface

To access the Advanced Catalog Management main menu, type TSO EX 'hlq.SCKMPARM(CKMISPF)'.

Pull-down menus and options

An action bar appears at the top of each full panel (pop-up panels do not have action bars) that displays the names of pull-down menus with options for working with Advanced Catalog Management.

The following lists the options from the pull-down menus:

**Menu**  The Menu pull-down has the following options:
- Messages—displays the product messages member.
- CKMINI Values—displays the product configuration variables.
- Exit—exits Advanced Catalog Management.

**Diagnostics**  The Diagnostics pull-down has the following options:
- About—displays release level information for the product and the products used by Advanced Catalog Management.
- Dump Load Module—displays the requested load modules. The load module can be from one of the system libraries or may be an Advanced Catalog Management load module. Only the first 4096 bytes of the module are displayed.
- Free Memory—displays current memory usage.
- Load Modules—displays currently active load modules.
- Program Metadata—displays version and maintenance information about Advanced Catalog Management and any other product it uses.
- SAF Permissions—displays SAF permissions for your user ID.

**Preferences**  The Preferences pull-down has the following options:
- Job Card—sets job statement options for every command.
- Reset Profile—resets the panel variables to the default value.
Selecting pull-down menu options
To select a pull-down menu option:
1. Place the cursor on the pull-down menu you want and press Enter.
2. From the pull-down menu, enter the number of the option you want and press Enter.

You can run each of these options from the command line.

Accessing online help
To access the Advanced Catalog Management online help facility press F1.

Exiting Advanced Catalog Management
You can exit Advanced Catalog Management using one of these methods.
- Type X from the main menu and press Enter.
- Type EXIT on the command line from the main menu.
- Type 3 from the Menu pull-down and press Enter.

Tailoring Job Card Options
Use the Job Card option from the Preferences pull-down menu to tailor the job card information for your user ID before submitting jobs from the Advanced Catalog Management interface.

Each major function has job card information defined for it. You can also add JES2 or JES3 control statements. A maximum of four cards are permitted per function. Blank cards are allowed and will not be used in the JCL.

You can also request that the last character of the Job name can be randomized every time a job is created for a specific function. The next character in the roman alphabet is assigned.

The job cards for the REORG function allows you enter the symbol &SYS as part of job name. For example, /P145&SYS JOB. &SYS will be replaced by the target system name in the /*JOBPARM or /*MAIN JECL statement. This is intended for use when a primary and one or more secondary systems are accessing the catalog.

Note: Truncation will occur if the supplied jobname characters and the length of the system name exceed 7 or 8 characters (depending on the setting of the Randomize last character of jobname option).

Because the job cards are initially populated with default job information, you should use the MASTER command first to change all of the job statements to something more appropriate for your site before tailoring any of the individual job statements.

CAUTION:
The MASTER command will destroy all the current job statements.

Resetting Profile Options
Use the Reset Profile option from the Preferences pull-down menu to reset the panel value defaults for your user ID.
Some functions store variables in panels so you do not have to re-enter them every time you access the panel. You can reset the variables for an entire function but, you cannot reset individual variables. To reset the variables for a specific function, type Y in the Reset Variables column to the right of the function.

Certain functions, such as SUPERCLIP, have the ability to imbed user comments within the panel. For example, a reminder to vary a DASD volume off-line before submitting the job. To reset these user comments, type Y in the Reset User Comments column to the far right of the function.
Chapter 5. Issuing CAS commands

You can run CAS commands directly from the Advanced Catalog Management main menu that will issue the MODIFY CATALOG and DISPLAY GRS commands and display information about the catalog address space (CAS) and the catalog data space cache (CDSC).

The commands are run using the IBM-supplied Extended MCS capability. If a command generates information, it is shown for you. Some of the displays are enhanced to make it easier to read the information or to provide additional information.

Running a CAS command

To run a CAS command, complete these steps:

1. From the Advanced Catalog Management main menu, select option 0, Issue CAS Commands. The Select CAS/GRS Command panel appears.
2. Type the option for the command you want to run.
3. Optionally, type the system name of an alternate LPAR in the SYSPLEX. The command is routed to that system name and run. The default is the current system name. To route the command to all LPARs within the SYSPLEX, type *ALL to show a single command with the results seamlessly concatenated or type *ALL* to show each command, as routed, followed by that system's response
4. Press Enter. Advanced Catalog Management runs the command.

CAS command options

This topic describes each of the CAS/GRS commands you can run from the CAS/GRS Command panel.

List currently allocated catalogs
The command F CATALOG,ALLOCATED is run. This command will list the name, volser, current allocation count, and status for every currently allocated catalog.

Display ECSharing status
The command F CATALOG,ECSHR(STATUS) is run. This command shows the status of the Coupling Facility (CF), and the status of each catalog referenced since the last IPL.

Display catalog load module entries
The command F CATALOG,ENTRY is run. This command shows the starting address, the FMID and the PTF/APAR level for all catalog load modules.

List currently active CAS tasks
The command F CATALOG,LIST is run. This command lists the currently active service tasks, their related names, elapsed times, and unique identifications.

List detail information about a CAS request
The command F CATALOG,LISTJ(jobname),DETAIL is run. This command lists information about the specified task and optional information. From the pop-up panel, enter the 1 to 8 byte job name to query. The job name is
validated to ensure it meets the standard for a valid job name, but it is not checked against the list of active jobs.

**List current limits and defaults**
The command F CATALOG,REPORT is run. This command, for the CAS, lists the current limits and installation-specified defaults.

**List catalog cache status information**
The command F CATALOG,REPORT,CACHE is run. This command, for all catalogs, lists the cache status and performance information.

**List events that invoke external code**
The command F CATALOG,REPORT,PERFORMANCE is run. This command lists information about events outside of the catalog component.

**Reset the counts for REPORT,PERFORMANCE**
The command F CATALOG,REPORT,PERFORMANCE(RESET) is run. This command resets the COUNT and AVERAGE values in all the statistics. This command produces no display. When the command is done, the message "Command executed" displays.

**Enable enhanced VVDS record validation**
The command F CATALOG,ENABLE(VVRCHECK) is run. This command enables the enhanced VVR record checking feature during VVDS I/O; more extensive checks of VVR content will be made prior to writing and immediately following reading. Intended primarily for situations when records are being corrupted. Will add minimal additional overhead to read and write times. Do not enable without first checking that all maintenance has been applied. To check on the current status of VVRCHECK, use the List current limits and defaults option. This command produces no display. When the command is done, the message "Command executed" displays.

**Disable enhanced VVDS record validation**
The command F CATALOG,DISABLE(VVRCHECK) is run. This command disables the enhanced VVR record checking feature during VVDS I/O. To check on the current status of VVRCHECK, use List current limits and defaults option. This command produces no display. When the command is done, the message "Command executed" displays.

**List GRS contention**
The command D GRS,CONTENTION is run. This command lists resource contention information for the current complex.

---

**Using CAS display primary commands**

You can use these primary commands while you view the results from a CAS command.

To run the previous command, type REFRESH on the command line and press Enter. (Alternatively, you can press the PF5 key with no command entered.)

To run the previous command at a specific interval, type AUTO xx on the command line and press Enter. xx is a value between 0 and 9999999 for the number of seconds. For example, if you type AUTO 20, the command will run every 20 seconds. If you do not specify a value on the AUTO command, the command is run every 10 seconds.

To stop the AUTO command, use the ATTENTION key.
Chapter 6. Searching for Objects

Advanced Catalog Management allows you to search for objects and display information about them.

You can search and display information about catalogs, DASD volumes, and storage groups. After you display a list of objects, you can issue commands, search for specific objects, and print the results to a file.

Searching for a Catalog

Advanced Catalog Management provides an option on the main menu that allows you to search for and display catalog attributes.

From this display, you can issue the commands for Backup, Recover, and Diagnose against specific catalogs, and ZAP against catalog entries for specific data sets. You can also use primary and line commands to further process the results.

Specifying catalog search criteria

To search for and display catalogs based on a specific catalog name or mask, type 1 (Search for Catalog) from the Advanced Catalog Management main menu.

The Specify Catalog Name/Mask panel appears. From this panel you can specify the criteria to use when searching for selected catalogs. The catalog names are obtained from the local master catalog.

**DSN or Mask**

specify a data set name or mask to search for and display. "**" is automatically appended to the string you enter.

When you are finished, press Enter to continue. The Search for Catalog panel appears.

Viewing the catalog display

The Search for Catalog panel displays catalog names based on the catalog or mask entered on the Specify Catalog Name/Mask panel.

The following describes the fields on the Search for Catalog panel. Scroll right to see all columns.

**C**

Type S in the C column to display the Search for Data Set Setup panel. You can also enter line commands that will process the selected catalog.

**Catalog Name or Mask**

lists the catalog name based on the criteria you entered on the Specify Catalog Name/Mask panel.

**Volser**

shows the volume serial number of the DASD on which the catalog is resident. The volume serial number is specified when the object is DEFINED using Access Method Services. In an SMS environment, ACS routines, if applicable, will override any specification.

**Ext**

shows the number of DASD extents currently used by the catalog on the storage device. Disk extents are added as needed by DASD management when the catalog expands. The maximum number of extents permitted for an object is 123.
Alias Count shows the number of aliases currently associated with the catalog. Aliases are created by the DEFINE ALIAS AMS command. There is a limit on the number of aliases that may be associated with a single catalog. To determine the approximate number of additional aliases that may be associated with a catalog, issue the Alias Growth (AG) line command.

Strno shows the number of strings currently assigned to the object. Strings are assigned either by the AMS DEFINE command or by the AMS ALTER command. A string is required to access an object. The more strings assigned, the more concurrent accesses to the object are permitted. The minimum number of strings that may be assigned is one. Each string requires an index and data buffer and other control blocks. More strings equate to more storage use. To determine potential string shortage problems, use the Issue CAS commands option from the main menu, and issue the F CATALOG,LIST command.

Catalog Status shows a set of six flags. These flags are as follows:
- Byte 1—Allocated to CAS: Y(es) or N(o). If unopened, or in error, a dash (-) will display.
- Byte 2—SMS controlled volume: S. If unopened, or in error, a dash (-) will display.
- Byte 3—Catalog closed: C or In-Storage Cache (ISC) user: I or Virtual Look-aside Facility (VLF) Cache active: V.
- Byte 4—VolCat: A.
- Byte 5—ICF Shared: R or ECS: E.
- Byte 6—Locked: L.

HURBA shows the High-Used RBA of the Data Component of the catalog. The High-Used RBA of any keyed VSAM object’s data component will always be a multiple of that component’s Control Area (CA) size. The CA size is: The Control Interval (CI) size multiplied by the number of Control Intervals in a Control Area, CA Size = CI Size * (CI/CA). This value indicates the number of bytes being “used” by the component; it includes unused bytes due to:
- Requested CI and CA freespace
- Unused CIs due to CA splits
- Unused CIs in the last logical CA
- Unused CIs due to key compression problems

If this value seems to be inordinately high given the number of objects being maintained by the catalog, run the MAP command to perform an analysis of the object.

HARBA shows the High-Allocated RBA of the Data Component of the catalog. The High-Allocated RBA of any keyed VSAM object’s data component will always be a multiple of that component’s Control Area (CA) size. The CA size is: The Control Interval (CI) size multiplied by the number of Control Intervals in a Control Area , CA Size = CI Size * (CI/CA). This value indicates the number of bytes allocated to CAs in the Data Component. If this value is much greater than the HURBA, and no planned growth is expected for this catalog, excess DASD space has been allocated to this catalog. If the HURBA has the same value or is approaching this value, future activity could cause another DASD extent to be allocated.
% shows the HURBA expressed as a percentage of the HARBA for this catalog’s data component. If this value is relatively low, and no planned growth is expected for this catalog, excess DASD space has been allocated to this catalog. If the value is approaching 100 or is 100, future activity could cause an additional DASD extent to be allocated.

CISIZE shows the Control Interval size, in bytes, used by this catalog’s data component. The Control Interval size is specified when the Catalog is DEFINED. AMS has the right to change the specified size (without notification) if an invalid or inappropriate size is specified.

CI/CA shows the number of Control Intervals in a Control Area for the object's data component. The CI/CA will always be an integer value greater than 1. AMS does not permit the CI/CA or the CA size to be directly specified. The Control Area size is constant for the component, ranging between a minimum of one track to a maximum of one cylinder of the DASD device. AMS uses the space allocation specification for the data component typically to derive the CA size.

CAs Used shows the number of Control Areas within the HURBA for the object's data component. Typically, if the space for the catalog has been allocated in cylinders, this value will equal the number of DASD cylinders in use. Please refer to the discussion on HURBA since the term “used” does not mean that data are, in fact, occupying the area.

Type shows the unit - Track or Cylinder - used to allocate DASD space for the object's data component. Normally, this space allocation unit is specified as part of the AMS DEFINE command. However, the space may be specified in other units, and these units may be changed at DEFINE to track or cylinder.

Pri shows the quantity used for the primary allocation of DASD space for the object's data component. Normally, a single extent will be used to satisfy this allocation unit; however, if there is no single unused DASD extent of that size or greater, then this request may be satisfied by use of up to 5 separate extents. DASD volumes should be de-fragmented to prevent this from occurring.

Sec shows the quantity used for the secondary allocation of DASD space for the object's data component. Normally, a single extent will be used to satisfy this allocation unit; however, if there is no single unused DASD extent of that size or greater then this request may be satisfied by use of up to 5 separate extents. DASD volumes should be de-fragmented to prevent this from occurring.

4 GByte % shows the HURBA expressed as a percentage of 4 gigabytes. The maximum HURBA value for a BCS is 4 GigaBytes.

Catalog display primary commands
You can use most ISPF primary commands and these panel-specific primary commands from the Search for Catalog panel.

The text in parentheses is optional when specifying the command.

REF(resh) displays the Specify Catalog Name/Mask panel to allow selection of different catalogs.
**B(ackup) mask**
selects any catalog that matches the specified name or mask for processing
using the BACKUP BCS command. The catalogs that match have a B in
the line command entry field. When you are finished selecting catalogs for
processing, press Enter to access the Submit BACKUP BCS panel.

**D(iagnose) mask**
selects any catalog that matches the specified name or mask for processing
using the DIAGNOSE BCS-VVDS command. The catalogs that match have
a D in the line command entry field. When you are finished selecting
catalogs for processing, press Enter to access the Submit DIAGNOSE
BCS-VVDS panel.

**R(cover) mask**
selects any catalog that matches the specified name or mask for processing
using the RECOVER BCS command. The catalogs that match have an R in
the line command entry field. When you are finished selecting catalogs for
processing, press Enter to access the Submit RECOVER BCS panel.

**PR(in)T**
produces a report, output to a sequential file, of the display. A pop-up
requests the name of the data set to use for the output. The data set must
not exist, and is allocated with a status of NEW. You can use the SORT
command to sort the report before you produce the report. You can use the
IBM-supplied utility, IEBGENER, to print the report:

```plaintext
//PRINT   EXEC PGM=IEBGENER
//SYSIN    DD DUMMY
//SYSPRINT DD DUMMY
//SYSUT1   DD DISP=SHR,DSN=your.data.set.name
//SYSUT2   DD SYSOUT=*  
```

**SORT**
sort the list of catalogs based on the values in a specific column. The initial
sort sequence is by catalog name. You can sort only one column at a time.
When you enter the SORT command, the column specified is used as the
major key and the current "sort column" is used as a minor key. For
example, to sort by Extents within Volser, use the SORT EXTENTS
command and then use the SORT VOLSER command. You can use the
SORT command as follows:

- Specify the SORT command with no argument. The Catalog Sort panel
  appears. From this panel, you can select the sort sequence of ascending
  or descending and a specific sort column.

- Specify the SORT command with one or two arguments, for example,
  SORT VOL ASCENDING where VOL is the abbreviation for the column
  name and ASCENDING is the sequence. The sequence argument is
  optional and defaults to ASCENDING if not specified. You can specify the
  column names as follows:
  - Catalog Name—CAT(alog)
  - Volser—VOL(ser)
  - Alias Count—ALI(as)
  - Extents—EXT(ents)
  - String Number—STR(no)
  - Status—STA(tus)
  - HURBA—HUR(BA)
  - HARBA—HAR(BA)
  - Percentage—PER(centage)
These ISPF primary commands have special capabilities on the Search for Catalog panel.

**L(ocate)**
positions the display on a specific catalog by name. For example, LOCATE SYS1.CPU1.MASTER will position the display on the catalog with a name of SYS1.CPU1.MASTER. The name entered will be directly matched byte for byte for the length of the LOCATE argument against those names displayed in the list. If the name is not found, then the display will be positioned on the name that would immediately follow the specified argument in the list. If there were no such names, then a message will be displayed. Mask characters may be supplied as part of the name. The standard mask characters * and % - as well as extended characters may be used. For example, LOCATE SYS1 or LOCATE SYS1*.** would position the display on the first catalog name with SYS1 in the name. When a mask is used, then Repeat Find (RFIND), usually PF5, can be used to position to the next matching name.

**F(ind)**
positions the display on a specific catalog by name. For example, FIND SYS1.CPU1.MASTER would position the display on the catalog with a name of SYS1.CPU1.MASTER. The name entered will be directly matched byte for byte against those in the list. If the name is not found, a message will be displayed. Mask characters may be supplied as part of the name. You can use the standard mask characters * and %, as well as the extended characters. For example, FIND SYS1.CPU%.MASTER would position the display on the first catalog name with SYS1.CPU in the first eight bytes, the ninth byte may be any acceptable character, the remaining bytes would have to match .MASTER. When a mask is used, then Repeat Find (RFIND), usually PF5, can be used to position to the next matching name.

**Catalog display line commands**
You can use the following line commands from the Search for Catalog panel.

Multiple, different or similar, line commands may be entered in one iteration of the dialog.

**AG**
displays approximate alias growth.

**AL**
displays the aliases associated with the catalog.

**AS**
displays the aliases associated with the catalog including those with the SYMBOLICRELATE attribute.

**B**
selects the catalog for BACKUP command processing.

**D**
selects the catalog for DIAGNOSE command processing.

**I**
displays information about the catalog.

**R**
selects the catalog for RECOVER command processing.

**S**
displays data sets within the selected catalog.
Searching for a DASD Volume

Advanced Catalog Management provides an option on the main menu that allows you to search for and display DASD volumes and optionally, the VVDS attributes.

From this display, you can issue the commands for Backup, Recover, and Diagnose against specific volumes. You can also use primary and line commands to further process the results.

Specifying volume search criteria

To search for and display volumes based on a specific volume name or mask, type 2 (Search for DASD Volume) from the Advanced Catalog Management main menu.

The Search for Volume Setup panel appears. From this panel you can specify the criteria to use when searching for selected volumes. The volumes shown are selected by issuing a UCBSCAN for the online volumes and then the results are further refined by using the criteria you entered.

Volser or Mask
specify a volser name or mask to search for and display.

When you are finished, press Enter to continue. The Search for Volume panel appears.

Viewing the volume display

The Search for Volume panel displays volsers based on the name or mask entered on the Search for Volume Setup panel.

The following describes the fields on the Search for Volume panel.

C allows a line command that will process the selected volume.

Status provides information to indicate that either the volume does not have a VVDS, or, that a line command for that volume has been performed.

Volser or Mask lists the volume serial number of the DASD based on the criteria you entered on the Search for Volume Setup panel. The volume serial number is specified when the volume is initialized.

Extents shows the number of DASD extents currently used by the VVDS on the storage device. Disk extents are added as needed by DASD management when the VVDS expands. The maximum number of extents permitted for an object is 123.

Type shows the unit - Track or Cylinder - used to allocate DASD space for the object's data component. Normally, this space allocation unit is specified as part of the AMS DEFINE command. However, the space may be specified in other units, and these units may be changed at DEFINE to track or cylinder.

Pri shows the quantity used for the primary allocation of DASD space for the object's data component. Normally, a single extent will be used to satisfy this allocation unit; however, if there is no single unused DASD extent of
that size or greater, then this request may be satisfied by use of up to 5 separate extents. DASD volumes should be de-fragmented to prevent this from occurring.

Sec shows the quantity used for the secondary allocation of DASD space for the object’s data component. Normally, a single extent will be used to satisfy this allocation unit; however, if there is no single unused DASD extent of that size or greater, then this request may be satisfied by use of up to 5 separate extents. DASD volumes should be de-fragmented to prevent this from occurring.

Volume display primary commands
You can use most ISPF primary commands and these panel-specific primary commands from the Search for Volume panel.

The text in parentheses is optional when specifying the command.

REF(resh)

displays the Search for Volume Setup panel to allow selection of different volumes.

B(ackup) mask

selects any volume that matches the specified volser or mask for processing using the BACKUP VVDS command. The volumes that match have a B in the line command entry field. When you are finished selecting volumes for processing, press Enter to access the Submit BACKUP VVDS panel.

D(iagnose) mask

selects any volume that matches the specified volser or mask for processing using the DIAGNOSE VOLUME-BCS command. The volumes that match have a D in the line command entry field. When you are finished selecting volumes for processing, press Enter to access the Submit DIAGNOSE VOLUME-BCS panel.

R(ecover) mask

selects any volumes that match the specified volser or mask for processing using the RECOVER VVDS command. The volumes that match have an R in the line command entry field. When you are finished selecting volumes for processing, press Enter to access the Submit RECOVER VVDS panel.

PR(in)T

produces a report, output to a sequential file, of the display. A pop-up requests the name of the data set to use for the output. The data set must not exist, and is allocated with a status of NEW. You can use the SORT command to sort the report before you produce the report. You can use the IBM-supplied utility, IEBGENER, to print the report:

```plaintext
//PRINT EXEC PGM=IEBGENER
//SYSPRINT DD DUMMY
//SYSUT1 DD DISP=SHR,DSN=your.data.set.name
//SYSUT2 DD SYSOUT=* 
```

SORT sort the list of volumes based on the values in a specific column. You can sort only one column at a time. You can use the SORT command with one, or optionally two arguments. For example, SORT EXT ASCENDING where EXT is the abbreviation for the column name and ASCENDING is the sequence. The sequence argument is optional and defaults to ASCENDING if not specified. You can specify the column names as follows:

- Volser—VOL(ser)
These ISPF primary commands have special capabilities on the Search for Volume panel.

**L(ocate)**
positions the display on a specific volume by volser. For example, LOCATE 9SRC will position the display on the volser 9SRC. The volser entered will be directly matched byte for byte for the length of the LOCATE argument against those volumes displayed in the list. If the volser is not found, then the display will be positioned on the volume that would immediately follow the specified argument in the list. If there were no such volumes, then a message will be displayed. Mask characters may be supplied as part of the volser. The standard mask characters - * and % - as well as extended characters may be used. For example, LOCATE 9SRC or LOCATE 9SRC% would position the display on the first volume with 9SRC in the volser. When a mask is used, then Repeat Find (RFIND), usually PF5, can be used to position to the next matching volser.

**F(ind)**
positions the display on a specific volume by volser. For example, FIND SYSRS1 will position the display on the volume with a volser of SYSRS1. The volser entered will be directly matched byte for byte against those in the list. If the volser is not found, a message will be displayed. Mask characters may be supplied as part of the volser. You can use the standard mask characters * and %, as well as the extended characters. For example, FIND SYSRS1 will position the display on the first volume with SYSRS in the first five bytes, the sixth byte may be any acceptable character. When a mask is used, then Repeat Find (RFIND), usually PF5, can be used to position to the next matching volser.

**Volume display line commands**
You can use the following line commands from the Search for Volume panel.

Multiple, different or similar, line commands may be entered in one iteration of the dialog.

- **B** selects the VVDS for BACKUP command processing.
- **D** selects the VVDS for DIAGNOSE command processing.
- **R** selects the VVDS for RECOVER command processing.

---

**Searching for a Storage Group**

Advanced Catalog Management provides an option on the main menu that allows you to search for and display storage groups.

From this display, you can issue the commands for Backup and Diagnose against those volumes within the storage group. You can also use primary and line commands to further process the results.

**Specifying storage group search criteria**
To search for and display storage groups based on a specific name or mask, type 3 (Search for Storage Group) from the Advanced Catalog Management main menu.
The Search for Storage Group Setup panel appears. From this panel you can specify the criteria to use when searching for selected storage groups. The storage groups shown are selected using the subsystem interface to Storage Management and then the results are further refined by using the criteria you entered.

**Storage Group or Mask**
specify a storage group name or mask to search for and display.

**Viewing the storage group display**
The Search for Storage Group panel displays storage groups based on the name or mask entered on the Search for Storage Group Setup panel.

The following describes the fields on the Search for Volume panel.

- **C** enter a line command that will process the selected storage group.
- **Storgrp or Mask** lists the storage groups based on the criteria you entered on the Search for Storage Group Setup panel. Storage groups are named by the Storage Administrator.
- **#Vols** indicates the number of volumes defined to the Storage Group that are online to the current system. When the Storage Group does not have any volumes that are online, then this field is blank.
- **Description** reflects the description text that is defined for the Storage Group by the Storage Administrator. The full description text will be truncated if it is longer than the available space on the panel.

**Storage group display primary commands**
You can use most ISPF primary commands and these panel-specific primary commands from the Search for Storage Group panel.

The text in parentheses is optional when specifying the command.

- **REF(resh)** displays the Search for Storage Group Setup panel to allow selection of different storage groups.
- **B(ackup) mask** selects any storage group that matches the specified name or mask for processing using the BACKUP VVDS command. The storage groups that match have a B in the line command entry field. When you are finished selecting storage groups for processing, press Enter to access the Submit BACKUP VVDS panel.
- **D(ia)gnose) mask** selects any storage group that matches the specified name or mask for processing using the DIAGNOSE VOLUME-BCS command. The storage groups that match have a D in the line command entry field. When you are finished selecting storage groups for processing, press Enter to access the Submit DIAGNOSE VOLUME-BCS panel.

These ISPF primary commands have special capabilities on the Search for Storage Group panel.

- **L(ocate)** positions the display on a specific storage group name. For example, LOCATE SG will position the display on the storage group with SG in the first character of the name.
two bytes. The name entered will be directly matched byte for byte for the length of the LOCATE argument against those storage groups displayed in the list. If the name is not found, then the display will be positioned on the storage group that would immediately follow the specified argument in the list. If there were no such storage groups, then a message will be displayed. Mask characters may be supplied as part of the name. The standard mask characters * and % as well as extended characters may be used. For example, LOCATE SGC or LOCATE SGC* would position the display on the first name with SGC at the start of the name. When a mask is used, then Repeat Find (RFIND), usually PF5, can be used to position to the next matching name.

F(ind) positions the display on a specific storage group name. For example, FIND SGBOOKS would position the display on the storage group with a name of SGBOOKS. The name entered will be directly matched byte for byte against those in the list. If the name is not found, a message will be displayed. Mask characters may be supplied as part of the name. You can use the standard mask characters * and %, as well as the extended characters. For example, FIND SGTSO& will position the display on the first storage group with SGTSO& in the first five bytes, the sixth byte may be any acceptable character. When a mask is used, then Repeat Find (RFIND), usually PF5, can be used to position to the next matching name.

Storage group display line commands
You can use the following line commands from the Search for Storage Group panel.

You can enter a line command for multiple storage groups in the list at one time.

B selects the storage group for BACKUP command processing.

D selects the storage group for DIAGNOSE command processing.

V displays a pop-up with the DASD volumes assigned to the storage group. The information for each volume include:

• The volser
• The UCB if the volume is online.
• The capacity in cylinders, if the volume is online.
• The free space in cylinders, if the volume is online.
• The largest free extent in cylinders, if the volume is online.
Chapter 7. Running Advanced Catalog Management Commands

You can run all Advanced Catalog Management commands through the ISPF interface or you can create a commands library to store the JCL to run the commands.

For all commands, the interface generates a background batch job to run the command. ISPF allows the viewing of BCS, DSN, VVDS, and VTOC data in foreground by invoking ZAP PRINT dynamically.

General command usage guidelines

Before you run Advanced Catalog Management commands, you should become familiar with these general command usage guidelines.

Unless noted, these general guidelines apply to both running commands using the ISPF interface or running the commands from your own built JCL.

Simulation mode

Most of the Advanced Catalog Management commands provide a SIMULATE keyword that allows you to test a command and its parameter specifications before running it.

After you run the command with the SIMULATE keyword, you can review the results. This helps increase your knowledge of how a command works and what the different keywords and parameters do without the danger of damaging your environment.

Include and Exclude Processing

Many of the Advanced Catalog Management commands use extensive include and exclude keyword list processing, allowing you to specifically select items for the command to process.

You can specify either fully qualified values or masks for each of the INCLUDE and EXCLUDE keywords.

The INCLUDE list is processed first and then the EXCLUDE list is applied.

You can use the GLOBAL_EXCLUDE section of CKMINI to unconditionally exclude certain objects from being processed by the DIAGNOSE command, regardless of what is specified on the INCLUDE and EXCLUDE keywords. See "GLOBAL_EXCLUDE" on page 279 for more information.

Continuing lines

This topic describes and shows examples on how to continue a command or a keyword value onto the next line when adding commands to your JCL.

Most commands have keyword values that fit on one line. The exceptions are the EXPLORE and ZAP commands. For example, the ZAP command KEY keyword value can be up to 255 bytes (in character), or 510 bytes (in hexadecimal) and the VER or REP keyword values can be up to 256 bytes (in character) or 512 bytes (in hexadecimal).
To continue a command from one line to the next, a dash (-) or plus sign (+)
continuation character can be used. Like IDCAMS, when a plus sign is used as the
continuation character, leading blanks on the next line are discarded. Using a dash
fails unless the continuation on the next line has no blanks on the left.
The example below shows the continuation of the ZAP command using the dash
continuation character. The ZAP command starts in column 2. The dash
continuation character is in column 71, but can be coded anywhere after the last
byte of data on the line.
ZAP

DSN(DL.T22621.TEST)
DELETE(
KEY(X'C1C1C1C1C1')
PRINT-BEFORE
VER(
000000,X'C1C1C1C1C1E3C8C9E240C9E240D9C5C3'
000012,X'D6D9C440E4D5D6404040404040404040'
000022,X'40404040404040404040404040404040'
000032,X'40404040404040404040404040404040'
000040,X'40404040404040404040404040404040'
)
)

-

When you use the dash continuation character, it does not have to be aligned in the
same column. The example below will be processed the same way as the example
above.
ZAP

DSN(DL.T22621.TEST)+
DELETE(KEY(X'C1C1C1C1C1')PRINT-BEFORE+
VER(000000,X'C1C1C1C1C1E3C8C9E240C9E240D9C5C3' +
000010,X'D6D9C440E4D5D6404040404040404040' +
000020,X'40404040404040404040404040404040' 000030,X'40404040404040404040404040404040' 000040,X'40404040404040404040404040404040'))

The example below shows the continuation of a keyword value using the dash
continuation character. When a keyword value cannot be fully contained on one
line, the dash continuation character must immediately follow the last significant
byte and then the keyword value continues on the next line, starting in column 1.
ZAP

DSN(DL.T15010.KSDS)
DELETE(
KEY(X'7C4BC1D4C6D9D96DE2C4E2C14040404040404040404040404040404040404040404040404040404040404040404040404040404040404040404040404040404040404040404040404040404040')
EXECUTE
PRINT-BEFORE
VER(
000000,X'7C4BC1D4C6D9D96DE2C4E2C14040404040404040404040404040404040404040404040404040404040404040404040404040404040404040404040404040404040404040404040404040404040534040'))

The example below shows the continuation of a keyword value using the plus sign
continuation character. When a keyword value cannot be fully contained on one
line, the plus sign continuation character must immediately follow the last significant
byte and then the keyword value continues at any point on the next line. Any initial
spaces are ignored.
ZAP

44

User’s Guide

DSN(DL.T15010.KSDS)
DELETE(
KEY(X'7C4BC1D4C6D9D96DE2C4E2C1404040404040404040404040+
404040404040404040404040404040404040404040404040+
404040404040404040404040404040404040404040404040+
4040404040')
EXECUTE
-


Changing Keyword Default Values

You can specify values in the CKMINI member of SCKMPARM to change the default values for many of the command keywords in the ISPF interface, for batch mode, or both.

The command syntax in this document shows the default keyword values provided at installation time. Your default values may vary depending on what was specified in the CKMINI member.

Extended ACS masking characters

Many Advanced Catalog Management commands and interface panels allow you to specify powerful filtering masks with extended ACS masking characters.

**Note:** Your installation may need to specify different masking characters to achieve the desired result if your code tables are different from the U.S.A. EBCDIC code set.

The table below lists the supported extended ACS filtering masking characters.

### Table 8. Extended ACS Masking Characters

<table>
<thead>
<tr>
<th>Mask</th>
<th>Hex</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>* (single)</td>
<td>5C</td>
<td>Represents 0-n characters. You can use this mask before an item, after an item, or both to designate a wild-card character position. For example, if *PROD is specified, an item is selected if the last four characters are PROD regardless of the starting characters. If you use the * character before and after an item, such as <em>ZREM</em>, this means that item is selected if any character string matches ZREM in its name.</td>
</tr>
<tr>
<td>%</td>
<td>6C</td>
<td>Represents a single character placeholder value, which can be alpha-numeric or any special character. The % character can be used in any position order. For example, if CRM%%ER6 is specified, an item is selected if it is 8 characters in length and the first three characters are CRM and the last three characters are ER6. The two middle placeholder values can be any characters.</td>
</tr>
<tr>
<td>&lt;</td>
<td>4C</td>
<td>Denotes a placeholder value for alpha characters only. The &lt; character can be used in any position order. For example, if CR&lt;&lt;ER* is specified, an item is selected if the first two characters are CR, the third and fourth characters are alpha, the fifth and sixth characters are ER, and any remaining characters are anything.</td>
</tr>
</tbody>
</table>
Table 8. Extended ACS Masking Characters (continued)

<table>
<thead>
<tr>
<th>Mask</th>
<th>Hex</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>&gt;</td>
<td>6E</td>
<td>Denotes a placeholder value for only numeric characters only. The &gt; character can be used in any position order. For example, if CR&gt;&gt;ER* is specified, an item is selected if the first two characters are CR, the third and fourth characters are numeric, the fifth and sixth characters are ER, and any remaining characters are anything.</td>
</tr>
<tr>
<td>** (double)</td>
<td>5C5C</td>
<td>Allows compatibility with standard ACS and DFSMSdss™ filtering masks. Only used for partially qualified data set names. Use the * or ** characters in any qualifier position to denote a wild-card node. For example, if CRFM*.*<em>VER.</em> is specified, a data set entry is selected if it has at least two qualifiers and the first qualifier starts with CRFM, the second qualifier ends with VER, and any remaining qualifiers are anything. <strong>Note</strong>: As with common data set name masking, any combination of *, **, and/or &gt; characters can be used for the item mask value.</td>
</tr>
<tr>
<td>!</td>
<td>5A</td>
<td>Denotes a placeholder value for national characters based on the U.S.A. EBCDIC code set only. The ! character can be used in any position order. National characters, based on the U.S.A. EBCDIC code set are @, #, and, $.</td>
</tr>
</tbody>
</table>

Running commands using the ISPF interface

This topic describes the steps to run a command using the Advanced Catalog Management interface.

**Note**: Be sure to tailor your job card options before running a command.
1. From the Advanced Catalog Management main menu, select one of the command options. The Select Command Function panel appears.
2. Select one of the command functions and press Enter. The Submit Command panel appears.
3. Enter the required information. For more information about each field, refer to the ISPF online help or the appropriate chapter in this document.
4. Type **S** in the Build JCL/Edit for Submit field and press Enter. After the data you entered is validated the Build JCL Warning pop-up appears.
5. Press Enter to continue. An ISPF edit session with your generated JCL and command statements appears.
6. Type **SUBMIT** to run the command.

Saving generated JCL and control statements

After you have built your command control statements using the interface, you can save the generated JCL and control statements to a PDS
1. From the ISPF edit session, type **CREATE** on the command line.
2. Type **C99999** (copy 99999 lines) on the first line.
3. Press Enter. The Edit/View - Create panel appears.
4. Enter the PDS or PDSE name and member in the **Data Set Name** field. If the data set is not cataloged, specify a value for the **Volume Serial** field.

5. Press Enter. The ISPF edit session appears. A message confirming the member creation appears at the top of the panel.

---

**Creating a commands library**

The SCKMCNTL library contains samples of JCL you can use to run all of the Advanced Catalog Management commands.

To set up your own library of commands, copy and paste the sample JCL members into your job streams and then modify them for your environment.

**Notes:**

1. When using the RECOVER command and the FORWARD keyword is specified (with or without SIMULATE), the following DDNames must be coded and not allocated to NULLFILE:
   - RCVDD1
   - RCVMRG
   - RCVSMF
   - The DDName specified in the SMFFILE keyword

2. For the RECOVER SIMULATE(DEFINE) keyword, the GENDEFCC DD card can be used.

The JCL DD statements that are the most commonly used for running the commands are described below.

**STEPLIB**

The APF-authorized SCKMLOAD library where you have installed the executable product modules. It is important that you consider how you get to this library in the event that the catalog being recovered is the one in which this library is cataloged.

**INI**

The initialization member in the distribution SCKMPARM where you choose your product execution and configuration parameters. The information in this library member is usually set up and maintained by the person responsible for installation and configuration of the product.

**SORTWKnn**

Optional. The presence of certain keywords causes the dynamic allocation of 12 sort work areas, unless overridden by the presence of SORTWKnn DD statements. The amount of space used is installation dependent (12 * default work area size). The default work area size is normally set at SORT installation time or by SCKMPARM settings. In some instances this amount of sort work space may be insufficient. The sort work space may be allocated by including the appropriate number of SORTWKnn DD statements to accomplish the task. An example of the SORTWKnn DD statement follows:

```
//SORTWK01 DD SPACE=(CYL,(60)),UNIT=SYSALLDA
```

Please consult the policies for your installation for the coding of DD statements.
**SYSPRINT**
The output data set where a report is created for listing all control cards that you supply, and all run-time messages from the commands. The attributes of SYSPRINT are:

```plaintext
RECFM=VBA,LRECL=137 (133 + 4),BLKSIZE=0
```

These attributes are set internally and are consistent for all commands and may not be overridden.

**SYSIN** A required statement that identifies the input file that contains all execution command control statements. This file can be identified with an asterisk parameter (DD *), in which case the control statements must immediately follow this DD statement in the input stream. Alternatively, the control statements can be stored in a sequential file, or as a member of a partitioned data set, in which case, the data set name (and member) is specified on this DD statement.

**SYSUDUMP** An optional output data set where a storage dump is written in the event of an abnormal end (ABEND) of Advanced Catalog Management.

**outdataset**
A user-named DD statement where the output of the command function is written. This DD statement is pointed to by an OUTFILE keyword in the command syntax. Usually, this data set can be allocated ahead of Advanced Catalog Management execution, and then dynamically allocated by specification of its actual data set name on the OUTDATASET keyword in the command syntax. For example, on the BACKUP BCS command, this is the data set to which the BCS is to be backed up.

**journaldataset**
A user-named data set that is always specified by its VSAM cluster name within the command, and dynamically allocated for use by the command. Several commands use a journal file, including DIAGNOSE (only for certain subcommands), MERGECAT, RECOVER (only when using the NEW-NAME parameter), and SUPERCLIP.

**Note:** Each command has its own format of journal file, with different attributes specified, so it is not possible (or desirable) to create one journal file and use it across all commands. Progress records, plus all information needed to restart or back out from a failure of the command is written to the journal file. Special care and use of the journal file is necessary. If you inadvertently delete it in between a failed command and an attempted restart or backout, it is impossible to do the restart or backout.
Attention:
- There is no Backout or Restart available in Recover BCS.
- Because the journal is a KSDS structure, the BMC MainView Batch Optimizer facility may need to be turned off. The following DD statement will turn off Batch Optimizer for VSAM:
  ```
  //DAP0NVPO DD DUMMY
  ```
  If you need to turn it off for a non-VSAM data set, add the following DD statement:
  ```
  //DAP0NNPO DD DUMMY
  ```

BCKWORK
This DD statement is required in BACKUP BCS when the PARALLEL option is used. The DD statement should be allocated with attributes similar to:
```
//BCKWORK DD DISP=(,PASS,DELETE),SPACE=(CYL,(5,5)),UNIT=SYSALLDA
```
This object is used to store the backup report data as they are generated: this report will then be internally sorted and written to the SYSPRINT DD statement.

RCVDD1
A temporary output data set for the RECOVER command, used to hold backup BCS records prior to reloading them into the target BCS. This is a mandatory DD statement. It should be defined with DCB attributes of: LRECL=32404 and RECFM=VB (as it is in the RECOVER member). If it is defined as a DASD data set (for performance reasons), the size requirements are equal to the loaded size of the BCS being restored.

SORTMSG
Is the alternate DD name for the SORT module SYSPRINT statement (required to be a different name, as Advanced Catalog Management already uses SYSPRINT) for the RECOVER and ZAP commands.

DD1, DD2, DD3, DD4
The sample RECOVER PROC includes the IEFBR14 step which is a handy way to ensure that RCVDD1, RCVMRG, RCVSMF, and SMFERR data sets are deleted prior to a RECOVER step. The technique of specifying DISP=(MOD,DELETE) means the data set is allocated as MOD if found, but then deleted; SPACE=(0,0) means that if it isn't found, it is allocated with no space, and then deleted.

GENDEFCC
When SIMULATE(DEFINE) is specified on RECOVER BCS or RECOVER DSN, the generated DEFINE USERCATALOG commands are captured and stored in the non-VSAM physical sequential (DSORG=PS) data set. No additional keywords are required for this, and is accomplished only if the presence of a JCL DD statement named GENDEFCC is detected in the job stream for RECOVER. Take note that this DD statement is not contained in the sample RECOVER JCL member, and must be added by you if desired. The GENDEFCC DD statement must be of the form:
```
//GENDEFCC DD DSN=dsname,DISP=(,CATLG),
//UNIT=SYSALLDA,SPACE=(TRK,(1,1))
```
The DEFINE command(s) are written in 80-column card image format, with program-specified DCB attributes of DSORG=PS, RECFM=FB, and LRECL=80. If multiple BCSs from the backup file are to be processed by SIMULATE(DEFINE), the DISP keyword must be changed to MOD.
RCVMRG
The data set into which RECOVER writes the merged backup BCS records and SMF forward recovery records. It should be defined with DCB attributes of: LRECL=32404 and RECFM=VB (as it is in the RECOVER member). If it is defined as a DASD data set (and should be for performance reasons), the size requirements are equal to the loaded size of the BCS being restored, plus an additional amount necessary to hold all of the SMF records that are merged in with the forward recovery.

RCVSMF
The data set that holds the re-formatted SMF records for the RECOVER command prior to the forward recovery operation. It should be defined with DCB attributes of: LRECL=32748 and RECFM=VB. If it is defined as a DASD data set (and should be for performance reasons), the size requirement is the amount necessary to hold all of the SMF records for the forward recovery.

SMFERR
The data set that holds any SMF records that are found to contain errors during the RECOVER command forward recovery operation. It should be defined with DCB attributes of: LRECL=32748 and RECFM=VB. If it is defined as a DASD data set (and should be for performance reasons), its size requirement should be satisfied with an allocation of TRK(1,1).

smfdata
A user-named DD statement that identifies all of the SMF data. This is used as input to a BCS forward recovery operation, and has all of the attributes of a data set containing SMF data.

Product Build Information in SYSPRINT Output

After you run each Advanced Catalog Management job, a SYSPRINT file is produced that contains the output from the command with product information messages.

The header line on each page of the report identifies the following:
• product name
• name and address
• date and time of the execution
• page number

On the first page of the output, the header line is followed by a message that provides product build information. The message contains this build information:
• version/release/maintenance level/service pack that you are executing
• date of the BUILD that you are executing
• operating system release of the system on which the build was performed

The last message in the SYSPRINT report is always a message that indicates the end of processing and the highest return code encountered during execution. This message is extremely important for reporting any type of problem.
Chapter 8. ALTER - Clean or Repair an ICF Catalog

Advanced Catalog Management provides the ALTER command with situation-specific functions to clean or repair the BCS or the VVDS.

Note: Before using the ALTER command, you should have a good knowledge and understanding of ICF catalog concepts and facilities, otherwise serious damage can result making further repair work more difficult.

ALTER BCS-BACK-POINTERS

Use the ALTER BCS-BACK-POINTERS command to quickly and easily change the BCS back-pointer value in one or more VVDS records.

The primary function of the ALTER BCS-BACK-POINTERS command is to change the BCS back-pointer fields. After performing this function on each volume, the command processor checks if the old BCS owns any data sets on the volume. If it does not, the BCS name is removed from the VVCR (and any VVCN) records in the VVDS of that volume. This effectively severs the BCS and this VVDS from a valid ICF catalog relationship. If the new BCS name is not already contained in the VVCR of each volume processed, it is added. This effectively creates a valid ICF catalog relationship for the BCS and VVDS.

Syntax
Notes:
1. If you specify REMOVE, you cannot specify NEW-BCS, INCLUDE-DSN, EXCLUDE-DSN, or PRINT(KEY).

ALTER BCS-BACK-POINTERS Command Syntax

**Keywords**

**INCLUDE-STORAGEGROUP**
- Specifies one or more specific or masked SMS storage groups of volumes to process.

**INCLUDE-VOLSER**
- Specifies one or more specific or masked volume serial numbers of the volumes on which VVDSs are to be processed. All selected volser must be for volumes that are currently online to the system where the ALTER command is run.

**NEW-BCS**
- Specifies the new fully qualified data set name of the BCS that replaces all occurrences of the OLD-BCS name.

**OLD-BCS**
- Indicates the BCS name to search for and replace with the NEW-BCS name.
  1. `bc` — the fully qualified data set name of the BCS.
  2. `ALL` — specifies that all un-referenced BCS names in the selected VVDSs are to be removed.

*ALL* can only be specified when the REMOVE keyword is also specified. When specified, the command processor scans the entire VVDS, comparing the BCS names in the VVCR/VVCN to the BCS back-pointers in each VVR/NVR, and when a BCS name is not found to exist in any VVR/NVR, it is then removed from the VVCR/VVCN.

**SIMULATE**
- Indicates that you want to test the command without actually performing it.

**INCLUDE-DSN**
- Specifies one or more specific or masked data set names whose VVR/NVR records are searched for in the VVDSs from the selected volume serial number list.
EXCLUDE-DSN
specifies one or more specific or masked data set names to exclude from processing.

EXCLUDE-STORAGEGROUP
specifies one or more specific or masked SMS storage groups of volumes to exclude from processing.

EXCLUDE-VOLSER
specifies one or more specific or masked volume serial numbers to exclude from processing.

PRINT
specifies the level of printing to SYSPRINT that takes place during processing.
• NONE—do not print anything. This is the default.
• DATA—print the complete record, including key and data, from the VVDS being altered.
• KEY—print only the key from the VVDS record being altered. Because the VVDS is structurally an ESDS, its records do not have keys so the component name of the data set record is printed.

REMOVE
deletes pointers in a VVDS that are pointing to non-existent catalogs. For each selected volume, the relationship with the VVDS and each BCS is validated. If the VVDS indicates a relationship with a BCS, and the BCS either no longer exists or does not contain the corresponding SYS1.VVDS.Vvolser entry, and no VVR or NVR records in that VVDS have a back-pointer to that BCS, then the name of that BCS is unregistered from the VVDS. Otherwise, the REMOVE is not performed. OLD-BCS is not necessary with REMOVE, but when specified it must be OLD-BCS(ALL).

If you specify REMOVE, you cannot specify NEW-BCS, INCLUDE-DSN, EXCLUDE-DSN, or PRINT(KEY).

Usage notes
None.

ALTER BCS-DEVICETYPE
Use the ALTER BCS-DEVICETYPE command to quickly and easily change the device type value in the catalog for data sets.

Syntax

```
ALTER BCS-Devicetype INCLUDE-Bcs(bcs bcsmask) NEW-DEVicetype(newvalue)
```
Keywords

**INCLUDE-BCS**

specifies one or more specific or masked BCS names to process. Only BCS names that are connected to the master catalog on the system running the ALTER command are selected. If MASTER-CATALOG is specified, all BCSs that match the BCSs specified in INCLUDE-BCS are included in the selection analysis.

**NEW-DEVICETYPE**

specifies the new value to insert into the existing device type field in the selected catalog records. The value entered may be a character value, denoted by the "C" flag, or a hexadecimal value, denoted by the "X" flag. If a hexadecimal value is entered, it must consist of the characters 0 through F, and must be 8 hexadecimal characters in length. Specify a generic name, esoteric name, or a hexadecimal value.
The device type will be validated. The value entered will be checked against the available system values (as defined via HCD) as well as an internal generic table. See "Usage notes" on page 56 for the values allowed by the internal generic table.

OLD-DEVICETYPE
specifies the old value to match in the device type field in the selected catalog records. The value entered may be a character value, denoted by the “C” flag, or a hexadecimal value, denoted by the “X” flag. If a hexadecimal value is entered, it must consist of the characters 0 through F, and must be 8 hexadecimal characters in length. Specify a generic name, esoteric name, or a hexadecimal value.

The device type will be validated. The value entered will be checked against the available system values (as defined via HCD) as well as an internal generic table. See "Usage notes" on page 56 for the values allowed by the internal generic table.

SIMULATE
specifies that you want to test the command without actually performing it.

EXCLUDE-BCS
specifies one or more specific or masked BCS names to exclude from processing.

INCLUDE-DSN
specifies one or more specific or masked data set names to process.

EXCLUDE-DSN
specifies one or more specific or masked data set names to exclude from processing.

INCLUDE-STORAGEGROUP
specifies one or more specific or masked SMS storage groups of volumes to process.

EXCLUDE-STORAGEGROUP
specifies one or more specific or masked SMS storage groups of volumes to exclude from processing.

INCLUDE-VOLSER
specifies one or more specific or masked volume serial numbers to process.

EXCLUDE-VOLSER
specifies one or more specific or masked volume serial numbers to exclude from processing.

MASTER-CATALOG
specifies a fully qualified master catalog name. This command searches that specified master catalog for user catalogs that match the specification in the INCLUDE-BCS keyword. All user catalogs in that master catalog are then included in the processing of this command.

If MASTER-CATALOG is not specified, only the master catalog on the system on which the command is run is used. The master catalog that you specify must be connected to the current system’s master catalog.

PRINT specifies the level of printing to SYSPRINT that takes place during processing.
- KEY—print only the key from the BCS record being altered. This is the default.
• NONE—do not print anything.
• DATA—print the complete record, including key and data, from the BCS being altered.

Usage notes

For the NEW-DEVICETYPE and OLD-DEVICETYPE keywords, the internal generic table allows the following values:

<table>
<thead>
<tr>
<th>Generic</th>
<th>Device Type</th>
<th>Class</th>
</tr>
</thead>
<tbody>
<tr>
<td>3380</td>
<td>X'3010200E'</td>
<td>DASD</td>
</tr>
<tr>
<td>3390</td>
<td>X'3010200F'</td>
<td>DASD</td>
</tr>
<tr>
<td>3400-2</td>
<td>X'30C08003'</td>
<td>Tape</td>
</tr>
<tr>
<td>3400-3</td>
<td>X'34008003'</td>
<td>Tape</td>
</tr>
<tr>
<td>3400-5</td>
<td>X'32008003'</td>
<td>Tape</td>
</tr>
<tr>
<td>3400-6</td>
<td>X'32108003'</td>
<td>Tape</td>
</tr>
<tr>
<td>3400-9</td>
<td>X'33008003'</td>
<td>Tape</td>
</tr>
<tr>
<td>3480</td>
<td>X'78008080'</td>
<td>Tape</td>
</tr>
<tr>
<td>3480X</td>
<td>X'78048080'</td>
<td>Tape</td>
</tr>
<tr>
<td>3490</td>
<td>X'78048081'</td>
<td>Tape</td>
</tr>
<tr>
<td>3590-1</td>
<td>X'78048083'</td>
<td>Tape</td>
</tr>
<tr>
<td>9345</td>
<td>X'30102004'</td>
<td>DASD</td>
</tr>
</tbody>
</table>

ALTER BCS-VOLSER

Use the ALTER BCS-VOLSER command to change all occurrences of a particular volser value within a BCS.

This command assumes that the volume's volser is already what you want it to be, and that the VTOC, VTOCIX, and VVDS have been updated (if necessary) to match that volser. This command will update the BCS only, cataloging the data sets on the volume to show the data sets to be physically allocated on that volume.

Syntax

```
ALTER Bcs-Volser [INClude-Bcs(bcs) bcsmask, Old-VOLser(volser), New-VOLser(volser)]
```

SIMulate

```
SIMulate [EXClude-Bcs(bcs) bcsmask, INClude-Dsn(dsn) dsmask]
```
Keywords

INCLUDE-BCS
specifies one or more specific or masked BCS names to process. Only BCS names that are connected to the master catalog on the system running the ALTER command are selected. If MASTER-CATALOG is specified, all BCSs that match the BCSs specified in INCLUDE-BCS are included in the selection analysis.

NEW-VOLSER
indicates the new value to insert for the volume serial number in the selected catalog records. The volser must be a maximum of 6 alphanumeric characters. Indirect volume serial numbers of &volser (for example, &SYSR1) or ****** are permitted.

Typically, the NEW-DEVICETYPE keyword is not used when changing the volser to an indirect or an extended indirect value. After running the command, the device type is changed to X'00000000'. At allocation time, allocation services will determine the device type. If a specific volser is specified, an automatic attempt is made to determine the device type and, without user intervention, make the device type change.

If it is not possible to determine the device type, you must specify NEW-DEVICETYPE. Only the volser in the volume cells of BCS records are changed, not any volser that may be part of a data set name, for example.

If one or more of the BCS being updated are physically resident on the volume, at execution time the master catalog is checked to determine if the volser for the user catalog record pointing to the BCS requires updating, if so, the record will be updated. If the MASTER-CATALOG keyword is also specified, that catalog is also checked and updated as required.

OLD-VOLSER
specifies the existing (old) volume serial number to replace within the selected catalog records. Indirect volume serial numbers, of the form ******, as well as extended indirect volume serial numbers, of the form &SYSR1, are permitted. Otherwise, the volser must be valid - a maximum of 6 alphanumeric characters.

Only the volser in the volume cells of BCS records are matched, not any volser that may be part of a data set name, for example. If one or more of the BCS being updated are physically resident on the volume, the master
catalog, at execution time, is checked to determine if the volser for the user catalog record pointing to the BCS requires updating, if so, the record will be updated. If the MASTER-CATALOG keyword is also specified, that catalog will also be checked and updated as required.

**SIMULATE**
specifies that you want to test the command without actually performing it.

**EXCLUDE-BCS**
indicates one or more specific or masked BCS names to exclude from processing.

**INCLUDE-DSN**
indicates one or more specific or masked data set names to process.

**EXCLUDE-DSN**
indicates one or more specific or masked data set names to exclude from processing.

**MASTER-CATALOG**
specifies a fully qualified master catalog name. This command searches that specified master catalog for user catalogs that match the specification in the INCLUDE-BCS keyword. All user catalogs in that master catalog are included in the processing of this command.

If MASTER-CATALOG is not specified, only the master catalog on the system on which the command is run is used. The master catalog that you specify must be connected to the current system’s master catalog.

**NEW-DEVICETYPE**
specifies the new value to insert into the existing device type field in the selected catalog records. The value entered may be a character value, denoted by the “C” flag, or a hexadecimal value, denoted by the “X” flag. If a hexadecimal value is entered, it must consist of the characters 0 through F, and must be 8 hexadecimal characters in length. Specify a generic name, esoteric name, or a hexadecimal value.

The device type will be validated. The value entered will be checked against the available system values (as defined via HCD) as well as an internal generic table. See [Usage notes](#) for the values allowed by the internal generic table.

**PRINT** specifies the level of printing to SYSPRINT that takes place during processing.

- **NONE**—do not print anything. This is the default.
- **KEY**—print only the key from the BCS record being altered.
- **DATA**—print the complete record, including key and data, from the BCS being altered.

**Usage notes**

For the NEW-DEVICETYPE keyword, the internal generic table allows the following values:

<table>
<thead>
<tr>
<th>Generic</th>
<th>Device Type</th>
<th>Class</th>
</tr>
</thead>
<tbody>
<tr>
<td>3380</td>
<td>X’3010200E’</td>
<td>DASD</td>
</tr>
<tr>
<td>3390</td>
<td>X’3010300F’</td>
<td>DASD</td>
</tr>
<tr>
<td>3400-2</td>
<td>X’30C08003’</td>
<td>Tape</td>
</tr>
</tbody>
</table>
### ALTER NONVSAM

Use the ALTER NONVSAM command to physically delete, rename, or synchronize the NVR for non-VSAM data sets.

This command works with the volume’s VTOC, VVDS, or both, but does not modify the BCS entries. This function serves as an alternative to the IEHPROGM SCRATCH and RENAME commands, and the IDCAMS DELETE NVR and ALTER commands.

#### Syntax

```plaintext
ALTER NonVsam(DSName(dsn)) VOLser(volser)

EXECute
SIMulate

Bcs-Back-Pointer(bcs)

ENQ
NOENQ
LIST
NOLIST
List-Only

NEW-Name(dsn)
SCRatch
sync-NVR

New-DataClass(data-class)

New-MgmtClass(mgmt-class)

New-StorClass(stor-class)

Notes:

1. You can specify this keyword with the SYNC-NVR or NEW-NAME keywords only when the VOLSER keyword specifies an SMS-managed volume.
2. When a keyword of SCRATCH, NEW-NAME or SYNC-NVR is specified, LIST is assumed even if NOLIST is specified.
3. If you specify LIST-ONLY, you cannot specify ENQ, NEW-NAME, SCRATCH, SYNC-NVR, or
```

#### Table: Device Types and Classes

<table>
<thead>
<tr>
<th>Generic</th>
<th>Device Type</th>
<th>Class</th>
</tr>
</thead>
<tbody>
<tr>
<td>3400-3</td>
<td>X'34008003'</td>
<td>Tape</td>
</tr>
<tr>
<td>3400-5</td>
<td>X'32008003'</td>
<td>Tape</td>
</tr>
<tr>
<td>3400-6</td>
<td>X'32108003'</td>
<td>Tape</td>
</tr>
<tr>
<td>3400-9</td>
<td>X'33008003'</td>
<td>Tape</td>
</tr>
<tr>
<td>3480</td>
<td>X'78008080'</td>
<td>Tape</td>
</tr>
<tr>
<td>3480X</td>
<td>X'78048080'</td>
<td>Tape</td>
</tr>
<tr>
<td>3490</td>
<td>X'78048081'</td>
<td>Tape</td>
</tr>
<tr>
<td>3590-1</td>
<td>X'78048083'</td>
<td>Tape</td>
</tr>
<tr>
<td>9345</td>
<td>X'30102004'</td>
<td>DASD</td>
</tr>
</tbody>
</table>
SIMULATE.

ALTER NONVSAM Command Syntax

**Keywords**

**DSNAME**

specifies the name of the non-VSAM data set to process. Quoted strings are allowed. For example, **DSNAME('**SYSUT1.'**) identifies data sets, such as **DSN=**SYSUT1.T1351067, that physically contain characters that are normally used for generics.

**VOLSER**

specifies the single volser on the specified data set to search for and process. Symbolic volser are not supported.

**EXECUTE**

indicates that you want to update the volume.

**SIMULATE**

specifies that you want to test the command without actually performing it.

**BCS-BACK-POINTER**

indicates that you want to override the BCS name that results from a normal catalog search. The default is the BCS name obtained from a catalog search on the current system. If the **BCS-BACK-POINTER** is not specified, the BCS selected will be determined by the **NEW-NAME** specification when executing a **RENAME**, or the **DSNAME** specification when executing a **SYNC-NVR**.

**ENQ**

indicates that you want to issue a SYSDSN enqueue for exclusive use of the specified data set name. If an ENQ conflict occurs, the command fails.

**NOENQ**

indicates that you do not want to issue a SYSDSN enqueue, but want to process the command even if another task owns the SYSDSN resource for the specified data set.

**LIST**

indicates that you want the before and after details of the data set included in the output listing.

**NOLIST**

indicates that you want to see messages that relate to volume update processing only. If **SCRATCH**, **NEW-NAME**, or **SYNC-NVR** is specified, **LIST** will automatically be used.

**LIST-ONLY**

indicates that you want to list the data set attributes only. The volume will not be updated. If you specify **LIST-ONLY**, you cannot specify **ENQ**, **NEW-NAME**, **SCRATCH**, **SYNC-NVR**, or **SIMULATE**.

**NEW-NAME**

indicates the fully qualified new data set name you want for the specified data set. If the object resides on a SMS-managed volume, and is appropriately cataloged as such, the **ALTER** command will fail.

**SCRATCH**

indicates that you want to delete the specified data set on the specified volume. If the object resides on a SMS-managed volume, and is appropriately cataloged as such, the **ALTER** command will fail.
SYNC-NVR
indicates that you want to repair an anomaly between the VVDS and the VTOC metadata for the object.

NEW-DATACLAS
indicates that you want to override the data class value that the command would have chosen. Valid values include:
- `data-class`—override the data class value with this value.
- `*`—override the data class value with the one selected according to current ACS rules.
- `-NULL-`—do not assign a data class value to this object.

The default is the original data class name for the data set or, if the NVR was not available, the data class name returned from the current ACS routines.

NEW-MGMTCLAS
indicates that you want to override the management class value that the command would have chosen. Valid values include:
- `mgmt-class`—override the management class value with this value. If this is a new management class value, it must be defined to the current SMS subsystem.
- `*`—override the management class value with the one selected according to current ACS rules.
- `-NULL-`—do not assign a management class value to this object.

The default is the original management class name for the data set or, if the NVR was not available, the management class name returned from the current ACS routines.

NEW-STORCLAS
indicates that you want to override the storage class value that the command would have chosen. Valid values include:
- `stor-class`—override the storage class value with this value. If this is a new storage class value, it must be defined to the current SMS subsystem.
- `*`—override the storage class value with the one selected according to current ACS rules.
- `-NULL-`—do not assign a storage class value to this object.

The default is the original storage class name for the data set or, if the NVR was not available, the storage class name returned from the current ACS routines.

Usage notes
1. ALTER NONVSAM provides the ability to physically delete, rename, and synchronize the NVR for non-VSAM data sets. This command works with the volume’s VTOC and/or VVDS, but does not modify the BCS entries. The function serves as an alternative to the IEHPROGM SCRATCH and RENAME commands, and the IDCAMS DELETE NVR and ALTER commands.
   - ALTER NONVSAM can be used for non-VSAM data sets on either non-SMS or SMS-Managed volumes.
   - ALTER NONVSAM cannot be used for data sets that are VSAM components.
   - The NOENQ parameter allows functions to be performed even when the data set name is currently in use by another task.
• If an SMS-managed non-VSAM data set was missing the NVR, the NEW-NAME and SYNC-NVR parameters will construct a default NVR based on the ACS routines. However, a default NVR cannot be reconstructed for data sets with the STRIPED or COMPRESSED attributes.

• The SCRATCH, NEW-NAME, and SYNC-NVR parameters will remove all duplicate and unnecessary NVRs for the data set when they are encountered.

• For a multi-volume SMS-managed data set, only the first volume will contain an NVR. An ALTER NONVSAM SYNC-NVR operation or the data class, storage class or management class keywords will result in a warning message.

• The ability to scratch or rename data sets that are correctly cataloged to the volume is restricted. This function is controlled through the presence and access to the security profile STGADMIN.IGG.DELNVR.NOBCSCHK in the FACILITY class. This is only allowed when the profile exists, and you have at least READ access to it.

• ALTER NONVSAM does not support symbolic VOLSERS. This command was designed to handle data set scratch and rename without involvement of any catalogs. A mounted volser containing mask or symbolic characters would be invalid.

2. When the data set name specified for the DSNAME keyword is cataloged and the BCS entry includes the volume specified in the VOLSER keyword, use of the SCRATCH and NEW-NAME parameters is extremely dangerous in most cases. The intent of ALTER NONVSAM is to address residual or alternate-version data set components that are not cataloged. If NEW-NAME is specified and the data set is SMS managed, then it is the user’s responsibility to perform the ALTER BBP (BCS-BACK-POINTER) and DEFINE RECATALOG. The ability to override this restriction can be accomplished through implementing the CLASS=FACILITY security profile STGADMIN.IGG.DELNVR.NOBCSCHK and granting READ access for your ID. However, it would be preferable to identify alternate ways to address this situation.

3. ALTER NONVSAM and SAF System Security Checking

Some of the security checking performed by ALTER NONVSAM occurs to preempt violations that would otherwise occur when certain system functions are invoked. In these situations, ALTER NONVSAM can provide more explicit information by detecting these situations in front of the system logic code, and also make these same access issues apparent during SIMULATE processing. When supported by the security product such as RACF, the audit records due to actions performed by ALTER NONVSAM indicate whether the command is being executed in SIMULATE or EXECUTE modes.

Security Profiles Referenced by ALTER NONVSAM

For more information regarding the security profiles for classes FACILITY STORCLAS and MGMTCLAS, see the DFSMSdfp™ Storage Administration Reference.

<table>
<thead>
<tr>
<th>Class</th>
<th>Resource</th>
</tr>
</thead>
<tbody>
<tr>
<td>DATASET</td>
<td>Data Set Name</td>
</tr>
<tr>
<td>DASDVOL</td>
<td>Volume Serial Number</td>
</tr>
<tr>
<td>STORCLAS</td>
<td>SMS Storage Class Name</td>
</tr>
<tr>
<td>MGMTCLAS</td>
<td>SMS Management Class Name</td>
</tr>
<tr>
<td>FACILITY</td>
<td>STGADMIN.DPDSRN.data.set where data.set is the first 23 characters of the data set name</td>
</tr>
</tbody>
</table>
Security checking with the NOENQ keyword

- The CLASS=FACILITY profile for STGADMIN.DPDSRN.data.set is checked to ensure that the data set name specified in the DSNAME keyword is not explicitly disallowed from NOENQ processing. This checking occurs for both SMS and Non-SMS volume situations. If no matching profile is found, then there are no effects due to this.

- The volume specified by the VOLSER keyword is checked for ALTER intent in CLASS=DASDVOL. If access is allowed, or, if no matching profile was found, then the SCRATCH function is considered as authorized. Otherwise the request is failed.

Security checking with the SCRATCH keyword

- If the data set name specified in DSNAME is cataloged, and the BCS entry includes the volume specified in the VOLSER keyword, a check is made to the CLASS=FACILITY profile STGADMIN.IGG.DELNVR.NOBCSCHK for READ access. If this profile is not found, or if you do not have at least READ access to it, then the SCRATCH request is failed. This check is performed for both Non-SMS and SMS-Managed volumes. The intent of this profile is to guard against unintentional damages.

- The data set name specified in DSNAME and VOLSER is checked for ALTER intent in CLASS=DATASET. If access is allowed, then the SCRATCH function is authorized. Otherwise, more checks are performed before this is considered a violation.

- The volume specified by the VOLSER keyword is checked for ALTER intent in CLASS=DASDVOL. If access is allowed, then the SCRATCH function is considered as authorized. Otherwise, if the volume is not SMS managed, the request is failed.

- If the volume is SMS-Managed, further checks are made to CLASS=FACILITY profiles STGADMIN.ADR.STGADMIN.COPY.DELETE and STGADMIN.ADR.STGADMIN.DUMP.DELETE for READ access. If access is allowed, then the SCRATCH function is considered as authorized. Otherwise, the request is failed.

Security checking with the NEW-NAME keyword

- If the data set name specified in DSNAME is cataloged, and the BCS entry includes the volume specified in the VOLSER keyword, a check is made to the CLASS=FACILITY profile STGADMIN.IGG.DELNVR.NOBCSCHK for READ access. If this profile is not found, or if you do not have at least READ access to it, then the NEW-NAME request is failed. This check is performed for both Non-SMS and SMS-Managed volumes. The intent of this profile is to guard against unintentional damages.

- The data set name specified in DSNAME and VOLSER is checked for ALTER intent in CLASS=DATASET. If access is allowed, then the NEW-NAME function is authorized. If access is denied, and, the volume specified in the

---

<table>
<thead>
<tr>
<th>Class</th>
<th>Resource</th>
</tr>
</thead>
<tbody>
<tr>
<td>FACILITY</td>
<td>STGADMIN.IGG.DELNVR.NOBCSCHK</td>
</tr>
<tr>
<td>FACILITY</td>
<td>STGADMIN.ADR.STGADMIN.COPY.DELETE</td>
</tr>
<tr>
<td>FACILITY</td>
<td>STGADMIN.ADR.STGADMIN.COPY.RENAME</td>
</tr>
<tr>
<td>FACILITY</td>
<td>STGADMIN.ADR.STGADMIN.DUMP.DELETE</td>
</tr>
<tr>
<td>FACILITY</td>
<td>STGADMIN.ADR.STGADMIN.RESTORE.RENAME</td>
</tr>
</tbody>
</table>
VOLSER keyword is not SMS-Managed, then the NEW-NAME request is failed. Otherwise, more checks are performed before this is considered a violation.

- The volume specified by the VOLSER keyword is checked for ALTER intent in CLASS=DASDVOL. If access is allowed, then the NEW-NAME function is considered as authorized. Otherwise, more checks are performed before this is considered a violation.

- If the volume is SMS-Managed, further checks are made to CLASS=FACILITY profiles STGADMIN.ADR.STGADMIN.COPY.RENAME and STGADMIN.ADR.STGADMIN.RESTORE.RENAME for READ access. If access is allowed, then the NEW-NAME function is considered as authorized. Otherwise, the request is failed.

Security checking with the NEW-STORCLAS and NEW-MGMTCLAS keywords

- The CLASS=FACILITY profile STGADMIN.IGG.ALTER.SMS is checked to determine if you have unrestricted use of all storage class and management class construct names. If the profile is found, and you have at least READ access to it, then no further security checking is performed against these names. If no matching profile is found, then this check is not a factor in determining SMS construct name authorization.

- The CLASS=STORCLAS or CLASS=MGMTCLAS profile for the specified construct name is checked to determine if you are allowed to use that storage class or management class name. If the profile is found, and you have at least READ access to it, or if no matching security profile was found, then processing is allowed to continue. Otherwise, the request is failed.

### ALTER SYS1-VVDS

Use ALTER SYS1-VVDS to perform specialized cleanup work against the VVDS on a volume.

#### Syntax

```
ALTER Sys1-Vvds DSName(dsn)
SMFfile( OutDataSet(dsn))
VOLser(volser)
```

#### Keywords

**DSNAME**
indicates the fully qualified data set name of the VVDS that you want to process. A valid VVDS always has a name in the format of SYS1.VVDS.Vvolser, where volser equals the actual volser of the volume if it is a valid VVDS. The name specified can be an &amp;TEMP data set name, representing an invalid VVDS that was previously renamed with the ALTER SYS1-VVDS command.

**SMFILE**
specifies the output data set or file to which the 'pseudo' SMF records are written. These records are termed 'pseudo' SMF records because they are
constructed by this command to mimic real SMF records. These SMF records will permit the construction of real VVR(s) and, for an SMS-managed volume, NVR(s) when the VVDS is recovered.

The SMF file must be a physical sequential, non-VSAM file. The command forces DCB attributes of RECFM=VBS, LRECL=8192, and half-track BLKSIZE if the file is allocated on disk, and 32768 if on tape.

- **OUTDATASET** — the fully qualified name of the output SMF data set. The data set is allocated DISP=OLD. If a relative GDG is specified, you cannot use OUTDATASET and must use OUTFILE.
- **OUTFILE** — the Data Definition name (DD name) to be used to allocate the output SMF file. You must use this option if one of the following is true:
  - The output is a Generation Data Set (GDS) and you want to specify a relative GDG, for example: GDG.NAME(+1).
  - You want to control the STATUS of the output file, for example: DISP=MOD.

### DELETE

Indicates that you want to delete the specified invalid VVDS from the specified volume. A VVDS is invalid if the volser portion of the DSNAME does not match the volser of the volume on which it resides. You can specify DELETE only for an invalid VVDS. You can delete an invalid VVDS even if the volume is SMS-managed.

If there are VSAM objects or, for an SMS-managed volume, non-VSAM objects on the volume, and the VVRs (and NVRs) describing these data sets are in the invalid VVDS, then ALTER SYS1-VVDS should be first executed with the SMFFILE option to create pseudo-SMF records that may be used in a RECOVER VVDS FORWARD to effectively “move” these records to the valid VVDS. After that, the “invalid” VVDS may be safely deleted with DELETE.

The command fails if the volser portion of the DSNAME and VOLSER specify the same volume serial number.

FORCE must be specified with DELETE when the VVDS contains recoverable VVRs.

### RENAME

Indicates that you want to rename the specified VVDS on the specified volume to an &TEMP data set name. The renamed VVDS is also converted to a DSORG=PS in the VTOC, making it accessible for subsequent browse. The renamed VVDS has a data set name in the format of:

```
SYSyydd.thhmmss.RA000.VVDS.Vvvvvv
```

Where **yyddd** and **thhmmss** is the current date and time when the RENAME was run, and **vvvvv** is the original volser of the VVDS when it was originally allocated. After a VVDS has been renamed to an &TEMP name, it cannot be renamed again.

Typically, this command is used to rename an invalid VVDS, but can also be used to rename an empty valid VVDS. If there are VSAM objects or, for an SMS-managed volume, non-VSAM objects on the volume, and the VVRs (and NVRs) describing these data sets are in the invalid VVDS, then ALTER SYS1-VVDS may be executed with the SMFFILE option to create pseudo-SMF records that may be used in a RECOVER VVDS FORWARD
to effectively "move" these records to the valid VVDS. The SMFFILE keyword execution may be run either before or after the RENAME operation.

The command fails if the volser portion of the DSNAME and VOLSER specify the same volume serial number.

FORCE must be specified with RENAME when the VVDS contains recoverable VVRs.

**FORCE**

indicates that a delete or rename should still run even if normal conditions for the ALTER SYS1-VVDS command are not met. You must specify FORCE if the VVDS to be deleted or renamed contains recoverable VVR or NVR records within it. A recoverable VVR or NVR record has the following attributes:

- It exists in the VVDS named in DSNAME.
- It does not exist in the valid VVDS that is active for the volume specified in VOLSER.
- It has a valid DSCB in the VTOC, and all extents described by the VTOC agree with the volume cell information in the VVDSs self-describing VVR.

Do not specify FORCE when the named VVDS does not contain any recoverable VVRs, or when the named VVDS has already been renamed. You must specify FORCE with DELETE when the VVDS contains recoverable VVRs.

**SIMULATE**

specifies that you want to trial the command without actually performing it.

**VOLSER**

indicates the single volume serial number of the disk volume on which to perform the VVDS cleanup work. You should know the SMS status of the volume (SMS-managed or not SMS-managed) before you execute this command because the rules differ based on this attribute.

**Usage notes**

None.
Chapter 9. BACKUP - Backup ICF Catalogs or VSAM Data Sets

Advanced Catalog Management provides the BACKUP command to perform high-speed, high-integrity backups of a BCS, VVDS, or VSAM (including Extended Format VSAM) data set.

BACKUP BCS

Use BACKUP BCS to back up one or more BCSs of an ICF catalog structure.

You can request the command to perform 'under-the-covers' structure and integrity diagnostics of each BCS prior to backup. The BCS is backed up as if it is an ESDS, accessing records in physical sequence, bypassing any potential index structure damage.

Syntax
EXAMINE expression:

- IndexTEST
- DataTEST
- IndexTEST DataTEST
- DataTEST NOIndexTEST
- IndexTEST NODataTEST

EXAMINE error-Limit:

- EXAMine-error-Limit(16)
- Ignore-Examine-Warning

Notes:
1. If you specify PARALLEL, do not specify the PRINT or DIAGNOSE-BCS keywords.

BACKUP BCS Command Syntax

**Keywords**

**BCS** specifies one or more fully qualified or masked BCSs of an ICF catalog to backup.

**OUTDATASET** specifies one or more fully qualified names of the output data sets to use for the backup. You must allocate the data set(s) prior to running the BACKUP command. The data set(s) are allocated DISP=OLD. The DCB information is BLKSIZE=0, LRECL=32756 and RECFM=VB.

**OUTFILE** specifies the JCL DD statement that contains the file specifications for the output backup file. This parameter allows you to allocate and define some of the physical file characteristics of the file at the time of the backup instead of in advance (as for OUTDATASET). Do not include any DCB information in the JCL.

**SIMULATE** specifies that you want to trial the command without actually performing it.

**ACCEPT-DIAGNOSE** indicates whether backup processing for the specified BCS is allowed to continue, based on certain levels of error or warning messages from execution of the underlying IDCAMS DIAGNOSE commands. This keyword is controlled by the DIAGNOSE keyword. If the DIAGNOSE keyword is not in effect, the ACCEPT-DIAGNOSE keyword is ignored. The valid values for ACCEPT-DIAGNOSE are:

- **W**—allows the backup to continue when warning messages (IDCAMS RC=4 or less) are issued. This is the default.
• E—allows the backup to continue when error messages (IDCAMS RC=8 or less) are issued.
• I—allows the backup to continue when informational messages (IDCAMS RC=0) are issued.

**ACCEPT-EXAMINE**

indicates whether backup processing for the specified BCS is allowed to continue, based on certain levels of error or warning messages from execution of the underlying IDCAMS EXAMINE commands. This keyword is controlled by the EXAMINE keyword. If the EXAMINE keyword is not in effect (either by default or explicit specification), the ACCEPT-EXAMINE keyword is ignored. The valid values for ACCEPT-EXAMINE are:

• W—allows the backup to continue when warning messages (IDCAMS RC=4 or less) are issued. This is the default.
• D—allows the backup to continue when disaster level, or extremely serious error messages (IDCAMS RC=12 or less) are issued.
• E—allows the backup to continue when error messages (IDCAMS RC=8 or less) are issued.
• I—allows the backup to continue when informational messages (IDCAMS RC=0) are issued.

**ALIAS**

indicates that all aliases associated with the backed up BCS are also backed up. The list of alias names is obtained from the master catalog for the system where the BACKUP command is being run, unless an alternative master catalog is specified on MASTER-CATALOG. The aliases are then available to be restored when the BCS is recovered.

**NOALIAS**

indicates that no aliases for this BCS are backed up from the master catalog. Because the BCS's aliases are not on the backup file, when a subsequent recovery of the BCS is done, you will have to redefine them using other techniques.

**PARALLEL**

specifies the number of sub-tasks you want to multi-task the process. Specify a value between 1 and 16. The default is 5. Use PARALLEL only if you are processing multiple catalogs. The only readily detectable difference in the output report will occur if you request to backup the current system's master catalog. If you do not specify PARALLEL, the master catalog is the first catalog listed in the report. If you specify PARALLEL, the master catalog is in the correct EBCDIC-collating sequence position in the report. The output backup will, however, be very different. The data from different catalogs will inter-leaved or striped.

**Note:** Two additional DD statements are required when PARALLEL is specified. A typical allocation would be:

```
//BCKWORK DD DISP=(,PASS,DELETE),UNIT=SYSLDAD,, SPACE=(CYL,(25,25))
//SORTMSG DD SYSOUT=* 
```

**DIAGNOSE-BCS**

specifies that an IDCAMS DIAGNOSE ICFCATALOG command is invoked prior to running the BACKUP command. IDCAMS DIAGNOSE is a catalog structure integrity checking tool. IDCAMS DIAGNOSE ICFCATALOG reads the entire BCS, checking the integrity of every record, cell, and data field within it. The inter-cell relationships are checked, and cell relationship information among records is verified to ensure correctness and
completeness. Since the COMPAREDD keyword is not specified, the associated VVDS entries are not included in the diagnosis.

**Note:** If the DIAGNOSE operation indicates that there are structural errors, backup processing continues or terminates based on what is specified for ACCEPT-DIAGNOSE.

**NODIAGNOSE-BCS**
specifies that an IDCAMS DIAGNOSE ICFCATALOG command is not run prior to running the BACKUP command.

**DIAGNOSE-ERROR-LIMIT**
specifies the maximum number of errors generated by the IDCAMS DIAGNOSE command with the ERRORLIMIT keyword. The argument value specified must be numeric, and in the range 0 (zero) to 2,147,483,647, inclusive. The default is 16.

**IGNORE-DIAGNOSE-WARNING**
controls the result of the IDCAMS DIAGNOSE command when it terminates with a return code of 4 - only Warning messages issued. The actual IDCAMS return code is always shown in the Summary Report. If the IDCAMS return code is 4 and ACCEPT-DIAGNOSE(W) is specified, a warning message is issued and the BACKUP command terminates with a return code of 4 if there are no other errors. If IGNORE-DIAGNOSE-WARNING is specified, a warning message will not be issued and the product will terminate with a return code of 0 if there are no other errors.

**DISPOSITION**
indicates the disposition value to use for the allocation of the input object.
- OLD—issues the allocation with a disposition of OLD. This is the default.
- SHR—issues the allocation with a disposition of SHR.

**EXAMINE**
indicates that the IDCAMS EXAMINE function is invoked prior to backup. See *IBM z/OS DFSMS™: Managing Catalogs* or *IBM z/OS DFSMS Access Method Services* for information on the authority required to invoke EXAMINE. If the EXAMINE operation indicates that the object has structural errors, backup processing continues or terminates based on what is specified for ACCEPT-EXAMINE.

**NOEXAMINE**
specifies that the IDCAMS EXAMINE command is not invoked by the BACKUP command.

**INDEXTEST**
specifies that a complete analysis of the index structure is performed. A cross-check is made of the vertical and horizontal address pointers between all of the index’s records, an analysis of the internal structure of the index CIs is made, and analysis of the internal structure of the index record is performed.

**NOINDEXTEST**
No analysis is performed on the index component.

**DATATEST**
specifies that a complete analysis of the data component structure is performed using the index component sequence set records, reading all CIs, including those marked free. Tests are done using the RDFs and the CIDF inside each CI, to ensure that the information about freespace and record numbers, lengths, and locations is correct.
Note: If you specify DATATEST, an INDEXTEST is automatically performed unless NOINDEXTEST is explicitly specified.

NODATATEST
No analysis is performed on the data component.

EXAMINE-ERROR-LIMIT
specifies the maximum number of errors to identify by the IDCAMS EXAMINE command. The value is inserted on the ERRORLIMIT keyword supplied to the IDCAMS EXAMINE command that is called by the EXAMINE keyword (or if this keyword is left to default). If you do not specify a value for EXAMINE-ERROR-LIMIT, it defaults to 16. If a value is specified, it must be numeric and within the range of 0 (zero) to 2,147,483,647.

IGNORE-EXAMINE-WARNING
controls the result of the IDCAMS EXAMINE command, when that command terminates with a return code of 4 - only Warning messages issued. The actual IDCAMS return code is always shown in the Summary Report. If the IDCAMS return code is 4, and ACCEPT-EXAMINE(W) is specified, a warning message is issued and the BACKUP command terminates with a return code of 4 if there are no other problems. If IGNORE-EXAMINE-WARNING is specified, a warning message is not issued and the product terminates with a return code of 0 if there are no other errors.

EXCLUDE-BCS
specifies one or more fully qualified or masked BCSs to exclude from the backup. Only those BCSs that were originally included on the BCS keyword can be excluded from the backup.

EXCP-MODE
specifies that the metadata for the object is not included as part of the output. As a result, when attempting a recover, the target object must be defined before the RECOVER command is run, and the RECOVER must specify INTOEMPTY. If EXCP-MODE is specified, there are potential problems when processing spanned records. Spanned records cannot be re-built with integrity if:
• there is only one spanned record in a CA and that record has more than 3 segments
• there are multiple spanned records within a CA

As a result, no attempt is made to write the content of spanned records to the output; instead, you must specify supply a SPANDATASET name or, if preferred, a SPANFILE value.

EXCP-MODE is designed for those times when the BCS is severely corrupted: for example, when the Index Component cannot be opened due to being deleted or corrupted.

SPANDATASET
specifies the name of the cataloged output data set for the segments of spanned records. You cannot specify a mask. This data set will be allocated at run time with a DISPOSITION of OLD. If you specify a relative GDG, you must specify the SPANFILE keyword instead.

SPANFILE
specifies a valid Data Definition name (DD name) to use for allocating the output spanned record file. You must use SPANFILE if one of the following is true:
• The output is a Generation Data Set (GDS) and you want to specify a relative GDG. For example:
  GDG.NAME(+1)
• You want to control the STATUS of the output file. For example:
  DISP=MOD

EXPLICIT-VERIFY
  indicates whether to invoke IDCAMS and run a VERIFY command prior to opening the object as part of the backup process. VERIFY validates the catalog maintained metadata for the object, correcting critical data that are not valid. The standard OPEN process will issue an implicit verify. It is not recommended that an EXPLICIT-VERIFY be used since, although Backup only reads the object, requiring ACCESS(READ); EXPLICIT-VERIFY will require ACCESS(ALTER) to the object, or ACCESS(READ) to the facility class STGADMIN.IGG.EXAMINE.DATASET.

FATAL-CATALOG-ERROR
  controls the processing if a serious error occurs when processing the input BCS. The valid options are:
  • WARNING—issue a warning message and terminate the backup of that catalog with a return code of 4.
  • ERROR—issue an error message and terminate the backup of that catalog with a return code of 8.

All other catalogs will be backed up.

MASTER-CATALOG
  identifies a valid alternate master catalog from which to locate user catalogs and back up aliases. The master catalog that you specify must be connected to the current system’s master catalog.

MESSAGE-TEXT
  controls the volume of IDCAMS messages printed during the backup. The valid values are:
  • FULL—indicates that all IDCAMS DIAGNOSE and EXAMINE messages are to be displayed.
  • NONE—indicates that all IDCAMS DIAGNOSE and EXAMINE messages are to be suppressed.

PRINT
  specifies the level of printing to SYSPRINT during backup processing. Valid values are:
  • NONE—specifies that records are not printed during BACKUP processing. This is the default.
  • DATA—prints the key and data of every processed record.
  • KEY—prints the key of every processed record.

NORESERVE
  indicates that access is not blocked and updates may occur during BACKUP processing.

RESERVE
  indicates that access is blocked to the catalog preventing any updates during BACKUP processing.

VERBOSE
  print all informational messages for each object processed. This is the default.
TERSE

print no informational messages for each object processed.

Usage notes
1. The recommended method for performing multiple backups in one execution is to use a single BACKUP command with either a list of names or a mask (including the PARALLEL option for BCS if desired). If you supply multiple BACKUP commands using OUTFILE pointing to the same DD statement, beware of the implications of the disposition you specify in the output file DD statement. When processing multiple catalog backups in one execution, stacking a BCS backup on the end of an existing data set that may have already contained a backup of the same catalog would create an undesirable situation, because on recovery the first instance of a given catalog is the one that will be restored. Also note that when specifying multiple catalogs in a single BACKUP command, duplicate catalog names are detected and a warning produced. Duplicate checking is not performed across multiple BACKUP commands. If methods other than those recommended are employed, it is strongly recommended you verify the results by viewing the contents of the output files by running a RECOVER LIST command.

2. The OUTFILE or OUTDATASET keywords can list multiple output files, resulting in as many copies of the backup as there are backup files. This is a technique for specifying one or more duplex backup files.

BACKUP DSN

Use BACKUP DSN to back up all types of VSAM data sets, including those defined as Extended Format.

Syntax
EXAMINE expression:

```
<IndexTEST> <DataTEST> <EXAmine-error-LIMIT(16)> <Ignore-Examine-Warning>
<IndexTEST> <DataTEST> <EXAmine-error-LIMIT(16)> <Ignore-Examine-Warning>
```

The JCL DD statement for the backup file.

```
OUTFILE
```

specifies the JCL DD statement that contains the file specifications for the output backup file. This parameter allows you to allocate and define some of the physical file characteristics of the file at the time of the backup instead of in advance (as for OUTDATASET). Do not include any DCB information in the JCL.

```
SIMULATE
```

specifies that you want to trial the command without actually performing it.

```
ACCEPT-EXAMINE
```

indicates whether backup processing for the specified VSAM DSN is allowed to continue, based on certain levels of error or warning messages from execution of the IDCAMS EXAMINE commands. This keyword is controlled by the EXAMINE keyword. If the EXAMINE keyword is not in effect (either by default or explicit specification), the ACCEPT-EXAMINE keyword is ignored. The valid values for ACCEPT-EXAMINE are:
- W—allows the backup to continue when warning messages (IDCAMS RC=4 or less) are issued. This is the default.
- D—allows the backup to continue when disaster level, or extremely serious error messages (IDCAMS RC=12 or less) are issued.
- E—allows the backup to continue when error messages (IDCAMS RC=8 or less) are issued.
- I—allows the backup to continue when informational messages (IDCAMS RC=0) are issued.

**DISPOSITION**

indicates the disposition value to use for the allocation of the input object.
- OLD—issues the allocation with a disposition of OLD. This is the default.
- SHR—issues the allocation with a disposition of SHR.

**EXAMINE**

indicates that the IDCAMS EXAMINE function is invoked prior to backup. See *IBM z/OS DFSMS: Managing Catalogs or IBM z/OS DFSMS Access Method Services* for information on the authority required to invoke EXAMINE. If the EXAMINE operation indicates that the object has structural errors, backup processing continues or terminates based on what is specified for ACCEPT-EXAMINE.

**NOEXAMINE**

specifies that the IDCAMS EXAMINE command is not invoked by the BACKUP command.

**INDEXTEST**

specifies that a complete analysis of the index structure is performed. A cross-check is made of the vertical and horizontal address pointers between all of the index's records, an analysis of the internal structure of the index CIs is made, and analysis of the internal structure of the index record is performed.

**NOINDEXTEST**

specifies that a data component analysis only is performed.

**DATATEST**

specifies that a complete analysis of the data component structure is performed using the index component sequence set records, reading all CIs, including those marked free. Tests are done using the RDFs and the CIDF inside each CI, to ensure that the information about freespace and record numbers, lengths, and locations is correct.

**Note:** If you specify DATATEST, an INDEXTEST is automatically performed.

**NODATATEST**

specifies that no analysis is performed on the data component.

**EXAMINE-ERROR-LIMIT**

specifies the maximum number of errors to identify by the IDCAMS EXAMINE command. The value is inserted on the ERRORLIMIT keyword supplied to the IDCAMS EXAMINE command that is called by the EXAMINE keyword (or if this keyword is left to default). If you do not specify a value for EXAMINE-ERROR-LIMIT, it defaults to 16. If a value is specified, it must be numeric and within the range of 0 (zero) to 2,147,483,647.
**IGNORE-EXAMINE-WARNING**
controls the result of the IDCAMS EXAMINE command, when that command terminates with a return code of 4 - only Warning messages issued. The actual IDCAMS return code is always shown in the Summary Report. If the IDCAMS return code is 4, and ACCEPT-EXAMINE(W) is specified, a warning message is issued and the product terminates with a return code of 4 if there are no other problems. If IGNORE-EXAMINE-WARNING is specified, a warning message is not issued and the product terminates with a return code of 0 if there are no other errors.

**EXCLUDE-BCS**
specifies one or more fully qualified or masked data set names to exclude from the backup. Only those objects that were originally included on the DSN keyword can be excluded from the backup.

**EXCP-MODE**
specifies that you want to perform the backup using EXCP-level I/O. Use EXCP-MODE in the following situations:
- There are serious physical problems associated with the object to be processed by BACKUP. For example, the Index Component is broken or lost.
- The objects are always allocated DISP=OLD.
- The objects have an attribute of SHROPTIONS(1 3) - 1 update or multiple read tasks; and there is an update task executing.
- The objects use RLS (Resource Level Sharing) and are open to one or more RLS tasks.

If EXCP-MODE is specified, there are potential problems when processing spanned records. Spanned records cannot be re-built with integrity if:
- there is only one spanned record in a CA and that record has more than 3 segments
- there are multiple spanned records within a CA

As a result, no attempt is made to write the content of spanned records to the output; therefore, to handle spanned records you must specify either SPANDATASET or SPANFILE. The spanned record segments will be written to the SPANDATASET. If EXCP-MODE is specified, LDS and compressed objects will be processed in normal mode.

**SPANDATASET**
specifies the name of the cataloged output data set for the segments of spanned records. You cannot specify a mask. This data set will be allocated at run time with a DISPOSITION of OLD. If you wish to use a relative GDS, then you must use SPANFILE and not SPANDATASET.

**SPANFILE**
specifies a valid Data Definition name (DD name) to use for allocating the output spanned record file. You must use SPANFILE if one of the following is true:
- The output is a Generation Data Set (GDS) and you want to specify a relative GDG. For example:
  
  \[ GDG\_NAME(+1) \]
- You want to control the STATUS of the output file. For example:
  
  \[ DISP=MOD \]

**EXPLICIT-VERIFY**
indicates whether to invoke IDCAMS and run a VERIFY command prior to
opening the object as part of the backup process. VERIFY validates the catalog maintained metadata for the object, updating critical data that are not valid. The standard OPEN process will issue an implicit verify. It is not recommended that an EXPLICIT-VERIFY be used since, although Backup only reads the object, requiring ACCESS(READ); EXPLICIT-VERIFY will require ACCESS(ALTER) to the object, or ACCESS(READ) to the facility class STGADMIN.IGG.EXAMINE.DATASET.

**FATAL-OBJECT-ERROR**
controls the processing if a serious error occurs when processing the input object. The valid options are:
- WARNING—issue a warning message and terminate the backup of that object with a return code of 4.
- ERROR—issue an error message and terminate the backup of that object with a return code of 8.

All other objects will be backed up.

**MASTER-CATALOG**
identifies a valid alternate master catalog from which the objects to be backed up are located. The master catalog that you specify must be connected to the current system’s master catalog.

**MESSAGE-TEXT**
controls the volume of IDCAMS messages printed during the backup. The valid values are:
- FULL—indicates that all IDCAMS EXAMINE messages are to be displayed.
- NONE—indicates that all IDCAMS EXAMINE messages are to be suppressed.

**NOSPHERE**
indicates that you do not want to backup all the alternate indexes and paths. This is the default.

**SPHERE**
indicates that you want to backup all the alternate indexes and paths. Use SPHERE only for real alternate indexes, not user-developed sparse indexes and others like them. If you specified EXCP-MODE, the associated alternate indexes and paths, as well as the base cluster, are backed up.

**NOBACKUP**
indicates that you want BACKUP DSN to run through the backup process but not actually create the backup. When NOBACKUP is specified, OUTFILE and OUTDATASET are not required.

**PHYSICAL**
use physical (CI) access to process input object. This is the default.

**LOGICAL**
use record access to process input object.

**VERBOSE**
print all informational messages for each object processed. This is the default.

**TERSE**
print no informational messages for each object processed.
Usage notes

**PHYSICAL and LOGICAL**

1. LDS cannot use LOGICAL so there will be an automatic change to PHYSICAL for any LDS specified.
2. VRRDS and RRDS cannot use PHYSICAL so there will be an automatic change to LOGICAL for any RRDS or VRRDS specified.
3. RLS-enabled objects, that are "in-use" cannot be processed physically so there will be an automatic change to LOGICAL.

The current process is PHYSICAL (except for RRDS and VRRDS)—the backup is performed by reading Control Intervals from the object’s data component and deblocking the records. The exception is when a spanned record is located when processing a KSDS. In that case, a direct read is performed to build the spanned record. LOGICAL processes the object by record, and for a KSDS or VRRDS using the index to process the data in logical key sequence.

**BACKUP VVDS**

Use BACKUP VVDS to perform a backup of the VVDS of an ICF catalog structure.

You can request VVDS backup of a single volser, a range of volser by mask, or all volumes in one or more storage groups. You can request the command to perform structure and integrity diagnostics of each VVDS prior to backup.

**Syntax**

```
BACKUP VVDS
  (dsname)
  (volser, volsermask)
  INClude-Storagegroup(stgrp, stgrpmask)
  (dsname, stgrp, stgrpmask)
  OutDataset(dsname)
  OutFILE(ddname)

  Accept-Diagnose(W)
  Accept-Diagnose(E)
  SIMulate
```
BACKUP VVDS Command Syntax

Keywords

**VVDS** specifies one or more VVDSs to backup by fully qualified or masked volume serial numbers.

**INCLUDE-STORAGEGROUP** specifies one or more storage group names or storage group masks to backup.

**OUTDATASET**
You must allocate the data set(s) prior to running the BACKUP command. The data set(s) are allocated DISP=OLD. The DCB information is BLKSIZE=0, LRECL=32756 and RECFM=VB.

**OUTFILE** specifies the JCL DD statement that contains the file specifications for the output backup file. This parameter allows you to allocate and define some of the physical file characteristics of the file at the time of the backup instead of in advance (as for OUTDATASET). Do not include any DCB information in the JCL.

**SIMULATE** specifies that you want to trial the backup without actually performing it.

**ACCEPT-DIAGNOSE** controls the continued processing of the backup based on the results of DIAGNOSE. The valid values are:
• W—allows the backup to continue when warning messages (IDCAMS RC=4 or less) are issued. This is the default.
• E—allows the backup to continue when error messages (IDCAMS RC=8 or less) are issued.
• I—allows the backup to continue when informational messages (IDCAMS RC=0) are issued.

NODIAGNOSE-BCS
specifies that an IDCAMS DIAGNOSE VVDS command is not run prior to running the BACKUP command.

DIAGNOSE-VVDS
specifies that an IDCAMS DIAGNOSE VVDS command is invoked prior to running the BACKUP command. IDCAMS DIAGNOSE is a catalog structure integrity checking tool. IDCAMS DIAGNOSE VVDS reads the entire VVDS, checking the integrity of every record, cell, and data field within it. The inter-cell relationships are checked, and cell relationship information among records is verified to ensure correctness and completeness. Since the COMPAREDS keyword is not specified, the associated BCS entries are not included in the diagnosis.

Note: If the DIAGNOSE operation indicates that there are structural errors, backup processing continues or terminates based on what is specified for ACCEPT-DIAGNOSE.

DIAGNOSE-ERROR-LIMIT
specifies the maximum number of errors generated by the IDCAMS DIAGNOSE command with the ERRORLIMIT keyword. The argument value specified must be numeric, and in the range 0 (zero) to 2,147,483,647, inclusive. The default is 16.

IGNORE-DIAGNOSE-WARNING
controls the result of the IDCAMS DIAGNOSE command when it terminates with a return code of 4 - only Warning messages issued. The actual IDCAMS return code is always shown in the Summary Report. If the IDCAMS return code is 4 and ACCEPT-DIAGNOSE(W) is specified, a warning message is issued and the product terminates with a return code of 4 if there are no other errors. If IGNORE-DIAGNOSE-WARNING is specified, a warning message will not be issued and the product will terminate with a return code of 0 if there are no other errors.

DISPOSITION
indicates the disposition value to use for the allocation of the input object.
• OLD—issues the allocation with a disposition of OLD. This is the default.
• SHR—issues the allocation with a disposition of SHR.

EXCLUDE-STORAGEGROUP
specifies one or more storage group names or storage group masks to exclude from the backup. Only those objects that were originally included on the INCLUDE-STORAGEGROUP keyword can be excluded from the backup.

EXCLUDE-VVDS
specifies one or more fully qualified or masked volume serial numbers to exclude from the backup. Only those objects that were originally included on the VVDS keyword can be excluded from the backup.
MESSAGE-TEXT controls the volume of IDCAMS messages printed during the backup. The valid values are:

- FULL—indicates that all IDCAMS DIAGNOSE messages are to be displayed.
- NONE—indicates that all IDCAMS DIAGNOSE messages are to be suppressed.

PRINT specifies the level of printing to SYSPRINT during backup processing. Valid values are:

- NONE—specifies that records are not printed during BACKUP processing. This is the default.
- DATA—prints the key and data of every processed record.
- KEY—prints the key of every processed record.

NORESERVE indicates that access is not blocked and updates may occur during BACKUP processing.

RESERVE indicates that access is blocked to the catalog preventing any updates during BACKUP processing.

VERBOSE print all informational messages for each object processed. This is the default.

TERSE print no informational messages for each object processed.

Usage notes

None.
Chapter 10. CATSCRUB - Synchronize Catalogs and Volumes for Disaster Recovery

Use the CATSCRUB command to compare each record in the specified catalogs against the actual data sets on the disk storage volumes.

If the catalog records do not match with the data set, you can delete the catalog record based on specific criteria. This forces the catalog to correctly reflect the actual contents of the restored volumes at the disaster recovery site.

The CATSCRUB command has anomaly keywords that determine what happens when an anomaly is encountered. For example, you may want to keep a GDG base record even though none of the Generation Data Sets are present.

Syntax

```
CATSCRUB BCS(bcsbcsmask)

EXClude-Bcs(bcsbcsmask)

EXECute

SIMulate

FATal-CATalog-ERRor( END )

CONTinue

MeSSage-TeXT( FULL )

Anomaly Action Anomaly Filter

Anomaly Action:

GDGbase-No-Active-Gens( Options )

GDS-Migrated( Options )

GDS-Migrated-Dasd( Options )

GDS-Migrated-Tape( Options )

GDS-Migrated-Tape( Options )
```

83
Anomaly Filter:

Options:

Notes:
1 Specifying the DELETE option for the GDS-MIGRATED keywords can result in a change in the relative number of generation data sets within the GDG. This can produce an unintended result when
you are processing by relative generation number.

CATSCRUB Command Syntax

**Keywords**

The following keywords define the environment that CATSCRUB runs in and which catalogs will be compared with what disk volumes. You must specify the catalogs with the BCS keyword, but generally you want CATSCRUB to determine the online disk volumes.

**BCS** specifies one or more specific or masked BCS names you want to process. If you want to process the master catalog, you must specify it explicitly and not with a mask value.

**EXCLUDE-BCS** specifies one or more specific or masked BCS names to exclude from processing. Only those BCSs that were originally included on the BCS keyword can be excluded from processing.

**EXECUTE** indicates that you want to update the catalogs.

**SIMULATE** specifies that you want to test the command without actually performing it.

**Important:** It is highly recommended that you run the CATSCRUB command using SIMULATE so you can test your command setup prior to a disaster recovery test or before performing a real disaster recovery.

**FATAL-CATALOG-ERR** specifies what happens when a fatal error occurs when processing a catalog.

- **END**—processing should end when a fatal catalog error is encountered. This is the default.
- **CONTINUE**—processing should continue when a fatal catalog error is encountered.

**MESSAGE-TEXT** controls the volume of messages printed during the execution of the command. Valid values are:

- **FULL**—provides a complete process log of all actions taken by the command and the name of every object processed. This is the default.
- **ABBREVIATED**—provides only a summary report.

**MATCH-VOLSER** specifies those volumes whose catalog entries will be synchronized. Specify this keyword when testing the disaster recovery process before moving to the disaster recovery site or when synchronizing a single catalog with a few volumes.

**CAUTION:**
Restricting the matched volume list in EXECUTE mode may delete production catalog entries matching your criteria for data sets on disk volumes not in the matched volume list. Always use the SIMULATE keyword to test the command before changing to the EXECUTE keyword.
**EXCLUDE-MATCH-VOLSER**
specifies one or more disk volumes or disk volume masks to exclude from the list of disk volumes as specified by the MATCH-VOLSER keyword.

**Anomaly Action Keywords**

These keywords identify the action to take after the catalog to disk volume matching process discovers an anomaly. Based on the options specified for the anomaly, should the anomaly be detected, the following occurs:

- The return code is set if the RC value exceeds the current return code value.
- If the DELETE option is specified, the "Anomaly Filter Keywords" are checked to determine the catalog entries to be kept, otherwise the appropriate catalog DELETE processing occurs.
- The processing continues or ends if the anomaly is encountered.

**GDGBASE-NO-ACTIVE-GENS**
specifies what happens when the GAT (Generation Aging Table) within a GDG record indicates that there are no GDS associated with the GDG. This may occur either "naturally" or because the command "emptied" the GAT as a result of other CATSCRUB command processing.

**GDS-MIGRATED**
specifies what happens when an individual GDS sub-record indicates that the entry is in migrated status.

**GDS-MIGRATED-DASD**
specifies what happens when an individual GDS sub-record indicates that the entry is in migrated status where the device type is disk.

**GDS-MIGRATED-TAPE**
specifies what happens when an individual GDS sub-record indicates that the entry is in migrated status where the device type is tape.

**GDS-MULTI-VOL-ERR**
specifies what happens when an individual GDS sub-record indicates that, for an active multi-volume generation, one or more of the referenced volumes is not being processed by the CATSCRUB command. This keyword will be applied to those entries having a volume cell matching a volser in the MATCH-VOLSER list.

**GDS-NOT-FOUND**
specifies what happens when an individual GDS sub-record does not physically exist on any of the volumes processed by the CATSCRUB command.

**GDS-TAPE**
specifies what happens when an individual GDS sub-record is tape resident.

**NONVSAM-ALIAS-NO-REALNAME**
specifies what happens to the alias entry for a non-VSAM object when the true-name is not found within the processed volumes.

**NONVSAM-MIGRATED**
specifies what happens when the entry for a non-VSAM data set indicates that the entry is in migrated status.

**Note:** This controls only "A" records (standard non-VSAM objects), not GDS (Generation Data Sets).
NONVSAM-MIGRATED-DASD
specifies what happens when the entry for a non-VSAM data set indicates that the entry is in migrated status where the device type is disk.

Note:  This controls only "A" records (standard non-VSAM objects), not GDS (Generation Data Sets).

NONVSAM-MIGRATED-TAPE
specifies what happens when the entry for a non-VSAM data set indicates that the entry is in migrated status where the device type is tape.

Note:  This controls only "A" records (standard non-VSAM objects), not GDS (Generation Data Sets).

NONVSAM-MULTI-VOL-ERR
specifies what happens when the entry for a non-VSAM data set indicates that, for an active multi-volume generation, one or more of the referenced volumes is not being processed by the CATSCRUB command. This keyword will be applied to those entries having a volume cell matching a volser in the MATCH-VOLSER list.

Note:  This controls only "A" records (standard non-VSAM objects), not GDS (Generation Data Sets).

NONVSAM-NOT-FOUND
specifies what happens when a non-VSAM data set does not physically exist on any of the volumes being processed by the command.

Note:  This controls only "A" records (standard non-VSAM objects), not GDS (Generation Data Sets).

NONVSAM-TAPE
specifies what happens when a non-VSAM data set is determined to be tape resident.

Note:  This controls only "A" records (standard non-VSAM objects), not GDS (Generation Data Sets).

OBJECT-ACCESS-METHOD
specifies what happens when an entry using OAM is encountered.

VSAMSPHERE-MIGRATED
specifies what happens when a VSAM cluster sphere record indicates that the entry is in migrated status.

VSAMSPHERE-MIGRATED-DASD
specifies what happens when a VSAM cluster sphere record indicates that the entry is in migrated status where the device type is disk.

VSAMSPHERE-MIGRATED-TAPE
specifies what happens when a VSAM cluster sphere record indicates that the entry is in migrated status where the device type is tape.

VSAMSPHERE-MULTI-VOL-ERR
specifies what happens when a VSAM cluster sphere record indicates that, for an active multi-volume object, one or more of the referenced volumes is not being processed by the command.

VSAMSPHERE-NOT-FOUND
specifies what happens when a VSAM cluster does not physically exist on any of the volumes being processed by the command.
Anomaly Filter Keywords

These keywords determine which catalog entries to keep (not delete) that have been detected as anomalies with the DELETE option in the corresponding "Anomaly Action Keywords" on page 86. If you specify none of the following keywords, all of the catalog entries will be deleted that have the DELETE option specified in their corresponding anomaly action keyword.

**KEEP-DSN**

specifies one or more specific or masked data set names exempt from CATSCRUB delete processing.

**EXCLUDE-KEEP-DSN**

specifies one or more data set names or masks to exclude from the list of data set names as specified by the KEEP-DSN keyword.

**KEEP-TAPE**

specifies one or more tape volumes or tape volume serial masks exempt from CATSCRUB delete processing.

**EXCLUDE-KEEP-TAPE**

specifies one or more tape volumes or tape volume serial masks to exclude from the list of tape volumes as specified by the KEEP-TAPE keyword.

**KEEP-VOLSER**

specifies one or more disk volumes or disk volume masks exempt from CATSCRUB delete processing.

**EXCLUDE-KEEP-VOLSER**

specifies one or more disk volumes or disk volume masks to exclude from the list of disk volumes as specified by the KEEP-VOLSER keyword.

Options

The following lists the options you can specify on the "Anomaly Action Keywords" on page 86.

**KEEP**

indicates that the catalog entry should be kept when a specific condition is encountered.

**DELETE**

indicates that the catalog entry should be deleted when a specific condition is encountered.

**RC**

specifies the return code in the range of 0 to 4095 on termination when a specific condition is encountered.

**CONTINUE**

indicates that processing should continue when a specific condition is encountered.

**END**

indicates that processing should end when a specific condition is encountered.

Usage notes

1. The CATSCRUB command syntax shows the keyword and option defaults that are provided at installation time. You can change many of these keyword and option defaults by modifying their associated tokens in the CATSCRUB_OPTIONS section of the CKMINI member of SCKMPARM.
2. CATSCRUB considers a disk data set to be multi-volume if it is defined in the catalog with more than one volume, even if the data set occupies only a single
volume. For example, a non-VSAM data set with data on one volume, but with candidate volumes for expansion, is considered to be a multi-volume data set.

3. The reasons for eliminating catalog entries that do not find a matching physical data set on the restored volumes include:
   • Catalog entries reflecting data sets that will never be restored, possibly because they were on volumes that will not be restored at the recovery site. An example of this situation might be migrated data sets.
   • Catalog entries reflecting data sets that will be restored later, from data set level backups. If the catalog entries for those data sets remain, they represent an already-existing catalog entry, and cause an error when an attempt is made to restore (and consequently catalog) the real data set.
Chapter 11. DIAGNOSE - Find and Fix ICF Catalog Errors

Advanced Catalog Management provides the DIAGNOSE command and a set of sub-commands that analyze and suggest fixes for a variety of error conditions in your ICF catalog environment. These fixes are written to two DD statements: one for IDCAMS processing and one for ZAP processing.

**DIAGNOSE ALIAS**

Use the DIAGNOSE ALIAS command to diagnose the alias structure in your master catalog environment, synchronizing it under your control.

This command provides the following diagnostic comparisons:
- Alias entries in one master catalog that are not in the other(s).
- Empty aliases, which are aliases that are defined but do not have any data sets defined under that alias.
- An alias in one master catalog relates to a particular user catalog, and the same alias is also found in another master catalog, but relates to a different user catalog.

When any of these situations (and others) are identified, an appropriate fix command is created and stored in a non- VSAM physical sequential file that you can browse, edit, and submit for execution to correct the error situations.

**Syntax**

```plaintext
//DIAGnose ALIAS(  
   - Compare-MasterCATalog( mcat  )  
      mcat1 mcatn  
       DEFINE-Alias  DELeTe-Alias  EMPTY-Alias  

   - NOList-Alias  EMPTY-Alias  
      Peer  (2)  
      List-Alias  COUNT  
      NonPeer  NonPeer-UnConditional  
      FIXDataSet( dsn )  
    
   INCLUDE-Alias( alias aliasmask )  
   EXClude-Alias( alias aliasmask )  
```
Notes:
1. LIST-ALIAS can be specified with only a single mcat.
2. PEER is the default with multiple mcats.
3. NONPEER is the default with a single mcat.

DIAGNOSE ALIAS Command Syntax

Keywords

COMPARE-MASTERCATALOG
specifies one or more fully qualified names of the primary master catalogs to be diagnosed for inter-catalog discrepancies, or to be the subject of alias informational reports, fixes, or both. The master catalogs specified must already be connected to the system on which DIAGNOSE ALIAS will run.

If one master catalog is specified, then no synchronization processing can be done. As a result, only empty aliases - those without any objects under them, and informational reports may be processed.

If two or more master catalogs are specified, then they will be compared based on the PEER keyword value. Suggested fixes to synchronize the catalogs will be reported and, if requested, written to the output fix data set.

NOLIST-ALIAS
specifies that an alias list should not be produced.

LIST-ALIAS
produces an alias list and statistical summary by user catalog in the specified master catalog.

COUNT
specifies that additional information will be added to the report that shows the number of objects associated with each alias within each catalog. Use of COUNT may significantly increase execution time.

PEER
specifies that all master catalogs are to be treated equally. When two master catalogs are specified in the COMPARE-MASTERCATALOG keyword, the synchronization logic will compare the aliases in both catalogs and generate fixes that, should they be applied, will cause the alias content of both catalogs to be identical. When the same alias occurs in both master catalogs, but is associated with two different user catalogs, then two sets of fixes will be created, and a choice must be made as to which is the appropriate fix. When more than two catalogs are specified, each master catalog will be compared to a single combined view of all of the catalogs.

NONPEER
specifies that the first master catalog is to be treated as the primary. The primary master catalog will be compared to each secondary master catalog in turn. Fixes will be generated so that, should they be applied, will cause the secondary master catalogs to be the same with respect to alias entries as the primary catalog. When the same alias occurs in both the primary and
the current secondary master catalog, but is associated with two different
user catalogs, the logic will revert to PEER, and two sets of fixes will be
generated

NONPEER-UNCONDITIONAL
specifies that the logic is the same as NONPEER with one exception. When
the same alias occurs in both primary master catalog and the current
secondary master catalog, but is associated with two different user
catalogs; in this case, only a single set of fixes will be created - the primary
master catalog will be considered to have the correct association. The fix
will, when applied, cause the secondary master catalog to match the
primary.

DEFINE-ALIAS
indicates that the generated IDCAMS DEFINE fix commands should not be
commented out with the ‘/*’ prefix. This will allow the fixes to run without
modification.

DELETE-ALIAS
indicates that the generated IDCAMS DELETE fix commands should not be
commented out with the ‘/*’ prefix. This will allow the fixes to run without
modification.

EMPTY-ALIAS
controls whether the logic to determine if an alias has any objects defined
under it is to be executed. If this keyword is specified, IDCAMS DELETE
ALIAS commands will be generated in the output FIXFILE when there is an
alias with no dependents. If the keyword is not specified, the check for
dependents is not made, and no DELETE ALIAS commands will be
generated for the condition.

FIXDATASET
specifies the fully qualified name of the pre-allocated output data set for the
generated IDCAMS control statements required to fix the errors found. This
option is mutually exclusive with FIXFILE.

FIXFILE
specifies the Data Definition name (DD name) to be used to allocate the
output file. You must specify this option if one of the following is true:
• The output fixes data set is a Generation Data Set (GDS) and you wish
to specify a relative GDG.
• You want to control the DISPOSITION of the data set, or change the
generated JCL to, for example, output the fixes to SYSOUT.

This option is mutually exclusive with FIXDATASET.

INCLUDE-ALIAS
specifies one or more fully qualified or masked aliases to include in master
catalog synchronization processing.

EXCLUDE-ALIAS
specifies one or more fully qualified or masked aliases to exclude from
processing. If EXCLUDE-ALIAS(**) is specified, fix generation is restricted
to when the same alias occurs in both master catalogs, but is associated
with two different user catalogs.

INCLUDE-BCS
specifies one or more fully qualified or masked BCSs to process.
EXCLUDE-BCS
specifies one or more fully qualified or masked BCSs to exclude from processing.

Usage notes
None.

DIAGNOSE BCS
Use the DIAGNOSE BCS command to diagnose the logical structure in your catalogs, repairing it under your control.

This command provides the following diagnostics:
- Detection of unused VVDS entries in a catalog.
- Detection of both truename and association loop failures including catalog alias.
- Detection of disk volumes that are offline.
- Detection of invalid characters in volume name.
- Detection of invalid characters in volume name.
- Detection of errors in translating system symbols.
- Detection of extension records without their non-extended base.
- Detection of broken records due to invalid cell lengths, duplicate associations or duplicate components.

When any of these situations (and others) are identified, an appropriate fix command is created and stored in a IDCAMS input command file that you can browse, edit, and submit for execution to correct the error situations.

Syntax

DIAGnose BCS(INClude-Bcs(bcs,bcsmask),EXClude-Bcs(bcs,bcsmask))
IDCAMS-FixFILE(ddname)
ZAP-FixFILE(ddname)
Abbreviated Message-Text(Full)
Keywords

**INCLUDE-BCS**
- specifies one or more fully qualified BCS or BCS masks to process. You can specify MASTERCATALOG rather than use the fully qualified master catalog name.

**EXCLUDE-BCS**
- optionally specifies one or more fully qualified BCS or BCS masks to exclude from processing.

**IDCAMS-FIXFILE**
- optionally specifies the Data Definition name (DD name) to be used to output the file containing IDCAMS fixes.

**ZAP-FIXFILE**
- optionally specifies the Data Definition name (DD name) to be used to output the file containing product ZAP DELETE and ZAP REPLACE fixes.

**MESSAGE-TEXT**
- optionally controls the volume of messages printed during the diagnose.
  - The valid values are:
    - **ABBREVIATED** (default) indicates that the record keys are not shown unless an error is detected for a catalog record.
    - **FULL** indicates that all record keys in the BCS are to be displayed.

**SUPPRESS**
- optionally limits the processing done by DIAGNOSE BCS. The valid values are:
  - **BAD-VOLSER** eliminates finding, printing, and fixing of data sets with invalid volume names.
  - **MISSING-VVDS-WARNING** eliminates processing associated with finding, printing, and fixing the missing VVDS entries in the catalog that are required. Mutually exclusive with **MISSING-VVDS-FIX**.
  - **MISSING-VVDS-FIX** eliminates the generation of fixes for the missing VVDS entries in the catalog that are required for the current records. Mutually exclusive with **MISSING-VVDS-WARNING**.
  - **UNUSED-VVDS-WARNING** eliminates processing associated with finding, printing, and fixing the unneeded VVDS entries in the catalog that are not required. Mutually exclusive with **UNUSED-VVDS-FIX**.
  - **UNUSED-VVDS-FIX** eliminates the generation of fixes for the unneeded VVDS entries in the catalog that are not required for the current records. Mutually exclusive with **UNUSED-VVDS-WARNING**.
  - **OFFLINE-VOLUME-WARNING** eliminates processing associated with finding, printing, and generating DELETE NOSCRATCH commands for data sets that are allocated to offline volumes. Mutually exclusive with **OFFLINE-VOLUME-FIX**.
OFFLINE-VOLUME-FIX
eliminates the generation of fixes for data sets that are allocated to
offline volumes. Mutually exclusive with OFFLINE-VOLUME-
WARNING.

Usage notes

DIAGNOSE BCS prints messages for each problem that is encountered as it is
discovered. At the end of processing of each catalog, all of these problems are
analyzed so that the best fix is created. Therefore, it is common to have more
problems than fixes.

DIAGNOSE BCS-VVDS

Use the DIAGNOSE BCS-VVDS command to compare the contents of one or more
user catalogs (BCSs) against associated VVDSs.

The input BCS(s) drive the processing. Details of each BCS record containing a
volume cell are noted. Following the extraction of BCS data, the relevant VVDS and
VTOC information is obtained. The diagnosis is done comparing the BCS data
against the combined VVDS and VTOC data, looking for inconsistencies.

Syntax
Notes:
1  This keyword is valid only if specified with EXAMINE (DATATEST) or EXAMINE (INDEXTEST).

DIAGNOSE BCS-VVDS Command Syntax

Keywords

COMPARE-BCS
specifies one or more fully qualified or masked BCSs to process. Every catalog entry in each selected BCS will be checked against its associated VVDS. Anomalies will cause one or more fixes to be generated.

ACCEPT-EXAMINE
controls whether to continue processing the current BCS based on the condition code returned by the EXAMINE keyword. If either DATATEST or INDEXTEST is specified on the EXAMINE keyword, then DIAGNOSE BCS-VVDS will execute an IDCAMS EXAMINE command. The IDCAMS EXAMINE may terminate with a condition code of 0, 4, 8, or 12.

The valid values for ACCEPT-EXAMINE are:
- W—allows the diagnose to continue when warning messages (IDCAMS RC=4 or less) are issued. This is the default.
- D—allows the diagnose to continue when disaster level, or extremely serious error messages (IDCAMS RC=12 or less) are issued.
- E—allows the diagnose to continue when error messages (IDCAMS RC=8 or less) are issued.
- I—allows the diagnose to continue when informational messages (IDCAMS RC=0) are issued.

ACCEPT-EXAMINE is valid only if specified with EXAMINE (DATATEST) or EXAMINE (INDEXTEST).

AGE-TOLERANCE
specifies that the diagnosis is to ignore catalog entries that have been created in the last \( n \) number of days. You can enter a value of up to 4 numeric characters.

ALL-RELATED
specifies the most comprehensive diagnosis and will identify the target VVDSs by analyzing the Volume cells within every BCS record.

TO-STORAGEGROUP
specifies one or more fully qualified or masked DASD storage groups to search and determine if there is an associated VVR (for VSAM) or NVR (for non-VSAM) record to participate in the diagnose compare process.

TO-VVDS
specifies one or more fully qualified or masked volume serial numbers to search and determine if there is an associated VVR (for VSAM) or NVR (for non-VSAM) record to participate in the diagnose compare process.

DELETE-ENTRIES
indicates that the generated IDCAMS DELETE fix commands should not be commented out with the '/' prefix. This allows the fixes to run without modification.

EXAMINE
indicates that an IDCAMS EXAMINE command will be invoked for the BCS prior to performing the diagnostic comparison with the VVDS.
INDEXTEST specifies that a complete analysis of the BCS’s index component structure is to be performed. A crosscheck is made of the vertical and horizontal address pointers between all of the index’s records, an analysis of the internal structure of the index CIs is made, and an analysis of the internal structure of the index record is performed. INDEXTEST is an AMS EXAMINE option.

NOINDEXTEST specified in conjunction with DATATEST indicates that no analysis is performed on the index component.

DATATEST specifies that a complete analysis of the BCS’s data component structure is to be performed. A complete sequential read of the BCS’s data component records is performed, using the index component’s sequence set records, reading all CIs, including those marked free. Tests are done using each CI’s RDFs and the CIDF, to ensure that the information about free space record numbers, lengths, and locations is correct. DATATEST is an AMS EXAMINE option. Specifying DATATEST automatically includes an INDEXTEST.

NODATATEST indicates that no analysis is performed on the data component.

NOEXAMINE indicates that an IDCAMS EXAMINE command is not to be invoked prior to diagnostic comparison.

EXAMINE-ERROR-LIMIT specifies the maximum number of errors to identify by the IDCAMS EXAMINE command. If you do not specify a value for EXAMINE-ERROR-LIMIT, it defaults to 16. If a value is specified, it must be numeric and within the range of 0 (zero) to 2,147,483,647.

EXCLUDE-BCS specifies one or more fully qualified or masked BCSs to exclude from processing.

EXCLUDE-STORAGEGROUP specifies one or more fully qualified or masked storage group names to exclude from processing.

EXCLUDE-VVDS specifies one or more fully qualified or masked volsers to exclude from processing.

INCLUDE-DSN specifies one or more fully qualified or masked data set names to process.

EXCLUDE-DSN specifies one or more fully qualified or masked data set names to exclude from processing.

FIXES specifies that the DIAGNOSE command should create the appropriate IDCAMS fix commands for certain errors that are identified.

FIXDATASET specifies the fully qualified name of the pre-allocated output data set for the generated IDCAMS control statements required to fix the BCSs.
FIXFILE
specifies the Data Definition name (DD name) to be used to allocate the output file to contain the fixes. You must specify this keyword if one of the following is true:

• The output fixes data set is a Generation Data Set (GDS) and you wish to specify a relative GDG.
• You want to control the DISPOSITION of the data set, or change the generated JCL to, for example, output the fixes to SYSOUT.

MEMBER
specifies the member name of the data set where the generated fixes will be stored. If the data set specified is a PDS or PDSE and no MEMBER is specified, then the member name used will be TEMPNAME.

CLASS
specifies the class of the fixes to be generated and written to the output data set. The fixes generated depend on the type of problem encountered. If a CLASS is specified, but no FIXDATASET or FIXFILE is specified, then that specific class of errors will be reported, but no fixes generated.

You must specify one of the following values:

• * — all errors generate a fix.
• 00 — the error is ambiguous so no fix is attempted.
• 01 — the error is unambiguous and clearly correctable so a fix is generated.
• 02 — the error is probably correctable so a fix is generated. These fixes will require review and verification.
• 03 — the error requires that the fixes be closely checked and may require modification.
• pair — the error matches the low-high pair value (for example, 01:03) so a fix is generated.

MAP-REPORT
specifies the type of BCS-VVDS mapping report to be generated. If you specify MAP-REPORT, you must specify at least one of the following values:

• VOL—error and fix counts reported by volser.
• BCS—error and fix counts reported by BCS name.
• BCS-VOL—error and fix counts reported by volser within BCS name.
• VOL-BCS—error and fix counts reported by BCS name within volser.

MASTER-CATALOG
identifies a valid alternate master catalog from which to locate user catalogs. The master catalog that you specify must be connected to the current system’s master catalog.

MESSAGE-TEXT
controls the volume of IDCAMS messages printed during the diagnose. The valid values are:

• FULL—indicates that all IDCAMS EXAMINE messages are to be displayed.
• NONE—indicates that all IDCAMS EXAMINE messages are to be suppressed.

MULTI-LEVEL-ALIAS
specifies the MLA value to be used when analyzing BCS usage for any
given catalog data set entry. The value must be numeric between 1-4 inclusive. If this keyword is not specified, the current system value will be used.

**Usage notes**

The DIAGNOSE BCS-VVDS command syntax shows the keyword and option defaults that are provided at installation time. You can change many of these keyword and option defaults by modifying their associated tokens in the DIAG_BCS_VVDS_OPTIONS section of the CKMINI member of SCKMPARM.

**DIAGNOSE VOLUME-BCS**

Use the DIAGNOSE VOLUME-BCS command to compare the physical data set components of one or more volumes against the related BCSs.

In addition to comparing VVDS and VTOC information against the BCS records, each data set is analyzed for structural completeness and viability, including multi-volume data sets. When data set anomalies are encountered, DIAGNOSE VOLUME-BCS will generate fixes to clean up components that cannot belong to any viable data set, or repair data sets so that they might be once again usable. When there are multiple possibilities of how the data set components might be cataloged together, various permutations are considered.

**Syntax**

```
DIAGnose VOLUME-BCS (  
   Compare-POOL( pool poolmask )  
   Compare-STorageGrouP( stgrp stgrpmask )  
   Compare-VOLser( volser volsermask )  
   AGE-tolerance(1)  
   AGE-tolerance(0 nnnn NO)  
   ALLOCate( FIXFILE  
       FIX  
       JCL )  
   DEFine-Recatalog(  
       FIX  
       JCL )  
   DELete-Entries  
   DELete-Only  
   ReCaTaLoG-Only  
   EXPort-Dsn( dsn dsmmask )  
   EXPort-File( ddname )  
)  
```
FIXES expression:
Keywords

COMPARE-POOL
specifies one or more fully qualified or masked non-SMS pool names to process. Every VTOC entry within the selected pools volumes will be processed. The pool concept is specific to Advanced Catalog Management. It provides a method for you to group one or more non-SMS DASD volumes into a group similar to a storage group. These names are defined in the CKMINI member of SCKMPARM.

COMPARE-STORAGEGROUP
specifies one or more fully qualified or masked storage group names to process. Every VTOC entry within the selected storage groups' volumes will be processed.

COMPARE-VOLSER
specifies one or more fully qualified or masked volser names to process. Every VTOC entry within the selected volumes will be processed.

AGE-TOLERANCE
specifies that the diagnosis is to ignore errors for data sets that have been created in the last n number of days. You can enter a value of up to 4 numeric characters.

ALLOCATE
specifies how VVDS allocations should be handled when the FILE keyword is required by the IDCAMS command.

- FIXFILE—generates all the required IDCAMS ALLOCATE commands at the front of the fix file data set. This is the default.
- FIX—generates the required IDCAMS ALLOCATE commands for each individual fix.
- JCL—allows you to specify the JCL DD statements that will provide the necessary VVDS allocations for each fix file data set. As an aid, the format of these JCL statements are presented as comments at the front of each fix file data set.
DEFINE-RECATALOG
indicates that the generated IDCAMS DEFINE RECATALOG fix commands should not be commented out with the ‘/*’ prefix. This allows the fixes to run without modification.

DELETE-ENTRIES
indicates that the generated IDCAMS DELETE NVR/VVR fix commands should not be commented out with the ‘/*’ prefix. This allows the fixes to run without modification.

DELETE-ONLY
specifies that only the IDCAMS DELETE NVR/VVR fix commands will be generated, and will be ready to execute directly without modification.

RECATALOG-ONLY
specifies that only the IDCAMS DEFINE RECATALOG fix commands will be generated, and will be ready to execute directly without modification.

EXPORT-DSN
specifies the data set sphere name for selecting the content of the export file data.

Note: This function should only be used under the direction of Technical Support. It is mutually exclusive with EXPORT-FILE.

EXPORT-FILE
specifies the output DDNAME to write the export data set.

Note: This function should only be used under the direction of Technical Support. It is mutually exclusive with EXPORT-DSN.

EXTENDED-STORAGEGROUP-SEARCH
enables Diagnose Volume-BCS to attempt to resolve those multi-volume data sets that are incomplete after the current storage group has been searched. EXTENDED-STORAGEGROUP-SEARCH is only applicable to data sets that reside on SMS-managed volumes that belong to storage groups that either point to other extended storage groups, or are defined as extended storage groups by one or more other storage groups.

Note: Be aware that this keyword can significantly increase processing time.

IMPLICIT-GDG-MODEL
controls what happens when an uncataloged data set is identified that meets the specification of a GDG model - typically, no DASD space has been allocated but DCB attributes are present.
- ALLOW— take no action on the data set.
- DELETE — issue a warning and generate an IDCAMS DELETE.
- WARN— issue a warning and do not generate an IDCAMS DELETE.

INCLUDE-BCS
specifies one or more fully qualified or masked BCSs to process.

EXCLUDE-BCS
specifies one or more fully qualified or masked BCSs to exclude from processing.

INCLUDE-DSN
specifies one or more fully qualified or masked data set names to process.
**EXCLUDE-DSN**
specifies one or more fully qualified or masked data set names to exclude from processing.

**EXCLUDE-POOL**
specifies one or more fully qualified or masked pool names to exclude from processing.

**EXCLUDE-STORAGEGROUP**
specifies one or more fully qualified or masked storage group names to exclude from processing.

**EXCLUDE-VOLSER**
specifies one or more fully qualified or masked volser names to exclude from processing.

**MASTER-CATALOG**
identifies a valid alternate master catalog from which to locate user catalogs. The master catalog that you specify must be connected to the current system's master catalog.

**MULTI-LEVEL-ALIAS**
specifies the MLA value to use when analyzing BCS usage for any given catalog data set entry. Specify a numeric value between 1 and 4. If no value is specified, then the command will use the current system value.

**OBSOLETE-VOLSER**
specifies one or more fully qualified or masked volser names that are known to no longer exist in the DASD farm. This obviates ambiguity when the command encounters a volser from a BCS entry that is not online to the current system.

**SYMBOLIC-VOLSER**
specifies one or more symbol-value pairs that will override the symbolic volser names used by the current z/OS image.

**FIXES**
specifies that the DIAGNOSE command should create the appropriate IDCAMS fix commands for certain errors that are identified.

**CLASS**
specifies the class of the fixes to be generated and written to the output data set. The fixes generated depend on the type of problem encountered. If a CLASS is specified, but no FIXDATASET or FIXFILE is specified, then that specific class of errors will be reported, but no fixes generated.

You must specify one of the following values:
- * — all errors generate a fix.
- 00 — the error is ambiguous so no fix is attempted.
- 01 — the error is unambiguous and clearly correctable so a fix is generated.
- 02 — the error is probably correctable so a fix is generated. These fixes will require review and verification.
- 03 — the error requires that the fixes be closely checked and may require modification.
- 04 — the error analysis proposed multiple resolutions for a situation that could be viewed from more than one perspective.
- 05 — the error would be applicable to multiple fix classes. Generally these anomalies are too ambiguous to be handled automatically.
pair — the error matches the low-high pair value (for example, 01:03) so a fix is generated.

LISTDATASET
specifies the name of the output data set for the analysis reports. The default is to SYSPRINT.

LISTFILE
specifies the Data Definition name (DD name) to be used to allocate the output analysis listing file. You must specify this keyword if one of the following is true:
- The output fixes analysis listing data set is a Generation Data Set (GDS) and you wish to specify a relative GDG.
- You want to control the DISPOSITION of the data set, or change the generated JCL to, for example, output the analysis listing to SYSOUT.

LISTMEMBER
specifies the member of the LISTDATASET where the generated fixes will be stored. If the LISTDATASET specified is a PDS or PDSE and no LISTMEMBER is specified, then the member name used will be TEMPNAME.

FIXDATASET
specifies the fully qualified name of the pre-allocated output data set for the generated IDCAMS control statements required to fix the VVDSs.

FIXFILE
specifies the Data Definition name (DD name) to be used to allocate the output file to contain the fixes. You must specify this keyword if one of the following is true:
- The output fixes data set is a Generation Data Set (GDS) and you wish to specify a relative GDG.
- You want to control the DISPOSITION of the data set, or change the generated JCL to, for example, output the fixes to SYSOUT.

FIXMEMBER
specifies the member of the data set where the generated fixes will be stored. If the data set specified is a PDS or PDSE and no MEMBER is specified, then the member name used will be TEMPNAME.

Usage notes
The DIAGNOSE VOLUME-BCS command syntax shows the keyword and option defaults that are provided at installation time. You can change many of these keyword and option defaults by modifying their associated tokens in the DIAG_VOLUME_BCS_OPTIONS section of the CKMINI member of SCKMPARM.

**DIAGNOSE VVDS-VTOC**
Use the DIAGNOSE VVDS-VTOC command to compare the contents of one or more VVDSs against their corresponding VTOC for each selected volume.

Volumes are analyzed one-at-a-time in ascending volser-name sequence. Unlike the other DIAGNOSE commands, DIAGNOSE VVDS-VTOC does not generate a fix file data set, but has an AUTOFIX mode that allows you to perform updates to the VVDS or VTOC immediately.
Keywords

**COMPARE-STORAGEGROUP**
specifies one or more fully qualified or masked storage group names to process. Every VVR and NVR in each volume's VVDS will be checked against its associated VTOC entry.

**COMPARE-VVDS**
specifies one or more fully qualified or masked volume names to process. Every VVR and NVR in each volume's VVDS within the selected storage groups will be checked against its associated VTOC entry.

**SIMULATE**
specifies that you want to trial the diagnosis without actually performing it.

**AUTOFIX**
specifies that corrective updates to the VVDS and VTOC should be performed.

**EXCLUDE-STORAGEGROUP**
specifies one or more fully qualified or masked storage group names to exclude from processing.

**EXCLUDE-VVDS**
specifies one or more fully qualified or masked VVDSs to exclude from processing.
MESSAGE-TEXT
controls the volume of messages printed during the diagnosis. The valid values are:
  • FULL—provides a complete process log of all actions taken by the DIAGNOSE command.
  • ABBREVIATED—provides a summary report.

SCRATCH
controls what happens when a Format 1 DSCB does not have a corresponding VVR or NVR in the VVDS, and a default VVR or NVR cannot be created. If you specify the SIMULATE keyword, a report proposing that the DSCB be scratched will be generated. If you specify the AUTOFIX keyword, an IDCAMS DELETE VVR or DELETE NVR will be directly executed to update the VTOC.

Usage Notes
The DIAGNOSE VVDS-VTOC command syntax shows the keyword and option defaults that are provided at installation time. You can change many of these keyword and option defaults by modifying their associated tokens in the DIAG_VVDS_VTOC_OPTIONS section of the CKMINI member of SCKMPARM.
Chapter 12. EXPLORE - Search ICF Catalogs for Data Sets

Use the EXPLORE command to search through your ICF catalog environment for data sets with attributes that match the specified criteria.

The EXPLORE command has an extensive list of criteria keyword filters that can be specified. These criteria keyword filters can be applied using full Boolean logic, allowing you to develop simple or complex searches, as your needs require. EXPLORE has these search capabilities:

- Catalog-centric mode searches primarily use the DSN and UCAT filters to select data sets from the catalog(s). This search mode has been the basis of standard EXPLORE.
- Volume-centric mode uses the INCLUDE-STORAGEGROUP/EXCLUDE-STORAGEGROUP or INCLUDE-VOLUME/EXCLUDE-VOLUME keywords of the BY-VOLUME keyword as the source of data set names that drive the search. In volume-centric mode, the DSN and UCAT filters serve only to filter the data selected. You can use volume-centric searches to find uncataloged data sets.

After the search is complete you can have the EXPLORE command produce these types of reports on the selected data sets:

- A single or multiple column data set name list report.
- An improved CATLIST report for each selected data set.
- An extract flat file that you can post-process with the Advanced Catalog Management REPORT command, MQFL, or with your own software (for example, with REXX, SAS, or any user written program).

Syntax

```
EXPLORE(CRITeria(INclude(Filter expression)))

Column-LISTFILE(ddname) SORTED
Column-LIST(dsn) SORTED
Dsn-LISTFILE(ddname) SORTED
Dsn-LIST(dsn) SORTED
Icf-LISTFILE(ddname) SORTED No-Gdgbase-Nonvsa
Icf-LIST(dsn) SORTED No-Gdgbase-Nonvsa
Ext-FLAT(dsn) STORGRP
Ext-FLATFILE(ddname) STORGRP

GENMAP(GENMAP-options)
```

109
Filter expression:

```plaintext
- DSN EQ dsn/dsnmask

- AND
- OR
- XOR
- NOT
```

GENMAP-options:

```plaintext
- EXECute
- OutFILE(ddname)
- OutDataSet(dsn)
- REPORTS(GENMAP-reports)
- HEXKEY

- RECORD-COUNTERS(2048)
- SAMPLE(2)
- RECORD-COUNTERS(2048)
- SAMPLE(2)
```

GENMAP-reports:

```plaintext
- CA-map
- CATlist
- FREE-CI
- INDEX
- RECommendations
- RECond-SiZeS
- STATistICAL
```

Notes:

1. Specify INCLUDE-STORAGEGROUP, INCLUDE-VOLUME, or both.
2. When you specify INCLUDE-STORAGEGROUP, you can use both EXCLUDE-STORAGEGROUP and EXCLUDE-VOLUME.
EXPLORE Command Syntax

Keywords

COLUMN-LISTFILE
specifies that the format of the output is a data set list with either three or four data set names per print line and is written to the file specified on the named DD statement. You can specify a SYSOUT DD statement name so that the output is written as a standard 133-column print file.

COLUMN-LIST
specifies that the format of the output is a data set list with either three or four data set names per print line and is written to the specified pre-existing, dynamically allocated data set.

DSN-LISTFILE
specifies that the format of the output is one data set name per line and is written to the file specified on the named DD statement. You can specify a SYSOUT DD statement name so that the output is written as a standard 133-column print file.

DSN-LIST
specifies that the format of the output is one data set name per line and is written to the specified pre-existing, dynamically allocated data set.

ICF-LISTFILE
specifies that the format of the output is similar to the IDCAMS LISTCAT format, but with additional enhancements and is written to the file specified on the named DD statement. You can specify a SYSOUT DD statement name so that the output is written as a standard 133-column print file.

ICF-LIST
specifies that the format of the output is similar to the IDCAMS LISTCAT format, but with additional enhancements and is written to the specified pre-existing, dynamically allocated data set.

SORTED
specifies that the output of data sets will be sorted in ascending EBCDIC collating sequence by data set name.

NO-GDGBASE-NONVSAM
suppresses the printing of individual GDS in the output of ICFLIST or ICFLISTFILE.

EXT-FLAT
specifies that extract data is written to the specified pre-existing data set.

EXT-FLATFILE
specifies that extract data is written to the specified DD statement. If SYSPRINT is used then the extract will be truncated and will be unsuitable for use.

STORGRP
specifies that EXPLORE should determine the storage group for the extracted data.

GENMAP
specifies either MAP commands or the output of MAP commands be written based on the GENMAP options. See [GENMAP options]

CRITERIA
specifies what to include or exclude from the search.
INCLUDE
specifies what to include in the search.
- DSN EQ—specifies what data set the search value must equal.
- dsn/dsnmask—specifies a specific or masked data set name.
- filter—see CRITERIA keyword filters

EXCLUDE
specifies what to exclude from the search.
- DSN EQ—specifies what data set the search value must equal.
- dsn/dsnmask—specifies a specific or masked data set name.
- filter—see CRITERIA keyword filters

BY-DSN-DD
specifies that EXPLORE performs a search on each of the data set names or masks found in the specified DD. You must have the same DD name in the JCL as the DD name used in the EXPLORE statement. BY-DSN-DD and BY-VOLUME are mutually exclusive.

BY-VOLUME
specifies that EXPLORE performs a search on each of the data set names found on the specified disk volumes, disk storage groups, or both. BY-DSN-DD and BY-VOLUME are mutually exclusive.

INCLUDE-STORAGEGROUP
specifies one or more disk volume storage group names or storage group masks that contain data set names to be used in the search.

INCLUDE-VOLUME
specifies one or more disk volume names or volume masks that contain data set names to be used in the search.

EXCLUDE-STORAGEGROUP
specifies one or more disk volume storage group names or storage-group masks that contain data set names to be excluded from the list of data sets used in the search.

EXCLUDE-VOLUME
specifies one or more disk volume serials or volume serial masks that contain data set names to be excluded from the list of data sets used in the search.

GENMAP options
The GENMAP keyword specifies that each KSDS or BCS data set selected by the EXPLORE command will be formatted into a MAP command, executed as a MAP command, or both.

EXECUTE
specifies that every KSDS or BCS data set selected by EXPLORE will be executed as MAP commands. The output is written to the normal SYSOUT file.

OUTFILE
specifies the Data Definition name (DD name) to use to allocate the output GENMAP file. You must use this option if one of the following is true:
- The output is a Generation Data Set (GDS) and you want to specify a relative GDG. For example: GDG.NAME(+1).
You want to control the STATUS of the output file. For example:

**DISP=MOD.**

**OUTDATASET**

specifies the name of the pre-existing output GENMAP data set.

**REPORTS**

specifies the reports you want to generate. You can specify any of these available reports:

- **ALL**—generates all of the reports.
- **CATLIST**—generates a Catalog Listing report. This report is very similar to an IDCAMS LISTCAT report, but with several beneficial formatting modifications and field additions or changes.
- **CA-MAP**—generates a Control Area Map report. This report produces, for the Data Component, a CA-by-CA report, that illustrates CA splits, free CIs in each CA, potentially un-useable CIs, CI utilization, key compression information, and the high-key for each CA.
- **FREE-CI**—generates a Free CI Distribution report. This report will actually generate a CA Split Distribution report and a Free CI Distribution report. To obtain this information, the command tallies the number of contiguous CA splits that have occurred throughout the object, as well as the number of free CIs in every CA processed. The reports are a summary of how these two free resources are distributed across the object.
- **INDEX**—generates an Index Structure report. This report provides a key size distribution summary, an Index Component CI size analysis (to assist in determining if potentially un-useable Data Component CIs exist), and an Index Component record distribution summary.
- **RECOMMENDATIONS**—generates a Recommendations report. This report provides various performance tuning and object attribute change recommendations.
- **RECORD-SIZE**—generates a Record Size Distribution report. This report uses a sampling technique, when processing the object’s Data Component, to reduce execution-time overhead, the sampling value may be changed via the SAMPLE keyword. By default, two CIs in every CA will be sampled, and the records therein used. If the sampled CIs contain segments of a spanned record, additional CIs may be processed. This report may aid in developing an appreciation of the average record size; this will help in developing an appropriate CI freespace percentage, the potential for records to span CIs and other data.
- **STATISTICAL**—generates a Statistical Summary report. This report, while it contains a lot of information similar to the IDCAMS LISTCAT, is considerably more useful, as it combines actual object analysis information with the LISTCAT information, to produce information that tells you how the object is really behaving, and what the various attributes are costing you.

**HEXKEY**

prints the two digit hexadecimal key value along with each line of the character key. This is useful for those application objects that use non-printable characters within the key.

**RECORD-COUNTERS**

controls the number of counter fields to be established to accumulate, by record length, the number of records found. The default value is 2048. You
can specify an integer between 1024 and 99999 (inclusive). These accumulators are used when the Record Sizes report is requested.

**SAMPLE**

indicates the number of CIs in each data component CA to sample. Specify an integer value between 0 to 99999999. The default is 2.

**CRITERIA keyword filters**

The following lists the valid compare operators you can use in the Boolean filter expression depending on the filter:

- **EQ**—Equals
- **GE**—Greater than or equals
- **GT**—Greater than
- **LE**—Less than or equals
- **LT**—Less than
- **NE**—Not equals

The following describes the filter syntax and purpose when specified in the INCLUDE and EXCLUDE keywords of the CRITERIA keyword. You must choose one value from items listed within brackets.

**ACCT-INFO** **{EQ | NE}** *accounting_information*

searches for catalog records that contain *accounting_information*. Accounting Information is a 32-byte text field that is stored in the VVR/NVR record, and specified with the IDCAMS ACCOUNT parameter for SMS-managed data sets. Unlike SMF job accounting data, which is segmented into multiple sub-fields, the ACCOUNT field consists of 32 printable upper-case characters that can contain imbedded blanks.

**ALIAS** **EQ** **{Y | N}**

searches for the current DSN specification, and selects it only if it is a valid 'alias' definition. This filter is valid for both non-VSAM data set aliases, and aliases that provide user catalog identification for data set LOCATE processing. When used with a user catalog alias, the DSN filter specification must not be longer than the system's multi level alias (MLA) value. If DSN specifies a mask value, all aliases that match the mask are selected, for both non-VSAM and user catalog alias searches.

**ALLOCTYPE** **{EQ | NE}** **{BLK | CYL | TRK}**

searches for data sets that were allocated with a matching allocation type.

**BLKSZ** **{EQ | NE | GE | GT | LE | LT}** *block_size*

searches for data sets that were allocated with the specified block value and argument operand. This search is valid only for non-VSAM data sets.

**BUFSIZE** **{EQ | NE | GE | GT | LE | LT}** *buffer_size*

searches for data sets that were allocated with the specified buffer size value and argument operand. This filter is only valid for VSAM data sets.

**BWO** **{EQ | NE}** **{TYPECICS | TYPEIMS | NO}**

searches for data sets that were created with backup-while-open. This search is valid only for non-VSAM data sets.

**BYTEA** **{EQ | NE | GE | GT | LE | LT}** *bytes_allocated*

searches for VSAM and non-VSAM data sets that have a *bytes_allocated* value that matches the specified argument operand. For VSAM data sets, this argument is compared to the data set's High Allocated RBA (HARBA)
value in the VVDS. The KSDS cluster value will have the sum of the BYTEA from the data and index components. For non-VSAM data sets, it is compared to the data set’s bytes_allocated value from the VTOC.

**BYTEU {EQ | NE | GE | GT | LE | LT} bytes_used**
searches for VSAM and non-VSAM data sets that have a bytes_used value that matches the specified argument operand. For VSAM data sets, this argument is compared to the data set’s High Used RBA (HURBA) value in the VVDS. The KSDS cluster value will have the sum of the BYTEU from the data and index components. For non-VSAM data sets, it is compared to the data set’s bytes_used value from the VTOC.

**CANDIDATE EQ {Y | N}**
ssearches for all data sets with candidate volumes.

**CANDIDATES {EQ | NE | GE | GT | LE | LT} candidate_value_count**
searches for data sets with the candidate_volume_count value that matches the specified argument operand.

**CASPLITS {EQ | NE | GE | GT | LE | LT} ca_splits**
searches for KSDS files, where the data component has CA splits that match the specified ca_splits value and argument operand. This filter is only valid for VSAM KSDS data sets.

**CATALOGED {EQ | NE} {Y | N}**
searches for cataloged data sets. This is used for volume-centric searches.

**CHGBIT EQ {Y | N}**
searches for data sets that have the incremental change bit turned on in the VTOC, indicating that the data set has been updated since the last incremental backup was taken.

**CI-CA {EQ | NE | GE | GT | LE | LT} cis_per_ca**
searches for VSAM data sets that match the specified argument operand for the number of CIs per CA. This value is a function of the CI and CA size. This filter is valid for VSAM data sets, and can be used for both the data and index component.

**CISPLITS {EQ | NE | GE | GT | LE | LT} ci_splits**
searches for KSDS files, where the data component has CI splits that match the argument operand. This filter only selects VSAM KSDS data sets.

**COMPRESS EQ {Y | N}**
searches for VSAM data sets that are defined as Extended Format compressed.

**CREDT {EQ | NE | GE | GT | LE | LT} {*-nnn} | creation_date**
searches for VSAM or non-VSAM data sets that have a creation date from the catalog that matches the argument value. Specify the creation date using one of the following formats:
- * (asterisk) for the current date
- *-nnn, where nnn is a 1-3 decimal numeric value, for the current date minus nnn
- creation_date for the date in the format of YYYYMMDD

**CYL-ALLOC {EQ | NE | GE | GT | LE | LT} cylinders_allocated**
searches for data sets with the specified cylinders_allocated value that matches the argument value. For VSAM clusters, the value is based on the setting for the token KSDS_CLUSTER_TOTALING in the
EXPLORE_OPTIONS section of CKMINI. If set to Y in CKMINI, the value is the sum of the data and index components, otherwise the value is only the data components value.

**CYL-USED** *(EQ | NE | GE | GT | LE | LT)* \( cylinders\_used \)
sources for data sets with the specified \( cylinders\_used \) value that matches the argument value. For VSAM clusters, the value is based on the setting for the token KSDS\_CLUSTER\_TOTALING in the EXPLORE_OPTIONS section of CKMINI. If set to Y in CKMINI, the value is the sum of the data and index components, otherwise the value is only the data components value.

**DATAclas** *(EQ | NE)* \( \{ data\_class \|'' \} \)
searches for all data sets that have a data class that matches the argument value. If \( data\_class \) is specified, it can be the full 1 to 8 character data class value, or a mask value. If specified as ' ' (a blank in single quotes) the search argument is for a null data class.

**D-CISz** *(EQ | NE | GE | GT | LE | LT)* \( data\_ci\_size \)
searches for VSAM data sets that match the specified argument operand for data component CI size. This filter selects VSAM data components.

**DEVNAME** *(EQ | NE)* \( device\_name \)
sources for data sets that were allocated on the specified \( device\_name \) type of device. The length is limited to four characters except for 3480X and the first four characters must consist of numeric characters. Valid \( device\_name \) values include 3390, 3480, and so on. Esoteric device names (for example, DASD, TAPE, SYSALLDA) are NOT allowed.

**DEVTYPE** *(EQ | NE)* \( device\_type \)
sources for data sets that were allocated on the specified \( device\_type \) value. The format (eight characters consisting of numeric digits 0 through 9 or the letters A through F) is the same as the output for DEVTYPE by the IDCAMS LISTCAT command, without the leading X' and trailing '.

**Note:** Data sets that contain an indirect volser (C''******) have a DEVTYPE of X'00000000', but cannot be selected by this keyword. These data sets have their DEVTYPE resolved to that of the IPL volume.

**DSN** *(EQ | NE)* \( \{ dsn \| dsnmask \} \)
sources for a data set that matches the argument specified with the fully qualified data set name, or multiple data sets if a mask value is specified. With this filter value, you can search on a fully qualified data set name, or a mask filter value. While this is not recommended, you can specify **", which lists every data set, in every connected user catalog, on the system on which the command is run.

**DSORG** *(EQ | NE)* \( data\_set\_organization \)
searches for data sets that match the argument for the specified data set organization. The valid DSORG filters are:
- DA — Direct access (BDAM) data sets
- IS — Indexed sequential (ISAM) data sets
- PO — Partitioned (both PDS and PDSE)
- PS — Sequential non-VSAM data sets
- U — Unmovable data sets
- VS — VSAM data set
It is possible to allocate data sets with a null DSORG. These undefined data sets would show up as:

- * — if created post ISPF 3.2
- ? — if created under ISPF 3.2

To create these, the data set must not be SMS managed, and can not have a DATACLAS assigned to it. Using this search argument would be a useful way to identify these files, particularly if the currently-allocated space is non-zero, as it generally means that the data set was allocated, but has never been opened or used. If it has zero allocated space, chances are that it is a model DSCB.

**DS-TYPE** \{EQ | NE\}  \(data\_set\_type\)

Searches for data sets that match the argument for the specified value. The valid values for  \(data\_set\_type\) are:

- AIX - Alternate index. This is a generic data set type that includes AIXC, AIXD, and AIXI.
- AIXC - Alternate Index cluster component.
- AIXD - Alternate Index data component.
- AIXI - Alternate Index component.
- ESDS - VSAM Entry Sequenced Data Set (ESDS). This is a generic data set type that includes ESDSC and ESDSD.
- ESDSC - VSAM Entry Sequenced Data Set (ESDS) cluster. Specification of this data set type includes only the cluster component of the ESDS.
- ESDSD - ESDS data component.
- GDGBASE - GDG base record.
- GDS - Specific generation data set.
- HFS - Hierarchical file system (HFS) object.
- KSDS - VSAM key sequenced data set (KSDS). This is a generic data set type that includes KSDSC, KSDSD, and KSDSI.
- KSDSC - VSAM Key Sequenced Data Set (KSDS) cluster. Specification of this data set type includes only the cluster component of the KSDS.
- KSDSD - KSDS data component.
- KSDSI - KSDS index component.
- LDS - VSAM Linear Data Set (LDS). This is a generic data set type that includes LDSC and LDSD.
- LDSC - VSAM Linear Data Set (LDS) cluster. Specification of this data set type includes only the cluster component of the LDS.
- LDSD - LDS data component.
- NONVSAM - Non-VSAM data set.
- OAM - Object Access Method.
- PATH - A path that's been defined over an alternate index or base cluster.
- PDSE - Extended PDS data set.
- RRDS - VSAM Relative Record Data Set (RRDS). This is a generic data set type that includes RRDSC and RRDSD.
- RRDSC - VSAM Relative Record Data Set (RRDS) cluster. Specification of this data set type includes only the cluster component of the RRDS.
- RRDSD - RRDS data component.
• USERCAT - ICF user catalog. This is a generic data set type that includes USERCATC, USERCATD and USERCATI.
• USERCATC - ICF catalog cluster. Specification of this type includes only the cluster component of the ICF catalog.
• USERCATD - ICF user catalog data component.
• USERCATI - ICF user catalog index component.
• VRRDS - VSAM Variable-Record-length Relative Record Data Set (VRDS). This is a generic data set type that includes RRDSC, RRDSD and RRDSI.
• VRRDSC - VSAM Variable Record length Relative Record Data Set (VRRS) cluster. Specification of this data set type includes only the cluster component of the VRRDS.
• VRRRSD - VRRDS data component.
• VRRDSI - VRRDS index component.
• VSAM - This is a generic data set type that includes KSDS, ESDS, LDS, RRRDS, VRRDS, AIX, PATH, and USERCAT.
• VSAMC - This is a generic data set type that includes KSDSC, ESDSC, LDSC, RRDS, VRRDSC, AIXC, and USERCATC.
• VSAMD - This is a generic data set type that includes KSDSD, ESDSD, LDSD, RRDS, VRRDSD, AIXD, and USERCATD.
• VSAMI - This is a generic data set type that includes KSDSI, VRRDSI, AIXI, and USERCATI.

ECSHARING EQ { Y | N }
searches for catalogs that are defined with ECSHARING (not whether the catalog is involved in ECSHARING).

EMPTY EQ { Y | N }
searches for GDGs that are defined with the EMPTY attribute.

ENT-SECT {EQ | NE | GE | GT | LE | LT} entries_per_section_in_index
searches for VSAM KSDS index components that match the specified argument for the number of entries per section in the index component.

ERASE EQ { Y | N }
searches for data sets that have been allocated with the ERASE attribute. Selects VSAM data sets only.

EXCPEXIT {EQ | NE} { exception_exit | ’ ’ }
searches data sets that match the specified argument for exception exit value or mask value. If specified as: ’ ’ (a blank in single quotes) it indicates a search for data sets that have a null (not specified) exception exit value.

EXPDT {EQ | NE | GE | GT | LE | LT} { * | +nnn | expiration_date | NEVER | NONE }
searches for VSAM or non-VSAM data sets that have an expiration date that matches the specified argument value. Specify the expiration date using one of the following formats:
• * (asterisk) for the current date.
• *+nnn, where nnn is a 1-3 decimal numeric value, for the current date plus nnn.
• expiration_date for the date in the format of YYYYMMDD.
• NEVER for VSAM or non-VSAM data sets that never expire and so EXPDT is equal to 1999365, 1999366 or 2155365. Only the EQ and NE operators can be specified with NEVER.
• NONE for VSAM or non-VSAM data sets that did not have an EXPDT entered at the time the file was created and so EXPDT is equal to '0000000'. Only the EQ and NE operators can be specified with NONE.

**Note:** If using z/OS 1.2 or higher, the EXPDT value for a GDG base contains the LAST ALTER value.

**EXTENDED EQ { Y | N }**
searches for all VSAM data sets that are (or are not) allocated in Extended Format mode.

**EXTENDED-ADDR EQ { Y | N }**
searches for all VSAM data sets that are (or are not) allocated in Extended Addressing mode.

**EXTENTS {EQ | NE | GE | GT | LE | LT} extents**
searches for all data sets, VSAM and non-VSAM, whose total number of allocated extents matches the specified argument value. Valid argument values are in the range of 0 through 255. For VSAM clusters, the value is based on the setting for the token KSDS_CLUSTER_TOTALING in the EXPLORE_OPTIONS section of CKMINI. If set to Y in CKMINI, the value is the sum of the data and index components, otherwise the value is only the data components value.

**FREE-CI {EQ | NE | GE | GT | LE | LT} free_cis**
searches for VSAM data sets that match the specified argument for number of free_cis. This value is the total number of free CIs throughout the file, including those within partially used CAs (such as, in front of HURBA), and in completely free CAs (such as, beyond HURBA). This filter is valid only for VSAM data sets.

**F1-CREDT {EQ | NE | GE | GT | LE | LT} { * [ -nnn ] | creation_date }**
searches for VSAM or non-VSAM data sets that have a creation date from the VTOC that matches the argument value. Specify the creation date using one of the following formats:
• * (asterisk) for the current date
• *-nnn, where nnn is a 1-3 decimal numeric value, for the current date minus nnn
• creation_date for the date in the format of YYYYMMDD

**FSPC-BYTE {EQ | NE | GE | GT | LE | LT} freespace_bytes**
searches for VSAM data sets that match the specified argument for number of freespace_bytes. This value is the total number of free bytes within the file, contained within completely empty CIs in front of HURBA, and in completely free CAs beyond HURBA. This filter is valid only for VSAM KSDS data sets.

**FSPC-CA% {EQ | NE | GE | GT | LE | LT} freespace_percent_ca**
searches for VSAM data sets that match the specified argument for number of freespace_percent_ca. This value is the percentage that is currently in the VVDS catalog record for the KSDS data component (it does not necessarily reflect the actual free space that has been reserved, as this field can be altered). This filter is valid only for VSAM KSDS data sets.

**FSPC-CI% {EQ | NE | GE | GT | LE | LT} freespace_percent_ci**
searches for VSAM data sets that match the specified argument for number of freespace_percent_ci. This value is the percentage that is currently in the catalog record for the KSDS data component (it does not necessarily reflect...
the actual free space that has been reserved, as this field can be altered). This filter is valid only for VSAM KSDS data sets.

**GDGACTIVE** \{EQ | NE | GE | GT | LE | LT\} \textit{number\_active\_gdgs}

searches for GDGs that have a number of active GDSs that match the specified argument. GDGACTIVE needs to be used in conjunction with DS-TYPE EQ GDGBASE. You can use this search to find ‘empty’ GDG bases, by specifying GDGACTIVE EQ 0.

**GDS-REL** \{EQ | NE | GE | GT | LE | LT\} \textit{relative\_generation\_number}

searches for GDSs with the specified \textit{relative\_generation\_number}, where 0 is the most recent, 1 the prior generation, and so on, up to 255.

**GDSSTATUS** \{EQ | NE\} \{ACTIVE | DEFERRED | ROLLEDOFF\}

searches for GDSs that match the argument for current status.

**HARBA** \{EQ | NE | GE | GT | LE | LT\} \textit{high\_allocated\_rba}

searches for VSAM data sets that have a \textit{high\_allocated\_rba} value in their data component that matches the specified argument. This argument is compared to the data set’s High Allocated RBA (HARBA) value in the VVDS. This filter is valid only for VSAM data sets.

**HASALIAS** EQ \{Y | N\}

searches for non-VSAM data sets that have an alias defined that refers to them.

**HURBA** \{EQ | NE | GE | GT | LE | LT\} \textit{high\_used\_rba}

searches for VSAM data sets that have a \textit{high\_used\_rba} value in their data component that matches the specified argument. This argument is compared to the data set’s High Used RBA (HURBA) value in the VVDS. This filter is valid only for VSAM data sets.

**I-CISZ** \{EQ | NE | GE | GT | LE | LT\} \textit{index\_CI\_size}

searches for VSAM data sets that match the specified argument operand for index component CI size. This filter is only valid for VSAM data set types that have an index component.

**I-LEVELS** \{EQ | NE | GE | GT | LE | LT\} \textit{index\_levels}

searches for VSAM KSDS data sets that match the specified argument for number of \textit{index\_levels}. This value is the current number of index levels (sequence set plus index set). This filter is valid only for VSAM KSDS data sets.

**IMBED** EQ \{Y | N\}

searches for VSAM KSDS files that match the specified argument for the IMBED attribute.

**INHIBIT** EQ \{Y | N\}

searches for VSAM data sets that match the argument for the INHIBIT indicator. INHIBIT is turned on by user specification during EXPORT processing, and causes a data set to be locked for update until the INHIBIT indicator is turned off.

**KEYLEN** \{EQ | NE | GE | GT | LE | LT\} \textit{key\_length}

searches for VSAM KSDS data sets that match the argument for the specified \textit{key\_length}. The length value can be in the range of 1 to 255 bytes.

**KEYRANGE** EQ \{Y | N\}

searches for VSAM KSDS data sets that match the argument for being defined with the KEYRANGE attribute
LASTALTDT {EQ | NE | GE | GT | LE | LT} \{ * [ -nnn ] I gdg_alter_date \}
searches for a GDGBASE that has had new entries added or removed on
the date that matches the argument value (not the date of the last IDCAMS
ALTER command). Specify the alter date using one of the following formats:
• * (asterisk) for the current date
• *-nnn, where nnn is a 1-3 decimal numeric value, for the current date
  minus nnn
• gdg_alter_date for the date in the format of YYYYMMDD

LASTBKDAT {EQ | NE | GE | GT | LE | LT} \{ * [ -nnn ] I last_backup_date \}
searches for data sets that have been backed up by ABARS that have a
last_backup_date that matches the specified argument value. Specify the
last backup date using one of the following formats:
• * (asterisk) for the current date
• *-nnn, where nnn is a 1-3 decimal numeric value, for the current date
  minus nnn
• last_backup_date for the date in the format of YYYYMMDD

Note: A date stamp of all zeroes means the data set has never been
processed by ABARS. A search with the boolean LE or LT operators
may result in a large amount of SYSOUT. If LT or LE is desired and
only ABARS controlled data sets are sought, then we suggest a
lower bound be set. For example, LASTBKDAT LT 20031105 AND
GT 19700101.

LASTBKTIM {EQ | NE | GE | GT | LE | LT} last_backup_time
searches for data sets that have been backed up by ABARS that have a
last_backup_time that matches the specified argument value. The time
must be in the format HH:MM:SS:T.

Note: A time stamp of all zeroes means the data set has never been
processed by ABARS. A search with the Boolean LE or LT operators
may result in a large amount of SYSOUT. If LT or LE is desired and
only ABARS controlled data sets are sought, then we suggest a
lower bound be set. For example, LASTBKTIM LT 10:59:19:9 AND
GT 00:00:00:1.

LIMIT {EQ | NE | GE | GT | LE | LT} limit_for_gdg
searches for GDGs that match the argument for the specified limit_for_gdg
value.

LRECL {EQ | NE | GE | GT | LE | LT} logical_record_length
searches for data sets that were allocated with the specified
logical_record_length value. This search is valid for both non-VSAM and
VSAM data sets. For VSAM data sets, the average RECORDSIZE is
ignored; the maximum RECORDSIZE is evaluated, and if not equal to zero
and not equal to x'FF's, the LRECL field is populated with that value.

MAXLRECL {EQ | NE | GE | GT | LE | LT} maximum_lrecl
searches for VSAM data sets that were allocated with the specified
maximum_lrecl value. This search is taken from the second value within the
RECORDSIZE keyword. This filter is valid only for VSAM data sets.

MAXRECS {EQ | NE | GE | GT | LE | LT} maximum_records
searches for VSAM RRDS that have a maximum_records value that
matches the specified argument. This filter is only valid for VSAM RRDS
data sets.
MGMTCLAS {EQ | NE} {management_class | management_class_mask | ''} searches for all data sets that have a management class that matches the argument value. If management_class is specified, it can be the full 1 to 8 character management class value, or a mask value. If '' (a blank in single quotes) is specified, the search argument is for a null management class.

MIGSTATUS {EQ | NE} {ML0 | ML1 | ML2} searches for all data sets that match the specified argument for DFSMShsm migration status.

NONUNQKEY EQ {Y | N} searches for VSAM alternate index (AIX) data sets defined with the specification for the NONUNIQUEKEY attribute that matches the specified argument.

OPENIND EQ {Y | N} searches for VSAM data sets that currently have the 'open for update/output' indicator set to match the specified argument. This is the VSAM indicator that determines whether a data set is open for update or output, so that further checks can be made with SHAREOPTIONS values and existing system ENQs, to determine if a new OPEN is allowed. It is also used by VERIFY in its processing for HURBA validation. This filter is valid only for VSAM data sets.

ORDERED EQ {Y | N} searches for VSAM data sets defined with the ORDERED specification that matches the specified argument. The ORDERED attribute is obsolete and no longer has any function. This filter is valid only for VSAM data sets.

OWNER {EQ | NE} {owner_information | ''} searches for all data sets that have an 'owner' (documentation value) that matches the argument value. If owner_information is specified, it can be the full 1 to 8 character owner information value. If '' (a blank in single quotes) is specified, the search argument is for a null OWNER value in the catalog record field for the data set. This filter is valid for VSAM and non-VSAM data sets.

PAGESPC EQ {Y | N} searches for VSAM data sets that have been defined as system page space data sets.

PATHENTRY {EQ | NE} data_set_name searches for VSAM data sets that have been either
• a PATH defined with a matching data_set_name
• an AIX defined with a matching data_set_name which has a path

REC-DEL {EQ | NE | GE | GT | LE | LT} records_deleted searches for VSAM data sets with STATISTICS field for REC DELETED that matches the specified argument. The specified records_deleted value must be a 1 to 10 digit numeric value, without commas or any other delimiter. The maximum value is 2147483647. This filter is valid only for VSAM data sets.

RECFM {EQ | NE} record_format searches for non-VSAM data sets with DCB RECFM attributes that match the specified argument. The valid RECFM argument values for this specification are: F, FA, FB, FBA, FBM, FBS, FBSA, FBSM, FM, FS, FSA, FSM, U, V, VA, VB, VBA, VBM, VBS, VBSA, VBSM, VM, VS, VSA, VSM. This filter is valid only for non-VSAM data sets.
REC-INS {EQ | NE | GE | GT | LE | LT} \textit{records\_inserted} 
searches for VSAM data sets with STATISTICS field for REC INSERTED that matches the specified argument. The specified \textit{records\_inserted} value must be a 1 to 10 digit numeric value, without commas or any other delimiter. The maximum value is 2147483647. This filter is valid only for VSAM data sets.

RECOVERY EQ { Y | N }
searches for VSAM data sets that match the argument for the RECOVERY attribute. This filter name is not associated with any of the RLS recovery values in the LISTCAT, but rather, with the SPEED versus RECOVERY attribute on the DEFINE CLUSTER command. This filter is valid only for VSAM data sets.

REC-RET {EQ | NE | GE | GT | LE | LT} \textit{records\_retrieved} 
searches for VSAM data sets with STATISTICS field for REC RETRIEVED that matches the specified argument. The specified \textit{records\_retrieved} value must be a 1 to 10 digit numeric value, without commas or any other delimiter. The maximum value is 2147483647. This filter is valid only for VSAM data sets.

REC-TOT {EQ | NE | GE | GT | LE | LT} \textit{records\_total} 
searches for VSAM data sets with STATISTICS field for REC TOTAL that matches the specified argument. The specified \textit{records\_total} value must be a 1 to 10 digit numeric value, without commas or any other delimiter. The maximum value is 2147483647. This filter is valid only for VSAM data sets.

REC-UPD {EQ | NE | GE | GT | LE | LT} \textit{records\_updated} 
searches for VSAM data sets with STATISTICS field for REC UPDATED that matches the specified argument. The specified \textit{records\_updated} value must be a 1 to 10 digit numeric value, without commas or any other delimiter. The maximum value is 2147483647. This filter is valid only for VSAM data sets.

REFDT {EQ | NE | GE | GT | LE | LT} \{ * [-nnn] | reference\_date | 0 | ZERO | NONE \}
searches for VSAM and non-VSAM data sets with last reference date from the VTOC that matches the specified argument. REFDT is always zeroes for Index components, GDG base, and PATHs. REFDT will be zero for any data set that has never been opened. If a KSDS has never been opened, then the data component will have a REFDT of zero, as will the cluster. Specify the reference date using one of the following formats:
- * (asterisk) for the current date
- *-nnn, where nnn is a 1-3 decimal numeric value, for the current date minus nnn
- reference\_date for the date in the format of YYYYMMDD
- ZERO, NONE, 00000000 or 0 all refer to a zero reference date.

REPL EQ { Y | N }
searches for VSAM KSDS data sets that match the specified argument for the REPLICATE attribute.

REUS EQ { Y | N }
searches for VSAM data sets that match the argument for the REUSE attribute.

RKP {EQ | NE | GE | GT | LE | LT} \textit{relative\_key\_position} 
searches for VSAM KSDS data sets that match the argument for the
specified relative_key_position. The record’s key position is relative to the
start of the record, where the first byte is numbered 0.

**RLS EQ { Y | N }**
searches for VSAM data sets that match the argument for use with the
Record Level Sharing indicator. This indicator is based on the LISTCAT field
RLS IN USE, where the value is either YES or NO.

**SCRATCH EQ { Y | N }**
searches for GDGs that match the argument for the SCRATCH attribute

**SDSN {EQ | NE }{ untranslated-dsn |''}**
searches for all data sets based on system symbols in the dataset name. If
SDSN is specified, it can be the full 1 to 44 dataset name. If ' ' (a blank in
single quotes) is specified, the search argument is for with (NE) or without
(EQ) any system symbols.

**SECFLAG EQ { Y | N }**
searches for data sets with RACF profile that matches the specified
argument. The attribute SECFLAG is set to yes in the catalog and/or VTOC
if the data set is defined with a discrete RACF profile. The flag is not set for
data sets defined with generic RACF profiles.

**SHRR {EQ | NE | GE | GT | LE | LT}{1|2|3|4}**
searches for VSAM data sets that have a cross-region SHAREOPTIONS
(the first sub-operand of the SHAREOPTIONS attribute) that matches the
specified argument.

**SHRS {EQ | NE | GE | GT | LE | LT}{3|4}**
searches for VSAM data sets that have a cross-system SHAREOPTIONS
(the second sub-operand of the SHAREOPTIONS attribute) that matches the
specified argument.

**SMS EQ{ Y | N }**
searches for VSAM and non-VSAM data sets with SMS-managed status
that matches the specified argument. A search on Y (yes) selects a data set
if it is SMS-managed. A search on N (no) selects a data set if it is not
SMS-managed.

**SPANNE D EQ { Y | N }**
searches for VSAM data sets that match the argument for the SPANNED
record attribute.

**SPCPRI {EQ | NE | GE | GT | LE | LT} space_primary**
searches for non-VSAM and VSAM data sets with specified primary space
allocation value that matches the argument value. The amount returned is
returned in blocks, tracks, or cylinders depending on the unit of allocation
for the data set. This filter would usually be specified in conjunction with the
ALLOCTYPE filter.

**SPCSEC {EQ | NE | GE | GT | LE | LT} space_secondary**
searches for non-VSAM and VSAM data sets with specified secondary
space allocation value that matches the argument value. The amount
returned is returned in blocks, tracks, or cylinders depending on the unit of
allocation for the data set. This filter would usually be specified in
conjunction with the ALLOCTYPE filter.

**SPEED EQ { Y | N }**
searches for VSAM data sets that match the argument for the SPEED
attribute.
STORCLAS \{EQ | NE\} \{ storage_class | storage_class_mask | "" \} searches for all data sets that have a storage class that matches the argument value. If \textit{storage\_class} is specified, it can be the full 1 to 8 character storage class value, or a mask value. If "" (a blank in single quotes) is specified, the search argument is for a null storage class.

STORGRP \{EQ | NE\} \{ storage\_group | storage\_group\_mask | "" \} searches for all data sets that have a storage group that matches the argument value. If \textit{storage\_group} is specified, it can be the full 1 to 8 character storage class value, or a mask value. If "" (a blank in single quotes) is specified, the search argument is for a null storage group.

\textbf{Note:} If you do not use STORGRP as a filter and you want it in the Extract for later processing then you need to add STORGRP to the Extract statement - EXT-FLAT (dsname STORGRP) or EXT-FLATFILE (ddname STORGRP).

STRIPECNT \{EQ | NE | GE | GT | LE | LT\} \textit{stripe\_count} searches for all data sets that have a stripe count value that matches the argument value. The specified value can be in the range of 1 to 255.

STRNO \{EQ | NE | GE | GT | LE | LT\} \textit{string\_number} searches for all catalogs that have a string-number value that matches the argument value. The specified value can be in the range of 2 to 255.

SVOL \{EQ | NE\} \{ "******", untranslated\_vol | "" \} searches for all data sets based on system symbols in the volume name. If SVOL is specified, it can be the full 6 volume name (SVOL EQ '&SYSR1'). If "" (a blank in single quotes) is specified, the search argument is for catalog records with (SVOL NE ' ') or without (SVOL EQ ' ') any system symbols.

TEMPEXP EQ \{ Y | N \} searches for VSAM data sets that match the argument for the IDCAMS LISTC TEMP-EXP indicator. TEMP-EXP is turned on by user specification of the TEMPORARY keyword during EXPORT processing.

TRACKS-ALLOC \{EQ | NE | GE | GT | LE | LT\} \textit{tracks\_alloc} searches for data sets with specified tracks allocated value that matches the argument value. For VSAM clusters, the value is based on the setting for the token KSDS\_CLUSTER\_TOTALING in the EXPLORE\_OPTIONS section of CKMINI. If set to Y in CKMINI, the value is the sum of the data and index components, otherwise the value is only the data components value.

TRACKS-PRI \{EQ | NE | GE | GT | LE | LT\} \textit{tracks\_pri} searches for data sets with specified primary tracks value that matches the argument value. For VSAM clusters, the value is based on the setting for the token KSDS\_CLUSTER\_TOTALING in the EXPLORE\_OPTIONS section of CKMINI. If set to Y in CKMINI, the value is the sum of the data and index components, otherwise the value is only the data components value.

TRACKS-SEC \{EQ | NE | GE | GT | LE | LT\} \textit{tracks\_sec} searches for data sets with specified secondary tracks value that matches the argument value. For VSAM clusters, the value is based on the setting for the token KSDS\_CLUSTER\_TOTALING in the EXPLORE\_OPTIONS section of CKMINI. If set to Y in CKMINI, the value is the sum of the data and index components, otherwise the value is only the data components value.
TRACKS-USED \{EQ | NE | GE | GT | LE | LT\} \_tracks\_used 
searches for data sets with specified tracks used value that matches the
argument value. For VSAM clusters, the value is based on the setting for
the token KSDS\_CLUSTER\_TOTALING in the EXPLORE\_OPTIONS
section of CKMINI. If set to Y in CKMINI, the value is the sum of the data
and index components, otherwise the value is only the data components
value.

UCAT \{EQ | NE\} \_ucatname | \_ucatname\_mask | MASTERCATALOG \}
paired with other search argument criteria, this argument allows you to
narrow the search for data sets within the specified user catalog name, or
any user catalog name that matches the specified mask value, or the
running system's master catalog. MASTERCATALOG refers to the running
system's master catalog and is only applicable to UCAT EQ.

UNIT \{EQ | NE\} \_unit
searches for data sets allocated on the specified unit. Specify the device
number (four characters consisting of numeric digits 0 through 9 or the
letters A through F).

UNQKEY \{EQ | NE\} \_UNQKEY
searches for VSAM alternate index (AIX) data sets defined with the
specification for the UNIQUEKEY attribute that matches the specified
argument.

UPGRADE \{EQ | NE\} \_UPGRADE
searches for VSAM alternate index (AIX) data sets defined with the
specification for the UPGRADE attribute that matches the specified
argument.

USEDPCT \{EQ | NE | GE | GT | LE | LT\} \_used\_percentage
searches for VSAM or non-VSAM data sets with percentage of
used-to-allocated space that matches the specified argument.
- For VSAM data sets (the data component only), used percentage is
  based on ratio of HURBA to HARBA values from the VVDS.
- For non-VSAM data sets, used percentage is based on the DS1LSTAR
  field in the VTOC.
- For PDSEs the USEDPCT will always be zero.

VOL \{EQ | NE\} \_volser | \_volser\_mask
searches for data sets that are partially or wholly allocated on the specified
volser, or any volser that matches the specified mask value.

VOLCOUNT \{EQ | NE | GE | GT | LE | LT\} \_number
searches for those data sets whose allocated or candidate volumes match
the specified argument.

Note: Searching on an argument such as VOLCOUNT GT 1 will return
(among other multi-volume data sets) KSDS files that have the
IMBED option in effect. This is due to two volume cells constructed
in the index component of the catalog record, one for the imbedded
sequence set within the data component, and the other for the index
set that is the true index component.

VOLTYPE \{EQ | NE\} \{CAND | MIGR | PRIM | TAPE \}
searches for all data sets with volume allocation status that matches the
specified argument. The choices are:
- CAND - candidate for future allocation.
- PRIM - the volume is currently allocated on by the data set.
• TAPE - the data set is allocated on a tape volume.
• MIGR - the data set is in DFSMSshm migrated status, and the cataloged volser entry is MIGRAT.

WCK EQ { Y | N }
ssearches for VSAM data sets that match the argument for the WRITECHECK attribute.

Usage notes

None.
Chapter 13. GENERATE - Create IDCAMS Commands

Use the GENERATE command to generate IDCAMS control statements, based on existing records in the specified BCS(s). This command is a complete replacement for the IBM utility, MCNVTCAT, which is no longer available.

Syntax

```
GENERATE Bcs-Unload BCS(bcs bcsmask) OutDataSet(dsn (member)) OutFILE(ddname (member)) EXClude-BCS(bcs bcsmask)

INCLUDE-Dsn(dsn dsnmask) EXClude-Dsn(dsn dsnmask)

INCLUDE-Type( )
  GDG-Base
  Generation-DataSet
  Generation-dataset-ALIas
  NonVsam
  Nonvsam-ALIas
  SYMBOLic-relate
  UserCATalog
  Usercatalog-ALIas
  VSAM
  AlternateIndeX CLuster PAGE-dataset Aix-PaTH Cluster-PaTH

EXClude-Type( )
  GDG-Base
  Generation-DataSet
  Generation-dataset-ALIas
  NonVsam
  Nonvsam-ALIas
  SYMBOLic-relate
  UserCATalog
  Usercatalog-ALIas
  VSAM
  AlternateIndeX CLuster PAGE-dataset Aix-PaTH Cluster-PaTH

INCLUDE-VOLser(volser volsermask) EXClude-VOLser(volser volsermask)
```

MCNVTCAT
```
(1) ALLOCATE DEFINE DELETE DELETE-NOSCRATCH
```
Notes:
1. If you specify ALLOCATE, you must also specify the INCLUDE-TYPE keyword with a value of ALL, GENERATION-DATASET, or NONVSAM.
2. Do not specify NEW-BCS if multiple BCS are to be processed.

GENERATE Command Syntax

Keywords

- **BCS** specifies one or more fully qualified or masked BCSs to process.

- **OUTDATASET** specifies the name of the pre-existing dynamically allocated output data set. The data set is allocated DISP=SHR.

- **OUTFILE** specifies the Data Definition name (DD name) for the output file. You must use this option if one of the following is true:
  - The output is a Generation Data Set (GDS) and you want to specify a relative GDG. For example: GDG.NAME(+1).
  - You want to control the STATUS of the output file. For example: DISP=MOD.

- **member** specifies the member name if the output commands are to be written to a PDS or PDSE. The following lists additional usage information for specifying **member** on OUTDATASET or OUTFILE:
  - If a member name is coded for either OUTDATASET or OUTFILE and the output data set is not a PDS(E), then the member name is ignored. A warning message is issued.
  - If no member name is specified and the output is a PDS(E), TEMPNAME will be used. A warning message is issued.
  - If a member name is coded on the OUTFILE keyword, and there is a member name in the JCL, the JCL member name is used.
  - If a member name is coded for either OUTDATASET or OUTFILE, and the member name consists of one or more alphanumeric characters followed by one or more + signs, then the logic will assume that, if multiple BCS are input, each BCS will output to a different member. For example: OUTDATASET( pds.name( BCS+++ ) ) will cause the first BCS’s data to be written to member BCS001; the second to BCS002, and so on.

Note: The CCC+++++ format of member name can be entered only as part of the OUTFILE or OUTDATASET argument; it may not be entered on the JCL DD statement.
EXCLUDE-BCS
specifies one or more fully qualified or masked BCSs to exclude from processing.

INCLUDE-DSN
specifies one or more fully qualified or masked data set names to process.

EXCLUDE-DSN
specifies one or more fully qualified or masked data set names to exclude from processing.

INCLUDE-TYPE
specifies that all records in the BCS that match the specified value or mask are processed. Valid type values include:

ALL
All entries are covered. Do not specify ALL with EXCLUDE-TYPE.

GDG-BASE
This covers DEFINE GENERATIONDATAGROUP.

GENERATION-DATASET
This covers the DEFINE NONVSAM as a result of GDS entries.

GENERATION-DATASET-ALIAS
This covers the DEFINE ALIAS for those GDS that have associated alias entries.

NONE
The logical opposite to “ALL”. Do not specify NONE with INCLUDE-TYPE.

NONVSAM
This covers the DEFINE NONVSAM as a result of simple non-VSAM entries; it does not include Generation Data Sets.

NONVSAM-ALIAS
This covers the DEFINE ALIAS for those non-VSAM entries that have associated alias entries; it does not include Generation Data Sets.

SYMBOLIC-RELATE
This covers the DEFINE ALIAS for those ALIAS entries that were created with the SYMBOLICRELATE keyword - the SYMBOLICRELATE contains one or more system symbols.

USERCATALOG
This covers the DEFINE USERCATALOG.

USERCATALOG-ALIAS
This covers the DEFINE ALIAS for those alias entries associated with a user catalog.

VSAM
This covers all application-type VSAM objects. This option encompasses the following VSAM-specific options which, alternatively, may be specified individually or in combination:

AIX-PATH
This covers the DEFINE PATH that relates an alternate index to its base object, either KSDS or ESDS.

ALTERNATEINDEX
This covers the DEFINE ALTERNATEINDEX as a result of an associated alternate index.
CLUSTER
This covers the DEFINE CLUSTER for an ESDS, KSDS, LDS, RRDS or VRRDS.

CLUSTER-PATH
This covers the DEFINE PATH that renames a cluster.

PAGE-DATASET
This covers the DEFINE CLUSTER for a SWAP or page object.

EXCLUDE-TYPE
specifies that all records in the BCS that match the specified value or mask are excluded from processing. Valid type values include:

ALL All entries are covered. Do not specify ALL with EXCLUDE-TYPE.

GDG-BASE
This covers DEFINE GENERATIONDATAGROUP.

GENERATION-DATASET
This covers the DEFINE NONVSAM as a result of GDS entries.

GENERATION-DATASET-ALIAS
This covers the DEFINE ALIAS for those GDS that have associated alias entries.

NONE The logical opposite to “ALL”. Do not specify NONE with INCLUDE-TYPE.

NONVSAM
This covers the DEFINE NONVSAM as a result of simple non-VSAM entries; it does not include Generation Data Sets.

NONVSAM-ALIAS
This covers the DEFINE ALIAS for those non-VSAM entries that have associated alias entries; it does not include Generation Data Sets.

SYMBOLIC RELATE
This covers the DEFINE ALIAS for those ALIAS entries that were created with the SYMBOLICRELATE keyword - the SYMBOLICRELATE contains one or more system symbols.

USERCATALOG
This covers the DEFINE USERCATALOG.

USERCATALOG-ALIAS
This covers the DEFINE ALIAS for those alias entries associated with a user catalog.

VSAM This covers all application-type VSAM objects. This option encompasses the following VSAM-specific options which, alternatively, may be specified individually or in combination:

AIX-PATH
This covers the DEFINE PATH that relates an alternate index to its base object, either KSDS or ESDS.

ALTERNATEINDEX
This covers the DEFINE ALTERNATEINDEX as a result of an associated alternate index.
CLUSTER
This covers the DEFINE CLUSTER for an ESDS, KSDS, LDS, RRDS or VRRDS.

CLUSTER-PATH
This covers the DEFINE PATH that renames a cluster.

PAGE-DATASET
This covers the DEFINE CLUSTER for a SWAP or page object.

INCLUDE-VOLSER
specifies one or more fully qualified or masked volser on which data sets reside whose BCS record would be considered for processing.

EXCLUDE-VOLSER
specifies one or more fully qualified or masked volser on which data sets reside whose BCS record would be excluded from processing.

MCNVTCAT
specifies that the DEFINEs generated will include the RECATALOG keyword. Since the objects are not being allocated, no DASD space parameters, if applicable, are generated. For catalogs, an IMPORT CONNECT OBJECTS is created.

ALLOCATE
creates IDCAMS ALLOCATE statements for the non-VSAM objects in the specified catalogs. GDS, OAM, migrated, or archived objects are not processed. ALLOCATE applies to non-VSAM objects only.

DEFINE
creates traditional DEFINE commands without the RECATALOG keyword, except for OAM objects; thus space allocation information, if applicable, is included. For OAM objects, RECATALOG COLLECTION is always generated.

DELETE
creates DELETE commands. Every DELETE will specify PURGE. If catalogs are selected, the DELETE will specify RECOVERY. If OAM objects are selected, the DELETE will specify NOSCRATCH. If GDG objects are selected, the DELETE will specify FORCE.

DELETE-NOSCRATCH
creates DELETE NOSCRATCH commands. If GDG objects are selected, the DELETE will specify FORCE; but will not specify NOSCRATCH. If Alias objects are selected, the DELETE will not specify NOSCRATCH.

NOCANDIDATE
specifies to include only volumes for specific data sets in the DEFINE's VOLUMES list.

CANDIDATE
specifies to include all specific and non-specific candidate volumes for any generated DEFINE command. This applies to both VSAM and non-VSAM objects.

NOJOBCARD
specifies that you do not want to create JCL including Job statements, Exec statements and Data Definition statements as part of the output IDCAMS statements.
JOBCARD
create JCL including Job statements, Exec statements and Data Definition statements as part of the output IDCAMS statements.

NEW-BCS
controls whether CATALOG(catalog.name) will be generated for every DEFINE command. You must specify a valid data set name or one of the following will occur:

- If NEW-BCS is not specified, the CATALOG DEFINE argument will be generated and will have, as an argument, the name of the current BCS being processed.
- If NEW-BCS(NONE) is specified, then no CATALOG DEFINE keyword will be generated.

The DEFINE’s CATALOG keyword will be generated, using the NEW-BCS argument as its value. If multiple BCS are to be processed, then NEW-BCS(catalog.name) is NOT permitted; however, NEW-BCS(NONE) is permitted.

RELATIVE-GENERATIONS
controls, for GDS, which generations are to be processed. Specify one or more integers between 0 (zero) and -254 (negative two hundred and fifty four) in any sequence. For example:

```plaintext
RELATIVE-GENERATIONS(0 -1 -2 -3)
```

This will cause only the most recent four generations of a GDG to be processed.

```plaintext
RELATIVE-GENERATIONS(-1 -2 0 -3)
RELATIVE-GENERATIONS(0,-1,-2,-3)
```

These will produce the same result.

```plaintext
RELATIVE-GENERATIONS(-2 -4)
```

This will cause only the -2 and -4 generations to be processed.

If a GDG does not have the relative generation in the Generation Aging Table, that generation is ignored for that GDG.

This keyword is useful only if you specify INCLUDE-TYPE(ALL) or INCLUDE-TYPE(GENERATION-DATASET).

SUBSTITUTE-VOLSER
specifies one or more volume serial numbers to be changed during the IDCAMS command generation. You must specify each fromvolser to change within a set of parentheses with tovolser and newdevicetype.

VVDS-CHECK
checks the object’s associated VVR or NVR for potential BCS Back Pointer conflict and takes into account the NEW-BCS argument when performing its check. Non-VSAM, non-SMS-managed, objects will not be checked. If there is a Back Pointer conflict, the DEFINE RECATALOG generation is bypassed to avoid IDC3009I 086-022 errors that would occur if the DEFINE RECATALOG was run.

NO-VVDS-CHECK
specifies that the DEFINE RECATALOG will be unconditionally generated; however, the conflict will be reported. The report will show the catalog as stored in the VVR/NVR.
**Usage notes**

1. The tokens in the GENERATE_OPTIONS section of the CKMINI member of SCKMPARM contain values you can modify that control the content of the job statement and, if necessary, the JECL statement within the JCL. They also contain values that control how many statements per step and the number of steps per job.

2. System Page data sets can be re-cataloged to a new master catalog without updating the BCS back-pointers. The page data sets under the new master catalog function normally, and IDCAMS performs the RECATALOG function, even when the back-pointers are incorrect. However, in order to delete the old BCS entry or the VVR, the BCS back-pointer must be correct.
Chapter 14. LISTSMF - Extract and Print SMF Dump Data Set
Records

Use the LISTSMF command to extract and print records from SMF dump data sets.

With LISTSMF, you can select SMF records based on the following criteria:
- All SMF records on the supplied dump data sets.
- SMF record type.
- Names of ICF catalogs (BCSs) contained in SMF records.
- Data sets for which SMF records were created.
- Job names for which SMF records were created.
- Volumes on which data sets reside for which SMF records were created.
- System IDs for which SMF records were created.
- Date and time ranges for SMF record selection.

Syntax

LISTSMF SMFDataSet(dsn) SMFfile(ddname) SMFDataSet(dsn) SMFfile(ddname)...
  BYPass-Type2-Check Date-Format(JUL) Date-Format(JUL) EUR JIS USA

INClude-Bcs(bcs) bcsmask INClude-SMS Class Expression
  INClude-Recordid(recordid) recordidrange
  INClude-Vvds(volser) volsermask

EXClude-Bcs(bcs) bcsmask
EXClude-Recordid(recordid) recordidrange
EXClude-Vvds(volser) volsermask

INClude-Dsn(dsn) dsmask

137
LISTSMF Command Syntax

Keywords

SMFDATASET
 specifies the name of the dumped SMF data set to be used as input. This data set will be allocated at execution time with a DISPOSITION of SHR.

SMFFILE
 specifies the Data Definition name (DD name) to be used to allocate the input SMF dump data set. You must use this option if one of the following is true:

- The output is a Generation Data Set (GDS) and you want to specify a relative GDG. For example: GDG.NAME(+1).
- The input backup is not cataloged on the system on which LISTSMF will be executed.
- You want to process multiple SMF dump data sets by concatenating the DSNs into a single DD statement.

BYPASS-TYPE2-CHECK
 indicates that you want to bypass checking for Type 2 records. When the SMF data is dumped, a Type 2 record is written to the start of the dump (a Type 3 is written at the end of the dump as well). The LISTSMF command will, to ensure that a valid SMF dump is input, check that a Type 2 record is the first record on the input. You may want to bypass the check if one of the following conditions are true:

- The input SMF data has been sorted; typically into date and time sequence.
- The input SMF data has already been processed by some other utility which may have stripped the Type 2 record.

DATE-FORMAT
 specifies the desired output print format of the date fields from the SMF record. The valid date formats are:

- EUR—European. The dates will be printed in \textit{dd.mm.yyyy} format.
- JIS—Japanese Industrial Standard (Christian era). The dates will be printed in \textit{yyyy-mm-dd} format.
- JUL—Julian. The dates will be printed in \textit{yyyyddd} format. Where \textit{ddd} is the day within the year.
- USA—United States of America. The dates will be printed in \textit{mm/dd/yyyy} format.

This keyword only affects the printing of the various date fields, and has no effect on any other date specified within the command.

INCLUDE-BCS
 specifies one or more fully qualified or masked catalog names, referenced by the SMF records, to process. Only SMF record types 36, 61, 64, 65 and 66 will be checked.
INCLUDE-RECORDID
specifies one or more fully qualified or masked SMF record types to process. You can specify a numeric value between 0 and 255. If you specify multiple values, separate them with a space or a comma. You can also specify a value range. For example, (60-66).

INCLUDE-VVDS
specifies one or more fully qualified or masked VVDS names, referenced by the SMF records, to process. You can specify the VVDS name as a volser or as the full SYS1.VVDS.Vnnnnnn name. Only SMF record type 60 will be checked.

EXCLUDE-BCS
specifies one or more fully qualified or masked catalog names, referenced by the SMF records, to exclude from processing.

EXCLUDE-RECORID
specifies one or more fully qualified or masked SMF record types to exclude from processing. You can specify a numeric value between 0 and 255. If you specify multiple values, separate them with a space or a comma. You can also specify a value range. For example, (60-66).

EXCLUDE-VVDS
specifies one or more fully qualified or masked VVDS names, referenced by the SMF records, to exclude from processing. You can specify the VVDS name as a volser or as the full SYS1.VVDS.Vnnnnnn name.

INCLUDE-DSN
specifies one or more fully qualified or masked data set names, referenced by the SMF records, to process. Only SMF record types 14, 15, 17, 18, 36, 60, 61, 64, 65, and 66 will be checked.

EXCLUDE-DSN
specifies one or more fully qualified or masked data set names, referenced by the SMF records, to exclude from processing.

INCLUDE-JOBNAME
specifies one or more fully qualified or masked job names, referenced by the SMF records, to process. Only SMF record types 14, 15, 17, 18, 20, 25, 26, 35, 36, 40, 60, 61, 62, 63, 64, 65, 66, 67, 68, and 69 will be checked.

EXCLUDE-JOBNAME
specifies one or more fully qualified or masked job names, referenced by the SMF records, to exclude from processing.

INCLUDE-SYSID
specifies a fully qualified or masked system identifier, referenced by the SMF records, to process.

EXCLUDE-SYSID
specifies a qualified or masked system identifier, referenced by the SMF records, to exclude from processing.

EXTRACT-DATASET
specifies the name of the output extract data set. This will cause the SMF records to not only be printed, but also written to this data set. The same criteria used to select a record for printing will be used to cause the record to be written to the extract data set. This data set will be allocated, at execution time, with a DISPOSITION of SHR.
EXTRACT-FILE
specifies the Data Definition name (DD name) to be used to allocate the output EXTRACT data set. You must use this keyword if any of the following are true:

- The output extract is a Generation Data Set (GDS) and you wish to specify a relative GDG. For example: GDG.NAME(0).
- You want to change the allocation attributes of the output extract file, for example, the SPACE, UNIT or other DD statement parameters.

FROM-DATE
specifies the starting date for processing the SMF records. Any SMF records with a timestamp before this will not be processed. If you do not specify FROM-DATE, processing starts from the earliest date and time found on the input SMF files.

FROM-TIME
specifies the starting time for processing the SMF records. Any SMF records with a timestamp before this will not be processed.

LIST-RECORDID
causes a listing of known SMF record types to be generated. The listing will show the Record Type, a brief description and indicate whether that record type is being captured on the system on which the LISTSMF job is being run.

PRINT
specifies the printed format of the SMF records. You can specify one of the following options:

- DUMP—The SMF records will be printed in dump format. Each printed line will show 32 bytes of data.
- ForMaT—The initial portion of the SMF record is formatted by field. Not all SMF record types will be formatted: those that are not, will be printed in DUMP mode.
- Over-Under—The SMF records will be printed in overunder format. Every 96 bytes of SMF data will require 3 lines of output. The first line will show the EBCDIC representation of the data. The second line will show the “zone” nibbles of the data. The third line will show the “numeric” nibbles of the data.
- NONE—The SMF records will not be printed. This will generally be used when an extract data set name is used.

TO-CURRENT-DATE
specifies that the current date is the default for end of processing.

TO-DATE
specifies the end date for processing the SMF records. Any SMF records with a timestamp after this will not be processed.

TO-TIME
specifies the ending time for processing the SMF records. Any SMF records with a timestamp after this will not be processed.

Include SMS Class Expression

INCLUDE-DATACLAS
specifies one or more full or masked SMS DATACLAS names, referenced by the SMF records, to process. Only SMF record types 14, 60, and 61 will be checked.
**EXCLUDE-DATACLAS**

specifies one or more full or masked SMS DATACLAS names, referenced by the SMF records, to exclude from processing. Specify EXCLUDE-DATACLAS(NULL) to exclude a record with SMS class information, but no DATACLAS.

**INCLUDE-MGMTCLAS**

specifies one or more full or masked SMS MGMTCLAS names, referenced by the SMF records, to process. Only SMF record types 14, 60, and 61 will be checked.

**EXCLUDE-MGMTCLAS**

specifies one or more full or masked SMS MGMTCLAS names, referenced by the SMF records, to exclude from processing. Specify EXCLUDE-MGMTCLAS(NULL) to exclude a record with SMS class information, but no MGMTCLAS.

**INCLUDE-STORCLAS**

specifies one or more full or masked SMS STORCLAS names, referenced by the SMF records, to process. Only SMF record types 14, 60, and 61 will be checked.

**EXCLUDE-STORCLAS**

specifies one or more full or masked SMS STORCLAS names, referenced by the SMF records, to exclude from processing. Specify EXCLUDE-STORCLAS(NULL) to exclude a record with SMS class information, but no STORCLAS.

**Usage Notes**

1. Use the PRINT(NONE) keyword to suppress printing a report of the selected SMF records.
Chapter 15. MAP - Map ICF Catalogs or VSAM KSDSs

Use the MAP command to map and analyze the internal structure of any VSAM KSDS, including the BCS component of an ICF catalog.

The reports from the MAP command allow you to see how your records are stored in the Data Component and how the keys are maintained in the Index Component. These reports will help diagnose problems inherent within VSAM keyed objects such as, the impact of badly compressing keys, the impact of "creeping" keys, problems with freespace distribution, and many others.

Syntax

```
  MAP [BCS(bcs)] [DSN(dsn)] [HEXKEY] [RECORD-COUNTERS(2048)] [REPORTS( Available reports )]
```

Available reports:

```
  ALL  CATlist  CA-map  free-CI  INDEX  RECommendations  REcord-SiZeS  STATiStical
```

MAP Command Syntax

Keywords

**BCS**  specifies the name of a BCS component of an ICF catalog to process.

**DSN**  specifies the name of a VSAM KSDS to process.

**HEXKEY**  prints the hexadecimal key value along with each line of the character key. This is useful for those application objects that use non-printable characters within the key. The default is to print the key in EBCDIC only.

**RECORD-COUNTERS**  controls the number of counter fields to be established to accumulate, by record length, the number of records found. The default value is 2048. You can specify an integer between 1024 and 99999 (inclusive). These accumulators are used when the Record Size Distribution report is requested.

**REPORTS**  specifies the reports you want to generate. You can specify any of these available reports:

- **ALL**—generates all of the reports.
- **CATLIST**—Catalog Listing report. This report is very similar to an IDCAMS LISTCAT report, but with several beneficial formatting modifications and field additions or changes. The report will typically be a single page in length, depending on how many volumes have been defined and allocated for the object.

- **CA-MAP**—Control Area Map report. This report produces, for the Data Component, a CA-by-CA report, that illustrates CA splits, free CIs in each CA, potentially un-useable CIs, CI utilization, key compression information, and the high-key for each CA.

- **FREE-CI**—Free CI Distribution report. This report will generate a CA Split Distribution report and a Free CI Distribution report. To obtain this information, the command tallies the number of contiguous CA splits that have occurred throughout the object, as well as the number of free CIs in every CA processed. The reports are a summary of how these two free resources are distributed across the object. Each report is usually a single page.

- **INDEX**—Index Structure report. This report provides a key size distribution summary, an Index Component CI size analysis (to assist in determining if potentially un-useable Data Component CIs exist), and an Index Component record distribution summary. This report is usually a single page.

- **RECOMMENDATIONS**—Recommendations report. This report provides various performance tuning and object attribute change recommendations. For example, how to improve the Index Component CI size to remove (or reduce) the number of potentially un-useable CIs in the Data Component CAs, how to code the BUFND and/or BUFNI DD sub-parameters on application JCL to achieve optimum NSR (Non Shared Resource) buffering results, and a suggestion, if necessary, to remove obsolete attributes that are no longer supported or recommended. The report is usually one page in length.

- **RECORD-SIZE**—Record Size Distribution report. This report uses a sampling technique, when processing the object's Data Component, to reduce execution-time overhead. The sampling value may be changed via the SAMPLE keyword. By default, two CIs in every CA will be sampled, and the records therein used. If the sampled CIs contain segments of a spanned record, additional CIs may be processed. This report may aid in developing an appreciation of the average record size. This will help in developing an appropriate CI freespace percentage, the potential for records to span CIs, and other data.

- **STATISTICAL**—Statistical Summary report. This report, while it contains a lot of information similar to the IDCAMS LISTCAT, is considerably more useful. It combines actual object analysis information with the LISTCAT information to produce information that tells you how the object is really behaving and what the various attributes are costing you. This report is usually a single page.

**SAMPLE**

indicates the number of CIs in each data component CA to sample. Specify an integer value between 0 to 99999999. If you specify 0 (zero), only the highest keyed CI in the CA is processed. The default is 2.

**Usage notes**

None.
Chapter 16. MERGECAT - Merge, Split, or Copy ICF Catalogs

Use the MERGECAT command to move or copy catalog entries from one BCS to another.

The MERGECAT command is useful for the day-to-day management of your BCS environment. Some situations where MERGECAT is useful are:

- A BCS becomes too large and unwieldy, alleviated by moving one or more ‘alias groups’ of catalog entries to another BCS.
- You determine that you have too many small BCSs, so you consolidate them into fewer, larger BCSs.
- It is necessary to merge catalog entries for ‘outside data’ brought into existing BCSs in the data center.
- New operating systems are being established and tested, and the BCS COPYONLY facility of MERGECAT is used to set up the new master catalog.

Syntax
Notes:
1  If the BCS you specify is the master catalog, you must specify the NOLOCK keyword.
2  When an all-inclusive mask, for example, **.*.* or **.*, is specified for keywords such as LEVEL,
    EXCLUDE-LEVEL, or ENTRIES it must be the only operand in that keyword.

MERGECAT Command Syntax

Keywords

INBCS
specifies the fully qualified name of the source BCS to process. The
specified BCS must be connected to the master catalog on the LPAR on
which MERGECAT is run. If INBCS is the master catalog, you must specify
NOLOCK, and you must also specify either COPY-ONLY or
FROM-MASTER-CATALOG.

OUTBCS
specifies the fully qualified name of the target BCS to process. The
specified BCS must be connected to the master catalog on the LPAR on
which MERGECAT is run. If OUTBCS is the master catalog, you must
specify NOLOCK and TO-MASTER-CATALOG.

JOURNAL
specifies the data set name of the VSAM KSDS journal file to use for
keeping track of MERGECAT processing. The journal is used to track the
MERGECAT changes so you can restart or back them out if a failure
occurs.

BACKOUT
specifies that all changes made to the source and target BCS, as well as
alias updates to the master catalog from a previous MERGECAT that was
interrupted during execution, are backed out. BACKOUT is not available for
a successfully completed MERGECAT.

Attention:  BACKOUT is not supported when WHILE-OPEN,
FROM-MASTER-CATALOG, or TO-MASTER-CATALOG are specified.

RESTART
specifies that processing is to resume for a previous MERGECAT that was
interrupted during execution.

Attention:  RESTART is not supported when WHILE-OPEN is specified.

SIMULATE
specifies that you want to trial the MERGECAT without actually performing
it.

NOMOVE-IN-USE
specifies that records for data sets which are in use (enqueued anywhere in
the sysplex) are not to be moved, and MERGECAT will consider the
corresponding alias level to be unmovable. This check is not performed
when the work selection is via the ENTRIES keyword. This is the default.

MOVE-IN-USE
specifies that records for data sets which are in use (enqueued anywhere in
the sysplex) may be moved by MERGECAT. Catalog errors may occur in
jobs which are using data sets whose records are moved. Generally these
will occur when open VSAM objects are closed.
COPY-ONLY
indicates that a copy operation should be performed. The source BCS, its
related aliases, and the VVDS back-pointers are not changed. The source
BCS is still the official catalog for those copied entries. If you specify
VVDS-UPDATE, an error message will be issued. COPY-ONLY will cause
catalog entries to be duplicated; however, since the copied entries in the
target catalog are not the official entries, they will not be maintained by
catalog management.

If you specify COPY-ONLY, you cannot specify MOVE-ALIAS.

WHILE-OPEN
allows catalog entries which may be in use to be moved non-disruptively.

SINGLE
indicates that no other system in the sysplex will participate in this
WHILE-OPEN operation. Ensure that all systems sharing the
INBCS and OUTBCS are down prior to using this keyword.

EXCLUDE-SYSTEMS
excludes systems which are defined in the CKMSYS00
SCKMPARM member, but are not active. Ensure that the named
systems sharing the INBCS and OUTBCS are down prior to using
this keyword.

Important:
• Do not cancel a MERGECAT WHILE-OPEN job because
recovery may be complex. Ensure that the job will not
exceed any limits such as CPU or line count which can
cause abends. It is recommended that backups of both the
source and target catalogs be taken prior to executing a
MERGECAT WHILE-OPEN job. If a MERGECAT
WHILE-OPEN job is cancelled or abends, please contact
Technical Support with the complete SYSOUT from the
MERGECAT execution for assistance with recovery.
• If a secondary system is shut down or fails while
MERGECAT WHILE-OPEN is running, and if any of the
catalog entries being moved by MERGECAT could potentially
be accessed by that system, that system must remain down
until the MERGECAT WHILE-OPEN completes.
• The LEVEL keyword is required when using the
WHILE-OPEN keyword and only one alias level may be
specified per MERGECAT WHILE-OPEN execution.
• There are several keywords that are mutually exclusive with
WHILE-OPEN:
  – BACKOUT
  – COPYONLY
  – ENTRIES
  – FROM-MCAT
  – LOCK
  – LONG-ENQ
  – MASTER-CATALOG
  – MOVEINUSE
  – NOMOVEALIAS
- NOMOVEINUSE
- NOVVDSUPDATE
- RESTART
- TO-MCAT

**LEVEL**
specifies that select levels should be moved from the source (INBCS) to the target (OUTBCS). The levels are determined by specifying one or more high level qualifiers or masked qualifiers. If alias entries for any specified level value cannot be located, or if they are currently associated with a BCS other than the one named in INBCS, the command produces an error message.

**EXCLUDE-LEVEL**
specifies that select levels should not be moved from the source (INBCS) to the target (OUTBCS) even if they are within the scope of the LEVEL keyword specifications. The levels are determined by specifying one or more high level qualifier names or masks. If EXCLUDE-LEVEL is specified without LEVEL, all levels in the catalog will be moved except those within the scope of EXCLUDE-LEVEL, as if LEVEL(“”) had also been specified.

**MOVE-ALIAS**
controls the processing of aliases associated with the source (INBCS) catalog. Up to 49 additional master catalogs can be specified. The master catalog is the one specified by the MASTERCATALOG keyword or the current master catalog. The running system master catalog (or the alternate master catalog specified via the MASTERCATALOG keyword) is processed regardless of whether or not it is specified in the MOVE-ALIAS list.
MERGECAT will add the alias associations not only to the master catalog, but also to the catalogs specified in this keyword. If MOVE-ALIAS is requested, and neither LEVEL nor EXCLUDE-LEVEL are requested, MERGECAT will delete all existing aliases from the master catalog that are associated with the source (INBCS) catalog and then re-associate those same aliases with the target (OUTBCS) catalog. If MOVE-ALIAS and LEVEL are both requested, MERGECAT will move only those aliases matching the LEVELs specified, except those specified in EXCLUDE-LEVEL.

If you specify MOVE-ALIAS, you cannot specify COPY-ONLY.

**ENTRIES**
specifies that select entries should be moved from the source (INBCS) to the target (OUTBCS). The entries are determined by specifying one or more data set names or masked arguments. No aliases are updated. If you specify ENTRIES, you cannot specify MOVE-ALIAS.

**NOMOVE-ALIAS**
specifies that no updates to the alias entries will be made. NOMOVE-ALIAS cannot be specified with either LEVEL or EXCLUDE-LEVEL.

**EXAMINE**
indicates that the IDCAMS EXAMINE function is invoked for the BCS prior to MERGECAT.

*Note:* If the EXAMINE operation indicates that the object has structural errors, processing continues or terminates based on what is specified for ACCEPT-EXAMINE.
**INDEXTEST**
specifies that a complete analysis of the BCS’s index component structure is to be performed. A crosscheck is made of the vertical and horizontal address pointers between all of the index’s records, an analysis of the internal structure of the index CIs is made, and an analysis of the internal structure of the index record is performed.

**DATATEST**
specifies that a complete analysis of the BCS’s data component structure is to be performed. A complete sequential read of the BCS’s data component records is performed, using the index component’s sequence set records, reading all CIs, including those marked free. Tests are done using each CI’s RDFs and the CIDF, to ensure that the information about free space record numbers, lengths, and locations is correct. If you specify DATATEST, an INDEXTEST is automatically run.

**NOEXAMINE**
specifies that the IDCAMS EXAMINE command is not invoked by MERGECAT.

**ACCEPT-EXAMINE**
indicates whether processing for the specified BCS is allowed to continue, based on certain levels of error or warning messages from execution of the underlying IDCAMS EXAMINE commands. This keyword is controlled by the EXAMINE keyword. If the EXAMINE keyword is not in effect the ACCEPT-EXAMINE keyword is ignored. The valid values for ACCEPT-EXAMINE are:

- **W**—allows the processing to continue when warning messages (IDCAMS RC=4 or less) are issued. This is the default.
- **D**—allows the processing to continue when disaster level, or extremely serious error messages (IDCAMS RC=12 or less) are issued.
- **E**—allows the processing to continue when error messages (IDCAMS RC=8 or less) are issued.
- **I**—allows the processing to continue when informational messages (IDCAMS RC=0) are issued.

**FATAL-CATALOG-ERROR**
controls the processing if a serious catalog record structural error is detected in a record being processed in the input BCS. The valid options are:

- **WARNING**
  issue a warning message and continue processing this alias level. A return code of 4 will be issued.

- **ERROR**
  issue an error message and terminate the MERGECAT execution with a return code of 8.

**FROM-MASTER-CATALOG**
overrides MERGECAT’s restriction against the INBCS being the master catalog for a move operation. When FROM-MASTER-CATALOG is specified, the check for catalog aliases is skipped, and new aliases are defined for the alias levels specified in the LEVEL keyword if MOVE-ALIAS is in effect.
Attention:

- When FROM-MASTER-CATALOG is specified, masked LEVEL values are not allowed.
- When FROM-MASTER-CATALOG is specified, BACKOUT will not be supported.
- MERGECAT will not allow SYS1. records to be moved from the master catalog, however, they may be copied via the COPYONLY keyword.

TO-MASTER-CATALOG

overrides MERGECAT’s restriction against the OUTBCS being the master catalog for a move operation. When TO-MASTER-CATALOG is specified, catalog aliases will be deleted for the alias levels specified in the LEVEL keyword if MOVE-ALIAS is in effect.

Attention:

- When TO-MASTER-CATALOG is specified, masked LEVEL values are not allowed.
- When TO-MASTER-CATALOG is specified, BACKOUT will not be supported.

LOCK indicates that the BCS will be locked. For locking to be operative the user ID under which the MERGECAT command runs must have READ access to the IGG.CATLOCK FACILITY class security profile. Users attempting to access the catalog will be denied access and the job will fail as the catalog is temporarily unavailable. If INBCS or OUTBCS specifies the master catalog you must specify NOLOCK.

NOLOCK indicates that the BCS will not be locked. If INBCS or OUTBCS specifies the master catalog you must specify NOLOCK.

MAXDUPS

specifies the number of duplicate keys that are to be permitted before MERGECAT is terminated with an appropriate error message and return code. If you specify 99999, no limit will be set on the number of duplicate keys permitted. When a duplicate key is encountered, the record is not copied from the source. The source record will not be deleted from the source catalog and the duplicately-named record in the target catalog will not be overlaid. If MAXDUPS has not been exceeded, a warning message is printed and processing continues. If MAXDUPS has been exceeded, an error message is printed and processing terminates. Manual action is required to resolve the duplicate name situation.

MASTER-CATALOG

identifies a valid alternate master catalog that will receive any alias re-association updates as a result of the MERGECAT processing. The rules for using MASTER-CATALOG are:

- The catalog must be connected to the current system’s master catalog as a user catalog.
- The catalog specified by the INBCS keyword must be connected to this alternate master catalog.
- The catalog specified by the OUTBCS keyword must be connected to this alternate master catalog.

The running system master catalog is not processed if the MASTER-CATALOG keyword specifies a different catalog. However, if the
MASTERCATALOG keyword is not specified, the running system master catalog is processed regardless of whether or not it is listed in the MOVE-ALIAS keyword.

NODIAGNOSE-BCS
specifies that an IDCAMS DIAGNOSE ICFCATALOG command is not run prior to running the MERGECAT command.

DIAGNOSE-BCS
specifies that an IDCAMS DIAGNOSE ICFCATALOG command is invoked prior to running the MERGECAT command. IDCAMS DIAGNOSE is a catalog structure integrity checking tool. IDCAMS DIAGNOSE ICFCATALOG reads the entire BCS, checking the integrity of every record, cell, and data field within it. The inter-cell relationships are checked, and cell relationship information among records is verified to ensure correctness and completeness. Because the COMPARAMD keyword is not specified, the associated VVDS entries are not included in the diagnosis.

ACCEPT-DIAGNOSE
indicates whether processing for the specified BCS is allowed to continue, based on certain levels of error or warning messages from execution of the underlying IDCAMS DIAGNOSE commands. This keyword is controlled by the DIAGNOSE keyword. If the DIAGNOSE keyword is not in effect, the ACCEPT-DIAGNOSE keyword is ignored. The valid values for ACCEPT-DIAGNOSE are:

- W—allows the processing to continue when warning messages (IDCAMS RC=4 or less) are issued. This is the default.
- E—allows the processing to continue when error messages (IDCAMS RC=8 or less) are issued.
- I—allows the processing to continue when informational messages (IDCAMS RC=0) are issued.

LONG-ENQ
causes the specified BCS to be enqueued while the MERGECAT is processing. LONG-ENQ is not recommended if the specified BCS is resident on a shared access DASD volume and your GRS or MIM system is not configured to convert the SYSIGGV2 RESERVE to a global ENQ. In this situation, the ENQ becomes a hardware RESERVE, locking out all I/O access by other systems to the volume containing the BCS.

SHORT-ENQ
causes the specified BCS to be enqueued only while each record is being physically moved. SHORT-ENQ(BOTH) is required when using the WHILE-OPEN option.

VVDS-UPDATE
specifies that all of the catalog back-pointers in the NVR and VVR records for all objects selected for movement from the source (INBCS) to the target (OUTBCS) will be updated. Every non-VSAM object cataloged on a SMS-controlled volume will have an NVR stored in that volume’s VVDS. This NVR contains the name of the BCS owning the object. Every VSAM object on a volume will have one or more VVRs stored in that volume’s VVDS. These VVRs contain the name of the BCS owning the object.

NOVVDS-UPDATE
specifies that no updates will be made to the catalog back-pointers in the NVR and VVR records for all the objects selected. All of the catalog entry move operations and alias operations are performed, but not VVDS updates.
**TERSE**

specifies that the potentially voluminous normal-processing messages should not be printed for each individual entry. No error messages are suppressed by TERSE. When TERSE is specified, a progress message is printed periodically showing how many records have been processed so far.

**Usage notes**

- For both the BACKOUT and RESTART keywords, the MERGECAT command must be coded exactly as it was for the interrupted execution, and the JOURNAL file used for that execution must be specified.
- The WHILE-OPEN keyword requires that the persistent started task be configured and active as described in Chapter 3.
- The product Performance Essential from EMC (formerly known as VSAM I/O Plus) is not compatible with MERGECAT and needs to be turned off. A DD statement similar to the one below will need to be added to the MERGECAT JCL:
  
  //PSPOFF DD DUMMY
Chapter 17. RECOVER - Recover ICF Catalogs or VSAM Data Sets

Advanced Catalog Management provides the RECOVER command for restoring a BCS, VVDS, or other VSAM object.

RECOVER BCS

Use the RECOVER BCS command to restore or forward recover a BCS.

The command supports the standard ICF catalog, as well as tape library management VOLCATs. Typically, every BCS in the installation is backed up on a very frequent schedule. If a BCS develops a problem, it can be restored from the most recent backup copy, and 'forward recovered' to the current time. It is also possible, typically for a disaster recovery situation, for all BCSs on a backup file to be restored in a single execution of the RECOVER command. In addition, you can use this command to change virtually any user-defined BCS attribute.

Syntax

```plaintext
RECOVER BCS(bcs [bcsmask])
InDataSet(dsn [dsnmask])
InFILE(ddname)
EXECute
DEFine
SIMulate(ReSTore)
Alias(ALIAS-Only
NOAlias)
ECSharing(NOECSharing)

EXClude-Bcs(bcs [bcsmask])
INClude-Dsn(dsn [dsnmask])
EXClude-Dsn(dsn [dsnmask])

INClude-Type
EXClude-Type

INClude-VOLser(volser [volsermask])
EXClude-VOLser(volser [volsermask])

EXTent-Consolidation

ForWarD(SMFfile(ddname) Optional time period)
Sync-Smf-Time(cpuid://-hhmss)

LoCK
NOloCK
LeaVe-LOCKed

Into-EMPTY
NODEfine
Master-CATalog(mcat [mcatmask])
New-BUFnD(nnn)
```
Optional include types:

- ALL
- Empty-GDG
- TAPE
- NonVsam
- Vsam
- GDG
- Gds-Dasd
- Gds-Tape
- VOLCAT
- (nnn)
- (nnn)

Optional exclude types:

- TAPE
- NonVsam
- Vsam
- GDG
- Gds-Dasd
- Gds-Tape
- VOLCAT
Optional time period:

FROM-Backup-date TO-Current-date
FROM-Date(date) FROM-Time(hh:mm:ss) TO-Date(date) TO-Time(hh:mm:ss)

Notes:
1. Do NOT specify this keyword if you are recovering more than one object.

Note: The CKMINI token RECOVER_PROCESSING_DEFAULT controls the default for EXECUTE/SIMULATE.

RECOVER BCS Command Syntax

Keywords

BCS specifies a fully qualified or masked BCS to recover. A mask is not permitted if the input to RECOVER was created by an IDCAMS EXPORT.

INDATASET specifies the fully qualified name of the BCS backup dataset that was created by the BACKUP BCS command or an IDCAMS EXPORT command.

INFILE specifies the DD name associated with the BCS backup dataset name that was created by the BACKUP BCS or an IDCAMS EXPORT command.

EXECUTE indicates that you want to run the command.

SIMULATE indicates that you want to trial the command without actually performing it. You can specify one of these values:
- DEFINE—read the input backup so the object to be recovered will be located and its AMS DEFINE shown (with any of the specified NEW-xxxxxxx keywords). If the object is not found, or the backup was incomplete, messages will be issued.
- RESTORE—perform everything except the physical DELETE, DEFINE of the object, and the actual writing of the data.

ALIAS specifies that all aliases are to be associated with the recovered catalog by making the required entries in the master catalog (as well as any other catalogs specified in the MASTER-CATALOG keyword). This is only valid if the input file contains BCSs that are backed up with the Advanced Catalog Management BACKUP BCS command. This option is ignored if a VOLCAT is being recovered - NOALIAS will be in effect. This is the default if not a VOLCAT.

ALIAS-ONLY specifies that only the catalog’s associated aliases are to be restored in the target system’s master catalog, and in any other catalogs optionally defined by the MASTER-CATALOG keyword.

NOALIAS specifies that you do not want to perform any alias processing. This is the default option if a VOLCAT is being recovered.
ECSHARING
specifies that you want to add the ECS attribute to the catalog’s list of attributes.

NOECSHARING
specifies that you do not want to add the ECS attribute to the catalog’s list of attributes.

EXCLUDE-BCS
specifies one or more specific or masked BCS names to exclude from processing.

INCLUDE-DSN
specifies one or more specific or masked data set names to process.

EXCLUDE-DSN
specifies one or more specific or masked data set names to exclude from processing.

INCLUDE-TYPE
specifies the types of objects to recover.
- ALL—All records unless specifically excluded will be recovered.
- EMPTY-GDG—All GDG base records are reset to their initial form. The GAT entries are cleared and all GDS sub-records removed. GDG extension records are dropped.
- GDG—GDG records are recovered, including all extension records.
- GDS-DASD(nnn)—An argument is optional, but if specified, it must be an integer between 0 and 255. Applies to GDG with GDS on DASD.
  - no argument—all pure DASD-based GDS are kept for GDG.
  - 0—for DASD-based, similar to EMPTY-GDG.
  - nnn—the nnn most recent DASD-based GDS are kept for GDG.
- GDS-TAPE(nnn)—An argument is optional, but if specified, it must be an integer between 0 and 255. Applies to GDG with GDS on TAPE.
  - No argument—all pure TAPE-based GDS are kept for GDG.
  - 0—for TAPE-based, similar to EMPTY-GDG
  - nnn—the nnn most recent TAPE-based GDS are kept for GDG.
- NONVSAM—Only non-VSAM DASD-based objects are recovered.
- TAPE—Only non-VSAM TAPE-based objects are recovered.
- VOLCAT—Only "L" and "W" catalog record types are recovered.
- VSAM—Only VSAM objects are recovered.

EXCLUDE-TYPE
specifies the types of objects to exclude from recovery.
- GDG—Do not recover GDG records. May not be combined with GDS-DASD or GDS-TAPE.
- GDS-DASD—Do not recover GDS on DASD. Applies to GDG with GDS on DASD.
- GDS-TAPE—Do not recover GDS on TAPE. Applies to GDG with GDS on TAPE.
- NONVSAM—Do not recover DASD-based non-VSAM objects.
- TAPE—Do not recover TAPE-based non-VSAM objects.
- VOLCAT—Do not recover "L" or "W" record types.
- VSAM—Do not recover VSAM objects.
INCLUDE-VOLSER
specifies one or more specific or masked volsers to process, allowing you to perform selective recovery of records, based on the volser in the BCS volume cell.

EXCLUDE-VOLSER
specifies one or more specific or masked volsers to exclude from processing, allowing you to perform selective recovery of records, based on the volser in the BCS volume cell.

EXTENT-CONSOLIDATION
indicates that you want to change the object’s allocation on recovery so only one DASD extent will be used to maintain the object’s data. The primary space allocation value will be changed. The value used for the new primary allocation will be the sum of all current extents.

Note:
- DASD management may use up to 5 physical extents to satisfy the primary or secondary allocation request.
- If DASD management is unable to satisfy the primary allocation request, the allocation may fail.

FORWARD
indicates that a forward recovery is to be attempted. The BCS will be recovered using a backup copy; any changes occurring since the backup was made will be applied using data from the input SMF records.

When the Advanced Catalog Management backup was made, the timestamp of the backup was written to the output data set. This timestamp is used to gather the appropriate SMF data. These data are then merged with the backup data.

SYNC-SMF-TIME
specifies a way of synchronizing SMF records when they are being used for forward recovery.
- cpuid1—the CPU ID recorded in the SMF record.
- +/-hhmmss—the time variation between the system on which the BACKUP was run and the system on which the SMF record was cut. Systems in timezones east of Greenwich (referring to Greenwich Mean Time or GMT) use a positive value.

SMFFILE
specifies the Data Definition name (DD name) that identifies the input SMF data set(s) to be used for the forward recovery. Only dumped SMF data sets are allowed. The current SYS1.MANx must be dumped if it is to be processed.

INTO-EMPTY
specifies that you want to define the object before the RECOVER BCS command is run and bypass the internal DELETE and DEFINE. This allows you to specify any attributes for the object. If you specify INTO-EMPTY, the target object must be cataloged. At runtime, the Hi-Used-RBA of the object will be checked. The Hi-Used-RBA must indicate that no data records are loaded.

NODEFINE
specifies that you want recover backup records into an existing BCS that already contains other catalog records. At runtime, the Hi-Used-RBA of the object will not be checked to ensure that no records are currently on the
target BCS. A catalog entry that is already present on the target BCS will not be replaced by the same entry on the input backup.

**LOCK** specifies that you want to lock the catalog during the RECOVER BCS process. Users attempting to access the catalog will be denied access and the job will fail as the catalog is temporarily unavailable. If LOCK is specified, and the RECOVER BCS fails, the catalog will not be unlocked.

**Note:** For locking to be operative, the user ID under which the RECOVER BCS executes must have READ access to the IGG.CATLOCK facility.

**NOLOCK** specifies that you do not want to lock the catalog during the RECOVER BCS process. Users attempting to access the catalog while it is in process of being recovered may cause problems and data loss. You can specify this if you want to control the LOCK and UNLOCK of the catalog directly.

**LEAVE-LOCKED** specifies that you want to lock the catalog during and following the successful recovery of the catalog. You must issue an IDCAMS ALTER UNLOCK at some later time.

**Note:** For locking to be operative the user ID under which the RECOVER BCS executes must have READ access to the IGG.CATLOCK facility.

**MASTER-CATALOG** indicates which master catalogs are to be updated with the catalog’s aliases. You can specify a maximum of 32 catalogs. Only applicable if ALIAS or ALIAS-ONLY specified. The current system’s master catalog will always be updated with the associated aliases, and should not be included in this keyword’s arguments.

**NEW-BUFND** specifies the number of Data Component buffers to assign to the BCS. Each buffer is used to maintain a Data Component Control Interval (CI). Specify an integer value between 3 and 255. The minimum value is STRNO + 1. The additional buffer is for CI split purposes.

**NEW-BUFNI** specifies the number of Index Component buffers to assign to the BCS. Each buffer is used to maintain an Index Component Control Interval (CI). Enter an integer value between 2 and 255. The minimum value is STRNO.

**NEW-CA-FSPC** specifies the percentage number of Control Intervals that will be left free (empty) in each Control Area during initial load or resume load processing. Specify a value between 0 and 100. If 100 percent is requested, only 1 Control Interval in each Control Area will be used for data, the rest will be left free.

Due to possible key compression problems, there is no guarantee that the CIs left empty are, in fact, usable. You can use the Advanced Catalog Management MAP command to perform a “post-load” analysis of the object. Because the number of free CIs is calculated using integer arithmetic, a non-zero request does not guarantee a free CI in a CA. For example, if there are 80 CI/CA, a request of 1% will give 0 free CIs.
NEW-CI-FSPC

specifies the percentage number of bytes that will be left free (empty) in each Control Interval during initial load or resume load processing. Specify a value between 0 and 100. If 100 percent is requested, only 1 record will be loaded into each Control Interval, the rest of the Control Interval will be left free.

Because the CI size is either a multiple of 512 (up to 8192) or a multiple of 2048 (up to 32768) and there are control fields in each CI, there will typically be some unused space in each CI but no guarantee that the requested free space is, in fact, adequate to prevent one or more records being loaded.

NEW-DATA-CISZ

indicates that you want to change the object’s Data Component Control Interval size. Consider the average record size and object usage when determining Data Component CI size. For keyed objects, please be aware of the relationship between the Data Component CI size, the Data Component CI/CA, and the Index Component CI size. As a rule, if you increase the Data Component CI size, you may decrease the Index Component CI size and vice-versa. LDS must use 4096.

NEW-DATA-CLAS

indicates that you want to either remove the SMS Data Class (as backed up) from the recovered object’s definition or to change the SMS Data Class. The SMS Data Class supplies data set attributes such as allocation and Extended Format. The SMS ACS routines will validate the request when the object is defined, and may choose to ignore the request.

NEW-DATA-PRIMARY

indicates that you want to change the primary SPACE allocation for the Data Component of the object being recovered.

Attention: If the object was originally defined using a unit other than CYLINDERS, AMS will convert that value to either TRACKS or CYLINDERS; if the object was allocated using TRACKS, AMS may have changed that to CYLINDERS. The change may be specified either by:

- An unsigned integer value of 1 to 7 digits. This will change the space allocation value to the value specified
- A percentage in the range -100<=n<=100. The new space allocation value will be computed as the specified percentage change (+ or -) of the allocation at time of backup. A function is applied to the result which returns the smallest integer greater than or equal to the computed value.

You should run a SIMULATE(DEFINE) mode RECOVER BCS first, and see what will occur. NEW-DATA-PRIMARY can be specified if you are recovering more than one object only if you specify a percentage.

NEW-DATA-SECONDARY

indicates that you want to change the secondary space allocation for the Data Component of the object being recovered.

Attention: If the object was originally defined using a unit other than CYLINDERS, AMS will convert that value to either TRACKS or CYLINDERS; if the object was allocated using TRACKS, AMS may have changed that to CYLINDERS. The change may be specified either by:
An unsigned integer value of 1 to 7 digits. This will change the space allocation value to the value specified.

A percentage in the range -100<=n<=100. The new space allocation value will be computed as the specified percentage change (+ or -) of the allocation at time of backup. A function is applied to the result which returns the smallest integer greater than or equal to the computed value.

You should run a SIMULATE(DEFINE) mode RECOVER BCS first, and see what will occur. NEW-DATA-SECONDARY can be specified if you are recovering more than one object only if you specify a percentage.

**NEW-INDEX-CISZ**

indicates that you want to change the object's Index Component Control Interval size. Please be aware of the relationship between the Data Component CI size, the Data Component CI/CA and the Index Component CI size. As a rule, if you increase the Index Component CI size, you may decrease the Data Component CI size and vice-versa. AMS will always calculate the minimum acceptable Index Component CI size. If that calculated minimum requirement is not met, AMS will increase the value; it will never decrease the value specified. No messages are issued when the value is changed.

To determine the correct Index Component CI size, use the Advanced Catalog Management MAP command. However, be aware that if changes are made, running the MAP command again may give a different suggestion and the attributes of the key may change during the life of the object making today's calculated Index CI size not the best choice for tomorrow's data.

**NEW-INDEX-PRIMARY**

indicates that you want to change the primary space allocation for the Index Component of the recovered object.

**Attention:** If the object was originally defined using a unit other than CYLINDERS, AMS will convert that value to either TRACKS or CYLINDERS; if the object was allocated using TRACKS, AMS may have changed that to CYLINDERS.

The change may be specified either by:

- An unsigned integer value of 1 to 7 digits. This will change the space allocation value to the value specified.
- A percentage in the range -100<=n<=100. The new space allocation value will be computed as the specified percentage change (+ or -) of the allocation at time of backup. A function is applied to the result which returns the smallest integer greater than or equal to the computed value.

You should run a SIMULATE(DEFINE) mode RECOVER BCS first, and see what will occur. NEW-INDEX-PRIMARY can be specified if you are recovering more than one object only if you specify a percentage.

**NEW-INDEX-SECONDARY**

indicates that you want to change the secondary space allocation for the Index Component of the recovered object.

**Attention:** If the object was originally defined using a unit other than CYLINDERS, AMS will convert that value to either TRACKS or CYLINDERS; if the object was allocated using TRACKS, AMS may have changed that to CYLINDERS.

The change may be specified either by:
• An unsigned integer value of 1 to 7 digits. This will change the space allocation value to the value specified.

• A percentage in the range -100 <= n <= 100. The new space allocation value will be computed as the specified percentage change (+ or -) of the allocation at time of backup. A function is applied to the result which returns the smallest integer greater than or equal to the computed value.

You should run a SIMULATE(DEFINE) mode RECOVER BCS first, and see what will occur. NEW-INDEX-SECONDARY can be specified if you are recovering more than one object only if you specify a percentage.

NEW-MGMTCLAS
indicates that you want to either remove the SMS Management Class (as backed up) from the recovered object’s definition or to change the SMS Management Class. The SMS Management Class interfaces with DFSMSHsm to control such features as backup frequency, migration, and retention. The SMS ACS routines will validate the request when the object is defined, and may choose to ignore the request.

NEW-NAME
specifies a new data set name for the recovered BCS. With NEW-NAME, the BCS with the old name will still exist unless the DELETE-OLD-BCS keyword is specified. NEW-NAME may cause problems with migrated data sets if the “old name” catalog is connected following the recovery. Information reporting this will be included in the report. NEW-NAME may not be used if more than one catalog is being recovered.

JOURNAL
indicates the name of the pre-allocated VSAM journal file to be used to track VVR and NVR changes when using the NEW-NAME keyword.

DELETE-OLD-BCS
indicates that you want to delete the old BCS before the NEW-NAME is defined. The DELETE will use the RECOVERY keyword. This keyword is useful when DASD space on a specific volume or within a storage group is limited. DELETE-OLD-BCS cannot be specified if you are recovering more than one object.

VVDS-UPDATE
indicates that you want to update all the catalog “back-pointers” in the NVR and VVR records for all the objects cataloged in the BCS being recovered with a NEW-NAME. Every non-VSAM object cataloged on a SMS-controlled volume will have an NVR stored in that volume’s VVDS. This NVR contains the name of the BCS “owning” the object. Every VSAM object on a volume will have one or more VVRs stored in that volume’s VVDS. These VVR(s) contain the name of the BCS “owning” the object.

NOVVDS-UPDATE
indicates that you do not want to update the catalog “back-pointers” in the NVR and VVR records for all the objects cataloged in the BCS being recovered with a NEW-NAME.

NEW-STORCLAS
indicates that you want to either remove the SMS Storage Class (as backed up) from the recovered object’s definition or to change the SMS Storage Class. The SMS Storage Class controls DASD placement of the object, allowing for data striping, or guaranteed space, and so on. The SMS ACS routines will validate the request when the object is defined, and may choose to ignore the request.
NEW-STRNO
specifies an integer value between 2 and 255 to change the number of strings assigned to the BCS. Each string is used to access the BCS. The more strings, the more concurrent accesses permitted. Each string requires storage for a Data buffer, an Index buffer, a Place Holder and other storage.

NEW-VOLSER
specifies a different volser for the recovery.

Note: If ACS (Automatic Class Selection) routines are active, then these may negate any request for a change in volume.

PRINT specifies the level of printing to SYSPRINT during restore and forward recovery.
- NONE—print no data.
- DATA—print the key and data of every record written to the target object.
- KEY—print the key of every record written to the target object.

When either DATA or KEY are specified, duplicate record data will also be printed. Each record printed is preceded with a header indicating the reason for printing.

FROM-BACKUP-DATE indicates that the recovery is to identify the exact backup date and time from the header record of the specified backup file, and all SMF records from that time onward are selected for forward recovery.

FROM-DATE specifies the starting date used for SMF record selection. The timestamp will default to January 1, 2000.

FROM-TIME specifies the starting time used for SMF record selection. The time will default to midnight on January 1, 2000.

TO-CURRENT-DATE indicates that all SMF records up to the current date and time are selected for forward recovery.

TO-DATE specifies the ending date to use for SMF record selection.

TO-TIME specifies the ending time to use for SMF record selection.

Usage notes
INCLUDE-DSN, INCLUDE-TYPE and INCLUDE-VOLSER are treated as “and” relationships when more than one is coded.

RECOVER DSN

Use the RECOVER DSN command to restore a VSAM data set that was backed up with the Advanced Catalog Management BACKUP DSN command.

In addition, you can use this command to change virtually any user-defined VSAM data set allocation attributes.
Syntax

RECOVER DSN(dsn, dsnmask) InDataSet(dsn) InFILE(ddname) EXECute DEFine SIMulate ReSTore

RECOVER DSN(dsn, dsnmask) InDataSet(dsn) InFILE(ddname) EXECute DEFine SIMulate ReSTore

RECOVER DSN(dsn, dsnmask) InDataSet(dsn) InFILE(ddname) EXECute DEFine SIMulate ReSTore

RECOVER DSN(dsn, dsnmask) InDataSet(dsn) InFILE(ddname) EXECute DEFine SIMulate ReSTore

EXClude-Dsn(dsn, dsnmask) Into-EMPTY New-BWO(NO TYPECICS TYPEIMS)

EXClude-Dsn(dsn, dsnmask) Into-EMPTY New-BWO(NO TYPECICS TYPEIMS)

EXClude-Dsn(dsn, dsnmask) Into-EMPTY New-BWO(NO TYPECICS TYPEIMS)

EXClude-Dsn(dsn, dsnmask) Into-EMPTY New-BWO(NO TYPECICS TYPEIMS)

New-CA-Fspc(percentage) (1) New-CI-Fspc(percentage) (1)

New-CA-Fspc(percentage) (1) New-CI-Fspc(percentage) (1)

New-CA-Fspc(percentage) (1) New-CI-Fspc(percentage) (1)

New-CA-Fspc(percentage) (1) New-CI-Fspc(percentage) (1)

New-Data-CISZ(ci-size) (1) New-DataClas(data-class)

New-Data-CISZ(ci-size) (1) New-DataClas(data-class)

New-Data-CISZ(ci-size) (1) New-DataClas(data-class)

New-Data-CISZ(ci-size) (1) New-DataClas(data-class)

New-Data-PRImary(alloc-value) (1) New-Data-SECondary(alloc-value) (1)

New-Data-PRImary(alloc-value) (1) New-Data-SECondary(alloc-value) (1)

New-Data-PRImary(alloc-value) (1) New-Data-SECondary(alloc-value) (1)

New-Data-PRImary(alloc-value) (1) New-Data-SECondary(alloc-value) (1)

New-Data-PRImary(alloc-value) (1) New-Data-SECondary(alloc-value) (1)

New-Data-PRImary(alloc-value) (1) New-Data-SECondary(alloc-value) (1)

New-Data-PRImary(alloc-value) (1) New-Data-SECondary(alloc-value) (1)

New-Data-PRImary(alloc-value) (1) New-Data-SECondary(alloc-value) (1)

New-ExceptionEXIT(exit-name) New-FRLOG(NONE)

New-ExceptionEXIT(exit-name) New-FRLOG(NONE)

New-ExceptionEXIT(exit-name) New-FRLOG(NONE)

New-ExceptionEXIT(exit-name) New-FRLOG(NONE)

New-ExceptionEXIT(exit-name) New-FRLOG(NONE)

New-ExceptionEXIT(exit-name) New-FRLOG(NONE)

New-ExceptionEXIT(exit-name) New-FRLOG(NONE)

New-ExceptionEXIT(exit-name) New-FRLOG(NONE)
Notes:

1. Do NOT specify this keyword if you are recovering more than one object.

   Note: The CKMINI token RECOVER_PROCESSING_DEFAULT controls the default for EXECUTE/SIMULATE.

RECOVER DSN Command Syntax

**Keywords**

**DSN** specifies one or more fully qualified or masked VSAM data sets to recover.

**INDATASET**

specifies the fully qualified name of the backup data set holding the VSAM data set (created by the Advanced Catalog Management BACKUP DSN command) that you want to recover.

**INFILE**

specifies the DD name containing the file specifications from where the data sets from the Advanced Catalog Management BACKUP DSN command are read.
EXECUTE indicates that you want to run the command.

SIMULATE indicates that you want to trial the command without actually performing it. You can specify any of these values:
- DEFINE—read the input backup so the object to be recovered will be located and its AMS DEFINE shown (with any of the specified NEW-xxxxxxx keywords). If the object is not found, or the backup was incomplete, messages will be issued.
- RESTORE—perform everything except the physical DELETE, DEFINE of the object, and the actual writing of the data.

EXCLUDE-DSN specifies one or more specific or masked data set names to exclude from processing.

INTO-EMPY specifies that you want to define the object before the RECOVER DSN command is run and bypass the internal DELETE and DEFINE. This allows you to specify any attributes for the object. If you specify INTO-EMPTY, the target object must be cataloged. The target object is either the Data Set Name or, if specified, the NEW-NAME. At runtime, the Hi-Used-RBA of the object will be checked. The Hi-Used-RBA must indicate that no data records are loaded.

NEW-BWO specifies that you want to change the current setting of BWO to the specified argument. If the argument is left blank, the current setting of BWO is nullified.

NEW-CA-FSPC specifies the percentage number of Control Intervals that will be left free (empty) in each Control Area during initial load or resume load processing. Specify a value between 0 and 100. If 100 percent is requested, only 1 Control Interval in each Control Area will be used for data, the rest will be left free.

Due to possible key compression problems, there is no guarantee that the CIs left empty are, in fact, usable. You can use the Advanced Catalog Management MAP command to perform a “post-load” analysis of the object. Because the number of free CIs is calculated using integer arithmetic, a non-zero request does not guarantee a free CI in a CA. For example, if there are 80 CI/CA, a request of 1% will give 0 free CIs.

Free space is an attribute of keyed objects only.

NEW-CI-FSPC specifies the percentage number of bytes that will be left free (empty) in each Control Interval during initial load or resume load processing. Specify a value between 0 and 100. If 100 percent is requested, only 1 record will be loaded into each Control Interval, the rest of the Control Interval will be left free.

Because the CI size is either a multiple of 512 (up to 8192) or a multiple of 2048 (up to 32768) and there are control fields in each CI, there will typically be some unused space in each CI but no guarantee that the requested free space is, in fact, adequate to prevent one or more records being loaded.
Free space is an attribute of keyed objects only.

**NEW-DATA-CISZ**
indicates that you want to change the object's Data Component Control Interval size. Consider the average record size and object usage when determining Data Component CI size. For keyed objects, please be aware of the relationship between the Data Component CI size, the Data Component CI/CA, and the Index Component CI size. As a rule, if you increase the Data Component CI size, you may decrease the Index Component CI size and vice-versa. The Data Component CI size may not be changed for LDS. LDS must use 4096.

**NEW-DATA-CLAS**
indicates that you want to either remove the SMS Data Class (as backed up) from the recovered object's definition or to change the SMS Data Class. The SMS Data Class supplies data set attributes such as allocation and Extended Format. The SMS ACS routines will validate the request when the object is defined, and may choose to ignore the request.

**NEW-DATA-PRIMARY**
indicates that you want to change the primary space allocation for the Data Component of the recovered object.

**Attention:** If the object was originally defined using a unit other than CYLINDERS, AMS will convert that value to either TRACKS or CYLINDERS; if the object was allocated using TRACKS, AMS may have changed that to CYLINDERS.
The change may be specified either by:
- An unsigned integer value of 1 to 7 digits. This will change the space allocation value to the value specified
- A percentage in the range -100\(\leq n\leq 100\). The new space allocation value will be computed as the specified percentage change (+ or -) of the allocation at time of backup. A function is applied to the result which returns the smallest integer greater than or equal to the computed value.
You should run a SIMULATE(DEFINE) mode RECOVER BCS first, and see what will occur. NEW-DATA-PRIMARY can be specified if you are recovering more than one object only if you specify a percentage.

**NEW-DATA-SECONDARY**
indicates that you want to change the secondary space allocation for the Data Component of the recovered object.

**Attention:** If the object was originally defined using a unit other than CYLINDERS, AMS will convert that value to either TRACKS or CYLINDERS; if the object was allocated using TRACKS, AMS may have changed that to CYLINDERS.
The change may be specified either by:
- An unsigned integer value of 1 to 7 digits. This will change the space allocation value to the value specified
- A percentage in the range -100\(\leq n\leq 100\). The new space allocation value will be computed as the specified percentage change (+ or -) of the allocation at time of backup. A function is applied to the result which returns the smallest integer greater than or equal to the computed value.
You should run a SIMULATE(DEFINE) mode RECOVER BCS first, and see what will occur. NEW-DATA-SECONDARY can be specified if you are recovering more than one object only if you specify a percentage.
NEW-EXCEPTIONEXIT
specifies that you want to create an EXCEPTIONEXIT or change the current
setting of EXCEPTIONEXIT to the specified argument. If specified without
an argument, the object being recovered will be defined without an
EXCEPTIONEXIT. If defined with an argument, the object will be defined
with the argument specified as an EXCEPTIONEXIT. This keyword may be
used when a mask is specified for the object being recovered.

NEW-FRLOG
specifies that you want to change the current setting of FRLOG to the
specified argument. If the argument is left blank, the current setting of
FRLOG is nullified.

NEW-INDEX-CISZ
indicates that you want to change the object's Index Component Control
Interval size. Please be aware of the relationship between the Data
Component CI size, the Data Component CI/CA and the Index Component
CI size. As a rule, if you increase the Index Component CI size, you may
decrease the Data Component CI size and vice-versa. AMS will always
calculate the minimum acceptable Index Component CI size. If that
calculated minimum requirement is not met, AMS will increase the value; it
will never decrease the value specified. No messages are issued when the
value is changed.

To determine the correct Index Component CI size, use the Advanced
Catalog Management MAP command. However, be aware that if changes
area made, running the MAP command again may give a different
suggestion and the attributes of the key may change during the life of the
object making today's calculated Index CI size not the best choice for
tomorrow's data.

You can change the Index Component CI size for KSDS and VRRDS only.

NEW-INDEX-PRIMARY
indicates that you want to change the primary space allocation for the Index
Component of the recovered object.

Attention: If the object was originally defined using a unit other than
CYLINDERS, AMS will convert that value to either TRACKS or
CYLINDERS; if the object was allocated using TRACKS, AMS may have
changed that to CYLINDERS.
The change may be specified either by:
• An unsigned integer value of 1 to 7 digits. This will change the space
allocation value to the value specified
• A percentage in the range -100<=n<=100. The new space allocation
value will be computed as the specified percentage change (+ or -) of the
allocation at time of backup. A function is applied to the result which
returns the smallest integer greater than or equal to the computed value.

You should run a SIMULATE(DEFINE) mode RECOVER BCS first, and see
what will occur. NEW-INDEX-PRIMARY can be specified if you are
recovering more than one object only if you specify a percentage.

NEW-INDEX-SECONDARY
indicates that you want to change the secondary space allocation for the
Index Component of the recovered object.
Attention: If the object was originally defined using a unit other than CYLINDERS, AMS will convert that value to either TRACKS or CYLINDERS; if the object was allocated using TRACKS, AMS may have changed that to CYLINDERS. The change may be specified either by:

- An unsigned integer value of 1 to 7 digits. This will change the space allocation value to the value specified.
- A percentage in the range -100≤n≤100. The new space allocation value will be computed as the specified percentage change (+ or -) of the allocation at time of backup. A function is applied to the result which returns the smallest integer greater than or equal to the computed value.

You should run a SIMULATE(DEFINE) mode RECOVER BCS first, and see what will occur. NEW-INDEX-SECONDARY can be specified if you are recovering more than one object only if you specify a percentage.

NEW-LOG specifies that you want to change the current setting of LOG to the specified argument. If the argument is left blank, the current setting of LOG is nullified.

NEW-LOGSTREAMID specifies that you want to change the current setting of LOGSTREAMID to the specified argument. The value for the stream-name must be a valid stream name. If the argument is left blank, the current setting of LOGSTREAMID is nullified.

NEW-MGMTCLAS indicates that you want to either remove the SMS Management Class (as backed up) from the recovered object's definition or to change the SMS Management Class. The SMS Management Class interfaces with DFSMShsm to control such features as backup frequency, migration, and retention. The SMS ACS routines will validate the request when the object is defined, and may choose to ignore the request.

NEW-NAME specifies a new data set name for the recovered data set. If you use with the SPHERE keyword, the associations are deleted and redefined as associations of the NEW-NAME.

DELETE-OLD-DSN indicates that you want to delete the old data set (and its associations) before the NEW-NAME is defined. This keyword is useful when DASD space on a specific volume or within a storage group is limited. DELETE-OLD-DSN cannot be specified if you are recovering more than one object.

OLD-HIGH-LEVEL specifies one or more beginning segments of the old data set name to be recovered. Do not specify mask characters or apostrophes. Only those objects having a name matching the segments specified will be given the NEW-HIGH-LEVEL. The number of segments and the respective segment lengths may differ from that specified for NEW-HIGH-LEVEL. If SPHERE is requested, any associations matching the OLD-HIGH-LEVEL argument will also be renamed to the NEW-HIGH-LEVEL.

NEW-HIGH-LEVEL specifies one or more beginning segments to be given to the new data set names to be recovered. Do not specify mask characters or apostrophes.
Only those objects having a name matching the segments specified for OLD-HIGH-LEVEL will be given the NEW-HIGH-LEVEL. The number of segments and the respective segment lengths may differ from that specified for OLD-HIGH-LEVEL.

**NEW-STORCLAS**
indicates that you want to either remove the SMS Storage Class (as backed up) from the recovered object’s definition or to change the SMS Storage Class. The SMS Storage Class controls DASD placement of the object, allowing for data striping, or guaranteed space, and so on. The SMS ACS routines will validate the request when the object is defined, and may choose to ignore the request.

**NEW-VOLSER**
specifies one or more alternate DASD volumes for the recovery. A maximum of 36 volsers are allowed.

**NOSPHERE**
indicates that you do not want to recover all the alternate indexes and paths.

**SPHERE**
indicates that you want to recover all the alternate indexes and paths. If an object with associated alternate indexes and paths is to be recovered with a changed name, the OLD-HIGH-LEVEL and NEW-HIGH-LEVEL keywords will allow all associated objects to be recovered without causing conflict with the “old” names of the associated objects. For this to function correctly, the SPHERE keyword must have been specified when the object was backed up. If the SPHERE keyword was not specified when the object was processed by the Advanced Catalog Management BACKUP DSN command, no error message is produced.

**PRINT**
specifies the level of printing to SYSPRINT during restore and forward recovery of a VSAM data set.

• **NONE**—print no data.
• **DATA**—print every record written to the target object.
• **DUPDATA**—print the dropped data. When records are determined to have the same logical key, the first record is kept and the subsequent records are dropped.
• **DUPKEY**—print the key of dropped records. When records are determined to have the same logical key, the first is kept and the subsequent are dropped.
• **KEY**—print the key of every record written to the target object. This is applicable to KSDS only.

When either DATA or KEY are specified, duplicate record data will also be printed. Each record printed is preceded with a header indicating the reason for printing.
Usage notes

None.

RECOVER LIST

Use the RECOVER LIST command to produce a report of the contents of a backup file that was created by any BACKUP command.

This report is useful for queries of the content of a backup file, or to 'see' attributes of one or more of the objects on the backup file. It can also be used immediately after a BACKUP execution is complete, to double-check that the backup file is readable.

Syntax

RECOVER LIST

/SM590000/SM590000

RECOVER

SUMMARY

FULL

LIST(

FULL

InDataSet(dsn)

InFILE(ddname)

ENTries(**)

ENTries( ** )

dsn

dsnmask

NOAlias

Alias

/SM590000/SM630000

RECOVER LIST Command Syntax

Keywords

SUMMARY

specifies that you want a minimal content listing. The names of the backed up objects, the backup date and time and the status of the backup (whether successful or otherwise).

FULL

specifies that you want a more comprehensive report. In addition to the information available in the SUMMARY output, metadata for each object is also shown. This includes the volume, CI sizes, the maximum and average record length (as specified by the AMS DEFINE), space allocation, and other data are listed.

IN DATASET

specifies the name of the input backup data set created by the Advanced Catalog Management BACKUP command.

INFILE

specifies the Data Definition name (DD name) that identifies the backup file. Multiple backup files can be concatenated on the INFILE DD statement and these can be a combination of BCS, VVDS, and DSN backup files.

ENTRIES

indicates that the report should only show those catalogs, VVDS, or DSN, that match the specified value. If ENTRIES is not specified or if ENTRIES(**) is specified, all objects on the backup file are listed. VVDS names must be completely specified as SYS1.VVDS.Vvolser or as a mask, such as SYS1.VVDS.VT*.

NOALIAS

specifies that you do not want to perform any alias processing. If the backup file contains BCSs, the aliases on the backup file are not listed.

ALIAS

specifies that all aliases are to be listed with any BCS that is selected for processing.
Usage notes

None.

RECOVER VVDS

Use the RECOVER VVDS command to restore or forward recover a VVDS.

While VVDSs are not regularly backed up by many installations, others find that a VVDS backup plan provides for added data integrity for critical volumes, where loss of a VVDS would be catastrophic. Another frequent reason for providing backup and recovery functions for a VVDS is when a VVDS needs to be re-sized, relocated on the volume, or reorganized.

Syntax

```
RECOVER VVDS(
  volser [volsermask]
) InDataSet(dsn)
InFILE(ddname)
EXECute
DEFine
SIMulate()
ReStore

EXTent-CONSOLIDation)
New-Data-PRIMARY(alloc-value)

Forward(SMFfile(ddname) Optional time-period)
Into-EMPTY

New-Data-SECONDary(alloc-value)

PRINT(NONE)
PRINT()
```

Optional time-period:

```
FROM-Backup-date TO-Current-date
FROM-Date(date) FROM-Time(hh:mm:ss)
TO-Date(date) TO-Time(hh:mm:ss)
```

Notes:

1. You cannot specify NEW-DATA-PRIMARY with EXTENT-CONSOLIDATION.

Note: The CKMINI token RECOVER_PROCESSING_DEFAULT controls the default for EXECUTE/SIMULATE.

RECOVER VVDS Command Syntax

Keywords

**VVDS** specifies one or more fully qualified or masked volser of the VVDS to restore.
INDASSET
specifies the fully qualified name of the backup data set created by the
Advanced Catalog Management BACKUP VVDS command from which you
want to recover.

INFILE
specifies the Data Definition name (DD name) of the backup data (created
by the Advanced Catalog Management BACKUP VVDS command) that you
want to recover.

EXECUTE
indicates that you want to run the command.

SIMULATE
indicates that you want to trial the command without actually performing it.
You can specify one of these values:

- DEFINE—read the input backup so the object to be recovered will be
  located and its AMS DEFINE shown (with any of the specified
  NEW-xxxxxx keywords). If the object is not found, or the backup was
  incomplete, messages will be issued.
- RESTORE—perform everything except the physical DELETE, DEFINE of
  the object, and the actual writing of the data.

EXTENT-CONSOLIDATION
indicates that you want to change the object’s allocation on recovery so
only one DASD extent will be used to maintain the object’s data. The
primary space allocation value will be changed. The value used for the new
primary allocation will be the sum of all current extents.

Note:
- DASD management may use up to 5 physical extents to satisfy
  the primary or secondary allocation request.
- If DASD management is unable to satisfy the primary allocation
  request, the allocation may fail.

NEW-DATA-PRIMARY
indicates that you want to change the primary space allocation for the Data
Component of the recovered object.

Attention: If the object was originally defined using a unit other than
CYLINDERS, AMS will convert that value to either TRACKS or
CYLINDERS; if the object was allocated using TRACKS, AMS may have
changed that to CYLINDERS.
The change may be specified either by:

• An unsigned integer value of 1 to 7 digits. This will change the space
  allocation value to the value specified
• A percentage in the range -100≤n≤100. The new space allocation
  value will be computed as the specified percentage change (+ or -) of the
  allocation at time of backup. A function is applied to the result which
  returns the smallest integer greater than or equal to the computed value.

You should run a SIMULATE(DEFINE) mode RECOVER BCS first, and see
what will occur. NEW-DATA-PRIMARY can be specified if you are
recovering more than one object only if you specify a percentage.

FORWARD
indicates that a forward recovery is to be attempted. The VVDS will be
recovered using a backup copy; any changes occurring since the backup was made will be applied using data from the input SMF records.

When the Advanced Catalog Management Backup was made, the timestamp of the backup was written to the output data set. This timestamp is used to gather the appropriate SMF data. These data are then merged with the backup data.

**SMFFILE**

specifies the Data Definition name (DD name) that identifies the input SMF data set(s) be used for the forward recovery. Multiple SMF data sets may be concatenated. Only dumped SMF data sets are allowed. The current SYS1.MANx must be dumped if it is to be processed.

**INTO-EMPTY**

specifies that you want to define the object before the RECOVER VVDS command is run and bypass the internal DELETE and DEFINE. This allows you to specify any attributes for the object. If you specify INTO-EMPTY, the target object must be cataloged. At runtime, the Hi-Used-RBA of the object will be checked. The Hi-Used-RBA must indicate that no data records are loaded.

**NEW-DATA-SECONDARY**

indicates that you want to change the secondary space allocation for the Data Component of the recovered object.

**Attention:** If the object was originally defined using a unit other than CYLINDERS, AMS will convert that value to either TRACKS or CYLINDERS; if the object was allocated using TRACKS, AMS may have changed that to CYLINDERS.

The change may be specified either by:

- An unsigned integer value of 1 to 7 digits. This will change the space allocation value to the value specified
- A percentage in the range -100<=n<=100. The new space allocation value will be computed as the specified percentage change (+ or -) of the allocation at time of backup. A function is applied to the result which returns the smallest integer greater than or equal to the computed value.

You should run a SIMULATE(DEFINE) mode RECOVER BCS first, and see what will occur. NEW-DATA-SECONDARY can be specified if you are recovering more than one object only if you specify a percentage.

**FROM-BACKUP-DATE**

indicates that the recovery is to identify the exact backup date and time from the header record of the specified backup file, and all SMF records from that time onward are selected for forward recovery.

**FROM-DATE**

specifies the starting date used for SMF record selection. The timestamp will default to January 1, 2000.

**FROM-TIME**

specifies the starting time used for SMF record selection. The time will default to midnight on January 1, 2000.

**TO-CURRENT-DATE**

indicates that all SMF records up to the current date and time are selected for forward recovery.
**TO-DATE**

specifies the ending date to use for SMF record selection.

**TO-TIME**

specifies the ending time to use for SMF record selection.

**PRINT** specifies the level of printing to SYSPRINT during the recovery process.

- NONE—print no data.
- DATA—print every record written to the target object.

**Usage notes**

None.
Chapter 18. REORG - Reorganize an Open BCS

Use the REORG command to dynamically reorganize an open BCS.

Many attributes of the catalog can be changed and unused extents can be released as part of the REORG process. The obsolete attributes IMBED and REPLICATE will always be removed.

Syntax

```
REORG BCS(bcs) NOTIFY SYSTEM(SYSNAME(sysname))
   (1) SIMULATE EXTent-RElease

   New-BUFnD(nnn)  New-BUFnI(nnn)  New-CA-Fspc(percentage)  New-CI-Fspc(percentage)

   New-Data-CISZ(ci-size)  New-Data-PRImary(alloc-value)  New-Data-SECondary(alloc-value)

   New-Data-SPaceTYpe( Tracks )  CYLinders  KiloBytes  MegaBytes

   New-Index-CISZ(ci-size)

   New-Index-PRImary(alloc-value)  New-Index-SECondary(alloc-value)

   New-Index-SPaceTYpe( Tracks )  CYLinders  KiloBytes  MegaBytes

   New-STRno(nnn)  New-VOLser(volser)  NO-REPLY

   OutFILE(ddname)

   OutDataSet(dsn)  REPAIR  WAIT(S)
   NOBacKup  WAIT(nn)  While-Open
```

Notes:

1. NOTIFY is only required for secondary jobs and is not specified for primary jobs.
Keywords

BCS specifies the name of the BCS to process. Ensure the BCS being processed is not the master catalog for any system. REORG will check the system on which it is running, but cannot check other systems.

NOTIFY specifies a secondary REORG job. This keyword is required for every secondary job.

SYSTEM specifies each system that shares the catalog. For example, if USRCAT.UCAT1 is shared by four systems, SYSA, SYSB, SYSC, and SYSD, then REORG needs each system defined in its own SYSTEM keyword. The primary REORG job uses the SYSTEM keywords to attempt to communicate with a secondary REORG job on each of the systems specified.

SYSNAME is the member name of a sysplex member. If it is not a sysplex member, SYSNAME is the SMF-ID name as specified in the SMF options. A maximum of 64 SYSTEM keywords (1 primary and up to 63 secondary systems) are allowed on a single REORG command.

SIMULATE indicates that you want to test the command without actually performing it.

EXTENT-RELEASE specifies that you want to release any unused DASD extents following the REORG process. Extents may become unused because the CA splits and other events that may have caused additional extents to be acquired will be cleared as part of the REORG.

Note: SIMULATE is unable to predict the number of unused extents that will be released.

NEW-BUFND changes the number of Data Component buffers assigned to the BCS. Each buffer is used to maintain a Data Component Control Interval (CI). Specify an integer value between 3 and 255. The minimum value is STRNO+1. The additional buffer is for CI split purposes.

NEW-BUFNI changes the number of Index Component buffers assigned to the BCS. Each buffer is used to maintain an Index Component Control Interval (CI). Specify an integer value between 2 and 255. The minimum value is STRNO.

NEW-CA-FSPC changes the percentage of Control Intervals that will be left free (empty) in each Control Area during initial load or resume load processing. Specify a percentage between 0 and 100. If 100 percent is specified, only one Control Interval in each Control Area will be used for data, the rest will be left free.

Free space is an attribute of keyed objects only.

Due to possible key compression problems, there is no guarantee that the CIs left empty are, in fact, usable. Please use the MAP command to perform a "post-load" analysis of the object.

Because the number of free CIs is calculated using integer arithmetic, a non-zero request does not guarantee a free CI in a CA. For example, if there are 80 CI/CA, a request of 1% will give 0 free CIs.
If you want to ensure that the REORG results in the smallest amount of used space, specify NEW-CA-FSPC(0) and NEW-CI-FSPC(0).

**NEW-CI-FSPC**
changes the percentage of bytes that will be left free (empty) in each Control Interval during initial load or resume load processing. Specify a percentage between 0 and 100. If 100 percent is requested, only one record will be loaded into each Control Interval, the rest of the Control Interval will be left free.

Free space is an attribute of keyed objects only.

Because the CI size is either a multiple of 512 (up to 8192) or a multiple of 2048 (up to 32768) and there are control fields in each CI, there will typically be some unused space in each CI but no guarantee that the requested free space is, in fact, adequate to prevent one or more records being loaded.

If you want to ensure that the REORG results in the smallest amount of used space, specify NEW-CA-FSPC(0) and NEW-CI-FSPC(0).

**NEW-DATA-CISZ**
changes the size of the object’s Data Component Control Interval size. Specify a numeric value that is a multiple of 512 when between 512 and 8192 and a multiple of 2048 when between 8192 and 32768.

For keyed objects, please be aware of the relationship between the Data Component CI size, the Data Component CI/CA, and the Index Component CI size. As a rule, if you increase the Data Component CI size, you can decrease the Index Component CI size and vice-versa.

Consider the average record size and object usage when determining Data Component CI size.

**NEW-DATA-PRIMARY**
specifies the primary space allocation for the Data Component of the object being recovered. Specify a maximum value of seven digits in length.

**CAUTION:**
if the object was originally defined using a unit other than CYLINDERS, AMS will convert that value to either TRACKS or CYLINDERS; if the object was allocated using TRACKS, AMS may have changed that to CYLINDERS. Run the command using SIMULATE first, and see what occurs.

**NEW-DATA-SECONDARY**
specifies the secondary space allocation for the Data Component of the object being recovered. Specify a value with a maximum of seven digits in length.

**CAUTION:**
if the object was originally defined using a unit other than CYLINDERS, AMS will convert that value to either TRACKS or CYLINDERS; if the object was allocated using TRACKS, AMS may have changed that to CYLINDERS. Run the command using SIMULATE first, and see what occurs.

**NEW-DATA-SPACETYPE**
specifies a new space allocation unit to assign to the Data Component of the BCS being reorganized. The units will be changed to Cylinders or Tracks when performing the physical allocation.
Because a BCS is a keyed object and the space allocation request has a relationship to the Control Area (CA) size used. It is recommended that space always be allocated in cylinders. Typically, if space is allocated in cylinders, the CA size will be one cylinder.

**NEW-INDEX-CISZ**
changes the size of the object’s Index Component Control Interval size.

Please be aware of the relationship between the Data Component CI size, the Data Component CI/CA, and the Index Component CI size. As a rule, if you increase the Index Component CI size, you can decrease the Data Component CI size and vice-versa.

AMS will always calculate the minimum acceptable Index Component CI size. If that calculated minimum requirement is not met, AMS will increase the value; it will never decrease the value specified. No messages are issued when the value is changed. To determine the correct Index Component CI size, use the Advanced Catalog Management MAP command. Be aware that if changes are made, running the MAP command again may give a different suggestion. The attributes of the key may change during the life of the object making today’s calculated Index CI size not the best choice for tomorrow’s data.

**NEW-INDEX-PRIMARY**
changes the primary space allocation for the Index Component of the object being recovered. Specify a value with a maximum of seven digits in length.

**CAUTION:**
If the object was originally defined using a unit other than CYLINDERS, AMS will convert that value to either TRACKS or CYLINDERS; if the object was allocated using TRACKS, AMS may have changed that to CYLINDERS. Run the command using SIMULATE first, and see what occurs.

**NEW-INDEX-SECONDARY**
changes the secondary space allocation for the Index Component of the object being recovered. Specify a value with a maximum of seven digits in length.

**CAUTION:**
If the object was originally defined using a unit other than CYLINDERS, AMS will convert that value to either TRACKS or CYLINDERS; if the object was allocated using TRACKS, AMS may have changed that to CYLINDERS. Run the command using SIMULATE first, and see what occurs.

**NEW-INDEX-SPACETYPE**
specifies a new space allocation unit to assign to the Index Component of the BCS being reorganized. The units will be changed to Cylinders or Tracks when performing the physical allocation.

**NEW-STRNO**
changes the number of Strings assigned to the BCS. Each string is used to access the BCS. The more strings, the more concurrent accesses permitted. Each string requires storage for a Data buffer, an Index buffer, a Place Holder and other storage. Specify an integer value between 2 and 255.

**NEW-VOLSER**
specifies a different DASD volume for the target catalog. A single volser
may be specified. When using NEW-VOLSER in the primary REORG job, NEW-VOLSER must also be coded in any secondary REORG jobs.

When NEW-VOLSER is specified, the REORG job, including all secondary REORG jobs, must have at least UPDATE access to their respective Master Catalogs. This is because the Usercatalog Connector record in the Master Catalog for this BCS will be updated to reflect the volser change.

NEW-VOLSER will leave the original VVRs on the source volume. The original VVRs are retained on the source volume for recovery purposes. A message lists the necessary commands to remove the original VVRs.

NEW-VOLSER will not remove the source volume SYS1.VVDS entry. There is no way for REORG to predict whether the original volume is to remain online.

It is strongly recommended to execute the DIAGNOSE VVDS-VTOC command against the target volume prior to executing REORG NEW-VOLSER.

Note: Care should be taken when choosing the new volume so that the end result conforms with site storage guidelines and policies.

**NO-REPLY**

indicates that you want to bypass operator intervention through WTOR. A WTO is issued instead.

**OUTFILE**

specifies the Data Definition name (DD name) for the output file. You must use this option if one of the following is true:

- The output is a Generation Data Set (GDS) and you want to specify a relative GDG. For example: GDG.NAME(+1).
- You want to control the STATUS of the output file. For example: DISP=MOD.

**OUTDATASET**

specifies the name of the pre-existing dynamically allocated output data set. The data set is allocated DISP=OLD.

**NOBACKUP**

indicates that you do not want a backup of the BCS to be made as part of the REORG process.

**Repair**

indicates that you want to attempt to correct Index Component structural errors, records out of sequence, and orphaned Control Intervals in both the Index and Data Components.

**wait**

specifies an interval, in minutes, that REORG is to wait for other LPARs to synchronize processing. Specify an integer value from 1 to 99 minutes. This keyword is meaningful only if the catalog to be processed is shared across multiple LPARs.

**WHILE-OPEN**

indicates that the REORG job should proceed if the BCS is in ACTIVE OPEN state on the current system.
Usage notes

1. Shared Catalog Considerations

REORG requires that all other systems that share the usercatalog run a NOTIFY (secondary REORG) job simultaneously with the primary REORG job. The secondary jobs perform several functions on those other systems, which include:

- Protecting the catalog from being accessed by other tasks while REORG is in progress.
- Protecting other tasks on that system from receiving catalog errors against that BCS while REORG is in progress.
- Automatically driving the IMPORT CONNECT ALIAS function when the primary job tells it to do so.

Example of three systems sharing a usercatalog that will be reorganized:

```
SYSA
BCS(BCS.UCAT1)
<PRIMARY>
SYSTEM(SYSNAME(SYSA))
SYSTEM(SYSNAME(SYSB))
SYSTEM(SYSNAME(SYSC))

SYSB
BCS(BCS.UCAT1)
NOTIFY
SYSTEM(SYSNAME(SYSA))
SYSTEM(SYSNAME(SYSB))
SYSTEM(SYSNAME(SYSC))

SYSC
BCS(BCS.UCAT1)
NOTIFY
SYSTEM(SYSNAME(SYSA))
SYSTEM(SYSNAME(SYSB))
SYSTEM(SYSNAME(SYSC))
```

In this configuration example, there are no other MVS images that have access to BCS.UCAT1. All three systems must be members of the same global enqueue environment.

2. When running REORG with the NEW-VOLSER keyword and any of the systems that share access to the catalog are down, it is necessary to do the following:

- Run the IMPORT CONNECT ALIAS command specifying the new volume against the master catalog of the system or systems which are down to update the volume information in the user catalog connector record for the reorganized catalog.

3. Operational Considerations

- The Primary and all Secondary REORG jobs should be run in a high priority service class. If not, the REORG may appear to be hung while waiting for resources, leading to a decision to cancel the job before completion.
- REORG uses QNAME=SIS2000 as an ENQ serialization resource. It is assumed that all SCOPE=SYSTEMS requests under this major name will be propagated across all systems sharing common DASD devices, and all SCOPE=SYSTEM or SCOPE=STEP requests will not be propagated to other systems. Failure to manage SIS2000 resources appropriately can result in data corruption or lead to other unpredictable results.
- MIM users must add QNAME SIS2000 to the MIM system name definition specification. Our experience with GRS has shown that cross-system
enqueues are honored without defining the QNAMEs, however, it is recommended to add the SIS2000 QNAME to GRS as well.

**MIM example**

To add the SIS2000 QNAME to MIM, add the following statement to your MIM PARMLIB member. This is only an example; the version of MIM you are using may require different statements.

```
SIS2000 GDIF=YES,SCOPE=SYSTEMS,EXEMPT=NO,ECMF=NO,RPTAFTER=0,
    RPTCYCLE=60,TRACE=NONE
```

**GRS example**

To add the SIS2000 QNAME to GRS, add the following statement to your GRS PARMLIB member. This is only an example; the version of GRS you are using may require different statements.

```
RNLDEF RNL(CON) TYPE(GENERIC) QNAME(SIS2000)
```

- REORG can deal with multiple active systems accessing the user catalog.
- The job may encounter security access violations. The user ID under which the REORG job runs must be authorized for update access to the BCS. The REORG command can be protected from non-authorized execution by defining the SAF class profile IBMTIVOLI.ACM.REORG in the installation's security product. For more information, refer to [Step 10: Define System Authorization Facility (SAF) Class Profiles](#) on page 15.
- Verify the structural integrity of the BCS by running IDCAMS EXAMINE INDEXTEST DATATEST before running REORG.
- Specifying a new primary allocation quantity, a new secondary allocation quantity, or a new space type implies EXTENT-RELEASE since ALL allocated space is released when the REORG is complete and then space is obtained using the specification.
- An ABEND or error that occurs prior to the start of the reload of the BCS does not require any recovery. The BCS is not reorganized but neither is it damaged. An ABEND that occurs after the reload has begun will trigger an attempt to recover the BCS to the state prior to the REORG process as indicated by the message CKM13050E Start BCS Recovery. Message CKM13052I indicates the recovery was successful. Message CKM13053E indicates the recovery was not successful. If the internal recovery attempt fails, it is likely that the BCS will be unusable and will have to be recovered from a backup copy. The data set specified on the OUTFILE or OUTDATASET keyword can be used as input to the RECOVER BCS command.
- The internal backup is a temporary data set dynamically allocated using UNIT(SYSALLDA). The amount of space required is based on the actual used size of the BCS. If necessary, REORG will attempt to allocate space across multiple volumes. For a large BCS (for example, a full 3390-3), the allocation parameters will be something like `SPACE=(CYL,(1670,1670)),UNIT=(3390,2)` so a completely empty volume is not required in order to satisfy the primary allocation.
- For non-SIMULATE mode, unless NO-REPLY is coded, a WTOR is issued to the operator console indicating that a REORG is requested of the named BCS. The operator must accept or reject the request. If the request is accepted, an informational highlighted WTO message is displayed on the console with the name of the BCS and the jobname and a note that catalog accesses will wait for the REORG to complete. The WTO message is issued as soon as the actual REORG of the BCS has begun; for example, after the UNLOAD and VERIFY steps have completed. This message marks the
critical point in the job where any abnormal termination likely means the BCS is unusable and will have to be recovered.

- The REORG command should be run when there is minimal activity by applications against the BCS. Online database systems usually have little access to the catalog once the files are opened, frequently at startup. However, applications may experience timeouts if transactions do not complete in some time frame.

- For systems running BMC STOPX37, add the DD statement //PROIGN DD DUMMY to REORG JCL. Verify the DDNAME in the STOPX37 PARMLIB member SMMSYSxx. Look for parameter IGNOREDD= and use the value specified. PROIGN is the BMC default value.

- For systems with DTS Software Allocation Control Center (ACC) and Space Recovery System (SRS), add the DD statement //ACCIGN DD DUMMY to REORG JCL. Check ACC/SRS installation parameters for default values that may be modified. ACCIGN is the DTS default value.

- For systems using CA-ALLOCATE to avoid x37 abends, to bypass CA-ALLOCATE, add the DD statement //VDSBYPAS DD DUMMY to REORG JCL. Check CA-ALLOCATE installation parameters for default values that may be modified. VDSBYPAS is the CA-ALLOCATE default DDname.

- REORG will fully support catalogs using ECS (Enhanced Catalog Sharing). As the REORG is processing, the BCS is temporarily taken out of ECSHR mode, and is then reinstated back into active ECSHR mode when the REORG process is complete. This function is also performed when executing in SIMULATE mode.

- If you are using the ISPF interface, set the CKMINI token JECL_STATEMENT in the REORG_BCS_OPTIONS section.

- Identify all shared systems for the target catalog.

- Update REORG JCL with SYSTEM (required) and NOTIFY keywords (required only if the target catalog is shared across systems).

- If the Primary and Secondary LPARs share spool, Primary and Secondary jobs can be submitted from the same system. If a Secondary does not share spool then the Secondary job(s) must be submitted manually on those systems.

- The various sharing systems do not need to have their master catalogs connected to each other.

4. If you determine it is necessary to cancel the REORG batch job and you suspect some problem with the REORG function, it is imperative that you obtain a system dump of the REORG batch job address space along with the CATALOG address space. This can be accomplished with the following MVS command:

```
DUMP COMM=(comment text)
```

*comment text* can be any descriptive text you wish (up to 100 characters), such as REORG Problem. This text will appear in the SVCDUMP descriptive title. The DUMP command responds with a WTO request to supply the dump parameters. The following is an example of a reply to obtain a dump of the REORG batch job and CATALOG address spaces, where *jname* is the jobname of the Advanced Catalog Management REORG batch job. CATALOG is entered as is. CATALOG is the usual name for the catalog address space. REPLY can be abbreviated as R.

```
REPLY nn,JOBNAME=(CATALOG,jname),SDATA=(ALLNUC,CSA,GRSQ,LPA,LSQA,PSA,RGB,SQA,SWA,SUM,TRT)
```
Contact Technical Support to obtain instructions on sending the SVCDUMP for analysis.

5. The REORG command provides a method for notifying the Catalog Address Spaces across all systems sharing the catalog of the new volume serial for the catalog. This method explicitly updates the catalog connector record in the master catalog of each participating system sharing the catalog with the new volume serial for the catalog. In addition, the method requests each participating CAS sharing the catalog to close and unallocate the catalog. This action sets up CAS to reallocate the catalog using the new volume serial for the next catalog request. The catalog is serialized across all participating systems for the duration of the move.

The inter-REORG communication process resolves issues relating to orphan CAS ENQs and when one or more sharing systems did not recognize the movement of the catalog. This inter-REORG communication technique is used for all REORG processing, not just REORG NEW-VOLSER.

The inter-REORG communication process includes the terms Primary REORG and Secondary REORG. The Primary REORG job has the responsibility of executing the REORG which includes reading and writing the catalog records and coordinating the notification process for other systems sharing the catalog. There is only one Primary REORG job when using REORG to reorganize a BCS.

One or more Secondary REORG jobs run on other systems which are sharing the catalog. A secondary REORG job’s responsibility is to notify its system’s CAS regarding the action of primary REORG which is executing elsewhere. Secondary REORGs do not read from or write to the catalog; the only I/O performed by the Secondary REORG job is to the SYSPRINT data set. If the catalog is not shared there will not be any Secondary REORG jobs. If the catalog is shared, a Secondary REORG job must be executing on all of the sharing systems.

Examples

- **Specifying all Systems that Share a Catalog that is Being Reorganized**

  For a Shared catalog, there is no automated way to determine all the systems that share the catalog. Consequently, with this CAS notification methodology, REORG requires an explicit specification of all the systems that share a catalog which is being reorganized. This is accomplished with the SYSTEM keyword:

  ```sql
  SYSTEM(SYSNAME(system_name))
  ```

  Where `system_name` is the member name of a sysplex member. If not a sysplex, `system_name` is the SMFid name as specified in the SMF options. A maximum of 64 SYSTEM keywords are allowed (1 Primary and up to 63 Secondaries).

  A SYSTEM keyword is required for each system that shares the catalog. For example, if USERCAT.UCAT1 is shared by four systems, SYSA, SYSB, SYSC, and SYSD, then in addition to the other REORG keywords, the following four SYSTEM keywords are necessary:

  ```sql
  SYSTEM(SYSNAME(SYSA))
  SYSTEM(SYSNAME(SYSB))
  SYSTEM(SYSNAME(SYSC))
  SYSTEM(SYSNAME(SYSD))
  ```

  So the control statements might look like: (the order does not matter)

  ```sql
  REORG BCS(USERCAT..UCAT1) -
  ...(other REORG keywords)
  SYSTEM(SYSNAME(SYSA)) -
  SYSTEM(SYSNAME(SYSB)) -
  SYSTEM(SYSNAME(SYSC)) -
  SYSTEM(SYSNAME(SYSD))
  ```
The Primary REORG job uses the SYSTEM keywords to attempt to communicate with a Secondary REORG job on each of the systems specified.

- **Specifying a Secondary REORG job**
  To continue with the previous example, assume the Primary job will execute on SYSC. The Primary REORG job will attempt to communicate with a Secondary REORG job on systems SYSA, SYSB and SYSD. A Secondary REORG job must be submitted on each of the other systems (SYSA, SYSB, and SYSD). The Primary and all Secondary REORG jobs must have unique jobnames, otherwise the jobs will not start execution. You can use the NOTIFY keyword to distinguish a Secondary REORG job. The control statements for the Secondary REORG jobs for SYSA, SYSB, and SYSD might look like this:

  ```
  REORG BCS(USERCAT.UCAT1) -
  NOTIFY -
  SYSTEM(SYSNAME(SYSA)) -
  SYSTEM(SYSNAME(SYSB)) -
  SYSTEM(SYSNAME(SYSC)) -
  SYSTEM(SYSNAME(SYSD))
  ```

- **Moving a catalog to a new volume**
  The NEW-VOLSER keyword is used to move a catalog to a new volume. When a NEW-VOLSER is coded in the Primary REORG job, NEW-VOLSER must also be coded in the Secondary REORG job(s).

  Primary on SYSC:
  ```
  REORG BCS(USERCAT.UCAT1) -
  ....optional statements omitted ... -
  NEW-VOLSER(TSO001) -
  SYSTEM(SYSNAME(SYSA)) -
  SYSTEM(SYSNAME(SYSB)) -
  SYSTEM(SYSNAME(SYSC)) -
  SYSTEM(SYSNAME(SYSD))
  ```

  The Secondary jobs for SYSA, SYSB, and SYSD will look like this:

  ```
  REORG BCS(USERCAT.UCAT1) -
  NOTIFY -
  NEW-VOLSER(TSO001) -
  SYSTEM(SYSNAME(SYSA)) -
  SYSTEM(SYSNAME(SYSB)) -
  SYSTEM(SYSNAME(SYSC)) -
  SYSTEM(SYSNAME(SYSD))
  ```

  The NEW-VOLSER keyword is an explicit request. It does not matter whether a catalog is moving from an SMS-managed volume to a non-SMS managed volume or a non-SMS managed volume to an SMS managed volume. REORG will bypass ACS routines.

  **Note:** Care should be taken when choosing the new volume so that the end result conforms with storage guidelines and policies.

- **Additional examples**
  Assume the target catalog is not shared across systems (the SYSTEM keyword is required even with no sharing).

  ```
  //J001 JOB ,NAME,MSGCLASS=X
  //*/
  //*/JOBPARM S=SYSA
  //*/
  //REORG EXEC PGM=CKM00010
  //STEPLIB DD DISP=SHR,DSN=HLQ.SCKMLOAD
  //INI DD DISP=SHR,DSN=HLQ.SCKMPARM(CKMINI)
  //BKUPDD1 DD DSN=HLQ.BKUP1,UNIT=SYSDA,
  // DISP=(,CATLG),SPACE=(CYL,(100,100),RLSE)
  //SYSPRINT DD SYSOUT=*  
  //SYSUDUMP DD SYSOUT=*
  ```
Assume the target catalog is shared across 4 systems. Take note that the ISPF panels will set the system name on the JOBPARM statement to match the name found in the SYSTEM keyword. Because 4 SYSTEM statements are present then the panels will build four jobs. The four systems are SYSA, SYSB, SYSC, SYSD. The NOTIFY is coded for the 3 secondaries: SYSB, SYSC, and SYSD.

Chapter 18. REORG - Reorganize an Open BCS

185
SIM -
NOTIFY -
SYSTEM(SYSNAME(SYSA)) -
SYSTEM(SYSNAME(SYSB)) -
SYSTEM(SYSNAME(SYSB)) -
SYSTEM(SYSNAME(SYSD))

//J004 JOB ,NAME,MSGCLASS=X

/***
/*JOBPARM S=SYSD

/***
//REORG EXEC PGM=CKM00010
//STEPLIB DD DISP=SHR,DSN=HLQ.SCKMLOAD
//INI DD DISP=SHR,DSN=HLQ.SCKMPARM(CKMINI)
//SYSINPUT DD SYSOUT=*  
//SYSUDUMP DD SYSOUT=*  
//SYIN DD *
REORG BCS (CRTUCAT.TESTCAT1) -
  WHILEOPEN -
  NOREPLY -
  SIM -
  NOTIFY -
  SYSTEM(SYSNAME(SYSA)) -
  SYSTEM(SYSNAME(SYSB)) -
  SYSTEM(SYSNAME(SYSB)) -
  SYSTEM(SYSNAME(SYSD))

/***

Assume the target catalog is not shared across systems and is being moved to a
new volume.

//J001 JOB ,NAME,MSGCLASS=X

/***
/*JOBPARM S=SYSA

/***
//REORG EXEC PGM=CKM00010
//STEPLIB DD DISP=SHR,DSN=HLQ.SCKMLOAD
//INI DD DISP=SHR,DSN=HLQ.SCKMPARM(CKMINI)
//BKUPDD1 DD DSN=HLQ.BKUP1,UNIT=SYSDA, DISP=(,CATLG),SPACE=(CYL,(100,100),RLSE)
//SYSINPUT DD SYSOUT=*  
//SYSUDUMP DD SYSOUT=*  
//SYIN DD *
REORG BCS (CRTUCAT.TESTCAT1) -
  WHILEOPEN -
  NOREPLY -
  SIM -
  SYSTEM(SYSNAME(SYSA)) -
  NEW-VOLSER(CRPN01) -
  OFILE(BKUPDD1 )

Assume the target catalog is shared across 4 systems and is being moved to a
new volume. The four systems are SYSA, SYSB, SYSC, SYSD. The NOTIFY is
coded for the 3 secondaries: SYSB, SYSC, and SYSD. The NEW-VOLSER is
coded on both the Primary and any Secondary.

//J001 JOB ,NAME,MSGCLASS=X

/***
/*JOBPARM S=SYSA

/***
//REORG EXEC PGM=CKM00010
//STEPLIB DD DISP=SHR,DSN=HLQ.SCKMLOAD
//INI DD DISP=SHR,DSN=HLQ.SCKMPARM(CKMINI)
//BKUPDD1 DD DSN=HLQ.BKUP1,UNIT=SYSDA, DISP=(,CATLG),SPACE=(CYL,(100,100),RLSE)
//SYSINPUT DD SYSOUT=*  
//SYSUDUMP DD SYSOUT=*  
//SYIN DD *
REORG BCS (CRTUCAT.TESTCAT1) -
WHILEOPEN -
NOREPLY -
SIM
NEW-VOLSER(CRPN01) - -
SYSTEM(SYSNAME(SYSA)) -
SYSTEM(SYSNAME(SYSB)) -
SYSTEM(SYSNAME(SYSC)) -
SYSTEM(SYSNAME(SYSD)) -
OFILE(BKUPDD1) -

//J002 JOB ,NAME,MSGCLASS=X
//*
/*JOBPARM S=SYSB
//*
//REORG EXEC PGM=CKM00010
//STEPLIB DD DISP=SHR,DSN=HLQ.SCKMLOAD
//INI DD DISP=SHR,DSN=HLQ.SCKMPARM(CKMINI)
//SYSPRINT DD SYSOUT=* 
//SYSUDUMP DD SYSOUT=* 
//SYSIN DD *
REORG BCS (CRTUCAT.TESTCAT1) - 
WHILEOPEN -
NOREPLY -
SIM -
NEW-VOLSER(CRPN01) -
NOTIFY -
SYSTEM(SYSNAME(SYSA)) -
SYSTEM(SYSNAME(SYSB)) -
SYSTEM(SYSNAME(SYSC)) -
SYSTEM(SYSNAME(SYSD)) -

//J003 JOB ,NAME,MSGCLASS=X
//*
/*JOBPARM S=SYSC
//*
//REORG EXEC PGM=CKM00010
//STEPLIB DD DISP=SHR,DSN=HLQ.SCKMLOAD
//INI DD DISP=SHR,DSN=HLQ.SCKMPARM(CKMINI)
//SYSPRINT DD SYSOUT=* 
//SYSUDUMP DD SYSOUT=* 
//SYSIN DD *
REORG BCS (CRTUCAT.TESTCAT1) -
WHILEOPEN -
NOREPLY -
SIM -
NEW-VOLSER(CRPN01) -
NOTIFY -
SYSTEM(SYSNAME(SYSA)) -
SYSTEM(SYSNAME(SYSB)) -
SYSTEM(SYSNAME(SYSC)) -
SYSTEM(SYSNAME(SYSD)) -

//J004 JOB ,NAME,MSGCLASS=X
//*
/*JOBPARM S=SYSD
//*
//REORG EXEC PGM=CKM00010
//STEPLIB DD DISP=SHR,DSN=HLQ.SCKMLOAD
//INI DD DISP=SHR,DSN=HLQ.SCKMPARM(CKMINI)
//SYSPRINT DD SYSOUT=* 
//SYSUDUMP DD SYSOUT=* 
//SYSIN DD *
REORG BCS (CRTUCAT.TESTCAT1) -
WHILEOPEN -
NOREPLY -
SIM -
NEW-VOLSER(CRPN01) -
NOTIFY -
SYSTEM(SYSNAME(SYSA)) -
SYSTEM(SYSNAME(SYSB)) -
SYSTEM(SYSNAME(SYSC)) -
SYSTEM(SYSNAME(SYSD))

/**
//
/**
Chapter 19. REPORT - Design Custom Reports

Use the REPORT command to create custom column-formatted reports or delimited data files using data elements from an extracted flat file produced by the Advanced Catalog Management EXPLORE command.

You can customize your reports by:
- Selecting fields to be displayed
- Establishing the sort sequence
- Indicating whether breaks occur when a field value changes
- Creating page titles
- Creating column titles
- Specifying field formatting such as length, data type, editing (for example, leading zero suppression in numeric fields), translations, and justification
- Setting maximum line width specification
- Setting lines per page

Syntax

```
REPORT(DICTionary-Name(mbr) Fields(field Report-Attributes) InDataSet(dsn) InFILE(ddname) 
OutDataSet(dsn) TITLE('title1' 'title2' 'title3') 
Blank-D Fields(field) Blank-D Fields(field) (HLQ(n)) 
Column-Separation(2) Date-Format(JUL) 
Column-Separation(n) Date-Format(JUL EUR JIS USA) 
Delimited() Delimiter('delimiter') TEXT-QUALifier('text')
```
Keywords

DICTIONARY-NAME
specifies the member of the data set identified on the DATADICT DD statement that contains the metadata for the EXPLORE output. The CKMPEXRW member of SCKMPARM contains the provided default data dictionary of valid field names and their default attributes.

FIELDS
specifies one or more field names from the extract file’s records and their characteristics. You can also specify a constant-literal string within quotes. See "CRITERIA keyword filters" on page 114 for a description of the field names. They are also listed in the CKMPEXRW member of SCKMPARM.

INDATASET
specifies the fully qualified data set name containing the extract file records from an EXPLORE command.

INFILE
specifies the Data Definition name (DD name) containing file specifications from where the extract file records from an EXPLORE command are read.

OUTDATASET
specifies the fully qualified data set name where the output report will be written. The data set must already be physically allocated before running the REPORT command.

OUTFILE
specifies the Data Definition name (DD name) containing file specifications where the output report will be written.
**TITLE** specifies up to three lines of data that will be used as the report title. Each quoted literal forms one title line. The length of each title is restricted to the value specified for REPORT-WIDTH.

**BLANK-DUPFIELDS** specifies one or more fields that will be suppressed from a column-formatted report if all of these fields are the same as in the previous report line. This keyword is ignored if DELIMITED is specified.

**BREAK-FIELDS** specifies one or more field names that will, on change of value, cause a report break. Usually, the field names specified here will also be specified on the SORT-FIELDS keyword.

- HLQ(n) after a field name in BREAK-FIELDS causes breaks to occur at the specified number of high-level-qualifiers of the associated field-name, which must be a dsname-oriented field. The value of n must be a single digit from 1 to 9. Fields which can be used with HLQ that are field-type(Q) in CKMPXRW are: DSN, P-DSNAME, SDSN, UCAT, and PATHENTRY.

This keyword is ignored if DELIMITED is specified.

**COLUMN-SEPARATION** specifies the inter-column spacing requirement for a column-formatted report. Specify an integer value. The default is 2. The sum of all the field widths plus all the inter-column separators must not exceed the logical record length of the output data set. This keyword is ignored if DELIMITED is specified.

**DATE-FORMAT** specifies the format of year, month, and day for the date fields. The valid date formats are:

- EUR—dd.mm.yyyy.
- JIS—yyyy-mm-dd.
- JUL—yyyyydd.
- USA—mm/dd/yyyy.

This keyword only affects the printing of the various date fields, and has no effect on any other date specified within the command.

**DELIMITED** specifies that the output report will be in delimited format used for loading into a spreadsheet rather than column format. The column-formatted processing associated with BLANK-DUPFIELDS and BREAK-FIELDS does not apply to delimited output.

If DELIMITED is specified without the DELIMITER and TEXT-QUALIFIER keywords, the DELIMITER defaults to a comma and TEXT-QUALIFIER defaults to an apostrophe (hexadecimal 7D) around non-numeric field values.

**DELIMITER** specifies the value, either as a character or as a hexadecimal value, that is to be used as a field separator. Valid forms for specifying a value are:

- A hex value format. For example, (X’11’).
- A value in quotes. For example, (""") or ("A").
- A value in apostrophes. For example, (""") or (’’)
- A simple character. For example, (A).
If DELIMITED is specified without the DELIMITER keyword, but with the TEXT-QUALIFIER keyword, then no delimiter appears in the output.

**TEXT-QUALIFIER**
specifies the value, either as a character or as a hexadecimal value, that is to be used to delimit all non-numeric strings. Valid forms for specifying a value are:
- A hex value format. For example, (X’11’).
- A value in quotes. For example, ("'") or ("A").
- A value in apostrophes. For example, ('"') or (',')
- A simple character. For example, (A).

If DELIMITED is specified without the TEXT-QUALIFIER keyword, but with the DELIMITER keyword, then the text is not enclosed in a qualifier.

**DATA-ONLY**
specifies the output format of the column-formatted report.
- N— specifies the output of a column-formatted report will have titles and column headers – the default when DATA-ONLY is not specified for non-delimited reports.
- Y— specifies the output of a column-formatted report (not delimited format) will contain no titles and no column headers.

**LINES-PER-PAGE**
specifies the integer value for the number of lines to be printed on each page of the report. This value includes the title lines, column headings, and so on. The default is 55 lines. The minimum value must allow for the title lines, a separator line, the column headings and, at least one data line.

**REPORT-WIDTH**
specifies the integer value for the maximum number of bytes in the output record. It does not include the ANSI/ISO control character.

**SORT-FIELDS**
specifies that you want your output report to be sorted in ascending sort sequence by field names specified in the FIELDS keyword. If you use SORT-FIELDS, your job step JCL must include a SORTMSG DD statement.

**TITLE-JUSTIFY**
specifies the justification for the report title. Valid values are:
- CENTER—centers the title lines. This is the default.
- LEFT—aligns the title lines to the left starting in byte 1.
- RIGHT—aligns the title lines to the right.

**COLUMN-HEADERS**
specifies up to three lines of data that will be used as column headers. Each header literal forms one column header line.

**DISPLAY-LENGTH**
specifies the space, in bytes, to reserve for each field to be displayed. Each field value is truncated or padded to fit this width. The default is the field length defined in the data dictionary.

**TRANSLATIONS**
specifies one or more pairs of values that provide a translation of an input column. If the value of a field matches the from-value, it is replaced in the output report with the to-value. from-value can be a single- or double-quoted character literal, or a hexadecimal literal specified as $'1234'$. to-value must be a literal. If the field data contains a value that is not
specified as a *from-value*, it is shown as-is with no modifications. If the data
dictionary used for the report specifies a default translation and you do not
want to use it, specifying TRANSLATIONS without a *from-value* will print the
original value.

**TOTALS**
causes line(s) to be printed containing the column totals for each field which
can be totaled. Fields that can be totaled are defined with field-type(T) in
the dictionary.

If the total doesn’t fit in the available print width, it will be scaled as
necessary using K, M, G, T, just enough to make it fit. For columns where
the detail values are centered in the available print width because they are
narrower than the print width, the total will be right justified to allow for the
maximum possible digits to be printed.

When BREAK-FIELDS and TOTALS are both specified, a line of subtotals
will be printed at the point where a break occurs. TOTALS without
BREAK-FIELDS will print (only) grand totals. Subtotals are printed under a
line of all ‘-’. Grand totals are printed under a line of all ‘=’.

**Usage notes**
1. The report definitions in this command use these rules:
   - Only columns 1 through 72 are examined.
   - You can specify keywords and field names in any combination of upper and
     lowercase characters.
   - You can specify the command and its keywords on multiple lines by using
     continuation characters as the last character on a line. The minus (-) and plus
     (+) characters are interchangeable except when used with continuing quoted
     values. A minus (-) continuation indicates that leading spaces on the following
     line are included, and a plus (+) continuation ignores leading spaces on the
     following line.
   - You can use two types of comments.
     - An asterisk (*) in column one creates a single line comment.
     - /* at the beginning and */ at the end of a block of comments creates
       single or multiple line comments. You can nest one or more block
       comments.
   - You can specify quoted strings by using either matching single or double
     quotes. For example, “abc” and ’abc’ are equivalent. If you need quotes
     displayed within a string you can use either two-for-one quoting such as in
     'My Company’’s Disk Usage’ or alternating quoting such as in "My Company's
     Disk Usage”.
2. If you need to change the contents of the data dictionary, you are encouraged
to add a MODIFICATION member to a user SCKMPARM and add that library to
your DATADICT DD statement. Using the MODIFICATION command will
simplify your transition to a future release. The following shows the syntax for
MODIFICATION:

```
  MODification(--DICTIONary-Name(mbr))
```
**Note:** The keyword descriptions for the MODIFICATION command are the same as those for the REPORT command.

The distributed data dictionary has DSNAME as the column header for the DSN field. If you wanted to change the column header to Dataset Name, you would do the following:

a. Add the following text to a member of your user SCKMPARM called YOURMOD.

```plaintext
MODIFICATION(  
   DICTIONARY-NAME(CKMPEXRW)  
   FIELDS (  
      DSN (  
         COLUMN-HEADERS ( 'DATASET NAME' )  
      )  
   )  
)
```

b. Add your user SCKMPARM to the concatenation of the DATADICT DD statement.

c. Change `DICTIONARY-NAME(CKMPEXRW)` in your REPORT command to `DICTIONARY-NAME(YOURMOD)`

**Example**

Example for FIELDS showing the syntax of the optional attributes:

```plaintext
FIELDS(DSN (DISPLEN(30) COLHDR('Dataset', 'Name')))
```
Chapter 20. SUPERCLIP - Change a DASD Volser

Use the SUPERCLIP command to change the volume serial number of a DASD volume.

SUPERCLIP ensures that all volume and catalog pointers to the volume and from the objects on the volume are updated to reflect the new volser. As part of the process, the volume's VTOC, indexed VTOC, and VVDS are updated to reflect the change in volser. A volume's volser can be changed if a BCS is resident on the volume. In this case, all master catalogs where the BCS is connected can be updated to reflect the new volser. SUPERCLIP can change the volser of a volume that contains multi-volume data sets, regardless of where the volume is in the multi-volume list.

Changing the volume serial number of a DASD volume requires the volume to go offline and come back online. Generally SUPERCLIP varies the volume offline and online, but SUPERCLIP can be directed to operate on a volume that you manually vary offline and online.

Syntax

```
SuperCLIP—JouRNaL(dsn)—New-VOLser(volser)—Old-VOLser(volser)—Backout—ReSTaRT—SIMulate
```

SUPERCLIP Command Syntax

**Keywords**

**JOURNAL**

specifies an already defined KSDS that will be used to track the SUPERCLIP changes so that they can be backed out if a failure occurs.

**NEW-VOLSER**

specifies the new volume serial number to which the volume is to be renamed. Specify up to 6 alphanumeric or national characters for the volser. The NEW-VOLSER must be the same length as OLD-VOLSER. For example, if the OLD-VOLSER is 5 characters, the NEW-VOLSER must be 5 characters.

**OLD-VOLSER**

specifies the volume serial number of the volume to be renamed. Specify up to 6 alphanumeric or national characters for the volser.

**BACKOUT**

specifies that all changes made to the specified volser, as well as BCS
updates made for cataloged data sets from a previous SUPERCLIP that was interrupted during execution, are to be backed out. The BACKOUT keyword cannot be used after running a successful SUPERCLIP.

**RESTART**

specifies that processing is to resume for a previous SUPERCLIP command that was interrupted.

**SIMULATE**

indicates that you want to trial the command without actually performing it.

**DEVNUM**

specifies the unit address of the DASD volume being clipped. The device number is only required in those environments where SUPERCLIP is unable to vary the device offline and back online internally. This is usually due to an installation MCS user exit. See the Usage notes for more information on using this keyword.

**MASTER-CATALOG**

specifies which master catalogs are to be updated when the SUPERCLIP command is run. The current system’s master catalog will always be updated.

**UNCATALOGED-DSN**

specifies a change to the default program action when an uncataloged data set (excluding the VVDS or VTOCIX) is found.

- **CONTINUE**—processing is to continue when an uncataloged data set is encountered. This is the default.
- **END**—processing is to terminate upon the first occurrence of an uncataloged data set.
- **RC**—specifies the return code to be assigned on the SYSOUT message whenever an uncataloged data set is encountered. Specify a return code value of 0 to 9999. The default is 4.

**Usage notes**

1. Changing the volume serial number requires some planning.

   On the system where SUPERCLIP runs, the volume will be varied offline, the volume serial number changed, and the volume varied back online.

   - SUPERCLIP is generally run in a mode for JES2 sites that de-allocates the user catalogs on the volume from the catalog address space, varies the volume offline and back online. If SUPERCLIP cannot vary the volume offline because of data sets allocated on the volume, it will retry the operation until it succeeds or the JOB is cancelled. This gives you an opportunity to find what is blocking the processing.

   SUPERCLIP can be run in a mode where you must have the volume offline before SUPERCLIP begins (requires DEVNUM keyword with the device address of the volume) and requires you to vary the volume online afterwards. This mode might be simpler for your operations, or can be used if SUPERCLIP is unable to vary the device by itself. This mode is required for JES3 sites.

   - For all other systems that have the volume mounted, the volume needs to be manually varied offline before SUPERCLIP runs and varied online afterwards so that volume is usable. Failure to do this will mean unpredictable results for the data and applications that may allocate the volume.

2. The following lists actions not supported by the SUPERCLIP command.
Changing the volser of a DFSMShsm ML1 volume (including one that is used for Small Data set Packing) is not supported with SUPERCLIP because DFSMShsm tracks the names and locations of data sets in the DFSMShsm CDS which SUPERCLIP does not update.

For SMS sites, SUPERCLIP protects you from making a change that would violate the SMS definitions that you have established.

SUPERCLIP does not update user-application data. Data set names containing the volser will not be renamed. Data sets containing records referencing volsers will not be updated. It is your responsibility to ensure that there is no application dependency on volsers.

SUPERCLIP cannot rename a z/OS sysres volume, or other system related volumes, for example volumes with PAGE data sets.

3. Keep these details in mind when using the DEVNUM keyword.

For most uses of SUPERCLIP, you can omit the DEVNUM keyword and let SUPERCLIP manage taking the volume offline and back online so that the following is not required. For those sites where SUPERCLIP cannot vary the volume offline (for example those sites that have a master console user exit that interferes with SUPERCLIP), you can use the DEVNUM keyword and the steps outlined below.

Prior to submitting the SUPERCLIP command, do the following:

a. The volume to be clipped must be offline to all systems. Verify this with the operator command:
   \[ \text{D U, VOL=oldvol} \]

b. If the volume contains one or more user catalogs, those catalogs must be unallocated from the catalog address space in order for the vary offline to work.
   \[ \text{F CATALOG, UNALLOCATE(\textit{bcsname})} \]

c. The volume can then be varied offline.
   \[ \text{V cuu, OFFLINE} \]

The following is an example of a proc that could be used to accomplish steps 3b and 3c on all systems.

\[ // VARYOFF PROC \]
\[ // COMMAND 'RO *ALL,F CATALOG,UNALLOCATE(PRD001.USERCAT)' \]
\[ // COMMAND 'RO *ALL,V 70BE,OFFLINE' \]
\[ //S1 EXEC PGM=IEFBR14 \]
\[ // PEND \]
\[ //DOIT EXEC VARYOFF \]

After running the SUPERCLIP command and when there are catalogs on the volume, do the following:

As a part of SUPERCLIP processing, master catalogs named by the MASTERCATALOG keyword will have the connector records for any catalogs on the clipped volume changed to the new volser name. It is not necessary to issue commands to allocate catalogs to CAS. Each will be allocated and opened on the first reference made to it.

4. You can run a SIMULATE, check the output to ensure that it looks correct, then run SUPERCLIP with the RESTART keyword. This mode uses the journal file, and the data set and BCS list on the volume at the time of the SIMULATE, to perform all of the necessary volser change functions. Using SIMULATE then RESTART requires you ensure the volume is quiesced between the simulate and non-simulate runs. If there are any data set deletes and defines on the volume that invalidate the journal, the subsequent RESTART will be unreliable.

5. The BACKOUT option can be used if the previous run of SUPERCLIP without SIMULATE did not complete successfully after updates were made. The
The RESTART option can be used after a successful run with SIMULATE, or following a run without SIMULATE after BACKOUT and RESTART have been enabled. In either case, SUPERCLIP must have completed the analysis phase. You can tell if SUPERCLIP can be backed out or restarted by the presence of the following message:

**CAT14020I SUPERCLIP STEP: RESTART AND BACKOUT - ENABLED**

In addition, you cannot back out or restart a SUPERCLIP without SIMULATE if the step completed successfully as indicated by the following message:

**CAT14020I SUPERCLIP STEP: RESTART AND BACKOUT - DISABLED**

Whether you choose restart or backout is up to you, and is dependent on where the error occurred, and why it occurred.

- With the RESTART keyword specified, the SUPERCLIP command is 're-driven', and using the information kept in the journal file from the interrupted execution, the point of interruption is determined. SUPERCLIP completes all of the remaining volser change operations from that point onwards.
- With the BACKOUT keyword specified, the information maintained in the journal file allows SUPERCLIP to 'undo' all completed operations up to the time of interrupt. The volume and all related BCSs are returned to their initial status prior to the execution of SUPERCLIP. BACKOUT cannot be specified for a successful SUPERCLIP.

6. Reliable SUPERCLIP functionality requires all Journal I/O to occur as requested. If you are a MainView Batch Optimizer user, you can specify the `//DAP@NVPO DD DUMMY` and the `//DAP@NNPO DD DUMMY` JCL statements to turn off MainView for SUPERCLIP.
Chapter 21. ZAP - Change ICF Catalog, VTOC, and VSAM Data Set Records

Advanced Catalog Management provides the ZAP command to view, delete, and make superzap-type changes to ICF catalog structures (BCS and VVDS records), as well as VTOC entries and VSAM data sets, with increased visibility of what you are doing.

ZAP BCS DELETE

Use the ZAP BCS DELETE command to delete one or more records or control intervals in a BCS record.

Syntax

```
ZAP BCS(bcs) DELete(
  RBA('0000'),
  Control-Interval(n),
  KEY('bcskey'),
  EXTension('
    X'bcskey'
  '),
  VER(displmnt,'value'),
  EXECute,
  SIMulate,
  COUNT(1),
  Print-Before
)
```

Keywords:

- **BCS** specifies the fully qualified data set name of the BCS you want to process.
- **RBA** specifies the relative byte address of a specific record. Please note that the RBA of VRRDS and KSDS (and BCS) records may change. The RBA is a four byte hexadecimal value. Specify the full value using 2-for-1 notation. For example, 0001C000. Because RBA access is physical, not keyed, when this keyword is specified for a keyed object, and the COUNT keyword requests multiple records, those records returned may not be in logical key sequence.
- **CONTROL-INTERVAL** specifies the number of the CI to be processed. The contents of an entire control interval will be deleted.
- **INDEX-COMPONENT** specifies that the Index Component of the catalog will be processed. The default component to be processed is the data component unless you specify the INDEX-COMPONENT keyword.
KEY specifies a value of up to 45 bytes for the required catalog record's key. If the specified key value is only 44 bytes, ZAP will automatically add a byte value of X'00', assuming you want to process the first record for a VSAM cluster or GDG sphere record.

You can enter the key value as a mask or in one of the following formats:
- A space-delimited character string. For example, SYS1.LINKLIB.
- A delimited character string. For example, C'SYS1.LINKLIB'.
- A delimited hexadecimal string. For example, X'E2E8E2F14BD3C9D5D2D3C9C2'.

If a record with the specified key value is not located, processing begins with the next record in the BCS.

EXTENSION specifies a particular extension record for a BCS record that has been identified by the KEY specification. Specify an even number of bytes in hexadecimal format. The value may or may not be enclosed in X'...'. For example, EXT(x'01') or EXT(01) are valid, but EXT(x'1') or EXT(1) are not valid.

VER specifies that you want to verify the existing record contents. You must specify values in pairs, enclosed in parentheses, and separated by commas. The maximum length of the value of VER is 256 (512 hex).
- displmnt—a hex offset, relative to the start of a record or control interval. It must be an even number of bytes of either 2, 4, or 6 hexadecimal characters. The displacement values must be in ascending order.
- C'value' or X'value'—a character format or hexadecimal format. The length of the value compared is determined by the actual specification.

Note: Record fields such as type codes, flag bytes, and so on could easily test true at an offset other than the one intended or in a record or control interval other than the one intended. Therefore, it is recommended that multiple areas be compared, for added insurance that the desired record/control interval field is, in fact, altered.

EXECUTE indicates that you want run the command.

SIMULATE indicates that you want to trial the command without actually performing it.

COUNT specifies the number of records that are to be processed.
- 1—process 1 record. This is the default if COUNT is not specified.
- ALL—process all remaining records. If KEY, RBA or CONTROL-INTERVAL is also specified, ALL results in all records from that point onwards to be processed. If KEY, RBA, or CONTROL-INTERVAL is not specified, ALL processes all records in the entire BCS.
- n—process the specified number of records. You can specify an integer from 1 to 99999999.

PRINT-BEFORE specifies that you want the record to be printed before any changes are made.
Usage notes
1. If ZAP BCS DELETE deletes a record, an SMF type 65 record should be cut. This will allow RECOVER BCS or RECOVER VVDS to capture these changes in a forward recovery. These records can also be used in reporting and auditing.
2. The ZAP will fail if a SPANNED record is encountered, RBA('00000000') is specified or left to default, and COUNT(ALL) is specified.
3. If the COUNT parameter specifies a value greater than 1, the KEY or RBA parameter indicates the record or control interval at which processing is to begin. It continues from that location in ascending key sequence for KEY or physically sequential for RBA.

ZAP BCS PATCH

Use the ZAP BCS PATCH command to alter the contents of one or more records in a BCS.

Syntax

```
/ZAP BCS(bcs) Patch(
  RBA(X'00000000')
  RBA(X'rba')
  Control-Interval(-(n-)
    INDeX-Component
    KEY(bcskey) EXTension(-)
      C'bcskey' X'bcskey'
    -X'nn'
  )-
  REP(displmnt ,C'value' ,X'value' )
  VER(displmnt ,C'value' ,X'value' )
  EXECute
  SIMulate
  Print-After
  Print-Before
  COUNT(1)
  COUNT( ALL )
)
```

Keywords

- **BCS**: specifies the fully qualified data set name of the BCS you want to process.
- **RBA**: specifies the relative byte address of a specific record. Please note that the RBA of VRRDS and KSDS (and BCS) records may change. The RBA is a four byte hexadecimal value. Specify the full value using 2-for-1 notation. For example, 0001C000. Because RBA access is physical, not keyed, when this keyword is specified for a keyed object, and the COUNT keyword requests multiple records, those records returned may not be in logical key sequence.
CONTROL-INTERVAL
specifies the number of the CI to be processed. The contents of an entire control interval will be altered.

INDEX-COMPONENT
specifies that the Index Component of the catalog will be processed. The default component to be processed is the data component unless you specify the INDEX-COMPONENT keyword.

KEY specifies a value of up to 45 bytes for the required catalog record’s key. If the specified key value is only 44 bytes, ZAP will automatically add a byte value of X’00’, assuming you want to process the first record for a VSAM cluster or GDG sphere record.

You can enter the key value as a mask or in one of the following formats:
• A space-delimited character string. For example, SYS1.LINKLIB.
• A delimited character string. For example, C’SYS1.LINKLIB’.
• A delimited hexadecimal string. For example, X’E2E8E2F14BD3C9D5D2D3C9C2’.

If a record with the specified key value is not located, processing begins with the next record in the BCS.

EXTENSION specifies a particular extension record for a BCS record that has been identified by the KEY specification. Specify a one byte value via two hexadecimal characters. The value may or may not be enclosed in X’...’.

For example, EXT(x’01’) or EXT(01) are valid, but EXT(x’1’) or EXT(1) are not valid.

REP specifies that you want to change the existing record contents. You must specify values in pairs, enclosed in parentheses, and separated by commas. The maximum length of the value of REP is 256 (512 characters of 2-for-1 notation).
• displmnt—a hex offset, relative to the start of a record or control interval. It must be either 2, 4, or 6 hexadecimal characters. The displacement values must be in ascending order.
• C'value' or X'value'—a character format or hexadecimal format. The length of the value compared is determined by the actual specification.

VER specifies that you want to verify the existing record contents. You must specify values in pairs, enclosed in parentheses, and separated by commas. The maximum length of the value of VER is 256 (512 characters of 2-for-1 notation).
• displmnt—a hex offset, relative to the start of a record or control interval. It must be either 2, 4, or 6 hexadecimal characters. The displacement values must be in ascending order.
• C'value' or X'value'—a character format or hexadecimal format. The length of the value compared is determined by the actual specification.

Note: Record fields such as type codes, flag bytes, and so on could easily test true at an offset other than the one intended or in a record or control interval other than the one intended. Therefore, it is recommended that multiple areas be compared, for added insurance that the desired record/control interval field is, in fact, altered.

EXECUTE indicates that you want run the command.
**SIMULATE**  
indicates that you want to trial the command without actually performing it.

**COUNT**  
specifies the number of records that are to be processed.  
- 1— process 1 record. This is the default if COUNT is not specified.  
- ALL— process all remaining records. If KEY, RBA or CONTROL-INTERVAL is also specified, ALL results in all records from that point onwards to be processed. If KEY, RBA, or CONTROL-INTERVAL is not specified, ALL processes all records in the entire BCS.  
- \( n \)— process the specified number of records. You can specify an integer from 1 to 99999999.

**PRINT-AFTER**  
specifies that you want the record to be printed after any changes are made.

**PRINT-BEFORE**  
specifies that you want the record to be printed before any changes are made.

**Usage notes**
1. If ZAP BCS PATCH alters a record, an SMF type 66 record should be cut, or if it adds a record, an SMF type 61 record should be cut. This will allow RECOVER BCS or RECOVER VVDS to capture these changes in a forward recovery. These records can also be used in reporting and auditing.
2. The ZAP will fail if a SPANNED record is encountered, RBA('00000000') is specified or left to default, and COUNT(ALL) is specified.
3. If the COUNT keyword specifies a value greater than 1, the KEY or RBA keyword indicates the record or control interval at which processing is to begin. It continues from that location in ascending key sequence for KEY or physically sequential for RBA.
4. If multiple VER keyword pairs are specified then all verifies must be true in order to perform a REP. Multiple REP pairs can be specified and do not have to match the number and displacements in the VER keyword.

**ZAP BCS PRINT**

Use the ZAP BCS PRINT command to print one or more BCS records and select the level of formatting you want for the printed report.

**Syntax**

```
ZAP BCS(bcs) PRINT(RBA('00000000') Count(1) DUMP Path A Path B Path C Count(1))
```
Keywords

**BCS** specifies the fully qualified data set name of the BCS you want to process.

**RBA** specifies the relative byte address of a specific record. Please note that the RBA of VRRDS and KSDS (and BCS) records may change. The RBA is a four byte hexadecimal value. Specify the full value using 2-for-1 notation. For example, 0001C000. Because RBA access is physical, not keyed, when this keyword is specified for a keyed object, and the COUNT keyword requests multiple records, those records returned may not be in logical key sequence.

**DUMP** specifies that the records are shown in 16 bytes per line in hexadecimal and limited EBCDIC. The names of cells are not identified.

**CELLDUMP** specifies that the records are shown in 16 bytes per line in hexadecimal and limited EBCDIC. The names of cells are identified, but not individual fields.

**FORMAT** specifies that individual fields are included with field descriptions.

**FATAL-READ-ERROR** controls what happens when a serious read error is encountered when processing the input object. Fatal errors are caused by anomalies in the VSAM structure. For example, a spanned record is maintained in two or more control intervals; if the update number in these control intervals is not synchronized, attempts to read the record will fail.
- ERROR—issues an error message and terminates with a return code of 8.
- WARNING—issues a warning message and continues with a return code of 4.

**CONTROL-INTERVAL**

specifies the number of the CI to be processed. Entire control intervals will be printed.

**INDEX-COMPONENT**

specifies that the Index Component of the catalog will be processed. The default component to be processed is the data component unless you specify the INDEX-COMPONENT keyword.

**KEY**

specifies a value of up to 45 bytes for the required catalog record's key. If the specified key value is only 44 bytes, ZAP will automatically add a byte value of $X'00'$, assuming you want to process the first record for a VSAM cluster or GDG sphere record.

You can enter the key value as a mask or in one of the following formats:
- A space-delimited character string. For example, SYS1.LINKLIB.
- A delimited character string. For example, C'SYS1.LINKLIB'.
- A delimited hexadecimal string. For example, X'E2E8E2F14BD3C9D5D2D3C9C2'.

If a record with the specified key value is not located, processing begins with the next record in the BCS.

**EXTENSION**

specifies a particular extension record for a BCS record that has been identified by the KEY specification. Specify a one byte value via two hexadecimal characters. The value may or may not be enclosed in $X'...'$.

For example, EXT(x'01') or EXT(01) are valid, but EXT(x'1') or EXT(1) are not valid.

**KEY-ONLY**

specifies that only the key content is printed.

**COUNT**

specifies the number of records that are to be processed.
- 1—process 1 record. This is the default if COUNT is not specified.
- ALL—process all remaining records. If KEY, RBA or CONTROL-INTERVAL is also specified, ALL results in all records from that point onwards to be processed. If KEY, RBA, or CONTROL-INTERVAL is not specified, ALL processes all records in the entire BCS.
- n—process the specified number of records. You can specify an integer from 1 to 99999999.

**Usage notes**

1. The ZAP will fail if a SPANNED record is encountered, RBA('00000000') is specified or left to default, and COUNT(ALL) is specified.
2. If the COUNT keyword specifies a value greater than 1, the KEY or RBA keyword indicates the record or control interval at which processing is to begin. It continues from that location in ascending key sequence for KEY or physically sequential for RBA.
ZAP DSN DELETE

Use the ZAP DSN DELETE command to delete one or more records or control intervals in a VSAM data set.

Syntax

```
ZAP DSN(dsname)DELETE(
  RBA(X'00000000')
  RBA(X'rba')
  Control-Interval(n)
  KEY(dskey)
  INDEX-COMPONENT
  INDEX-COMPONENT
  KEY
  EXECute
  SIMulate
  COUNT(1)
  PRINT-Before
)
```

Keywords

**DSN** specifies the fully qualified name of the VSAM data set you want to process.

**RBA** specifies the relative byte address of a specific record. Please note that the RBA of VRRDS and KSDD (and BCS) records may change. The RBA is a four byte hexadecimal value. Specify the full value using 2-for-1 notation. For example, 0001C000. Because RBA access is physical, not keyed, when this keyword is specified for a keyed object, and the COUNT keyword requests multiple records, those records returned may not be in logical key sequence.

**CONTROL-INTERVAL** specifies the number of the CI to be processed. The contents of an entire control interval will be deleted.

**INDEX-COMPONENT** specifies that the Index Component of a KSDD or BCS will be processed. The default component to be processed is the data component unless you specify the INDEX-COMPONENT keyword.

**KEY** specifies a key value for the full or generic key of a KSDD record or the Relative Record Number of a (V)RRDD to process.

You can enter the key value in one of the following formats:

- A character string without spaces. For example, `ALLOURBASEAREBELONGTOUS` or `’ALLOURBASEAREBELONGTOUS’`.
- A character string with spaces. For example, `’ALL OUR BASE ARE BELONG TO US’`.
• A hexadecimal string. For example, 
  X'C1D3D340D6E4D940C21E2C540C1D9C540C2C3D36D5C7'.

• A generic key. For example, if the object’s key was five bytes in length, 
  C'ALL' would request a record with a value of ALL in the first three bytes.

If a record with the specified key value is not found, processing begins with 
the next record in the data set.

VER specifies that you want to verify the existing record contents. You must 
specify values in pairs, enclosed in parentheses, and separated by 
commas. The maximum length of the value of VER is 256 (512 characters 
of 2-for-1 notation).

• displmnt—a hex offset, relative to the start of a record or control interval. 
  It must be either 2, 4, or 6 hexadecimal characters. The displacement 
  values must be in ascending order.

• C'value' or X'value'—a character format or hexadecimal format. The 
  length of the value compared is determined by the actual specification.

Note: Record fields such as type codes, flag bytes, and so on could easily 
test true at an offset other than the one intended or in a record or 
control interval other than the one intended. Therefore, it is 
recommended that multiple areas be compared, for added insurance 
that the desired record/control interval field is, in fact, altered.

EXECUTE indicates that you want run the command.

SIMULATE indicates that you want to trial the command without actually performing it.

COUNT specifies the number of records that are to be processed.

• 1—process one record. This is the default if COUNT is not specified.

• ALL—process all remaining records. If KEY or CONTROL-INTERVAL is 
  also specified, ALL results in all records from that point onwards to be 
  processed.

• n—process the specified number of records. You can specify an integer 
  from 1 to 99999999.

PRINT-BEFORE specifies that you want the record to be printed before any changes are 
made.

Usage notes
1. Depending on the type of object processed, you must specify the following 
   keyword:
   • If the object is an ESDS, RBA must be specified.
   • If the object is a KSDS, KEY or RBA must be specified.
   • If the object is an RRDS or VRRDS, KEY must be specified.

2. The ZAP will fail if a SPANNED record is encountered, RBA('00000000') is 
   specified or left to default, and COUNT(ALL) is specified. You must use 
   KEY(x'00') GTEQ instead.

3. If the COUNT keyword specifies a value greater than 1, the KEY keyword 
   indicates the record or control interval at which processing is to begin. It 
   continues from that location in ascending key sequence for KEY or physically 
   sequential for RBA.
ZAP DSN PATCH

Use the ZAP DSN PATCH command to alter one or more records or control intervals in a VSAM data set.

Syntax

```
ZAP DSN(dsname) PatCH(
  RBA(X'00000000')
  RBA(X'rba')
  Control-Interval(0)
  INDEX-Component
  KEY(dskey)
  KEY(X'dsnkey')

REP(displmnt, C'value') VER(displmnt, C'value')
EXECute SIMulate

CouNT(1)
Print-After
Print-Before
```

Keywords

**DSN** specifies the fully qualified name of the VSAM data set you want to process.

**RBA** specifies the relative byte address of a specific record. Please note that the RBA of VRRDS and KSDS (and BCS) records may change. The RBA is a four byte hexadecimal value. Specify the full value using 2-for-1 notation. For example, 0001C000. Because RBA access is physical, not keyed, when this keyword is specified for a keyed object, and the COUNT keyword requests multiple records, those records returned may not be in logical key sequence.

**CONTROL-INTERVAL** specifies the number of the CI to be processed. The displacement value in VER and REP keywords references relative byte locations within the CI, rather than within a record.

**INDEX-COMPONENT** specifies that the Index Component of a KSDS or BCS will be processed. The default component to be processed is the data component unless you specify the INDEX-COMPONENT keyword.

**KEY** specifies a key value for the full or generic key of a KSDS record or the Relative Record Number of a (V)RRDS to process.

You can enter the key value in one of the following formats:
• A character string without spaces. For example, `ALLOURBASEAREBELONGTOUS` or `'ALLOURBASEAREBELONGTOUS'`.

• A character string with spaces. For example, `CALL OUR BASE ARE BELONG TO US`.

• A hexadecimal string. For example, `X'C1D3D406E4D940C2C1E2C540C1D9C540C2C3D3D6D5C7'`.

• A generic key. For example, if the object’s key was five bytes in length, `CALL` would request a record with a value of `ALL` in the first three bytes.

If a record with the specified key value is not found, processing begins with the next record in the data set.

**REP** specifies that you want to change the existing record contents. You must specify values in pairs, enclosed in parentheses, and separated by commas. The maximum length of the value of REP is 256 (512 characters of 2-for-1 notation).

• `displmnt`—a hex offset, relative to the start of a record or control interval. It must be either 2, 4, or 6 hexadecimal characters. The displacement values must be in ascending order.

• `C'value' or `X'value'—a character format or hexadecimal format. The length of the value compared is determined by the actual specification.

**VER** specifies that you want to verify the existing record contents. You must specify values in pairs, enclosed in parentheses, and separated by commas. The maximum length of the value of VER is 256 (512 characters of 2-for-1 notation).

• `displmnt`—a hex offset, relative to the start of a record or control interval. It must be either 2, 4, or 6 hexadecimal characters. The displacement values must be in ascending order.

• `C'value' or `X'value'—a character format or hexadecimal format. The length of the value compared is determined by the actual specification.

**Note:** Record fields such as type codes, flag bytes, and so on could easily test true at an offset other than the one intended or in a record or control interval other than the one intended. Therefore, it is recommended that multiple areas be compared, for added insurance that the desired record/control interval field is, in fact, altered.

**EXECUTE** indicates that you want to run the command.

**SIMULATE** indicates that you want to trial the command without actually performing it.

**COUNT** specifies the number of records that are to be processed.

• `1`—process one record. This is the default if COUNT is not specified.

• `ALL`—process all remaining records. If KEY or CONTROL-INTERVAL is also specified, ALL results in all records from that point onwards to be processed.

• `n`—process the specified number of records. You can specify an integer from 1 to 99999999.

**PRINT-AFTER** specifies that you want the record to be printed after any changes are made.
PRINT-BEFORE
  specifies that you want the record to be printed before any changes are made.

Usage notes
1. Depending on the type of object processed, you must specify the following keyword:
   • If the object is an ESDS, RBA must be specified.
   • If the object is a KSDS, KEY or RBA must be specified.
   • If the object is an RRDS or VRRDS, KEY must be specified.
2. The ZAP will fail if a SPANNED record is encountered, RBA(’00000000’) is specified or left to default, and COUNT(ALL) is specified. You must use KEY(x’00’) GTEQ instead.
3. If the COUNT keyword specifies a value greater than 1, the KEY keyword indicates the record or control interval at which processing is to begin. It continues from that location in ascending key sequence for KEY or physically sequential for RBA.
4. If multiple VER keyword pairs are specified then all verifies must be true in order to perform a REP. Multiple REP pairs can be specified and do not have to match the number and displacements in the VER keyword.

ZAP DSN PRINT

Use the ZAP DSN PRINT command to print one or more records or control intervals in a VSAM data set.

Syntax

```
ZAP DSN(dsname) PRINT(
   RBA(X’00000000’) COUNT(1) DUMP
   Path A
   Path B
   Path C
)
```

Path A:
```
RBA(X’00000000’)

FATal-read-ERROR(ERROR)

FATal-read-ERROR(WARNING)
```

Path B:
```
Control-Interval(0)

INDEX-Component
```
ZAP DSN PRINT Command Syntax

Keywords

**DSN** specifies the fully qualified name of the VSAM data set you want to process.

**RBA** specifies the relative byte address of a specific record. Please note that the RBA of VRRDS and KSDS (and BCS) records may change. The RBA is a four byte hexadecimal value. Specify the full value using 2-for-1 notation. For example, 0001C000. Because RBA access is physical, not keyed, when this keyword is specified for a keyed object, and the COUNT keyword requests multiple records, those records returned may not be in logical key sequence.

**CONTROL-INTERVAL** specifies the number of the CI to be processed.

**INDEX-COMPONENT** specifies that the Index Component of a KSDS or BCS will be processed. The default component to be processed is the data component unless you specify the INDEX-COMPONENT keyword.

**FATAL-READ-ERROR** controls what happens when a serious read error is encountered when processing the input object. Fatal errors are caused by anomalies in the VSAM structure. For example, a spanned record is maintained in two or more control intervals; if the update number in these control intervals is not synchronized, attempts to read the record will fail.

- **ERROR**—issues an error message and terminates with a return code of 8.
- **WARNING**—issues a warning message and continues with a return code of 4.

**KEY** specifies a key value for the full or generic key of a KSDS record or the Relative Record Number of a (V)RRDS to process.

You can enter the key value in one of the following formats:

- A character string without spaces. For example, `ALLOURBASEAREBELONGTOUS` or `ALLOURBASEAREBELONGTOUS'.
- A character string with spaces. For example, `C'ALL OUR BASE ARE BELONG TO US'`
- A hexadecimal string. For example, `X'C1D3D34064D940C21E2C540C1D9C540C2C3D36D5C7'.
- A generic key. For example, if the object's key was five bytes in length, `C'ALL' would request a record with a value of `ALL` in the first three bytes.

If a record with the specified key value is not found, processing begins with the next record in the data set.
KEY-ONLY  
specifies that only the key content is printed.

GTEQ  
specifies that the record's key is to be compared using a Greater Than or Equal comparator.

COUNT  
specifies the number of records that are to be processed.

- 1—process one record. This is the default if COUNT is not specified.
- ALL—process all remaining records. If KEY or CONTROL-INTERVAL is also specified, ALL results in all records from that point onwards to be processed.
- n—process the specified number of records. You can specify an integer from 1 to 99999999.

DUMP  
indicates that you want the data shown as 16 bytes per line in hexadecimal and limited EBCDIC. This is similar to the "standard" dump format.

CHARACTER  
indicates that you want the data shown in EBCDIC only at 64 bytes per line.

Usage notes
1. The ZAP will fail if a SPANNED record is encountered, RBA('00000000') is specified or left to default, and COUNT(ALL) is specified. You must use KEY(x'00') GTEQ instead.
2. If the COUNT keyword specifies a value greater than 1, the KEY keyword indicates the record or control interval at which processing is to begin. It continues from that location in ascending key sequence for KEY or physically sequential for RBA.

ZAP VTOC DELETE

Use the ZAP VTOC DELETE command to delete one or more DSCBs from the VTOC.

Syntax

```
ZAP VTOC(valser) DELETE(DSName(dsname) VER(displmnt C'value' X'value') EXECute SIMulate)
```

Keywords

- **VTOC**  specifies a six character volume serial to process.
- **DSNAME**  specifies the name of the DSCB to process.
- **VER**  specifies that you want to verify the existing record contents. You must
specify values in pairs, enclosed in parentheses, and separated by commas. The maximum length of the value of VER is 256 (512 characters of 2-for-1 notation).

- `displmnt`—a hex offset, relative to the start of a record. It must be either 2, 4, or 6 hexadecimal characters. The displacement values must be in ascending order.
- `C'value' or `X'value'—a character format or hexadecimal format. The length of the value compared is determined by the actual specification.

Note: Record fields such as type codes, flag bytes, and so on could easily test true at an offset other than the one intended or in a record or control interval other than the one intended. Therefore, it is recommended that multiple areas be compared, for added insurance that the desired record/control interval field is, in fact, altered.

**EXECUTE**

indicates that you want to run the command.

**SIMULATE**

indicates that you want to trial the command without actually performing it.

**CCHHR**

specifies a particular VTOC record to be processed. Specify a maximum of 10 hexadecimal characters for `cccchhhhrr`.

**PRINT-BEFORE**

specifies that you want the record to be printed before any changes are made.

**Usage notes**

None.

---

**ZAP VTOC PATCH**

Use the ZAP VTOC PATCH command to alter one or more DSCBs from a VTOC.

Some fields such as EXTENTS will not be processed by this command.

**Syntax**

```
ZAP VTOC(volser) PATCH(CCHHR(cccchhhhrr) REP(displmnt,C'value',) REP(displmnt,X'value',) EXEC) 
```

**Keywords**

**VTOC** specifies a six character volume serial to process.
CCHHR specifies a particular VTOC record to be processed. Specify a maximum of 10 hexadecimal characters for cccchhhhrr.

REP specifies that you want to change the existing record contents. You must specify values in pairs, enclosed in parentheses, and separated by commas. The maximum length of the value of REP is 256 (512 characters of 2-for-1 notation).

- `displmnt`—a hex offset, relative to the start of a record. It must be either 2, 4, or 6 hexadecimal characters. The displacement values must be in ascending order.
- `C'value' or X'value'”—a character format or hexadecimal format. The length of the value compared is determined by the actual specification.

VER specifies that you want to verify the existing record contents. You must specify values in pairs, enclosed in parentheses, and separated by commas. The maximum length of the value of VER is 256 (512 characters of 2-for-1 notation).

- `displmnt`—a hex offset, relative to the start of a record. It must be either 2, 4, or 6 hexadecimal characters. The displacement values must be in ascending order.
- `C'value' or X'value'”—a character format or hexadecimal format. The length of the value compared is determined by the actual specification.

Note: Record fields such as type codes, flag bytes, and so on could easily test true at an offset other than the one intended or in a record or control interval other than the one intended. Therefore, it is recommended that multiple areas be compared, for added insurance that the desired record/control interval field is, in fact, altered.

EXECUTE indicates that you want run the command.

SIMULATE indicates that you want to trial the command without actually performing it.

PRINT-AFTER specifies that you want the record to be printed after any changes are made.

PRINT-BEFORE specifies that you want the record to be printed before any changes are made.

Usage notes
1. If multiple VER keyword pairs are specified then all verifies must be true in order to perform a REP. Multiple REP pairs can be specified and do not have to match the number and displacements in the VER keyword.

ZAP VTOC PATCH—with CHANGED-BIT

Use the ZAP VTOC PATCH—with CHANGED-BIT command to toggle the change bit in the Format 1 DSCB from a VTOC.

Syntax
ZAP VTOC PATCH—with CHANGED-BIT Command Syntax

**Keywords**

VTOC specifies a six character volume serial to process.

DSNAME specifies a data set name.

CHANGED-BIT specifies whether you want to toggle the changed-bit on or off.

EXECUTE indicates that you want run the command.

SIMULATE indicates that you want to trial the command without actually performing it.

PRINT-AFTER specifies that you want the record to be printed after any changes are made.

PRINT-BEFORE specifies that you want the record to be printed before any changes are made.

**Usage notes**

If no option is coded, then the INI token: ZAP_PROCESSING_DEFAULT will, if present, control processing. If there is no INI token, then EXECUTE will be the default.

### ZAP VTOC PRINT

Use the ZAP VTOC PRINT command to print one or more DSCBs from a VTOC.

**Syntax**

You can also print the VTOC index. Empty DSCBs are not printed.
Notes:
1 If DSCB-TYPE(4) or DSCB-TYPE(5) is specified, only 1 DSCB will be printed.

ZAP VTOC PRINT Command Syntax

**Keywords**

**VTOC**  specifies a six character volume serial to process.

**DSNAME**  specifies the name of the DSCB to process.

**CCHHR**  specifies a particular VTOC record to be processed using CCHHR. Specify a maximum of 10 hexadecimal characters for cccchhhrr.

**TTR**  specifies a particular VTOC record to be processed using TTR. Specify a maximum of six hexadecimal characters for ttttrr.

**INDEX**  specifies that all information about the VTOC index will be printed. You can specify any of these options to print specific information about the index:

- **VIER**—only the VIER records from the Indexed VTOC are printed.
- **VIXM**—only the VIXM records from the Indexed VTOC are printed.
- **VMDS**—only the VMDS records from the Indexed VTOC are printed.
- **VPSM**—only the VPSM records from the Indexed VTOC are printed.

**COUNT**  specifies the number of records that are to be processed.

- **1**—process one record. This is the default.
- **ALL**—process remaining records.
- **n**—process the specified number of records. You can specify an integer from 1 to 99999999.

**DSCB-TYPE**  specifies the type of DSCBs to print. Specify an integer from 1 through 9 or an asterisk (*) for all types. You cannot specify zero (0). You cannot select or print unused DSCBs.

**DUMP**  specifies that the records are shown in 16 bytes per line in hexadecimal and limited EBCDIC. The names of cells are not identified.

**OVER-UNDER**  specifies that each 64 bytes of data are shown as:
• 64 bytes of limited EBCDIC.
• 64 bytes of hexadecimal zone nibbles.
• 64 bytes of hexadecimal numeric nibbles.

**FORMAT**
specifies that the individual fields are included with field descriptions.

**Usage notes**
1. If DSNAME and DSCB-TYPE(*) are specified, then all chained DSCBs for that DSNAME will be followed.

---

**ZAP VTOC RENAME**

Use the ZAP VTOC RENAME command to rename a DSCB in the VTOC.

**Syntax**

```
ZAP VTOC(volser) RENAME(DSName(dsname) NEWName(dsname) VER(displmnt,'C'value')
```

**Keywords**

**VTOC** specifies a six character volume serial to process.

**DSNAME** specifies the name of the DSCB to rename.

**NEWNAME** specifies the new name of the DSCB.

**VER** specifies that you want to verify the existing record contents. You must specify values in pairs, enclosed in parentheses, and separated by commas. The maximum length of the value of VER is 256 (512 characters of 2-for-1 notation).

- `displmnt`—a hex offset, relative to the start of a record. It must be either 2, 4, or 6 hexadecimal characters. The displacement values must be in ascending order.
- `C'value'` or `X'value'`—a character format or hexadecimal format. The length of the value compared is determined by the actual specification.

**Note:** Record fields such as type codes, flag bytes, and so on could easily test true at an offset other than the one intended or in a record or control interval other than the one intended. Therefore, it is recommended that multiple areas be compared, for added insurance that the desired record/control interval field is, in fact, altered.

**EXECUTE** indicates that you want run the command.
SIMULATE
indicates that you want to trial the command without actually performing it.

CCHHR
specifies a particular VTOC record to be processed. Specify a maximum of 10 hexadecimal characters for cccchhhhrr.

PRINT-AFTER
specifies that you want the record to be printed after any changes are made.

PRINT-BEFORE
specifies that you want the record to be printed before any changes are made.

Usage notes
None.

ZAP VVDS DELETE
Use the ZAP VVDS DELETE command to delete a VVDS record or the contents of a VVDS control interval.

Syntax

Path A:

Path B:
ZAP VVDS DELETE Command Syntax

Keywords

**VVDS** specifies the volume serial of the VVDS.

**RBA** specifies the relative byte address of a specific record. The RBA is a four byte hexadecimal value. Specify the full value using 2-for-1 notation. For example, 0001C000.

**CONTROL-INTERVAL** specifies the number of the CI to be processed. The contents of an entire control interval will be deleted.

**COMPONENT** specifies a fully qualified or masked object name to be located within the VVR and NVR records maintained in the VVDS. Please remember that this will be the component name, not cluster, for VSAM objects. You can specify the component name as:

- A space-delimited character string. For example, SYS1.LINKLIB.
- A delimited character string. For example, C'SYS1.LINKLIB'.
- A delimited hexadecimal string. For example, X'E2E8E2F14BD3C9D5D2D3C9C2'.

**KRQ** specifies the keyrange qualifier suffix value that was appended to the component’s data set name as a result of the DEFINE command KEYRANGE parameter. The value is in the format A001, A002, and so on. The ZAP command will append this value to the specified COMPONENT name as a compare value on the component name search.

**VVDS-RECTYPE** specifies the particular VVDS record type to be processed. You must specify one of the following values:

- *—Any VVDS record type. This is the default.
- N—Non-VSAM (NVR) record.
- Q—Secondary VSAM (VVR) record.
- Z—Primary VSAM (VVR) record.

**VER** specifies that you want to verify the existing record contents. You must specify values in pairs, enclosed in parentheses, and separated by commas. The maximum length of the value of VER is 256 (512 characters of 2-for-1 notation).
displmnt—a hex offset, relative to the start of a record or control interval. It must be either 2, 4, or 6 hexadecimal characters. The displacement values must be in ascending order.

C'value' or X'value'—a character format or hexadecimal format. The length of the value compared is determined by the actual specification.

**Note:** Record fields such as type codes, flag bytes, and so on could easily test true at an offset other than the one intended or in a record or control interval other than the one intended. Therefore, it is recommended that multiple areas be compared, for added insurance that the desired record/control interval field is, in fact, altered.

**NVR** specifies that an IDCAMS DELETE NVR will be generated and run. The component named on the COMPONENT keyword not only has its VVDS record removed, but the component names are also passed through to DASDM to have the VTOC records deleted and physical space occupied by the components released.

**VVR** specifies that an IDCAMS DELETE VVR will be generated and run. The component named on the COMPONENT keyword not only has its VVDS record removed, but the component names are also passed through to DASDM to have the VTOC records deleted and physical space occupied by the components released.

**EXECUTE** indicates that you want run the command.

**SIMULATE** indicates that you want to trial the command without actually performing it.

**COUNT** specifies the number of records that are to be processed.

- 1—process one record. This is the default.
- ALL—process all remaining records. If COMPONENT or CONTROL-INTERVAL is also specified, ALL indicates all records from that point onwards will be processed.
- n—process the specified number of records. You can specify an integer from 1 to 99999999.

**PRINT-BEFORE** specifies that you want the record to be printed before any changes are made.

**Usage notes**

1. If ZAP VVDS DELETE deletes a record, an SMF type 60 record should be cut. This will allow RECOVER BCS or RECOVER VVDS to capture those changes in a forward recovery. These records can also be used in reporting and auditing.

---

**ZAP VVDS PATCH**

Use the ZAP VVDS PATCH command to alter a VVDS record or the contents of a VVDS control interval.

**Purpose**

```bash
ZAP VVDS(SYS1.VVDS.Vvolser) Patch( )
```
Keywords

**VVDS** specifies the volume serial of the VVDS.

**RBA** specifies the relative byte address of a specific record. The RBA is a four byte hexadecimal value. Specify the full value using 2-for-1 notation. For example, 0001C000.

**CONTROL-INTERVAL** specifies the number of the CI to be processed.

**COMPONENT** specifies a fully qualified or masked object name to be located within the VVR and NVR records maintained in the VVDS. Please remember that this will be the component name, not cluster, for VSAM objects. You can specify the component name as:

- A space-delimited character string. For example, SYS1.LINKLIB.
- A delimited character string. For example, C'SYS1.LINKLIB'.
- A delimited hexadecimal string. For example, X'E2E8E2F14BD3C9D5D2D3C9C2'.

**KRQ** specifies the keyrange qualifier suffix value that was appended to the component's data set name as a result of the DEFINE command KEYRANGE parameter. The value is in the format A001, A002, and so on. The ZAP command will append this value to the specified COMPONENT name as a compare value on the component name search.

**VVDS-RECTYPE** specifies the particular VVDS record type to be processed. You must specify one of the following values:
• "—Any VVDS record type. This is the default.
• N—Non-VSAM (NVR) record.
• Q—Secondary VSAM (VVR) record.
• Z—Primary VSAM (VVR) record.

**REP** specifies that you want to change the existing record contents. You must specify values in pairs, enclosed in parentheses, and separated by commas. The maximum length of the value of **REP** is 256 (512 characters of 2-for-1 notation).

- **displmnt**—a hex offset, relative to the start of a record or control interval. It must be either 2, 4, or 6 hexadecimal characters. The displacement values must be in ascending order.
- **C'value' or X'value'**—a character format or hexadecimal format. The length of the value compared is determined by the actual specification.

**VER** specifies that you want to verify the existing record contents. You must specify values in pairs, enclosed in parentheses, and separated by commas. The maximum length of the value of **VER** is 256 (512 characters of 2-for-1 notation).

- **displmnt**—a hex offset, relative to the start of a record or control interval. It must be either 2, 4, or 6 hexadecimal characters. The displacement values must be in ascending order.
- **C'value' or X'value'**—a character format or hexadecimal format. The length of the value compared is determined by the actual specification.

**Note:** Record fields such as type codes, flag bytes, and so on could easily test true at an offset other than the one intended or in a record or control interval other than the one intended. Therefore, it is recommended that multiple areas be compared, for added insurance that the desired record/control interval field is, in fact, altered.

**EXECUTE**
indicates that you want run the command.

**SIMULATE**
indicates that you want to trial the command without actually performing it.

**COUNT**
specifies the number of records that are to be processed.
- 1—process one record. This is the default.
- ALL—process all remaining records. If COMPONENT or CONTROL-INTERVAL is also specified, ALL indicates that all records from that point onwards will be processed.
- n—process the specified number of records. You can specify an integer from 1 to 99999999.

**PRINT-AFTER**
specifies that you want the record to be printed after any changes are made.

**PRINT-BEFORE**
specifies that you want the record to be printed before any changes are made.
Usage notes
1. If ZAP VVDS PATCH processes a record, an SMF type 60 record should be cut. This will allow RECOVER BCS or RECOVER VVDS to capture those changes in a forward recovery. These records can also be used in reporting and auditing.

ZAP VVDS PRINT

Use the ZAP VVDS PRINT command to print a VVDS record or the contents of a VVDS control interval.

Syntax

ZAP VVDS (SYS1.VVDS.Vvolser) PRINT (RBA(X'00000000') Count(1) DUMP
Path A
Path B

Path A:

RBA(X'00000000')
RBA(X'rba')
Component(key) X'key'
KRQ(annn)
VVDS-RECTYPE(k)
VVCM
VVCN
VVCR

DUMP
CellDUMP
Key-Only
Format

FATal-read-ERROR(ERROR)
FATal-read-ERROR(WARNING)

Path B:

Control-Interval(n)

ZAP VVDS PRINT Command Syntax

Keywords

**VVDS** specifies the volume serial of the VVDS.
RBA specifies the relative byte address of a specific record. The RBA is a four-byte hexadecimal value. Specify the full value using 2-for-1 notation. For example, 0001C000.

COMPONENT specifies a fully qualified or masked object name to be located within the VVR and NVR records maintained in the VVDS. Please remember that this will be the component name, not cluster, for VSAM objects. You can specify the component name as:

- A space-delimited character string. For example, SYS1.LINKLIB.
- A delimited character string. For example, C'SYS1.LINKLIB'.
- A delimited hexadecimal string. For example, X'E2E8E2F14BD3C9D5D2D3C9C2'.

KRQ specifies the keyrange qualifier suffix value that was appended to the component's data set name as a result of the DEFINE command KEYRANGE parameter. The value is in the format A001, A002, and so on. The ZAP command will append this value to the specified COMPONENT name as a compare value on the component name search.

VVDS-RECTYPE specifies the particular VVDS record type to be processed. You must specify one of the following values:

- *—Any VVDS record type. This is the default.
- N—Non-VSAM (NVR) record.
- Q—Secondary VSAM (VVR) record.
- Z—Primary VSAM (VVR) record.

VVCM indicates that any and all VVCM extension records to the VVCR are to be printed. A VVCM is required any time the physical allocated size of the VVDS exceeds approximately six cylinders. When VVCM is specified, only VVCM records are printed.

VVCN indicates that any and all VVCN extension records to the VVCR are to be printed. A VVCN is required any time there are more than 36 BCSs associated to a VVDS. When VVCN is specified, only VVCN records are printed.

VVCR indicates that the first record in the VVDS, the VVDS Volume Control Record (VVCR) is to be printed. When VVCR is specified, the VVCR and all VVCNs or VVCMs that are present within the VVDS are printed.

DUMP specifies that the records are shown in 16 bytes per line in hexadecimal and limited EBCDIC. This is similar to the "standard" dump format.

CELLDUMP specifies that each cell of the VVDS record is printed separately in DUMP format.

FORMAT specifies the VVDS record will be formatted by individual field within cell. For binary fields, the individual bit flags will, if known, be identified.

KEY-ONLY specifies that only the key content is printed.

FATAL-READ-ERROR controls what happens when a serious read error is encountered when processing the input object. Fatal errors are caused by anomalies in the VSAM structure. For example, a spanned record is maintained in two or
more control intervals; if the update number in these control intervals is not synchronized, attempts to read the record will fail.

- **ERROR**—issues an error message and terminates with a return code of 8.
- **WARNING**—issue a warning message and continues with a return code of 4.

**CONTROL-INTERVAL**

specifies the number of the CI to be processed.

**COUNT**

specifies the number of records that are to be processed.

- **1**—process one record. This is the default.
- **ALL**—process all remaining records. If COMPONENT or CONTROL-INTERVAL is also specified, ALL indicates that all records from that point onwards will be processed.
- **n**—process the specified number of records. You can specify an integer from 1 to 99999999.

**Usage notes**

None.
Chapter 22. Tape Audit Feature

Advanced Catalog Management Tape Audit feature provides audit procedures organized by tape management product.

These audits help determine whether tapes are being returned to the scratch pool or are lost for future use due to procedural or system errors. The primary inputs to these audits are the Tape Management Catalog contents and the secondary inputs include the Basic Catalog Structure.

Advanced Catalog Management provides these cataloged procedures:
- CKMAUDCR audits the catalog’s tape entries towards the RMM database.
- CKMAUDTC audits the catalog’s tape entries towards the CA1 TMC contents.
- CKMAUDTR is a rerun of CKMAUDTC. It is used to tune the errors to match your environment.

Running an Audit Procedure

This topic describes the steps for running an audit procedure to obtain audit results.

This procedure assumes you have already set up your Job card information needed for running the audit procedures.
1. Determine which audit procedure you want to run.
2. Display the audit procedure JCL in an edit session.
3. Optionally, update the audit procedure JCL to include or exclude specific catalogs from the audit.
4. Type SUBMIT to run the audit procedure.

Make sure the audit procedure JCL finished successfully before viewing or correcting any auditing errors.

Including and Excluding Catalogs

Many cataloged audit procedures contain an EXCLUDE DD statement that references an CKMZXCxx member in the hlq.SCKMPARM that lists the catalogs to include or exclude from the audit.

The xx in the member name matches the last two characters of its associated cataloged audit procedure.

To INCLUDE or EXCLUDE certain catalogs from the audit:
1. Modify the statement //EXCLUDE DD DSN=hlq.SCKMPARM(CKMZXCxx) in the cataloged audit procedure.
2. Modify member CKMZXCxx in hlq.SCKMPARM with one of the following:
   - a list of catalogs to exclude after the EXcludes FOLLOW statement.
   - a list of catalogs to include after the Includes FOLLOW statement.

INCLUDEs and EXCLUDEs are mutually exclusive and cannot be used in combination. Catalog names must start in column 1.

The following shows an example list of included catalogs for an audit procedure:
The following shows an example list of excluded catalogs for an audit procedure:

```plaintext
EXCLUDES FOLLOW
ICF.ZAPP02
CRTUCAT.EH.REORG01
```

## Correcting Errors

This chapter provides information on how to set up your audit procedures to correct errors automatically or to use Advanced Catalog Management to analyze and correct errors manually.

### Automatic Error Correction

Advanced Catalog Management allows you select the fixes that most appropriately satisfy your environment, make it the default, and then apply them automatically.

All of the audit procedures have a member in the `hlq.SCKMPARM` library. These are the generic plans and automatic fix routines for each diagnostic error that can be repaired. The recommended fixes must be defined by the customer where appropriate. You should review the automatic fixes member and select the fixes that most appropriately satisfy your environment so only those fixes are applied when the audit procedure is run.

A plan for each diagnostic error is distributed with the product and resides in the `hlq.PLANS` library. The naming convention of each plan member is the five-digit diagnostic error preceded by a P. The naming convention of the preferred fix for that plan is a five-digit diagnostic error preceded by an F. The contents of a sample automatic fixes member is shown below.

**Note:** This is an example of the CKMZAFxx member in the `hlq.SCKMPARM` library.

```
***************************** Top of Data *****************************
* LIST OF AUTOMATIC FIXES FOR THE xxxx AUDIT (CMAUDxx)
* COLUMN 1 IS PLAN MEMBER TO EXECUTE, COLUMN 10 IS PREFERRED FIX
Pxxxxx   Fxxxxx
```

Column 1 contains the start of the plan member name and column 10 contains the start of the fix to apply. If you do not want to apply a fix automatically, specify NONE for both the plan member to execute (starting in column 1) and the preferred fix (starting in column 10).

To apply the fixes automatically, you must make the following changes to your audit procedure:

1. Change the data set name in the `//FORMAT` statement to direct the JCL and control statement to the internal reader. For example:
   ```plaintext
   //FORMAT DD SYSOUT=(*,INTRDR)
   ```

2. Modify the `//SELECTS DD NAME` statement to include the automatic fixes member.
Error Threshold Monitoring

You can bypass automatic error correction if the number of errors exceeds a predefined threshold or based on filtering by high-level qualifier or group of high-level qualifiers.

The following example shows the default plan for diagnostic xxxx, where xxxx would be the diagnostic error.

```
***** ************************************************ Top of Data *****************************************************
000001 PLAN PLAN01
000002 *
000003 *
000004 SELECT *
000005 FROM (dataset)
000006 USING dataset(member)
000007 CREATE dataset .
000008 WHERE DIAGNOSTIC = 'xxxx'
000009 AND ERR-COUNT GT '0'
000010 END PLAN01
000011 PLAN PLAN02 COND EQ 0 PLAN01
000012 * SAMPLE PLAN TO TEST A COPY OF ARGUMENTS
000013 SELECT *
000014 FROM (dataset)
000015 USING dataset(member)
000016 USE error dataset
000017 FROMKEY ERRNUM = 'xxxx'
000018 TOKEY ERRNUM = 'xxxx'
000019 WHERE ERRNUM = 'xxxx'
000020 * ANY COPY MEMBER STATEMENTS FOR ENHANCED PLANS WOULD GO HERE
000021 * COPY TESTLIST
000022 * END PLAN02
```

PLAN01 determines if any diagnostics have been detected with the logic in lines 8 and 10. If the answer is zero, the COND example in PLAN02 determines whether the second part of the plan should run. The syntax allows more than one condition to be tested before a condition is true. All conditions must be satisfied before the result is set to true.

In this case, if some diagnostics are detected, PLAN02 captures and spools the error detail to the error dataset.

If you do not want to run fixes when the error count exceeds a predefined threshold, you can add a statement in the example after line 10 similar to the following:

```
WHERE DIAGNOSTIC = 'xxxx'
    AND ERR-COUNT GT '0'
    AND ERR-COUNT LT '10000'
```

Lines 21 and 22 of the example plan show a comment about copying a member for more conditional setting. This is where you can enter data set name filter patterns to distinguish test from production data or any other criteria. You can add the statements directly into the plan or place them in a separate member in the PLANS library. An example of what you might specify for line 21 to test true on a specific DSN is shown below:

```
AND TDSN AE 'DCD.**'
OR TDSN AE 'EDP.**'
OR TDSN AE 'DANR.**'
```

The AE operation means ACS PATTERN EQUAL to the filter pattern presented in the argument. You can use the corresponding operation of AN (ACS PATTERN NOT EQUAL) for an exclusion test.
If the same list of data sets are needed from plan to plan, you can create a member in the PLANS data set with these arguments in it and use the COPY statement to employ the member in each plan where needed. In the above example, COPY TESTLIST on line 22 is commented out. Create the member name and change the COPY statement to refer to that member. All the statements in the member TESTLIST will be placed after the WHERE statement and applied.

More than one selection plan can be processed against the same diagnostic. For example, if you have a list of data sets stored in member PRODLIST, an additional plan would be identical to the one shown above except COPY PRODLIST would be specified. Assume that the fix to apply for production data sets is different than the test data sets. The SELECT DD statement of the audit procedure would contain a reference to the automatic fix member containing multiple plans and their fixes.

**Automatic Error Correction Quick Reference**
The following table lists the members of SCKMPARM that are referred to by the SELECTS DD statement of the cataloged procedures and the diagnostics they would apply to. Additionally, the data description MAPS, used to conditionally qualify diagnostics, are listed in the MAPS column.

*Table 9. SCKMPARM Members Referred to by the SELECTS DD Statement*

<table>
<thead>
<tr>
<th>SCKMPARM Member</th>
<th>Audit Procedure</th>
<th>Diagnostics</th>
<th>MAPS</th>
</tr>
</thead>
<tbody>
<tr>
<td>CKMZAFRM</td>
<td>CKMAUDRM</td>
<td>6001W - 6007W</td>
<td>CKMZ0031</td>
</tr>
<tr>
<td>CKMZAFTC</td>
<td>CKMAUDTC</td>
<td>7001W - 7007W</td>
<td>CKMZ0033</td>
</tr>
<tr>
<td>CKMZAFTC</td>
<td>CKMAUDTR</td>
<td>7001W - 7007W</td>
<td>CKMZ0033</td>
</tr>
</tbody>
</table>

**Analyzing and Correcting Errors Manually**
Advanced Catalog Management provides a method of analyzing and correcting audit errors after the audits have been executed and researched.

The audit error correction processes create TSO, RMM, TMSBINQ, and TMSUPDTE commands. The selection and application of a particular fix strategy is your responsibility and should be applicable to your environment.

**Note:** Multiple users may apply fixes after an audit has been run.

To view and correct errors:

1. From the Tape Audit menu (CKM710) panel, type the option on the command line that applies to the audit procedure you have just run and press Enter. The Error (CKM720) panel for the selected audit procedure is displayed.
2. Type F (fix) next to the error number to fix the error and press Enter. The Fix List (CKM715) panel is displayed. This panel lists the provided fixes or diagnostic aids for this error.

**Tip:** To view additional details about a fix, type H next to the fix and press Enter on the Error (CKM720) or Fix List (CKM715) panels.

3. Type F (fix) next to the member name and press Enter. A sequential data set is automatically created with the JCL FIX control statements.

**Note:** If you do not already have a job card member defined for running jobs to fix audit errors, you will be prompted to create a job card member for your user ID.
4. Optionally, modify the JCL and control statement prior to executing them.

5. Type SUBMIT on the command line to run the JCL. The results of the execution are placed in a data set prefixed with your TSO user ID. For example, the following data set was created:

   UID1.FIXAUDIT.F11D1CA

   UID1 is the User ID and F11D1CA is the error number and the fix option for this error.

6. Type the data set name in the DSNAME LEVEL field on the Data Set List Utility panel (ISPF 3.4) to display the data set containing the results of the fix processing and press Enter. The results are displayed.

## Browsing Audit Results

Advanced Catalog Management provides a method of browsing audit results after the audits have been executed and researched.

To browse audit results:

1. From the Tape Audit menu (CKM710) panel, type the option on the command line that applies to the audit procedure you have just run and press Enter. The Error (CKM720) panel for the selected audit procedure is displayed.

   **Tip:** To view additional details about a fix, type $ next to the fix and press Enter.

2. Type B (browse) next to an error number and press Enter. The data set is displayed in browse mode. You can scroll right to see any additional information.

3. Press End (PF3) to return to the Error (CKM720) panel.

## Modifying Audit Results

Advanced Catalog Management provides a method of modifying audit results after the audits have been executed.

When you modify the audit results, you are not making permanent changes to the results. The modified data is made within a temporary data set. Any data that is deleted or corrected is still accessible by Advanced Catalog Management and is not updated until the audit is run again.

To modify audit results:

1. From the Tape Audit menu (CKM710) panel, type the option on the command line that applies to the audit procedure you have just run and press Enter. The Error (CKM720) panel for the selected audit procedure is displayed.

2. Type M (modify) next to an error number and press Enter. The data set is displayed in edit mode within a temporary data set. You can scroll right to see any additional information.

3. Make any deletions or modifications to the audit results and save your changes.

4. Press End (PF3) to advance to the Fixes (CKM715) panel.
Chapter 23. Multi-Purpose Query and Format Language

The Multi-Purpose Query and Format Language (MQFL) allows you to relate the contents of the data in one application to another, and provides a way to format the data into a report or utility control statements.

The Multi-Purpose Query and Format Language has two parts:
- the query, performed using the Query Language feature
- the format, performed using the Format Language feature

The Query Language Feature

The Query Language feature, based on the ANSI standard Structured Query Language (SQL), is used to create prototype logic, audit existing files, prepare conversion files, capture test data, obtain hexadecimal dump files of specific records, and extract records in their native format.

The Query Language feature addresses the broadest range of data processing needs. It is not limited to a specific discipline, such as DFSMShsm or ICF catalogs. It is designed to run efficiently and requires no data conversion.

For example, you can process your input files by:
- comparing the contents of two files and merging the result when specific criteria are met
- sorting the selected data
- applying boolean logic

After you have obtained your records with the Query Language feature, you can use the Format Language feature to format the records into something more useful.

Query Language Guidelines

You must follow these guidelines when using the Query Language to define a query and plans for multiple queries.

Query Guidelines

The Query Language is similar to the Structured Query Language (SQL). When you create a query, you include a group of Query Language statements that will process your input file and select only the data you want.

You must place your statements in the following order:
1. Begin the query with one of the following:
   - A SELECT statement to define the name of the fields you want to process in the file.
   - A JOIN statement to join the data from two input files.
2. Use the FROM statement to define one or more input data sets containing the files you want to process.
3. Use the CREATE statement to define the extract data set.
4. Use the USING statement to specify the file containing the Cobol map of the input file.
5. Use the FROMKEY and TOKEY statements to define where to start the processing in a KSDS.
6. Use the WHERE statement to define how to filter the data.
7. Use the ORDER BY statement to sort the data.

Each query must follow these guidelines:
- Use a maximum of 12 lines, starting with the SELECT statement.
- Use only one SELECT or JOIN statement.
- Use the ORDER BY statement to end a query that begins with the SELECT statement.
- Use the WHERE statement to end a query that begins with the JOIN statement.

Plan Guidelines

The Query Language feature allows you to group multiple queries together that perform more complex processing of your data. To group multiple queries together, you must place each query in a plan. A plan contains a logical set of Query Language statements that perform a single query. If you are performing a single query only, do not place it in a plan.

You must follow these rules when defining a plan:
- Specify the start of the plan as PLAN plan-name.
- Start the PLAN statement in column 1.
- Specify the end of the plan as END plan-name.
- Start the END statement in column 1.
- Separate the PLAN and END statement from the plan-name with one blank space.
- Place only one query in each plan.

Single Query Example

The following example shows a single query and does not require the PLAN and END statements.

```
* STORAGE GROUPS HIGH OCCUPANCE CAPTURE
SELECT SGROUP-HIGH,SPERCENT-OCC-HI
FROM (HLQ.MONTHLY.SUM
     HLQ.WEEKLY.SUM)
USING HLQ.CNTL(STGPSUM)
CREATE HLQ.STGP.WORK04.RAWHI
ORDER DISTINCT BY SGROUP-HIGH A, SPERCENT-OCC-HI D
```

Multiple Plans Example

The following example shows multiple plans called PLAN02 and PLAN04.

```
PLAN PLAN02
* STORAGE GROUPS LOW OCCUPANCY CAPTURE
SELECT SGROUP-LOW,SPERCENT-OCC-LO
FROM (HLQ.MONTHLY.SUM
     HLQ.WEEKLY.SUM)
USING HLQ.CNTL(STGPSUM)
CREATE HLQ.STGP.WORK04.RAWLO
ORDER DISTINCT BY SGROUP-LOW A, SPERCENT-OCC-LO A
END PLAN02
PLAN PLAN04
* ELIMINATE DUPLICATE STORAGE GROUPS
```
CREATE

Use the CREATE statement to build the extract data set to populate with the selected data from your query.

If the data set already exists, it is deleted and reallocated. If the data set does not exist, it is created as new. All data sets are allocated as RECFM=VB, LRECL=8192, and BLKSIZE=23476. The type of allocation units (CYLINDERS or TRACKS) and the number of units are controlled by a member in CNTL called DEFAULTS. You can change these allocation units as needed.

CREATE Data Set Example

You can specify the extract data set name as a fully qualified data set name with no apostrophes.
CREATE HLQ.DVLP.STGP.TR01MODL.CSV

FROM

Use the FROM statement to identify the input data set name for the query.

Generation data sets (GDGs) are supported by their entire spelled out name or the relative number in parentheses. You can also concatenate multiple data set names within parentheses.

Fully Qualified Data Set Name Example

Specify the fully-qualified data set name with no apostrophes.
FROM DCD.DEMO.SUM

Concatenated Data Sets Example

Concatenate data sets in parenthetical statements.
FROM (DCD.WEEKLY.SUM
   DCD.MONTHLY.SUM)

Concatenated GDGs Example

Place the GDG's relative number in parentheses.
FROM (HLQ.GDG.TEST(0)
   HLQ.GDG.TEST(-1)
   HLQ.GDG.TEST(-2))

FROMKEY

Use the FROMKEY statement to indicate where the processing should start in the input data sets specified in the FROM statement.

In the case of a KSDS, such as the DFSMSshsm CDS, the specified key value is used to point to the location in the file to start reading.
You can use FROMKEY and TOKEY independently.

**FROMKEY Example**

In this example, the processing begins at the first MCD record in the DFSMShsm MCDS that starts with DCD. It finishes after passing the last record containing DCD. This allows the process to skip uninteresting records and save a large amount of processing overhead.

```
* SAMPLE FROMKEY IN HEX
SELECT MCDDSN,MCDVSN,MCDTLR,MCDMIG
   FROM (RLS1.HSM.SPLIT.MCDS1
          RLS1.HSM.SPLIT.MCDS2)
   CREATE DCD.HSM.MCDPLAN1.FORMAT
   USING DCD.MFL.MAPS(MCD)
   FROMKEY MCDDSN = 'DCD.'
   TOKEY MCDDSN = 'DCD.'
   WHERE MCHTYPE = X'00'
   AND MCDFLGS ON B'10000000'
   ORDER BY MCDDSN A
```

**JOIN**

Use the JOIN statement to conditionally join the contents of one extract with the contents of a second extract.

The JOIN statements allows you to easily relate data from diverse sources without having to create a formal database. For example, you can extract and join legacy data, such as the contents of a DFSMShsm CDS, with a catalog extraction.

A query that contains the JOIN statement references two extract data sets that have already been created by a previous query so it does not contain the SELECT statement.

When you use the JOIN statement, you must also specify the following:

- The WITH parameter for the name of the second file.
- The CREATE statement for the name of the third file containing the combined extracts.
- The WHERE statement for the condition that determines how to join the data together.

The JOIN statement provides parameters you can specify on the OPTION statement that define how to treat mismatches in the file. The default is to show everything.
- NONULLS—suppress mismatches
- NULLSONLY—show mismatches only

**Step-by-Step JOIN Example**

This example shows the step-by-step process of running two separate queries and then joining their two data sets into a third data set.

**Step 1**—This step selects data from two data sets and creates the data set DCD.HSM.MCBPLAN FORMAT.

```
* SAMPLE FROMKEY IN HEX
SELECT BDSN,MCBDSN,MCBVSN,MCBDBU
   FROM (SIS.HSM.SPLIT.BCDS1
          SIS.HSM.SPLIT.BCDS2)
```
CREATE DCD.HSM.MCBPLAN.FORMAT
USING DCD.MFL.MAPS(MCB)
FROMKEY BDSN = 'X'C4'
TOKEY BDSN = 'X'C4'
WHERE BDSN EQ 'D'
AND MCBFLGS ON B'10000000'
ORDER BY BDSN A

Step 2—This step selects data from two additional data sets and creates the data set DCD.HSM.MCCPLAN.FORMAT.

* SAMPLE MCC PLAN GENERATED BY TTOC
SELECT MCCADSN,MCK,MCCVSN,MCCFBID(HEX)
FROM (RLS1.HSM.SPLIT.BCDS1
RLS1.HSM.SPLIT.BCDS2)
USING DCD.MFL.MAPS(MCC)
CREATE DCD.HSM.MCCPLAN.FORMAT
WHERE MCHTYPE = 'X'24'
AND MCK LK '.DS01.'
ORDER BY MCCADSN A

Step 3—This step joins the two data sets DCD.HSM.MCBPLAN.FORMAT and DCD.HSM.MCCPLAN.FORMAT from the previous two queries and processes the data.

* SAMPLE JOIN PLAN
JOIN DCD.HSM.MCBPLAN.FORMAT
WITH DCD.HSM.MCCPLAN.FORMAT
CREATE DCD.HSM.JOIN.FORMAT
WHERE BDSN EQ MCCADSN
OPTION NONULLS
FORMAT OPTIONS NOCOMP NOSTRING FB80
FORMAT FOLLOWS

You can run the queries described above as a multiple plan query.

PLAN PLAN01
* SAMPLE FROMKEY IN HEX
SELECT BDSN,MCBBDSN,MCBVSN,MCBBU
FROM (SIS.HSM.SPLIT.BCDS1
SIS.HSM.SPLIT.BCDS2)
CREATE DCD.HSM.MCBPLAN.FORMAT
USING DCD.MFL.MAPS(MCB)
FROMKEY BDSN = 'X'C4'
TOKEY BDSN = 'X'C4'
WHERE BDSN EQ 'D'
AND MCBFLGS ON B'10000000'
ORDER BY BDSN A
END PLAN01
PLAN PLAN02
* SAMPLE MCC PLAN GENERATED BY TTOC
SELECT MCCADSN,MCK,MCCVSN,MCCFBID(HEX)
FROM (RLS1.HSM.SPLIT.BCDS1
RLS1.HSM.SPLIT.BCDS2)
USING DCD.MFL.MAPS(MCC)
CREATE DCD.HSM.MCCPLAN.FORMAT
WHERE MCHTYPE = 'X'24'
AND MCK LK '.DS01.'
ORDER BY MCCADSN A
END PLAN02
PLAN PLAN03
* SAMPLE JOIN PLAN
JOIN DCD.HSM.MCBPLAN.FORMAT
WITH DCD.HSM.MCCPLAN.FORMAT
CREATE DCD.HSM.JOIN.FORMAT
WHERE BDSN EQ MCCADSN
OPTION NONULLS
FORMAT OPTIONS NOCOMP NOSTRING FB80
FORMAT FOLLOWS

JOIN Example

This example shows how the lowest and highest occupancy level of all the storage groups in the system are logically joined into a third file.

JOIN HLQ.STGP.WORK04.LOW.CSV
    WITH HLQ.STGP.WORK04.HIGH.CSV
CREATE HLQ.STGP.WORK04.HILO
    WHERE SGROUP-LOW EQ SGROUP-HIGH

The following shows the low occupancy extraction for storage groups.

AA=SGROUP-LOW
A0=SPERCENT-OCC-LO
AAAAAAAA AAA
AAAAAAAA 000
ARCHIVE 060
CONCPY 001
CRPSG9 003
CRSU1 041
DB2SG 017
DTS1 001
DUANEG 001
HSMBACK 001
HSMMIGL1 041
HSMMIGL2 009
NOGROUP 025
PROD 066
SGBRMI 001

The following shows the high occupancy extraction for storage groups.

AA=SGROUP-HIGH
A0=SPERCENT-OCC-HI
AAAAAAAA AAA
AAAAAAAA 000
ARCHIVE 063
CONCPY 001
CRPSG9 003
CRSU1 041
DB2SG 017
DTS1 001
DUANEG 001
HSMBACK 001
HSMMIGL1 050
HSMMIGL2 009
NOGROUP 028
PROD 076
SGBRMI 001

This following shows the JOIN results.

AA=SGROUP-LOW
A0=SPERCENT-OCC-LO
AB=SGROUP-HIGH
A1=SPERCENT-OCC-HI
AAAAAAAA AAA AAAAAAAA AAA
AAAAAAAA 000 BBBBBBBB 111
ARCHIVE 060 ARCHIVE 063
CONCPY 001 CONCPY 001
CRPSG9 003 CRPSG9 003
CRSU1 041 CRSU1 041
Missing Values Example

Using the JOIN example above, this example shows how to use OPTION NULLSONLY to list only values without a match.

```
JOIN HLQ.STGP.WORK04.LOW.CSV
  WITH HLQ.STGP.WORK04.HIGH.CSV
CREATE HLQ.STGP.WORK04.HILO
  WHERE SGROUP-LOW EQ SGROUP-HIGH
  OPTION NULLSONLY
```

The results are shown below.

```
AA=SGROUP-LOW
A0=SPERCENT-OCC-LO
AB=SGROUP-HIGH
A1=SPERCENT-OCC-HI
AAAAAAAA AAA AAAAAAAA AAA
AAAAAAAAA 000 BBBBBBBB 111
CONCPY 001 ............
CRSU1 041 ............
DTS1 001 ............
HSMBACK 001 ............
HSMMIGL2 009 ............
```

No Matches Example

Using the JOIN example above, this example shows how to use OPTION NONULLS to eliminate records that have no match.

```
JOIN HLQ.STGP.WORK04.LOW.CSV
  WITH HLQ.STGP.WORK04.HIGH.CSV
CREATE HLQ.STGP.WORK04.HILO
  WHERE SGROUP-LOW EQ SGROUP-HIGH
  OPTION NONULLS
```

The results are shown below.

```
AA=SGROUP-LOW
A0=SPERCENT-OCC-LO
AB=SGROUP-HIGH
A1=SPERCENT-OCC-HI
AAAAAAAA AAA AAAAAAAA AAA
AAAAAAAAA 000 BBBBBBBB 111
ARCHIVE 060 ARCHIVE 063
CRPSG9 003 CRPSG9 003
DB2SG 017 DB2SG 017
DUANEG 001 DUANEG 001
HSMMIGL1 041 HSMMIGL1 050
NOGROUP 025 NOGROUP 028
PROD 066 PROD 076
SGBRMI 001 SGBRMI 001
```
ORDER BY

Use the ORDER BY statement to sort the selected data into ascending or descending order and end the query.

To order the selected data in ascending order, specify A one space after the field name. To order the selected data in descending order, specify D one space after the field name. The default is to sort the data in ascending order.

You can specify the DISTINCT parameter to eliminate duplicate rows. You must specify the DISTINCT parameter before the BY keyword of the ORDER BY statement.

All field names after the ORDER BY statement must also be specified in the SELECT statement. The ORDER BY statement ends the query.

Ascending Order Example

This example shows how to sort the data in ascending order by date and time.

* STORAGE GROUP NOGROUP AT 09 AM MONTHLY
  SELECT SDATE,STIME,SSYSID,SGROUP,SCAPACITY-CYL,SCALLOC-CYL,
       SPERCENT-OCC,SHIGH-THRSH
  FROM (HLQ.MONTHLY.SUM)
  USING HLQ.CNTL(STGPSUM))
  CREATE HLQ.STGP.TR01MODL.CSV
  WHERE SGROUP = 'NOGROUP'
  AND STIME = '07'
  ORDER BY SDATE A, STIME A

Remove Duplicate Rows Example

In this example, the data in the field SGROUP-HIGH is sorted in ascending order and the data in the field SPERCENT-OCC-HI is sorted in descending order. The DISTINCT parameter will then remove any duplicate rows.

* STORAGE GROUPS HIGH OCCUPANCE CAPTURE
  SELECT SGROUP-HIGH,SPERCENT-OCC-HI
  FROM (HLQ.MONTHLY.SUM
  FROM (HLQ.WEEKLY.SUM)
  USING HLQ.CNTL(STGPSUM))
  CREATE HLQ.STGP.WORK04.RAWHI
  ORDER DISTINCT BY SGROUP-HIGH A, SPERCENT-OCC-HI D

SELECT

Use the SELECT statement to identify the names of the fields you want to extract from the input file.

The following lists the guidelines for the SELECT statement:
- Use to start the query.
- Separate each field with a comma.
- List additional fields on the next line and specify a comma after the last field on the previous line.
- Select each field in the record from the position that it corresponds to in the Cobol map.
- Specify SELECT * to extract the entire file.
- Specify SELECT *DUMP to print the selected records in a SNAP DUMP format.
- Do not use SELECT * or SELECT *DUMP with the ORDER BY statement.
SELECT Example

The following example shows the SELECT statement and some fields that are shown on mapping.

```
SELECT SDATE,STIME,SSYSID,SGROUP,SCAPACITY-CYLs,SALLOC-CYLs,
       SPERCENT-OCC,SHIGH-THRSH
```

In this example, the selected fields are matched with the Cobol map of the file. Additionally, all numeric fields are converted to display numeric. If a selected field occurs more than once in a record, multiple selected lines are created.

```
01 STORAGE-GROUP-SUMMARY.
   * IBM JULIAN DATE FIELD SDATE
   05 SDATE PIC 9(7).
   05 STIME PIC X(8).
   05 SSYSID PIC X(4).
   10 SGROUP PIC X(8).
      05 SGROUP-H REDEFINES SGROUP-GROUP.
----------------------------------
   05 SCAPACITY-CYLs PIC 9(13).
   05 SALLOC-CYLs PIC 9(13).
----------------------------------
   05 OCCUPANCY.
      10 SPERCENT-OCC PIC 9(3).
      05 SHIGH-THRSH PIC 9(3).
----------------------------------
   05 FILLER PIC X(13).
   * FIELD DESCRIPTIONS FOLLOW.
   * SDATE DATE STORAGE GROUP SUMMARY WAS CREATED
   * STIME TIME STORAGE GROUP SUMMARY WAS CREATED
   * SSYSID SYSTEM IDENTIFIER
   * SGROUP NAME OF STORAGE GROUP
   * SVOLS NUMBER OF VOLUMES WITH GROUP
   * SCAPACITY-CYLs GROUP CAPACITY IN CYLINDERS
   * SFREE-CYLs NUMBER OF FREE CYLINDERS IN GROUP
   * SPERCENT-OCC STORAGE GROUP PERCENT ALLOCATED
```

The following example shows what the file would look like when you run the SELECT statement. Each selected field is assigned a pair of legend characters. The DA=SDATE signifies the SDATE field. The same matching pair of legend characters are aligned vertically over the position in the record that represents that field as shown in the DA fields in the example below. This continues with each selected field. The selection of the legends has significance in their names. For example, all legends with D as the first character represent date fields. All legends with an alpha character in the second character represent alpha fields. All legend characters with a numeric as the second character represent numeric fields.

```
000001 DA=SDATE
000002 AA=STIME
000003 AB=SSYSID
000004 AC=SGROUP
000005 A0=SCAPACITY-CYLs
000006 A1=SALLOC-CYLs
000007 A2=SPERCENT-OCC
000008 A3=SHIGH-THRSH
-------------------1-------------------2-------------------3-------------------4-------------------5-------------------6-------------------7--
000009 DDDDDDD AAAAAAA AAA AAAAA AAA AAAAA AAA AAAAA AAA AAA AAAAA AAA AAA AAAAA AAA AAA AAAAA AAA AAA AAAAA AAA AAA AAAAA AAA AAA AAAAA AAA AAA AAAAA AAA AAA AAAAA AAA AAA AAAAA AAA AAA AAAAA AAA AAA AAAAA AAA AAA AAAAA AAA AAA AAAAA AAA AAA AAAAA AAA AAA AAAAA AAA AAA AAAAA AAA AAA AAAAA AAA AAA AAAAA AAA AAA AAAAA AAA AAA AAAAA AAA AAA AAAAA AAA AAA AAAAA AAA AAA AAAAA AAA AAA AAAAA AAA AAA AAAAA AAA AAA AAAAA AAA AAA a
000010 AAAAAAA AAAAAA AAAA AAAA AAAA AAAA AAA AAAAA AAA AAA AAAAA AAA AAA AAAAA AAA AAA AAAAA AAA AAA AAAAA AAA AAA AAAAA AAA AAA AAAAA AAA AAA AAAAA AAA AAA AAAAA AAA AAA AAAAA AAA AAA AAAAA AAA AAA AAAAA AAA AAA AAAAA AAA AAA AAAAA AAA AAA AAAAA AAA AAA AAAAA AAA AAA AAAAA AAA AAA AAAAA AAA AAA AAAAA AAA AAA AAAAA AAA AAA AAAAA AAA AAA AAAAA AAA AAA AAAAA AAA AAA AAAAA AAA AAA AAAAA AAA AAA AAAAA AAA AAA AAAAA AAA AAA AAAAA AAA AAA AAAAA AAA AAA AAAAA AAA AAA AAAAA AAA AAA AAAAA AAA AAA AAAAA AAA AAA AAAAA AAA AAA AAAAA AAA AAA AAAAA AAA AAA AAAAA AAA AAA AAAAA AAA AAA AAAAA AAA AAA AAAAA AAA AAA AAAAA AAA AAA AAAAA AAA AAA AAAAA AAA AAA AAAAA AAA AAA AAAAA AAA AAA AAAAA AAA AAA AAAAA AAA AAA AAAAA AAA AAA AAAAA AAA AAA AAAAA AAA AAA AAAAA AAA AAA AAAAA AAA AAA AAAAA AAA AAA AAAAA AAA AAA AAAAA AAA AAA AAAAA AAA AAA AAAAA AAA AAA AAAAA AAA AAA AAAAA AAA AAA AAAAA AAA AAA AAAAA AAA AAA AAAAA AAA AAA AAAAA AAA AAA AAAAA AAA AAA AAAAA AAA AAA AAAAA AAA AAA AAAAA AAA AAA AAAAA AAA AAA AAAAA AAA AAA AAAAA AAA AAA AAAAA AAA AAA AAAAA AAA AAA AAAAA AAA AAA AAAAA AAA AAA AAAAA AAA AAA AAAAA AAA AAA AAAAA AAA AAA AAAAA AAA AAA AAAAA AAA AAA AAAAA AAA AAA AAAAA AAA AAA AAAAA AAA AAA AAAAA AAA AAA a
000011 2005113 07:17:03 DVLPC NOGROUP 00000001148598 0000000309789 027 085
000012 2005114 07:14:11 DVLPC NOGROUP 00000001151938 0000000310545 027 085
000013 2005115 07:14:31 DVLPC NOGROUP 00000001151938 0000000311342 028 085
000014 2005116 07:19:08 DVLPC NOGROUP 00000001148598 0000000307399 027 085
000015 2005117 07:11:06 DVLPC NOGROUP 00000001145258 0000000297359 026 085
```
TOKEY

Use the TOKEY statement to specify where the processing should end in the FROM data set.

After the key value specified in the argument is passed, processing stops.

USING

Use the USING statement to define the file that contains the Cobol map of the input file.

The data set name containing the Cobol map is specified as a fully-qualified data set name with no apostrophes. The Cobol map can be a member of a PDS or a sequential file.

If the input file has already been processed by the Query Language feature, you must use the DEFERRED parameter.

Fully Qualified Data Set Name Example

This example shows a fully qualified data set name with no apostrophes.

USING HLQ.CNTL(STGPSUM)

DEFERRED Parameter Example

This example shows the DEFERRED parameter in the query of PLAN03 because the query in PLAN01 has already processed the three input files using a Cobol map in HLQ.CNTL(STGPSUM).

WHERE

Use the WHERE statement to specify the filtering for selecting specific data.
If the WHERE statement is not specified, all fields specified in the SELECT statement are selected without any filtering (not recommended).

Follow these rules when using the WHERE statement:

- You can specify boolean operators.
- You can specify an AND or OR connector to each argument.
- You can use parenthetical statements. All conditions coded in parentheses are evaluated to be either true or false.
- You can specify NOT to reverse a true or false condition.
- The fields in the WHERE statement must exist in the Cobol map specified in the USING statement.
- You cannot specify the literal before the field.

If you specify an operator, such as LT (less than), the field specified in the WHERE statement is compared to the argument specified by the literal. If the content of the field is less than the specified literal, then the condition is true and the record is included. The same logic applies for the GT (greater than) operator. If the content of the field is greater than the literal, then the condition is true and the record is included.

**Literal Equals Example**

This example shows a simple equate to a literal value.

```cobol
WHERE SGROUP EQ 'HSMML1'
```

**Greater Than Example**

This example shows a field called MIGDATE is compared to a field called BACKDATE in the same record. If the contents of MIGDATE is greater than the contents of the data described by BACKDATE, the condition is true.

```cobol
WHERE MIGDATE GT BACKDATE
```

**AND Connector Example**

This example shows two arguments connected with AND. In this case, both arguments must be satisfied before the record is selected.

```cobol
WHERE MIGDATE GT BACKDATE
    AND VOLSER EQ '123456'
```

**OR Connector Example**

This example shows two arguments connected with OR. In this example, either condition may be true to cause record selection.

```cobol
WHERE MIGDATE GT BACKDATE
    OR MIGDATE GT '*-5'
```

**Parenthetical Arguments Example**

This example shows parenthetical arguments.

```cobol
WHERE (MIGDATE GT BACKDATE
    AND VOLSER EQ '123456')
    AND (MIGDSN EQ 'USERID.DATA.SET'
        OR MIGDSN EQ 'ANOTHER.USER.DATA.SET')
```
Reversed Parenthetical Arguments Example

This example shows parenthetical arguments that are reversed by NOT.

```
WHERE (MIGDATE GT BACK DATE
  AND VOLSER EQ '123456')
  AND NOT(MIGDSN EQ 'USERID.DATA.SET'
    OR MIGDSN EQ 'ANOTHER.USER.DATA.SET')
```

Boolean Operators

This topic describes the supported boolean operators you can specify on the WHERE statement.

Table 10. Boolean Operators

<table>
<thead>
<tr>
<th>Operator</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>EQ or =</td>
<td>The condition is TRUE if the contents of the data described by the first argument is EQUAL TO the second argument.</td>
</tr>
<tr>
<td>NE or ^=</td>
<td>The condition is TRUE if the contents of the data described by the first argument is NOT EQUAL TO the second argument.</td>
</tr>
<tr>
<td>LT or &lt;</td>
<td>The condition is TRUE if the contents of the data described by the first argument is LESS THAN the second argument.</td>
</tr>
<tr>
<td>GT or &gt;</td>
<td>The condition is TRUE if the contents of the data described by the first argument is GREATER THAN the second argument.</td>
</tr>
<tr>
<td>LE or &lt;=</td>
<td>The condition is TRUE if the contents of the data described by the first argument is LESS THAN OR EQUAL TO the second argument.</td>
</tr>
<tr>
<td>GE or &gt;=</td>
<td>The condition is TRUE if the contents of the data described by the first argument is GREATER THAN OR EQUAL TO the second argument.</td>
</tr>
<tr>
<td>NH or ^&gt;</td>
<td>The condition is TRUE if the contents of the data described by the first argument is NOT HIGHER THAN the second argument.</td>
</tr>
<tr>
<td>NL or ^&lt;</td>
<td>The condition is TRUE if the contents of the data described by the first argument is NOT LOWER THAN the second argument.</td>
</tr>
</tbody>
</table>

Extended Boolean Operators

This topic describes the extended Boolean operators you can specify on the WHERE statement.

Table 11. Extended Boolean Operators

<table>
<thead>
<tr>
<th>Operator</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>LIKE or LK ~ (tilde)</td>
<td>The condition is TRUE if the string of data described by the second argument occurs anywhere in the first argument. This is useful to identify data in the data field that is unpredictable or free form.</td>
</tr>
<tr>
<td>NK</td>
<td>The condition is TRUE if the string of data described by the second argument does NOT occur anywhere in the first argument. This is useful to identify data in the data field that is unpredictable or free form.</td>
</tr>
<tr>
<td>AE</td>
<td>The string of data described by the second argument must be an ACS filter pattern. The condition is TRUE if the filter pattern matches the first argument. This is useful when working with OS/390 data set naming conventions. For example, WHERE DSN1 AE 'USERID.*.CNTL'.</td>
</tr>
<tr>
<td>AN</td>
<td>The string of data described by the second argument must be an ACS filter pattern. The condition is TRUE if the filter pattern does NOT match the first argument. This is useful when working with OS/390 data set naming conventions. For example, WHERE DSN2 AN 'USERID.*.CLIST'.</td>
</tr>
</tbody>
</table>
Table 11. Extended Boolean Operators (continued)

<table>
<thead>
<tr>
<th>Operator</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>IS NUMERIC</td>
<td>The condition is TRUE if the contents of the data described by the first argument contains valid numeric data. Numeric data is described as</td>
</tr>
<tr>
<td></td>
<td>packed decimal, fixed point binary or display numeric. The condition is FALSE if a field described as numeric is compared to a numeric literal</td>
</tr>
<tr>
<td></td>
<td>that is not numeric. This evaluation ensures the data is numeric before the comparison is made.</td>
</tr>
<tr>
<td>IS NOT NUMERIC</td>
<td>The condition is TRUE if the content of the data described by the first argument contains non-numeric data. Numeric data is described as</td>
</tr>
<tr>
<td></td>
<td>packed decimal, fixed point binary, or display numeric. This is useful for identifying data in a file that should be numeric, but it is not.</td>
</tr>
<tr>
<td>IS NULL</td>
<td>The condition is TRUE if the content of the data described by the first argument contains all null data (hex zeroes).</td>
</tr>
<tr>
<td>IS NOT NULL</td>
<td>The condition is TRUE if the content of the data described by the first argument does NOT contain all null data (hex zeroes).</td>
</tr>
<tr>
<td>ON</td>
<td>OS/390 files such as the HSM Control Data Sets contain many bit settings that have meaning. ANSI SQL statements do not provide these</td>
</tr>
<tr>
<td></td>
<td>operators. The condition is TRUE if the bit pattern described by the second argument all match. For example, WHERE MCDFLGS ON B'10000000'.</td>
</tr>
<tr>
<td>OFF</td>
<td>The condition is TRUE if the bit pattern described by the second argument has no matching bits. For example, WHERE MCDFLGS OFF B'10000000'.</td>
</tr>
<tr>
<td>MIX</td>
<td>The condition is TRUE if the bit pattern described by the second argument has some matching bits. For example, WHERE MCDFLGS OFF B'10001000'.</td>
</tr>
</tbody>
</table>

Argument Literals

This topic describes how to deal with literals in an argument specified on the WHERE statement.

You must enclose literals in the argument within apostrophes. The length of the value specified in the literal is used for the length of the compare. For example, if a value like DCD.THIS.IS.A.LOGN.NAME is compared to DCD. as an equal value, the condition would be true. DCD. matches the first four characters of the field in the argument.

Table 12. Argument Literals

<table>
<thead>
<tr>
<th>Operator</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Relative date argument</td>
<td>If the field being examined is described in the map as a date, a relative date argument may be coded in the argument field. Each time the query is processed, this date is computed from today's date plus or minus the numeric value after the asterisk. For example, '*-5'.</td>
</tr>
<tr>
<td>BINARY</td>
<td>For bit manipulation, an argument may be presented in a bit pattern format. For example B'10000000' is interpreted as value X'80' in the query.</td>
</tr>
<tr>
<td>HEX</td>
<td>Typically, the values coded are in EBCDIC format, but sometimes values exist in the files that cannot be represented by anything other than hexadecimal equivalents. Therefore, the HEX argument literal is provided. For example, X'4040' represents two blanks. The argument built in the query would be translated to two blanks.</td>
</tr>
</tbody>
</table>
Table 12. Argument Literals (continued)

<table>
<thead>
<tr>
<th>Operator</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>NUMBERS</td>
<td>Numerical values are converted to the packed for binary arithmetic values before comparing. If the field specified in argument one is display, the compare follows the length rules of the literal as opposed to evaluating the entire number.</td>
</tr>
</tbody>
</table>

Format Language Feature

The Format Language feature allows you use FORMAT commands to organize and present the data from your query.

The Format Language feature is integrated directly into the query to provide seamless processing. When the query has selected qualified records and placed them into rows and columns (a table), you can browse, edit, or remark on the contents. These records are turned into something you can use such as control statements to interface with other utilities, comma separated values (CSV) for graphic processes, or annotated tables for inserting constants.

The Format Language feature has two FORMAT statements:
- FORMAT OPTIONS defines how to organize the data from your query.
- FORMAT FOLLOWS defines how to present the data from your query.

FORMAT OPTIONS Statement

The FORMAT OPTIONS statement uses many parameters that define how to organize the data from your query.

The FORMAT OPTIONS statement must begin in column 1. You can specify more than one FORMAT OPTIONS statement to describe all of the parameters you want. Titles functions are not provided. The data dictionary it uses is generated automatically from the SQL legends.

You can specify the following parameters on the FORMAT OPTIONS statement:
- COMP or NOCOMP
- DATE= date format
- DATE=1940001.BLANKS or DATE=1940001.ASTERISK
- DUPLICATE (/field)
- FB80
- TOTALS or TOTALSONLY or NOTOTALS
- STRING or NOSTRING

COMP and NOCOMP

Use the COMP or NOCOMP parameter on the FORMAT OPTIONS statement to define what to do with trailing blanks when a substitution is made for the specified field.

COMP causes the format to suppress trailing blanks after the field and NOCOMP leaves the blanks in place. For example, if the field represented by /field was 44 bytes long, and the actual substitution was 30 bytes long, 14 bytes of trailing blanks would be compressed if COMP is specified.
COMP Example

In this example, FORMAT OPTIONS COMP is used to compress the format and a comma is used to separate the fields.

```
FORMAT OPTIONS COMP
FORMAT FOLLOWS
/SGROUP,OCC=/SPERCENT-OCC
```

Because the field /SGROUP is eight bytes long, the trailing blanks after the fields /SGROUP and /SPERCENT-OCC are compressed (eliminated) and a comma separates them.

```
ARCHIVE,OCC=060
HSMBACK,OCC=001
NOGROUP,OCC=027
SGBRMI,OCC=001
SGBRMP,OCC=047
SGBRMSD,OCC=002
```

NOCOMP Example

In this example, FORMAT OPTIONS NOCOMP is used to align each column of fields.

```
FORMAT OPTIONS NOCOMP
FORMAT FOLLOWS
/SGROUP OCC=/SPERCENT-OCC
```

Because the field /SGROUP is eight bytes long, the trailing blanks after the field are not compressed (eliminated).

```
ARCHIVE OCC=060
HSMBACK OCC=001
NOGROUP OCC=027
SGBRMI OCC=001
SGBRMP OCC=047
SGBRMSD OCC=002
```

DATE

Use the DATE parameter on the FORMAT OPTIONS statement to define how to format the date.

Using DATE=\textit{date format} will format the date in the pattern you specify, where MM is the month, DD is the day, and YYYY is the year. You can use a character, such as a slash (/) or a dash (-), to separate the day, month, and year. If you specify a date pattern that spells out the day and month, it is always formatted in the order of DAY MONTH YEAR.

The following lists sample date formats:

- DATE=YYYYDDD—Julian date. This is the default.
- DATE=DD/MM/YYYY—day/month/year
- DATE=MM/DD/YYYY—month/day/year
- DATE=YYYY/MM/DD—year/month/day
- DATE=YYYY/DD/MM—year/day/month
- DATE=DAYMONTH.D—day and month spelled out in Dutch
- DATE=DAYMONTH.E—day and month spelled out in English
- DATE=DAYMONTH.F—day and month spelled out in French
- DATE=DAYMONTH.G—day and month spelled out in German
DATE=DAYMONTH.I—day and month spelled out in Italian
DATE=DAYMONTH.S—day and month spelled out in Spanish

If the input date is invalid or null, 1940001 is substituted in the extract. You can then replace it with a blank or an asterisk in the format. DATE=1940001.BLANKS or DATE=1940001.ASTERISK, and DATE=date display format can both be coded.

**DATE Parameter Examples**

The following shows examples of the DATE parameter. These examples use a slash (/) or a dash (-) as the separating character.

If the input date is 2005292 and FORMAT OPTIONS DATE=MM/DD/YYYY is specified, the date will be formatted as 10/19/2005.

If the input date is 2005292 and FORMAT OPTIONS DATE=DD/MM/YYYY is specified, the date will be formatted as 9/10/2005.

If the input date is 2005292 and FORMAT OPTIONS DATE=YYYY-MM-DD is specified, the date will be formatted as 2005-10-19.

If the input date is 2005292 and FORMAT OPTIONS DATE=DAYMONTH.E is specified, the date will be formatted in English as MONDAY OCTOBER 19 2005.

If the input date is 2005292 and FORMAT OPTIONS DATE=DAYMONTH.G is specified, the date will be formatted in German as MONTAG OKTOBER 19 2005.

If the input date is invalid and FORMAT OPTIONS DATE=1940001.BLANKS is specified, the date will be formatted as blanks.

If the input date is invalid and FORMAT OPTIONS DATE=1940001.ASTERISKS is specified, the date will be formatted as * * * * * * *

**DUPLICATE(/field)**

Use the DUPLICATE(/field) parameter on the FORMAT OPTIONS statement to determine how to format the header and trailer each time a change in the specified field occurs.

The control statement .F1 describes the first set of header and trailer values to format when encountering the first non-duplicate field specified in the DUPLICATE parameter. The control statement .F2 describes the second set of header and trailer values to format when encountering the first non-duplicate field.

**DUPLICATE(/field) Example**

This example shows how to define the DUPLICATE parameter and display the headers (.H) and trailer (.T) each time there is a change in the storage group name (/SGROUP).

* STORAGE GROUP TWO GROUPS SEVERAL HOURS
SELECT SDATE,STIME,SSYSID,SGROUP,SCAPACITY-CYLS,SALLOC-CYLS,
SPERCENT-OCC,SHIGH-THRSH
 ..
  ..
FORMAT OPTIONS FB80 DUPLICATE(/SGROUP)
FORMAT Follows
The results are shown below.

```
DEFINE (HSMIGL1 +
  (HIGH(080 +
    ANOTHER VALUE(07:10:45 HSMIGL1 +
    ANOTHER VALUE(09:00:54 HSMIGL1 +
    CLOSING VALUE ))))

DEFINE (NOGROUP +
  (HIGH(085 +
    ANOTHER VALUE(07:10:45 NOGROUP +
    ANOTHER VALUE(09:00:54 NOGROUP +
    CLOSING VALUE ))))

DEFINE (PROD +
  (HIGH(085 +
    ANOTHER VALUE(07:10:45 PROD +
    ANOTHER VALUE(09:00:54 PROD +
    CLOSING VALUE )))))
```

**DUPLICATE(field)** with .F1 and .F2 Example

The DEFINE NVSAM for a tape data set requires control statements to describe a series of tape volume serial numbers (VOLUMES) and a control statement to describe the file sequence numbers (FSQN). This example shows how to define the DUPLICATE parameter with the .F1 and .F2 control statements for multi-volume, multi-file data sets on tape.

* MULTI VOLUME AND MULTI FILE PROCESSING.

```
SELECT C-DSNAME, VOLSEQ, VOL, FILESEQ, DEVNAME, UNIT-C, DEVTYPE
FROM DCD.CATTAPES.FLAT
CREATE DCD.CAT.CATRCAT.FORMAT
USING DCD.MFL.MAPS(MAPEXPLR)
WHERE VOLTYPE = 'TAPE'
ORDER BY C-DSNAME A, VOLSEQ A
FORMAT OPTIONS COMP DUPLICATE(/C-DSNAME) F80
```

The following shows the results. Notice that when there is only one volume and one file, it is formatted properly.

```
DEF NVSAM (NAME(BACKUP.AAAA.DSN1) DEVT(3490) +
  VOLUMES( +
    100001, +
    100002, +
    100003, +
    100004, +
  ) +
  FSEQN( +
    00000, +
    00000, +
    00000, +
    00000, +
  )
```
DEF NVSAM (NAME(BACKUP.ARCHN1.FEB19) DEVT(3490) +
VOLUMES( +
    200008, +
    000001, +
    00001, +
  ) +
FSEQN( +
    00001, +
  )
}
DEF NVSAM (NAME(BACKUP.ARCHV1.G0957V00) DEVT(3490) +
VOLUMES( +
    200040, +
    00001, +
  ) +
FSEQN( +
    00001, +
  )
)

FB80
Use the FB80 parameter on the FORMAT OPTIONS statement to format each line
as fixed block with a record length of 80.

This parameter can format sundry utility control statements that are compatible with
utility requirements. Variable block is the default.

Fixed Block Format Example

The following example shows the FORMAT OPTIONS statement with the FB80
parameter.

* STORAGE GROUP SEVERAL GROUPS
SELECT SDATE,STIME,SSYSID,SGROUP,SCAPACITY-CYLS,SALLOC-CYLS,
    SPERCENT-OCC,SHIGH-THRSH
FROM (HLQ.WEEKLY.SUM)
USING HLQ.CNTL(STGPSUM))
CREATE HLQ.STGP.TR04DEMO.CSV
WHERE (SGROUP = 'NOGROUP'
    OR SGROUP = 'HSMMIGL1'
    OR SGROUP = 'PROD'
    OR SGROUP = 'ARCHIVE')
AND (SDATE = '*-1'
    AND STIME = '09'
ORDER DISTINCT BY SGROUP A
FORMAT OPTIONS FB80
FORMAT FOLLOWS
DEFINE(/SGROUP) +
    CYLS(/SCAPACITY-CYLS) +
    SECONDARY(/SALLOC-CYLS)

The utility control statements that are created are shown below.

DEFINE(ARCHIVE) +
    CYLS(0000000003339) +
    SECONDARY(0000000002017)
DEFINE(HSMMIGL1) +
    CYLS(0000000020034) +
    SECONDARY(0000000008478)
DEFINE(NOGROUP) +
    CYLS(00000001141918) +
    SECONDARY(00000000289689)
DEFINE(PROD) +
    CYLS(0000000233800) +
    SECONDARY(0000000170178)

STRING and NOSTRING
Use the STRING or NOSTRING parameter on the FORMAT OPTIONS statement to
indicate whether each line should be continuous.
Use the plus sign (+) or minus sign (-) as the last connector character on the line to indicate the line continues onto the next line.

STRING suppresses the connector and the data on the next line is formatted as a continuous line. If the format layout does not contain a connector and STRING was specified, the formatted results are unpredictable.

NOSTRING treats each line individually and the connector symbols, if present, are included (not suppressed). NOSTRING is the default.

**Continuous Lines with Compression Example**

In the example below, FORMAT OPTIONS COMP STRING is specified. The STRING parameter formats the selected fields as a continuous line and the COMP parameter removes any trailing blanks after each field.

```
* STORAGE GROUP SEVERAL GROUPS
SELECT SDATE,STIME,SSYSID,SGROUP,SCAPACITY-CYLS,SALLOC-CYLS,
     SPERCENT-OCC,SHIGH-THRSH
FROM (HLQ.WEEKLY.SUM)
```

```
FORMAT OPTIONS COMP STRING
FORMAT FOLLOWS
/SGROUP,/SDATE,/STIME,/SSYSID,/SGROUP,/SCAPACITY-CYLS,/SALLOC-CYLS,+
/SPERCENT-OCC,/SHIGH-THRSH
```

The results are shown below.

```
ARCHIVE,2005132,09:00:54,DVLP,ARCHIVE,0000000003339,0000000002017,061,085
HSMMIGL1,2005132,09:00:54,DVLP,HSMMIGL1,0000000020034,0000000008478,043,080
NOGROUP,2005132,09:00:54,DVLP,NOGROUP,0000001141918,0000000289689,026,085
PROD,2005132,09:00:54,DVLP,PROD,0000000233800,0000000170178,073,085
```

**No Compression Example**

In this example, FORMAT OPTIONS NOCOMP STRING is specified. The STRING parameter formats the selected fields as a continuous line and the NOCOMP parameter retains any trailing blanks after each field.

```
* STORAGE GROUP SEVERAL GROUPS
SELECT SDATE,STIME,SSYSID,SGROUP,SCAPACITY-CYLS,SALLOC-CYLS,
     SPERCENT-OCC,SHIGH-THRSH
FROM (HLQ.WEEKLY.SUM)
```

```
FORMAT OPTIONS NOCOMP STRING
FORMAT FOLLOWS
/SGROUP /SDATE /STIME /SSYSID /SGROUP /SCAPACITY-CYLS /SALLOC-CYLS +
/SPERCENT-OCC /SHIGH-THRSH
```

The results are shown below.

```
---+----1----+----2----+----3----+----4----+----5----+----6----+----7----+----
ARCHIVE 2005132 09:00:54 DVLP ARCHIVE 0000000003339 0000000002017 061 085
HSMMIGL1 2005132 09:00:54 DVLP HSMMIGL1 0000000020034 0000000008478 043 080
NOGROUP 2005132 09:00:54 DVLP NOGROUP 0000001141918 0000000289689 026 085
PROD 2005132 09:00:54 DVLP PROD 0000000233800 0000000170178 073 085
```
Individual Lines with Compression Example

In this example, FORMAT OPTIONS COMP is specified. Because NOSTRING is the default, each field appears on its own line and the plus sign (+) indicates the line continues onto the line. The COMP parameter removes any trailing blanks after each field. Each field is also separated with a comma.

* STORAGE GROUP SEVERAL GROUPS
  SELECT SDATE,STIME,SSYSID,SGROUP,SCAPACITY-CYLS,SALLOC-CYLS, 
       SPERCENT-OCC,SHIGH-THRSH 
  FROM (HLQ.WEEKLY.SUM)
    
    FORMAT OPTIONS COMP
    FORMAT FOLLOWS 
/SGROUP,/SDATE,/STIME,/SSYSID,/SGROUP,/SCAPACITY-CYLS,/SALLOC-CYLS,+ 
/SPERCENT-OCC,/SHIGH-THRSH

The results are shown below.
ARCHIVE,2005132,09:00:54,DVLP,ARCHIVE,0000000003339,0000000002017,+ 
   061,085
HSMMIGL1,2005132,09:00:54,DVLP,HSMMIGL1,0000000020034,0000000008478,+ 
  043,080
NOGROUP,2005132,09:00:54,DVLP,NOGROUP,0000001141918,0000000289689,+ 
  026,085
PROD,2005132,09:00:54,DVLP,PROD,0000000233800,0000000170178,+ 
  073,085

Individual Lines without Compression Example

In the example below, FORMAT OPTIONS NOCOMP is specified. Because NOSTRING is the default, each field appears on its own line and the plus sign (+) indicates the line continues onto the line. The NOCOMP parameter retains any trailing blanks after each field.

* STORAGE GROUP SEVERAL GROUPS
  SELECT SDATE,STIME,SSYSID,SGROUP,SCAPACITY-CYLS,SALLOC-CYLS, 
       SPERCENT-OCC,SHIGH-THRSH 
  FROM (HLQ.WEEKLY.SUM)
    
    FORMAT OPTIONS NOCOMP
    FORMAT FOLLOWS 
/SGROUP /SDATE /STIME /SSYSID /SGROUP /SCAPACITY-CYLS /SALLOC-CYLS + 
/SPERCENT-OCC /SHIGH-THRSH

The results are shown below.
ARCHIVE 2005132 09:00:54 DVLP ARCHIVE 0000000003339 0000000002017 + 
  061 085
HSMMIGL1 2005132 09:00:54 DVLP HSMMIGL1 0000000020034 0000000008478 + 
  043 080
NOGROUP 2005132 09:00:54 DVLP NOGROUP 0000001141918 0000000289689 + 
  026 085
PROD 2005132 09:00:54 DVLP PROD 0000000233800 0000000170178 + 
  073 085

TOTALS, TOTALSONLY and NOTOTALS

Use the TOTALS, TOTALSONLY, or NOTOTALS parameter on the FORMAT OPTIONS statement to indicate whether to format a totals line for the specified numeric fields.
The average, minimum, and maximum values are provided with the TOTALS and TOTALSONLY parameters.

The valid parameters are:
- TOTALS—formats a total line for each numeric field.
- TOTALSONLY—formats the total without details.
- NOTOTALS—formats no totals (the default).

**TOTALSONLY Example**

The following example shows the FORMAT OPTIONS statement with the TOTALSONLY parameter.

```
* TAKE ACTION ON A STORAGE GROUP
* SELECT  SGROUP, SVOLS, STIME, SALLOC-CYLS
* FROM HRM0801X.QABETA.DVLP.WEEKLY.SUM
* USING HRM0801X.QABETA.COMMANDS(STGSPM)
* CREATE DCD.HRM.TR07DEMO.BATCHFIX
* WHERE SGROUP = 'NOGROUP'
* AND STIME = '07'
* FORMAT OPTIONS NOCOMP NOSTRING TOTALSONLY
* FORMAT FOLLOWS
*/SGROUP /SVOLS /STIME /SALLOC-CYLS
```

The results are shown below. The number of occurrences, total value, average, minimum, and maximum values for each numeric field (SVOLS and SALLOC-CYLS) is listed.

<table>
<thead>
<tr>
<th>LABEL</th>
<th>OCCURS</th>
<th>TOTAL</th>
<th>AVERAGE</th>
<th>MINIMUM</th>
<th>MAXIMUM</th>
</tr>
</thead>
<tbody>
<tr>
<td>SVOLS</td>
<td>5</td>
<td>1701</td>
<td>340</td>
<td>340</td>
<td>341</td>
</tr>
<tr>
<td>SALLOC-CYLS</td>
<td>5</td>
<td>1452775</td>
<td>290555</td>
<td>286741</td>
<td>298292</td>
</tr>
</tbody>
</table>

**FORMAT FOLLOWS Statement**

The FORMAT FOLLOWS statement uses text and parameters to define how to present the data from your query.

The FORMAT FOLLOWS statement immediately follows the FORMAT OPTIONS statement and indicates the end of the formatting options and the beginning of the format layout. The format layout describes exactly how to present the data and takes into consideration any options specified on the FORMAT OPTIONS statement.

The FORMAT FOLLOWS statement must begin in column 1.

The format layout can contain the following:
- Text
- .H (Header)
- .T (Trailer)
- .F1 and .F2 control statements
- /field

**Headers**

Use .H (header) on the FORMAT FOLLOWS statement to provide title lines and positional column titles to match any comma-separated fields.
Headers in the formatted text must be defined first after the FORMAT FOLLOWS statement. Headers are defined as .H in columns one and two. All fields (/field) will be substituted and use the COMP, STRING, and FB80 parameter rules and include the headers only once for the process. Substituted fields will use the values in the first input line.

**Formatted Headers Example**

The following example shows a query that will format a two-line header only once.

```sql
* STORAGE GROUP NOGROUP AT 09 AM MONTHLY
SELECT SDATE,STIME,SSYSID,SGROUP,SCAPACITY-CYLS,SALLOC-CYLS,
     SPERCENT-OCC,SHIGH-THRSH
FROM (HLQ.MONTHLY.SUM)
USING HLQ.CNTL(STGPSUM))
CREATE HLQ.STGP.TR01MODL.CSV
WHERE SGROUP = 'NOGROUP'
AND STIME = '07'
ORDER DISTINCT BY SDATE A, STIME A
FORMAT OPTIONS COMP STRING
FORMAT FOLLOWS .HTR01SSG, STGP NOGROUP AT 07
.HDATE,TIME,SYS,GROUP,CAPACITY,ALLOCATED,%OCC,%HIGH
/SDATE,/STIME,/SSYSID,/SGROUP,/SCAPACITY-CYLS,/SALLOC-CYLS,+ 
/SPERCENT-OCC,/SHIGH-THRSH
```

The results are shown below.

```
TR01SSG, STGP NOGROUP AT 07
DATE,TIME,SYS,GROUP,CAPACITY,ALLOCATED,%OCC,%HIGH
2005113,07:17:03,DVLP,NOGROUP,0000001148598,0000000309789,027,085
2005114,07:14:11,DVLP,NOGROUP,0000001151938,0000000310545,027,085
2005115,07:14:35,DVLP,NOGROUP,0000001151938,0000000311342,028,085
2005116,07:19:04,DVLP,NOGROUP,0000001148598,0000000307399,027,085
```

**Trailers**

Use .T (trailer) on the FORMAT FOLLOWS statement to provide closing syntax for utility statements.

You must define trailers in the format layout as the last line after the FORMAT FOLLOWS statement. Trailers are defined as .T in columns one and two. All fields (/field) will be substituted and observe the COMP, STRING, and FB80 parameter rules on the FORMAT OPTIONS statement and include the trailer only once for the process.

**Formatted Trailers Example**

The following example uses .T (trailers) to provide the closing syntax for the IDCAMS control cards that are built.

```sql
SELECT DSN
FROM DR03.TSTSM.EXTFILE
CREATE DR03.TSTSM.MQL.OUTPUT
USING HLQ.QABETA.SCMPARM(CMPXEMQ)
    WHERE DSN EQ 'CRTSDLR'
ORDER BY DSN A
FORMAT OPTIONS NOCOMP
FORMAT FOLLOWS .H//IDCAMS EXEC PGM=IDCAMS
.H//SYSPRINT DD SYSOUT=* 
.H//SYSIN DD *
```

254 User's Guide
The results are shown below.

```
//IDCAMS EXEC PGM=IDCAMS
//SYSPRINT DD SYSOUT=*
//SYSIN DD *
   REPRO CRTSDLR1.AIX.TESTBB
   DELETE CRTSDLR1.AIX.TESTBB NSCR
//*
```

**HSM Reporter/Manager Examples**

This topic provides examples that are specific to HSM Reporter/Manager.

These examples use the MQFL JCL located in `hlq.SCKMCNTL(CKMJMQ)`. The MAP of the extract record is located in `hlq.SCKMPARM(CKMPEXMQ)`.

An **IEBGENER** step was added to the JCL in order to print the results for each example.

```
//GENER EXEC PGM=IEBGENER
//SYSIN DD DUMMY
//SYSPRINT DD DUMMY
//SYSUT1 DD DSN=DR03.TSTSM.MQL.OUTPUT,DISP=SHR
//SYSUT2 DD SYSOUT=*  NSCR
//*
```

**Report with Fields Example**

This example prints a report containing the data set name (`/DSN`), the BCS Create Date (`/F1-CREDT`), and the DSCB Create Date (`/CREDT`) fields. Because `NOCOMP` is specified, any trailing blanks between the fields are shown in the report.

```
SELECT DSN,CREDT,F1-CREDT
   FROM DR03.TSTSM.EXTFILE
CREATE DR03.TSTSM.MQL.OUTPUT
   USING CKM0202.SCKMPARM(CKMPEXMQ)
   WHERE VOL EQ 'CRT'
   ORDER BY DSN A
   FORMAT OPTIONS NOCOMP
   FORMAT FOLLOWS
   /DSN /F1-CREDT /CREDT
```

The results are shown below.

```
CRTSDLR1.GDG.TESTB.G0001V00 2004308 2006269
CRTSDLR1.GDG.TESTC.G0001V00 2006269 2006269
CRTSDLR1.KSDS.TESTA 2006051 2006051
```

**Report with Labels Example**

This example prints a label (for example, `DSN=`) before each field in the report.

```
SELECT DSN,CREDT,F1-CREDT
   FROM DR03.TSTSM.EXTFILE
CREATE DR03.TSTSM.MQL.OUTPUT
   USING CKM0202.SCKMPARM(CKMPEXMQ)
   WHERE VOL EQ 'CRT'
```

The results are shown below.

```
CRTSDLR1.GDG.TESTB.G0001V00 2004308 2006269
CRTSDLR1.GDG.TESTC.G0001V00 2006269 2006269
CRTSDLR1.KSDS.TESTA 2006051 2006051
```
ORDER BY DSN A
FORMAT OPTIONS NOCOMP
FORMAT FOLLOWS
DSN=/DSN F1-CREDT=/F1-CREDT CREDT=/CREDT

The results are shown below.

DSN=CRTSDLR1.AIX.TESTBB F1-CREDT=2006087 CREDT=2006087
DSN=CRTSDLR1.AIX.TESTBB.DATA F1-CREDT=2006087 CREDT=2006087
DSN=CRTSDLR1.AIX.TESTBB.INDEX F1-CREDT=2006087 CREDT=2006087

Control Cards Example

This example shows how you can use MQFL to build IDCAMS control cards.

SELECT DSN
    FROM DR03.TSTSM.EXTFILE
CREATE DR03.TSTSM.MQL.OUTPUT
    USING CKM0202.SCKMPARM(CKMPEXMQ)
    WHERE DSN EQ 'CRTSDLR'
    ORDER BY DSN A
FORMAT OPTIONS NOCOMP
FORMAT FOLLOWS
.H//IDCAMS EXEC PGM=IDCAMS
.H//SYSPRINT DD SYSOUT=* 
.H//SYSIN DD *
    REPRO /DSN
    DELETE /DSN NSCR
.T//* 
.T//

The results are shown below.

.H//IDCAMS EXEC PGM=IDCAMS
.H//SYSPRINT DD SYSOUT=* 
.H//SYSIN DD *
    REPRO CRTSDLR1.AIX.TESTBB
    DELETE CRTSDLR1.AIX.TESTBB NSCR
.T//* 
.T//

DSS DUMP Cards Example

This example shows how you can use MQFL to build DSS DUMP cards.

SELECT DSN
    FROM DR03.TSTSM.EXTFILE
CREATE DR03.TSTSM.MQL.OUTPUT
    USING CKM0202.SCKMPARM(CKMPEXMQ)
    WHERE DSN EQ 'CRTSDLR'
    ORDER BY DSN A
FORMAT OPTIONS NOCOMP
FORMAT FOLLOWS
.H//DSSDUMP EXEC PGM=ADDRSSU,PARM='UTILMSG=YES'
.H//BKUPDD DD DSN=DR01.TSTSM.DSS.BKUP1,UNIT=SYSDA,
.H//    DISP=(,CATLG),SPACE=(CYL,(100,50),RLSE)
.H//SYSPRINT DD SYSOUT=* 
.H//SYSIN DD *
    DUMP DS(INCL(/DSN)) -
    ALLDATA(*) ALLEXCP - 
    SHARE -
    OUTDD(BKUPDD)
.T//* 
.T//

The results are shown below.
Volume Record Example

This example uses the DCOLLECT volume map that is located in hlq.SCKMPARM(CKMDCMAP) to generate a Volume record. The DCOLLECT step DCOLLECT OUTFILE(OUTDS) STORAGEGROUP(SGCRTS) NODATAINFO is followed by the MQFL step. Please note that HEX is added so that the UNIT number will remain in hexadecimal format.

```
SELECT DCSVOLSR,DCDTYP,DCDVNUM(HEX)
FROM DR03.TSTSM.DCOLLECT
CREATE DR02.TSTSM.MQL.OUTPUT
  USING CKM0202.SCKMPARM(CKMDCMAP)
  WHERE DCSVOLSR EQ 'CRTS'
  ORDER BY DCSVOLSR     A
  FORMAT OPTIONS NOCOMP
  FORMAT FOLLOWS
    INIT UNIT/(DCDVNUM) VOLID/(DCSVOLSR) VFY(XXXXXX) -
      INDEX(0.1.89) VTOC(6,0,600) SG
```

The results are shown below.

```
INIT UNIT(5044) VOLID(CRTS00) VFY(XXXXXX) -
  INDEX(0,1.89) VTOC(6,0,600) SG
INIT UNIT(5144) VOLID(CRTS01) VFY(XXXXXX) -
  INDEX(0,1.89) VTOC(6,0,600) SG
```

Examples for HSM or ARH

None at this time.

Examples for MFA or AKD

None at this time.
Chapter 24. CKMINI Configuration Values

The CKMINI member of SCKMPARM (the product initialization member) is used to define global information regarding Advanced Catalog Management usage and options within your installation.

The CKMINI member is organized in sections. A section name is indicated by the colon character (:) immediately followed by the section name. Section names are to be changed or added only under the direction of Technical Support.

Each section contains a set of individual parameter specifications known as token statements. The general format for a token statement is:

Token = Value

Tokens are set with a value, specified by you or Technical Support, that is a set of strings to the right of the token's equal (=) sign. Token values may be keywords, user values, or a keyword with a user value, shown as VALUE(uservalue).

You can enclose values in either single or double quotes. The quotes are stripped away before the product uses the value. Quotes may be supplied as data by:

- Using the opposite quote symbol as delimiters (for example, "'" will yield a single quote as data).
- Specifying two to get one (for example, ''' will yield a single quote as data).

Leading blanks from the beginning of the logical card-image records are allowed for all token statements. Syntax scan processing locates the first non-blank character in each logical record. The entire length of the 80-byte logical record is considered for valid data. Do not renumber the CKMINI member sequence numbers assigned in columns 73 through 80 because this will cause errors to occur.

Continuing a token statement

Token statements can be continued, using either a minus (-) or plus (+) character anywhere within the text. All data to the right of the continuation character on that logical record are interpreted as a comment and ignored.

Reading the token statements

The token statements shown in this document follow these rules:

- Default values are underlined.
- Multiple values are separated with a vertical bar (|). You must choose one.
- User-supplied values are in lowercase italic. For example, text.

Commenting Rules

Both line mode and block mode methods of commenting are supported:

- An asterisk (*) in column 1 marks the entire line as a comment. This style of comment is not allowed inside a continued /* */ type comment, but is allowed in a continued token/value statement.
- Entire lines, blocks of lines, or portions of a line may be commented by beginning the comment with a '/' and terminating the comment with a '/*'. Nested comments are honored.
You can add a Notes token to document changes to any section including the initial or unnamed section. The CKMJINIM program will retain these notes along with any comments that continue from the Notes token. For example:

```
Notes = /* Updated by Dan
on 2006/12/01 */
```

You can also use a portion of the section-statement line after the first space for documenting changes to that section. For a multi-image INI, the section name can be qualified by sysplex, system name, or both as shown below, except for the PRODUCT_INFO and INIMERGE_VALUES sections:

- Sysplex-name and system-name qualification:
  `:section-name.sysplex-name.system-name`
- Sysplex-name only qualification:
  `:section-name.sysplex-name`
- System-name only qualification:
  `:section-name..system-name`

The sysplex and system names must be explicitly specified with no wildcard characters allowed.

CKMJINIM will retain your qualified sections and merge new tokens for those sections.

Those programs using the CKMINI will use only the first matching section. All other variations of that section will be ignored. You can specify qualified sections for those images with unique requirements, followed by an unqualified section that applies to all of the other images.

---

### ACM_OPTIONS

This section of CKMINI sets installation dependent options.

**JOURNAL_VOLUME = volser**

The specific DASD volume on which the JOURNAL is to be defined. This is used when a request is made in the ISPF interface by RECOVER BCS and MERGECAT to create the journal definition. If not specified, the default is for ACS rules to apply.

**SPACE_MANAGEMENT = HSM | DMS | ABR | ABR(***xxx***))**

The type of migrate, archive or both types of DASD space management software implemented at your installation. You can specify HSM (the default), ABR, DMS (now called CA-Disk, and formerly SAMS Disk), and ABR(***xxx***). If your installation uses both HSM and DMS, you can specify both, in either order, and separated by one blank.

If your installation's migrated repository does not use the # HLQ, ABR(***xxx***)) is provided to explicitly specify alternate HLQ, where ***xxx*** is the DSN HLQ for ABR migration repository entries.

If you do not have HSM, you must specify either DMS or ABR. If left blank, RECOVER and other commands will fail.

This token applies to the DIAGNOSE BCS-VVDS, GENERATE BCS-UNLOAD, MERGECAT, RECOVER BCS, and SUPERCLIP commands.
**ABR_MODEL_DSCB_PREFIX = FDRABR.V**

This token is for FDRABR users only. It specifies the prefix for a model DSCB on each disk volume that ABR manages.

**ARCHIVE_VOLSERS = volume1 volume2 ... volume5**

This token will override the list of reserved volume serial names that represent an archive status for a given data set. This may be necessary when the SPACE_MANAGEMENT token specifies DASD space management software other than DFSMShsm™. (SPACE_MANAGEMENT=HSM automatically implies ARCHIVE_VOLSERS=MIGRAT.) You can specify up to 5 volume serial names. The default values are dependent upon the values specified by the SPACE_MANAGEMENT token.

This token applies to the GENERATE BCS-UNLOAD, DIAGNOSE and RECOVER commands.

**SMF_TIME_DIFFERENCE = 60000**

The SMF time gap in 1/100th of a second units. For example, 60000 equal 10 minutes. Specify a maximum numeric value of up to 15 digits.

**RECOVER_PROCESSING_DEFAULT = SIMULATE | EXECUTE**

This token controls RECOVER processing if SIMULATE or EXECUTE is not specified in command.

This applies to the RECOVER BCS, VVDS, and DSN commands.

**ZAP_PROCESSING_DEFAULT = SIMULATE | EXECUTE**

This token controls ZAP processing if SIMULATE or EXECUTE is not specified in command.

This applies to all ZAP DELETE (BCS, VVDS, DSN, and VTOC), ZAP PATCH (BCS, VVDS, DSN, and VTOC), and ZAP VTOC RENAME commands.

**REGION = 0M**

The REGION JCL option.

**SMF_RECORD_TYPE =**

This token allows you to record statistics and then report on them using LISTSMF. Specify an optional numeric value of 1 to 255. If the SMF record will be recorded, you must enter this value in the TYPE keyword of the SMFPRMxx system PARMLIB concatenation member.

This token applies to the BACKUP BCS and BACKUP VVDS commands.

**ISPF_JCL_ALLOC = ’SPACE(allocation_type, space_value)’**

This token controls the amount of disk space allocated to the work file holding the JCL and command generated using the ISPF dialogs. Use standard JCL DASD space allocation syntax. Must be TRACKS or CYLINDERS and > 0.
For example: `ISPF_JCL_ALLOC = 'SPACE=(TRK,(3,3))'` or `ISPF_JCL_ALLOC = 'SPACE=(CYL,1)'`.

**ALTER_SYS1_VVDS_OPTIONS**

This section of CKMINI customizes the ISPF panel defaults for the ALTER SYS1-VVDS functions.

`OUTFILE_ALLOC1 = 'text', OUTFILE_ALLOC2 = 'text', and OUTFILE_ALLOC3 = 'text'`

A set of default JCL statement strings to be used for allocating the new OUTDATASET file. Each text string cannot exceed 50 characters. The content of the strings must collectively follow the standard JCL syntax rules. You can also modify the JCL prior to submitting the job. The default is:

```
OUTFILE_ALLOC1 = 'DISP=(,CATLG,DELETE),UNIT=SYSALLDA,'
OUTFILE_ALLOC2 = 'SPACE=(CYL,(1,1),RLSE)'
OUTFILE_ALLOC3 =
```

**BACKUP_BCS_OPTIONS**

This section of CKMINI customizes the ISPF panel defaults for BACKUP BCS functions.

**FATAL_CATALOG_ERROR = WARNING | ERROR**

This sets the default value for the `FATAL-CATALOG-ERROR` field.

- **WARNING**—issues a warning message and terminates the backup of that catalog with a return code of 4.
- **ERROR**—issues an error message and terminates the backup of that catalog with a return code of 8.

**OUTDATASET = dsname**

This sets the default value for the `OUTPUT Data Set Name` field. Specify a value for the data set name of the backup file that will be created.

`OUTFILE_ALLOC1 = 'text' and OUTFILE_ALLOC2 = 'text'`

A set of default JCL statement strings to be used for allocating the new OUTDATASET file. Each text string cannot exceed 50 characters. The content of the strings must collectively follow the standard JCL syntax rules. You can also modify the JCL prior to submitting the job. The default is:

```
OUTFILE_ALLOC1 = 'DISP=(,CATLG,DELETE),UNIT=SYSALLDA,'
OUTFILE_ALLOC2 = 'SPACE=(CYL,(1,1),RLSE)'
```

**SPANFILE_ALLOC1 = 'text' and SPANFILE_ALLOC2 = 'text'**

A set of default JCL statement strings to be used for allocating the new SPAN-DATASET. Each text string cannot exceed 50 characters. The content of the strings must collectively follow the standard JCL syntax rules. You can also modify the JCL prior to submitting the job. The default is:

```
SPANFILE_ALLOC1 = 'DISP=(,CATLG,DELETE),UNIT=SYSALLDA,'
SPANFILE_ALLOC2='SPACE=(CYL,(1,1),RLSE)'
```
**BACKUP_DSN_OPTIONS**

This section of CKMINI customizes the ISPF panel defaults for BACKUP DSN functions.

**OUTDATASET = dsname**

This sets the default value for the **OUTPUT Data Set Name** field. Specify a value for the data set name of the backup file that will be created.

**OUTFILE_ALLOC1 = 'text' and OUTFILE_ALLOC2 = 'text'**

A set of default JCL statement strings to be used for allocating the new OUTDATASET file. Each text string cannot exceed 50 characters. The content of the strings must collectively follow the standard JCL syntax rules. You can also modify the JCL prior to submitting the job. The default is:

```
OUTFILE_ALLOC1 = 'DISP=(,CATLG,DELETE),UNIT=SYSALLDA,'
OUTFILE_ALLOC2 = 'SPACE=(CYL,(1,1),RLSE)'
```

**FATAL_OBJECT_ERROR = WARNING | ERROR**

This sets the default value for the **FATAL-OBJECT-ERROR** field.

- **WARNING**—issues a warning message and terminates the backup of that object with a return code of 4.
- **ERROR**—issues an error message and terminates the backup of that object with a return code of 8.

**BACKUP_VVDS_OPTIONS**

This section of CKMINI customizes the ISPF panel defaults for BACKUP VVDS functions.

**OUTDATASET = dsname**

This sets the default value for the **OUTPUT Data Set Name** field. Specify a value for the data set name of the backup file that will be created.

**OUTFILE_ALLOC1 = 'text' and OUTFILE_ALLOC2 = 'text'**

A set of default JCL statement strings to be used for allocating the new OUTDATASET file. Each text string cannot exceed 50 characters. The content of the strings must collectively follow the standard JCL syntax rules. You can also modify the JCL prior to submitting the job. The default is:

```
OUTFILE_ALLOC1 = 'DISP=(,CATLG,DELETE),UNIT=SYSALLDA,'
OUTFILE_ALLOC2 = 'SPACE=(CYL,(1,1),RLSE)'
```

**CKM00390_VALUES**

This section of CKMINI controls the attributes of certain journaling files.

The parameters documented below are to be used when it is necessary to adapt certain dynamic allocations to comply with the local SMS ACS routines or other device selection requirements. This may be required in order to circumvent VIO allocation. Several parameters are not documented and those parameters should be used only by Technical Support.
**&.UNIT = SYSWORK**

The unit type for temporary data set journal files. The specified value directly correlates with the UNIT= keyword as used in the JCL DD statement. If the unit type value is left blank, SYSALLDA is used.

**&.STORCLAS = SCWORK**

The storage class name for temporary data set journal files. Device selection will communicate with the SMS ACS routines local for your environment. The specified value directly correlates with the STORCLAS= keyword as used in the JCL DD statement. If the storage class value is left blank, no value is used.

**&.DATACLAS = DCWORK**

The data class name for temporary data set journal files. The data class value may or may not be significant to device selection through the local SMS ACS routines. The specified value directly correlates with the DATACLAS= keyword as used in the JCL DD statement. If the data class value is left blank, no value is used.

**&.MGMTCLAS = MCWORK**

The management class name for temporary data set journal files. The management class value may or may not be significant to device selection through the local SMS ACS routines. The specified value directly correlates with the MGMTCLAS= keyword as used in the JCL DD statement. If the management class value is left blank, no value is used.

---

**CATSCRUB_OPTIONS**

This section of CKMINI controls options that affect the behavior of the CATSCRUB command in batch mode.

---

**Non-VSAM Data Set Defaults**

This topic describes the non-VSAM data set keyword defaults for the CATSCRUB command.

**NONVSAM_MULTI_VOL_ERR_DISP = KEEP | DELETE**

This sets the default value for the NONVSAM-MULTI-VOL-ERR keyword.

- **KEEP**—the catalog record for the non-VSAM data set will be retained in the catalog regardless of its allocation status.
- **DELETE**—the catalog record for the non-VSAM data set will be deleted if found to be in an incomplete allocation status.

**Note:** When DELETE processing is performed by CATSCRUB, it only involves the equivalent of a DELETE NOSCRATCH of the object within the catalog, and never performs any physical deletion of objects on the disk volumes.

**NONVSAM_MULTI_VOL_ERR_RC = 4**

This sets the default value for RC (return code) on the NONVSAM-MULTI-VOL-ERR keyword. This specifies the return code to be assigned on the SYSOUT message whenever a non-VSAM data set is found to be in an incomplete allocation status. Specify a value between 0 and 9999.
NONVSAM_MULTI_VOL_ERR_PROC = CONTINUE | END

This sets the default processing value for the NONVSAM-MULTI-VOL-ERR keyword.

- CONTINUE—processing is to continue when a non-VSAM data set is encountered that is in an incomplete allocation status.
- END—processing is to terminate when a non-VSAM data set is encountered that is in an incomplete allocation status.

NONVSAM_MIGRATED_DISP = KEEP | DELETE

This sets the default value for the NONVSAM-MIGRATED, NONVSAM-MIGRATED-DASD, and NONVSAM-MIGRATED-TAPE keywords.

- KEEP—the catalog record for the non-VSAM data set will be retained, even though it is in migrate status.
- DELETE—the catalog record for non-VSAM data set will be deleted if it is found to be in migrate status.

Note: When DELETE processing is performed by CATSCRUB, it only involves the equivalent of a DELETE NOSCRATCH of the object within the catalog, and never performs any physical deletion of objects on the disk volumes.

NONVSAM_MIGRATED_RC = 4

This sets the default value for RC (return code) on the NONVSAM-MIGRATED, NONVSAM-MIGRATED-DASD, and NONVSAM-MIGRATED-TAPE keywords. This specifies the return code to be assigned on the SYSOUT message whenever a non-VSAM data set is found to be in migrate status. Specify a value between 0 and 9999.

NONVSAM_MIGRATED_PROC = CONTINUE | END

This sets the default processing value for the NONVSAM-MIGRATED, NONVSAM-MIGRATED-DASD, and NONVSAM-MIGRATED-TAPE keywords.

- CONTINUE—processing is to continue when a non-VSAM data set is encountered that is in migrate status.
- END—processing is to terminate when the first occurrence of a non-VSAM data set is encountered in migrate status.

NONVSAM_NOT_FOUND_DISP = KEEP | DELETE

This sets the default value for the NONVSAM-NOT-FOUND keyword.

- KEEP—the catalog record for these non-VSAM data sets is retained even though the data set does not exist.
- DELETE—the catalog record for these non-VSAM data sets is deleted.

Note: DELETE processing only involves a deletion of a catalog record, and never performs any physical deletion of objects on the disk volumes.

NONVSAM_NOT_FOUND_RC = 4

This sets the default value for RC (return code) on the NONVSAM-NOT-FOUND keyword. This specifies the return code to be assigned on the SYSOUT message.
whenever one of the non-VSAM data sets is not found. Specify a value between 0 and 9999.

**NONVSAM_NOT_FOUND_PROC = CONTINUE | END**

This sets the default processing value for the NONVSM-NOT-FOUND keyword.
- CONTINUE—processing is to continue after encountering a non-VSAM data sets that is not found.
- END—all further processing is to terminate when the first occurrence of a non-VSAM data set is not found.

**NONVSAM_TAPE_DISP = KEEP | DELETE**

This sets the default value for the NONVSAM-TAPE keyword.
- KEEP—the catalog record for the non-VSAM data set will be retained, even though the data set is on tape.
- DELETE—the catalog record for the non-VSAM generation data set will be deleted for all data sets found to be physically resident on tape.

**Note:** When DELETE processing is performed by CATSCRUB, it only involves the equivalent of a DELETE NOSCRATCH of the object within the catalog, and never performs any physical deletion of objects on the disk volumes.

**NONVSAM_TAPE_RC = 4**

This sets the default value for RC (return code) on the NONVSAM-TAPE keyword. This specifies the return code to be assigned on the SYSOUT message whenever a non-VSAM data sets is determined to physically reside on tape. Specify a value between 0 and 9999.

**NONVSAM_TAPE_PROC = CONTINUE | END**

This sets the default processing value for the NONVSAM-TAPE keyword.
- CONTINUE—processing is to continue when a when a non-VSAM data set is determined to physically reside on tape.
- END—all further processing is to terminate upon the first occurrence of a non-VSAM data set that physically resides on tape.

**Non-VSAM Alias Defaults**

This topic describes the non-VSAM Alias keyword defaults for the CATSCRUB command.

**NONVSAM_ALIAS_NO_REALNAME_DISP = KEEP | DELETE**

This sets the default value for the NONVSM-ALIAS-NO-REALNAME keyword.
- KEEP—the non-VSAM alias record will be retained, even though the real data set does not exist (at least, does not exist on the specified volumes for the command).
- DELETE—the non-VSAM alias record will be deleted for all occurrences where its related real data set does not exist.

**Note:** DELETE processing only involves a deletion of a catalog record, and never performs any physical deletion of objects on the disk volumes.
**NONVSAM_ALIAS_NO_REALNAME_RC = 4**

This sets the default value for RC (return code) on the NONVSAM-ALIAS-NO-REALNAME keyword. This specifies the return code to be assigned on the SYSOUT message whenever the real data set for a non-VSAM data set does not physically exist. Specify a value between 0 and 9999.

**NONVSAM_ALIAS_NO_REALNAME_PROC = CONTINUE | END**

This sets the default processing value for the NONVSAM-ALIAS-NO-REALNAME keyword.

- CONTINUE—processing is to continue when the real data set for a non-VSAM data set does not physically exist.
- END—processing is to terminate when the first occurrence that the real data set for a non-VSAM alias does not physically exist.

**VSAM Data Set Defaults**

This topic describes the VSAM data set keyword defaults for the CATSCRUB command.

**VSAMSPHERE_MULTI_VOL_ERR_DISP = KEEP | DELETE**

This sets the default value for the VSAMSPHERE-MULTI-VOL-ERR keyword.

- KEEP—the cluster sphere record for the VSAM cluster will be retained, even though it is in migrate status.
- DELETE-ALIAS—the cluster sphere record for VSAM cluster will be deleted if it is found to be in migrate status.

**Note:** When DELETE processing is performed by CATSCRUB, it only involves the equivalent of a DELETE NOSCRATCH of the object within the catalog, and never performs any physical deletion of objects on the disk volumes.

**VSAMSPHERE_MULTI_VOL_ERR_RC = 4**

This sets the default value for RC (return code) on the VSAMSPHERE-MULTI-VOL-ERR keyword. This specifies the return code to be assigned on the SYSOUT message whenever the cluster sphere record for a VSAM cluster is found to be in the migrated status. Specify a value between 0 and 9999.

**VSAMSPHERE_MULTI_VOL_ERR_PROC = CONTINUE | END**

This sets the default processing value for the VSAMSPHERE-MULTI-VOL-ERR keyword.

- CONTINUE—processing is to continue when a VSAM data set is encountered that is in an incomplete allocation status.
- END—processing is to terminate when the first occurrence of a multi-volume VSAM data set is encountered in an incomplete allocation status.

**VSAMSPHERE_MIGRATED_DISP = KEEP | DELETE**

This sets the default values for the VSAMSPHERE-MIGRATED, VSAMSPHERE-MIGRATED-DASD, and VSAMSPHERE-MIGRATED-TAPE keywords.
KEEP—the cluster sphere record for the VSAM cluster will be retained, even though it is in migrate status.

DELETE—the cluster sphere record for VSAM cluster will be deleted if it is found to be in migrate status.

Note: When DELETE processing is performed by CATSCRUB, it only involves the equivalent of a DELETE NOSCRATCH of the object within the catalog, and never performs any physical deletion of objects on the disk volumes.

**VSAMSPHERE_MIGRATED_RC = 4**

This sets the default value for RC (return code) on the VSAMSPHERE-MIGRATED, VSAMSPHERE-MIGRATED-DASD, and VSAMSPHERE-MIGRATED-TAPE keywords. This specifies the return code to be assigned on the SYSOUT message whenever the cluster sphere record for a VSAM cluster is found to be in the migrated status. Specify a value between 0 and 9999.

**VSAMSPHERE_MIGRATED_PROC = CONTINUE | END**

This sets the default processing value for the VSAMSPHERE-MIGRATED, VSAMSPHERE-MIGRATED-DASD, and VSAMSPHERE-MIGRATED-TAPE keywords.

- CONTINUE—processing is to continue when a VSAM data set is encountered that is in a migrate status.
- END—processing is to terminate when the first occurrence of a multi-volume VSAM data set is encountered in a migrate status.

**VSAMSPHERE_NOT_FOUND_DISP = KEEP | DELETE**

This sets the default value for the VSAMSPHERE-NOT-FOUND keyword.

- KEEP—the catalog record for the VSAM data set is retained.
- DELETE—the catalog record for the VSAM data set is deleted.

**VSAMSPHERE_NOT_FOUND_RC = 4**

This sets the default value for RC (return code) on the VSAMSPHERE-NOT-FOUND keyword. This specifies the return code to be assigned on the SYSOUT message whenever a VSAM data set is not found. Specify a value between 0 and 9999.

**VSAMSPHERE_NOT_FOUND_PROC = CONTINUE | END**

This sets the default processing value for the VSAMSPHERE-NOT-FOUND keyword.

- CONTINUE—processing is to continue when a VSAM data set is not found.
- END—processing is to terminate upon the first occurrence of one of these VSAM data sets.

**Generation Data Set Defaults**

This topic describes the generation data set keyword defaults for the CATSCRUB command.
**GDS_NOT_FOUND_DISP = KEEP | DELETE**

This sets the default value for the GDS-NOT-FOUND keyword.

- **KEEP**—the generation data set (GDS) will be retained within the GDG sphere, even though the data set does not physically exist. If the GDS entry is kept, the result may be an error when the GDG is subsequently processed (although it will not produce a processing error if this specific generation in error is never actually accessed - for example, where the GDS is being retained in the GDG sphere record to maintain proper relativity of generations, and is not intended for processing).

- **DELETE**—the generation data set (GDS) will be deleted within the GDG sphere that does not physically exist on the volumes to be matched by CATSCRUB.

**Note:** When DELETE processing is performed by CATSCRUB, it only involves the equivalent of a DELETE NOSCRATCH of the object within the catalog, and never performs any physical deletion of objects on the disk volumes.

Careful consideration should be given to this specification, as it can result in a change in the relative number of generation data sets within a GDG, which can produce an unintended result when you are subsequently processing with relative generation specifications in your job streams.

**GDS_NOT_FOUND_RC = 4**

This sets the default value for RC (return code) on the GDS-NOT-FOUND keyword. This specifies the return code to be assigned on the SYSOUT message whenever a generation data set (GDS) does not physically exist. Specify a value between 0 and 9999.

**GDS_NOT_FOUND_PROC = CONTINUE | END**

This sets the default processing value for the GDS-NOT-FOUND keyword.

- **CONTINUE**—processing is to continue when a generation data set (GDS) does not physically exist.

- **END**—processing is to terminate upon the first occurrence of a generation data set (GDS) that does not physically exist.

**GDS_MULTI_VOL_ERR_DISP = KEEP | DELETE**

This sets the default value for the GDS-MULTI-VOL-ERR keyword.

- **KEEP**—the generation data set (GDS) will be retained within the GDG sphere, even though the validity of its allocation status is in question. The result may be an error when the GDG is subsequently processed (although it will not produce a processing error if this specific generation in error is never actually accessed - for example, where the GDS is being retained in the GDG sphere record to maintain proper relativity of generations, and is not intended for processing).

- **DELETE**—the generation data set (GDS) will be deleted within the GDG sphere if it is found to be in an incomplete allocation status.

**Note:** When DELETE processing is performed by CATSCRUB, it only involves the equivalent of a DELETE NOSCRATCH of the object within the catalog, and never performs any physical deletion of objects on the disk volumes.
Careful consideration should be given to this specification, as it can result in a change in the relative number of generation data sets within a GDG, which can produce an unintended result when you are subsequently processing with relative generation specifications in your job streams.

**GDS_MULTI_VOL_ERR_RC = 4**

This sets the default value for RC (return code) on the GDS-MULTI-VOL-ERR keyword. This specifies the return code to be assigned on the SYSOUT message whenever a generation data set (GDS) is encountered that is in an incomplete allocation status. Specify a value between 0 and 9999.

**GDS_MULTI_VOL_ERR_PROC = CONTINUE | END**

This sets the default processing value for the GDS-MULTI-VOL-ERR keyword.
- CONTINUE—processing is to continue when a generation data set (GDS) is encountered that is in an incomplete allocation status.
- END—processing is to terminate upon the first occurrence of a generation data set (GDS) that is encountered in an incomplete allocation status.

**GDS_MIGRATED_DISP = KEEP | DELETE**

This sets the default values for the GDS-MIGRATED, GDS-MIGRATED-DASD, and GDS-MIGRATED-TAPE keywords.
- KEEP—the generation data set (GDS) will be retained within the GDG sphere, even though it is in migrate status.
- DELETE—the generation data set (GDS) will be deleted within the GDG sphere if it is found to be in migrate status.

**Note:** When DELETE processing is performed by CATSCRUB, it only involves the equivalent of a DELETE NOSCRATCH of the object within the catalog, and never performs any physical deletion of objects on the disk volumes.

Careful consideration should be given to this specification, as it can result in a change in the relative number of generation data sets within a GDG, which can produce an unintended result when you are subsequently processing with relative generation specifications in your job streams.

**GDS_MIGRATED_RC = 4**

This sets the default value for RC (return code) on the GDS-MIGRATED, GDS-MIGRATED-DASD, and GDS-MIGRATED-TAPE keywords. This specifies the return code to be assigned on the SYSOUT message whenever a generation data set (GDS) is found to be in the migrated status. Specify a value between 0 and 9999.

**GDS_MIGRATED_PROC = CONTINUE | END**

This sets the default processing value for the GDS-MIGRATED, GDS-MIGRATED-DASD, and GDS-MIGRATED-TAPE keywords.
- CONTINUE—processing is to continue when a generation data set (GDS) is encountered that is in migrate status.
- END—processing is to terminate upon the first occurrence of a generation data set (GDS) that is encountered in migrate status.
**GDS_TAPE_DISP = KEEP | DELETE**

This sets the default value for the GDS-TAPE keyword.
- **KEEP**—the generation data set (GDS) will be retained within the GDG sphere, even though the data set is on tape. If the GDS entry is kept, the result may be an error when the GDG is subsequently processed, if the tape can not be located (although it will not produce a processing error if this specific generation in error is never actually accessed - for example, where the GDS is being retained in the GDG sphere record to maintain proper relativity of generations, and is not intended for processing).
- **DELETE**—the generation data set (GDS) entry within the GDG sphere record will be deleted for all data sets found to be physically resident on tape.

**Note:** When DELETE processing is performed by CATSCRUB, it only involves the equivalent of a DELETE NOSCRATCH of the object within the catalog, and never performs any physical deletion of objects on the disk volumes.

Careful consideration should be given to this specification, as it can result in a change in the relative number of generation data sets within a GDG, which can produce an unintended result when you are subsequently processing with relative generation specifications in your job streams.

**GDS_TAPE_RC = 4**

This sets the default value for RC (return code) on the GDS-TAPE keyword. This specifies the return code to be assigned on the SYSOUT message whenever a generation data set (GDS) is determined to physically reside on tape. Specify a value between 0 and 9999.

**GDS_TAPE_PROC = CONTINUE | END**

This sets the default processing value for the GDS-TAPE keyword.
- **CONTINUE**—processing is to continue when a generation data set (GDS) is determined to physically reside on tape.
- **END**—processing is to terminate upon the first occurrence of a generation data set (GDS) that physically resides on tape.

**GDGBASE_NO_ACTIVE_GENS_DISP = KEEP | DELETE**

This sets the default value for the GDGBASE-NO-ACTIVE-GENS keyword.
- **KEEP**—the GDG sphere record will be retained, even though it is empty of generation data sets.
- **DELETE**—the GDG sphere record will be deleted if it is found to be empty of generation data sets at any time during CATSCRUB processing.

**Note:** When DELETE processing is performed by CATSCRUB, it only involves the equivalent of a DELETE NOSCRATCH of the object within the catalog, and never performs any physical deletion of objects on the disk volumes.

**GDGBASE_NO_ACTIVE_GENS_RC = 4**

This sets the default value for RC (return code) on the GDGBASE-NO-ACTIVE-GENS keyword. This specifies the return code to be assigned on the SYSOUT message relating to each GDG sphere record that is identified as having no active
generations (empty). Specify a value between 0 and 9999.

**GDGBASE_NO_ACTIVE_GENS_PROC = CONTINUE | END**

This sets the default processing value for the GDGBASE-NO-ACTIVE-GENS keyword.

- **CONTINUE**—processing is to continue when a GDG sphere record is encountered that is empty of generations, or when other CATSCRUB processing deletes all of the GDGs generations.
- **END**—processing is to terminate upon the first occurrence of a GDG sphere record that is empty of generations, or when other CATSCRUB processing deletes all of the GDGs generations.

**Object Access Method (OAM) Defaults**

This topic describes the object access method keyword defaults for the CATSCRUB command.

**OBJECT_ACCESS_METHOD_DISP = KEEP | DELETE**

This sets the default value for the OBJECT-ACCESS-METHOD keyword.

- **KEEP**—the OAM entry will be retained
- **DELETE**—the OAM entry will be deleted.

**Note:** When DELETE processing is performed by CATSCRUB, it only involves the equivalent of a DELETE NOSCRATCH of the object within the catalog, and never performs any physical deletion of objects on the disk volumes.

**OBJECT_ACCESS_METHOD_RC = 4**

This sets the default value for RC (return code) on the OBJECT-ACCESS-METHOD keyword. This specifies the return code to be assigned on the SYSOUT message relating to each OAM entry processed. Specify a value between 0 and 9999.

**OBJECT_ACCESS_METHOD_PROC = CONTINUE | END**

This sets the default processing value for the OBJECT-ACCESS-METHOD keyword.

- **CONTINUE**—processing will continue when an OAM entry is processed.
- **END**—processing will terminate when the first OAM entry is processed.

**Fatal Catalog Error Default**

This topic describes the fatal catalog error keyword default for the CATSCRUB command.

**FATAL_CATALOG_ERR_PROC = CONTINUE | END**

This sets the default value for the FATAL_CATALOG_ERR keyword.

- **CONTINUE**—processing is to continue when a fatal catalog error is encountered.
- **END**—processing is to terminate upon the first occurrence of a fatal catalog error.
This section of CKMINI controls options that affect the behavior of the DIAGNOSE BCS-VVDS command in batch mode.

**MISSING_NVR_ERROR = DELETE | WARNING**

This controls what happens when a non-VSAM data set is found on an SMS managed volume, and a FIXFILE data set has been requested.

- **DELETE**—IDCAMS DELETE statements will be generated for non-VSAM SMS with missing NVR.

  **Note:** These data sets might be usable, but are dysfunctional for backup, recovery, and so on.

- **WARNING**—warnings will be issued, but Fixlist DELETES will not be generated for non-VSAM.

**DEBUG_LEVEL = 0 | 1**

- **0**—issues minimal SMS with Missing NVR type messages.
- **1**—prints Allocation, Work Space calculation, and Volser-processing messages. This can assist in identifying problematic volumes.

**AGE-TOLERANCE = NO | 0 | 1 | >1**

An interval in days from the current date for the AGE-TOLERANCE keyword default value. A day is the finest level of granularity that is supported.

- **NO**—bypasses all data set age considerations.
- **0**—ignores data sets that happen to get deleted in transit.
- **1**—ignores data sets that were deleted and redefined in transit. All data sets created on the current day are exempt from error detection.
- **2 to 9999**—filters out and ignores any data set errors for BCS entries that were created at any time after the implied time interval, specified in days.

**WORK_MAX_BLKSIZE = 27998**

The value used for the work-file DCBs, which are all sequential non-VSAM data sets, and for space allocation calculations when the work files are dynamically allocated. Specify a value between 4096 and 32760.

**WORK_DDNAME_01 = CATWRK01, WORK_DDNAME_02 = CATWRK02, and WORK_DDNAME_03 = CATWRK03**

The files will be dynamically allocated using the specified *ddnames*, if they are not included in the JCL; otherwise, the JCL allocation will be used.

**WORK_UNIT = SYSALLDA**

The unit name for the work data sets if they are dynamically allocated.

**WORK_STORCLAS = storage-class-name**

The SMS storage class name for the work data sets, if they are dynamically allocated.
WORK_MGMTCLAS = management-class-name

The SMS management class name for the work data sets, if they are dynamically allocated.

WORK_DATACLAS= data-class-name

The SMS data class name for the work data sets, if they are dynamically allocated.

You can also specify an alternate SMS Data Class to allow multiple candidate volumes in order to circumvent B37 ABENDs with the WORK1 file.

WORK_MAX_PRI_CYL = 750

The maximum primary space allocation. Specify a value between 1 and 9999. This throttles the maximum primary space allocation value, for each volume, in cylinders, for the work data sets. When not specified, the command will not dynamically allocate work files that have a primary space size of more than 750 cylinders.

WORK_MAX_SEC_CYL = 150

The maximum secondary space allocation value, for each volume, in cylinders, for the work data sets. Specify a value between 1 and 9999 When not specified, the command will not dynamically allocate work files that have a secondary space size of more than 150 cylinders.

WORK_EST_FACTOR = 50

This means that for every 4096 bytes used in the catalog's data component, we will anticipate an average of 50 volume cells for DASD extents. Specify a value between 1 and 9999. This value will be used to estimate the space requirements for work-file #1. The estimated number of records will be calculated based upon the HURBA value of a selected catalog.

EXAMINE_DEFAULT = YES | NO

The default keyword to use for the command is EXAMINE (YES) or NOEXAMINE (NO). If you specify YES, IDCAMS will run EXAMINE for each BCS prior to reading its contents. If structural errors are detected, then the IDCAMS message output will be displayed.

DIAGNOSE_ALIAS_OPTIONS

This section of CKMINI customizes the ISPF panel defaults for DIAGNOSE ALIAS functions.

FIXFILE_ALLOC1 = 'text' and FIXFILE_ALLOC2 = 'text'

A set of default JCL statement strings to be used for allocating the output file. Each text string cannot exceed 50 characters. The content of the strings must collectively follow the standard JCL syntax rules. You can also modify the JCL prior to submitting the job. The default is:

FIXFILE_ALLOC1 = 'DISP=(,CATLG,DELETE),UNIT=SYSALLDA,'
FIXFILE_ALLOC2 = 'SPACE=(CYL,(1,1),RLSE)'
**DIAGNOSE_BCS-VVDS_OPTIONS**

This section of CKMINI customizes the ISPF panel defaults for DIAGNOSE BCS-VVDS functions.

**FIXFILE_ALLOC1 = 'text' and FIXFILE_ALLOC2 = 'text'**

A set of default JCL statement strings to be used for allocating the output file. Each text string cannot exceed 50 characters. The content of the strings must collectively follow the standard JCL syntax rules. You can also modify the JCL prior to submitting the job. The default is:

```
FIXFILE_ALLOC1 = 'DISP=(,CATLG,DELETE),UNIT=SYSALLDA,'
FIXFILE_ALLOC2 = 'SPACE=(CYL,(1,1),RLSE)'
```

**DIAGNOSE_ICFCAT_OPTIONS**

This section of CKMINI customizes the ISPF panel defaults for DIAGNOSE ICFCAT functions.

**OUTFILE_ALLOC1 = 'text' and OUTFILE_ALLOC2 = 'text'**

A set of default JCL statement strings to be used for allocating the new OUTFILE data set. Each text string cannot exceed 50 characters. The content of the strings must collectively follow the standard JCL syntax rules. You can also modify the JCL prior to submitting the job. The default is:

```
OUTFILE_ALLOC1 = 'DISP=(,CATLG,DELETE),UNIT=SYSALLDA,'
OUTFILE_ALLOC2 = 'SPACE=(CYL,(1,1),RLSE)'
```

**DIAGNOSE_VOLUME-BCS_OPTIONS**

This section of CKMINI customizes the ISPF panel defaults for DIAGNOSE VOLUME-BCS functions.

**FIXFILE_ALLOC1 = 'text' and FIXFILE_ALLOC2 = 'text'**

A set of default JCL statement strings to be used for allocating the output file. Each text string cannot exceed 50 characters. The content of the strings must collectively follow the standard JCL syntax rules. You can also modify the JCL prior to submitting the job. The default is:

```
FIXFILE_ALLOC1 = 'DISP=(,CATLG,DELETE),UNIT=SYSALLDA,'
FIXFILE_ALLOC2 = 'SPACE=(CYL,(1,1),RLSE)'
```

**LISTFILE_ALLOC1 = 'text' and LISTFILE_ALLOC2 = 'text'**

A set of default JCL statement strings to be used for allocating the output file. Each text string cannot exceed 50 characters. The content of the strings must collectively follow the standard JCL syntax rules. You can also modify the JCL prior to submitting the job. The default is:

```
LISTFILE_ALLOC1 = 'DISP=(,CATLG,DELETE),UNIT=SYSALLDA,'
LISTFILE_ALLOC2 = 'SPACE=(CYL,(1,1),RLSE)'
```

**DELETE-TEMPSYS = NO | YES**

This enables temporary data sets found on the selected volumes to be considered for deletion. The filtering criteria command keywords for these data sets follow the same rules as any other data set name, however, scratch eligibility is based upon
its current in-use status. The SYSDSN major name is checked to ensure that the
data set is not currently in use. In a shared DASD environment, the SYSDSN ENQ
for these data sets must have a global scope in order to avoid possible integrity
issues.

**DIAGNOSE_VVDS_OPTIONS**

This section of CKMINI customizes the ISPF panel defaults for DIAGNOSE VVDS
functions.

**OUTFILEALLOC1 = 'text' and OUTFILEALLOC2 = 'text'**

A set of default JCL statement strings to be used for allocating the new OUTFILE
data set. Each text string cannot exceed 50 characters. The content of the strings
must collectively follow the standard JCL syntax rules. You can also modify the JCL
prior to submitting the job. The default is:

OUTFILEALLOC1 = 'DISP=(,CATLG,DELETE),UNIT=SYSALLDA,'
OUTFILEALLOC2 = 'SPACE=(CYL,(1,1),RLSE)'

**DIAG_VOLUME_BCS_OPTIONS**

This section of CKMINI controls options that affect the behavior of the DIAGNOSE
VOLUME-BCS command in batch mode.

**BCSDEPTH = 32**

The maximum number of BCS data sets that can be open concurrently. Specify a
value between 1 and 255.

**DSN_COMPONENT_MAX = 256**

The maximum number of internal component control blocks for a given data set
name being analyzed. The primary purpose for this is to prevent runaway
permutation modeling. Specify a value between 32 and 8192.

**JAM_FILES = DASD | VIRTUAL**

This sets what to use for larger temporary work space when diagnosing volumes.
- DASD—dynamically allocates temporary work data sets.
- VIRTUAL—manages the temporary data in virtual data spaces. Use this when
  the local SMS ACS routines unconditionally force VIO allocation and the current
  system has sufficient auxiliary storage available.

**NONSMS_STORAGEGROUP = NON-SMS**

The specified value is a pseudo SMS storage group that represents all non-SMS
volumes. For example, specifying EXCLUDE-STORAGEGROUP(NON-SMS) on the
DIAGNOSE command will exclude all non-SMS volumes. Specify a value with 1 to
8 alphanumeric characters, and it can include hyphens and underscore characters.

**AGE-TOLERANCE = NO | 0 | 1 | nnnn**

This sets the default value for the AGE-TOLERANCE keyword.
ALLOCATE = \texttt{FIXFILE} | \texttt{FIX} | \texttt{JCL}

This sets the default value for the ALLOCATE keyword.

EXTENDED-STOREAGEGROUP-SEARCH = \texttt{NO} | \texttt{YES}

This sets the default value for the EXTENDED-STOREAGEGROUP-SEARCH keyword.

IMPLICIT-GDG-MODEL = \texttt{ALLOW} | \texttt{WARN} | \texttt{DELETE}

This sets the default value for the IMPLICIT-GDG-MODEL keyword.

DELETE-TEMPSYS = \texttt{NO} | \texttt{YES}

This feature enables temporary data sets that are found on the selected volumes to be considered for deletion. The filtering criteria command keywords for these data sets will follow the same rules as any other data set name, however, scratch eligibility will be based upon its current in-use status. The SYSDSN major name will be checked to ensure that the data set is not currently in use. In a shared DASD environment, the SYSDSN ENQ for these data sets must have a global scope in order to avoid possible integrity issues.

**DIAG\_VVDS\_VTOC\_OPTIONS**

This section of CKMINI controls options that affect the behavior of the DIAGNOSE VVDS-VTOC command in batch mode.

NONSMS\_STOREAGEGROUP = \texttt{NON-SMS}

A reserved name for a pseudo storage group name that represents all non-SMS managed volumes. The value can contain 1 to 8 alphanumeric characters, and can include hyphens and underscores.

MESSAGE\_TEXT = \texttt{ABBR\_VIATED} | \texttt{FULL}

The default value for the MESSAGE-TEXT keyword.

ORPHAN\_DSCB = \texttt{SCRATCH} | \texttt{NOSCRATCH}

The default keyword to use for the command is SCRATCH or NOSCRATCH.

**EXPLORE\_OPTIONS**

This section of CKMINI controls options that affect the behavior of the EXPLORE command in batch mode.

DISPLAY\_EXCLUDES = \texttt{Y} | \texttt{N}

This will display (Y) or suppress (N) EXCLUDE messages.

MAXIMUM\_VOLUMES = 128

The number of volumes EXPLORE needs to reserve for the maximum volumes that a data set can have in the catalogs. Specify a value between 1 and 512
KSDS_CLUSTER_TOTALING = Y | N

The default value of the fields tracks_alloc, tracks_pri, tracks_sec, tracks_used, and extents when specified as filters on the CRITERIA keyword of the EXPLORE command.

Specify Y if the value is the sum of the data and index components or specify N if the value is only the data components.

EXPLORE_OPTIONS_ISPF

This section of CKMINI customizes the ISPF panel defaults for EXPLORE functions.

$xxxxx1_ALLOC1 = 'text' and $xxxxx1_ALLOC2 = 'text'

A set of default JCL strings used for allocating the output files. The text strings cannot exceed 50 characters. The combination of the content of each string set must follow the standard JCL syntax rules. You can also modify the JCL prior to submitting the job. The defaults are:

OUTDD_ALLOC1 = 'DISP=(,CATLG,DELETE),UNIT=SYSALLDA,'
OUTDD_ALLOC2 = 'SPACE=(CYL,(2,1),RLSE)'

EXTDD_ALLOC1 = 'DISP=(,CATLG,DELETE),UNIT=SYSALLDA,'
EXTDD_ALLOC2 = 'SPACE=(CYL,(10,1),RLSE)'

GENDD_ALLOC1 = 'DISP=(,CATLG,DELETE),UNIT=SYSALLDA,'
GENDD_ALLOC2 = 'SPACE=(CYL,(1,1),RLSE)'

GENERATE_BCS-UNLOAD_OPTIONS

This section of CKMINI customizes the ISPF panel defaults for GENERATE BCS-UNLOAD functions.

OUTDATASET = dsname

This sets the default value for the OUTPUT Data Set Name field. Specify a value for the data set name of the backup file that will be created.

OUTFILE_ALLOC1 = 'text', OUTFILE_ALLOC2 = 'text', and OUTFILE_ALLOC3 = 'text'

A set of default JCL statement strings to be used for allocating the new OUTDATASET file. Each text string can not exceed 50 characters. The content of the strings must collectively follow the standard JCL syntax rules. You can also modify the JCL prior to submitting the job. The default is:

OUTFILE_ALLOC1 = 'DISP=(,CATLG,DELETE),UNIT=SYSALLDA,'
OUTFILE_ALLOC2 = 'SPACE=(CYL,(1,1),RLSE)'

FATAL_OBJECT_ERROR = WARNING | ERROR

This sets the default value for the FATAL-OBJECT-ERROR field.
- WARNING—issues a warning message and terminates the backup of that object with a return code of 4.
- ERROR—issues an error message and terminates the backup of that object with a return code of 8.
**GENERATE_OPTIONS**

This section of CKMINI controls options that affect the behavior of the GENERATE BCS-UNLOAD command in batch mode.

**JOB1 = '//JOBNAME? JOB (ACCT?),NAME?,CLASS=A, MSGCLASS=X'**

This supplies the first job card for every job.

**JOB2 = ' ', JOB3 = ' ', and JOB4 = ' '**

JOB2 through JOB4 provide additional job or JES statements. If these tokens are left blank, they will not be in the output.

**MAX_CMDS_STEP = 120**

An integer indicating the maximum number of AMS commands per step.

**MAX_STEPS_JOB = 10**

An integer indicating the maximum number of steps per job.

---

**GLOBAL_EXCLUDE**

This section of CKMINI causes certain Advanced Catalog Management functions to unconditionally exclude certain objects from being processed, regardless of what was selected with the command filtering.

**Note:** Be aware that not all functions are affected by these tokens, and they may affect different functions in different ways.

The primary intent of the GLOBAL_EXCLUDE lists is to protect specific volumes and data sets from damage due to inappropriate output from the DIAGNOSE BCS-VVDS and DIAGNOSE VOLUME-BCS commands. The potential of generating inappropriate fixes can be mitigated by exempting certain volumes and data set names. Because each installation has its own unique naming conventions and OS implementation methods, these objects cannot be programmatically excluded with accuracy without sufficient information regarding the local environment. Particularly susceptible are data sets that are cataloged correctly only through another system’s master catalog, cataloged through use of system symbolics that will resolve differently on other systems, or data sets that are normally not cataloged at all. Examples are data sets residing on IPL volumes, and JES2/JES3 spool data sets.

Here are some recommendations to consider:

- Exclude Sysres volumes.
- Exclude non-SMS managed volumes (typically system-related) that are not managed by unit name esoterics, DASD pooling software, or both.
- Exclude JES spool volumes, data sets, or both.
- Exclude volumes containing sysplex couple data sets, which cannot sustain long-term unconverted hardware reserve requests or high non-sysplex I/O activity.
- Exclude SMP/E managed data sets such as DLIB data sets.
• Exclude known physical data sets on shared DASD that are not accessible through all master catalogs.

Here are some usage considerations to follow:
• GLOBAL_EXCLUDE processing will not exclude accessing of BCS data sets for catalog access purposes. You must exclude these using the DIAGNOSE command syntax.
• For VSAM components, DSNAME exclusion applies to the component name, (as its name would appear on the VTOC), and not to the sphere or cluster name.
• The DIAGNOSE commands can run against excluded volumes and data sets only if an alternate CKMINI member is provided in the batch JCL.
• For DSNVOL entries, the delimiter separating the data set name and volser can be either an underscore(_), a backslash(\), or a slash(/) character. However, the slash character is not recommended because it can conflict with the comment delimiters '/'' and '/' when masks are used.
• The ampersand character (&) is not valid for any GLOBAL_EXCLUDE entry. This restriction is in place because system symbolic translations cannot be accurately resolved on behalf of other systems that are either dormant or external to the sysplex.
• Even though masking characters are supported, the volser "******" (six asterisks) should not be used to represent the current IPL volume, and if specified, unpredictable results can occur.

**TABLE_SIZE = 16K PRIVATE**

The initial size limit for the internal tables created under the :GLOBAL_EXCLUDE section. Any unused private storage for the tables will be freed.

You can specify values in bytes, kilobytes, or megabytes. For example, 65536, 64K, or 1M.

You can further qualify the value with the keyword PRIVATE or DATASPACE. For example, **TABLE_SIZE = 1M DATASPACE**.

**VOLUME_**** =**

A list of volsers, volser masks, or both that are to be automatically exempted from DIAGNOSE BCS-VVDS and DIAGNOSE VOLUME-BCS processing. Only the first six characters of the token name are significant, but the complete token name must be unique. The maximum total length of a token name is 72 characters. You can specify any number of unique VOLUME tokens. Each token can specify an unlimited number of volsers and volser masks. You can continue each line using a trailing hyphen for a maximum of 47 lines for each token. Delimit volser and volser masks with blanks or commas. For example:

**VOLUME_0001=IPL\%A MCAT00 PAGE**

**DSNAME_**** =**

A list of data set names, data set name masks, or both that are to be automatically exempted from DIAGNOSE BCS-VVDS and DIAGNOSE VOLUME-BCS processing. Only the first six characters of the token name are significant, but the complete token name must be unique. The maximum total length of a token name is 72 characters. You can specify any number of unique DSNAME tokens. Each token can specify an unlimited number of data set names and data set name masks. You
can continue each line using a trailing hyphen for a maximum of 47 lines for each
token. Delimit data set names and masks with blanks or commas. For example:

```
DSNAME_0002=SYS1.LINKLIB SYS1.LPALIB -
SYS1.IOF*.*
DSNAME_9999=SYS1.HASPACE SYS1.JESCKPT
```

**INIMERGE_VALUES**

This section of CKMINI is critical for the CKMJINIM process and should be changed only by Technical Support.

**SPECIAL_SECTIONS =**

The values are:

- SI040_VALUES
- SI027_VALUES
- GLOBAL_EXCLUDE
- NONSMS_POOLS
- CKM00390_VALUES
- RECOVER_SYNC_SMF_TIME
- GENERATE_OPTIONS

**INSTALLATION_DATASETS**

This section of CKMINI identifies site dependent, read-only data set libraries that are required to run Advanced Catalog Management.

**LOAD1 = ?.SCKMLOAD**

The fully qualified (without quotes) data set name specified during the installation. You can also specify LOAD2 through LOAD5 to use multiple STEPLIBS for ISPF. LOAD1 is required and the others are optional.

**Note:** This library must be APF authorized, and will be dynamically allocated by Advanced Catalog Management.

**ISPPLIB1 = ?.SCKMPENU**

The fully qualified (without quotes) data set name specified during the installation. You can also use ISPPLIB2 through ISPPLIB5. ISPPLIB1 is required and the others are optional.

**PARMLIB = ?.SCKMPARM**

The fully qualified (without quotes) data set name specified during the installation.

**Note:** The CKMINI member (containing the INI parameter values) and the CKMISPF member (containing the product EXEC) must both reside in this parameter library.

**MSGLIB = ?.SCKMMSGS**

The fully qualified (without quotes) data set name specified during the installation.
**JCLBUILD_ALLOC_PARMS**

This section of CKMINI sets configuration values used by SCKMCNTL(CKMJCLBD) to tailor the JCL procedures and their usage within the SCKMCNTL library.

- `WRKUNIT = SYSDA`
- `SOUT = *`
- `ATP = TRK`
- `PRI = 100`
- `SEC = 200`
- `PUNIT = SYSDA`
- `SPC1 = ’(CYL,(10,10),RLSE)’`
- `SPC2 = ’(TRK,(1,1),RLSE)’`
- `LTYPE = PDS`
- `RLSE = RLSE`

**JCLBUILD_CKM_DATASETS**

This section of CKMINI sets configuration values used by SCKMCNTL(CKMJCLBD) to tailor the JCL procedures and their usage within the SCKMCNTL library.

- `LOAD = your.runtime.hql.SCKMLOAD`

Specifies the authorized runtime library for some JCL members of the SCKMCNTL library.

- `PFX = your.auditjob.hlq`

Specify the high level qualifier for libraries created by the Audit batch jobs. This prefix must refer to SMS-managed datasets.

- `PPFX = your.runtime.hql`

Specifies the prefix for all of the runtime libraries for some JCL members of the SCKMCNTL library.

- `TGTHLQ = your.targetsmp.hlq`

Specifies the prefix for SMP target libraries used by the CKMJLRUN and CKMJLDIF members of SCKMCNTL.

**JCLBUILD_COMMAND_VALUES**

This section of CKMINI sets configuration values used by SCKMCNTL(CKMJCLBD) to tailor the JCL procedures and their usage within the SCKMCNTL library.

- `PLAN = F6001WA`
- `REORGSPP = ’(CYL,(100,100),RLSE)’`
- `BACKBSP = ’(CYL,(100,100),RLSE)’`
- `BACKVSP = ’(CYL,(100,100),RLSE)’`
SYSPLEX = MYPLEX
Leave this value unchanged. It provides a placeholder for member CKMJINV of the SCKMCNTL library.

SYSTEM = MYSYSN
Leave this value unchanged. It provides a placeholder for member CKMJINV of the SCKMCNTL library.

---

**JCLBUILD_JOB_PARMS**

This section of CKMINI sets configuration values used by SCKMCNTL(CKMJCLBD) to tailor the JCL procedures and their usage within the SCKMCNTL library.

**TOPT** = YES
**USERID** = &SYSUID

---

**JCLBUILD_PROC_PARMS**

This section of CKMINI is critical for the CKMJCLBD process and should be changed only by Technical Support.

---

**JCLBUILD_VENDOR_DATASETS**

This section of CKMINI sets RMM configuration values used by SCKMCNTL(CKMJCLBD) to tailor the JCL procedures and their usage within the SCKMCNTL library for Audit batch jobs members.

The following values are only required if RMM is used.

**RMMCDS** = NULLFILE
**RMMMSG** = NULLFILE
**RMMRPT** = NULLFILE

The following value is only required if CA1 is used.

**CA1TMC** = NULLFILE

---

**LISTSMF_OPTIONS**

This section of CKMINI customizes the ISPF panel defaults for LISTSMF functions.

**EXTFILE_ALLOC1** = 'text' and **EXTFILE_ALLOC2** = 'text'

A set of default JCL statement strings to be used for allocating the new EXTFILE data sets. Each text string cannot exceed 50 characters. The content of the strings must collectively follow the standard JCL syntax rules. You can also modify the JCL prior to submitting the job. The default is:

**EXTFILE_ALLOC1** = 'DISP=(,CATLG,DELETE),UNIT=SYSALLDA,'  
**EXTFILE_ALLOC2** = 'SPACE=(CYL,(1,1),RLSE)'

**SMFILE_ALLOC1** = 'text'

The default JCL statement string to be used for allocating the new SMFFILE data set. The text string cannot exceed 50 characters. The content of the string must follow the standard JCL syntax rules. You can also modify the JCL prior to submitting the job. The default is:
SMFILE_ALLOC1 = 'DISP=SHR'

MERGEcatid_OPTIONS

This section of CKMINI customizes the ISPF panel defaults for MERGEcatid functions.

RESTART_MODE = blank | R | B | S

This sets the default value for the Mode field.
- blank—specify no value to leave the field blank.
- R—RESTART
- B—BACKOUT
- S—SIMULATE

NONSMS_POOLS

This section of CKMINI assigns groups of Non-SMS volume serial numbers to a pool name.

These Non-SMS pools can be managed by the DIAGNOSE VOLUME-BCS command as a collective storage group, similar to how SMS managed volumes are grouped under storage group constructs. Defining Non-SMS pools are appropriate for volumes that are managed by esoteric unit names, vendor software, or both, that facilitate DASD pooling. Typically, these volumes are populated with application-related data. Non-SMS pools are not recommended for system related DASD such as IPL, Catalog, Page, Sysplex Couple, and Spool volumes. These volumes are usually managed individually on a volser specific basis by Systems Programmers.

No errors are returned when any of the volser names or masks are not matched by any online volumes. When a volser matches multiple pool name definitions, only the first applicable pool name is assigned to that volume. A single pool name can therefore be constructed from multiple token names.

**POOLxxxx = NAME(poolname) VOL(volser1 | volsermask1 ... volserm | volsermaskn)**

These rules apply to the token name POOLxxxx:
- Contain 4 to 64 characters.
- Contain the name POOL as the first 4 characters.
- Contain any uppercase or numeric characters, hyphens, and underscores for the remaining characters.
- Is unique.
- Is required.

These rules apply to the NAME(poolname) value:
- Is required.
- Contain a 1 to 8 character value that is acceptable as a JCL DDNAME.
- Cannot conflict with an existing SMS storage group name.
- Contain only one discrete value.
These rules apply to the `VOL( volser1 | volsermask1 ... volsern | volsermaskn )` value:

- Is required.
- Contain one or more volsers or volser masks.

**Example**

The following example shows how to specify non-SMS volume serial numbers to a pool.

```plaintext
:X:NONSMS_POOLS

POOL_DB2_001 = NAME(DB2DA) VOL(DB2001 DB2019 DB240*)
POOL_DB2_002 = NAME(DB2DA) VOL(DB28*)
POOL_LOG_1 = NAME(LOGDA) VOL(LOG0*)
```

**PRODUCT_INFO**

This section of CKMINI sets product version and release information.

**Important:** Do not modify any tokens in this section except with the CKMJINIM utility. These tokens are documented for your reference only.

```
ACM_REL = VvvRrr

The version and release of Advanced Catalog Management software currently running.

ACM_REL_DATE = dd mmm yyyy

The date that the base level software currently installed was packaged.

ACM_MAINT_DATE = dd mmm yyyy

The date that the maintenance level software currently applied was packaged.

ACM_TITLE1 = ‘...’ and ACM_TITLE2 = ‘...’ and ACM_TITLE3 = ‘...

CKMJNIIM information, including release number and copyright.
```

**PROGRAM_CONTROL**

This section of CKMINI is reserved for custom options and debugging features implemented only under the direction of Technical Support.

**RECOVER_BCS_OPTIONS**

This section of CKMINI customizes the ISPF panel defaults for RECOVER BCS functions.

```
INFILE_ALLOC1 = ‘text’

The default JCL statement string that will qualify the allocation of the existing BACKUP data set name. The text string cannot exceed 50 characters. The content of the string must follow the standard JCL syntax rules. You can also modify the JCL prior to submitting the job. The default is:

INFILE_ALLOC1 = ‘DISP=OLD’
```
xxxxx1_ALLOC1 = 'text' and xxxx1_ALLOC2 = 'text'

The parameters that will qualify the allocation of the associated RECOVER JCL data set name. The text string cannot exceed 50 characters. The combination of the content of each string set must follow the standard JCL syntax rules. You can also modify the JCL prior to submitting the job. The defaults are:

RCVDD1_ALLOC1 = 'UNIT=SYSALLDA,'
RCVDD1_ALLOC2 = 'SPACE=(CYL,(10,10),RLSE)'
RCVDD2_ALLOC1 = 'UNIT=SYSALLDA,'
RCVDD2_ALLOC2 = 'SPACE=(CYL,(10,10),RLSE)'
RCVMRG_ALLOC1 = 'UNIT=SYSALLDA,'
RCVMRG_ALLOC2 = 'SPACE=(CYL,(10,10),RLSE)'
RCVSMF_ALLOC1 = 'UNIT=SYSALLDA,'
RCVSMF_ALLOC2 = 'SPACE=(CYL,(10,10),RLSE)'
SMFERR_ALLOC1 = 'UNIT=SYSALLDA,DISP=(,CATLG),'
SMFERR_ALLOC2 = 'SPACE=(TRK,(1,1),RLSE)'
GENDSN_ALLOC1 = 'UNIT=SYSALLDA,DISP=(,CATLG),'
GENDSN_ALLOC2 = 'SPACE=(TRK,(10,1),RLSE)'

NEWDATAPRIMARY =

This sets the default value for the NEW-DATA-PRIMARY field. Specify a data primary allocation value of 1 to 7 characters.

NEWDATASECONDARY =

This sets the default value for the NEW-DATA-SECONDARY field. Specify a data secondary allocation value of 1 to 7 characters.

NEWINDEXPRIMARY =

This sets the default value for the NEW-INDEX-PRIMARY field. Specify an index primary allocation value of 1 to 7 characters.

NEWINDEXSECONDARY =

This sets the default value for the NEW-INDEX-SECONDARY field. Specify an index secondary allocation value of 1 to 7 characters.

NEWDATACLAS =

This sets the default value for the NEW-DATACLAS field. Specify a class value of 1 to 8 characters.

NEWSTORCLAS =

This sets the default value for the NEW-STORCLAS field. Specify a class value of 1 to 8 characters.

NEWMGMTCLAS =

This sets the default value for the NEW-MGMTCLAS field. Specify a class value of 1 to 8 characters.
NEWDATA_CISZ =

This sets the default value for the NEW-DATA-CISZ field. Specify a default new data CISZ value for the BCS being restored. The value specified must be decimal numeric and a multiple of 512 (Advanced Catalog Management and IDCAMS performs a validation on the value). If the object being recovered is a Linear Data Set (LDS), this value is ignored because 4096 is the only valid CI size for this type of data set.

NEWINDEX_CISZ =

This sets the default value for the NEW-INDEX-CISZ field. Specify a default new index CISZ value for the BCS being restored. The value specified must be decimal numeric and a multiple of 512 (Advanced Catalog Management and IDCAMS performs a validation on the value).

NEWCI_FSPC =

This sets the default value for the NEW-CI-FSPC field. Specify a percentage of 0 to 100 for new CI free space (KSDS only).

NEWCA_FSPC =

This sets the default value for the NEW-CA-FSPC field. Specify a percentage of 0 to 100 for new CA free space (KSDS only).

NEWBUFND =

This sets the default value for the NEW-BUFND field. Specify a numeric value between 0 and 10000 for the default number of Data Component buffers to assign to the new BCS.

NEWBUFNI =

This sets the default value for the NEW-BUFNI field. Specify a numeric value between 0 and 10000 for the default number of Index Component buffers to assign to the new BCS.

NEWSTRNO =

This sets the default value for the NEW-STRNO field. Specify a numeric value between 0 and 10000 for the default number of strings to assign to the new BCS.

RECOVER_DSN_OPTIONS

This section of CKMINI customizes the ISPF panel and the batch execution defaults for RECOVER DSN.

SORT_DYNAMIC_ALLOC = 3

The number of dynamically allocated data sets that will be used by sort. The maximum value allowed is 255, as stated in the DFSORT™ Application Programming Guide, and the maximum number of numeric characters allowed is 3.
**SORT_FILE_SIZE = E000000001600000**

The file size that will be used by sort. The first position is validated as numeric E or U. The maximum number of numeric characters allowed is 10, as the maximum value according to the *DFSORT Application Programming Guide* is 2097152000, and the maximum length is 11 so that an Numeric or Unumeric with 10 digits may be used (for example, E2097151999).

**INFILE_ALLOC1 = 'text'**

The default JCL statement string to be used to qualify the allocation of the existing BACKUP data set name. The text string cannot exceed 50 characters. The content of the string must follow standard JCL syntax rules. You can also modify the JCL prior to submitting the job. The default is:

```
INFILE_ALLOC1 = 'DISP=OLD'
```

**GENDSN_ALLOC1 = 'text' and GENDSN_ALLOC2 = 'text'**

A set of default JCL statement strings to be used to qualify the allocation of the associated RECOVER JCL data set name. Each text string cannot exceed 50 characters. The content of the strings must collectively follow the standard JCL syntax rules. You can also modify the JCL prior to submitting the job. The default is:

```
GENDSN_ALLOC1 = 'UNIT=SYSALLDA,DISP=(,CATLG),'
GENDSN_ALLOC2 = 'SPACE=(TRK,(10,1),RLSE)'
```

**NEWDATAPRIMARY =**

This sets the default value for the **NEW-DATA-PRIMARY** field. Specify a data primary allocation value of 1 to 7 characters.

**NEWDATASECONDARY =**

This sets the default value for the **NEW-DATA-SECONDARY** field. Specify a data secondary allocation value of 1 to 7 characters.

**NEWINDEXPRIMARY =**

This sets the default value for the **NEW-INDEX-PRIMARY** field. Specify an index primary allocation value of 1 to 7 characters.

**NEWINDEXSECONDARY =**

This sets the default value for the **NEW-INDEX-SECONDARY** field. Specify an index secondary allocation value of 1 to 7 characters.

**NEWDATACLAS =**

This sets the default value for the **NEW-DATACLAS** field. Specify a new DATACLAS of 1 to 8 characters to use when allocating the new data set.

**NEWSTORCLAS =**

This sets the default value for the **NEW-STORCLAS** field. Specify a new STORCLAS value of 1 to 8 characters to use when allocating the new data set.
NEWMGMTCLAS =
This sets the default value for the NEW-MGMTCLAS field. Specify a new MGMTCLAS value of 1 to 8 characters to use when allocating the new data set.

NEWDATACISZ =
This sets the default value for the NEW-DATA-CISZ field. Specify a default new data CISZ value for the VSAM data set being restored. The value specified must be decimal numeric and a multiple of 512 (Advanced Catalog Management and IDCAMS performs a validation on the value). If the object being recovered is a Linear Data Set (LDS), this value is ignored because 4096 is the only valid CI size for this type of data set.

NEWINDEXCISZ =
This sets the default value for the NEW-INDEX-CISZ field. Specify a default new index CISZ value for the VSAM data set being restored. The value specified must be decimal numeric and a multiple of 512 (Advanced Catalog Management and IDCAMS performs a validation on the value).

NEWCIFSPC =
This sets the default value for the NEW-CI-FSPC field. Specify a percentage of 0 to 100 for new CI free space (KSDS only).

NEWCAFSPC =
This sets the default value for the NEW-CA-FSPC field. Specify a percentage of 0 to 100 for new CA free space (KSDS only).

RECOVER_LIST_OPTIONS
This section of CKMINI customizes the ISPF panel defaults for RECOVER LIST functions.

INFILE_ALLOC1 = 'text'
The default JCL statement string that will qualify the allocation of the existing BACKUP data set name. The text string cannot exceed 50 characters. The content of the string must follow the standard JCL syntax rules. You can also modify the JCL prior to submitting the job. The default is:
INFILE_ALLOC1 = 'DISP=OLD'

RECOVER_SYNC_SMF_TIME
This section of CKMINI allows you to customize the ISPF panel defaults for the RECOVER BCS functions.

SMF_DIFF_cpuid1 = cpuid1:+hhmmss and SMF_DIFF_cpuid2 = cpuid2:-hhmmss
This sets the default values for the SYNC-SMF-TIME field. Each time zone value consists of the following:
• cpuid—the 1 to 4 internal SYSPNAME values as recorded in the SMF record.
the required colon symbol.

- `+hhmmss` or `-hhmmss` — the time difference between the backup site's local time and the SMF recording site's local time. The time difference is a positive value as you go east and negative value as you go west.

For example, the difference is positive (+hhmmss) if the SMF-cutting LPAR is to the east like New York is +2 hours when compared to Denver.

---

**RECOVER_VVDS_OPTIONS**

This section of CKMINI customizes the ISPF panel defaults for RECOVER VVDS functions.

**INFILE_ALLOC1 = 'text'**

The default JCL statement string that will qualify the allocation of the existing BACKUP data set name. The text string cannot exceed 50 characters. The content of the string must follow the standard JCL syntax rules. You can also modify the JCL prior to submitting the job. The default is:

```
INFILE_ALLOC1 = 'DISP=OLD'
```

**xxxxx1_ALLOC1 = 'text' and xxxxx1_ALLOC2 = 'text'**

The parameters that will qualify the allocation of the associated RECOVER JCL data set name. The text string cannot exceed 50 characters. The combination of the content of each ALLOC1 and ALLOC2 string set must follow the standard JCL syntax rules. You can also modify the JCL prior to submitting the job. The defaults are:

```
RCVDD1_ALLOC1 = 'UNIT=SYSALLDA,','
RCVDD1_ALLOC2 = 'SPACE=(CYL,(10,10),RLSE),'

RCVMRG_ALLOC1 = 'UNIT=SYSALLDA,','
RCVMRG_ALLOC2 = 'SPACE=(CYL,(10,10),RLSE),'

RCVSMF_ALLOC1 = 'UNIT=SYSALLDA,','
RCVSMF_ALLOC2 = 'SPACE=(CYL,(10,10),RLSE),'

SMFERR_ALLOC1 = 'UNIT=SYSALLDA,DISP=(,CATLG),','
SMFERR_ALLOC2 = 'SPACE=(TRK,(1,1),RLSE),'
```

**NEWDATAPRIMARY =**

This sets the default value for the **NEW-DATA-PRIMARY** field. Specify a data primary allocation value of 1 to 7 characters.

**NEWDATASECONDARY =**

This sets the default value for the **NEW-DATA-SECONDARY** field. Specify a data secondary allocation value of 1 to 7 characters.

---

**REORG_BCS_OPTIONS**

This section of CKMINI customizes the ISPF panel defaults for REORG BCS functions.
OUTFILE_ALLOC1 = 'text' and OUTFILE_ALLOC2 = 'text' and
OUTFILE_ALLOC3 = 'text'

A set of default JCL statement strings to be used for allocating the new OUTFILE
data set. Each text string cannot exceed 50 characters. The content of the strings
must collectively follow the standard JCL syntax rules. You can also modify the JCL
prior to submitting the job. The default is:
OUTFILE_ALLOC1 = 'DISP=(,CATLG,DELETE),UNIT=SYSALLDA,'
OUTFILE_ALLOC2 = 'SPACE=(CYL,(15,15),RLSE)' 
OUTFILE_ALLOC3 =

JECL_STATEMENT = 'text'

This value will be added to the JCL (and modified) for lpars selected from the
SYSTEM dialog. Specify a 1 to 50 character JES2 (/*JOBPARM) or JES3 (/**MAIN)
statement.

REPORT_OPTIONS

This section of CKMINI customizes the ISPF panel defaults for the REPORT
functions.

INFILE_ALLOC1 = 'text'

The default JCL statement string that will qualify the allocation of the existing
BACKUP data set name. The text string cannot exceed 50 characters. The content
of the string must follow the standard JCL syntax rules. You can also modify the
JCL prior to submitting the job. The default is:
INFILE_ALLOC1 = 'DISP=SHR'

OUTFILE_ALLOC1 = 'text', OUTFILE_ALLOC2 = 'text', and
OUTFILE_ALLOC3 = 'text'

A set of default JCL statement strings to be used for allocating the new OUTFILE
data set. Each text string cannot exceed 50 characters. The content of the strings
must collectively follow the standard JCL syntax rules. You can also modify the JCL
prior to submitting the job. The default is:
OUTFILE_ALLOC1 = 'DISP=(,CATLG,DELETE),UNIT=SYSALLDA,'
OUTFILE_ALLOC2 = 'SPACE=(CYL,(15,15),RLSE)' 
OUTFILE_ALLOC3 =

RESOURCE_SERIALIZATION

This section of CKMINI has no tokens at this time.

SI027_VALUES

This section of CKMINI should be changed only by Technical Support.

SI040_VALUES

This section of CKMINI controls options that affect the behavior of the Advanced
Catalog Management common VSAM access routines and should be changed only
by Technical Support.
SUPERCLIP_OPTIONS

This section of CKMINI customizes the ISPF panel defaults for SUPERCLIP functions.

**MODE = blank | R | B | S**

This sets the default value for the **Mode** field.

- blank—specify no value to leave the field blank.
- R—RESTART
- B—BACKOUT
- S—SIMULATE

ZAP_OPTIONS

This section of CKMINI customizes the ISPF panel defaults for ZAP functions.

**FATAL_READ_ERROR = WARNING | ERROR**

This sets the default value for the **FATAL-READ-ERROR** field.

- WARNING—issues a warning message and continues with a return code of 4.
- ERROR—issues an error message and terminates with a return code of 8.

This token applies to ZAP PRINT (BCS, DSN, and VVDS).
Chapter 25. Messages and Codes for Advanced Catalog Management

This appendix documents the messages and error codes issued by Advanced Catalog Management. Messages are presented in ascending alphabetical and numerical order.

Messages

All message IDs have a severity code as the last character. These severity codes are:

<table>
<thead>
<tr>
<th>Severity Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>Information message. No user action required.</td>
</tr>
<tr>
<td>S</td>
<td>Status message. No user action required.</td>
</tr>
<tr>
<td>W</td>
<td>Warning message. Results may not be as expected.</td>
</tr>
<tr>
<td>E</td>
<td>Error message. Some may be user-correctable, read the User Response to determine the course of action.</td>
</tr>
</tbody>
</table>

Product Error Messages

**CKM00143 ABENDED U-xxxx**

Explanation:

Program CKM00143 has suffered an abend and is taking appropriate recovery and cleanup actions. The requested function appearing in the CKM14300I message has failed.

User response:

Contact Technical Support. Have the execution listings and the SYSUDUMP output available. Also, make note of the MVS operating system release, and the type of hardware that was being accessed.

**CKM01000E OPEN FAILED FOR DDNAME=cccccccc**

Explanation:

During program start, either required modules or DD statements were not discovered.

User response:

For missing modules, Ensure the proper //STEPLIBs are available. For missing DDs, add the appropriate DD statement to the execution JCL. For OPEN Failures, ensure that any conflicting DCB override attributes are removed from the JCL. For CDE Failures, notify Technical Support.

**CKM01001I dd mmm yyyy hh.mm.ss PAGE: nnn**

Explanation:

Welcome message with the current date, time and page number.

User response:

None.

**CKM01002E ** RETURN-CODE 12 SET DUE TO COMMAND INPUT ERROR.**

Explanation:

During command interpretation, command cccccc could not be identified. The execution return-code is set to 12 to flush the remaining commands for this run.

User response:

Check the spelling of the command. Ensure that the command text is in UPPER case format.

**CKM01004E INVALID SYSIN DCB LOGICAL RECORD LENGTH**

Explanation:

The SYSIN DD statement refers to a dataset that doesn't have LRECL=80.

User response:

Correct the JCL.
CKM01005E • CKM01013E

CKM01005E  FATAL ERRORS HAVE OCCURRED DURING //INI PROCESSING.

Explanation:
During program start, one or more problems occurred during decoding of the //INI member. As the //INI provides vital information for this product, the program cannot continue execution.

User response:
Contact Technical Support. Have available the listing that contains this message and the SCKMPARM member that controls execution of this product.

CKM01006E  PROGRAM MUST EXECUTE AS AN OS/390 AUTHORIZED

Explanation:
During program start, this product determined it was not OS/390 authorized. Due to restraints set forth by OS/390, numerous functions will not work, thus the program cannot continue execution.

User response:
Ensure that the library from which this product is executing is OS/390 authorized.

CKM01007W  NO COMMANDS HAVE BEEN DETECTED IN //SYSIN INPUT STREAM

Explanation:
During program execution, this product determined there were no valid commands (BACKUP, RECOVER, and so on) in the //SYSIN input stream.

User response:
Ensure that this product command's are in the input stream.

This may be due to commands from the sample libraries being modified, but not having their "\/*" removed.

It may also be due to two //SYSIN statements being specified or generated by JES2/3.

CKM01008I  COMMANDS PROCESSED: n

Explanation:
Program termination message. "n" is the number of recognizable commands (BACKUP, RECOVER, and so on) that were processed. This the count of commands recognized, not the count of commands successfully processed. It is possible that this product recognizes a command and during execution of the command, serious errors are encountered that terminate execution of that function

User response:

none.

CKM01009I  EXECUTION COMPLETE. HIGHEST RETURN CODE WAS n.

Explanation:
Program termination message. "n" is the highest return encountered during processing of the user's commands. See messages before this message for the exact reason why any return code was issued.

User response:

none.

CKM01010E  UNABLE TO DETERMINE OPEN CATALOGS

Explanation:
During program start, a problem occurred during discovery of the allocated/open catalogs to the Catalog Address Space.

User response:
Contact Technical Support. Have available the listing that contains this message and the SCKMPARM member that controls execution of this product.

CKM01011E  ENTRY ON CAXWA CHAIN IS INVALID

Explanation:
During program start, a problem occurred during discovery of the allocated/open catalogs to the Catalog Address Space.

User response:
Contact Technical Support. Have available the listing that contains this message and the SCKMPARM member that controls execution of this product.

CKM01012I  BUILD(bbbbbb REV=nn yyyyymmdd) OS(osname v.r PSEQ=pppppppp)

Explanation:
This message identifies the current Service Pack level of this product, and the current level of the MVS operating system. The PSEQ information is meaningful only to Technical Support for problem resolution purposes.

User response:

none.

CKM01013E  MVS SUPPORT LEVEL CONFLICT = INTERNAL-CODE=cccccc

Explanation:
This product detected an unexpected condition that is related to the internals of the operating system software.
The Internal-Code is meaningful only to Technical Support for problem resolution purposes.

User response:
Processing Terminates, and an SVC Dump is produced. Notify Technical Support. Technical Support may request that the SVC Dump be sent for further analysis.

** COMMAND FLUSHED DUE TO RETURN-CODE rc.**

Explanation:
The execution of a prior command resulted in a return-code that was 12 or higher. This message indicates that execution of the current command was not performed due to this reason.

User response:
Review the command that caused the reported return-code.

** invalid command input - text**

Explanation:
The input command is not valid.

User response:
Review the command that caused the reported error.

Syntax error in command starting on line xx command :

Explanation:
During prevalidation of commands in the SYSIN, an error was found. Syntax error - the command didn’t conform to basic syntax rules such as matching parens. Unknown command - the command is unknown.

User response:
Review the command that caused the reported error.

Unknown command in command starting on line xx command :

Explanation:
During prevalidation of commands in the SYSIN, an error was found. Syntax error - the command didn’t conform to basic syntax rules such as matching parens. Unknown command - the command is unknown.

User response:
Review the command that caused the reported error.

Your license for the product or a specific product command is not valid

Explanation:
Product command terminated with return code 90 which indicates that your license for that command is not valid. Licenses are defined in the INI under the PRODUCT_SECURITY section.

User response:
Generally none. If you can’t quickly identify the problem, Contact Technical Support.
CKM01091E  ABEND WHILE PROCESSING
COMMAND: cccccc

Explanation:
During execution of a command, an abend took place that the command did not rectify.

User response:
Ensure that all parameters on the named command are coded correctly, that external data sets used in the command are valid and try again. If the problem persists, contact Technical Support. Ensure all software run information is available: this includes the original JCL and control statements used to invoke this product, and all the spooled output from its execution.

CKM01094E  ** RETURN-CODE 16 SET DUE TO
ABEND IN FUNCTION cccccc

Explanation:
During execution of a command, a critical abend occurred. The condition-code has been forced to 16 in order to flush the remaining commands in the SYSIN stream to avoid the possibility of abend recursion.

User response:
Ensure that all parameters on the named command are coded correctly, that external data sets used in the command are valid and try again. If the problem persists, contact Technical Support. Ensure all software run information is available: this includes the original JCL and control statements used to invoke this product, and all the spooled output from its execution.

CKM01303E  Blank input line invalid

Explanation:
The SYSIN input found a blank line when expecting a continuation.
The SYSIN text will be printed up to the point of the error.

User response:
Correct the SYSIN input and resubmit.

CKM01304E  Expected continuation not found

Explanation:
The SYSIN input did not continue onto an additional line as expected.
The SYSIN text will be printed up to the point of the error.

User response:
Correct the SYSIN input and resubmit.

CKM01305E  Input Flushed

Explanation:
Because of other errors already printed, the remainder of the SYSIN will be ignored.
The SYSIN text will be printed up to the point of the error.

User response:
Correct the SYSIN input and resubmit.

CKM01306E  Unmatched parenthesis

Explanation:
The end of the SYSIN was reached while expecting a closing right parenthesis.
The SYSIN text will be printed up to the point of the error.

User response:
Correct the SYSIN input and resubmit.

CKM01307E  Paren nesting error

Explanation:
More right parenthesis characters have been seen than left parenthesis characters.
The SYSIN text will be printed up to the point of the error.

User response:
Correct the SYSIN input and resubmit.

CKM01308E  Input buffer full

Explanation:
In SYSIN buffer has been exceeded for the current command.
The SYSIN text will be printed up to the point of the error.

User response:
Correct the SYSIN input and resubmit.

CKM01309E  xxxxxx delimiters not balanced

Explanation:
Right quotes haven't been found to match the left single or double quotes for the string or hex quoted value. The SYSIN text will be printed up to the point of the error.

User response:
Correct the SYSIN input and resubmit.
**CKM01HEX**  **FUNCTION=function**  **R15=nnnn**  **LOC=lllllll**

**Explanation:**

During backup processing, an error occurred using CKM01HEX to print a record. Processing continues.

**User response:**

Report this message to Technical Support. Have available the listing that contains this message.

---

**CKM01SMF**  **ERROR; RETURN CODE=nnnn**  **LOC: llllllll entry**

**Explanation:**

An error occurred using CKM01SMF to obtain SSI information for the 'entry'. llllllll is the internal location where the error occurred. Processing terminates.

**User response:**

Contact Technical Support. Have available the listing containing this message.

---

**CKM01VV1**  **(nn) tttttttt TABLE PROCESSING.**  **R15=rc**

**Explanation:**

An unrecoverable internal error occurred while processing the BACKUP command.

**User response:**

Contact Technical Support. Have available the listing that contains this message and the SCKMPARM member that controls execution.

---

**CKM02001E**  **module MODULE MISSING FOR SUBCOMMAND xxxxxxxx**

**Explanation:**

During command interpretation, the command proceeding this message requested a module that was not available.

**User response:**

Contact Technical Support. Have available the listing that contains this message and the SCKMPARM member that controls execution.

---

**CKM02002E**  **UNRECOGNIZABLE SUBCOMMAND of BACKUP: xxxxxxxx**

**Explanation:**

During command interpretation, the command proceeding this message was not BACKUP BCS, BACKUP VVDS or BACKUP DSN.

**User response:**

The BACKUP command must have one of these keywords. Ensure continuation indicators are present if the command was continued onto a second line.

---

**CKM02003E**  **COMMAND HAS NO OPERANDS**

**Explanation:**

The BACKUP command had no operands.

**User response:**

Ensure that the subcommand of BACKUP is specified correctly. Most likely, the command was continued on a second line but the continuation marker was not present.

---

**CKM02004E**  **INSTALLATION SECURITY SERVER HAS DENIED ACCESS TO THIS PRODUCT COMMAND CKM02004E INSTALLATION SECURITY SERVER HAS RETURNED FAILURE CODES nnnn nnnn**

**Explanation:**

During command processing, the installation security has denied access to the BACKUP command.

**User response:**

Contact the installation security administrator if this unexpected. You will need to tell them the name of the product’s command in use. In this case it is BACKUP BCS or BACKUP VVDS.

---

**CKM02009I**  **BACKUP FUNCTION COMPLETE.**  **RETURN CODE 123**

**Explanation:**

Command execution termination message.

**User response:**

Generally none.

---

**CKM02046I**  **RECORD SUMMARY FOR catalogname**

**Explanation:**

If the counts are the same, the BACKUP was successful and no further action is necessary. If the symptom persists, a permanent solution would be to RECOVER the catalog.

If the counts are different, the BACKUP was not successful. Contact Technical Support. Ensure that this entire jobstream, including JCL, and all messages are available for the support staff.

---

**CKM02100I**  **BACKUP BCS MAINTENANCE LEVEL:**  **CKM00021/REV=nn**

**Explanation:**

Informational message giving the current revision number of the specific program.
CKM02103E • CKM02111E

User response:
None required. In the event of a problem, Technical Support may request the revision number.

CKM02103E ACCEPTxxxxxxxx VALUES CAN BE aaaaaaaaaaaaaaaaa

Explanation:
During command interpretation, the command preceding this message did not have the correct argument for the ACCEPTxxxxxxx keyword. Where xxxxxxxx is either DIAGNOSE or EXAMINE, and aaaaaaaaaaaaaa is a list of valid arguments. For ACCEPTDIAGNOSE, the valid arguments are "I", "W" or "E". For ACCEPTEXAMINE, the valid arguments are "I", "W", "E" or "D".

User response:
Correct the coding of the ACCEPTxxxxxxx keyword.

CKM02104I WHEN SIMULATE IS REQUESTED xxxx IS NOT OPERATIVE - IGNORED

Explanation:
Either ACCEPT-DIAGNOSE or ACCEPT-EXAMINE was requested together with SIMULATE. The ACCEPT-xxx keyword was ignored. When SIMULATE is requested, the DIAGNOSE or EXAMINE return code is reported, but makes no other difference in processing.

User response:
If the DIAGNOSE or EXAMINE indicated a problem, this should be checked before running the BACKUP BCS in non-SIMULATE mode.

CKM02105E MESSAGETEXT VALUES CAN BE "FULL" OR "NONE"

Explanation:
During command interpretation, the command preceding this message did not have the correct argument specified for the MESSAGETEXT keyword. The value must be "FULL", "NONE".

User response:
Correct the coding of the MESSAGETEXT keywords.

CKM02106E KEYWORD HAS NON-NUMERIC ARGUMENT

Explanation:
The keyword requires a numeric argument. Non-numeric data were detected.

User response:
Correct the argument for the keyword specified and re-submit.

CKM02107E KEYWORD ARGUMENT NOT IN VALID RANGE

Explanation:
The argument supplied for the keyword is outside the acceptable bounds.

User response:
Correct the argument for the keyword specified and re-submit.

CKM02108E ONLY PRINT(NONE) WHEN PARALLEL > 1

Explanation:
PRINT(DATA) and PRINT(KEY) are not permitted when the PARALLEL argument indicates multiple BCS are to be backed up concurrently.

User response:
Either remove the PRINT keyword and its argument or remove the PARALLEL keyword and its argument.

CKM02109I DEFAULT IN EFFECT: defaulted keyword

Explanation:
A default is being used for a keyword.

User response:
None.

CKM02110E ODS OR OFILE KEYWORD MISSING

Explanation:
During command interpretation, the command preceding this message did not have the ODS/OUTDATASET/OFILE/OUTFILE keyword.

User response:
The BACKUP command must have one of these keywords. Ensure continuation indicators are present if the command was continued onto a second line.

CKM02111E KEYWORD HAS NO OPERANDS. KEYWORD=kkkkkk START OF STRING=(not applicable)

Explanation:
During command interpretation, the keyword listed in this message did not have any arguments.

User response:
Most keywords have arguments. Ensure continuation indicators are present if the keyword was continued onto a second line.
CKM02112E • CKM02126E

CKM02112E  MASK VALIDATION ERROR FOR ENTRY: SSSSSSSS DESCRIPTION OF ERROR: ERROR DESCRIPTION

Explanation:
A DSN or mask value does not conform to standards.
User response:
Ensure DSN or mask is correct.

CKM02113W DUPLICATE DSN OR MASK ENCOUNTERED -- IGNORED. KEYWORD=KKKKKKKKK START OF STRING=SSSSSSS

Explanation:
A DSN or mask value has been coded more than once.
User response:
Ensure DSN or mask is correct.

CKM02116I THE FOLLOWING DSNS/MASKS ARE TO BE PROCESSED DURING TTT PROCESSING

Explanation:
The message displays a list of DSNs and masks detected during BACKUP initial processing.
User response:
none.

CKM02117E DDName: xxxxxxxx assigned to NULLFILE

Explanation:
Certain DDNames used in the backup process must not be assigned to DUMMY or NULLFILE.
User response:
Change the JCL to assign either a temporary file (typically) or another type. Ensure the correct DCB information is provided. Submit the request again.

CKM02118E Missing DDName: xxxxxxxx

Explanation:
Certain DDNames are required when a Backup is requested. The reported DDName was not found.
User response:
Determine the correct specification for the DDName from the User Guide. Correct the JCL and re-submit.

CKM02119E Sort for Report data failed. R15=nnnn

Explanation:
When processing a Backup request with the PARALLEL option, the sort of the output report data failed.
User response:
Check the output SORTMSG DDName listing for the error. Contact Technical Support.

CKM02120E SPANFILE OR SPANDATASET REQUIRES EXCPMODE

Explanation:
Either SPANFILE or SPANDATASET was requested and EXCPMODE was NOT requested. EXCPMODE is required for SPANFILE or SPANDATASET.
User response:
Correct the command and re-submit.

CKM02124E ATTACH OF SUB-TASK FAILED

Explanation:
While processing BACKUP BCS in PARALLEL mode, the attach of a sub-task failed.
User response:
Ensure that all keywords on the named command are coded correctly, that external data sets used in the command are valid and try again. If the problem persists, contact Technical Support. Ensure all software run information is available: this includes the original JCL and control statements used, and all of the spooled output from its execution.

CKM02125E NO FREE ECB FOUND

Explanation:
While processing BACKUP BCS in PARALLEL mode, no unused / free ECB was located.
User response:
Ensure that all keywords on the named command are coded correctly, that external data sets used in the command are valid and try again. If the problem persists, contact Technical Support. Ensure all software run information is available: this includes the original JCL and control statements used, and all of the spooled output from its execution.

CKM02126E NO POSTED ECB LOCATED

Explanation:
While processing BACKUP BCS in PARALLEL mode, no posted ECB was found following the return from a WAIT.
CKM02127E  CKM02134W

User response:
Ensure that all keywords on the named command are coded correctly, that external data sets used in the command are valid and try again. If the problem persists, contact Technical Support. Ensure all software run information is available: this includes the original JCL and control statements used, and all of the spooled output from its execution.

CKM02127E  CKM02134W

Explanation:
While processing BACKUP BCS in PARALLEL mode, an attached sub-task terminated with an error.

User response:
Check the output report for CKM021nnW or CKM021nnE messages. Dependent on the content of those messages, take corrective action. Ensure that all keywords on the named command are coded correctly, that external data sets used in the command are valid and try again.

If the problem persists, contact Technical Support. Ensure all software run information is available: this includes the original JCL and control statements used, and all of the spooled output from its execution.

CKM02127W  CKM02134W

Explanation:
While processing BACKUP BCS in PARALLEL mode, an attached sub-task terminated with an error.

User response:
Check the output report for CKM021nnW or CKM021nnE messages. Dependent on the content of those messages, take corrective action. Ensure that all keywords on the named command are coded correctly, that external data sets used in the command are valid and try again.

CKM02130W  CKM02134W

Explanation:
A Catalogname specified for backup is not catalogued in the master catalog or the CAT(...) catalog.

User response:
Ensure the name is spelled correctly.

CKM02133W  CKM02134W

Explanation:
After processing the BACKUP command, no catalogs were selected for backup.

User response:
Ensure the names are specified correctly. At least one catalog must be backed up with the BACKUP command.

CKM02134W

Explanation:
The record length field contained inside a Usercatalog Connector record identifying a catalog about to be backed up does not match the record length returned from VSAM.

User response:
This highly unusual circumstance may indicate a problem in the master catalog, or object of the MCAT(...) parameter on the BACKUP command.

Execute an IDCAMS DIAGNOSE ICFCAT IDS(...) specifying the master catalog, or if using the MCAT(...) parameter on the BACKUP command, specify that catalog. Most likely, the catalog being backed up will need its Usercatalog Connector record deleted via an IDCAMS EXPORT DISCONNECT... command followed by an IDCAMS IMPORT CONNECT... command.

Note: Should this course of action be required, IDCAMS DEFINE ALIAS commands will be needed to associate
the various DSNs within the affected catalog with the master catalog.

**CKM0213SW RELATED DSN FOR TRUENAME tttttttttttt IS NOT 45X'00'**

**Explanation:**
While processing the BACKUP command, the DSN specified in the BCS(...) keyword referenced a Truename record. These records usually name a data or index component of a BCS or VSAM data set.

Since this Truename record was located due to being named in the BCS(...) keyword, it must reference a catalog. Catalogs use a name of 45X'00'. If the reference is not 45X'00', a serious catalog architectural problem exists.

**User response:**
Either add DIAGNOSEBCS to the product's BACKUP command or execute IDCAMS DIAGNOSE ICFCAT for this catalog. Action will be based on the outcome of the DIAGNOSE function.

**CKM02136W Master Catalog entry for: DSNAME is not for a valid BCS**

**Explanation:**
While processing the BACKUP command, the DSN specified in the BCS(...) keyword referenced an object that was not a valid BCS.

**User response:**
Check the name of the object and then execute an IDCAMS LISTCAT ENT(dsname)ALL. Ensure that AMS reports it as a catalog; if there are still problems, contact Technical Support.

**CKM02137E DSNAME ddddddddd DEFINED BY DDNAME dddddddd APPEARS MORE THAN ONCE IN ODS/OFILE**

**Explanation:**
BACKUP detected an output DSname was used more than one time.

**User response:**
Output DSnames must be unique.

**CKM02138I FREE COMPLETE FOR OUTPUT DSNAME=ddddddd**

**Explanation:**
OUTDATASET(...) was coded and BACKUP has successfully freed the file name.

**User response:**
None.

**CKM02139I CLOSE COMPLETE FOR OUTPUT DDNAME=ddddddd**

**Explanation:**
Either OUTDATASET(...) or OUTFILE (...) was coded and BACKUP has successfully CLOSED the file.

**User response:**
None.

**CKM02140E UNABLE TO xxxxxxxxxx DDNAME=ddddddd R15=nnn R0=nnn**

**Explanation:**
While processing the BACKUP command, the DDname of the OFILE/OUTFILE keyword was missing.

**User response:**
Ensure the DDname is specified correctly.

**CKM02141E INVALID SYNTAX FOR VALUES SPECIFIED WITHIN PARENTHESIS FOR KEYWORD=kkkkkkkkk START OF STRING=sssssssss**

**Explanation:**
For OUTFILE, valid DDnames must be coded within the "(...)". DDnames must be from 1 to 8 characters and conform to MVS DDname rules.

For OUTDATASET, valid DSNAMEs must be coded within the "(...)". DSNAMEs must be from 1 to 44 characters and conform to MVS DSNAME rules.

DSNAMEs cannot be masks.

**User response:**
Correct the coding of the OUTFILE/OUTDATASET parameter.

**CKM02142I allocation COMPLETE FOR OUTPUT DDNAME=ddddddd, DSN=ddddddd**

**Explanation:**
OUTDATASET(...) was coded and BACKUP has successfully allocated the file name.

**User response:**
None.

**CKM02143I OPEN COMPLETE FOR OUTPUT DDNAME=dname DSN=dsname [VOLUME=vol]**

**Explanation:**
The OUTDATASET(...) /OUTFILE(...) /SPANFILE(...) / SPANDATASET(...) was coded and BACKUP successfully opened the file.

**User response:**
None.
CKM02148W  CKM02164W

None.

CKM02148W INI error - Section: name Token:
SMF_RECORD_TYPE Error:
xxxxxxxxxxxxxxxxxxxxxxxxx

Explanation:
The value supplied in the named section for the
SMF_RECORD_TYPE token in the INI is invalid. The
xxxxx will indicate the error. The value should be from 1
- 3 numeric bytes in the range 0 - 255 inclusive.

User response:
Correct the content of the INI. The value is optional, if
entered, the value must also be supplied in the TYPE
option as specified in the SMFPRMxx member of
SYS1.PARMLIB.

CKM02149I Failed to write SMF record. RC: xxx

Explanation:
A problem occurred when trying to write the SMF record
for the Backup summary.

User response:
Contact Technical support.

CKM02150I IDCAMS DIAGNOSE of BCS terminated
with a Return Code of 12. A BACKUP
BCS specifying EXCPMODE may be
able to process the data

Explanation:
IDCAMS DIAGNOSE detected a severe problem when
processing one or more of the selected BCS. Severe
errors may cause "normal" Backup BCS to fail.
EXCPMODE of Backup may, on the other hand, be
successful.

User response:
Some of these "Severe" problems, for example:
IDC31376I INPUT ICFCAT HAS NO VVDS ENTRIES
are not that severe, and the BCS in question should, if
there are no other Diagnose failures, be processed with
NODIAGNOSE-BCS. Otherwise, the BACKUP BCS
should be re-executed with EXCPMODE and
NODIAGNOSE-BCS specified.

CKM02151I EXCPMODE of BACKUP BCS will
require the target BCS to be defined
prior to executing RECOVER BCS. The
RECOVER BCS must specify
INTO-EMPTY.

Explanation:
EXCP-MODE was specified.

User response:
Since EXCP-MODE was specified, you must, if you are
going to process the backup with Recover BCS, define
the target BCS and, when coding the RECOVER BCS
keywords, include INTO-EMPTY.

CKM02157I PRINT OPTION IN EFFECT: option

Explanation:
The specified print option will be used.

User response:
None.

CKM02163W SMF IS NOT ACTIVE ON THE
SUBSYSTEM

Explanation:
The BACKUP and RECOVER facility permits forward
recovery using SMF data. SMF data are not collected if
SMF is not active, negating the ability to use this
feature.

User response:
SMF should be activated on those subsystems that
update the BCS being recovered.

CKM02164W SMF TYPE 61 (BCS DEFINE ) NOT
BEING RECORDED ON THIS
SUBSYSTEM

Explanation:
The SMF administrator controls which SMF records are
to be recorded. Updates to BCS cause a SMF record
type 61, 65, or 66 to be cut. One, or more, of the
specific record types are not being recorded. The
BACKUP and RECOVER facility permits forward
recovery using SMF data; these record types are
required for this feature.

User response:
Request the SMF administrator to enable recording of
the specific SMF record type(s).

CKM02164W SMF TYPE 65 (BCS DELETE ) NOT
BEING RECORDED ON THIS
SUBSYSTEM

Explanation:
The SMF administrator controls which SMF records are
to be recorded. Updates to BCS cause a SMF record
type 61, 65, or 66 to be cut. One, or more, of the
specific record types are not being recorded. The
BACKUP and RECOVER facility permits forward
recovery using SMF data; these record types are
required for this feature.

User response:
Request the SMF administrator to enable recording of
CKM02164W  CKM02196E

Chapter 25. Messages and Codes for Advanced Catalog Management  303

the specific SMF record type(s).

CKM02164W  SMF TYPE 66 (BCS ALTER ) NOT BEING RECORDED ON THIS SUBSYSTEM

Explanation:
The SMF administrator controls which SMF records are to be recorded. Updates to BCS cause a SMF record type 61, 65, or 66 to be cut. One, or more, of the specific record types are not being recorded. The BACKUP and RECOVER facility permits forward recovery using SMF data; these record types are required for this feature.

User response:
Request the SMF administrator to enable recording of the specific SMF record type(s).

CKM02187E  ERROR DURING

Explanation:
An unrecoverable internal error occurred while processing the BACKUP command.

User response:
Contact Technical Support. Have available the listing that contains this message and the SCKMPARM member that controls execution.

CKM02188E  KEYWORD HAS MORE THAN 1 OPERAND; ONLY 1 ALLOWED
  KEYWORD=kkkkkkkkk START OF STRING=mmmmmm

Explanation:
During command interpretation, the keyword listed in this message had more than 1 argument.

User response:
Ensure only argument is coded for this keyword.

CKM02190E  VALUE ENTERED FOR KEYWORD GREATER THAN NNN
  KEYWORD=kkkkkkkkk START OF STRING=ssssssss

Explanation:
A keyword argument was greater than nnn characters.

User response:
Ensure argument is correct.

CKM02191E  ABEND WHILE PROCESSING BACKUP COMMAND; PHASE pppp

Explanation:
An unrecoverable MVS related error occurred while processing the BACKUP command.

User response:
For x37 and x13 related errors, the problem is caused by a poorly specified OUTFILE or OUTDATASET. Correct the specifications and re-run product. For all other errors, contact Technical Support. Have available the listing that contains this message and the SCKMPARM member that controls execution.

CKM02193E  GETMAIN FAILED (1) MVS R15=nnn REQUEST SIZE (KB)=sss

Explanation:
During BACKUP keyword evaluation, a problem occurred during acquisition of workspace.

User response:
Contact Technical Support. Have available the listing that contains this message and the SCKMPARM member that controls execution.

CKM02195E  UNABLE TO aaaaaaaa DSN/MASK INFORMATION. (n) R15=nnn

Explanation:
During BACKUP keyword evaluation, a problem occurred during retrieval of a dataspace necessary for processing. "tablename" is the name of the internal table being created.

User response:
Contact Technical Support. Have available the listing that contains this message and the SCKMPARM member that controls execution.

CKM02196E  ATTEMPT FOR DYNAMIC allocation (n) HAS FAILED

Explanation:
This message, accompanied by numerous IGD, IEF, or IKJ messages indicates that a file was not available for dynamic allocation or dynamic unallocation. This condition will stop further execution of the BACKUP command. "(n)" refers to a specific place in the module that detects this condition.

User response:
Action varies depending on the DSN named in the IGD, IEF or IKJ messages. Most likely, the problem is due to incorrectly specifying a BCS on the BACKUP parameter.
CKM02200I  CKM02210E

CKM02200I  BACKUP VVDS MAINTENANCE LEVEL:
CKM00022/REV=nn

Explanation:
Informational message giving the current revision number of the specific program.
User response:
None required. In the event of a problem, Technical Support may request the revision number.

CKM02203E  ACCEPTDIAGNOSE AND ACCEPTEXAMINE VALUES CAN BE ‘I’, ‘W’, OR ‘E’

Explanation:
During command interpretation, the command preceding this message did not have the correct value inside the ACCEPTDIAGNOSE or ACCEPTEXAMINE keyword. The value must be ‘I’, ‘W’, or ‘E’.
User response:
Correct the coding of the ACCEPTDIAGNOSE keywords.

CKM02204I  WHEN SIMULATE IS REQUESTED xxxx IS NOT OPERATIVE - IGNORED

Explanation:
ACCEPT-DIAGNOSE was requested together with SIMULATE. The ACCEPT-xxx keyword was ignored. When SIMULATE is requested, the DIAGNOSE return code is reported, but makes no other difference in processing.
User response:
If the DIAGNOSE indicated a problem, this should be checked before running the BACKUP VVDS in non-SIMULATE mode.

CKM02205E  MESSAGETEXT VALUES CAN BE “FULL” OR “NONE”

Explanation:
During command interpretation, the command preceding this message did not have the correct value inside the MESSAGETEXT keyword. The value must be “FULL”, “NONE”.
User response:
Correct the coding of the MESSAGETEXT keywords.

CKM02206E  KEYWORD HAS NON-NUMERIC ARGUMENT

Explanation:
The keyword requires a numeric argument. Non-numeric data were detected.

User response:
Correct the argument for the keyword specified and re-submit.

CKM02207E  KEYWORD ARGUMENT EXCEEDS VALID RANGE

Explanation:
The argument supplied for the keyword is outside the acceptable bounds.
User response:
Correct the argument for the keyword specified and re-submit.

CKM02208E  DIAGNOSE-ERROR-LIMIT INCOMPATIBLE WITH NODIAGNOSE-VVDS

Explanation:
The keyword DIAGNOSE-ERROR-LIMIT only makes sense if the DIAGNOSE-VVDS keyword is also coded.
User response:
Either remove the DIAGNOSE-ERROR-LIMIT request, or add a DIAGNOSE-VVDS keyword, and re-submit.

CKM02209W  ONE OR MORE VVR/NVR CONTAIN BACK POINTERS TO THE CURRENT MASTER CATALOG: dsname

Explanation:
While processing the VVR and NVR records in the VVDS a check is made on the catalog back pointer. If this indicates the current Master Catalog, an error will occur when the Recover process attempts to DELETE the VVDS with the RECOVERY option. The object name of the FIRST entry meeting this condition is shown in the message.
User response:
All objects cataloged in the Master Catalog should be moved from this volume to another, if pertinent. Once this done, the VVDS should be backed up.

CKM02210E  ODS OR OFILE KEYWORD MISSING

Explanation:
During command interpretation, the command preceding this message did not have the ODS/OUTDATASET/OFILE/OUTFILE keyword.
User response:
The BACKUP command must have one of these keywords. Ensure continuation indicators are present if the command was continued onto a second line.
CKM02211E  KEYWORD HAS NO OPERANDS.
KEYWORD=kkkkkk START OF
STRING=(not applicable)

Explanation:
During command interpretation, the keyword listed in
this message did not have any operands.

User response:
Most keywords have operands. Ensure continuation
indicators are present if the keyword was continued
onto a second line.

CKM02212E  MASK VALIDATION ERROR FOR
ENTRY: SSSSSSSS
DESCRIPTION OF
ERROR: ERROR DESCRIPTION

Explanation:
A DSN or mask value does not conform to standards.

User response:
Ensure DSN or mask is correct.

CKM02213W  DUPLICATE DSN OR MASK
ENCOUNTERED -- IGNORED.
KEYWORD=KKKKKKKKK START OF
STRING=SSSSSSSS

Explanation:
A DSN or mask value has been coded more than once.

User response:
Ensure DSN or mask is correct.

CKM02214E  BACKUP VVDS(...) VALUE MUST BE A
1-6 CHARACTER VOLSER

Explanation:
Only volume serial numbers and volume serial masks
can be specified as the object of VVDS(...). The values
can be from 1 to 6 characters long.

User response:
Correct the coding of the values on the BACKUP VVDS
keyword.

CKM02216I  THE FOLLOWING DSNS/MASKS ARE
TO BE PROCESSED DURING TTT
PROCESSING

Explanation:
The message displays a list of DSNs and masks
detected during BACKUP initial processing.

User response:
none.

CKM02217E  CKM01SMF ERROR; RETURN
CODE=xxxx LOC: lllllll entry

Explanation:
An error occurred using CKM01SMF to obtain SSI
information for the 'entry'. lllllll is the internal location
where the error occurred. Processing terminates.

User response:
Contact Technical Support. Have available the listing
containing this message.

CKM02218E  NO STORAGE GROUPS RETURNED
BY SSI

Explanation:
SSI did not return any storage groups to CKM01SMF.
Processing terminates.

User response:
Check that storage groups are defined on the system. If
unable to determine the cause of this message, contact
Technical Support. Have available the listing containing
this message.

CKM02219E  KEYWORD: EXCLUDE-
STORAGEGROUP MAXIMUM LENGTH:
nnn EXCEEDED

Explanation:
The operand entered for a keyword exceeded the
maximum length allowed for the operand. nnn is the
maximum allowed length for the keyword. Processing
terminates.

User response:
Correct the length of the keyword's operand.

CKM02219E  KEYWORD: INCLUDE-
STORAGEGROUP MAXIMUM LENGTH:
nnn EXCEEDED

Explanation:
The operand entered for a keyword exceeded the
maximum length allowed for the operand. nnn is the
maximum allowed length for the keyword. Processing
terminates.

User response:
Correct the length of the keyword's operand.

CKM02220E  INVALID VALUE IN KEYWORD:
EXCLUDE-STORAGEGROUP VALUE:
error

Explanation:
The value in the keyword is invalid. 'error' indicates the
problem detected with the value. Processing terminates.
CKM02220E  INVALID VALUE IN KEYWORD: INCLUDE-STORAGEGROUP VALUE: error

Explanation:
The value in the keyword is invalid. 'error' indicates the problem detected with the value. Processing terminates.

User response:
Correct the value's specification.

CKM02221W DUPLICATE IGNORED; KEYWORD: EXCLUDE-STORAGEGROUP ENTRY: entry

Explanation:
A duplicate entry was found for the keyword. The duplicate will be ignored. Processing continues.

User response:
Correct the value's specification.

CKM02221W DUPLICATE IGNORED; KEYWORD: INCLUDE-STORAGEGROUP ENTRY: entry

Explanation:
A duplicate entry was found for the keyword. The duplicate will be ignored. Processing continues.

User response:
None.

CKM02222E  NOTHING SPECIFIED FOR KEYWORD: EXCLUDE-STORAGEGROUP

Explanation:
A keyword was entered without an appropriate operand. Processing terminates.

User response:
Specify an appropriate operand for the keyword.

CKM02222E  NOTHING SPECIFIED FOR KEYWORD: INCLUDE-STORAGEGROUP

Explanation:
A keyword was entered without an appropriate operand. Processing terminates.

User response:
Specify an appropriate operand for the keyword.
CKM02226I  THE FOLLOWING DSNS/MASKS ARE TO BE PROCESSED DURING INCLUDE PROCESSING

Explanation:
The message displays a list of DSNs and masks detected during BACKUP initial processing.
User response:
none.

CKM02227W EXCLUSIONS WERE REQUESTED; BUT NO VOLSERS MATCHED THE EXCLUDE ARGUMENTS

Explanation:
No VVDS were found for the EXCLUDE keywords specified - EXCLUDE-VVDS and EXCLUDE-STORAGEGROUP. Processing continues.
User response:
None.

CKM02237E DSNAME ddddddddd dd Defined by DDNAME dddddddd Appears More Than Once In ODS/OFILE

Explanation:
BACKUP detected an output DSname was used more than one time.
User response:
Output DSnames must be unique.

CKM02238I FREE COMPLETE FOR OUTPUT
DSNAME=ddddddd

Explanation:
OUTDATASET(...) was coded and BACKUP has successfully freed the desired file name.
User response:
None.

CKM02239I CLOSE COMPLETE FOR OUTPUT
DDNAME=ddddddd

Explanation:
Either OUTDATASET(...) or OUTFILE (...) was coded and BACKUP has successfully CLOSED the desired file.
User response:
None.

CKM02240E UNABLE TO xxxxxxxxx
DDNAME=ddddddd R15=nnn R0=nnn

Explanation:
While processing the BACKUP command, the DDname of the OFILE/OUTFILE keyword was missing.
User response:
Ensure the DDname is specified correctly.

CKM02241E INVALID SYNTAX FOR VALUES SPECIFIED WITHIN PARENTHESIS FOR KEYWORD=kkkkkkkkk START OF STRING=ssssssssss

Explanation:
For OUTFILE, valid DDnames must be coded within the "(...)". DDnames must be from 1 to 8 characters and conform to MVS DDname rules. For OUTDATASET, valid DSNAMEs must be coded within the "(...)". DSNAMEs must be from 1 to 44 characters and conform to MVS DSNAME rules. DSNAMEs cannot be masks.
User response:
Correct the coding of the OUTFILE/OUTDATASET parameter.

CKM02242I allocation COMPLETE FOR OUTPUT
DDNAME=ddddddd, DSN=ddddddd

Explanation:
OUTDATASET(...) was coded and BACKUP has successfully allocated the desired file name.
User response:
None.

CKM02243I OPEN COMPLETE FOR OUTPUT
DDNAME=ddname DSN=dsname VOLUME=vol

Explanation:
The OUTDATASET(...)/OUTFILE(...) was coded and BACKUP successfully opened the file.
User response:
None.

CKM02244E VVDS HAS NO ARGUMENTS AND INCLUDE-STORAGEGROUP NOT SPECIFIED

Explanation:
The BACKUP VVDS command specified no volumes/VVDS to be backed up; neither was the INCLUDE-STORAGEGROUP keyword coded.
User response:

Specify the VVDS(s) to be backed up either by coding the volume(s) following the VVDS keyword: BACKUP VVDS(vol1,vol2,...), or by requesting the storage groups: BACKUP VVDS INCLUDE-STORAGEGROUP(group1,group2,...) or by combining both methods. Correct the request and re-submit.

CKM02245I START OF DATA UNLOAD FOR ddddd
ON dd mmm yyyy (yyyyddd) AT hh.mm.ss

Explanation:

Informational message indicating the DSN about to be unloaded.

User response:

None.

CKM02246I RECORD SUMMARY FOR ddddd
PRIMARY SECONDARY NONVSAM VVCR/VVCN OTHER TOTAL ... n n n n n ... 

Explanation:

This message provides a count of the various types of records encountered during BACKUP command processing.

The record types are:

PRIMARY which corresponds the type Z VSAM Volume Record. There is a primary VVR on the first volume of every VSAM data or index component. The primary VVR describes the name of the component, the cluster to which it belongs, statistical information, extent information, and physical attributes of the data or index component.

SECONDARY which corresponds the type Q VSAM Volume Record. There is a secondary VVR on the second and subsequent volume of every multi volume VSAM data or index component. There are secondary VVRs for the second and subsequent keyranges of a keyrange KSDS regardless if the KSDS is a multi volume file or single volume file. KSDS with imbedded sequence set records (IMBED) have secondary VVRs to describe the portion of the index that is imbedded within the data component. Unlike the primary VVR, the secondary describes the name of the component, the cluster to which it belongs and extent information of the data or index component.

NONVSAM which corresponds the type N Volume Record. There is a nonVSAM VR for every SMS managed nonVSAM file on the volume. The nonVSAM VR describes the name of the file and SMS information.

VVCR/VVCN describes control records within the VVDS that describe catalogs that currently or in the past referenced this volume.

OTHER indicates all other types of VVDS records that are processed during BACKUP processing.

TOTAL indicates the total number of records that were backed up from the VVDS named in the BACKUP command.

TOTAL BYTES indicates the total number of bytes that were backed up from the VVDS named in the BACKUP command.

User response:

None.

CKM02247I END OF DATA UNLOAD FOR ddddd
ON dd mmm yyyy AT hh.mm.ss

Explanation:

Informational message indicating the DSN which has been unloaded.

User response:

None.

CKM02248W INI error - Section: name Token: SMF_RECORD_TYPE Error: xxxxxxxxxxxxxxxxxxxxxx

Explanation:

The value supplied in the named section for the SMF_RECORD_TYPE token in the INI is invalid. The xxxxx will indicate the error. The value should be from 1 - 3 numeric bytes in the range 0 - 255 inclusive.

User response:

Correct the content of the INI. The value is optional, if entered, the value must also be supplied in the TYPE option as specified in the SMFPRMxx member of SYS1.PARMLIB.

CKM02249I Failed to write SMF record. RC: xxx

Explanation:

A problem occurred when trying to write the SMF record for the Backup summary.

User response:

Contact Technical support.

CKM02250W IDCAMS (n) ISSUED RETURN CODE cc

Explanation:

While preparing to unload a VVDS, the object failed EXAMINE or DIAGNOSE processing. "n" is an internal locator for the issuance of this message, as it can be issued from several places in the BACKUP command.

"cc" is the return code issued by IDCAMS during the EXAMINE/DIAGNOSE execution.

User response:
If the preceding messages from IDCAMS indicate EXAMINE was being executed, the object has a VSAM structural failure. The object may be functioning correctly, but certain functions may not work. The object should be restored and forward recovered with the RECOVER command as soon as possible.

If the preceding messages from IDCAMS indicate DIAGNOSE was being executed, the VVDS has a logical structural problem that can be corrected with the appropriate IDCAMS commands. Either interpret the problem and correct it on your own, or execute the DIAGNOSE command to interpret the problems.

**CKM02256I** OBJECT (component) HAS MULTIPLE EXTENTS: number

**Explanation:**
The VVDS has more than one DASD extent.

**User response:**
If EXTENT-CONSOLIDATION is not requested, the object will be RECOVERed in multiple extents. If EXTENT-CONSOLIDATION is requested, the object will be re-allocated, on RECOVER, with a single extent.

**CKM02257I** PRINT OPTION IN EFFECT: option

**Explanation:**
The specified print option will be used.

**User response:**
None.

**CKM02258W** ERROR CALLING

**Explanation:**
During backup processing, an error occurred using CKM01HEX to print a record. Processing continues.

**User response:**
Report this message to Technical Support. Have available the listing that contains this message.

**CKM02260W** VOLUME VVVVV IS NOT ONLINE

**Explanation:**
BACKUP VVDS, while validating values in the VVDS(...) keyword, discovered that a specified volume was not online. This error does not stop further processing of BACKUP. Other selected VVDSs will be backed up.

**User response:**
Correct the coding of the value on the VVDS(...) keyword or place the volume online.

**CKM02261I** VVDS SYS1.VVDS.Vvvvvv IS NOT ON THE VOLUME

**Explanation:**
BACKUP VVDS, while validating values in the VVDS(...) keyword, discovered that a specified volume did not have a VVDS. This message does not stop further processing of BACKUP. Other selected VVDSs will be backed up.

**User response:**
Determine why the selected volume does not have a VVDS and re-run product.

**CKM02262W** NO VOLUMES MEET MASK SPECIFICATIONS OF SYS1.VVDS.Vvvvvv

**Explanation:**
BACKUP VVDS, while validating values in the VVDS(...) keyword, did not select any VVDSs for processing.

**User response:**
Correct the selection values in the VVDS(...) keyword. If an EXCLUDEVVDS(...) keyword was specified, ensure it did not undo every volume that the VVDS(...) keyword would have selected.

**CKM02263E** No VVDS’s meet specifications for BACKUP

**Explanation:**
BACKUP VVDS, while validating values in the VVDS(...) keyword, did not select any VVDSs for processing.

**User response:**
Correct the selection values in the VVDS(...) keyword. If an EXCLUDEVVDS(...) keyword was specified, ensure it did not undo every volume that the VVDS(...) keyword would have selected.

**CKM02264I** BASED ON THE MASKS/DSNS ENTERED, THE FOLLOWING VVDS’S HAVE BEEN SELECTED.

**Explanation:**
BACKUP VVDS, while validating values in the VVDS(...) keyword, selected the following list of VVDSs for processing.

**User response:**
None.
CKM02265E  DEVICE ERROR - function VOL=volser
            RC=rc  RSN=rsn

Explanation:
BACKUP VVDS, encountered an error accessing the indicated volume.

User response:
Contact Technical Support. Have available the listing that contains this message and the SCKMPARM member that controls execution.

CKM02266E  CVAF ERROR - VOL=volser
            CVSTAT=xxx

Explanation:
BACKUP VVDS, encountered a CVAF error accessing the VTOC for the indicated volume.

User response:
Contact Technical Support. Have available the listing that contains this message and the SCKMPARM member that controls execution.

CKM02269E  VVDS BACKUP BYPASSED DUE TO
            IDCAMS DIAGNOSE VVDS RETURN CODE

Explanation:
BACKUP VVDS, while processing a VVDS for backup invoked IDCAMS DIAGNOSE VVDS to ensure the integrity of the VVDS. DIAGNOSE determined a structural error and returned a error code of magnitude 8. BACKUP VVDS will skip this VVDS and continue processing other selected VVDSs (unless ACCEPT-DIAGNOSE(E) is specified).

User response:
Correct the errors determined during IDCAMS DIAGNOSE VVDS or use DIAGNOSE VVDS-BCS command to correct the errors. If the errors are determined to be of insufficient cause to stop the backup, remove the ACCEPTDIAGNOSE keyword from the BACKUP command or specify ACCEPTDIAGNOSE(E).

CKM02280E  synad message text

Explanation:
During BACKUP VVDS processing, EXCP encountered an I/O error. The message text is from the standard SYNAD analysis routine.

User response:
Contact Technical Support. Have available the listing that contains this message and the SCKMPARM member that controls execution.

CKM02281E  VVDS VALIDATION FAILED.
            VOL=volser  BLOCK=xxxx  CODE(x)
            RBA=rba

Explanation:
During BACKUP VVDS processing, a C/I within the VVDS failed validation.

User response:
Contact Technical Support. Have available the listing that contains this message and the SCKMPARM member that controls execution.

CKM02281I  PLEASE REVIEW THE USER GUIDE TO
            DETERMINE WHETHER PRE-DFP31 KEYWORD may be applicable

Explanation:
During BACKUP VVDS processing, the VVCR in the VVDS failed validation.

User response:
The VVCR (created during initial allocation of the VVDS) has, since DFP 3.1, an EBCDIC eye-catcher “VVCR”. This VVDS has at RBA zero (the VVCR location) a record that does not have this eye-catcher. If this VVDS is an old version, investigate the possible use of the PRE-DFP31 keyword in the BACKUP request.

Otherwise: Contact Technical Support. Have available the listing that contains this message and the SCKMPARM member that controls execution.
CKM02281W  CKM02291E

CKM02281W  VVDS VALIDATION FAILED.
VOL=volser  BLOCK=xxxx  CODE(x)
RBA=rba

Explanation:
During BACKUP VVDS processing, the VVCR in the
VVDS failed validation.

User response:
The VVCR (created during initial allocation of the
VVDS) has, since DFP 3.1, an EBCDIC eye-catcher
"VVCR". This VVDS has at RBA zero (the VVCR
location) a record that does not have this eye-catcher. If
this VVDS is an old version, investigate the possible
use of the PRE-DFP31 keyword in the BACKUP
request.
Otherwise: Contact Technical Support. Have available
the listing that contains this message and the
SCKMPARM member that controls execution.

CKM02282E  DATASPACE MGMT ERROR.
DSP=dsiname  SERV=service
FUNC=function  R15=xxxxxxxx
R0=xxxxxxxx

Explanation:
During BACKUP VVDS processing, an error occurred
while managing one of the dataspaces.

User response:
Contact Technical Support. Have available the listing
that contains this message and the SCKMPARM
member that controls execution.

CKM02283I  ----  BACKUP VVDS(volser)
DSN=SYS1.VVDS.Vvolser ----

Explanation:
A keyword value was greater than nnn characters.

User response:
Ensure value is correct.

CKM02287E  ERROR DURING

Explanation:
An unrecoverable internal error occurred while
processing the BACKUP command.

User response:
Contact Technical Support. Have available the listing
that contains this message and the SCKMPARM
member that controls execution.

CKM02288W  SMF IS NOT ACTIVE ON THE
SUBSYSTEM

Explanation:
The BACKUP and RECOVER facility permits forward
recovery using SMF data. SMF data are not collected if
SMF is not active, negating the ability to use this
feature.

User response:
SMF should be activated on those subsystems that
update the VVDS being recovered.

CKM02289W  SMF TYPE 60 (VVDS UPDATE) NOT
BEING RECORDED ON THIS
SUBSYSTEM

Explanation:
The SMF administrator controls which SMF records are
to be recorded. Updates to VVDS cause SMF record
type 60 to be cut. This record type is not being
recorded. The BACKUP and RECOVER facility permits
forward recovery using SMF data; this record type is
required for this feature.

User response:
Request the SMF administrator to enable recording of
the SMF type 60 record.

CKM02290E  VALUE ENTERED FOR KEYWORD
GREATER THAN NNN
KEYWORD=kkkkkkkkk  START OF
STRING=ssssssss

Explanation:
A keyword value was greater than nnn characters.

User response:
Ensure value is correct.

CKM02291E  ABEND WHILE PROCESSING BACKUP
COMMAND; PHASE pppp

Explanation:
An unrecoverable MVS related error occurred while
processing the BACKUP command.

User response:
For x37 and x13 related errors, the problem is caused
by a poorly specified OUTFILE or OUTDATASET.
Correct the specifications and re-run product.
For all other errors, contact Technical Support. Have
available the listing that contains this message and the
SCKMPARM member that controls execution.
CKM02292I • CKM02304I

CKM02292I CALLING IDCAMS TO PERFORM xxxxxxxxxxx

Explanation:
“xxxxxxxxxxxxx” identifies the IDCAMS diagnostic function about to be invoked.

User response:
None.

CKM02293E GETMAIN FAILED (1) MVS R15=nnn
REQUEST SIZE (KB)=sss

Explanation:
During BACKUP keyword evaluation, a problem occurred during acquisition of workspace.

User response:
Contact Technical Support. Have available the listing that contains this message and the SCKMPARM member that controls execution.

CKM02295E UNABLE TO aaaaaaaa DSN/MASK INFORMATION. (n) R15=nnn

Explanation:
During BACKUP keyword evaluation, a problem occurred during retrieval of a dataspace necessary for processing. “tablename” is the name of the internal table being created.

User response:
Contact Technical Support. Have available the listing that contains this message and the SCKMPARM member that controls execution.

CKM02296E ATTEMPT FOR DYNAMIC allocation (n) HAS FAILED

Explanation:
This message, accompanied by numerous IGD, IEF, or IKJ messages indicates that a file was not available for dynamic allocation or dynamic unallocation. This condition will stop further execution of the BACKUP command. “(n)” refers to a specific place in the module that detects this condition.

User response:
Action varies depending on the DSN named in the IGD, IEF or IKJ messages. Most likely, the problem is due to something amiss with the volume of a connected user catalog or a non-existent VVDS.

CKM02297W ATTEMPT FOR DYNAMIC allocation (n) HAS FAILED

Explanation:
This message, accompanied by numerous IGD, IEF, or IKJ messages indicates that a file was not available for dynamic allocation or dynamic unallocation. This condition will NOT stop further execution of the BACKUP command. “(n)” refers to a specific place in the module that detects this condition.

User response:
If the EXAMINE indicated a problem, this should be checked before running the BACKUP DSN in non-SIMULATE mode.

CKM02300I BACKUP DSN MAINTENANCE LEVEL:
CKM00023/REV=nn

Explanation:
Informational message giving the current revision number of the specific program.

User response:
None required. In the event of a problem, Technical Support may request the revision number.

CKM02303E ACCEPTDIAGNOSE AND ACCEPTEXAMINE VALUES CAN BE “I”, “W”, OR “E”

Explanation:
During command interpretation, the command preceding this message did not have the correct value inside the ACCEPTDIAGNOSE or ACCEPTEXAMINE keyword. The value must be “I”, “W”, or “E”.

User response:
Correct the coding of the ACCEPTDIAGNOSE keywords.

CKM02304I WHEN SIMULATE IS REQUESTED xxxx IS NOT OPERATIVE - IGNORED

Explanation:
ACCEPT-EXAMINE was requested together with SIMULATE. The ACCEPT-xxx keyword was ignored. When SIMULATE is requested, the EXAMINE return code is reported, but makes no other difference in processing.

User response:
If the EXAMINE indicated a problem, this should be checked before running the BACKUP DSN in non-SIMULATE mode.
CKM02305E MESSAGETEXT VALUES CAN BE "FULL" OR "NONE"

**Explanation:**
During command interpretation, the command preceding this message did not have the correct value inside the MESSAGETEXT keyword. The value must be "FULL", "NONE".

**User response:**
Correct the coding of the MESSAGETEXT keywords.

---

CKM02306E KEYWORD HAS NON-NUMERIC ARGUMENT

**Explanation:**
The keyword requires a numeric argument. Non-numeric data were detected.

**User response:**
Correct the argument for the keyword specified and re-submit.

---

CKM02307E KEYWORD ARGUMENT EXCEEDS VALID RANGE

**Explanation:**
The argument supplied for the keyword is outside the acceptable bounds.

**User response:**
Correct the argument for the keyword specified and re-submit.

---

CKM02308E EXAMINE-ERROR-LIMIT INCOMPATIBLE WITH NOEXAMINE

**Explanation:**
The keyword EXAMINE-ERROR-LIMIT only makes sense if the EXAMINE keyword is also coded.

**User response:**
Either remove the EXAMINE-ERROR-LIMIT request, or add an EXAMINE keyword, and re-submit.

---

CKM02309I DEFAULT IN EFFECT: defaulted keyword

**Explanation:**
A default is being used for a keyword.

**User response:**
None.

---

CKM02310E ODS OR OFILE KEYWORD MISSING

**Explanation:**
During command interpretation, the command preceding this message did not have the ODS/OUTDATASET/OFILE/OUTFILE keyword.

**User response:**
The BACKUP command must have one of these keywords. Ensure continuation indicators are present if the command was continued onto a second line.

---

CKM02311E KEYWORD HAS NO OPERANDS.
KEYWORD=kkkkkk START OF STRING={not applicable}

**Explanation:**
During command interpretation, the keyword listed in this message did not have any operands.

**User response:**
Most keywords have operands. Ensure continuation indicators are present if the keyword was continued onto a second line.

---

CKM02312E MASK VALIDATION ERROR FOR ENTRY: SSSSSSSS
DESCRIPTION OF ERROR: ERROR DESCRIPTION

**Explanation:**
A DSN or mask value does not conform to standards.

**User response:**
Ensure DSN or mask is correct.

---

CKM02313W DUPLICATE DSN OR MASK ENCOUNTERED -- IGNORED.
KEYWORD=kkkkkkkk START OF STRING=SSSSSS

**Explanation:**
A DSN or mask value has been coded more than once.

**User response:**
Ensure DSN or mask is correct.

---

CKM02314E DATASET SPECIFICATION MATCHES THAT OF A VVDS: dsname

**Explanation:**
A DSN or mask value appears to match that of a VVDS.

**User response:**
To backup a VVDS, use the BACKUP VVDS command.
Error on VSAM OPEN: RC=X'nn', ACBERRFLG=X'nn'

Explanation:
When attempting to open the object for processing, an error occurred. The reason for the error may be found in the manual: DFSMS Macro Instructions for Data Sets. Specifically, under the topic: VSAM Macro Return and Reason Codes OPEN Return and Reason Codes.

User response:
Check the manual. If this does not help solve the problem, contact Technical Support.

THE FOLLOWING DSNS/MASKS ARE TO BE PROCESSED DURING TTT PROCESSING

Explanation:
The message displays a list of DSNs and masks detected during BACKUP initial processing.

User response:
none.

The object had an attribute of IMBED; index allocation changed to CYL(1 1)

Explanation:
The object is a KSDS with the IMBED attribute. The Index Component was not allocated in CYLINDERS, the Data Component was allocated in CYLINDERS. Removal of IMBED on Recover will cause the space required by the Index Component to increase.

User response:
If CYL(1 1) is not enough on Recover to hold the Index Component, be prepared to over-ride the specification.RECOVER DSN(...) NEW-INDEX-PRIMARY(nn) NEW-INDEX-SECONDARY(nn) ...

SPANFILE OR SPANDATASET REQUIRES EXCPMODE

Explanation:
Either SPANFILE or SPANDATASET was requested and EXCPMODE was NOT requested. EXCPMODE is required for SPANFILE or SPANDATASET.

User response:
Correct the command and re-submit.

UNABLE TO PROCESS SPANNED RECORD - NO SPANFILE/SPANDATASET SPECIFIED

Explanation:
A problem occurred while attempting to process a spanned record. The record could not be saved to a file as neither SPANFILE nor SPANDATASET were specified; instead the segments are printed.

User response:
If the segment should be saved to a file, specify SPANFILE or SPANDATASET (LRECL=32756, RECFM=VB) and re-run the request.

DUPLICATE DSN -- IGNORED.
DSN=DDD

Explanation:
A DSN was specified more than once.

User response:
None. When multiple masks are used it is possible that one name will fit a more than one mask.

BASED ON THE MASKS/DSNS ENTERED, THE FOLLOWING CLUSTERS HAVE BEEN SELECTED.

Explanation:
This lists all datasets selected for backup.

User response:
None.

NO VSAM CLUSTERS MATCH DSN/MASK SUPPLIED: dsname

Explanation:
When the catalog was searched for VSAM clusters, no match was found when using the DSN or mask shown. BACKUP DSN will process only ESDS, KSDS and LDS objects... nothing else.

User response:
Ensure the name is spelled correctly.

NO DSNS MEET SPECIFICATIONS FOR BACKUP

Explanation:
After processing the BACKUP command, no DSNs were selected for backup. BACKUP DSN will process only ESDS, KSDS and LDS objects.

User response:
Ensure the names are specified correctly. At least one DSN must be backed up with the BACKUP command.
CKM02337E  DSNAME dddddddd DEFINED BY DDNAME dddddddd APPEARS MORE THAN ONCE IN ODS/OFILE

Explanation:
BACKUP detected an output DSname was used more than one time.

User response:
Output DSnames must be unique.

CKM02338I  FREE COMPLETE FOR OUTPUT DSNAME=ddddddd

Explanation:
OUTDATASET(...) was coded and BACKUP has successfully freed the desired file name.

User response:
None.

CKM02339I  CLOSE COMPLETE FOR OUTPUT DDNAME=ddddddd

Explanation:
Either OUTDATASET(...) or OUTFILE(...) was coded and BACKUP has successfully CLOSED the desired file.

User response:
None.

CKM02340E  UNABLE TO xxxxxxxxx DDNAME=ddddddd R15=nnn R0=nnn

Explanation:
While processing the BACKUP command, the DDname of the OFILE/OUTFILE keyword was missing.

User response:
Ensure the DDname is specified correctly.

CKM02341E  INVALID SYNTAX FOR VALUES SPECIFIED WITHIN PARENTHESIS FOR KEYWORD=kkkkkkkkk START OF STRING=ssssssss

Explanation:
For OUTFILE, valid DDnames must be coded within the "(...)". DDnames must be from 1 to 8 characters and conform to MVS DDname rules.

For OUTDATASET, valid DSNAMEs must be coded within the "(...)". DSNAMEs must be from 1 to 44 characters and conform to MVS DSNAME rules. DSNAMEs cannot be masks.

User response:
Correct the coding of the OUTFILE/OUTDATASET parameter.

CKM02342I  allocation COMPLETE FOR OUTPUT DDNAME=ddddddd, DSN=ddddddd

Explanation:
OUTDATASET(...) was coded and BACKUP has successfully allocated the desired file name.

User response:
None.

CKM02343I  OPEN COMPLETE FOR OUTPUT DDNAME=ddname DSN=dsname VOLUME=vol

Explanation:
The OUTDATASET(...) /OUTFILE(...) was coded and BACKUP successfully opened the file.

User response:
None.

CKM02345I  START OF DATA UNLOAD FOR ddddd ON dd mmm yyyy (yyyyddd) AT hh.mm.ss

Explanation:
Informational message indicating the DSN about to be unloaded.

User response:
None.

CKM02346I  RECORD SUMMARY FOR dataset

Explanation:
If the counts are the same, the BACKUP was successful and no further action is necessary. If the symptom persists, a permanent solution would be to RECOVER the cluster. If the counts are different, the BACKUP was not successful.

Contact Technical Support. Ensure that this entire jobstream, including JCL, and all messages are available for the support staff.

CKM02346I  RECORD SUMMARY FOR dataset

Explanation:
If the counts are the same, the BACKUP was successful and no further action is necessary. If the symptom persists, a permanent solution would be to RECOVER the cluster. If the counts are different, the BACKUP was not successful.

Contact Technical Support. Ensure that this entire jobstream, including JCL, and all messages are...
available for the support staff.

**Explanation:**
Informational message indicating the DSN which has been unloaded.

**User response:**
None.

**CKM02350W IDCAMS (n) ISSUED RETURN CODE cc**

**Explanation:**
While preparing to unload a dataset, the object failed EXAMINE or DIAGNOSE processing. “n” is an internal locator for the issuance of this message, as it can be issued from several places in the BACKUP command. “cc” is the return code issued by IDCAMS during the EXAMINE/DIAGNOSE execution.

**User response:**
If the preceding messages from IDCAMS indicate EXAMINE was being executed, the object has a VSAM structural failure. The object may be functioning correctly, but certain functions may not work. The object should be restored and forward recovered with the RECOVER command as soon as possible. If the preceding messages from IDCAMS indicate DIAGNOSE was being executed, the cluster has a logical structural problem that can be corrected with the appropriate IDCAMS commands. Either interpret the problem and correct it on your own, or execute the DIAGNOSE command to interpret the problems.

**CKM02351I NUMBER OF SPANNED RECORDS ENCOUNTERED: NN**

**Explanation:**
While unloading data for an object, “nn” spanned records were encountered.

**User response:**
None. Spanned records, although seldom a problem, make emergency data gathering for the object extremely difficult. This would only be a problem when normal data unloading methods do not work.

**CKM02352E PROCESSING FOR uuuuuuuu HAS BEEN TERMINATED**

**Explanation:**
While unloading data for a dataset, a fatal error caused BACKUP to stop processing the cluster “uuuuuuuu”. This error was detected by the Catalog Fast Reader Module and reported by the Error Summary Module. Numerous CKM341xxl messages accompany this message. If “NOEXAMINE” was not coded and EXAMINE did not detect errors, it is possible that the cluster was successfully backed up. To determine if this the case, using IDCAMS, execute EXAMINE explicitly:

```
//AMS EXEC PGM=IDCAMS IDC01710I DATA COMPONENT CONTAINS nnn RECORDS
//SYSPRINT DD SYSOUT=* 
EXAMINE NAME(...)DTEST
```

EXAMINE will issue several messages. Find the message Compare the nnn value to the total records unloaded by BACKUP which is indicated in the message

**User response:**
This error was detected by the Catalog Fast Reader Module and reported by the Error Summary Module. Numerous CKM341xxl messages accompany this message. If “NOEXAMINE” was not coded and EXAMINE did not detect errors, it is possible that the cluster was successfully backed up. To determine if this the case, using IDCAMS, execute EXAMINE explicitly:

```
//AMS EXEC PGM=IDCAMS IDC01710I DATA COMPONENT CONTAINS nnn RECORDS
//SYSPRINT DD SYSOUT=* 
EXAMINE NAME(...)DTEST
```

EXAMINE will issue several messages. Find the message Compare the nnn value to the total records unloaded by BACKUP which is indicated in the message

**CKM02353I SEGMENTS OF SPANNED RECORDS WRITTEN TO OUTPUT SPANFILE / SPANDATASET**

**Explanation:**
During EXCPMODE processing, one or more spanned records could not be re-built and were written to the output SPANFILE or SPANDATASET.

**User response:**
The segments of the records should be examined, and the catalog data re-built based on the data.
CKM02354E  Error reading (V)RRDS RC: nn, RPL
Error: nn

Explanation:
When attempting to read the object, an error occurred. The reason for the error may be found in the manual:
DFSMS Macro Instructions for Data Sets
Specifically, under the topic:
VSAM Macro Return and Reason Codes
Record Management Return and Reason Codes. Both values shown are in hexadecimal notation. Consult the "Synchronous Request" topic for the return code meaning. The RPL Error value is that from the RPLERRCD.

User response:
Check the manual. If this does not help solve the problem, contact Technical Support.

CKM02362E  Error: Backup of dsname requires ACCESS(READ). You currently have ACCESS(xxxxx).

Explanation:
The user had insufficient authority in SAF to process the dsname.

User response:
Either request sufficient authority from the SAF administrator or execute the backup under another user's authority. In SIMULATE mode, the message will be a warning. In EXECUTE mode, the message will be an error.

CKM02367E  DSN BACKUP BYPASSED DUE TO IDCAMS EXAMINE RETURN CODE

Explanation:
While processing a DSN for BACKUP, IDCAMS EXAMINE was invoked to ensure the integrity of the object. EXAMINE determined a structural error and returned a error code of magnitude 8. BACKUP DSN will skip this object and continue processing other selected objects (unless ACCEPT-EXAMINE(E) is specified).

User response:
Since IDCAMS EXAMINE indicates an INDEX or DATA component structural error, this cluster must be deleted and recovered. Refer to the Documentation for details on recovering a dataset. If the errors are determined to be of insufficient cause to stop the backup, remove the ACCEPTEXAMINE keyword from the BACKUP command or specify ACCEPTEXAMINE(E).

CKM02354E  CKM02367W
CKM02370W • CKM02373I

and recovered. Refer to the Documentation for details on recovering a dataset. If the errors are determined to be of insufficient cause to stop the backup, remove the ACCEPTEXAMINE keyword from the BACKUP command or specify ACCEPTEXAMINE(E).

CKM02370W IGGCSI00 ERROR: R15: xx REASON CODE: xx RETURN CODE: xx

Explanation:
BACKUP DSN, while processing the catalog to determine the DSNames matching a specific filter value, or when trying to obtain the attributes of a specific DSNames, CSI returned the an error. This BACKUP DSN request will be skipped.

User response:
Check the error against those specified for IDC3009I in the MVS Messages and Codes manual or, if not documented there, the DFHSM/MVS Managing Catalogs manual. Take whatever action is deemed necessary from the supplied documentation.

CKM02370W IGGCSI00 ERROR: R15: xx REASON CODE: xx RETURN CODE: xx

Explanation:
BACKUP DSN, while processing the catalog to determine the DSNames matching a specific filter value, or when trying to obtain the attributes of a specific DSNames, CSI returned the an error. This BACKUP DSN request will be skipped.

User response:
Check the error against those specified for IDC3009I in the MVS Messages and Codes manual or, if not documented there, the DFHSM/MVS Managing Catalogs manual. Take whatever action is deemed necessary from the supplied documentation.

CKM02371W EMPTY DATASET (HI-USED RBA: 0)

Explanation:
BACKUP DSN, while processing the current object, determined that the HI-USED-RBA was zero. There were no data to be backed up. Please note that if the HI-USED-RBA was non-zero, but all records were deleted, then, the object will be backed-up, but with zero records.

User response:
This object has never been loaded, therefore, there was no need to have a back-up copy made.

CKM02372W OBJECT TYPE NOT SUPPORTED

Explanation:
BACKUP DSN, while processing the current object, determined that either the maximum record length exceeded 32752 bytes, or that the object was a RRDS, VRRDS, or VVDS. The object was not backed-up.

User response:
The record length restriction is a MVS restriction on variable length blocked records written to datasets that do not use the extended logical record interface. The BACKUP VVDS command should be used to backup VVDS objects. The design of BACKUP DSN precluded the backup of RRDS.

CKM02372W OBJECT TYPE NOT SUPPORTED

Explanation:
BACKUP DSN, while processing the current object, determined that either the maximum record length exceeded 32752 bytes, or that the object was a RRDS, VRRDS, or VVDS. The object was not backed-up.

User response:
The record length restriction is a MVS restriction on variable length blocked records written to datasets that do not use the extended logical record interface. The BACKUP VVDS command should be used to backup VVDS objects. The design of BACKUP DSN precluded the backup of RRDS.

CKM02372W OBJECT TYPE NOT SUPPORTED

Explanation:
BACKUP DSN, while processing the current object, determined that either the maximum record length exceeded 32752 bytes, or that the object was a RRDS, VRRDS, or VVDS. The object was not backed-up.

User response:
The record length restriction is a MVS restriction on variable length blocked records written to datasets that do not use the extended logical record interface. The BACKUP VVDS command should be used to backup VVDS objects. The design of BACKUP DSN precluded the backup of RRDS.

CKM02373I EXCPMODE unsupported for compressed object, LDS or (V)RRDS using record mode: dsname

Explanation:
EXCPMODE does not support compressed, striped, linear or relative objects. The BACKUP command temporarily switched to record mode to backup the object.

User response:
None.

CKM02379I DEFAULT IN EFFECT: defaulted keyword
Explanation:
A default is being used for a keyword.
User response:
None.

CKM02387E ERROR DURING
Explanation:
An unrecoverable internal error occurred while processing the BACKUP command.
User response:
Contact Technical Support. Have available the listing that contains this message and the SCKMPARM member that controls execution.

CKM02388E KEYWORD HAS MORE THAN 1 OPERAND; ONLY 1 ALLOWED
Explanation:
During command interpretation, the keyword listed in this message had more than 1 operand.
User response:
Ensure only operand is coded for this keyword.

CKM02390E VALUE ENTERED FOR KEYWORD GREATER THAN NNN
Explanation:
A keyword value was greater than nnn characters.
User response:
Ensure value is correct.

CKM02391E ABEND WHILE PROCESSING BACKUP COMMAND; PHASE pppp
Explanation:
An unrecoverable MVS related error occurred while processing the BACKUP command.
User response:
For x37 and x13 related errors, the problem is caused by a poorly specified OUTFILE or OUTDATASET. Correct the specifications and re-run product. For all other errors, contact Technical Support. Have available the listing that contains this message and the SCKMPARM member that controls execution.
**CKM02397E ATTEMPT FOR DYNAMIC ALLOCATION (n) HAS FAILED**

**Explanation:**
This message, accompanied by numerous IGD, IEF, or IKJ messages indicates that a file was not available for dynamic allocation or dynamic unallocation. This condition will NOT stop further execution of the BACKUP command. "(n)" refers to a specific place in the module that detects this condition.

**User response:**
Action varies depending on the DSN named in the IGD, IEF or IKJ messages. Most likely, the problem is due to something amiss with the volume of a connected user catalog or a non-existent VVDS.

---

**CKM02446I START OF DATA UNLOAD FOR ddddd ON dd mmm yyyy (yyyyddd) AT hh:mm:ss**

**Explanation:**
Informational message indicating the BCS about to be unloaded.

**User response:**
None.

---

**CKM02446I RECORD SUMMARY FOR ddddd CLUSTER LIBRARY VOLUME TRUENAME ...nnnn. . .**

**Explanation:**
This message provides a count of the various types of records encountered during BACKUP command processing.

The record types are:
- **CLUSTER** indicates the number of base cluster records (type code of "C"). Alternate index (AIX) information is stored within the base cluster record, so it does not appear as a separate record type. The key of each record is the base cluster name.
- **GDG** indicates the number of generation data set (GDS) records (type code of "B"). Each individual generation of a GDS is stored within the overall GDG record, so they do not appear as a separate record type. The key of each record is the base data set name (i.e., the fully qualified data set name, without a GxxxxVxx value).
- **E** indicates an extension record (type code of "E") to a base cluster record. Extension records are created whenever a cluster record exceeds the maximum record size specified for the BCS. The key of an extension record is the base cluster data set name, with a sequence number in the last byte of the key.
- **J** indicates an extension record (type code of "J") to a base generation data set (GDS) record. Extension records are created whenever a GDS record exceeds the maximum record size specified for the BCS. The key of an extension record is the base generation data set name, with a sequence number in the last byte of the key.
- **NONVSAM** indicates the number of nonVSAM data set records (type code of "A"). The key of record is the nonVSAM data set name.
- **TRUENAME** indicates the number of truename records (type code of "T"). Each component of a base cluster or
alternate index cluster, as well as the alternate index cluster itself, will have a truename record. The key of
each truename record is component name, or in the
case of an alternate index, the alternate index name.
PATH indicates the number of path records (type code
of "R") Typically, each alternate index is associated to
its base cluster with a path record, resulting in one path
record for each alternate index. In unusual
circumstances there can be a path for just a base
cluster.

UCAT indicates the number of usercatalog connector
records (type code of "x"). Typically, these records
would be in a BCS that is used as a master catalog,
indicating the user catalog BCSs that are connected to
it. ALIAS indicates the number of alias records (type
code of "x"). Typically, these records would be in a BCS
that is used as a master catalog, and are used by the
catalog order of search logic to determine which BCS to
search for a data set. OTHER indicates all other types
of catalog records that are connected to it.
ALIAS indicates the number of alias records (type code
of "x"). Typically, these records would be in a BCS that
is used as a master catalog, and are used by the
catalog order of search logic to determine which BCS to
search for a data set.
LIBRARY indicates the number of VOLCAT library
records (type code of "l").
VOLUME indicates the number of VOLCAT library
records (type code of "w").
OTHER indicates all other types of catalog records that
are processed during BACKUP processing.
TOTAL indicates the total number of records that were
backed up from the BCS named in the BACKUP
command.
TOTAL BYTES indicates the total number of bytes that
were backed up from the BCS named in the BACKUP
command.

User response:
None.

---

**Explanation:**

This message provides a count of the various types of
records encountered during BACKUP command
processing.
The record types are:

CLUSTER indicates the number of base cluster records
(type code of "C"). Alternate index (AIX) information is
stored within the base cluster record, so it does not
appear as a separate record type. The key of each
record is the base cluster name.

GDG indicates the number of generation data set (GDS)
records (type code of "B"). Each individual generation of
a GDS is stored within the overall GDG record, so they
do not appear as a separate record type. The key of
each record is the base data set name (i.e., the fully
qualified data set name, without a GxxxxVxx value)

E indicates an extension record (type code of "E") to a
base cluster record. Extension records are created
whenever a cluster record exceeds the maximum record
size specified for the BCS. The key of an extension
record is the base cluster data set name, with a
sequence number in the last byte of the key.

J indicates an extension record (type code of "J") to a
base generation data set (GDS) record. Extension
records are created whenever a GDS record exceeds
the maximum record size specified for the BCS. The
key of an extension record is the base generation data
set name, with a sequence number in the last byte of
the key.

NONVSAM indicates the number of nonVSAM data set
records (type code of "A"). The key of record is the
nonVSAM data set name.

TRUENAME indicates the number of truename records
(type code of "T"). Each component of a base cluster or
alternate index cluster, as well as the alternate index
cluster itself, will have a truename record. The key of
each truename record is component name, or in the
case of an alternate index, the alternate index name.

PATH indicates the number of path records (type code
of "R"). Typically, each alternate index is associated to
its base cluster with a path record, resulting in one path
record for each alternate index. In unusual
circumstances there can be a path for just a base
cluster.

UCAT indicates the number of usercatalog connector
records (type code of "x"). Typically, these records
would be in a BCS that is used as a master catalog,
indicating the user catalog BCSs that are connected to
it. ALIAS indicates the number of alias records (type
code of "x"). Typically, these records would be in a BCS
that is used as a master catalog, and are used by the
catalog order of search logic to determine which BCS to
search for a data set. OTHER indicates all other types
of catalog records that are connected to it.

ALIAS indicates the number of alias records (type code
of "x"). Typically, these records would be in a BCS that
is used as a master catalog, and are used by the
catalog order of search logic to determine which BCS to
search for a data set. OTHER indicates all other types
of catalog records that are connected to it.
TOTAL indicates the total number of records that were backed up from the BCS named in the BACKUP command.

TOTAL BYTES indicates the total number of bytes that were backed up from the BCS named in the BACKUP command.

User response:
None.

----

CKM02447I  END OF DATA UNLOAD FOR ddddd ON dd mmm yyyy AT hh.mm.ss

Explanation:
Informational message indicating the BCS which has been unloaded.

User response:
None.

----

CKM02448W UNABLE TO LOCATE VOLUME CELL (n) FOR CATALOG

Explanation:
While preparing to unload a catalog, the volume cell, a portion of the Usercatalog Connector record was not in the record. "(n)" refers to a specific place in the module that detects this condition.

User response:
This unusual situation indicates a problem with catalog records. First, execute IDCAMS DIAGNOSE ICFCAT for the catalog in question. If an error is indicated, act according to the recommendations from the manual. Otherwise, contact Technical support.

----

CKM02449E UNABLE TO MOUNT VOLUME FOR CATALOG.

Explanation:
While preparing to unload a catalog, the named volume was not online.

User response:
This indicates an obsolete Usercatalog Connector record in the master catalog, or the catalog named in the CAT(...) parameter of the BACKUP command. The catalog should be removed with an IDCAMS EXPORT DISCONNECT command.

----

CKM02449W UNABLE TO MOUNT VOLUME FOR CATALOG.

Explanation:
While preparing to unload a catalog, the named volume was not online.

User response:
This indicates an obsolete Usercatalog Connector record in the master catalog, or the catalog named in the CAT(...) parameter of the BACKUP command. The catalog should be removed with an IDCAMS EXPORT DISCONNECT command.

----

CKM02450W IDCAMS (n) ISSUED RETURN CODE cc

Explanation:
While preparing to unload a catalog, the object failed EXAMINE or DIAGNOSE processing. "(n)" is an internal locator for the issuance of this message, as it can be issued from several places in the BACKUP command. "cc" is the return code issued by IDCAMS during the EXAMINE/DIAGNOSE execution.

User response:
If the preceding messages from IDCAMS indicate EXAMINE was being executed, the object has a VSAM structural failure. The object may be functioning correctly, but certain functions may not work. The object should be restored and forward recovered with the RECOVER command as soon as possible. If the preceding messages from IDCAMS indicate DIAGNOSE was being executed, the catalog has a logical structural problem that can be corrected with the appropriate IDCAMS commands. Either interpret the problem and correct it on your own, or execute the DIAGNOSE command to interpret the problems.

----

CKM02451I NUMBER OF SPANNED RECORDS ENCOUNTERED: NN

Explanation:
While unloading data for an object, "nn" spanned records were encountered.

User response:
None. Spanned records, although seldom a problem, make emergency data gathering for the object extremely difficult. This would only be a problem when normal data unloading methods do not work.

----

CKM02452E PROCESSING FOR uuuuuuuu HAS BEEN TERMINATED

Explanation:
While unloading data for a catalog, a fatal error caused BACKUP to stop processing the catalog "uuuuuuuuu".

User response:
This error was detected by the Catalog Fast Reader Module and reported by the Error Summary Module. Numerous CKM341xxI messages accompany this message.
If "NOEXAMINE" was not coded and EXAMINE did not detect errors, it is possible that the catalog was successfully backed up. To determine if this the case,
using IDCAMS, execute EXAMINE explicitly:
//AMS EXEC PGM=IDCAMS
//SYSPRINT DD SYSOUT=*  
EXAMINE NAME(...DTEST
EXAMINE will issue several messages. Find the message IDC01710I DATA COMPONENT CONTAINS nnn RECORDS. Compare the nnn value to the total records unloaded by BACKUP which is indicated in the message.

**CKM02452W PROCESSING FOR uuuuuuuu HAS BEEN TERMINATED**

**Explanation:**
While unloading data for a catalog, a fatal error caused BACKUP to stop processing the catalog “uuuuuuuuu”.

**User response:**
This error was detected by the Catalog Fast Reader Module and reported by the Error Summary Module. Numerous CKM341xxI messages accompany this message.

If "NOEXAMINE" was not coded and EXAMINE did not detect errors, it is possible that the catalog was successfully backed up. To determine if this the case, using IDCAMS, execute EXAMINE explicitly:
//AMS EXEC PGM=IDCAMS
//SYSPRINT DD SYSOUT=*  
EXAMINE NAME(...DTEST
EXAMINE will issue several messages. Find the message IDC01710I DATA COMPONENT CONTAINS nnn RECORDS. Compare the nnn value to the total records unloaded by BACKUP which is indicated in the message.

**CKM02453I SEGMENTS OF SPANNED RECORDS WRITTEN TO OUTPUT SPANFILE / SPANDATASET**

**Explanation:**
During EXCPMODE processing, one or more spanned records could not be re-built and were written to the output SPANFILE or SPANDATASET.

**User response:**
The segments of the records should be examined, and the catalog data re-built based on the data.

**CKM02455E UNABLE TO LOCATE x VVR FOR dddddddddddddddddd**

**Explanation:**
A BCS, dddddddddddddddddd, has been selected for backup but one of the VVRs that describe either its index or data component was not available.

**User response:**
This indicates a serious problem with the volume. Execute IDCAMS DIAGNOSE VVDS against the catalogs volume to discover the extent of the problem. Most likely, the catalog will have to be deleted and restored.

**CKM02456I OBJECT (component) HAS MULTIPLE EXTENTS: number**

**Explanation:**
A BCS has more than one DASD extent.

**User response:**
If EXTENT-CONSOLIDATION is not requested, the object will be RECOVERed in multiple extents. If EXTENT-CONSOLIDATION is requested, the object will be re-allocated, on RECOVER, with a single extent.

**CKM02458W ERROR CALLING CKM01HEX; FUNCTION=function R15=nnnn LOC=lllll**

**Explanation:**
During backup processing, an error occurred using CKM01HEX to print a record. Processing continues.

**User response:**
Report this message to Technical Support. Have available the listing that contains this message.

**CKM02467E BCS BACKUP BYPASSED DUE TO IDCAMS EXAMINE RETURN CODE**

**Explanation:**
While processing BCS for backup, IDCAMS EXAMINE was invoked to ensure the integrity of the object. EXAMINE determined a structural error and returned a error code of magnitude 8. BACKUP BCS will skip this object and continue processing other selected objects (unless ACCEPTEXAMINE(E) is specified).

**User response:**
Since IDCAMS EXAMINE indicates an INDEX or DATA component structural error, this catalog must be deleted and recovered. Refer to the documentation for details on recovering a catalog. If the errors are determined to be of insufficient cause to stop the backup, remove the ACCEPTEXAMINE keyword from the BACKUP command or specify ACCEPTEXAMINE(E).

**CKM02467W BCS BACKUP BYPASSED DUE TO IDCAMS EXAMINE RETURN CODE**

**Explanation:**
While processing BCS for backup, IDCAMS EXAMINE
was invoked to ensure the integrity of the object.
EXAMINE determined a structural error and returned an
error code of magnitude 8. BACKUP BCS will skip this
object and continue processing other selected objects
(unless ACCEPTEXAMINE(E) is specified).

User response:
Since IDCAMS EXAMINE indicates an INDEX or DATA
component structural error, this catalog must be deleted
and recovered. Refer to the documentation for details
on recovering a catalog. If the errors are determined to
be of insufficient cause to stop the backup, remove the
ACCEPTEXAMINE keyword from the BACKUP
command or specify ACCEPTEXAMINE(E).

---

CKM02495E UNABLE TO aaaaaaa DSN/MASK
INFORMATION. (n) R15=nnn
Explanation:
During BACKUP keyword evaluation, a problem
occurred during retrieval of a dataspace necessary for
processing. "tablename" is the name of the internal
table being created.

User response:
Contact Technical Support. Have available the listing
that contains this message and the SCKMPARM
member that controls execution.
CKM02497E ATTEMPT FOR DYNAMIC allocation (n) HAS FAILED

Explanation:
This message, accompanied by numerous IGD, IEF, or IKJ messages indicates that a file was not available for dynamic allocation or dynamic unallocation. This condition will NOT stop further execution of the BACKUP command. “(n)” refers to a specific place in the module that detects this condition.

User response:
Action varies depending on the DSN named in the IGD, IEF or IKJ messages. Most likely, the problem is due to something amiss with the volume of a connected user catalog or a non-existent VVDS.

CKM02497W ATTEMPT FOR DYNAMIC allocation (n) HAS FAILED

Explanation:
This message, accompanied by numerous IGD, IEF, or IKJ messages indicates that a file was not available for dynamic allocation or dynamic unallocation. This condition will NOT stop further execution of the BACKUP command. “(n)” refers to a specific place in the module that detects this condition.

User response:
Action varies depending on the DSN named in the IGD, IEF or IKJ messages. Most likely, the problem is due to something amiss with the volume of a connected user catalog or a non-existent VVDS.

CKM03JIN SYSUT3 DATA SET FAILED allocation

Explanation:
The dynamic allocation of the CREATE/APPEND data set failed allocation.

User response:
Correct your input statements and resubmit.

CKM03JIN SYSUT3 DATA SET FAILED allocation

Explanation:
The dynamic allocation of the CREATE/APPEND data set failed allocation.

User response:
Correct your input statements and resubmit.

CKM03JIN SYSUT3 DATA SET FAILED allocation

Explanation:
The dynamic allocation of the CREATE/APPEND data set failed allocation.

User response:
Correct your input statements and resubmit.

User response:
Correct your input statements and resubmit.

CKM04001E module MODULE MISSING FOR SUBCOMMAND xxxxxxxx

Explanation:
During command interpretation, the command proceeding this message was not available.

User response:
One or more load modules are missing or the STEPLIB is incorrectly coded.

CKM04002E UNRECOGNIZABLE SUBCOMMAND of RECOVER: xxxxxxxx

Explanation:
During command interpretation, the command proceeding this message was not RECOVER BCS, RECOVER VVDS or RECOVER DSN.

User response:
The RECOVER command must have one of these keywords. Ensure continuation indicators are present if the command was continued onto a second line.

CKM04003E COMMAND HAS NO OPERANDS

Explanation:
The RECOVER command had no operands.

User response:
Ensure that the subcommand of RECOVER is specified correctly. Most likely, the command was continued on a second line but the continuation marker was not present.

CKM04004E INSTALLATION SECURITY SERVER HAS RETURNED FAILURE CODES NNNN NNNN

Explanation:
During command processing, product has communicated with the installation security server.

For the message “HAS DENIED ACCESS TO THIS COMMAND”, the Security Server has determined that you do not have authority to use the RECOVER command.

For the message “HAS RETURNED FAILURE CODES NNNN NNNN”, the Security Server has determined an error other than “DENIED ACCESS”. Refer to the OS390 Security Server RACROUTE manual for a description of these codes. The first is the “SAFRETURN” value and the second is the “SAFREASON” value.
User response:
Contact the installation security administrator if this unexpected. You will need to tell them the name of the command in use. In this case it is RECOVER BCS, RECOVER VVDS or RECOVER DSN.

Explanation:
During command processing, product has communicated with the installation security server.
For the message "HAS DENIED ACCESS TO THIS COMMAND", the Security Server has determined that you do not have authority to use the RECOVER command.
For the message "HAS RETURNED FAILURE CODES NNNN NNNN", the Security Server has determined an error other than "DENIED ACCESS". Refer to the OS390 Security Server RACROUTE manual for a description of these codes. The first is the "SAFRETURN" value and the second is the "SAFREASON" value.

User response:
Contact the installation security administrator if this unexpected. You will need to tell them the name of the command in use. In this case it is RECOVER BCS, RECOVER VVDS or RECOVER DSN.

Explanation:
Command execution termination message.

User response:
Generally none.

Explanation:
Informational message giving the current revision number of the specific program.

User response:
None required. In the event of a problem, Technical Support may request the revision number.

Explanation:
Dynamic allocation for a data set failed, or, dynamic deallocation for a ddname failed. The associated z/OS messages are displayed. Processing terminates.

Explanation:
During recovery processing, a problem occurred using a dataspace. tttttttt is the name of the internal table.

User response:
If unable to determine the reason for the failure from the associated z/OS messages, contact Technical Support. Have available the listing containing these messages.

Explanation:
The MSC backup for the BCS to be recovered did not complete successfully.

User response:
Use a successful backup of the BCS as input to recovery.

Explanation:
An unexpected condition was found during recovery processing.

User response:
Report this message with the LOC=lllll to Technical Support.

Explanation:
The BCS to be recovered was not found in the input file.

User response:
Correct the specification of the input file.

Explanation:
An unexpected record format was detected while reading the backup file. This could occur if the original backup job was cancelled.

User response:
If the original backup job indicated successful completion, report this message with the 'ccccc' code to Technical Support.

Explanation:
During recovery processing, a problem occurred using a dataspace. tttttttt is the name of the internal table.
Chapter 25. Messages and Codes for Advanced Catalog Management

**CKM04207E**  •  **CKM0420DW**

**CKM04207E**  INPUT FILE: ddname IS NOT A RECOGNIZED FORMAT

**Explanation:**
The dataset in ddname, used as input to the recovery, was not recognized as an MSC BACKUP or as an EXPORT.

**User response:**
Correct the input to RECOVER.

**CKM04208W**  INPUT CATALOG HAS EXPIRED
EXPIRATION DATE - IGNORED

**Explanation:**
The catalog to be recovered, when backed up, had an expiration date that is not greater than today's date. The catalog will be defined without an expiration date.

**User response:**
If an expiration date is required for the catalog, when the recover is complete, issue an IDCAMS ALTER to add an expiration date.

**CKM04209E**  When processing: KKKKKKK argument: AAAAAAAA MESSAGE

**Explanation:**
While the argument(s) for keyword KKKKKK were being processed, a problem - described in MESSAGE was detected when specific argument AAAAAA was being validated.

**User response:**
Correct the argument AAAAAA for keyword KKKKKKK and then rerun the request.

**CKM0420AW**  No VVDS Cluster record output. This will cause IDCAMS DIAGNOSE IDC31376I message.

**Explanation:**
A True-name record for the BCS' Index Component.
A Cluster record for the VVDS on which the BCS resides.

If, subsequently, the BCS is deleted with the RECOVERY option and re-defined, the SDR and the two true-name records are re-created, but the VVDS record is not. Hence, there will only be three records on such a BCS, and IDCAMS Diagnose will generate the IDC31376I message.

Recover BCS will, if the target catalog exists, issue an IDCAMS DELETE catalog.name USERCATALOG RECOVERY "under the covers" prior to defining the catalog anew.

**User response:**
As there is no VVDS record on the Recover input, a "quick fix" is to execute a DEFINE CLUSTER of the required VVDS following the Recover BCS. For example:

```
DEFINE CLUSTER(NAME(SYS1.VVDS.Vvolser) NONINDEXED VOLUMES(volser) - RECATALOG) CATALOG(catalog.name)
```

Where volser is the volser on which the BCS catalog.name resides.

**CKM0420BE**  EXCPMODE input requires INTO-EMPTY

**Explanation:**
The input to Recover BCS was created by Backup BCS being executed in EXCPMODE. When Backup BCS executes in EXCPMODE, no metadata for the BCS is captured; as a result, it is not possible to create the IDCAMS DEFINE for the BCS.

**User response:**
Execute an IDCAMS DEFINE for the BCS before attempting to execute the Recover BCS command. Specify INTO-EMPTY when coding the Recover BCS command.

**CKM0420CE**  VVDS update internal error - xxxxx

**Explanation:**
While processing a Recover BCS NEW-NAME VVDSUPDATE a problem occurred.

**User response:**
Contact Technical Support. Have the Recover BCS listing containing this message available.

**CKM0420DW**  Volume: vvvvvv - VVDS entry not found for: dsname

**Explanation:**
While processing a Recover BCS NEW-NAME
**CKM0420EW • CKM04210E**

**VVDSUPDATE** no VVR or NVR was found for dsname within the volume's VVDS. The logic requires that the back-pointer (catalog name) in the VVR or NVR be updated with the "new" catalog's name.

**User response:**
If unable to determine the reason for the failure or to correct it, contact Technical Support.

**CKM0420EW**  Volume: vvvvvv - Error reading VVDS entry: t dsname

**Explanation:**
While processing a Recover BCS NEW-NAME VVDSUPDATE the VVDS Data Manager encountered a problem reading the record type t for the object dsname. The logic requires that the back-pointer (catalog name) in the VVR or NVR be updated with the "new" catalog's name.

**User response:**
If unable to determine the reason for the failure or to correct it, contact Technical Support.

**CKM0420FI**  Volume: vvvvvv - VVDS entry updated for: dsname

**Explanation:**
While processing a Recover BCS NEW-NAME VVDSUPDATE the VVDS Data Manager updated the catalog name stored in the NVR or VVR for the object dsname. The logic requires that the back-pointer (catalog name) in the VVR or NVR be updated with the "new" catalog's name.

**User response:**
None.

**CKM0420GE**  Error opening Journal

**Explanation:**
An error occurred when Recover BCS NEW-NAME VVDSUPDATE attempted to open the journal object.

**User response:**
If unable to determine the reason for the failure or for assistance in correcting it, please contact Technical Support. Have the IDCAMS DEFINE and the Recover BCS listing available.

**CKM0420HE**  Journal file not empty

**Explanation:**
The journal object, when processing Recover BCS NEW-NAME VVDSUPDATE must be empty. The object's high-used RBA must be zero.

**User response:**
Use IDCAMS to DELETE and DEFINE the Journal object before re-submitting the Recover BCS.

**CKM0420JE**  ECS in use for catalog: xxx.xxx.xxx

**Explanation:**
Prior to attempting to recover the named catalog, it was determined that the catalog was enabled to the ECS structure. Undue stress will be placed upon the coupling facility if this catalog is not removed from the ECS structure prior to recovery.

The Warning message is issued when in SIMULATE mode.

The Error message is issued when not in SIMULATE mode.

**User response:**
Remove the catalog(s) from the ECS structure before executing the Recover BCS command - F CATALOG,ECSHR(REMOVE,catalog.name)

**CKM0420JW**  ECS in use for catalog: xxx.xxx.xxx

**Explanation:**
Prior to attempting to recover the named catalog, it was determined that the catalog was enabled to the ECS structure. Undue stress will be placed upon the coupling facility if this catalog is not removed from the ECS structure prior to recovery.

The Warning message is issued when in SIMULATE mode.

The Error message is issued when not in SIMULATE mode.

**User response:**
Remove the catalog(s) from the ECS structure before executing the Recover BCS command - F CATALOG,ECSHR(REMOVE,catalog.name)

**CKM0420II**  xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx

**Explanation:**
While processing Recover BCS NEW-NAME VVDSUPDATE various informational messages are issued.

**User response:**
None.

**CKM04210E**  IDCAMS ERROR function

**Explanation:**
A non-zero return code from IDCAMS was detected during the specified function. The associated IDCAMS messages precede this message.

**User response:**
Check the associated IDCAMS messages for problem determination.

CKM04211I  DATASET IN keyword allocated TO DDNAME: ddname
Explanation:
The dsname in the specified keyword has been dynamically allocated to 'ddname'.
User response:
None.

CKM04212E  OPEN FAILED FOR DDNAME: ddname
Explanation:
RECOVER was unable to open the file. Processing terminates.
User response:
Check that the JCL has the indicated ddname specified. If unable to determine the cause of the failure, contact Technical Support. Have available the listing that contains this message.

CKM04213W  ERROR CALLING CKM01HEX;
FUNCTION=function R15=nnnn LOC=lllll
Explanation:
During recovery processing, an error occurred using CKM01HEX to print a record. Processing continues.
User response:
Report this message to Technical Support. Have available the listing that contains this message.

CKM04214E  UNABLE TO ESTABLISH ESTAEX;
R15=nnnn LOC=lllll
Explanation:
During recovery processing, a subroutine was not able to establish an estaex environment. Processing terminates.
User response:
Report this message to Technical Support. Have available the listing that contains this message.

CKM04215E  DATE OF bbbbbbb GREATER THAN TODATE
Explanation:
For forward recovery, the date on the BACKUP/EXPORT header record is greater than the specified FORWARD keyword TODATE. 'bbbbbb' is BACKUP or EXPORT indicating the input file format.
User response:
Correct the FORWARD keyword TODATE.

CKM04216E  TIME OF bbbbbbb NOT LESS THAN TOTIME
Explanation:
For forward recovery, the time on the BACKUP/EXPORT header record is not less than the specified FORWARD keyword TOTIME. 'bbbbbb' is BACKUP or EXPORT indicating the input file format.
User response:
Correct the FORWARD keyword TOTIME.

CKM04217E  INVALID DATE OR TIME IN INPUT FILE xxxxxxxxxx
Explanation:
An invalid date or time was found in the BACKUP/EXPORT input file. xxxxxxxxxx is the date or time found.
User response:
If the BACKUP/EXPORT job successfully completed, contact Technical Support. Have available the listing that contains this message. The BACKUP/EXPORT file may be requested for problem determination.

CKM04218I  OVER TWENTY SYSIDS FOUND IN SMF INPUT
Explanation:
More than twenty different sysids (SMFID's) were found in the SMF data used as input. Timestamps for the first 20 will be shown. Processing continues.
User response:
None.

CKM04219I  PROCESSING SMF RECORDS FROM DATE/TIME: yyyyddd/hh:mm:ss TO DATE/TIME: yyyyddd/hh:mm:ss
Explanation:
SMF records will be selected based on the specified FROM/TO timestamps.
User response:
None.

CKM04220I  SMF RECORDS SELECTED: nnnnnnnn
Explanation:
nnnnnnnn is the number of SMF records found for the BCS.
CKM04221I  SMF RECORDS FOR SYSID: sid;
EARLIEST: yyyyddd/hh:mm:ss  LATEST: yyyyddd/hh:mm:ss
Explanation:
For the specified system id, the earliest and latest timestamps found in the SMF input.
User response:
None.

CKM04222W  NO SMF RECORDS SELECTED
Explanation:
No SMF records were found for the specified BCS within the specified FROM/TO timestamps. Recovery processing continues using the input from the BACKUP/EXPORT file.
User response:
None, unless there was an error in the specification for the FROM/TO timestamps to include from SMF.

CKM04223E  SORT FOR SMF DATA FAILED.
R15=nnnn
Explanation:
The sort for the SMF records failed.
User response:
Correct the problem that caused SORT to fail.

CKM04224E  INCOMPLETE SMF CATALOG RECORDS FOUND
Explanation:
During forward processing, a segmented SMF record was found that affected the BCS being recovered. Not all of the segments for this record were found in the SMF input. The partial record is written to ddname SMFERR. Recovery processing is terminated.
User response:
Ensure all the required SMF data is available to forward recovery for the specified FROM/TO timestamps.

CKM04225E  INVALID SMF RECORDS DETECTED - reason
Explanation:
During forward processing, an invalid SMF record was detected. The record is written to ddname SMFERR. An SMF record is considered 'invalid' if the record subtype is not 'DE', 'IN', or 'UP' or if the SMF record date is not a valid packed number. For message CKM04225E, the invalid SMF record was a type 60, 61, 65 or 66; recovery processing is terminated. For message CKM04225I, the invalid SMF record was not type 60, 61, 65 or 66; recovery processing continues.
User response:
Determine and correct the problem with the SMF data.

CKM04226W  ******** GAP IN TIME FOR SYSID: sid error
Explanation:
During forward processing, a gap in the timestamps was found for the specified system id. 'error' indicates the nature of the gap. Recovery processing continues.
User response:
None, unless there was an error in the specification for the FROM/TO timestamps to include from SMF or in the datasets specified in the ddname for SMFFILE.

CKM04227I  RECORD COUNTS FROM APPLYING SMF DATA: nnnnnnnn UNCHANGED;
nnnnnnnn DELETED; nnnnnnnn INSERTED; nnnnnnnn UPDATED
Explanation:
Forward recovery applied SMF records to the original BACKUP/EXPORT input file. UNCHANGED records were unaffected by the SMF input. DELETED records were found in the BACKUP/EXPORT input file, but, SMF indicated the entry had been deleted since the BACKUP/EXPORT. INSERTED records were found in the SMF input, but, not in the BACKUP/EXPORT. UPDATED records were found in both the BACKUP/EXPORT and SMF; the SMF record replaced the original record.
User response:
None.

CKM04228E  Option may not be used: xxxxxxxxxxxx with DSN mask specification on RECOVER
Explanation:
When a mask is specified for the DSName for the
object(s) to be recovered. Certain keywords are considered illegal. These keywords are of the form NEWxxxxx. The reason being that the keyword value would be applied to all the objects matching the DSName mask.

**User response:**
Remove the NEWxxxxxx keywords from the RECOVER command, or RECOVER each object individually, with the required NEWxxxxx keywords coded. Re-submit.

---

**CKM04229I** hh.mm.ss RECOVERY | SIMULATE STEP: processing step STARTED | COMPLETED

**Explanation:**
RECOVER processing message

**User response:**
None.

---

**CKM04230E** Option may not be used: xxxxxxxxxx without DSN mask specification on RECOVER

**Explanation:**
When a mask is not specified for the DSName for the object(s) to be recovered. Certain keywords are considered illegal.

**User response:**
Either specify a mask for the catalog name or remove the named keyword from the Recover BCS request. Re-submit.

---

**CKM04231W** MASTERCATALOG DEFINE ALIAS UNSUCCESSFUL: aaaaaaaa

**Explanation:**
The RECOVER command was in the process of defining alias entries in the MasterCatalog to the UserCatalog that was being recovered, and encountered an IDCAMS error. The message IDC3013I has indicated that a duplicate data set name is in conflict with the attempted DEFINE ALIAS command. It is also possible that a non-VSAM entry in the Master Catalog conflicts with the dataset qualifier that the DEFINE ALIAS command is attempting to establish.

This message lists out catalog entries in the Master Catalog that are the likely causes of the “duplicate” entry condition.

**User response:**
Once the problem has been identified and the appropriate corrective actions have been taken, the DEFINE ALIAS command displayed by the CKM04232W message can be manually retried using the IDCAMS utility.

---

**CKM04232W** CONFLICTING CATALOG ENTRIES IN MASTER CATALOG:

**Explanation:**
The RECOVER command was in the process of defining alias entries in the MasterCatalog to the UserCatalog that was being recovered, and encountered an IDCAMS error. The message IDC3013I has indicated that a duplicate data set name is in conflict with the attempted DEFINE ALIAS command. It is also possible that a non-VSAM entry in the Master Catalog conflicts with the dataset qualifier that the DEFINE ALIAS command is attempting to establish.

This message lists out catalog entries in the Master Catalog that are the likely causes of the “duplicate” entry condition.

**User response:**
Once the problem has been identified and the appropriate corrective actions have been taken, the DEFINE ALIAS command displayed by the CKM04232W message can be manually retried using the IDCAMS utility.

---

**CKM04234W** NO RECORDS WRITTEN TO OUTPUT BCS

**Explanation:**
While processing the backup and, possibly, the SMF data no records were written to the output BCS.

**User response:**
Determine why a catalog selected by RECOVER has no entries. It is possible that the definition of the catalog is sufficient for this operation to be a success, however it is unusual to restore an empty catalog.

---

**CKM04235I** RECOVERY | SIMULATE STARTED FOR BCS: bcsname bbbbbb DATE/TIME: yyyyddd/hh:mm:ss

**Explanation:**
BCS recovery process start message. ’SIMULATE’ indicates a simulation was requested. ’bbbbbb’ indicates input from ‘BACKUP’ or ‘EXPORT’. The DATE/TIME is from the input file header.

**User response:**
None.
CKM04236I  RECOVERY | SIMULATE COMPLETED
FOR BCS:  bcsname

Explanation:
BCS recovery process completion message.
'SIMULATE' indicates a simulation was requested.

User response:
None.

CKM04237I  MasterCatalog Backup to be copied
INTOEMPTY BCS:  bcsname

Explanation:
The BACKUP file contains a backup of the current
master catalog, and it is being cloned into the
NEWNAME catalog dataset that is a new, and possibly
empty, catalog. If NOALIAS was not specified in the
command, then NOALIAS will automatically be assumed
to ensure that existing aliases within the current Master
Catalog remain unaffected. If NOVVDS-UPDATE was
not specified in the command, then NOVVDS- UPDATE
will automatically be assumed to ensure that the VVRs
and NVRs will remain associated with the current
Master Catalog.

User response:
None.

CKM04238I  (message text in Explanation)

Explanation:
Message:
ALIAS NAMES FROM  yyyyyy; TOTAL:  nn,nnn
alias name1
alias name2
alias namen

BCS recovery is using aliases from source yyyyyy.
yyyyy will be 'BACKUP', 'EXPORT', or 'SMF'. The
number of aliases is nn,nnn.

User response:
None.

CKM04239I  ALIASES APPLIED TO CATALOG:
mcatname

Explanation:
BCS recovery applied the aliases to the specified
master catalog.

User response:
None.

CKM04240I  IGG.CATLOCK profile not found;
NOLOCK enabled.

Explanation:
The keyword LOCK or LEAVE-LOCKED has been
specified. Catalog locking is only available if the
IGG.CATLOCK profile has been defined - it could not be
found; therefore NOLOCK has been enabled.

User response:
None.

CKM04241I  BCS DISCONNECTED FROM CURRENT
MASTER CATALOG

Explanation:
The BCS has been 'export disconnected' from the
master catalog on the current system.

User response:
None.
CKM04242E REQUEST TO RECOVER CURRENT MASTER CATALOG

Explanation:
The BCS specified for recovery is the master catalog on the current system. E(rror) if not SIMULATE, W(arning) if SIMULATE.

User response:
Recovery of a master catalog cannot be done while that catalog is in use as a master catalog.

CKM04242W REQUEST TO RECOVER CURRENT MASTER CATALOG

Explanation:
The BCS specified for recovery is the master catalog on the current system. E(rror) if not SIMULATE, W(arning) if SIMULATE.

User response:
Recovery of a master catalog cannot be done while that catalog is in use as a master catalog.

CKM04243E EXPORT FILE: EXPECTING aaaaaaaa FOUND bbbbbbbb

Explanation:
During processing of an exported BCS as input, unexpected data in the file was detected.

User response:
Report this message to Technical Support. Have available the listing that contains this message. The EXPORT file may be requested for problem determination.

CKM04244E EXPORT FILE IS FOR CATALOG: bcsname

Explanation:
Recovery processing detected the specified input file is an EXPORT of bcsname, which is not the BCS requested.

User response:
Correct the specified export file or the specified BCS, whichever is appropriate.

CKM04245E UNABLE TO REDEFINE CATALOG; MISSING INFORMATION FOR component

Explanation:
Recovery was unable to extract the information needed to redefine the user catalog BCS from the BACKUP/EXPORT input file. 'component' may be 'UCAT', 'DATA', or 'INDEX'.

User response:
Fix error and retry the job.
CKM04248E • CKM04255W

CKM04248E  BCS not cataloged; error text
Explanation:
The BCS to be recovered is not cataloged. RECOVER is
trying to verify that the BCS does not exist on
the volume serial number so the DEFINE for the BCS
will be successful. However, a problem was detected
during the verification. Processing terminates.
User response:
Check the accompanying error text. If unable to
determine the cause of the failure, contact Technical
Support. Have available the listing that contains this
message.

CKM04248W  BCS not cataloged; error text
Explanation:
The BCS to be recovered is not cataloged. RECOVER is
trying to verify that the BCS does not exist on
the volume serial number so the DEFINE for the BCS
will be successful. However, a problem was detected
during the verification. Processing terminates.
User response:
Check the accompanying error text. If unable to
determine the cause of the failure, contact Technical
Support. Have available the listing that contains this
message.

CKM04249I  NEW BCS NAME: xxxxxxxx
Explanation:
Catalog is being recovered to new name xxxxxxxx.
User response:
None.

CKM04250W  bbbbbb OF CATALOG CONTAINS NO
IMBEDDED MASTERCAT ALIASES.
Explanation:
The backup file contains a usercatalog that originally did
not have any HLQ aliases defined to it in the master
catalog. In addition, the ALIAS option was specified or
defaulted to, and the backup was either an EXPORT or
was created by the BACKUP command with the ALIAS
option in effect. RECOVER processing will ultimately not
apply any alias updates to the master catalog. ’bbbobb’
is BACKUP or EXPORT indicating the input file format.
User response:
None.

CKM04251E  ERROR ACCESSING CATALOG:
catalog name
Explanation:
A VSAM error occurred accessing the specified catalog.
User response:
See associated CKM341nnE error messages. If unable
to resolve the problem, contact Technical Support. Have
available the listing that contains these messages.

CKM04252E  DUPLICATE BCS RECORD. KEY=bcsrc
record key
Explanation:
A duplicate key was detected while rewriting the BCS
records during recovery.
User response:
If IEMPTY was specified, the BCS to be recovered must
contain only the self-defining entries for the BCS and
the VVDS entry for the BCS.

CKM04253E  DELETE-OLD-BCS requires
NEW-NAME
Explanation:
The DELETE-OLD-BCS keyword has been requested,
but the NEW-NAME keyword has not been requested.
User response:
Either remove the DELETE-OLD-BCS keyword from the
command, or add the NEW-NAME (and JOURNAL)
keyword to the command.

CKM04254W  VOLCAT IS ABOUT TO BE
RECOVERED, NOALIAS IS
TEMPORARILY ENABLED
Explanation:
Potentially multiple catalogs may be recovered since a
mask has been specified. The keyword ALIAS has
either been specified or is in default. The following
VOLCAT will be processed in NOALIAS mode.
User response:
None required...VOLCATs do not support aliases.

CKM04255W  BCS STILL LOCKED DUE TO
PREVIOUS ERRORS
Explanation:
Due to errors during recovery processing, the BCS is
left 'locked' to prevent modifications until the errors are
corrected.
User response:
If the previous errors do not prohibit use of the BCS,
issue the 'ALTER UNLOCK' command to enable access to the BCS. If the previous errors prohibit use of the BCS, take the appropriate steps to correct the errors; this may include running the recovery process.

**CKM04256W DUPLICATE KEYS IN BACKUP; reason**

**Explanation:**
Multiple reasons, explanations, and actions possible:

**REASON:** RECORDS ARE THE SAME

**DESCRIPTION:** A record with a duplicate key was detected from the BACKUP file. The record is a duplicate record. The duplicate record will be printed and dropped.

**ACTION:** None.

**REASON:** LATEST CREATION DATE KEPT

**DESCRIPTION:** A record with a duplicate key was detected from the BACKUP file. The record with the most recent creation date was retained and the record with the earlier creation date was dropped. Both records are printed. Processing continues.

**ACTION:** None. Be aware that, if forward recovery is in effect, SMF data may replace any records reported in this step of processing.

**REASON:** FIRST RECORD KEPT

**DESCRIPTION:** A record with a duplicate key was detected from the BACKUP file. The records either do not contain a creation date or the creation dates are equal. The second record was dropped. Both records are printed. Processing continues.

**ACTION:** Examine the printed records. The dropped record may have the desired data. Be aware that, if forward recovery is in effect, SMF data may replace any records reported in this step of processing.

**REASON:** HIGHEST GENERATION KEPT

**DESCRIPTION:** A record with a duplicate key was detected from the BACKUP file. The records either do not contain a creation date or the creation dates are equal. The records are for a GDG. The GATs (Generation Aging Table) were inspected, the record with the highest generation was kept; the record with the lower value was dropped.

**ACTION:** Examine the printed records. The dropped record may have the desired data. Be aware that, if forward recovery is in effect, SMF data may replace any records reported in this step of processing.

**REASON:** MIGRATED

**DESCRIPTION:** A record with a duplicate key was detected from the BACKUP file. The records either do not contain a creation date or the creation dates are equal. The records are for a DASD-based object. One record has a genuine volser with a VTOC entry for the object, the other (dropped) record indicates that the object was migrated.

**ACTION:** Examine the printed records. The dropped record may have the desired data. Be aware that, if forward recovery is in effect, SMF data may replace any records reported in this step of processing.

**REASON:** NO VTOC ENTRY

**DESCRIPTION:** A record with a duplicate key was detected from the BACKUP file. The records either do not contain a creation date or the creation dates are equal. The records are for a DASD-based object. One record has a volser but that volume either has no UCB or the volume’s VTOC does not contain an entry for the object.

**ACTION:** Examine the printed records. The dropped record may have the desired data. Be aware that, if forward recovery is in effect, SMF data may replace any records reported in this step of processing.

**User response:**
Refer to actions listed in Explanation.

**CKM04257E SORT FOR BCS DATA FAILED.  
R15=nnnn**

**Explanation:**
The sort of the BCS backup records failed.

**User response:**
Correct the problem that caused SORT to fail.

**CKM04258E ORIGINAL CATALOG IS VOLCAT, NEW IS ICFCAT**

**Explanation:**
A request has been made to Recover a VOLCAT, the NEW-NAME argument indicates a name not reserved for a VOLCAT.

**User response:**
Change the NEW-NAME argument to a value that is not reserved for a VOLCAT name.

**CKM04259E ORIGINAL CATALOG IS ICFCAT, NEW IS VOLCAT**

**Explanation:**
A request has been made to Recover an ICFCAT, the NEW-NAME argument indicates a name reserved for a VOLCAT.

**User response:**
Change the NEW-NAME argument to a value that is not reserved for a VOLCAT name.
CKM04260E  CKM04261E  CKM04262E  CKM04263I

CKM04260E  MISSING DDNAME: xxxxxxxx

Explanation:
The RECOVER(BCS) command requires certain DDNames to be allocated in the JCL. The specified DDName is missing.

User response:
Check the User Guide for guidance on how this DDName should be specified.

CKM04261E  DDNAME: xxxxxxxx ASSIGNED TO: NULLFILE

Explanation:
The RECOVER(BCS) command requires that certain DDNames not be assigned to DUMMY or DSN=NULLFILE.

User response:
Check the User Guide for guidance on how this DDName should be specified.

CKM04262E  (multiple possible messages)

Explanation:
There are multiple, possible error or warning messages.

CKM04262E  ERROR: RECOVERY OF A BCS WILL REQUIRE ACCESS(READ) TO THE IGG.CATLOCK PROFILE

CKM04262E  YOU CURRENTLY HAVE ACCESS(xxxxxx) TO THE profile PROFILE

CKM04262W  ERROR: RECOVERY OF A BCS WILL REQUIRE ACCESS(READ) TO THE IGG.CATLOCK PROFILE

CKM04262W  YOU CURRENTLY HAVE ACCESS(xxxxxx) TO THE profile PROFILE

CKM04262W  (multiple possible messages)

Explanation:
The RECOVER(BCS) command requires certain Security authorizations. Access Method Services (required for DELETE/DEFINE of the BCS) stipulates that the user have UPDATE authority on the Master Catalog when deleting or defining a BCS. The INTOEMPTY keyword was NOT included on the RECOVER request. E(err) if not SIMULATE, W(arning) if SIMULATE.

ACTION: Contact your resource security administrator, and request this permission.

CKM04262E  ERROR: RECOVERY OF A BCS WILL REQUIRE ACCESS(CONTROL) TO THE TARGET BCS

CKM04262E  YOU CURRENTLY HAVE ACCESS(xxxxxx) TO THE catalog CATALOG

CKM04262W  ERROR: RECOVERY OF A BCS WILL REQUIRE ACCESS(CONTROL) TO THE TARGET BCS

CKM04262W  YOU CURRENTLY HAVE ACCESS(xxxxxx) TO THE catalog CATALOG

Description: The RECOVER(BCS) command requires certain Security authorizations. Access Method Services (required for DELETE/DEFINE of the BCS) stipulates that the user have UPDATE authority on the BCS when deleting or defining a BCS. The INTOEMPTY keyword was NOT included on the RECOVER request. E(err) if not SIMULATE, W(arning) if SIMULATE.

ACTION: Contact your resource security administrator, and request this permission.

CKM04262W  ERROR: RECOVERY OF A BCS WILL REQUIRE ACCESS(CONTROL) TO THE TARGET BCS

CKM04262W  YOU CURRENTLY HAVE ACCESS(xxxxxx) TO THE catalog CATALOG

Description: The RECOVER(BCS) command requires certain Security authorizations. Access Method Services (required for DELETE/DEFINE of the BCS) stipulates that the user have UPDATE authority on the BCS when deleting or defining a BCS. The INTOEMPTY keyword was NOT included on the RECOVER request. E(err) if not SIMULATE, W(arning) if SIMULATE.

ACTION: Contact your resource security administrator, and request this permission.

User response:
Refer to the information in the Explanation for the appropriate user response.

CKM04263I  SMF IS NOT ACTIVE ON THE SUBSYSTEM

Explanation:
CKM04262W has multiple possible messages and user responses. Refer to the documentation for CKM04262E for a complete information.

User response:
Refer to the documentation for CKM04262E for a complete information.

CKM04263I  SMF IS NOT ACTIVE ON THE SUBSYSTEM

Explanation:
The RECOVER(BCS) command specified FORWARD. FORWARD implies the collection of SMF data. SMF data are not collected if SMF is not active.

User response:
SMF should be activated on those subsystems that
update the BCS being recovered.

**CKM04264I**  SMF TYPE 61 | 65 | 66 (BCS DEFINE | DELETE | ALTER) NOT BEING RECORDED ON THIS SUBSYSTEM

**Explanation:**
The RECOVER(BCS) command specified FORWARD. FORWARD implies the collection of SMF data. Updates to BCS cause a SMF record type 61, 65, or 66 to be cut. One, or more, of the specific record types are not being recorded.

**User response:**
Request the SMF administrator to enable recording of the specific SMF record type(s).

**CKM04265W**  Duplicate DSN or Mask encountered -- ignored: dsname

**Explanation:**
A DSN or mask value has been coded more than once.

**User response:**
Ensure DSN or mask is correct.

**CKM04266I**  The following DSNs/masks | SYSIDs are to be processed during KKKKKKK processing

**Explanation:**
The message displays a list of:
- DSNs and masks detected during RECOVER INCLUDE/EXCLUDE-DSN processing
- SYSIDs detected during SYNC-SMF-TIME processing

**User response:**
None required.

**CKM04267I**  BCS still locked due to LEAVE-LOCKED request

**Explanation:**
The BCS remains in a LOCKed state since LEAVE-LOCKED was requested.

**User response:**
Remember to issue an AMS ALTER UNLOCK in the future.

**CKM04268E**  RACROUTE error; SAF return code: xxxx RACF return code: xxxx RACF reason code: xxxx

**Explanation:**
When checking the Security Access Facility for the permissions required to Recover a BCS, an error occurred.

**User response:**
Contact Technical Support.

**CKM04268W**  RACROUTE error; SAF return code: xxxx RACF return code: xxxx RACF reason code: xxxx

**Explanation:**
When checking the Security Access Facility for the permissions required to Recover a BCS, an error occurred.

**User response:**
Contact Technical Support.

**CKM04269I**  The object: dsname Was marked for both Inclusion and Exclusion by Volser - included

**Explanation:**
One or more of the object's volsers was coded in both the INCLUDE-VOLSER keyword and in the EXCLUDE-VOLSER keyword. The object will be cataloged in the recovered catalog.

**User response:**
None required.

**CKM04270E**  Invalid volser in keyword: keyword Volser: volser

**Explanation:**
The volser in the keyword is invalid. The second line indicates the problem detected with the volser.

**User response:**
Correct the volser specification.

**CKM04271W**  Duplicate Volser or Mask encountered -- ignored: volser

**Explanation:**
A Volser or mask value has been coded more than once.

**User response:**
Ensure Volser or mask is correct.

**CKM04272I**  The following Volsers/masks are to be processed during ttt processing

**Explanation:**
The message displays a list of Volsers and masks.
detected during RECOVER INCLUDE/EXCLUDE-VOLSER processing.

User response:

none.

CKM04273I (multiple possible messages)

Explanation:

There are multiple possible messages, descriptions, and actions.

hh:mm:ss RECOVERY PUT MESSAGE: SECONDARY ALLOCATION OR NEW VOLUME

DESCRIPTION: When a BCS is being recovered either the target DASD had insufficient space, or a secondary extent was required as insufficient primary space was allocated.

ACTION: Change the RECOVER - either specify a different volume using the NEWVOL parameter, or increase the primary allocation using the NEWPRIMARY parameter.

hh:mm:ss RECOVERY PUT MESSAGE: DUPLICATE ALT INDEX KEY CREATE

DESCRIPTION: This will not occur, but is included for completeness.

ACTION: Contact Technical Support if it occurs.

hh:mm:ss RECOVERY PUT MESSAGE: WRITE BUFFER SUGGESTED

DESCRIPTION: This will not occur, but is included for completeness.

ACTION: Contact Technical Support if it occurs.

hh:mm:ss RECOVERY PUT MESSAGE: SEQUENCE SET CAPACITY EXCEEDED

DESCRIPTION: When a BCS is being recovered the Index Component CI was not large enough to store all the keys from a Data Component CA. As a direct result, some CIs in the Data Component CA are totally unavailable for use, now when being loaded, and later for CA splits. This wastes DASD space. This message may be masked by the "Secondary allocation or new volume" message.

ACTION: Change the RECOVER options. To attempt to prevent this from happening, specify a NEWCAFSPC parameter of 0 (zero), this will ensure that ALL CIs in the Data CA will be eligible, at the same time increase the size of the Index CI by specifying a NEWINDEXCISZ parameter that is larger than that used for the object attempt the RECOVER again (it is a dyadic process). If the message still occurs, once again, make the NEWINDEXCISZ parameter larger, and attempt the RECOVER. When this message no longer occurs, specify a "normal, not excessive" CA freespace value using NEWCAFSPC, and RECOVER the object. This is just one solution, it may not be the best. If there are questions, contact Technical Support.

hh:mm:ss RECOVERY PUT MESSAGE: RESERVED

DESCRIPTION: This will not occur, but is included for completeness.

ACTION: Contact Technical Support if it occurs.

JOURNAL: journal-name IS NOT CATALOGED

DESCRIPTION: The JOURNAL keyword's argument must specify a cataloged KSDS. The argument is not a cataloged object.

ACTION: Determine why the object is not cataloged. An incorrect dsname may have been specified or the object deleted. Correct the spelling or define the object as specified in the User's Guide and re-submit.

JOURNAL: journal-name IS CATALOGED IN BCS BEING RENAMED

DESCRIPTION: The JOURNAL keyword's argument must specify a cataloged KSDS that is not cataloged in the BCS being recovered.

ACTION: Delete the current object and re-define it in a catalog other than that being recovered with a NEWNAME. Re-submit.

JOURNAL: journal-name IS NOT A VSAM OBJECT

DESCRIPTION: The JOURNAL keyword's argument must specify a VSAM KSDS. The argument is not a VSAM object.

ACTION: Determine why the object is not VSAM. An incorrect dsname may have been specified. Correct and re-submit.

JOURNAL: journal-name IS NOT A KSDS

DESCRIPTION: The JOURNAL keyword's argument must specify a VSAM KSDS. The argument is a VSAM ESDS, LDS, RRDS or VRRDS.

ACTION: Determine why the object is not a KSDS. An incorrect dsname may have been specified. Correct and re-submit.
CKM04276I The following arguments were unmatched for keyword: KKKKK

Explanation:
The keyword KKKKK was supplied with one or more arguments. The arguments listed were not used during processing.

User response:
Possibly none. If the keyword is SYNC-SMF-TIME, then no SMF records were processed for the CPU Id(s) listed.

CKM04277W QSAM RECORD LENGTH: NNNN BCS CLAIMED RECORD LENGTH: NNNN **REJECT**

Explanation:
While loading a catalog, product determined that the record length reported by QSAM was not the same as the length indicated in the record.

User response:
Records with this problem are determined and rejected by BACKUP. However if an older backup is used as input to RECOVER, there may be records with this problem that previous versions of product would unload causing problems with RECOVER. See CKM02177W for more details.

User response:
Multiple possible user responses. See the complete information in Explanation.
CKM04284E • CKM04294E

Correct the parameter in error.

**CKM04284E REQUIRED KEYWORD MISSING:**

**keyword**

**Explanation:**
A keyword required for recovery processing has been omitted.

**User response:**
Specify the required keyword.

---

**CKM04285E NOTHING SPECIFIED FOR KEYWORD:**

**keyword**

**Explanation:**
A keyword was entered without an appropriate argument.

**User response:**
Specify an appropriate argument for the keyword.

---

**CKM04286E KEYWORD: keyword MAXIMUM LENGTH: nnn EXCEEDED**

**Explanation:**
The argument entered for a keyword exceeded the maximum length allowed for the argument. nnn is the maximum allowed length for the keyword's argument.

**User response:**
Correct the length of the keyword's argument.

---

**CKM04287E KEYWORD HAS MORE THAN 1 OPERAND; ONLY 1 ALLOWED:**

**keyword**

**Explanation:**
Multiple arguments were detected for a keyword; only one operand is permitted.

**User response:**
Correct the keyword to use one argument.

---

**CKM04288E INVALID DDNAME IN KEYWORD:**

**keyword DDNAME: ddname error**

**Explanation:**
Parsing detected a problem with the ddname in the keyword. "error" contains the detected error.

**User response:**
Correct the ddname specification.

---

**CKM04289E DDNAME SPECIFIED IN KEYWORD:**

**keyword DDNAME: ddname WAS NOT FOUND**

**Explanation:**
The ddname specified for the keyword was not found in the JCL.

**User response:**
Correct either the ddname specification or the JCL.

---

**CKM04290E ERROR WITH DATE:**

**keyword error**

**Explanation:**
The date found in FROMDATE or TODATE is incorrect. 'error' describes the problem detected.

**User response:**
Correct the keyword's date.

---

**CKM04291E ERROR WITH TIME:**

**keyword error**

**Explanation:**
The time found in FROMTIME or TOTIME is incorrect. 'error' describes the problem detected.

**User response:**
Correct the keyword's time.

---

**CKM04292E FROMDATE GREATER THAN TODATE**

**Explanation:**
For forward recovery, the FROMDATE in use is greater than the TODATE in use. The FROMDATE must be less than or equal to the TODATE.

**User response:**
Correct the appropriate date.

---

**CKM04293E FROMTIME NOT LESS THAN TOTIME**

**Explanation:**
For forward recovery, the FROMTIME in use is greater than or equal to the TOTIME in use. The FROMTIME must be less than the TOTIME.

**User response:**
Correct the appropriate time.

---

**CKM04294E INVALID DATASETNAME IN KEYWORD:**

**keyword DSN: dsname error**

**Explanation:**
The dsname in the keyword is invalid. 'error' indicates the problem detected with the datasetname.

**User response:**
Correct the dsname specification.

CKM04295I  CLUSTER LIBRARY VOLUME
TRUENAME ... n n n n ...

Explanation:
This message provides a count of the various types of records written to the recovered BCS. Please note that the cluster and true-name totals do NOT include the records created when the BCS was defined.

The record types are:

CLUSTER indicates the number of base cluster records (type code of "C"). Alternate index (AIX) information is stored within the base cluster record, so it does not appear as a separate record type. The key of each record is the base cluster name.

GDG indicates the number of generation data set (GDS) records (type code of "B"). Each individual generation of a GDS is stored within the overall GDG record, so they do not appear as a separate record type. The key of each record is the base data set name (i.e., the fully qualified data set name, without a GxxxxVxx value)

E indicates an extension record (type code of "E") to a base cluster record. Extension records are created whenever a cluster record exceeds the maximum record size specified for the BCS. The key of an extension record is the base cluster data set name, with a sequence number in the last byte of the key.

J indicates an extension record (type code of "J") to a base generation data set (GDS) record. Extension records are created whenever a GDS record exceeds the maximum record size specified for the BCS. The key of an extension record is the base generation data set name, with a sequence number in the last byte of the key.

NONVSAM indicates the number of nonVSAM data set records (type code of "A"). The key of record is the nonVSAM data set name.

TRUENAME indicates the number of truename records (type code of "T"). Each component of a base cluster or alternate index cluster, as well as the alternate index cluster itself, will have a truename record. The key of each truename record is component name, or in the case of an alternate index, the alternate index name. PATH indicates the number of path records (type code of "R"). Typically, each alternate index is associated to its base cluster with a path record, resulting in one path record for each alternate index. In unusual circumstances there can be a path for just a base cluster.

UCAT indicates the number of usercatalog connector records (type code of "x"). Typically, these records would be in a BCS that is used as a master catalog, indicating the user catalog BCSs that are connected to it. ALIAS indicates the number of alias records (type code of "x"). Typically, these records would be in a BCS that is used as a master catalog, and are used by the catalog order of search logic to determine which BCS to search for a data set. OTHER indicates all other types of catalog records that are connected to it.

ALIAS indicates the number of alias records (type code of "x"). Typically, these records would be in a BCS that is used as a master catalog, and are used by the catalog order of search logic to determine which BCS to search for a data set.

LIBRARY indicates the number of VOLCAT library records (type code of "l"). VOLUME indicates the number of VOLCAT library records (type code of "w"). OTHER indicates all other types of catalog records that were written to the BCS named in the RECOVER command.

TOTAL indicates the total number of records that were written to the BCS named in the RECOVER command.

TOTAL BYTES indicates the total number of bytes that were written to the BCS named in the RECOVER command.

User response:
None.

CKM04295I  CLUSTER LIBRARY VOLUME
TRUENAME ... n n n n ...

Explanation:
This message provides a count of the various types of records written to the recovered BCS. Please note that the cluster and true-name totals do NOT include the records created when the BCS was defined.

The record types are:

CLUSTER indicates the number of base cluster records (type code of "C"). Alternate index (AIX) information is stored within the base cluster record, so it does not appear as a separate record type. The key of each record is the base cluster name.

GDG indicates the number of generation data set (GDS) records (type code of "B"). Each individual generation of a GDS is stored within the overall GDG record, so they do not appear as a separate record type. The key of each record is the base data set name (i.e., the fully qualified data set name, without a GxxxxVxx value)

E indicates an extension record (type code of "E") to a base cluster record. Extension records are created whenever a cluster record exceeds the maximum record size specified for the BCS. The key of an extension record is the base cluster data set name, with a sequence number in the last byte of the key.

J indicates an extension record (type code of "J") to a base generation data set (GDS) record. Extension records are created whenever a GDS record exceeds the maximum record size specified for the BCS. The key of an extension record is the base generation data set name, with a sequence number in the last byte of the key.

NONVSAM indicates the number of nonVSAM data set records (type code of "A"). The key of record is the nonVSAM data set name.

TRUENAME indicates the number of truename records (type code of "T"). Each component of a base cluster or alternate index cluster, as well as the alternate index cluster itself, will have a truename record. The key of each truename record is component name, or in the case of an alternate index, the alternate index name.

PATH indicates the number of path records (type code of "R"). Typically, each alternate index is associated to its base cluster with a path record, resulting in one path record for each alternate index. In unusual circumstances there can be a path for just a base cluster.

UCAT indicates the number of usercatalog connector records (type code of "x"). Typically, these records would be in a BCS that is used as a master catalog, indicating the user catalog BCSs that are connected to it. ALIAS indicates the number of alias records (type code of "x"). Typically, these records would be in a BCS that is used as a master catalog, and are used by the catalog order of search logic to determine which BCS to search for a data set. OTHER indicates all other types of catalog records that are connected to it.
the maximum record size specified for the BCS. The key of an extension record is the base generation data set name, with a sequence number in the last byte of the key.

NONVSAM indicates the number of nonVSAM data set records (type code of "A"). The key of record is the nonVSAM data set name.

TRUENAME indicates the number of truename records (type code of "T"). Each component of a base cluster or alternate index cluster, as well as the alternate index cluster itself, will have a truename record. The key of each truename record is component name, or in the case of an alternate index, the alternate index name.

PATH indicates the number of path records (type code of "R"). Typically, each alternate index is associated to its base cluster with a path record, resulting in one path record for each alternate index. In unusual circumstances there can be a path for just a base cluster.

UCAT indicates the number of usercatalog connector records (type code of "x"). Typically, these records would be in a BCS that is used as a master catalog, indicating the user catalog BCSs that are connected to it. ALIAS indicates the number of alias records (type code of "x"). Typically, these records would be in a BCS that is used as a master catalog, and are used by the catalog order of search logic to determine which BCS to search for a data set. OTHER indicates all other types of catalog records that are connected to it.

ALIAS indicates the number of alias records (type code of "x"). Typically, these records would be in a BCS that is used as a master catalog, and are used by the catalog order of search logic to determine which BCS to search for a data set.

LIBRARY indicates the number of VOLCAT library records (type code of "I").

VOLUME indicates the number of VOLCAT library records (type code of "w").

OTHER indicates all other types of catalog records that were written to the BCS named in the RECOVER command.

TOTAL indicates the total number of records that were written to the BCS named in the RECOVER command.

TOTAL BYTES indicates the total number of bytes that were written to the BCS named in the RECOVER command.

User response:
None.

Explanation:
This message provides a count of the various types of records encountered while reading the Backup of the BCS indicated.

The record types are:

CLUSTER indicates the number of base cluster records (type code of "C"). Alternate index (AIX) information is stored within the base cluster record, so it does not appear as a separate record type. The key of each record is the base cluster name.

GDG indicates the number of generation data set (GDS) records (type code of "B"). Each individual generation of a GDS is stored within the overall GDG record, so they do not appear as a separate record type. The key of each record is the base data set name (i.e., the fully qualified data set name, without a GxxxxVxx value)

E indicates an extension record (type code of "E") to a base cluster record. Extension records are created whenever a cluster record exceeds the maximum record size specified for the BCS. The key of an extension record is the base cluster data set name, with a sequence number in the last byte of the key.

J indicates an extension record (type code of "J") to a base generation data set (GDS) record. Extension records are created whenever a GDS record exceeds the maximum record size specified for the BCS. The key of an extension record is the base generation data set name, with a sequence number in the last byte of the key.

NONVSAM indicates the number of nonVSAM data set records (type code of "A"). The key of record is the nonVSAM data set name.

TRUENAME indicates the number of truename records (type code of "T"). Each component of a base cluster or alternate index cluster, as well as the alternate index cluster itself, will have a truename record. The key of each truename record is component name, or in the case of an alternate index, the alternate index name.

PATH indicates the number of path records (type code of "R"). Typically, each alternate index is associated to its base cluster with a path record, resulting in one path record for each alternate index. In unusual circumstances there can be a path for just a base cluster.

UCAT indicates the number of usercatalog connector records (type code of "x"). Typically, these records would be in a BCS that is used as a master catalog, indicating the user catalog BCSs that are connected to it. ALIAS indicates the number of alias records (type code of "x"). Typically, these records would be in a BCS that is used as a master catalog, and are used by the catalog order of search logic to determine which BCS to search for a data set. OTHER indicates all other types of catalog records that are connected to it.
of "x". Typically, these records would be in a BCS that is used as a master catalog, and are used by the catalog order of search logic to determine which BCS to search for a data set.

LIBRARY indicates the number of VOLCAT library records (type code of "l").

VOLUME indicates the number of VOLCAT library records (type code of "w").

OTHER indicates all other types of catalog records that were backed up from the BCS named in the RECOVER command.

TOTAL indicates the total number of records that were backed up from the BCS named in the RECOVER command.

TOTAL BYTES indicates the total number of bytes that were backed up from the BCS named in the RECOVER command.

User response:
None.

CKM04296I  RECORD SUMMARY FOR
  PROCESSING BACKUP FOR
  catalog-name CLUSTER LIBRARY
  VOLUME TRUENAME ... n n n n ...

Explanation:
This message provides a count of the various types of records encountered while reading the Backup of the BCS indicated.

The record types are:

CLUSTER indicates the number of base cluster records (type code of "C"). Alternate index (AIX) information is stored within the base cluster record, so it does not appear as a separate record type. The key of each record is the base cluster name.

GDG indicates the number of generation data set (GDS) records (type code of "B"). Each individual generation of a GDS is stored within the overall GDG record, so they do not appear as a separate record type. The key of each record is the base data set name (i.e., the fully qualified data set name, without a GxxxxVxx value)

E indicates an extension record (type code of "E") to a base cluster record. Extension records are created whenever a cluster record exceeds the maximum record size specified for the BCS. The key of an extension record is the base cluster data set name, with a sequence number in the last byte of the key.

J indicates an extension record (type code of "J") to a base generation data set (GDS) record. Extension records are created whenever a GDS record exceeds the maximum record size specified for the BCS. The key of an extension record is the base generation data set name, with a sequence number in the last byte of the key.

NONVSAM indicates the number of nonVSAM data set records (type code of "A"). The key of record is the nonVSAM data set name.

TRUENAME indicates the number of truename records (type code of "T"). Each component of a base cluster or alternate index cluster, as well as the alternate index cluster itself, will have a truename record. The key of each truename record is component name, or in the case of an alternate index, the alternate index name.

PATH indicates the number of path records (type code of "P"). Typically, each alternate index is associated to its base cluster with a path record, resulting in one path record for each alternate index. In unusual circumstances there can be a path for just a base cluster.

UCAT indicates the number of usercatalog connector records (type code of "X"). Typically, these records would be in a BCS that is used as a master catalog, indicating the user catalog BCSs that are connected to it. ALIAS indicates the number of alias records (type code of "x"). Typically, these records would be in a BCS that is used as a master catalog, and are used by the catalog order of search logic to determine which BCS to search for a data set. OTHER indicates all other types of catalog records that are connected to it.

ALIAS indicates the number of alias records (type code of "x"). Typically, these records would be in a BCS that is used as a master catalog, and are used by the catalog order of search logic to determine which BCS to search for a data set.

LIBRARY indicates the number of VOLCAT library records (type code of "l").

VOLUME indicates the number of VOLCAT library records (type code of "w").

OTHER indicates all other types of catalog records that were backed up from the BCS named in the RECOVER command.

TOTAL indicates the total number of records that were backed up from the BCS named in the RECOVER command.

TOTAL BYTES indicates the total number of bytes that were backed up from the BCS named in the RECOVER command.

User response:
None.

CKM04297W  OPTION: xxxxxxxxx ENABLED FOR
  RESTORE OF EXCPMODE BACKUP

Explanation:
When restoring an EXCPMODE backup, NOALIAS and INTOEMPTY are required. These options were enabled.

User response:
None.

Chapter 25. Messages and Codes for Advanced Catalog Management  343
Do not specify NOINTOEMPTY, ALIAS or ALIASONLY when restoring an EXCPMODE backup. The restore will still be processed.

**CKM04298E**  AMSOPEN FAILED. R15=nnnn

**Explanation:**
An attempt was made to issue an IDCAMS command.

**User response:**
Contact Technical Support. Have available the listing that contains this message.

**CKM04298W**  NON-ZERO RETURNED BY IDCAMS;
RC=nnnn

**Explanation:**
An IDCAMS command failed with return code nnnn. The IDCAMS messages are displayed. Recovery processing is terminated.

**User response:**
Determine from the IDCAMS messages the reason for the failure.

**CKM04299E**  ABEND DURING RECOVER COMMAND

**Explanation:**
During execution of RECOVER, an abend occurred. Processing terminates.

**User response:**
Ensure that all parameters on the named command are coded correctly, that external data sets used in the command are valid and try again. If the problem persists, contact Technical Support. Have available the listing that contains this message.

**CKM04300I**  RECOVER VVDS Maintenance Level:
CKM00043/Rev=xx

**Explanation:**
Informational message giving the current revision number of the specific program.

**User response:**
None required. In the event of a problem, Technical Support may request the revision number.

**CKM04301E**  allocation FAILED FOR DSN:
datasetname DEallocation FAILED FOR DDN: ddname

**Explanation:**
Dynamic allocation for a dataset failed, or, dynamic deallocation for a ddname failed. The associated z/OS messages are displayed. Processing terminates.

**User response:**
Report this message to Technical Support. Have available the listing that contains this message and the

**CKM04302E**  BACKUP WAS NOT COMPLETED

**Explanation:**
The MSC backup for the VVDS to be recovered did not complete successfully.

**User response:**
Use a successful backup of the VVDS as input to recovery.

**CKM04303E**  INTERNAL PROCESSING ERROR;
LOC=lllll

**Explanation:**
An unexpected condition was found during recovery processing.

**User response:**
Report this message with the LOC=lllll to Technical Support.

**CKM04304E**  ENTRY NOT FOUND ON BACKUP FILE FOR vvdsnname

**Explanation:**
The VVDS specified was not found on the input file.

**User response:**
Correct the specification of the input file.

**CKM04305E**  BACKUP FORMAT INCORRECT, ccccc

**Explanation:**
An unexpected record format was detected while reading the backup file. This could occur if the original backup job was cancelled.

**User response:**
If the original backup job indicated successful completion, report this message with the 'ccccc' code to Technical Support.

**CKM04306E**  ERROR CALLING CKM01VV1 tttttttt

**Explanation:**
During recovery processing, a problem occurred using a dataspace. tttttttt is the name of the internal table.

**User response:**
Report this message to Technical Support. Have available the listing that contains this message and the
SCKMPARM member that controls execution.

---

**CKM04310E** IDCAMS ERROR function

**Explanation:**  
A non-zero return code from IDCAMS was detected during the specified function. The associated IDCAMS messages precede this message.

**User response:**  
Check the associated IDCAMS messages for problem determination.

---

**CKM04311I** DATASET IN keyword allocateD TO DDNAME: ddname

**Explanation:**  
The dsname in the specified keyword has been dynamically allocated to 'ddname'.

**User response:**  
None.

---

**CKM04312E** OPEN FAILED FOR DDNAME: ddname

**Explanation:**  
RECOVER was unable to open the file. Processing terminates.

**User response:**  
Check that the JCL has the indicated ddname specified. If unable to determine the cause of the failure, contact Technical Support. Have available the listing that contains this message.

---

**CKM04313W** ERROR CALLING CKM01HEX; FUNCTION=function R15=nnnn LOC=lllll

**Explanation:**  
During recovery processing, an error occurred using CKM01HEX to print a record. Processing continues.

**User response:**  
Report this message to Technical Support. Have available the listing that contains this message.

---

**CKM04314E** UNABLE TO ESTABLISH ESTAEX; R15=nnnn LOC=lllll

**Explanation:**  
During recovery processing, a subroutine was not able to establish an estaex environment. Processing terminates.

**User response:**  
Report this message to Technical Support. Have available the listing that contains this message.

---

**CKM04315E** DATE OF BACKUP GREATER THAN TODATE

**Explanation:**  
For forward recovery, the date on the BACKUP header record is greater than the specified FORWARD keyword TODATE.

**User response:**  
Correct the FORWARD keyword TODATE.

---

**CKM04316E** TIME OF BACKUP NOT LESS THAN TOTIME

**Explanation:**  
For forward recovery, the time on the BACKUP header record is not less than the specified FORWARD keyword TOTIME.

**User response:**  
Correct the FORWARD keyword TOTIME.

---

**CKM04317E** INVALID DATE OR TIME IN INPUT FILE xxxxxxxxxx

**Explanation:**  
An invalid date or time was found in the BACKUP input file. xxxxxxxxxx is the date or time found.

**User response:**  
If the BACKUP job successfully completed, contact Technical Support. Have available the listing that contains this message. The BACKUP file may be requested for problem determination.

---

**CKM04318I** OVER TWENTY SYSIDS FOUND IN SMF INPUT

**Explanation:**  
More than twenty different sysids (SMFID's) were found in the SMF data used as input. Timestamps for the first 20 will be shown. Processing continues.

**User response:**  
None.

---

**CKM04319I** PROCESSING SMF RECORDS FROM DATE/TIME: yyyyddd/hh:mm:ss TO DATE/TIME: yyyyddd/hh:mm:ss

**Explanation:**  
SMF records will be selected based on the specified FROM/TO timestamps.

**User response:**  
None.
None.

CKM04320I  SMF RECORDS SELECTED: nnnnnnn
Explanation:
nnnnnnn is the number of SMF records found for the VVDS
User response:
None.

CKM04321I  SMF RECORDS FOR SYSID: sid;
EARLIEST: yyyyddd/hh:mm:ss LATEST: yyyyddd/hh:mm:ss
Explanation:
For the specified system id, the earliest and latest timestamps found in the SMF input.
User response:
None.

CKM04322W  NO SMF RECORDS SELECTED
Explanation:
No SMF records were found for the specified VVDS within the specified FROM/TO timestamps. Recovery processing continues using the input from the BACKUP file.
User response:
None, unless there was an error in the specification for the FROM/TO timestamps to include from SMF.

CKM04323E  SORT FOR SMF DATA FAILED.
R15=nnnn
Explanation:
The sort for the SMF records failed.
User response:
Correct the problem that caused SORT to fail.

CKM04325E  INVALID SMF RECORDS DETECTED - reason
Explanation:
During forward processing, an invalid SMF record was detected. The record is written to ddname SMFERR. An SMF record is considered 'invalid' if the record subtype is not 'DE', 'IN', or 'UP' or if the SMF record date is not a valid packed number. For message CKM04325E, the invalid SMF record was a type 60, 61, 65 or 66; recovery processing is terminated. For message CKM04325I, the invalid SMF record was not type 60, 61, 65 or 66; recovery processing continues.
User response:
Determine and correct the problem with the SMF data.

CKM04326W  ******** GAP IN TIME FOR SYSID: sid
error
Explanation:
During forward processing, a gap in the timestamps was found for the specified system id. 'error' indicates the nature of the gap. Recovery processing continues.
User response:
None, unless there was an error in the specification for the FROM/TO timestamps to include from SMF or in the datasets specified in the ddname for SMFFILE.

CKM04327I  RECORD COUNTS FROM APPLYING SMF DATA:
nnnnnnn UNCHANGED; nnnnnnn DELETE; nnnnnnn INSERTED; nnnnnnn UPDATED
Explanation:
Forward recovery applied SMF records to the original BACKUP input file. UNCHANGED records were unaffected by the SMF input. DELETED records were found in the BACKUP input, but SMF indicated the entry had been deleted since the BACKUP. INSERTED records were found in the SMF input, but not in the BACKUP. UPDATED records were found in both the BACKUP and SMF; the SMF record replaced the original record.
User response:
None.

CKM04329I  hh.mm.ss SIMULATE STEP: processing step STARTED/COMPLETED
Explanation:
RECOVER processing message
User response:
CKM04329I  hh.mm.ss SIMULATE STEP: processing step STARTED/COMPLETED

Explanation:
RECOVER processing message

User response:
None.

CKM04330I  RECORD SUMMARY FOR vvdsname

Explanation:
RECORDS FROM BACKUP
RECORDS WRITTEN TO vvdsname
PRIMARY SECONDARY NONVSAM VVCR/VVCN OTHER TOTAL ...
n n n n n n ...
BCS'S ADDED TO VVCR/VVCN: nnnnn

This message provides a count of the various types of records encountered during RECOVER command processing.

The record types are:

PRIMARY which corresponds the type Z VSAM Volume Record. There is a primary VVR on the first volume of every VSAM data or index component. The primary VVR describes the name of the component, the cluster to which it belongs, statistical information, extent information, and physical attributes of the data or index component.

SECONDARY which corresponds the type Q VSAM Volume Record. There is a secondary VVR on the second and subsequent volume of every multi volume VSAM data or index component. There are secondary VVRs for the second and subsequent keyranges of a keyrange KSDS regardless if the KSDS is a multi volume file or single volume file. KSDS' with imbedded sequence set records (IMBED) have secondary VVRs to describe the portion of the index that is imbedded within the data component. Unlike the primary VVR, the secondary describes the name of the component, the cluster to which it belongs and extent information of the data or index component.

NONVSAM which corresponds the type N Volume Record. There is a nonVSAM VR for every SMS managed nonVSAM file on the volume. The nonVSAM VR describes the name of the file and SMS information.

VVCR/VVCN describes control records within the VVDS that describe catalogs that currently or in the past referenced this volume.

OTHER indicates all other types of catalog records that are processed during BACKUP processing.

TOTAL indicates the total number of records that were found in the BACKUP/EXPORT input file, or in the file created by merging the BACKUP/EXPORT records with SMF data.

TOTAL BYTES indicates the total number of bytes for the records.

User response:
None.

CKM04358I  SIMULATE STARTED FOR VVDS: vvdsname BACKUP DATE/TIME: yyyyddd/hh:mm:ss

Explanation:
VVDS recovery process start message. The DATE/TIME is from the input file header. ‘SIMULATE’ indicates a simulation was requested.

User response:
None.

CKM04359I  SIMULATE COMPLETED FOR VVDS: vvdsname

Explanation:
VVDS recovery process completion message. ‘SIMULATE’ indicates a simulation was requested.

User response:
None.

CKM04358I  SIMULATE STARTED FOR VVDS: vvdsname BACKUP DATE/TIME: yyyyddd/hh:mm:ss

Explanation:
VVDS recovery process start message. The DATE/TIME is from the input file header. ‘SIMULATE’ indicates a simulation was requested.

User response:
None.

CKM04359I  SIMULATE COMPLETED FOR VVDS: vvdsname

Explanation:
VVDS recovery process completion message. ‘SIMULATE’ indicates a simulation was requested.

User response:
None.

CKM04359I  SIMULATE COMPLETED FOR VVDS: vvdsname

Explanation:
VVDS recovery process completion message. ‘SIMULATE’ indicates a simulation was requested.

User response:
None.
CKM04360E • CKM04367W

CKM04360E  MISSNG DDNAME: xxxxxxxx
Explanation:
The RECOVER(VVDS) command requires certain DDNames to be allocated in the JCL. The specified DDName is missing.
User response:
Check the User Guide for guidance on how this DDName should be specified.

CKM04361E  DDNAME: xxxxxxxx ASSIGNED TO: NULLFILE
Explanation:
The RECOVER(VVDS) command requires that certain DDNames not be assigned to DUMMY or DSN=NULLFILE.
User response:
Check the User Guide for guidance on how this DDName should be specified.

CKM04362I  SMF IS NOT ACTIVE ON THE SUBSYSTEM
Explanation:
The RECOVER(VVDS) command specified FORWARD. FORWARD implies the collection of SMF data. SMF data can not be collected if SMF is not active.
User response:
SMF should be activated on those subsystems that update the VVDS being recovered.

CKM04363I  SMF TYPE 60 (VVDS UPDATE) NOT BEING RECORDED ON THIS SUBSYSTEM
Explanation:
The RECOVER(VVDS) command specified FORWARD. FORWARD implies the collection of SMF data. Updates to VVDS cause a SMF record type 60 to be cut. This record type is not being recorded.
User response:
Request the SMF administrator to enable recording of the SMF type 60 record.

CKM04364E  VOLSER volser NOT FOUND ON SYSTEM
Explanation:
UCBLOOK indicated that the volume serial number, volser, specified for VVDS recovery was not available. Processing terminates.
User response:
Correct the volume serial number specified, or ensure the volume serial is online to the system where the RECOVER job is going to execute.

CKM04365E  ERROR ACCESSING VVDS VOLSER; error text
Explanation:
An error occurred processing the volume for VVDS recovery. The error text indicates the function that was attempted. Processing terminates.
User response:
Contact Technical Support. Have available the listing containing this message.

CKM04366E  ERROR PROCESSING VTOC DATA; error text
Explanation:
An error occurred processing the VTOC information for the volume. The error text indicates the problem with the VTOC data.
User response:
If unable to correct the problem with the VTOC, contact Technical Support. Have available the listing containing this message.

CKM04367E  ERROR PROCESSING VVDS DATA; error text
Explanation:
An error occurred processing the VVDS entries from the BACKUP file. For message CKM04367E, processing terminates. For message CKM04367W, processing continues.
User response:
If unable to correct the problem, contact Technical Support. Have available the listing containing this message.

CKM04367W  ERROR PROCESSING VVDS DATA; DUPLICATE BCS NAME
Explanation:
An error occurred processing the VVDS entries from the BACKUP file. For message CKM04367E, processing terminates. For message CKM04367W, processing continues.
User response:
If unable to correct the problem, contact Technical Support. Have available the listing containing this message.
CKM04368E  ERROR ACCESSING VVDS vudsname
Explanation:
A VSAM error occurred accessing the specified VVDS.
User response:
See associated CKM341nnE error messages. If unable to resolve the problem, contact Technical Support. Have available the listing that contains this message.

CKM04369E  SPACE PROBLEM WITH VVDS; INSUFFICIENT SPACE FOR VVR/VVN ENTRIES
Explanation:
VVDS RECOVER cannot add additional entries to the VVDS. For message CKM04369E, processing terminates. For message CKM04369W, processing continues.
User response:
Reallocate the VVDS with sufficient space and run the RECOVER VVDS with INTOEMPTY, or use the NEWDATAPRIMARY and NEWDATASECONDARY keywords to allocate additional DASD space.

CKM04369W  SPACE PROBLEM WITH VVDS; UNABLE TO ADD BCS NAME
Explanation:
VVDS RECOVER cannot add additional entries to the VVDS. For message CKM04369E, processing terminates. For message CKM04369W, processing continues.
User response:
Reallocate the VVDS with sufficient space and run the RECOVER VVDS with INTOEMPTY, or use the NEWDATAPRIMARY and NEWDATASECONDARY keywords to allocate additional DASD space.

CKM04370W  RECORD DOES NOT MATCH VTOC; error text
Explanation:
The VVDS record to be written to the VVDS does not match the current information in the VTOC. The record is dropped. The record is printed.
User response:
If the mismatch occurred due to activity against the dataset since the BACKUP of the VVDS was run, use forward recovery of the VVDS. If forward recovery is being used, ensure that all the dumped SMF data from all images which share the volume is used for the SMFFILE.

CKM04371W  DUPLICATE NAMES IN BACKUP; reason
Explanation:
REASON: RECORDS ARE THE SAME
A record with a duplicate name was detected from the BACKUP file. The record is a duplicate record. The duplicate record will be dropped. The duplicate will be printed. Processing continues.

Explanation:
REASON: RECORDS MATCHING VTOC KEPT
A record with a duplicate name was detected from the BACKUP file. The record that matched the VTOC information was retained and the other record was dropped. Both records are printed. Processing continues.

Explanation:
REASON: FIRST RECORD KEPT
A record with a duplicate name was detected from the BACKUP file. Neither record matched the VTOC information. The second record was dropped. Both records are printed. Processing continues.

If forward recovery is in effect, SMF data may replace the records reported in this step of processing.

CKM04372E  SORT FOR VVDS DATA FAILED.
R15=nnnn
Explanation:
The sort for the VVDS backup records failed.
User response:
Correct the problem that caused SORT to fail.

CKM04379I  DEFAULT IN EFFECT: defaulted keyword
Explanation:
A default is being used for a keyword.
User response:
None.

CKM04380I  PRINT OPTION IN EFFECT: option
Explanation:
The specified print option will be used.
User response:
None.
**CKM04381E** • **CKM04391E**

**CKM04381E**  INDATASET OR INFILE REQUIRED

Explanation:
Recovery processing requires INDATASET or INFILE to be specified.

User response:
Specify the appropriate input parameter.

**Explanation:**
Recovery processing requires INDATASET or INFILE to be specified.

**User response:**
Specify the appropriate input parameter.

**CKM04382E**  PARAMETER keyword INVALID WITHOUT keyword

Explanation:
A conflict in the parameters specified was detected.

User response:
Correct the conflict.

**Explanation:**
A conflict in the parameters specified was detected.

**User response:**
Correct the conflict.

**CKM04382E**  PARAMETER keyword INVALID WITHOUT keyword

Explanation:
A conflict in the parameters specified was detected.

User response:
Correct the conflict.

**Explanation:**
A conflict in the parameters specified was detected.

**User response:**
Correct the conflict.

**CKM04383E**  ERROR IN PARAMETERS FOR keyword

Explanation:
Parsing of the RECOVER command detected errors in the parameters of the specified keyword.

User response:
Correct the parameter in error.

**Explanation:**
Parsing of the RECOVER command detected errors in the parameters of the specified keyword.

**User response:**
Correct the parameter in error.

**CKM04384E**  REQUIRED KEYWORD MISSING: keyword

Explanation:
A keyword required for recovery processing has been omitted.

User response:
Specify the required keyword.

**Explanation:**
A keyword required for recovery processing has been omitted.

**User response:**
Specify the required keyword.

**CKM04385E**  NOTHING SPECIFIED FOR KEYWORD: keyword

Explanation:
A keyword was entered without an appropriate argument.

User response:
Specify an appropriate argument for the keyword.

**Explanation:**
A keyword was entered without an appropriate argument.

**User response:**
Specify an appropriate argument for the keyword.

**CKM04386E**  KEYWORD: keyword MAXIMUM LENGTH: nnn EXCEEDED

Explanation:
The argument entered for a keyword exceeded the maximum length allowed for the argument. nnn is the maximum allowed length for the keyword's argument.

User response:
Correct the length of the keyword's argument.

**Explanation:**
The argument entered for a keyword exceeded the maximum length allowed for the argument. nnn is the maximum allowed length for the keyword's argument.

**User response:**
Correct the length of the keyword's argument.

**CKM04387E**  KEYWORD HAS MORE THAN 1 OPERAND; ONLY 1 ALLOWED: keyword

Explanation:
Multiple arguments were detected for a keyword; only one argument is permitted.

User response:
Correct the keyword to use one argument.

**Explanation:**
Multiple arguments were detected for a keyword; only one argument is permitted.

**User response:**
Correct the keyword to use one argument.

**CKM04388E**  INVALID DDNAME IN KEYWORD: keyword DDNAME: ddbname error

Explanation:
Parsing detected a problem with the ddbname in the keyword. 'error' contains the detected error.

User response:
Correct the ddbname specification.

**Explanation:**
Parsing detected a problem with the ddbname in the keyword. 'error' contains the detected error.

**User response:**
Correct the ddbname specification.

**CKM04389E**  DDNAME SPECIFIED IN KEYWORD: keyword DDNAME: ddbname WAS NOT FOUND

Explanation:
The ddbname specified for the keyword was not found in the JCL.

User response:
Correct either the ddbname specification or the JCL.

**Explanation:**
The ddbname specified for the keyword was not found in the JCL.

**User response:**
Correct either the ddbname specification or the JCL.

**CKM04390E**  ERROR WITH DATE: keyword error

Explanation:
The date found in FROMDATE or TODATE is incorrect. 'error' describes the problem detected.

User response:
Correct the keyword's date.

**Explanation:**
The date found in FROMDATE or TODATE is incorrect. 'error' describes the problem detected.

**User response:**
Correct the keyword's date.

**CKM04391E**  ERROR WITH TIME: keyword error

Explanation:
The time found in FROMTIME or TOTIME is incorrect. 'error' describes the problem detected.

User response:
Correct the keyword's date.

**Explanation:**
The time found in FROMTIME or TOTIME is incorrect. 'error' describes the problem detected.

**User response:**
Correct the keyword's date.
User response:
Correct the keyword’s time.

CKM04392E FROMDATE GREATER THAN TODATE
Explanation:
For forward recovery, the FROMDATE in use is greater than the TODATE in use. The FROMDATE must be less than or equal to the TODATE.
User response:
Correct the appropriate date.

CKM04393E FROMTIME NOT LESS THAN TOTIME
Explanation:
For forward recovery, the FROMTIME in use is greater than or equal to the TOTIME in use. The FROMTIME must be less than the TOTIME.
User response:
Correct the appropriate time.

CKM04394E INVALID DATASETNAME IN KEYWORD: keyword DSN: dsname error
Explanation:
The dsname in the keyword is invalid. ‘error’ indicates the problem detected with the datasetname.
User response:
Correct the dsname specification.

CKM04395E INVALID VOLSER IN KEYWORD: VVDS VOLSER: volser
Explanation:
The volume serial number specified for VVDS recovery is invalid.
User response:
Correct the volser specification.

CKM04398E AMSOPEN FAILED. R15=nnnn
Explanation:
An attempt was made to issue an IDCAMS command.
User response:
Contact Technical Support. Have available the listing that contains this message.

CKM04398W NON-ZERO RETURNED BY IDCAMS;
RC=nnnn
Explanation:
An IDCAMS command failed with return code nnnn. The IDCAMS messages are displayed. Recovery processing is terminated.
User response:
Determine from the IDCAMS messages the reason for the failure.

CKM04399E ABEND DURING RECOVER COMMAND
Explanation:
During execution of RECOVER, an abend occurred. Processing terminates.
User response:
Ensure that all parameters on the named command are coded correctly, that external data sets used in the command are valid and try again. If the problem persists, contact Technical Support. Have available the listing that contains this message.

CKM04400I RECOVER DSN MAINTENANCE LEVEL:
CKM00044/REV=nn
Explanation:
Informational message giving the current revision number of the specific program.
User response:
None required. In the event of a problem, Technical Support may request the revision number.

CKM04401E allocation FAILED FOR DSN: datasetname DEallocation FAILED FOR DDN: ddname
Explanation:
Dynamic allocation for a dataset failed, or, dynamic deallocation for a ddname failed. The associated OS/390 messages are displayed. Processing terminates.
User response:
If unable to determine the reason for the failure from the associated OS/390 messages, contact Technical Support. Have available the listing containing these messages.

CKM04402E BACKUP WAS NOT COMPLETED
Explanation:
The backup for the DSN to be recovered did not complete successfully.
Use a successful backup of the DSN as input to recovery.

**CKM04403W BUILDINDEX ISSUED THE FOLLOWING MESSAGES:**

**Explanation:**
While re-building the alternate index, the IDCAMS BUILDINDEX issued one or more messages about minor problems.

**User response:**
Check and take action based on the IDC messages that follow.

**CKM04404E ENTRY NOT FOUND ON BACKUP FILE FOR dsname**

**Explanation:**
The DSN to be recovered was not found in the input file.

**User response:**
Correct the specification of the input file.

**CKM04405E BACKUP FORMAT INCORRECT, cccccc**

**Explanation:**
An unexpected record format was detected while reading the backup file. This could occur if the original backup job was cancelled.

**User response:**
If the original backup job indicated successful completion, report this message with the ‘ccccc’ code to Technical Support.

**CKM04406E ERROR CALLING CKM00327 ttttttt FUNCTION: function R15=nnnn**

**Explanation:**
During recovery processing, a problem occurred using a dataspace. ttttttt is the name of the internal table.

**User response:**
Report this message to Technical Support. Have available the listing that contains this message and the SCKMPARM member that controls execution.

**CKM04407W Alternate Index not built as base object has no records**

**Explanation:**
While re-building the alternate index, the definition was successful, but the alternate index could not be built as there were no records on the base cluster.

None. Be aware, that (a) the alternate index must be built before it can be part of the upgrade set and (b) the load of the base object may issue warnings as the alternate index is cataloged but can not participate in the load of the base, but must be built subsequently.

**CKM04408E INTOEMPTY REQUESTED: CSI ERROR**

**Explanation:**
INTOEMPTY was requested. This requires that the target is defined before the RECOVER is attempted and that the hi-used-rba is zero. The target must be a cataloged VSAM object.

**User response:**
Ensure that if INTOEMPTY is coded that the object would not cause any of the problems to occur. If the problem was a “CSI ERROR”, contact Technical support.

**CKM04408E INTOEMPTY REQUESTED: CSI ERROR**

**Explanation:**
INTOEMPTY was requested. This requires that the target is defined before the RECOVER is attempted and that the hi-used-rba is zero. The target must be a cataloged VSAM object.

**User response:**
Ensure that if INTOEMPTY is coded that the object would not cause any of the problems to occur. If the problem was a “CSI ERROR”, contact Technical support.

**CKM04408E INTOEMPTY REQUESTED: CSI ERROR**

**Explanation:**
INTOEMPTY was requested. This requires that the target is defined before the RECOVER is attempted and that the hi-used-rba is zero. The target must be a cataloged VSAM object.

**User response:**
Ensure that if INTOEMPTY is coded that the object would not cause any of the problems to occur. If the problem was a “CSI ERROR”, contact Technical support.

**CKM04408E INTOEMPTY REQUESTED: CSI ERROR**

**Explanation:**
INTOEMPTY was requested. This requires that the target is defined before the RECOVER is attempted and that the hi-used-rba is zero. The target must be a cataloged VSAM object.

**User response:**
Ensure that if INTOEMPTY is coded that the object would not cause any of the problems to occur. If the problem was a "CSI ERROR", contact Technical support.

**CKM04408E INTOEMPTY REQUESTED: CSI ERROR**

**Explanation:**
INTOEMPTY was requested. This requires that the target is defined before the RECOVER is attempted and that the hi-used-rba is zero. The target must be a cataloged VSAM object.

**User response:**
Ensure that if INTOEMPTY is coded that the object would not cause any of the problems to occur. If the problem was a "CSI ERROR", contact Technical support.

**CKM04410E IDCAMS ERROR function**

**Explanation:**
A non-zero return code from IDCAMS was detected during the specified function. The associated IDCAMS messages precede this message.

**User response:**
Check the associated IDCAMS messages for problem determination.

**CKM04411I DATASET IN keyword allocated TO DDNAME: ddname**

**Explanation:**
The dsname in the specified keyword has been dynamically allocated to 'ddname'.

**User response:**
None.

**CKM04412E OPEN FAILED FOR DDNAME: ddname**

**Explanation:**
RECOVER was unable to open the file. Processing terminates.

**User response:**
Check that the JCL has the indicated ddname specified. If unable to determine the cause of the failure, contact Technical Support. Have available the listing that contains this message.

**CKM04413W ERROR CALLING CKM01HEX; FUNCTION=function R15=nnnn LOC=lllll**

**Explanation:**
During recovery processing, an error occurred using CKM01HEX to print a record. Processing continues.

**User response:**
Report this message to Technical Support. Have available the listing that contains this message.

**CKM04414E INI token SORT_DYNAMIC_ALLOC number of digits greater than max of 3: xxxxx**

**Explanation:**
During processing of the INI over-rides for the KSDS sort the value assigned to the SORT_DYNAMIC_ALLOC token was determined to be excessive.

**User response:**
Correct the INI token SORT_DYNAMIC_ALLOC and re-submit the job.

**CKM04415E INI token SORT_DYNAMIC_ALLOC value xxx not numeric**

**Explanation:**
During processing of the INI over-rides for the KSDS sort the value assigned to the SORT_DYNAMICALLOC token was determined to have one or more non-numeric bytes.

**User response:**
Correct the INI token SORT_DYNAMIC_ALLOC and re-submit the job.

**CKM04416E INI token SORT_DYNAMIC_ALLOC value greater than max value of 255: xxx**

**Explanation:**
During processing of the INI over-rides for the KSDS sort the value assigned to the SORT_DYNAMIC_ALLOC token was determined to be greater than 255. Sort permits only 255 SORTWK files.

**User response:**
Correct the INI token SORT_DYNAMIC_ALLOC and re-submit the job.

**CKM04417E INI token SORT_FILE_SIZE first byte not numeric, "E" or "U"**

**Explanation:**
During processing of the INI over-rides for the KSDS sort the value assigned to the SORT_FILE_SIZE token was determined to be invalid in format. The first character must be 0, 1, ...9, E or U.

**User response:**
Correct the INI token SORT_FILE_SIZE and re-submit the job.

**Explanation:**
During processing of the INI over-rides for the KSDS sort the value assigned to the SORT_FILE_SIZE token was determined to be excessive. Sort permits a FILSZ argument of up to 15 significant digits.

**User response:**
Correct the INI token SORT_FILE_SIZE and re-submit the job.

**CKM04419E** INI token SORT_FILE_SIZE first byte "E" or "U" must have at least one numeric suffix

**Explanation:**
During processing of the INI over-rides for the KSDS sort the value assigned to the SORT_FILE_SIZE token was determined to be invalid. Sort requires that the argument to FILSZ be either "Ennn", "Unnn", or "nnnn" (15 numerics maximum).

**User response:**
Correct the INI token SORT_FILE_SIZE and re-submit the job.

**CKM04420E** INI token SORT_FILE_SIZE value xxxxxxxxxxxxxxxx not numeric

**Explanation:**
During processing of the INI over-rides for the KSDS sort the value assigned to the SORT_FILE_SIZE token was determined to have one or more non-numeric bytes.

**User response:**
Correct the INI token SORT_FILE_SIZE and re-submit the job.

**CKM04428E** OPTION MAY NOT BE USED: xxxxxxxxxxxxxx WITH DSN MASK SPECIFICATION ON RECOVERY

**Explanation:**
When a mask is specified for the DSName for the object(s) to be recovered. Certain keywords are considered illegal. These keywords are of the form NEWxxxxx. The reason being that the keyword value would be applied to all the objects matching the DSName mask.

**User response:**

Remove the NEWxxxxx keywords from the RECOVER command, or RECOVER each object individually, with the required NEWxxxxx keywords coded. Re-submit.

**CKM04429I** hh.mm.ss SIMULATE STEP: processing step STARTED/COMPLETED

**Explanation:**
RECOVER processing message

**User response:**
None.

**CKM04453E** DELETE-OLD-DSN requires NEW-NAME

**Explanation:**
The DELETE-OLD-DSN keyword has been requested, but the NEW-NAME keyword has not been requested.

**User response:**
Either remove the DELETE-OLD-DSN keyword from the command, or add the NEW-NAME keyword to the command.

**CKM04457E** SORT FOR KSDS DATA FAILED. R15=nnnn

**Explanation:**
The sort of the KSDS backup records failed.

**User response:**
Correct the problem that caused SORT to fail.
CKM04460I  SIMULATE STARTED FOR DSN: dsname

Explanation:
DSN recovery process initiation message. 'SIMULATE' indicates a simulation was requested.

User response:
None.

CKM04461I  NEW DSNAME: dsname

Explanation:
The RECOVER DSN command specified that the object was to be renamed on RECOVER. The name will be applied to the cluster. The object names will be generated following the standard AMS rules.

User response:
None.

CKM04462E  ERROR ACCESSING OBJECT: dsname

Explanation:
During the RECOVER DSN command, a serious error when attempting to PUT (write) a record. The message will be followed by a more specific message.

User response:
Contact Technical Support.

CKM04463I  RECORD COUNTS FROM RECOVERY:
xxxx OUTPUT - THERE WERE xxx DUPLICATE KEYS

Explanation:
The RECOVER DSN command has terminated. The number of output records is listed. When a KSDS is being recovered, there is the possibility of duplicate keyed records existing on the backup. A count of these duplicate keyed records is shown. This count will be output for both SIMULATE and non-SIMULATE executions.

User response:
None, unless duplicate keyed records are shown. These should be investigated (the record written may not be the most up-to-date instance. Use the PRINT option with or without the SIMULATE to determine the content of the records that have / would have been dropped.

CKM04464I  SIMULATE COMPLETED FOR DSN: dsname RETURN CODE: xx

Explanation:
DSN recovery process termination message. 'SIMULATE' indicates a simulation was requested.

User response:
None.

CKM04464I  SIMULATE COMPLETED FOR DSN: dsname RETURN CODE: xx

Explanation:
DSN recovery process termination message. 'SIMULATE' indicates a simulation was requested.

User response:
None.

CKM04465I  TOTAL OBJECTS RECOVERED: xx,xxx

Explanation:
DSN recovery process termination message. The number of objects that were successfully processed. This message is only output if a mask for the DSN to be recovered and SIMULATE(DEFINE/RESTORE) is not specified.

User response:
None.

CKM04466I  TOTAL RECOVERY FAILURES: xx,xxx

Explanation:
DSN recovery process termination message. The number of objects that could not be successfully recovered. This message is only output if a mask for the DSN to be recovered and SIMULATE(DEFINE/RESTORE) is not specified.

User response:
None.

CKM04467W Duplicate DSN or Mask encountered -- ignored: dsname

Explanation:
Either the RECOVER DSN or the EXCLUDE-DSN argument had a duplicate data set name or mask entered. The duplicate name is listed.

User response:
None.
The following DSNs/masks are to be processed during xxxxxx processing:

**Explanation:**
The keyword xxxxxxx specified the following data set names or masks. These listed names will be processed accordingly.

**User response:**
None.

The following DSNs/masks were requested, but were not found:

**Explanation:**
The RECOVER DSN argument listed one or more data sets that were not found on the input backup. The specific data set names or masks requested are listed.

**User response:**
None.

The following DSNs/masks were requested for exclusion, but not found:

**Explanation:**
The RECOVER DSN command used the EXCLUDE-DSN keyword; one or more of the data set names entered as arguments to EXCLUDE-DSN did not match any data sets to be recovered. The specific data set names or masks requested are listed.

**User response:**
None.

 Beware of the "Secondary allocation or new volume" message.

**Explanation:**
When a DSN is being recovered either the target DASD had insufficient space, or a secondary extent was required as insufficient primary space was allocated.

**User response:**
Change the RECOVER by either 
- specifying a different volume using the NEWVOL parameter, or
- increasing the primary allocation using the NEWPRIMARY parameter.

Contact Technical Support if it occurs.

 Beware of the "Duplicate Alt Index Key Create" message.

**Explanation:**
This will not occur, but is included for completeness.

**User response:**

 Beware of the "Reserved" message.

**Explanation:**
This will not occur, but is included for completeness.

**User response:**
Contact Technical Support if it occurs.

 Beware of the "No Buffer Writes Performed" message.

**Explanation:**
This will not occur, but is included for completeness.

**User response:**

Contact Technical Support if it occurs.

**CKM04473I  hh:mm:ss RECOVERY STEP: RPL ACTIVE FOR ANOTHER REQUEST**

**Explanation:**
This should not occur.

**User response:**
Contact Technical Support if it occurs.

**CKM04473I  hh:mm:ss RECOVERY STEP: LOGICAL ERROR ON PUT**

**Explanation:**
This should not occur.

**User response:**
Contact Technical Support if it occurs.

**CKM04473I  hh:mm:ss RECOVERY STEP: PHYSICAL ERROR ON PUT**

**Explanation:**
This will not occur.

**User response:**
Contact Technical Support if it occurs.

**CKM04474I  PARAMETER: xxxxxxx IGNORED. NOT APPLICABLE TO TYPE: XXXX**

**Explanation:**
When a DSN is being recovered the user requested a NEWxxxx parameter. The parameter is not applicable to this type of VSAM object. For example, the user requested a freespace value when recovering a LDS.

**User response:**
Change the RECOVER - remove the offending parameter(s).

**CKM04475W ENTRY NOT RESTORED - NOT BACKED UP dsname**

**Explanation:**
When attempting to RECOVER a specific DSN, the DSN was not found on the BACKUP.

**User response:**
Validate the spelling of the DSN. Correct and re-submit. Validate the input backup file DSN. Correct and re-submit. To determine the content of the backup file, execute the following command: RECOVER DSN("") SIMULATE(LIST) INDATASET(xxxxx)

**CKM04479I DEFAULT IN EFFECT: defaulted keyword**

**Explanation:**
A default is being used for a keyword.

**User response:**
None.

**CKM04480I PRINT OPTION IN EFFECT: option**

**Explanation:**
The specified print option will be used.

**User response:**
None.

**CKM04481E INDATASET OR INFILE REQUIRED**

**Explanation:**
Recovery processing requires INDATASET or INFILE to be specified.

**User response:**
Specify the appropriate input parameter.

**CKM04482E PARAMETER keyword INVALID WITHOUT keyword**

**Explanation:**
A conflict in the parameters specified was detected.

**User response:**
Correct the conflict.

**CKM04482E PARAMETER keyword INVALID WITHOUT keyword**

**Explanation:**
A conflict in the parameters specified was detected.

**User response:**
Correct the conflict.

**CKM04483E ERROR IN PARAMETERS FOR keyword**

**Explanation:**
Parsing of the RECOVER command detected errors in the parameters of the specified keyword.

**User response:**
Correct the parameter in error.
CKM04485E • CKM04498W

CKM04485E  NOTHING SPECIFIED FOR KEYWORD:

keyword

Explanation:
A keyword was entered without an appropriate operand.

User response:
Specify an appropriate operand for the keyword.

CKM04486E  KEYWORD: keyword MAXIMUM
LENGTH: nnn EXCEEDED

Explanation:
The operand entered for a keyword exceeded the
maximum length allowed for the operand. nnn is the
maximum allowed length for the keyword.

User response:
Correct the length of the keyword’s operand.

CKM04487E  KEYWORD HAS MORE THAN 1
OPERAND; ONLY 1 ALLOWED:

keyword

Explanation:
Multiple operands were detected for a keyword; only
one operand is permitted.

User response:
Correct the keyword to use one operand.

CKM04488E  INVALID DDNAME IN KEYWORD:

keyword DDNAME: ddname error

Explanation:
Parsing detected a problem with the ddname in the
keyword. ‘error’ contains the detected error.

User response:
Correct the ddname specification.

CKM04489E  DDNAME SPECIFIED IN KEYWORD:

keyword DDNAME: ddname WAS NOT
FOUND

Explanation:
The ddname specified for the keyword was not found in
the JCL.

User response:
Correct either the ddname specification or the JCL.

CKM04494E  INVALID DATASETNAME IN KEYWORD:

keyword DSN: dsname error

Explanation:
The dsname in the keyword in invalid. ‘error’ indicates
the problem detected with the datasetname.

User response:
Correct the dsname specification.

CKM04497W  RECOVER OF EXCPMODE BACKUP;

intoempty ENABLED

Explanation:
When restoring an EXCPMODE backup,
SIMULATE(DEFINE) is not applicable, a SIMULATE -
without the under-the-cover DELETE and DEFINE is
performed. When restoring an EXCPMODE backup, the
INTO-EMPTY option should be specified. Processing
continues as if it were specified.

User response:
Do not specify SIMULATE(DEFINE) when restoring an
EXCPMODE backup. Specify INTO-EMPTY when
restoring an EXCPMODE backup. The restore will still
be processed.

CKM04498E  AMSOPEN FAILED. R15=nnnn

Explanation:
An attempt was made to issue an IDCAMS command.

User response:
Contact Technical Support. Have available the listing
that contains this message.

CKM04498W  NON-ZERO RETURNED BY IDCAMS;

RC=nnnn

Explanation:
An IDCAMS command failed with return code nnnn. The
IDCAMS messages are displayed. Recovery processing
is terminated.

User response:
Determine from the IDCAMS messages the reason for the failure.

**CKM04500I**  
**RECOVER LIST Maintenance Level:** CKM00045/Rev=xx

**Explanation:**  
Informational message giving the current revision number of the specific program.

**User response:**  
None required. In the event of a problem, Technical Support may request the revision number.

**CKM04501E**  
**Deallocation failed DDNAME: xxxxxxx**

**Explanation:**  
Dynamic allocation for a dataset failed, or, dynamic deallocation for a ddname failed. The associated OS/390 messages are displayed. Processing terminates.

**User response:**  
If unable to determine the reason for the failure from the associated OS/390 messages, contact Technical Support. Have available the listing containing these messages.

**CKM04502E**  
**Input BACKUP was empty**

**Explanation:**  
The MSC backup to be listed did not complete successfully.

**User response:**  
Use a successful backup as input to recovery.

**CKM04503E**  
**Input BACKUP was not in backup format**

**Explanation:**  
RECOVER LIST will only process a Backup file generated by the BACKUP command.

**User response:**  
None.

**CKM04505E**  
**BACKUP format incorrect, xxxx**

**Explanation:**  
An unexpected record format was detected while reading the backup file. This could occur if the original backup job was cancelled.

**User response:**  
If the original backup job indicated successful completion, report this message with the ‘ccccc’ code to Technical Support.

**CKM04506E**  
**Error calling CKM01VV1 xxxxxx Function: xxxx R15=xxxx**

**Explanation:**  
During recovery processing, a problem occurred using a dataspace. tttttt is the name of the internal table.

**User response:**  
Report this message to Technical Support. Have available the listing that contains this message and the SCKMPARM member that controls execution.

**CKM04507W**  
**No matching entries for: xxxxxxxxx**

**Explanation:**  
There were backups on the input matching the ENTRIES keyword.

**User response:**  
Check the spelling of the ENTRIES argument. Remember that when listing the backup of VVDS, the Recover List command requires a full DSName, not just a volser or volser mask.

**CKM04511I**  
**Dataset in xxxxxxxx allocated to DDName: xxxxxxx**

**Explanation:**  
The dsname in the specified keyword has been dynamically allocated to 'ddname'.

**User response:**  
None.

**CKM04512E**  
**Open failed for DDName: xxxxxxx**

**Explanation:**  
RECOVER was unable to open the file. Processing terminates.

**User response:**  
Check that the JCL has the indicated ddname specified.
If unable to determine the cause of the failure, contact Technical Support. Have available the listing that contains this message.

**CKM04514I  Number of entries with incomplete backups: nnnnnnn**

**Explanation:**
Counts of the number of entries meeting the complete or incomplete criterium.

**User response:**
None.

**CKM04581E  INDATASET or INFILE required**

**Explanation:**
Recovery processing requires INDATASET or INFILE to be specified.

**User response:**
Specify the appropriate input parameter.

**CKM04583E  Error in parameters for: xxxxxxx**

**Explanation:**
Parsing of the RECOVER command detected errors in the parameters of the specified keyword.

**User response:**
Correct the parameter in error.

**CKM04585E  Nothing specified for keyword: xxxxxxx**

**Explanation:**
A keyword was entered without an appropriate operand.

**User response:**
Specify an appropriate operand for the keyword.

**CKM04586E  Keyword: xxxxxxxxx maximum argument length: nnn exceeded**

**Explanation:**
The operand entered for a keyword exceeded the maximum length allowed for the operand. nnn is the maximum allowed length for the keyword.

**User response:**
correct the length of the keyword's operand.

**CKM04587E  Keyword has more than 1 argument; only 1 allowed: xxxxxxx**

**Explanation:**
Multiple arguments were detected for a keyword; only one argument is permitted.

**User response:**
correct the keyword to use one operand.

**CKM04588E  Invalid DDName in keyword: xxxxxxx DDName: xxxxxx 'error'**

**Explanation:**
Parsing detected a problem with the ddname in the keyword. 'error' contains the detected error.

**User response:**
correct the ddname specification.

**CKM04589E  DDName specified in keyword: xxxxxxx DDName: xxxxxx was not found**

**Explanation:**
The ddname specified for the keyword was not found in the JCL.

**User response:**
Correct either the ddname specification or the JCL.

CKM04594E  CKM06014I

Chapter 25. Messages and Codes for Advanced Catalog Management
None.

**Explanation:**
Displays the count of datasets selected for processing.

**User response:**
None.

---

**CKM06015I  Number of catalog entries selected by DSN:**

**Explanation:**
Displays the count of datasets selected for processing.

**User response:**
None.

---

**CKM06016E  Keyword BY-DSN-DD xxxx**

**Explanation:**
An error occurred when using the BY-DSN-DD keyword.

**Errors:**
and BY-VOLUME together
Keyword BY-DSN-DD and BY-VOLUME are mutually exclusive, at most one can be used in the same EXPLORE command.

value too long
The keyword's value is a DD name which needs to be one to eight characters long.

value is not a DD statement
The keyword's value wasn't found in the JCL as a DD statement.

DD open failure
The input DD statement could not be opened.

**User response:**
Correct the specification of the BY-DSN-DD keyword or the datasets listed by the specified DD statement.

---

**CKM06017E  Invalid DSN/mask in BY-DSN-DD DD:xxxx**

**Explanation:**
During BY-DSN-DD processing, the string identified was found not to be a valid data set name or data set mask. EXPLORE continues to check all other BY-DSN-DD datasets but does not continue.

**User response:**
Correct the identified dataset names and resubmit.

---

**CKM06018I  Ignoring duplicate BY-DSN-DD DSN/mask: xxx**

**Explanation:**
During BY-DSN-DD processing, the DSN/mask identified was found to be already seen in the input. EXPLORE continues to check all other BY-DSN-DD datasets.

**User response:**
Informational message about the duplicate entry.

---

**CKM06019E  DSN/mask in BY-DSN-DD too long, input follows.**

**Explanation:**
During BY-DSN-DD processing, the DSN/mask identified was found to be too long.

**User response:**
Correct the specification of the DSN/mask.

---

**CKM06020E  Maximum length exceeded (nnn) for keyword kkkkk**

**Explanation:**
The operand entered for a keyword exceeded the maximum length allowed for the operand. nnn is the maximum allowed length for the keyword. Processing terminates.

**User response:**
Correct the length of the keyword's operand.

---

**CKM06021E  Bad characters in keyword XXXX**

**Explanation:**
Invalid characters such as * or $ were found in a DDNAME or DSNAMES field.

**User response:**
Correct the keyword.

---

**CKM06022E  Invalid DSNAMES in keyword xx**

**Explanation:**
The data set name specified is invalid.

**User response:**
Correct the data set name.

---

**CKM06023E  NOTHING SPECIFIED FOR KEYWORD: keyword**

**Explanation:**
A keyword was entered without an appropriate operand. Processing terminates.

**User response:**
Specify an appropriate operand for the keyword.

---

**CKM06024E  No output type keywords specified**

**Explanation:**
An output keyword is required.

**User response:**
Provide a COLUMNLISTFILE, COLUMNLIST, DSNLISTFILE, DSNLIST, ICFLISTFILE, ICFLIST,
EXTFLATFILE, EXTFLAT, GENMAP, or some form of one or more of these keywords.

CKM06029E function FAILED FOR keyword dsn
Explanation:
The function (ALLOC or FREE) failed for the specified keyword and data set.
User response:
If the function is ALLOC, make sure the data set name is correct and the data set exists. If the function is FREE, report this message to Technical Support. Have available the listing that contains this message and the SCKMPARM member that controls execution.

CKM06034E Error trying to find INCLUDE ( - xxx
Explanation:
The INCLUDE phrase is incorrect.
User response:
Correct the keyword and submit.

CKM06035E Missing ) for EXCLUDE(
Explanation:
The INCLUDE or EXCLUDE keyword is missing a closing parenthesis.
User response:
Correct the keyword and submit.

CKM06040I selected storage groups follow
Explanation:
Displays storage groups selected with BY-VOLUME keywords.
User response:
None

CKM06041E Invalid exclude volume mask xxx for yyy Error: mmmm
Explanation:
The following keywords of BY-VOLUME INCLUDE-STORAGEGROUP, EXCLUDE-STORAGEGROUP INCLUDE-VOLSER, EXCLUDE-VOLSER allow one or more names or masks. The indicated entry is not a valid name or mask.
User response:
Correct the values in the keyword specified.

CKM06042E Invalid exclude volume xxx for yyy Error: mmmm
Explanation:
The value retrieved from your storagegroup or online volumes, doesn't appear to be valid.
User response:
Contact technical support.
CKM06042E  CKM06047E

CKM06042E Invalid exclude volume xxx for yyy
Error: mmmm

Explanation:
The value retrieved from your storagegroup or online volumes, doesn't appear to be valid.

User response:
Contact technical support.

---

CKM06043E Error returning storage groups volumes

Explanation:
EXPLORE was unable to retrieve either the list of storage groups or the volumes for a specific storage group. Storage groups are only valid for HSM environments.

User response:
Contact technical support if your site uses HSM.

---

CKM06044E No storage groups returned

Explanation:
No storage groups were returned from SMS.

User response:
Contact technical support.

---

CKM06044I selected volumes follow

Explanation:
Displays the volume selected with BY-VOLUME keywords.

User response:
None

---

CKM06045E UCB scan error, return code xx reason code yy

Explanation:
EXPLORE was unable to retrieve a list of DASD volumes during BY-VOLUME processing.

User response:
Contact technical support.

---

CKM06047E INCLUDE_STORAGEGROUP or INCLUDE-VOLUME is required

Explanation:
1 The EXCLUDE-STORAGEGROUP keyword removes storage groups from the INCLUDE-STORAGEGROUP keyword. The include is required if the exclude is used.
2 BY-VOLUME processing needs to know which volumes to process and it determines them from INCLUDE-STORAGEGROUP or the INCLUDE-VOLUME

User response:
Correct your BY-VOLUME keywords

---
The EXCLUDE-STORAGEGROUP keyword removes storage groups from the INCLUDE-STORAGEGROUP keyword. The include is required if the exclude is used.

BY-VOLUME processing needs to know which volumes to process and it determines them from INCLUDE-STORAGEGROUP or the INCLUDE-VOLUME

**User response:**
Correct your BY-VOLUME keywords

---

**CKM06048E** INCLUDE-STORAGEGROUP valid only for INI SPACE_MANAGER HSM

**Explanation:**
The storage group keywords of BY-VALUE are only supported for INI SPACE_MANAGEMENT of HSM.

**User response:**
Correct your BY-VOLUME keywords

---

**CKM06051E** Incompatible keywords:

**Explanation:**
You are allowed to enter either one of the keywords but not both.

**User response:**
Correct the keyword to use one operand.

---

**CKM06054E** No volumes found online matching BY-VOLUME keywords

**Explanation:**
Your include and exclude statements didn’t yield any volumes that are online for BY-VOLUME processing.

**User response:**
Correct your BY-VOLUME keywords

---

**CKM06055E** No datasets on volumes matching BY-VOLUME keywords

**Explanation:**
Your include and exclude statements found one or more online volumes that did not have any datasets on them for BY-VOLUME processing.

**User response:**
Correct your BY-VOLUME keywords

---

**CKM06081E** DDNAME xx is not specified in JCL for yy

**Explanation:**
An output DDNAME type keyword named a DD statement that is not in the JCL.

---

**CKM06091E** GETKWD call failed for keyword xxx

**Explanation:**
Internal error calling parser during identified call.

**User response:**
Report problem to technical support.

---

**CKM06092E** Parser call failed for: value

**Explanation:**
Internal error calling parser during identified call.

**User response:**
Report problem to technical support.

---

**CKM06093E** Invalid EXPLORE command entered

**Explanation:**
Internal error calling parser during identified call.

**User response:**
Report problem to technical support.

---

**CKM06101W** Bad catalog data follows, field: xxx

**Explanation:**
During evaluation of filters, invalid data was found for the field and DSN show. This record was not selected because of the bad data. Message consists of three or four lines.

**User response:**
Repair this catalog entry.

---

**CKM06102E** Include filter DSN EQ for BY-DSN-DD not allowed

**Explanation:**
During evaluation of filters, some other value than ** was specified for the INCLUDE DSN EQ filter for a BY-DSN-DD request.

**User response:** Change your request to DSN EQ ** for all BY-DSN-DD requests. If you do want a filter on DSN, place that filter within an EXCLUDE( ... ) keyword.

---

**CKM06105E** Keyword xxxx failed to evaluate as true/false/bad data

**Explanation:**
The program was unable to determine evaluate the sub-expression with the keyword shown. A dump of the
record follows for diagnostics.

**User response:**
Contact Technical Support. Have available the listing that contains this message.

---

**CKM06107E** DSN FAILED EVALUATION CHECK:
dsn / mask - errortext

**Explanation:**
The dsn / mask specified in the DSN() command string of the EXPLORE CANDIDATES command contains an invalid character.

**User response:**
Take corrective action to correct the dsn or mask with the invalid character in the dsn or mask.

---

**CKM06109E** EXPLORE parsing of the “CRITERIA” keyword was not successful

**Explanation:**
EXPLORE found error(s) in the criteria keyword. Other messages will indicate the specific error found.

**User response:**
Change your CRITERIA keyword and resubmit.

---

**CKM06109I** parsing of the “CRITERIA” keyword was successful

**Explanation:**
EXPLORE found no errors in the specified criteria keyword string.

**User response:**
None.

---

**CKM06110E** INVALID PARM FIELD TO CKM00061:
parm field VALUE PASSED: value

**Explanation:**
Internal error in parameters used by EXPLORE. Processing terminates.

**User response:**
Contact Technical Support. Have available the listing that contains this message.

---

**CKM06111I** THE FOLLOWING DSNS/MASKS HAVE BEEN SELECTED dataset name(s)/masks

**Explanation:**
The listed dataset names or masks were found in INCL(DSN EQ ...) entries.

**User response:**
None.

---

**CKM06115I** xxxx - excluded - no read access - will not be processed

**Explanation:**
UCAT Mask xxxx in EXCL(UCAT keyword excluded matched 1. UCAT Mask xxxx in EXCL(UCAT keyword excluded matched USER Catalog form process 2. The user who submitted the JOB, does not have read access to named catalog.

**User response:**
Confirm that this user catalog was to be exclude

---

**CKM06120E** KEYWORD: keyword LENGTH ERROR; VALUE: value

**Explanation:**
The length of the value specified for a keyword was invalid.

**User response:**
Correct the value specified for the keyword.

---

**CKM06121E** INVALID KEYWORD: keyword

**Explanation:**
The specified keyword is invalid.

**User response:**
Correct the keyword.

---

**CKM06123E** KEYWORD: keyword INVALID OPERATOR: operator

**Explanation:**
The operator specified is not valid, or, is not valid with the indicated keyword.

**User response:**
Correct the operator.
Chapter 25. Messages and Codes for Advanced Catalog Management
CKM06512E  Expression has only two parts more than 3 parts in expression

Explanation:
Expressions have two forms as shown below consisting of 3,5,7,...
Syntax for a simple expression field op value
Syntax for a complex expression field op value op value ... op value

User response:
Change the request and resubmit.

CKM06513E  Unmatched right parenthesis

Explanation:
A right parenthesis was found without a prior left parenthesis.

User response:
Change the request and resubmit.

CKM06514E  Unmatched left parenthesis

Explanation:
A left parenthesis was found without a following right parenthesis.

User response:
Change the request and resubmit.

CKM06515E  more than 3 parts in expression

Explanation:
Expressions have two forms as shown below consisting of 3,5,7,...
Syntax for a simple expression field op value
Syntax for a complex expression field op value op value ... op value

User response:
Change the request and resubmit.

CKM06516E  string is longer than 80

Explanation:
The value part of an expression is too long.

User response:
Change the request and resubmit.

CKM06517E  Expression has only one part

Explanation:
Expressions have two forms as shown below consisting of 3,5,7,...
Syntax for a simple expression field op value
Syntax for a complex expression field op value op value ... op value

User response:
Change the request and resubmit.

CKM06518E  Expression hs no parts

Explanation:
Expressions have two forms as shown below consisting of 3,5,7,...
Syntax for a simple expression field op value
Syntax for a complex expression field op value op value ... op value

User response:
Change the request and resubmit.

CKM06519E  BOOLEAN TEST IS LOST

Explanation:
The boolean processor is unable to handle your request. This usage is not supported

User response:
Contact Technical Support.

CKM06520E  Trailing boolean operator

Explanation:
AND, OR, and XOR connect two expressions. The parser has found one of these keywords at the end of an expression without a following expression.

User response:
Change the request and resubmit.

CKM06521E  Boolean operator required (n)

Explanation:
The boolean processor is unable to handle your request. This usage is not supported

User response:
Contact Technical Support.
CKM06521E Boolean operator required (n)
Explanation:
The boolean processor is unable to handle your request. This usage is not supported
User response:
Contact Technical Support.

CKM06801W VVDS record not found for xxx
Explanation:
EXPLORE’s catalog extract routine did not find a VVDS for a disk type dataset that wasn’t migrated.
User response:
Informational only. Processing continues.

CKM06802W VTOC data unavailable for VVVVV, DSN=dsn
Explanation:
EXPLORE’s catalog extract routine did not find a VTOC for a disk type dataset that wasn’t migrated.
User response:
Informational only. Processing continues.

CKM06803W VTOC format 3 record not found for
Explanation:
EXPLORE’s catalog extract routine did not find a FMT3 for a disk type dataset that wasn’t migrated.
User response:
Informational only. Processing continues.

CKM06809W GDG GAT entry for G000V000 in DSN xxx not found
Explanation:
EXPLORE unable to find GAT entry for an GDG generation.
User response:
Processing continues, but you need to evaluate this catalog record.

CKM06810W allocation failed for: cccc
Explanation:
allocation failed for catalog cccc.
User response:
Determine the reason for the allocation failure and retry.

CKM06812W Error opening catalog:
Explanation:
User response:

CKM06813W Invalid DSN found :
Explanation:
The catalog contained an invalid dataset name. The first MSC05236W shows the dataset name in character format. The next three MSC05236W show the name in hex.
User response:
Fix the catalog and retry the function.

CKM06814W MASK FAILED EVALUATION CHECK: xxxx - yyyyy
Explanation:
Mask xxxx is invalid for reason yyyyy
User response:
Fix the error and retry the function.

CKM06816W CVAF ERROR: RETURN CODE:rc
STATUS CODE:sc VOLUME:vvvv ID=nn
PREV FUNC:ffff
Explanation:
This an internal error. Status code of 15 - x’0f’, UCB is not valid, volume was not mounted; VIO unit, not DASD
User response:
Contact Technical Support.

CKM06822W Associated entry not found in catalog - nnnn
Explanation:
A non-VSAM alias entry with an association of nnnn. nnnn was not found in the catalog. The most probable cause is an orphaned catalog entry.
User response:
Determine the reason for and fix the problem. Retry the function. If help is needed, contact Technical Support for assistance.
CKM06825W  Error reading self describing record from catalog: nnnn
Explanation:
This an internal error.
User response:
Contact Technical Support.

CKM06830I  allocation failed for: nnnn - will not be used for search
Explanation:
Unable to allocate catalog nnnn. No entries that may reside in this catalog will be retrieved.
User response:
Informational only. Processing continues.

CKM06831W Volume not mounted: vvvv First DSN=nnn DEVTYPE:ttt
Explanation:
A catalog entry specified that a dataset was cataloged to a volume, vvvv, that was not mounted for dsn nnn on device type ttt. EXPLORE writes this message once per volume, eventhough it applies to all subsequent datasets on the same volume.
User response:
Mount the volume, uncatalog the dataset, or re-specify the selection masks. Retry the function.

CKM06897I  No authority to read catalog
Explanation:
The user who submitted this JOB does not have read authority to the named catalog.
User response:
Informational only.

CKM06898I  Statistics
Explanation:
EXPLORE's catalog extract routine display statistics concerning its work.
User response:
Informational only.

CKM06899I  Error in deallocation, DDN xxx DSN xxx
Explanation:
An error has been detected during catalog deallocation.
User response:
Contact Technical Support.

CKM07000I  LISTSMF MAINTENANCE LEVEL: CKM00070/REV=nn
Explanation:
Informational message giving the current revision number of the specific program.
User response:
None required. In the event of a problem, Technical Support may request the revision number.

CKM07001E  Deallocation failed DDName: ddname
Explanation:
Dynamic allocation for a dataset failed, or, dynamic deallocation for a ddname failed. The associated OS/390 messages are displayed. Processing terminates.
User response:
If unable to determine the reason for the failure from the associated OS/390 messages, contact Technical Support. Have available the listing containing these messages.

CKM07001E  Deallocation failed DDName: ddname
Explanation:
Dynamic allocation for a dataset failed, or, dynamic deallocation for a ddname failed. The associated OS/390 messages are displayed. Processing terminates.
User response:
If unable to determine the reason for the failure from the associated OS/390 messages, contact Technical Support. Have available the listing containing these messages.

CKM07002E  Invalid input file - no SMF Dump Header
Explanation:
Error message issued as program is expecting an SMF Dump data set as input. SMF dump data set always has a SMF record type X'02' as the first record; this first record is not present.
User response:
Check the specification of the input data set. If there are still problems, contact Technical Support.
CKM07004E  Installation Security Server has
returned failure codes NNNN NNNN

Explanation:
During command processing, the product has
communicated with the installation security server. For
the message "HAS DENIED ACCESS TO THIS
COMMAND", the Security Server has determined that
you do not have authority to use the LISTSMF
command. For the message "HAS RETURNED
FAILURE CODES NNNN NNNN", the Security Server
has determined an error other than "DENIED ACCESS".
Refer to the OS390 Security Server RACROUTE
manual for a description of these codes. The first is the
"SAFRETURN" value and the second is the
"SAFREASON" value.

User response:
Contact the installation security administrator if this
unexpected. You will need to tell them the name of the
command in use. In this case it is LISTSMF.

CKM07006E  ERROR CALLING CKM01VV1 tttttttt
            FUNCTION: function R15=nnnn

Explanation:
During LISTSMF processing, a problem occurred using
a dataspace. tttttttt is the name of the internal table.

User response:
Report this message to Technical Support. Have
available the listing that contains this message and the
SCKMPARM member that controls execution.

CKM07008E  KEYWORD HAS NO OPERANDS

Explanation:
During LISTSMF processing, a keyword in the
command stream was entered without an argument.

User response:
Either add a valid argument to the keyword, or remove
the keyword from the input stream.

CKM07009I  LISTSMF function complete. Return
code xxx

Explanation:
Command execution termination message.

User response:
Generally none.

CKM07011I  Dataset in xxxxxxxxxx allocated to
            DDName: ddname

Explanation:
The dsname in the xxxxxxxxxx keyword has been
dynamically allocated to 'ddname'.

User response:
None.

CKM07012E  Mask validation error for entry:
            dsname/mask Description of error:
            description

Explanation:
A DSN or mask value does not conform to standards.

User response:
Ensure DSN or mask is correct.

CKM07013W Duplicate DSN or Mask encountered --
            ignored. Keyword=KKKKKKKKK Start
            of string=SSSSSSS

Explanation:
A DSN or mask value has been coded more than once.

User response:
Ensure DSN or mask is correct.

CKM07014E  Open failed for DDName: ddname

Explanation:
LISTSMF was unable to open the file. Processing
terminates.

User response:
Check that the JCL has the indicated ddname specified.
CKM07015E • CKM07024E

If unable to determine the cause of the failure, contact Technical Support. Have available the listing that contains this message.

CKM07015E OPERAND NOT NUMERIC
Keyword=KKKKKKKKK Start of string=SSSSSSS

Explanation:
An operand that should be numeric contains non numeric data.

User response:
Correct the operand.

CKM07016I The following DSNs/masks are to be processed during keyword processing

Explanation:
The message displays a list of DSNs and masks detected during LISTSMF initial processing.

User response:
None.

CKM07017W DUPLICATE RECORD ID ENCOUNTERED -- IGNORED

Explanation:
The same record id was coded multiple times for one keyword.

User response:
None.

CKM07018I The following Record IDs are to be processed during keyword processing

Explanation:
The message displays a list of Record IDs and descriptions detected during LISTSMF initial processing.

User response:
None.

CKM07019E OPERAND NOT IN VALID RANGE
Keyword=KKKKKKKKK Start of string=SSSSSSS

Explanation:
An operand, that should be valued with a range, was assigned a value outside of that range.

User response:
Correct the operand.

CKM07020I LIST OF KNOWN SMF RECORD DESCRIPTIONS (AND RECORDING STATUS):

Explanation:
The heading of all supplied SMF record descriptions and an indication of whether that specific SMF record type is being recorded on that image.

User response:
None.

CKM07021I SMF IS NOT ACTIVE ON THE SUBSYSTEM

Explanation:
SMF data are not being collected on this subsystem.

User response:
Informational.

CKM07022I SMF type nnn not being recorded on this subsystem

Explanation:
The SMF administrator controls which SMF records are to be recorded. The specified SMF record type (encoded within INCLUDE-RECORDID or EXCLUDE-RECORDID) was not being recorded on the subsystem on which the LISTSMF command is being executed.

User response:
Informational.

CKM07023I Number of SMF records printed: nnnn

Explanation:
The number of SMF records that were printed after the INCLUDE and EXCLUDE processing, if any, was applied.

User response:
None.

CKM07024E SORT FOR SMF DATA FAILED.
R15=nnnn

Explanation:
The sort for the SMF records failed.

User response:
Correct the problem that caused SORT to fail.
CKM07025E  PRINT(NONE) MAY ONLY BE REQUESTED IF EXTRACT-DATASET OR EXTRACT-FILE SPECIFIED

Explanation:
The request had both PRINT(NONE) and no EXTRACT option coded. This would cause all the selected records to be sorted and then discarded.

User response:
Either remove the PRINT request, or code an EXTRACT option, then re-submit the command.

CKM07026I  The following JOBNAMEs are to be processed during keyword processing

Explanation:
The message displays a list of JOBNAMEs detected during LISTSMF initial processing.

User response:
None.

CKM07027I  The following SYSIDs are to be processed during keyword processing

Explanation:
The message displays a list of SYSIDs detected during LISTSMF initial processing.

User response:
None.

CKM07048W INI error - Section: name Token: SMF_RECORD_TYPE Error: xxxxxxxxxxxxxxx

Explanation:
The value supplied in the named section for the SMF_RECORD_TYPE token in the INI is invalid. The xxxxxxx will indicate the error. The value should be from 1 - 3 numeric bytes in the range 0 - 255 inclusive.

User response:
Correct the content of the INI. The value is optional, if entered, the value must also be supplied in the TYPE option as specified in the SMFPRMxx member of SYS1.PARMLIB.

CKM07079I  Default in effect: xxxxxxx

Explanation:
A default is being used for a keyword.

User response:
None.

CKM07080I  LISTSMF processing records from YYYY/DDD through YYYY/DDD

Explanation:
Either the FROM-DATE or TO-DATE keyword was not in Julian format, the dates requested are shown in Julian for confirmation.

User response:
None.

CKM07081E  SMFDATASET OR SMFFILE REQUIRED

Explanation:
LISTSMF processing requires SMFDATASET or SMFFILE to be specified.

User response:
Specify the appropriate input keyword.

CKM07083E  Error in parameters for keyword

Explanation:
Parsing of the LISTSMF command detected errors in the parameters of the specified keyword.

User response:
Correct the parameter in error.

CKM07084E  Required keyword missing: keyword

Explanation:
A keyword required for LISTSMF processing has been omitted.

User response:
Specify the required keyword.

CKM07085E  Nothing specified for keyword: keyword

Explanation:
A keyword was entered without an appropriate operand.

User response:
Specify an appropriate operand for the keyword.

CKM07086E  KEYWORD: keyword MAXIMUM LENGTH: nnn EXCEEDED

Explanation:
The operand entered for a keyword exceeded the maximum length allowed for the operand. nnn is the maximum allowed length for the keyword.

User response:
Correct the length of the keyword’s operand.
CKM07087E  Keyword has more than 1 operand;  
only 1 allowed: keyword
Explanation:
Multiple operands were detected for a keyword; only one operand is permitted.
User response:
Correct the keyword to use one operand.

CKM07088E  Invalid DDName in keyword: keyword
DDName: ddname error
Explanation:
Parsing detected a problem with the ddname in the keyword. 'error' contains the detected error.
User response:
Correct the ddname specification.

CKM07089E  DDName specified in keyword: keyword
DDName: ddname was not found
Explanation:
The ddname specified for the keyword was not found in the JCL.
User response:
Correct either the ddname specification or the JCL.

CKM07090E  Error with date: keyword error
Explanation:
The date found in FROMDATE or TODATE is incorrect. 'error' describes the problem detected.
User response:
Correct the keyword's date.

CKM07091E  Error with time: keyword error
Explanation:
The time found in FROMTIME or TOTIME is incorrect. 'error' describes the problem detected.
User response:
Correct the keyword's time.

CKM07092E  FROMDATE GREATER THAN TODATE
Explanation:
For LISTSMF, the FROMDATE specified is greater than the TODATE specified. The FROMDATE must be less than or equal to the TODATE.
User response:

CKM07093E  FROMTIME NOT LESS THAN TOTIME
Explanation:
For LISTSMF, the FROMTIME specified is greater than or equal to the TOTIME specified. The FROMTIME must be less than the TOTIME.
User response:

CKM07094E  Invalid datasetname in keyword:
keyword DSN: dsname error
Explanation:
The dsname in the keyword is invalid. 'error' indicates the problem detected with the datasetname.
User response:
Correct the dsname specification.

CKM07107E  LRECL of input data less than a field offset
Explanation:
At least one field's offset is beyond the LRECL of this fixed length input.
User response:
Check to see if you are using the correct input dataset or the correct data dictionary.

CKM08000I  Maintenance Level:
CKM00080/yyyyymmd VER=v.nnn
REV=nn ptf
Explanation:
Documents the maintenance level of the CKM00080 program where "yyyyymmd" is the assembly date, "v.nnn" is the version or release number, "nn" is the revision level and "ptf" is the latest change identifier.
User response:
None. This information can be used in problem determination.

CKM08001I  ZAP Function complete. Return code: nnnn
Explanation:
Return code from ZAP function. If the return code is not zero, other messages will be displayed.
User response:
Generally none. For return code 90 - Contact Technical Support.
CKM08027E  CKM01VV1 Tree I/O failure on XXXXXXX request. Return code NNN

Explanation:
A ZAP internal error has occurred.

User response:
Contact Customer Support.

CKM08044E  Installation Security Server has returned failure codes NNNN NNNN

Explanation:
During command processing, the product has communicated with the installation security server. For the message "has denied access to this command", the Security Server has determined that you do not have authority to use the ZAP command. For the message "has returned failure codes NNNN NNNN", the Security Server has determined an error other than "DENIED ACCESS". Refer to the z/OS Security Server RACROUTE manual for a description of these codes. The first is the "SAFRETURN" value and the second is the "SAFREASON" value.

User response:
Contact the installation security administrator if this unexpected. You will need to tell them the name of the command in use. In this case it is ZAP BCS, ZAP VVDS, ZAP DSN or ZAP VTOC.

CKM08044E  Installation Security Server has returned failure codes NNNN NNNN

Explanation:
During command processing, the product has communicated with the installation security server. For the message "has denied access to this command", the Security Server has determined that you do not have authority to use the ZAP command. For the message "has returned failure codes NNNN NNNN", the Security Server has determined an error other than "DENIED ACCESS". Refer to the z/OS Security Server RACROUTE manual for a description of these codes. The first is the "SAFRETURN" value and the second is the "SAFREASON" value.

User response:
Contact the installation security administrator if this unexpected. You will need to tell them the name of the command in use. In this case it is ZAP BCS, ZAP VVDS, ZAP DSN or ZAP VTOC.

CKM08052E  CHANGED-BIT must be ON or OFF

Explanation:
When attempting to ZAP a VTOC the CHANGED-BIT keyword was specified; the CHANGED-BIT keyword requires an argument of ON or OFF. This was not specified.

User response:
Correct the CHANGED-BIT argument and re-submit the job.

CKM08053E  VRRDS requires a minimum RBA(04)

Explanation:
When attempting to ZAP a VRRDS, the RBA keyword must be that of a record; that of the stored RRN is not permitted. This can only be validated on the first record.

User response:
To print the first record of a VRRDS, specify RBA(04).

CKM08054I  Default in effect:

Explanation:
The specified keyword or a keyword argument was not supplied. The default value was taken.

User response:
Informational only.

CKM08055E  ZAP VTOC PATCH requires CCHHR

Explanation:
ZAP function syntax is incorrect. When requesting a PATCH, the only supported method of record identification is CCHHR.

User response:
Supply the valid CCHHR as a 10 character hexadecimal string using 2-for-1 notation. Correct the command and re-submit.

CKM08056E  ZAP VTOC RENAME requires DSName

Explanation:
ZAP function syntax is incorrect. When requesting a RENAME, the only supported method of record identification is DSName, optionally, a CCHHR may be
supplied to uniquely identify duplicate VTOC entries.

**User response:**
Supply the valid DSName as either a character or hexadecimal string using 2-for-1 notation for the hexadecimal. Correct the command and re-submit.

**CKM08058E ZAP VTOC DELETE requires DSName**

**Explanation:**
ZAP function syntax is incorrect. When requesting a DELETE, the only supported method of record identification is DSName, optionally, a CCHHR may be supplied to uniquely identify duplicate VTOC entries.

**User response:**
Supply the valid DSName as either a character or hexadecimal string using 2-for-1 notation for the hexadecimal. Correct the command and re-submit.

**CKM08059E RENAME only valid for ZAP VTOC**

**Explanation:**
ZAP function syntax is incorrect.

**User response:**
Correct the command and re-submit.

**CKM08060E No BCS, DSN, VTOC or VVDS keyword**

**Explanation:**
ZAP function syntax is incorrect.

**User response:**
The keyword BCS, DSN, VTOC or VVDS must be supplied. Correct the command and re-submit.

**CKM08061E No PRINT, PATCH, DELETE or RENAME keywords**

**Explanation:**
ZAP function syntax is incorrect.

**User response:**
One of the keywords PRINT, PATCH, DELETE or RENAME must be present in the ZAP function. Correct the command and re-submit.

**CKM08062E PATCH invalid without VER and REP keyword**

**Explanation:**
ZAP function syntax is incorrect.

**User response:**
Patch keyword must have at least one VER and one REP keyword supplied.

**CKM08063E DELETE invalid without VER keyword**

**Explanation:**
ZAP function syntax is incorrect.

**User response:**
Delete keyword must have at least one VER keyword supplied.

**CKM08064E Nothing specified for keyword:**

**Explanation:**
The keyword KKKKKKK is expecting an argument, no argument was supplied.

**User response:**
Check the syntax in the User Guide for the keyword KKKKKKK and determine the argument to be provided.

**CKM08065E Keyword: KKKKKKKKK maximum length NNN exceeded**

**Explanation:**
The keyword KKKKKKK is expecting an argument. This argument has a length restriction that was exceeded.

**User response:**
Check the syntax in the User Guide for the keyword KKKKKKK and determine the argument to be provided.

**CKM08066E Keyword has more than one argument; only one allowed: KKKKKKK**

**Explanation:**
The keyword KKKKKKK is expecting a single argument. Multiple arguments have been supplied.

**User response:**
Check the syntax in the User Guide for the keyword KKKKKKK and determine the argument to be provided.

**CKM08067E Character or hexadecimal argument not delimited: KKKKKKK**

**Explanation:**
The keyword KKKKKKK is expecting either a character string delimited by C’...’ or a hexadecimal string delimited by X’...’ as an argument.

**User response:**
Enclose the argument within C’...’ or X’...’ depending on whether a character string or hexadecimal string is coded.
CKM08068E Invalid data set name in keyword: KKKKKKK DSN: dsname

Explanation:
The keyword KKKKKKK is expecting a data set name to be supplied as an argument. The second line of the error message will detail the problem.

User response:
Check the syntax of the data set name, and correct the argument supplied.

CKM08069E Invalid volser in keyword: KKKKKKK
Volser: VVVVVVV

Explanation:
The keyword KKKKKKK is expecting a volume serial to be supplied as an argument. The volser supplied is in error.

User response:
Check the syntax of the volume serial, and correct the argument supplied.

CKM08070E Invalid hexadecimal string: KKKKKKK
String: XXXXXXX

Explanation:
The keyword KKKKKKK is expecting a string of 2-for-1 hexadecimal characters to be supplied. The second line of the error message will detail the problem.

User response:
Check the content of the string and correct as needed.

CKM08071E Invalid decimal string: KKKKKKK
String: DDDDDDD

Explanation:
The keyword KKKKKKK is expecting a string of numeric characters to be supplied. The second line of the error message will detail the problem.

User response:
Check the content of the string and correct as needed.

CKM08072E Keyword: KKKKKKK Offset greater than 2 Hexadecimal characters.

Explanation:
The keyword KKKKKKK is expecting an offset that should be encoded in the range 0000 (or 00) through 8000. The data is coded in 2-for-1 hexadecimal notation.

User response:
Check the content of the offset and correct as needed.

CKM08073E Keyword: KKKKKKK Offset: OOOO is not larger than previous offset plus data length

Explanation:
The keyword KKKKKKK has multiple "offset,string" combinations specified. These should not overlay one another. An overlay has been detected.

User response:
Check the content of the offsets and lengths and correct.

CKM08074E Keyword: KKKKKKK Invalid string: SSSSSSSSSSSS

Explanation:
The keyword KKKKKKK has been supplied with a string as an argument. The second line of the message will indicate the specific error.

User response:
Check the content of the string and correct.

CKM08075E No KEY, but EXTENSION requested

Explanation:
A ZAP BCS has been requested. The EXTENSION keyword has been supplied, but no associated KEY keyword.

User response:
Either remove the EXTENSION keyword or add a KEY keyword.

CKM08076E No COMPONENT, but KRQ requested

Explanation:
A ZAP VVDS has been requested. The KRQ keyword has been supplied, but no associated COMPONENT keyword.

User response:
Either remove the KRQ keyword or add a COMPONENT keyword.

CKM08077E KRQ format invalid

Explanation:
A ZAP VVDS has been requested. The KRQ keyword has been supplied, but the argument is not correctly formatted. Valid KRQ are of the format ANNN, where A is an alpha character and NNN are three numerics; for example: A001 The second line of the error message will detail the problem.

User response:
Correct the KRQ argument.
<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CKM08078E</td>
<td><strong>INDEX-COMPONENT</strong> requires <strong>CONTROL-INTERVAL</strong> to also be requested</td>
</tr>
<tr>
<td><strong>Explanation:</strong></td>
<td>A ZAP BCS or DSN has been requested. The <strong>INDEX-COMPONENT</strong> keyword has been supplied, but the <strong>CONTROL-INTERVAL</strong> keyword is absent.</td>
</tr>
<tr>
<td><strong>User response:</strong></td>
<td>Supply the <strong>CONTROL-INTERVAL</strong> keyword when requesting the <strong>INDEX-COMPONENT</strong>.</td>
</tr>
<tr>
<td>CKM08079E</td>
<td><strong>VVDSRECTYPE</strong> must be *, Z, Q or N</td>
</tr>
<tr>
<td><strong>Explanation:</strong></td>
<td>An incorrect value was specified for <strong>VVDSRECTYPE</strong>.</td>
</tr>
<tr>
<td><strong>User response:</strong></td>
<td>Valid <strong>VVDS-RECTYPE</strong> are * (All), Z (VSAM), Q (VSAM ext) or N (nonVSAM).</td>
</tr>
<tr>
<td>CKM08080E</td>
<td><strong>DSCB-TYPE</strong> must be *, 1, 2, ... 7</td>
</tr>
<tr>
<td><strong>Explanation:</strong></td>
<td>An incorrect value was specified for <strong>DSCB-TYPE</strong>.</td>
</tr>
<tr>
<td><strong>User response:</strong></td>
<td>Valid <strong>DSCB-TYPE</strong> are * (All) or from 1 through 7 inclusive.</td>
</tr>
<tr>
<td>CKM08081E</td>
<td><strong>VIER/VPSM/VIXM/VMDS</strong> require <strong>INDEX</strong> to also be requested</td>
</tr>
<tr>
<td><strong>Explanation:</strong></td>
<td>A ZAP VTOK has been requested. One or more specific Indexed VTOK record types have been but the <strong>INDEX</strong> keyword is absent.</td>
</tr>
<tr>
<td><strong>User response:</strong></td>
<td>Supply the <strong>INDEX</strong> keyword when requesting specific Indexed VTOK record types.</td>
</tr>
<tr>
<td>CKM08101E</td>
<td><strong>BCS/VVDS</strong> RECORD NOT FOUND <strong>KEY</strong>: xxxxxxxxxxxxxxxxxxxxxxxxxxxxx</td>
</tr>
<tr>
<td><strong>Explanation:</strong></td>
<td>During cell formatting, the length of a cell went past the end of the record.</td>
</tr>
<tr>
<td><strong>User response:</strong></td>
<td>This may indicate a corruption in the record. Print the record using DUMP rather than FORMAT or CELLDUMP and try to determine the error in the record. It may be possible to correct the length with a ZAP PATCH command either at the record level or control interval level.</td>
</tr>
</tbody>
</table>
**CKM08108E**  CELL TYPE ERROR FOUND DURING CELL VALIDATION

Explanation:
During cell formatting, an unknown cell type was found.

User response:
This may indicate a corruption in the record or the product's company may have introduced a new cell type. Print the record using DUMP and try to determine the error. Contact Technical support for assistance.

**CKM08109E**  FIELDLENGTH GREATER THAN 72 CHARACTERS

Explanation:
A record field to be displayed in ISPF exceeds 72 characters.

User response:
Contact Technical support for assistance.

**CKM08111E**  CKM01VV1 TABLE I/O FAILURE ON xxxxxxx REQUEST. RETURN CODE nnn

Explanation:
A ZAP PRINT internal error has occurred.

User response:
Contact Customer Support.

**CKM08112E**  NO TABLE HEADER RECORD FOUND

Explanation:
ZAP PRINT request error.

User response:

**CKM08113E**  BCSIVVDS allocation FAILED

Explanation:
ZAP PRINT request error.

User response:
Other error messages should give a detailed explanation of the problem.

**CKM08117E**  BAD RETURN CODE FROM CKM01HEX: nn

Explanation:
A ZAP PRINT internal error has occurred.

User response:
Contact Customer Support.

**CKM08118W**  NO DATA FOUND TO PRINT BASED ON PARMS SPECIFIED

Explanation:
ZAP PRINT could not find any records to print based on the parameters passed.

User response:
Try a different search criteria.

**CKM08119I**  ZAP PROCESSING name

Explanation:
Informational

User response:
None

**CKM08150E**  POINT ERROR, SI27 FAILED RC: nnn

Explanation:
Internal error

User response:
Contact Technical Support

**CKM08151E**  GETNEXT ERROR, SI27 FAILED RC: nnn

Explanation:
Internal error

User response:
Contact Technical Support

**CKM08152E**  ERROR OCCURRED REWRITING ORIGINAL TABLE - RC: nnn

Explanation:
Internal error

User response:
Contact Technical Support

**CKM08153E**  ERROR OCCURRED WRITING TABLE COPY - RC: nnn

Explanation:
Internal error

User response:
Contact Technical Support
CKM08197W • CKM08207I

**CKM08197W LENGTH VALUE X’nnnn’ NOT EQUAL TO PHYSICAL LENGTH X’mmmmmmmm’**

**Explanation:**
ZAP PRINT detected an inconsistency in the length value of a record (mmmm), as contained in the first 2 bytes of the record, compared with the RPL length value (mmmmmmmmm) returned by VSAM. The RPL length value is the physical length of the record.

**User response:**
Some investigation may be warranted to try to determine the cause of the inconsistent lengths. Consider using ZAP PATCH to correct the length value.

**CKM08201E STORAGE OBTAIN nn FAILED, RC=mmmm**

**Explanation:**
A Storage Obtain failed. nn is a tracking number used by Technical Support mmmm is the Return Code from the STORAGE macro.

**User response:**
Increase REGION size and/or use other short-on-storage resolution techniques. If the problem persists, contact Technical Support.

**CKM08202E RECORD NOT FOUND, KEY: key**

**Explanation:**
A keyed catalog record get failed. key is the key of the record specified in the ZAP PATCH KEY parameter.

**User response:**
Correct the KEY parameter of the ZAP PATCH statement and resubmit the job. If the problem persists, contact Technical Support.

**CKM08203E function FAILED. error: offset,data**

**Explanation:**
A VER or REP failed for the stated reason: 
- function = VER or REP
- error = INVALID OFFSET OR LENGTH
- DATA MISMATCH
- VVR LENGTH CHANGE

offset = Offset of VER or REP

data = Data supplied with VER or REP

If error=INVALID OFFSET OR LENGTH, the offset is beyond the end of the record or the offset plus the length of the data extends beyond the end of the record.

If error=DATA MISMATCH, the data in the VER does not match the data in the record.

If error=VVR LENGTH CHANGE, the REP includes a modification of the VVR length that is inconsistent with the true length of the VVR. This not allowed as it may cause VVR record deblocking problems.

This message is followed by a dump of the record.

**User response:**
If error=INVALID OFFSET OR LENGTH, correct the offset or the length of the data. If error=DATA MISMATCH, determine the correct data from the dump of the record which follows.

**CKM08204E RECORD CHANGED DURING UPDATE OF key**

**Explanation:**
While the record with key of key was being updated, it was changed by some other process.

**User response:**
Try the ZAP again, if the problem persists, contact Technical Support.

**CKM08205W DELETE OF CATALOG SELF DESCRIBING RECORD (SDR) IS NOT ALLOWED.**

**Explanation:**
An attempt was made to delete the catalog self describing record (SDR) which has a key of 45X’00’.

**User response:**
Deletion of the SDR would make the catalog unavailable and is therefore not allowed by ZAP.

**CKM08206I RECORD WRITTEN/MODIFIED**

**Explanation:**
A new record has been written or an existing record has been modified and rewritten.

**User response:**
None

**CKM08207I VER SUCCESSFUL. NO REP STATEMENTS FOUND OR VERONLY SPECIFIED. NO CHANGES MADE.**

**Explanation:**
Either no REP statements were found or VERONLY was specified. Any REP statements will be checked for...
syntax but no changes are made.

User response:
None

**CKM08208E** allocation OF BCS/VVDS DATASET FAILED

Explanation:
ZAP PATCH was unable to allocate either the BCS or VVDS. For BATCH jobs, see the preceding "IKJNNNNN" message for further error details. For ISPF sessions, message CKM08210E follows with further error detail.

User response:
Use the error information to correct the name or resolve allocation problem. You may need to reference Dynamic allocation Error/Reason Codes contained in the manual "MVS Authorized Assembler Services Guide".

**CKM08209E** FREE OF DATASET FAILED

Explanation:
Dynamic unallocation of the BCS or VVDS failed.

User response:
See error message in CKM08210E for more details.

**CKM08210E** allocation error message text

Explanation:
This message follows messages CKM08208E/9E for ISPF sessions and contains the error message generated by dynamic allocation when attempting to allocate the BCS or VVDS dataset.

User response:
Use the error information to correct the name or resolve allocation problem. You may need to reference Dynamic allocation Error/Reason Codes contained in the manual "MVS Authorized Assembler Services Guide".

**CKM08211E** DISPLAYED RECORD DOES NOT MATCH EXISTING RECORD - UPDATE CANCELLED

Explanation:
ISPF environment only. Indicates the selected record has changed since originally retrieved. Message CKM08212E follows.

User response:
None

**CKM08212E** DISPLAYED DATA WILL BE REFRESHED

Explanation:
ISPF environment only. The record has changed (see message CKM08211E) so the record data will be refreshed.

User response:
None

**CKM08213I** RECORD DELETED: record

Explanation:
NVR or VVR was specified on ZAP VVDS DELETE. An IDCAMS command was issued to delete the record.

User response:
None

**CKM08215W** KEY CHANGE DETECTED: oldkey TO newkey

Explanation:
The key portion of a keyed record was modified by a REP statement.

User response:
ZAP will attempt to WRITE the record with the "newkey" and delete the record with the "oldkey".

**CKM08216E** RECORD NOT FOUND, COMPONENT: component name

Explanation:
"component name" was not found in the VVDS.

User response:
Ensure the component name specified is correct.

**CKM08217I** RECORD TYPE type HAS BEEN MODIFIED WITH REP(...) DATA SPECIFIED

Explanation:
A VVDS record was modified and rewritten.

User response:
None

**CKM08218I** DELETE NOT PERFORMED SINCE VERONLY SPECIFIED

Explanation:
VERONLY was specified on a DELETE command.

User response:
None. The record is not deleted.

**Explanation:**
No VER statements were specified and are required when performing a DELETE.

**User response:**
Specify a VER statement.

**Explanation:**
Documents the maintenance level of the CKM00083 program where “yyyymmdd” is the assembly date, “v.nnn” is the version or release number, “nn” is the revision level and “ptf” is the latest change identifier.

**User response:**
None. This information can be used in problem determination.

**Explanation:**
Internal invocation of IDCAMS failed with RC=n.nn.

**User response:**
Contact Technical Support.

**Explanation:**
Internal invocation of IDCAMS failed with RC=n.nn.

**User response:**
Contact Technical Support.

**Explanation:**
Error encountered processing data returned by IDCAMS

**User response:**
Contact Technical Support.

**Explanation:**
During PATCH processing, the KEY was modified. ZAP attempted to WRITE the record back with the modified KEY, but a record with the same key already exists.

**User response:**
PATCH process is terminated without updating the record. Examine the VER/REP statements to ensure the action is consistent with the records in the catalog.

**Explanation:**
A ZAP PATCH internal error has occurred.

**User response:**
Contact Technical Support.

**Explanation:**
KEY was specified but input DATASET is of type LINEAR or ESDS.

**User response:**
re-specify selection that is compatible with input dataset.

**Explanation:**
The length of the KEY value is greater than the KEY length of the dataset, or 255.

**User response:**
re-specify the KEY value.

**Explanation:**
The length of the KEY value is greater than the KEY length of the dataset.

**User response:**
Check the KEY value and re-specify.
Non-decimal numeric value specified for KEY of a RRDS or VRRDS dataset.

User response:
Check the KEY value and re-specify a decimal numeric value that corresponds to a relative record.

CKM08306E  NUMERIC KEY EXCEEDS LIMIT: LIMIT IS 4,294,967,295

Explanation:
A decimal number larger than 4,294,967,295 was specified for a relative record number.

User response:
Check the KEY value. A relative record number cannot exceed 4,294,967,295.

CKM08307E  Error on VSAM GET - Processing incomplete: RC=X‘rr’ RPLERRCD=X‘cc’

Explanation:
A non-zero return code, ‘rr’ with RPL error code ‘cc’ was received from a VSAM request.

User response:
The return code and rpl error code are documented in the manual "z/OS DFSMS Macro Instructions for Data Sets". Report the problem to Technical Support if the problem cannot be resolved by the documentation.

CKM08310I  MAINTENANCE LEVEL:
CKM00080/yyyymmdd VER=v.nnn REV=nn ptf

Explanation:
Documents the maintenance level of the CKM00083 program where "yyyymmdd" is the assembly date, "v.nnn" is the version or release number, "nn" is the revision level and "ptf" is the latest change identifier.

User response:
None. This information can be used in problem determination.

CKM08311E  CKM01VV1 TABLE I/O FAILURE ON xxxxI REQUEST. RETURN CODE nnn

Explanation:
A ZAP internal error has occurred.

User response:
Contact Customer Support.

CKM08312E  NO TABLE HEADER RECORD FOUND

Explanation:
ZAP PRINT request error.

User response:

CKM08313E  DSN allocation FAILED

Explanation:
ZAP PRINT request error.

User response:
Other error messages should give a detailed explanation of the problem.

CKM08314E  Error on VSAM OPEN: RC=X’rr’

ACBERFLG=X‘cc’

Explanation:
VSAM OPEN failed with return code 'rr'. The ACB error flag, 'cc', is displayed.

User response:
Review the VSAM Open error codes in manual "z/OS DFSMS Macro Instructions for Data Sets". Report the problem to Technical Support if it cannot be resolved.

CKM08316E  RBA VALUE CANNOT BE CALCULATED - CINUMBR TIMES CI_SIZE TO LARGE

Explanation:
ZAP CANNOT CALCULATE THE RBA VALUE FOR THE REQUESTED RECORD. THE RESULTING RBA VALUE EXCEEDS 2exp63

User response:
Review the CI number specified and the CI size of the dataset. The CI number will have to be reduced. If the problem was not caused by the CI specification, contact Technical Support.

CKM08317E  CI processing is not supported for compressed objects

Explanation:
A request was made to process a compressed object using CI mode.

User response:
Do not specify a CI number when processing a compressed object. Either specify a key or RBA.
CKM08318W NO DATA FOUND TO PRINT BASED ON PARMS SPECIFIED

Explanation:
ZAP PRINT could not find any records to print based on the parameters passed.

User response:
Try a different search criteria.

CKM08320E Catalog error processing: dsname
IGGCSI00 error: R15: xxx Reason Code: xxx Return Code: xxx

Explanation:
A catalog error occurred while using IGGCSI00 to obtain the metadata for the object from the catalog.

User response:
Issue an IDCAMS LISTCAT for the object. You may also issue an IDCAMS DIAGNOSE for the object's catalog. Report the problem to Technical Support if it cannot be resolved.

CKM08321E Catalog error processing: dsname/component name

Explanation:
A catalog error occurred while using IGGCSI00 to obtain the metadata for the object from the catalog. IGGCSI00 responded that no entries matched the dsname/component name.

User response:
Issue an IDCAMS LISTCAT for the base object. You may also issue an IDCAMS DIAGNOSE for the object's catalog. Report the problem to Technical Support if it cannot be resolved.

CKM08322E Invalid catalog type for: dsname

Explanation:
IGGCSI00 returned a non-VSAM catalog-type code. ZAP DSN may only be used to process VSAM objects.

User response:
Issue an IDCAMS LISTCAT for the data set name. Check the catalog entry code. Report the problem to Technical Support if it cannot be resolved.

CKM08323E RBA access to keyed object using RLS prohibited

Explanation:
A keyed object (KSDS or VRRDS) was opened in RLS mode. RLS requires keyed access to keyed objects; the request was for RBA access.

User response:
Either change the request to specify the key of the required record; quiesce the object using the VARY SMS operator command or by issuing the appropriate CICS operator command.

CKM08324E CI access to object using RLS prohibited

Explanation:
An object was opened in RLS mode. RLS prohibits CI access to an object.

User response:
Either change the request to specify the key of the required record for keyed objects; or specify the RBA for non-keyed objects; or quiesce the object using the VARY SMS operator command or by issuing the appropriate CICS operator command.

CKM08350E POINT ERROR, SI27 FAILED RC: nnn

Explanation:
Internal error

User response:
Contact Technical Support

CKM08351E GETNEXT ERROR, SI27 FAILED RC: nnn

Explanation:
Internal error

User response:
Contact Technical Support

CKM08352E ERROR OCCURRED REWRITING ORIGINAL TABLE - RC: nnn

Explanation:
Internal error

User response:
Contact Technical Support

CKM08353E ERROR OCCURRED WRITING TABLE COPY - RC: nnn

Explanation:
Internal error

User response:
Contact Technical Support
**CKM08401E**  STORAGE OBTAIN nn FAILED, 
**RC=mmmm**

**Explanation:**
A Storage Obtain failed. nn is a tracking number used by Technical Support mmmm is the Return Code from the STORAGE macro

**User response:**
Increase REGION size and/or use other short-on-storage resolution techniques. If the problem persists, contact Technical Support.

**CKM08402E**  RECORD NOT FOUND

**Explanation:**
The record specified by either KEY or RBA was not found.

**User response:**
Verify the record selection criteria and resubmit the job

**CKM08403E**  function FAILED. error: offset,data

**Explanation:**
A VER or REP failed for the stated reason

function = VER or REP

error = INVALID OFFSET OR LENGTH

or

DATA MISMATCH

or

VVR LENGTH CHANGE

offset = Offset of VER or REP

data = Data supplied with VER or REP

If error=INVALID OFFSET OR LENGTH, the offset is beyond the end of the record or the offset plus the length of the data extends beyond the end of the record.

If error=DATA MISMATCH, the data in the VER does not match the data in the record.

If error=VVR LENGTH CHANGE, the REP includes a modification of the VVR length that is inconsistent with the true length of the VVR. This not allowed as it may cause VVR record debllocking problems.

This message is followed by a dump of the record.

**User response:**
If error=INVALID OFFSET OR LENGTH, correct the offset or the length of the data. If error=DATA MISMATCH, determine the correct data from the dump of the record which follows.

**CKM08404I**  MAINTENANCE LEVEL: 
**CKM00084/yyyymmdd VER=v.nnn
REV=nn ptf**

**Explanation:**
Documents the maintenance level of the CKM00084 program where "yyyymmdd" is the assembly date, "v.nnn" is the version or release number, "nn" is the revision level and "ptf" is the latest change identifier.

**User response:**
None. This information can be used in problem determination.

**CKM08405W**  DELETE OF THE SELF DESCRIBING RECORD (SDR) OF A BCS IS NOT ALLOWED.

**Explanation:**
An attempt was made to delete the catalog self describing record (SDR) which has a key of 45X'00'.

**User response:**
Deletion of the SDR would make the catalog unavailable and is therefore not allowed by ZAP.

**CKM08406I**  DATA CI WRITTEN/ MODIFIED CI NUMBER nnnnnnn rrrrrrr

**Explanation:**
ZAP PATCH wrote or updated the control interval with CI number "nnnnnnnn". The CI has RBA value rrrrrrr.

**User response:**
None

**CKM08407I**  VER SUCCESSFUL. NO REP STATEMENTS FOUND OR VERONLY SPECIFIED. NO CHANGES MADE.

**Explanation:**
Either no REP statements were found or VERONLY was specified. Any REP statements will be checked for syntax but no changes are made.

**User response:**
None

**CKM08408E**  DATASET allocation FAILED

**Explanation:**
ZAP PATCH/DELETE was unable to allocate the input dataset.

**User response:**
Other error messages should give a detailed explanation of the problem.
CKM08409E • CKM08419E

CKM08409E DATASET UNallocation FAILED
Explanation:
ZAP PATCH/DELETE not able to FREE the input dataset.
User response:
Other error messages should give a detailed explanation of the problem.

CKM08410E allocation/unallocation error message text
Explanation:
This message follows messages CKM08408E/9E and contains the error message generated by dynamic allocation when attempting to allocate the dataset.
User response:
Use the error information to correct the name or resolve allocation problem. You may need to reference Dynamic allocation Error/Reason Codes contained in the manual "MVS Authorized Assembler Services Guide".

CKM08411E KEY LENGTH INVALID: 0 OR GREATER THAN 255
Explanation:
The length of the KEY value is greater than the KEY length of the dataset, or 255.
User response:
re-specify the KEY value.

CKM08412E ERROR LOADING CATALOG SERVICE ROUTINE - IGGCSI00'
Explanation:
Error loading the Catalog Search Interface module, IGGCSI00.
User response:
Check that IGGCSI00 is in SYS1.LINKLIB

CKM08413E IGGCSI00 RC=X'rr', REASON=X'sssssssss', DSN:
Explanation:
Locate for DSN failed with return X'rr' and reason code X'sssssssss'.
User response:
Check the dataset name specified is correct. Return and reason codes are explained in the manual: z/OS DFSMS: Managing Catalogs

CKM08414E DSM ENTRY NOT CATALOGED:
Explanation:
Catalog Search Interface did not locate the DSN.
User response:
Check that the DSN is spelled correctly.

CKM08415W KEY CHANGE DETECTED
Explanation:
The key portion of a keyed record was modified by a REP statement.
User response:
ZAP will attempt to WRITE the record with the "newkey" and delete the record with the "oldkey".

CKM08416E RBA VALUE CANNOT BE CALCULATED - CI_NUMBR TIMES CI_SIZE TO LARGE
Explanation:
ZAP CANNOT CALCULATE THE RBA VALUE FOR THE REQUESTED RECORD. THE RESULTING RBA VALUE EXCEEDS 2exp63
User response:
Review the CI number specified and the CI size of the dataset. The CI number will have to be reduced. If the problem was not caused by the CI specification, contact Technical Support.

CKM08418I CI NOT DELETED (EMPTIED) SINCE VERONLY SPECIFIED
Explanation:
On a DELETE request, VERONLY was specified so the DELETE action is not taken
User response:
None.

CKM08419E NO VER STATEMENTS SPECIFIED. VER IS REQUIRED WHEN PERFORMING A DELETE
Explanation:
No VER statements were specified and are required when performing a DELETE.
User response:
Specify a VER statement.
CKM08420E  Error on VSAM OPEN: RC=X’rr’
          ACBERFLG=X’cc’

Explanation:
VSAM OPEN failed with return code ‘rr’. The ACB error flag, ‘cc’, is displayed.

User response:
Review the VSAM Open error codes in the manual “z/OS DFSMS Macro Instructions for Data Sets”. Report the problem to Technical Support if it cannot be resolved.

CKM08421E  Error on VSAM GET|PUT|ERASE :
          RC=X’rr’  RPLERRCD=X’cc’

Explanation:
A non-zero return code, ‘rr’ with RPL error code ‘cc’ was received from a VSAM request.

User response:
The return code and rpl error code are documented in the manual “z/OS DFSMS Macro Instructions for Data Sets”. Report the problem to Technical Support if the problem cannot be resolved by the documentation.

CKM08423W  KEY WAS MODIFIED AND NEW RECORDCANNOT BE INSERTED BECAUSE DATASET NOT OPENED AS CLUSTER

Explanation:
A REP statement modified the key portion of a keyed record. However, the dataset is not OPENed as a cluster and the record with the modified key cannot be written.

User response:
If the record is to be written, specify the cluster name in the DSN parameter.

CKM08424W  Processing a component of an indexed object will generate a timestamp inconsistency. To correct this problem, an IDCAMS VERIFY DS(cluster.name) should be executed.

Explanation:
A PATCH or DELETE specified the component name of an indexed object. VSAM maintains a timestamp within the VVR showing the time at which the component was last closed. Since only one component was specified, its timestamp will differ from that of the other component. The next open of the cluster will receive an IEC161I 058(018)-061 message.

User response:
Execute, as suggested, and IDCAMS VERIFY before processing the cluster further.

CKM08426E  KEYWORD ‘KEY’ IS INCOMPATIBLE WITH INPUT DATASET TYPE: ttttt

Explanation:
KEY was specified but input DATASET is of type LINEAR or ESDS.

User response:
re-specify selection that is compatible with input dataset.

CKM08427E  LENGTH OF SPECIFIED KEY,(nnn), IS GREATER THAN DATASET KEY LENGTH,(nnn).

Explanation:
The length of the KEY value is greater than the KEY length of the dataset.

User response:
Check the KEY value and re-specify.

CKM08428E  FOR RRDS OR VRRDS, SPECIFIED KEY IS NOT DECIMAL NUMERIC

Explanation:
Non-decimal numeric value specified for KEY of a RRDS or VRRDS dataset.

User response:
Check the KEY value and re-specify a decimal numeric value that corresponds to a relative record.

CKM08429E  NUMERIC KEY EXCEEDS LIMIT: LIMIT IS 4,294,967,295

Explanation:
A decimal number larger than 4,294,967,295 was specified for a relative record number.

User response:
Check the KEY value. A relative record number cannot exceed 4,294,967,295.

CKM08430E  DELETE NOT ALLOWED WITH DATA OPENED AS ESDS

Explanation:
A VSAM component is being accessed as an ESDS and a DELETE was attempted.

User response:
VSAM ERASE is not supported on an ESDS.
**CKM08431E • CKM08527E**

**CKM08431E UNABLE TO RESERVE CATALOG**

**Explanation:**
The dataset specified is a catalog and to preserve the integrity of the catalog before an update, a RESERVE for the catalog resource must be issued. The RESERVE failed and the ZAP process is ended.

**User response:**
Resubmit job. If problem persists, contact Technical Support.

---

**CKM08432E CANNOT EMPTY CONTROL INTERVAL 0 OF A BCS**

**Explanation:**
A delete was attempted on control interval 0 of a catalog. This would destroy the catalog self describing record (SDR) and make the catalog unavailable.

**User response:**
If the dataset is a catalog, ZAP DELETE does not allow the catalog self describing record to be destroyed.

---

**CKM08497E INTERNAL ERROR optional text**

**Explanation:**
A ZAP PATCH internal error has occurred.

**User response:**
Contact Technical Support.

---

**CKM08500I Maintenance Level: CKM00085/assem.date Ver=nnnn Rev=nnn**

**Explanation:**
Informational message giving the current revision number of the specific program.

**User response:**
None required. In the event of a problem, Technical Support may request the revision number.

---

**CKM08502W No data to print based on parms specified.**

**Explanation:**
There was no VTOC record that matched the criteria specified.

**User response:**
Change the selection criteria.

---

**CKM08510E No Tree Header node found**

**Explanation:**
An unexpected condition was found during ZAP VTOC PRINT processing.

**User response:**
Report this message to Technical Support.

---

**CKM08511E UCBLOOK failed - Invalid VolSerc**

**Explanation:**
An unexpected condition was found during ZAP VTOC PRINT processing.

**User response:**
Check the volser requested. If the volser is online, report this message to Technical Support. If the volser is offline, ZAP VTOC can not process volumes that have been varied offline.

---

**CKM08512E CVAFSEQ failed**

**Explanation:**
An unexpected condition was found during ZAP VTOC PRINT processing.

**User response:**
Report this message to Technical Support.

---

**CKM08517E CKM01HEX formatting failure on rrrrrrr request. Return Code xxx**

**Explanation:**
An unexpected condition was found during ZAP VTOC PRINT processing.

**User response:**
Report this message to Technical Support.

---

**CKM08523E VTOC data invalid**

**Explanation:**
An unexpected condition was found during ZAP VTOC PRINT processing.

**User response:**
Report this message to Technical Support.

---

**CKM08527E CKM01VV1 tree I/O failure on rrrrrrr request. Return Code xxx**

**Explanation:**
An unexpected condition was found during ZAP VTOC PRINT processing.

**User response:**
If this was a PUT request and the ZAP VTOC is being executed from within ISPF, consider reducing the COUNT. Otherwise report this message to Technical Support.

CKM08530E  Error occurred writing original tree -
  RC: xx
Explanation:
An unexpected condition was found during ZAP VTOC PRINT processing.
User response:
Report this message to Technical Support.

CKM08531E  Error occurred writing duplicate tree -
  RC: xx
Explanation:
An unexpected condition was found during ZAP VTOC PRINT processing.
User response:
Report this message to Technical Support.

CKM08600I  Maintenance Level:
  CKM00086/ assem. date Ver=nnnn
  Rev=nnn
Explanation:
Informational message giving the current revision number of the specific program.
User response:
None required. In the event of a problem, Technical Support may request the revision number.

CKM08601I  ZAP VTOC xxxxxxxx successful.
Explanation:
The DELETE, PATCH or RENAME was successfully completed.
User response:
None required - informational.

CKM08603E  VER failed - mis-matched data
Explanation:
The VER string at the displacement specified did not match the string in the DSCB record. The DSCB record is printed.
User response:
Compare the VER string against the record shown. Correct the command and re-submit.

CKM08604E  DSCB not found in VTOC
Explanation:
No VTOC record was found matching the requested DSName and/or CCHHR. (The CCHHR is optional on DELETE and RENAME, but mandatory for PATCH; the DSName is required for DELETE or RENAME).
User response:
Request a ZAP VTOC PRINT and determine the actual record DSName and/or CCHR. Correct the command and re-submit.

CKM08607I  VER successful. No REP statements found or SIMULATE specified.
Explanation:
A VTOC record was found using the DSName and/or the CCHHR specified. The VER string matched the VTOC record at the displacement specified. The record was not changed.
User response:
Informational only.

CKM08608I  DSCB located. SIMULATE specified. No changes made.
Explanation:
A VTOC record was found using the DSName and/or the CCHHR specified. The record was not changed.
User response:
Informational only.

CKM08609I  No change requested
Explanation:
A ZAP VTOC PATCH was requested to toggle the CHANGED-BIT in a specific data set's format 1 DSCB. The bit setting was already in the requested state.
User response:
Informational only.

CKM08610E  Storage Obtain xxx failed, RC=nnn
Explanation:
An unexpected condition was found during ZAP VTOC processing.
User response:
Report this message to Technical Support.
CKM08611E • CKM09004E

CKM08611E  UCBLOOK failed - Invalid Volserc
Explanation:
An unexpected condition was found during ZAP VTOC processing.
User response:
Check the volser requested. If the volser is online, report this message to Technical Support. If the volser is offline, ZAP VTOC can not process volumes that have been varied offline.

CKM08612E  CVAFSEQ failed
Explanation:
An unexpected condition was found during ZAP VTOC processing.
User response:
Report this message to Technical Support.

CKM08613E  UCBLOOK failed
Explanation:
An unexpected condition was found during ZAP VTOC processing.
User response:
Check the volser requested. If the volser is online, report this message to Technical Support. If the volser is offline, ZAP VTOC can not process volumes that have been varied offline.

CKM08614E  Volume access error on Vol(vvvvvv) - mmmmmmmmm
Explanation:
An unexpected condition was found during ZAP VTOC processing.
User response:
Check the volser requested. If the volser is online, report this message to Technical Support. If the volser is offline, ZAP VTOC can not process volumes that have been varied offline.

CKM08617E  CKM01HEX formatting failure on rrrrrr request. Return Code xxx
Explanation:
An unexpected condition was found during ZAP VTOC processing.
User response:
Report this message to Technical Support.

CKM08697E  Internal error llll RC=xxxxx
mmmmmmmm
Explanation:
An unexpected condition was found during ZAP VTOC processing.
User response:
Report this message to Technical Support.

CKM09001I  CKM00090 Maintenance Level (REV=x,PMR=x,REVDATE=x)
Explanation:
Display of the version of module CKM00090,
User response:
None.

CKM09002I  CATSCRUB processing complete. Highest return code was NNN
Explanation:
Command execution termination message.
User response:
Generally none.

CKM09004E  Installation security server has returned failure codes NNNN NNNN
Explanation:
During command processing, the product has communicated with the installation security server.
For the message "HAS DENIED ACCESS TO THIS COMMAND", the Security Server has determined that you do not have authority to use the BACKUP command.
For the message "HAS RETURNED FAILURE CODES NNNN NNNN", the Security Server has determined an error other than "DENIED ACCESS". Refer to the OS390 Security Server RACROUTE manual for a description of these codes. The first is the "SAFRETURN" value and the second is the "SAFREASON" value.
User response:
Contact the installation security administrator if this unexpected. You will need to tell them the name of the command in use. In this case it is CATSCRUB.

CKM09004E  Installation security server has returned failure codes NNNN NNNN
Explanation:
During command processing, the product has communicated with the installation security server.
For the message "HAS DENIED ACCESS TO THIS COMMAND", the Security Server has determined that you do not have authority to use the BACKUP command.

For the message "HAS RETURNED FAILURE CODES NNNN NNNN", the Security Server has determined an error other than "DENIED ACCESS". Refer to the OS390 Security Server RACROUTE manual for a description of these codes. The first is the "SAFRETURN" value and the second is the "SAFREASON" value.

User response:
Contact the installation security administrator if this unexpected. You will need to tell them the name of the command in use. In this case it is CATSCRUB.

**CKM10000E** mmmmmmm Module Missing For Subcommand sssssssssssss

**Explanation:**
The module corresponding to DIAGNOSE command sssssssssss does not appear to be in the load module libraries.

**User response:**
Via IEHLIST, AMBLIST, ISPF, or some other installation utility, prepare a listing of the load module library directory and Contact Technical Support.

**CKM10002E** Unrecognizable Subcommand Of DIAGNOSE: sssssssssssssss

**Explanation:**
The DIAGNOSE command sssssssssssssss is not in the supported list of subcommands.

**User response:**
Ensure that the subcommand of DIAGNOSE is specified correctly.

**CKM10003E** Command Has No Operands

**Explanation:**
The DIAGNOSE command had no operands.

**User response:**
Ensure that the subcommand of DIAGNOSE is specified correctly. Most likely, the command was continued on a second line but the continuation marker was not present.

**CKM10009I** DIAGNOSE Function Complete. Return Code ccc

**Explanation:**
Command execution termination message.

For return code 90
Your product code and/or license for the product is not valid or you are not licensed for this command.

**User response:**
Generally none.

For return code 90 - Contact Technical Support.

**CKM11101E** COMPAREVVDSS OR COMPARESTORAGEGROUP KEYWORD MISSING

**Explanation:**
One of these two keywords, or their abbreviations must be in every execution of DIAGNOSE VVDS-BCS. (Note: COMPARESTORAGEGROUP is not implemented at this time)

**User response:**
Ensure the keyword is coded correctly.

**CKM11102E** No Volumes Meet The COMPAREVVDSS OR COMPARESTORAGEGROUP Specifications, Or, All Volumes Have Been Excluded

**Explanation:**
After scanning online UCBs, based on discrete serial numbers, masks, and data from SMS, no volumes have been selected for processing. (Note: COMPARESTORAGEGROUP is not implemented at this time)

**User response:**
Ensure the masks and/or serials are specified correctly. Ensure that exclude specifications did not remove all the volumes.

**CKM11103I** The Following Volumes Have Met All Selection Requirements And Will Be Processed: x x x x x x x

**Explanation:**
After scanning online UCBs, based on discrete serial numbers, masks, and data from SMS, the list of volumes have been

**User response:**
None.

**CKM11104E** INSTALLATION SECURITY SERVER HAS RETURNED FAILURE CODES NNNN NNNN

**Explanation:**
Chapter 25. Messages and Codes for Advanced Catalog Management 391
During command processing, the product has communicated with the installation security server. For the message "HAS DENIED ACCESS TO THIS COMMAND", the Security Server has determined that you do not have authority to use the DIAGNOSE VVDS-BCS command. For the message "HAS RETURNED FAILURE CODES NNNN NNNN", the Security Server has determined an error other than "DENIED ACCESS". Refer to the OS390 Security Server RACROUTE manual for a description of these codes. The first is the "SAFRETURN" value and the second is the "SAFREASON" value.

User response:
Contact the installation security administrator if this unexpected. You will need to tell them the name of the command in use. In this case it is DIAGNOSE VVDS-BCS.

CKM11104E INSTALLATION SECURITY SERVER HAS RETURNED FAILURE CODES NNNN NNNN

Explanation:
During command processing, the product has communicated with the installation security server. For the message "HAS DENIED ACCESS TO THIS COMMAND", the Security Server has determined that you do not have authority to use the DIAGNOSE VVDS-BCS command. For the message "HAS RETURNED FAILURE CODES NNNN NNNN", the Security Server has determined an error other than "DENIED ACCESS". Refer to the OS390 Security Server RACROUTE manual for a description of these codes. The first is the "SAFRETURN" value and the second is the "SAFREASON" value.

User response:
Contact the installation security administrator if this unexpected. You will need to tell them the name of the command in use. In this case it is DIAGNOSE VVDS-BCS.

CKM11105E DELETE-TEMPSYS OR TEMPSYS KEYWORD CONTAINS INVALID DATA: xxx

Explanation:
The command value for the keyword DELETE-TEMPSYS or TEMPSYS was specified, but was neither ALLOW, DELETE, or a numeric value between 0-999.

User response:
Specify a correct value, or omit the keyword from the command to use the default value from the INI SCKMPARM member.

CKM11110I CURRENT MASTER CATALOG IS: master.catalog.name

Explanation:
Informational.

User response:
None.

CKM11111I DIAGNOSE VVDS-BCS MAINTENANCE LEVEL: program/REV=level

Explanation:
Informational.

User response:
None. This message indicates the current fix level for the DIAGNOSE VVDS-BCS program. The information can expedite Technical Support's research process while handling problem reports or other assistance requests.

CKM11112E VALIDATION ERROR FOR ENTRY: mmmmmmmmmmmmm DESCRIPTION OF ERROR: eeeeeeeeee

Explanation:
During preliminary parsing of various keywords, the product encountered invalid characters in an entry for a keyword.

User response:
Correct the specification for the mask or entry name.

CKM11116I THE FOLLOWING ENTRIES/MASKS ARE TO BE PROCESSED DURING kkkkkkkk PROCESSING

Explanation:
During preliminary parsing of various keywords, the product has accepted the list of entries and/or masks for processing.

User response:
None.

CKM11117I VOLUME volser EXCLUDED VIA INI GLOBAL_EXCLUDE PROCESSING.

Explanation:
The Volume (VVDS) was selected via the command specifications, but was excluded from processing due to the VOLUME token in the GLOBAL_EXCLUDE section via the SCKMPARM INI.

User response:
None.
**CKM11119W** VTOC ENTRY dddddddd IS NOT CATALOGUED

**Explanation:**

After processing the entire VVDS, one or more VTOC entries were not matched with VVDS entries. Besides not being in the VVDS, those listed here were not catalogued in any system catalog.

**User response:**

In many cases, these are system datasets that are not, and will never be catalogued nor will they ever appear in a VVDS. If the volume is not SMS managed, only VSAM files appear in the VVDS, leading to an increased possibility of entries in this category. Typically, HSM migrated files appear here with an internally assigned name, and are tracked by HSM.

However, there is a possibility that these are remnants of catalog management problems and these files will need to be catalogued.

The product will create control statements to catalog these files. It is very possible that the files listed here should not be catalogued. It is up to the user to make this determination.

**CKM11120W** VTOC ENTRY NOT LOCATED IN VVDS: dddddd

**Explanation:**

After processing the entire VVDS, one or more VTOC entries were not matched with VVDS entries.

**User response:**

In many cases, these are system datasets that are not, and will never appear in a VVDS. If the volume is not SMS managed, only VSAM files appear in the VVDS, leading to an increased possibility of entries in this category. Typically, HSM migrated files appear here with an internally assigned name, and are tracked by HSM.

However, there is a possibility that these are remnants of catalog management problems and these file will need to be deleted. If it is determined that these are unwanted entries, IDCAMS DELETE...VVR or DELETE...NVR control statements will be necessary to remove these from the disk.

There are circumstances where this valid, most notably for a multi volume SMS NonVSAM dataset. Only the first volume of a multi volume SMS NonVSAM dataset will have a VVDS entry. When this detected, the additional message

**NOTE** IT SHOWS EVIDENCE OF BEING PART OF A MULTI VOLUME DATASET: NO FIX GENERATED.

will appear.

When the product does create control statements to delete this category of file, it is very possible that the

**CKM11119W** ERROR DURING VVDS PROCESSING: .processing phase..

**Explanation:**

While reading the VVDS, several errors or other unexpected conditions can occur. The processing phase will be noted.

**User response:**

If the "processing phase" is "No user VVR/NVRs" no further action need be taken, unless the volume is known to have user datasets. In this case, that is, when the product indicates no user VVRs/NVRs, and it is known that they exist, or for all the other processing phases listed, contact Technical Support.

**CKM11121I** PRELIMINARY CHARACTERISTICS OF VVDS SYS1.VVDS.VxxxxxxCONTROL INTERVALS allocated nnnn CATALOGS REFERENCING nnnn SMS MANAGED YES/NO

**Explanation:**

While reading the VVDS, the product keeps statistics of what has been detected.

**CKM11122I** FINAL CHARACTERISTICS OF VVDS SYS1.VVDS.Vxxxxxx PRIMARY VVRS (Z) ENCOUNTERED nnnn - SECONDARY VVRS (Q) ENCOUNTERED nnnn - NON VSAMS (N) ENCOUNTERED nnnn - VVCNS ENCOUNTERED - VVCMS ENCOUNTERED - UNKNOWN TYPES ENCOUNTERED - While reading the VVDS, The product keeps statistics of what has been detected.

**Explanation:**

While reading the VVDS, The product keeps statistics of what has been detected.

**CKM11123I** NO WARNINGS OR ERRORS ISSUED WHILE PROCESSING VVDS SYS1.VVDS.

**Explanation:**

The product did not determine any problems with the VVDS or VTOC.

**User response:**

none.
User's Guide

### CKM1125I  CATALOG SUMMARY FOR VVDS

**Explanation:**

- - - - CATALOG NAME - - - - VVR/NVR COUNT

CATALOG1.USERCAT 200 mmmmmmmmm

CATALOG2.USERCAT 2,020

Additional observations by the product while processing the VVDS. In addition, various messages may appear to the right of the VVR count. These messages are: No VVRs or NVRs reference this catalog Excluded by user via EXCLUDEBCS(...) Not listed in the VVCR/VVCN Could not be dynamically allocated Could not be opened for processing

**User response:**

none.

### CKM1126I NO CATALOGS ARE LISTED OR REFERENCED IN VVDS

**Explanation:**

After scanning the VVCR list of catalogs, the product determined that no user catalogs have ever controlled files on this volume.

**User response:**

If this a newly allocated volume, this a typical message and no further action need be taken. If this an existing volume and it is known that numerous files exist on the volume, contact Technical Support.

### CKM1127W F1 DSCB NOT IN VTOC FOR dddddddddddd

**Explanation:**

While diagnosing the VVDS entry for dddddddddddd, it was determined that its corresponding VTOC entry was missing.

**User response:**

VTOC entries are critical for allocation and protection of allocated space on DASD. If the VTOC entry is missing for a file, the chances are good that the file does not exist or is severely damaged.

The product has generated a DELETE...NVR or DELETE...VVR to remove the VVDS entry for this file. Once deleted, the file can be restored from a previous backup.

### CKM1128I PROCESSING COMPLETE FOR VVDS

**Explanation:**

The product has completed processing for a volume.

### CKM1129W CANNOT DISTINGUISH RECORD IN VVDS

**Explanation:**

While processing a VVDS record, the product has encountered an unknown record type. The record is displayed in hex.

**User response:**

Contact Technical Support.

### CKM1130W BCS bbbbbbb IS NAMED AS THE OWNING CATALOG FOR ddddddddD BUT IS NOT LISTED IN THE VVCR

**Explanation:**

The product has discovered a catalog name (bbbbbbbb) named as owning a VVR or NVR, but the catalog was not listed in the list of catalogs for this volume.

**User response:**

The product has generated an IDCAMS DEFINE CLUSTER recatalog for the VVDS for the named catalog. After executing this repair, the problem will not be there.

### CKM1131W UNABLE TO LOCATE COMPONENT (c) ccccccccc IN BCS bbbbbb

**Explanation:**

While processing a VVDS record for ccccccccc which was record type Z, Q, or N (replacing the "c"), the product could not locate the corresponding VSAM truename record or the NonVSAM record. For VSAM, this accompanied by a CKM1137W or CKM1138W message.

**User response:**

If the FIXDATASET or FIXFILE keyword was coded, the product generated two sets of control statements to correct this situation.

If this a good file, it is uncatalogued. The product has generated an IDCAMS DEFINE CLUSTER RECATALOG control statement.

If this an unwanted file, the product has generated an IDCAMS DELETE...NVR or DELETE...VVR as appropriate.

Decide which fix is desired and pass it to IDCAMS. To assist in locating the associated set IDCAMS statements, see the accompanying CKM1184W message for the cross reference number.
CKM11133W CANNOT PROCESS BCS bbbbbbbbbbb ON BEHALF OF ccccccccc (c) DUE TO PREVIOUS ERRORS

Explanation:
While attempting to process a VVDS record for ccccccccc which was record type Z, Q, or N (replacing the "c"), the product encountered one of several errors accessing the corresponding catalog.

User response:
Most likely, there will be a IKJ56228I DATA SET UCAT.EH.DELETED.CAT NOT IN CATALOG OR CATALOG CAN NOT BE ACCESSED message along with a CKM11197W ATTEMPT FOR DYNAMIC allocation (4) HAS FAILED FOR UCAT.EH.DELETED.CAT message. If so, determine why the catalog is not available. Perhaps it exists, but is not connected to the product's executing system's master catalog.

CKM11134W UNABLE TO LOCATE VOLUME vvvvv INFORMATION (c) WITHIN BCS RECORD FOR ccccccccccccc

Explanation:
While attempting to process a VVDS record for ccccccccc which was record type Z, Q, N, or a Format 1 DSCB, the product was not able to locate the corresponding volume information within the catalog record.

This message can be generated from several locations within DIAGNOSE VVDS-BCS. To identify where the message was generated, the "c" is replaced by an alphabetic identifier. The origin of the message is of no consequence to the user.

If the additional text "CLUSTER MAY BE IN AN INCOMPLETE STATE OF MIGRATION" also appears, then a VSAM component truename was found to be pointing to a Non-VSAM catalog entry to volume MIGRAT.

User response:
Most likely, the dataset exists on two different volumes, one of which is invalid.

If the current catalog pointer is the correct version, this VVR/NVR should be deleted. First, the current catalog pointer has to be deleted with DELETE...NOSCRATCH followed by a DELETE...VVR or DELETE...NVR for this unwanted file. Second, the original pointer must be restored with a DEFINE CLUSTER recatalog or DEFINE NONVSAM recatalog command.

If the current catalog pointer is not correct, and the uncatalogued version triggering this message is correct, the incorrect pointer and corresponding file must be deleted with DELETE... . Then, this entry can be recatalogued.

CKM11135W BASE CLUSTER NAME IN VVR DOES NOT MATCH BASE CLUSTER NAME IN TRUENAME RECORD

Explanation:
While attempting to process a VVDS record for a VSAM base cluster's component, the product determined a "truename loop failure." This occurs when a VSAM component's truename record indicates it is part of a base cluster but that name is not part of the base cluster's record.

User response:
The errant records should be deleted and DEFINE CLUSTER recatalog should be performed.

CKM11136W ALTERNATE INDEX NAME IN VVR DOES NOT MATCH ALTERNATE INDEX NAME IN TRUENAME RECORD.

Explanation:
While attempting to process a VVDS record for a VSAM Alternate Index's component, the product determined a "truename loop failure." This occurs when a VSAM component's truename record indicates it is part of a base cluster but that name is not part of the base cluster's record.

User response:
The errant records should be deleted and DEFINE ALTERNATEINDEX recatalog should be performed.

CKM11137W UNABLE TO LOCATE BASE CLUSTER ddddddIN BCS bbbbbbbbbbb FOR COMPONENT (c) ccccccccccccc

Explanation:
While attempting to process a VVDS record for ccccccccc which was record type Z, Q, or N (replacing the "c"), the product was not able to locate the corresponding base cluster record of name dddddd within catalog bbbbbbbbbbb. For VSAM, this message accompanies a CKM11132W message.

User response:
This condition indicates that the component is not catalogued. The product will have generated a a DEFINE CLUSTER recatalog to remedy this problem.

CKM11138W TRUENAME ttttttttt NOT AVAILABLE BUT CORRESPONDING CLUSTER cccccccccccc IS AVAILABLE

Explanation:
While processing a VVDS record for VSAM component tttttttt the product was not able to locate the BCS truename record but was able to find the base cluster...
record of name ccccccccc. For VSAM, this message accompanies a CKM11132W message.

**User response:**
This condition indicates that the component is not catalogued. A truename record does not exist. If a truename record exists, it must be deleted with a DELETE...TRUEENAME command, followed by a DEFINE CLUSTER recatalog.

---

**CKM1139W UNABLE TO LOCATE GENERATION GNNNvNNN WITHIN GENERATION BASE bbbbbbbbbbbbb**

**Explanation:**
While processing a Generation Data Set entry of generation "gennnnvnn", the product was not able to locate this generation value within the existing GDS base record.

**User response:**
This condition indicates that the generation is not catalogued. Either catalogue it with DEFINE NONVSAM recatalog or delete it with DELETE...NVR.

---

**CKM1141E ERROR DURING UCBLOOK FUNCTION FOR VOLUME vvvvvv R15=rr R0=cc**

**Explanation:**
During preliminary processing of the VVDS, The product encountered difficulties getting unit control block information.

**User response:**
Contact Technical Support.

---

**CKM1142E ERROR DURING CVAF FUNCTION FOR VOLUME vvvvvv FUNCTION=fff R15=rr CVSTAT=ccccc**

**Explanation:**
During preliminary processing of the VVDS, the product encountered difficulties getting VTOC information.

**User response:**
Contact Technical Support.

---

**CKM1143W DUPLICATE FORMAT 1 DSCB IN VTOC ON VOLUME vvvvv DSN=ddddddd**

**Explanation:**
During preliminary processing of the VVDS, the product encountered difficulties getting VTOC information. A duplicate DSN is extraordinary!

**User response:**
Contact Technical Support.

---

**CKM1144W A BCS TYPE(x) ENTRY EXISTS FOR DSN=data.set.name, BUT DATASET ON VOLUME(vvvvvv) VOLSEQ(nn) IS NOT A PART OF THIS STRUCTURE.**

**Explanation:**
A dataset or VSAM component exists on the indicated volume. The dataset name is cataloged, but the existing BCS entry does not include the physical dataset on this volume. The dataset is considered to be an orphan.

**User response:**
If FIXFILE or FIXDATASET was specified, a fix is generated that will delete the physical dataset on the volume.

---

**CKM1145E UNABLE TO OPEN FIXFILE DDNAME=ddddddd**

**Explanation:**
During preliminary parsing of various keywords, The product experienced difficulty in opening the FIXFILE data set. This message will be accompanied by an OS/390 message.

**User response:**
Depends on the OS/390 message.

---

**CKM1146I & & TEMP DATASET NOT IN USE AND ASSUMED TO BE RESIDUAL. VOL=vvvvv,DSN=SYSyddd. Thhmmss.RA000.ijijijj.Rxxxxxxx**

**Explanation:**
Depending upon the DELETE-TEMPSYS option in effect, the temporary dataset has been determined to be residual debris due to a system crash or premature address space termination at end of memory. The dataset does not appear to be allocated by any current task.

**User response:**
If FIXDATASET or FIXFILE was specified, a fix is generated to delete the physical dataset from the indicated volume.

---

**CKM1147W DUPLICATE NVR RECORD TYPE(N) ENCOUNTERED IN VVDS. VOL=vvvvv,DSN=data.set.name**

**Explanation:**
A Duplicate VVR or NVR entry was encountered in the VVDS. For VVR records, the types may be TYPE(Z) or TYPE(Q). The VVDS dataset contains some minor corruption.

**User response:**
None.
**CKM11147W** DUPLICATE NVR RECORD TYPE(N) ENCOUNTERED IN VVDS. VOL=vvvvv,DSN=data.set.name

**Explanation:**
A Duplicate VVR or NVR entry was encountered in the VVDS. For VVR records, the types may be TYPE(Z) or TYPE(Q). The VVDS dataset contains some minor corruption.

**User response:**
None.

**CKM11150I** ONE OR MORE DELETE...VVR OR DELETE...NVR COMMANDS HAVE BEEN GENERATED FOR THIS VVDS

**Explanation:**
Because of a FIXDATASET or FIXFILE keyword, and due to prevailing conditions within the VVDS, the product generated one or more DELETE commands that require IDCAMS's access to the VVDS via a DD card.

**User response:**
Add this DD card to the IDCAMS JCL if the DELETE commands are to be used.

**CKM11154W** DATASET NAME FORMAT IS INVALID FOR CATALOGS.

**Explanation:**
A Format-1 DSCB in the VTOC contains a dataset name that cannot be cataloged. Additional information immediately follows that identifies this dataset.

**User response:**
If this dataset is not used, it can usually be scratched using the IEHPROGM utility, provided that you have sufficient security authority (via RACF, etc.) to do so. Otherwise, please contact Technical Support, and provide the entire sysout listing, including the job log. Technical Support may also request additional information.

**CKM11155E** CSI WORK AREA

**Explanation:**
00000000 040C0000 8127E510 00000000 00000000 "... 00000010 00FCFBC8 00000000 070C0000 83DFF928 "... A catastrophic error occurred while accessing catalog information via the Catalog Search Interface. This message includes necessary diagnostic information to determine the cause of the error.

**User response:**
Contact Technical Support. Have the complete jobstream available. This includes the JES2/3 job log, JCL listing, and complete //SYSPRINT output from the product. It is possible additional information will be required.
Explanation:

While performing comparisons between VVDS/VTOC entries and a BCS, the product determined that the catalog entry was not the expected type for a corresponding VTOC and/or VVDS entry.

For example, Format 1 DSCB entry "A.B.C" was represented in the catalog by a Cluster (VSAM) name. Only VSAM components, non VSAM datasets and generation data entries may have VTOC entries.

"ddddddd" is replaced by the VTOC entry's name.
"e" is replaced by the catalog's entry type.
"tttttttt" is replaced by the definition of the entry type.

For example, if the catalog entry type was "R", the definition would be "PATH".

As appropriate, the "CATALOG ENTRY TYPE" line or the "VVDS ENTRY TYPE" line may or may not appear in the message.

User response:

The product is unable to resolve this mismatch. The user is urged to execute an IDCAMS LISTCAT ENTRIES(ddddddd)ALL of the entry name in question.

This should be followed by an IEBLIST LISTVTOC FORMAT,VOL=3390=volser of the entry's volume, or an IDCAMS PRINT IDS(SYS1.VVDS.Vvolser) of the entry's volume.

After determining the cause for the mis-matched entries, appropriate action should be taken. Most likely, the VTOC entry discovered by the product is incorrect and should be removed.
**CKM11156W DUE TO COMPLEXITY OF THE MISMATCH, NO FIX HAS BEEN GENERATED**

**Explanation:**

While performing comparisons between VVDS/VTOC entries and a BCS, the product determined that the catalog entry was not the expected type for a corresponding VTOC and/or VVDS entry.

For example, Format 1 DSCB entry "A.B.C" was represented in the catalog by a Cluster (VSAM) name. Only VSAM components, non VSAM datasets and generation data entries may have VTOC entries.

"dddddddd" is replaced by the VTOC entry's name.

"e" is replaced by the catalog's entry type.

"tttttttt" is replaced by the definition of the entry type.

For example, if the catalog entry type was "R", the definition would be "PATH".

As appropriate, the "CATALOG ENTRY TYPE" line or the "VVDS ENTRY TYPE" line may or may not appear in the message.

**User response:**

The product is unable to resolve this mismatch. The user is urged to execute an IDCAMS LISTCAT ENTRIES(ddddddd)ALL of the entry name in question.

This should be followed by a IEHLIST LISTVTOC FORMAT,VOL=3390=volser of the entry's volume, or an IDCAMS PRINT IDS(SYS1.VVDS.Vvolser) of the entry's volume.

After determining the cause for the mis-matched entries, appropriate action should be taken. Most likely, the VTOC entry discovered by the product is incorrect and should be removed.

**CKM11157W MODEL DSCB FOR GDG AND THE BCS ARE NOT LOCATED ON THE SAME VOLUME.**

**Explanation:**

GDG MODEL DSCB: VOL=vvvvv1 DSN=data.set.name

BCS OF GDGBASE: VOL=vvvvv2

DSN=usercatalog.name

DIAGNOSE VVDS-BCS detected a nonSMS Model DSCB (data set with space of zero tracks). The Model DSCB name matched a generation data set base name (entry type "B"). For this DSCB to be used, the DSCB must be on the same volume as the BCS. However, DIAGNOSE determined that the DSCB was not on the BCS' volume.

**User response:**

Most likely, the BCS has been moved from its original location. The listed DSCB should me moved from the volume that is indicated as "vvvvv1", to the volume indicated as "vvvvv2".

If FIXDATASET or FIXFILE was specified, a fix is generated to delete the physical dataset from the indicated volume that is indicated as "vvvvv1".

**CKM11160E NO STORAGE GROUPS RETURNED BY SSI**

**Explanation:**

SSI did not return any storage groups to CKM01SMF. Processing terminates.

**User response:**

Check that storage groups are defined on the system. If unable to determine the cause of this message, contact Technical Support. Have available the listing containing this message.
CKM11165W • CKM11187E

**CKM11165W** NO VOLUME SERIALS RETURNED FOR STORAGE GROUP: storage group

Explanation:
SSI did not return any volsers for the storage group to CKM01SMF. Processing continues.

User response:
None.

**CKM11166i** THE FOLLOWING VOLSERS WERE DERIVED FOR KEYWORD: keyword list of volume serial numbers

Explanation:
SSI returned the volume serials from specified storage groups. Processing continues.

User response:
None.

**CKM11175E** REQUIRED TOKEN xxxxxxx xxxxx MISSING FROM INI MEMBER.

Explanation:
while reading logic control values from the INI file, the product determined that the named token has a value out of range, contrary to accepted values, or is required and not specified.

User response:
Correct the named token's value according to instructions.

**CKM11175E** REQUIRED TOKEN xxxxxxx xxxxx MISSING FROM INI MEMBER.

Explanation:
while reading logic control values from the INI file, the product determined that the named token has a value out of range, contrary to accepted values, or is required and not specified.

User response:
Correct the named token's value according to instructions.

**CKM11176i** TOKEN xxxxxxx xxxxx VALUE = vvv NOW IN EFFECT

Explanation:
while reading logic control values from the INI file, The product determined that the named token has a value that will control program logic.

User response:
None.

**CKM11183I** THIS VVR/NVR/DSCB HAS BEEN CONSIDERED BEFORE. SEE CORRESPONDING FIX: NNN

Explanation:
During VVDS processing, the product has already processed this record on behalf of another within a base cluster or GDG family.

User response:
Reference the listed fix number for corrective action.

**CKM11185I** RECORD FROM VVDS

Explanation:
During VVDS processing, the product has determined some sort of illogical condition and is displaying the errant VVDS or BCS record.

User response:
None. This message is produced because of MESSAGETEXT(FULL).

**CKM11185I** RECORD FROM VVDS

Explanation:
During VVDS processing, the product has determined some sort of illogical condition and is displaying the errant VVDS or BCS record.

User response:
None. This message is produced because of MESSAGETEXT(FULL).

**CKM11186I** THIS CATALOG APPEARS MULTIPLE TIMES IN THE VVCR/VVCN FAMILY: bbbbbbbbbbb

Explanation:
While decoding the list of catalogs referencing this BCS the product detected the same catalog more than one time.

User response:
Contact Technical Support.

**CKM11187E** ERROR DURING CKM01VV1 (cc) table name TABLE PROCESSING R15=rr hhhhhhh hhhhhhhh CKM11187E KEY=

Explanation:
the product uses numerous sorted tables for processing. An error occurred while processing one of the tables.

User response:
If the two hex displays contain 00000008 xx0005xx (where "xx" are insignificant digits) check with the
installation's system programmer and the IEFUSI exits. This a result of limitations on dataspace creation enforced by the exit. Depending on the command, and options within the command, there can be more than 20 dataspaces in use at a time within the product. For all other codes, Contact Technical Support.

**CKM11188E** DATA STRUCTURE IN BCS | VVDS RECORD AT OFFSET X’nnnn’ IS ILLOGICAL

**Explanation:**

DIAGNOSE VVDS-BCS has detected a structural problem with the contents or nature of a BCS record. If MESSAGE-TEXT(FULL) is in effect, the CKM11188I message displays the record in error.

**User response:**

Contact Technical Support. Ensure that the full sysout listing of this jobstream is available that has MESSAGE-TEXT(FULL) in effect.

**CKM11189W** REQUESTED VOLUME SERIAL NOT ONLINE: sssssss

**Explanation:**

The product determined that the discrete serial number specified in a COMPAREVVDS keyword was not online.

**User response:**

Correct the serial.

**CKM11190E** VALUE ENTERED FOR KEYWORD GREATER THAN nnn

**Explanation:**

The product determined that the value placed in a keyword exceeded specification.

**User response:**

Correct the value.

**CKM11191E** KEYWORD HAS NO OPERANDS

**Explanation:**

The product determined that no values were placed in a keyword that required values.

**User response:**

Correct the value.

**CKM11192E** KEYWORD HAS MORE THAN 1 OPERAND; ONLY 1 ALLOWED

**Explanation:**

The product determined that more than one value was coded in a keyword that is restricted to one value.

**User response:**

Correct the value.

**CKM11193E** GETMAIN FAILED (c) MVS R15=rrr REQUEST SIZE (KB)=sss

**Explanation:**

The product uses several dynamic areas for processing. An error occurred while acquiring one of these areas.

**User response:**

Contact Technical Support.

**CKM11194W** DUPLICATE ENTRY OR MASK ENCOUNTERED -- IGNORED: sssssssss

**Explanation:**

The product determined that more than an entry or mask was specified more than one time.

**User response:**

Correct the value.

**CKM11195W** NO VOL/STG MATCH FOUND;

**Explanation:**

For VOL, the specified volser, or, the volser derived from a storage group, was not found. For STG, the specified storage group was not found. Processing continues.

**User response:**

None required.

**CKM11196W** ATTEMPT FOR DYNAMIC allocation (c) HAS FAILED FOR ddddddd

**Explanation:**

The product was unable to dynamically allocate a VVDS, Catalog, or the FIXDATASET. There will be one or more IKJ messages describing the error.

**User response:**

For FIXDATASET, specify the correct data set name. For all others, this indicates the VVDS or Catalog does not exist. This may or may not be valid.
CKM1198E  CKM11204E

CKM1198E  CKM01SMF ERROR; RETURN
CODE=nnnn LOC: lllllll entry

Explanation:
An error occurred using CKM01SMF to obtain SSI
information for the 'entry'. lllllll is the internal location
where the error occurred. Processing terminates.

User response:
Contact Technical Support. Have available the listing
containing this message.

CKM11200I  DIAGNOSE ALIAS MAINTENANCE
LEVEL: CKM00112/REV=nn

Explanation:
Informational message giving the current revision
number of the specific program.

User response:
None required. In the event of a problem, Technical
Support may request the revision number.

CKM11201E  "COMPAREMASTERCATALOG"
KEYWORD MISSING

Explanation:
The "COMPAREMASTERCATALOG" keyword (or its
abbreviation "CM") must be included every execution of
DIAGNOSE ALIAS.

User response:
Ensure the keyword is coded correctly.

CKM11202I  "FIXDS" OR "FFILE" KEYWORD NOT
DETECTED DIAGNOSE ALIAS WILL
PROCEED IN REPORT-ONLY MODE

Explanation:
The "FIXDATASET" or "FIXFILE" keyword (or the
abbreviations "FIXDS" and "FFILE") was not included
therefore DIAGNOSE ALIAS will report on
descrepancies and will not produce a file containing the
fixes.

User response:
None.

CKM11203W  Alias XXX defined to be in YYY does
not exist or is offline

Explanation:
The user catalog YYY named in the alias record for
XXX could not be allocated and opened. Fixes will be
created if requested.

User response:
After deciding that this alias name should be used in the
CKM11205I  Corresponding fix: suppressed by EXCLUDE-BCS

Explaination:
A fix is required to resolve a problem indicated in the previous message. However, the INCLUDE/EXCLUDE keywords indicated that the fix should not be produced.

User response:
None.

---

CKM11205I  Corresponding fix: suppressed by EXCLUDE-BCS

Explaination:
A fix is required to resolve a problem indicated in the previous message. However, the INCLUDE/EXCLUDE keywords indicated that the fix should not be produced.

User response:
None.

---

CKM11205I  Corresponding fix: suppressed by EXCLUDE-BCS

Explaination:
A fix is required to resolve a problem indicated in the previous message. However, the INCLUDE/EXCLUDE keywords indicated that the fix should not be produced.

User response:
None.

---

CKM11207W  Alias XXX references catalog yyy which is inconsistent

Explaination:
A fix is required to resolve a problem with a alias that doesn't reference the same user catalog from all master catalogs.

User response:
After deciding which entry is correct, remove the "*/" from the corresponding FIXFILE output record and execute IDCAMS with the FIXFILE as //SYSIN. Warning: Use of DIAGNOSE ALIAS with the DEFINEALIAS (DEFA) option with PEER for more than two catalogs will create multiple DEFINE statements and using these directly in IDCAMS will result in errors.

---

CKM11212E  MASK VALIDATION ERROR FOR ENTRY: mmmmmmmmmmmmm
DESCRIPTION OF ERROR: eeeeeeeeeeee

Explaination:
During preliminary parsing of various keywords, the product encountered invalid characters in a catname/alias mask.

User response:
Correct the specification for the mask.

---

CKM11216I  THE FOLLOWING ALIAS NAMES/DSNS/MASKS ARE TO BE PROCESSED DURING kkkkkkkkk PROCESSING

maskname1
...
aliasname1
...

During preliminary parsing of various keywords, the product has accepted the list of alias names, DSNs, and/or masks for processing.

User response:
None.

---

CKM11221I  EXTRACTING USERCATALOG AND ALIAS INFORMATION FROM mcatname

Explaination:
After identifying the catalogs used as input to DIAGNOSE ALIAS based on the COMPAREMASTERCATALOG keyword, must locate usercatalog and alias name information within the specified catalog. This message identifies the master catalog being interrogated.
CKM11222I • CKM11225W

User response:
None.

CKM11222I  (multiple line message; see Explanation)
Explanation:
MCAT MAXIMUM RECORD LENGTH: nn,nnn
nnn RECORDS IN CATALOG
nnn ALIAS RECORDS FOR USERCATALOGS
nnn USERCATALOG RECORDS

After identifying the master catalogs used as input to DIAGNOSE ALIAS based on the COMPAREMASTERCATALOG keyword, DIAGNOSE ALIAS has located usercatalog and alias name information within the master catalog named in CKM11221I. This message summarizes the results of the interrogation.

"MCAT MAXIMUM RECORD LENGTH" is the maximum record length allowed for the records in the Master Catalog. It is significant for "U" records which are used to describe a User Catalog and its associated alias(es); there is a limit to the number of aliases.

"RECORDS IN CATALOG" describes the total number of records of all types encountered during interrogation.

"ALIAS RECORDS" describes the number of "X" records within the interrogated catalog. These records are a critical part of the DIAGNOSE ALIAS function.

"USERCATALOG RECORDS" describes the number of "U" records within the interrogated catalog. These records are a critical part of the DIAGNOSE ALIAS function.

User response:
None.

CKM11223I  (multiple line message; see Explanation)
Explanation:
The following user catalogs located in mcatname have no alias names
ucatalogname1
ucatalogname2
...

After extracting usercatalog information from the master catalog used as input to DIAGNOSE ALIAS based on the COMPAREMASTERCATALOG keyword, DIAGNOSE ALIAS has determined that the following list of usercatalogs do not have any associated alias names.

User response:
This informational message will show the user what catalogs do not have associated alias names. Depending on the installation, it may or not be a problem warranting further action.

In many cases, there will be "test" catalogs without alias names and are perfectly acceptable. Other cases may require further study to determine why the catalog exists in the first place, or what alias names are necessary to fully utilize the catalog.

CKM11225W (multiple line message; see Explanation)
Explanation:
The following alias names found in ucat located in mcatname have no corresponding usercatalog record
aliasname1 (found in ucatnamex)
aliasname2 (found in ucatnamey)
...

After extracting usercatalog information from the master catalog used as input to DIAGNOSE ALIAS based on the COMPAREMASTERCATALOG keyword, DIAGNOSE ALIAS has determined that the list of alias names do not have associated usercatalog records.

User response:
This highly unusual situation depicts a logic error within the mastercatalog used as input to DIAGNOSE ALIAS. When IDCAMS' DIAGNOSE ICFCAT, this problem would be identified as a "truename loop failure." DIAGNOSE ALIAS will generate a DELETE aliasname CATALOG(...) command to remedy this situation.
After extracting usercatalog information from the master catalog used as input to DIAGNOSE ALIAS based on the COMPAREMASTERCATALOG keyword, DIAGNOSE ALIAS has determined that the list of alias names derived by decoding usercatalog records do not have associated alias records.

**User response:**

This highly unusual situation depicts a logic error within the mastercatalog used as input to DIAGNOSE ALIAS. When IDCAMS' DIAGNOSE ICFCAT, this problem would be identified as a "truename loop failure."

Recovery from this event requires deleting the usercatalog record containing the invalid alias name(s) and rebuilding them. It would require EXPORT DISCONNECT commands for each OS390 image in which this situation exists. After that, IMPORT CONNECT commands followed by the appropriate DEFINE ALIAS commands

**Explanation:**

THE FOLLOWING ALIAS NAMES LOCATED IN mcatname ARE ASSIGNED TO MULTIPLE USER CATALOGS

USER CATALOG: ucatname ASSOCIATED WITH: aliasname

USER CATALOG: ucatname ASSOCIATED WITH: aliasname

... 

ALIAS: aliasname ASSOCIATED WITH: ucatname

After extracting usercatalog information from the master catalog used as input to DIAGNOSE ALIAS based on the COMPAREMASTERCATALOG keyword, the program has determined that the same ALIAS name exists in two (or more) U records. This information is shown in the detail: "USER CATALOG: ucatname ASSOCIATED WITH: aliasname" if an X record for that same alias is present, then the additional detail: "ALIAS: aliasname ASSOCIATED WITH: ucatname" will be present.

**User response:**

This highly unusual situation indicates typically a mis-guided deletion of the initial X (alias) record at some point. This condition will not be detected by any AMS command - DIAGNOSE or EXAMINE.

Given the following scenario:

Two catalogs - UCATA and UCATB.

UCATA has an alias: ALIASA.

Objects are created using ALIASA as the high-level qualifier; these will be cataloged in UCATA.

Somehow, the ALIASA X record is lost.

The ALIASA record is recreated, this time it is related to UCATB. The objects in UCATA with a high-level qualifier of ALIASA are now unreachable. This may cause problems such as dataset not found, duplicate name on volume etc.

Recovery from this event is not straightforward. Typically, the rightful owner of the alias must be determined. The user-catalog(s) mistakenly related with the alias would require an EXPORT DISCONNECT. After that, IMPORT CONNECT and DEFINE ALIAS commands would be required to recreate the valid associations. Any objects cataloged in the incorrect catalogs would have to be adjusted to point to the valid catalog.

**User response:**

Contact Technical Support for assistance.

**Explanation:**

After identifying the catalogs used as input to DIAGNOSE ALIAS based on the COMPAREMASTERCATALOG keyword, DIAGNOSE ALIAS has started collecting usercatalog and alias name information within the specified catalogs.

Ordinarily, duplicate usercatalog or alias names would be impossible as a catalog is a KSDS and duplicate keys are not allowed. However, DIAGNOSE ALIAS uses DIAGNOSE ALIAS unique high speed catalog access techniques and residual VSAM record management damage could result in this condition.

**User response:**

It is recommended that the catalog in question be unloaded with BACKUP and restored with RECOVER to eliminate this problem.

**Explanation:**

After identifying the catalogs used as input to DIAGNOSE ALIAS based on the COMPAREMASTERCATALOG keyword, DIAGNOSE ALIAS has collected usercatalog and alias name information within the specified catalogs. Comparing data elements from the two named catalogs begins at this point in execution.

**User response:**

None.
**CKM11232W**

**UCAT ucatname IN mcatname1 BUT NOT IN mcatname2**

**Explanation:**
After identifying the catalogs used as input to DIAGNOSE ALIAS based on the COMPREMASTERCATALOG keyword, DIAGNOSE ALIAS has collected usercatalog and alias name information within the specified catalogs. A usercatalog record has been found in mcatname1 but wasn’t found in mcatname2. An IMPORT CONNECT will be generated to create the named catalog on behalf of mcatname2.

**User response:**
None.

**CKM11233I**

**COMPARE-MASTERCATALOG**

**cm-name-a FOUND IN cm-name-b**

**Explanation:**
DIAGNOSE ALIAS has determined that a catalog named by COMPARE-MASTERCATALOG(...) parameter is a usercatalog in the other catalog named by COMPARE-MASTERCATALOG(...).

**User response:**
None. This situation is typical of master catalogs in a sysplex. This allows master catalog updates to occur from the other system in the sysplex.

**CKM11234I**

**NO USERCATALOG CONFLICTS**

**Explanation:**
After identifying the catalogs used as input to DIAGNOSE ALIAS based on the COMPREMASTERCATALOG keyword, DIAGNOSE ALIAS has collected usercatalog and alias name information within the specified catalogs. Data elements from the two named catalogs has completed and there were no discrepancies found within the ucatname records.

**User response:**
None.

**CKM11235I**

**BEGINNING ALIAS COMPARISON**

**Explanation:**
After identifying the catalogs used as input to DIAGNOSE ALIAS based on the COMPREMASTERCATALOG keyword, DIAGNOSE ALIAS has collected usercatalog and alias name information within the specified catalogs. Comparing data elements from the two named catalogs begins at this point in execution.

**User response:**
None.

**CKM11236W (multiple line message; see Explanation)**

**Explanation:**
Alias XXX references catalog YYY which appears in the COMPARE-MASTERCATALOG keyword. No fix will be provided as this is considered to be deliberate due to processing requirements of the installation.

This message appears in conjunction with CKM11239W or CKM11237W. An Alias name’s related object is one of the parameters of the COMPARE-MASTERCATALOG keyword.

**User response:**
DIAGNOSE ALIAS cannot determine if this deliberate or accidental (thus needing repair). Many installations have special alias names for “cross-connected” master catalogs which allow maintenance from the other system. This situation requires intervention from the product user to determine if it was intended. If it was not intentional, the user must generate their own IDCAMS DELETE aliasname CATALOG(...) and DEFINE ALIAS (NAME(aaaaa)RELATE(uuuuu)CATALOG(xxxxx)) commands to rectify the situation.

**CKM11237W**

**ALIAS aliasname IN mcatname1 BUT NOT IN mcatname2**

**Explanation:**
After identifying the catalogs used as input to DIAGNOSE ALIAS based on the COMPREMASTERCATALOG keyword, DIAGNOSE ALIAS has collected usercatalog and alias name information within the specified catalogs. An alias record has been found in mcatname1 but wasn’t found in mcatname2. A DEFINE ALIAS will be generated to create the named alias on behalf of mcatname2.

**User response:**
After deciding that this alias name should be used in mcatname2, remove the “/*” from the corresponding FIXFILE output record and execute IDCAMS with the FIXFILE as //SYSIN. Optionally, execute DIAGNOSE ALIAS with the DEFINEALIAS (DEFA) option. This will create IMPORT CONNECT and DEFINE ALIAS statements that are not commented, ready for input to IDCAMS.
CKM11238I  NO ALIAS CONFLICTS
Explanation:
After identifying the catalogs used as input to DIAGNOSE ALIAS based on the COMPAREMASTERCATALOG keyword, DIAGNOSE ALIAS has collected usercatalog and alias name information within the specified catalogs. Data elements from the two named catalogs has completed and there were no discrepancies found within the ucatname records.

User response:
None.

CKM11239W (multiple line message; see Explanation)
Explanation:
ALIAS aliasname HAS UNMATCHED RELATED USERCATALOG NAMES
TEMPORARILY SWITCHING TO PEER MODE (only if NONPEER requested)
THE ALIAS ENTRY IN mcatname1 REFERENCES ucatnamex
THE ALIAS ENTRY IN mcatname2 REFERENCES ucatnamey
REVERTING TO NON-PEER MODE (only if NONPEER requested)

After identifying the catalogs used as input to DIAGNOSE ALIAS based on the COMPAREMASTERCATALOG keyword, DIAGNOSE ALIAS has collected usercatalog and alias name information within the specified catalogs. While comparing alias names from the two named catalogs, the product determined that the related usercatalog names do not match. DIAGNOSE ALIAS will generate DELETE ALIAS and DEFINE ALIAS commands for both mcatnames. When NONPEER mode was requested, the command temporarily switches to PEER mode, and generates fixes both ways, before reverting to NONPEER mode. Messages indicative of this are issued.

User response:
After deciding which entry is correct, remove the "/*" from the corresponding FIXFILE output record and execute IDCAMS with the FIXFILE as //SYSIN. Optionally, execute DIAGNOSE ALIAS with the DEFINEALIAS (DEFA) option. This will create IMPORT CONNECT and DEFINE ALIAS statements that are not commented, ready for input to IDCAMS. As there are two sets of DELETE and DEFINE commands, one for each mcatname, this not recommended.

CKM11240I  BEGINNING UNNEEDED ALIAS INSPECTION FOR mmmmmmm
Explanation:
After identifying the catalogs used as input to DIAGNOSE ALIAS based on the COMPAREMASTERCATALOG keyword, DIAGNOSE ALIAS has collected usercatalog and alias name information within the specified catalogs. With the UNNEEDEDALIAS or UA keyword on the DIAGNOSE ALIAS command, every alias name will be checked for the presence of corresponding data sets within the related usercatalog.

User response:
None.

CKM11241W ALIAS aaa HAS NO MATCHING DATA SETS IN USERCATALOG uuuuuu
Explanation:
While inspecting usercatalogs for the presence of at least one data set which matches the alias name in question, DIAGNOSE ALIAS has determined that no data set exist. DIAGNOSE ALIAS will generate a DELETE ALIAS command for the alias name.

User response:
None.

CKM11242I  NO UNNEEDED ALIAS NAMES DETECTED IN mmmmmmmmmmm
Explanation:
After identifying the catalogs used as input to DIAGNOSE ALIAS based on the COMPAREMASTERCATALOG keyword, DIAGNOSE ALIAS has collected usercatalog and alias name information within the specified catalogs. After checking every alias name in the named mastercatalog DIAGNOSE ALIAS has determined that every alias name has at least one corresponding data set.

User response:
None.

CKM11245E Unable to open FIXFILE
  DName=dddddddd
Explanation:
During preliminary parsing of various keywords, the product experienced difficulty in opening the FIXFILE data set. This message will be accompanied by an OS/390 message.

User response:
Depends on the OS/390 message.
CKM11246I THE FOLLOWING CATALOGS LOCATED IN master-catalog HAVE ALIASES

Explanation:
Due to the LIST-ALIAS keyword being requested, a report showing, by User Catalog, the aliases associated with that User Catalog. Following the alias(es) there will be a summary line showing the number of aliases and the average alias length. This followed by a line showing the space availability for additional aliases in the "U" record; given the average alias length.

User response:
None

CKM11247W Duplicate delete ALIAS defined to be in CATALOG already deleted

Explanation:
With DELETE-ALIAS specified, multiple reasons for deleting this alias from this catalog have been found. DIAGNOSE ALIAS will write a commented out DELETE ALIAS command on the duplicated delete. How can this occur: 1. Matching two master catalogs and alias X is in one but not the other. 2. Alias X has no catalog entries when EMPTY-ALIAS specified.

User response:
None

CKM11248W SYMBOLICRELATE alias xxx to user catalog yyy ignored.

Explanation: The catalog alias xxx was found that references the user catalog yyy. That alias was defined with SYMBOLICRELATE.

User response: DIAGNOSE ALIAS will not produce fixes for aliases defined with SYMBOLICRELATE or for user catalogs that are only referenced with aliases defined with SYMBOLICRELATE.

CKM11270I CATALOG mcatname1 WILL NOT BE COMPARED TO ANY OTHER CATALOG

Explanation:
After parsing the input keywords, DIAGNOSE ALIAS has identified the named catalogs used as input to DIAGNOSE ALIAS. This based on the COMPAREMASTERCATALOG keyword. The first version of the message will be published if two names are specified in the COMPAREMASTERCATALOG keyword. The second version of the message will be published if one name is specified in the COMPAREMASTERCATALOG keyword.

User response:
None.

CKM11271I THE TWO CATALOGS WILL BE TREATED AS EQUALS, THAT IS, DEFINE/DELETE ALIAS COMMANDS WILL BE CREATED FOR ENTRIES NOT IN ONE CATALOG BUT PRESENT IN THE OTHER

Explanation:
After parsing the input keywords, DIAGNOSE ALIAS has determined that mcatname1 will be compared against mcatname2 followed by comparing mcatname2 against mcatname1. The two catalogs will be treated as peers. This controlled by the PEER and NONPEER keywords.

User response:
None, unless the intentions were to compare mcatname1 against mcatname2 and not compare mcatname2 against mcatname1. If was desired, add the NONPEER keyword to the DIAGNOSE ALIAS command and execute it again.

CKM11272I THAT IS, DEFINE/DELETE ALIAS COMMANDS WILL BE CREATED FOR ENTRIES MISSING FROM mcatname2 BUT PRESENT IN mcatname1

Explanation:
After parsing the input keywords, DIAGNOSE ALIAS has determined that mcatname1 will be compared against mcatname2. The two catalogs will be not treated as peers. Instead, mcatname1 will be treated as a control catalog. This is controlled by the PEER and NONPEER keywords.

User response:
None, unless the intentions were to compare mcatname1 against mcatname2 and compare mcatname2 against mcatname1. If was desired, change the NONPEER keyword to the PEER keyword on the DIAGNOSE ALIAS command or remove the NONPEER keyword and execute it again.
CKM11272I THAT IS, DEFINE/DELETE ALIAS COMMANDS WILL BE CREATED FOR ENTRIES MISSING FROM mcatname2 BUT PRESENT IN mcatname1

Explanation:

After parsing the input keywords, DIAGNOSE ALIAS has determined that mcatname1 will be compared against mcatname2. The two catalogs will not be treated as peers. Instead, mcatname1 will be treated as a control catalog. This is controlled by the PEER and NONPEER keywords.

User response:

None, unless the intentions were to compare mcatname1 against mcatname2 and compare mcatname2 against mcatname1. If was desired, change the NONPEER keyword to the PEER keyword on the DIAGNOSE ALIAS command or remove the NONPEER keyword and execute it again.

CKM11284I CORRESPONDING FIX: nnn

Explanation:

During usercatalog and alias comparisons of the two mcatnames, the product has generated one or more fixes and placed them in the FIXFILE data set. This message correlates the fix in the FIXFILE to the message appearing immediately before this one.

User response:

Depends on the message immediately before this one.

CKM11287E ERROR DURING CKM01VV1 (cc) table-name TABLE PROCESSING R15=rr CKM11287E KEY=...

Explanation:

The product uses numerous sorted tables for processing. An error occurred while processing one of the tables.

User response:

Contact Technical Support.

CKM11288W IGGCSI00 ERROR: R15: nnn REASON CODE: nnn RETURN CODE: 100

Explanation:

The product uses the supplied routine IGGCSI00 when the COUNT keyword is used to determine the number of catalog entries there are for a particular alias. The catalog specified by "catalog-name" when accessed by IGGCSI00 had a problem.

User response:

If R15 is 004: If the Return Code is 100 or 122, consult the supplied manual "DFSMS: Managing Catalogs" for the problem. For any other Return Code value, consult the supplied manual "MVS System Messages" under the IDC3009I entry. If R15 is any other value: Contact Technical Support.

CKM11290E VALUE ENTERED FOR KEYWORD GREATER THAN nnn KEYWORD=kkkkkkkk START OF STRING=ssssssssss

Explanation:

The product determined that the value placed in a keyword exceeded specification.

User response:

Correct the value.

CKM11291E KEYWORD HAS NO OPERANDS. KEYWORD=kkkkkkkk START OF STRING=ssssssssss

Explanation:

The product determined that no values were placed in a keyword that required values.

User response:

Correct the value.
CKM11292E  KEYWORD HAS MORE THAN n OPERAND(s) ONLY n ALLOWED.  KEYWORD=kkkkkkkk START OF STRING=ssssssssssss

Explanation:
The product determined that more than one value was coded in a keyword that is restricted to one value.

User response:
Correct the value.

CKM11294W  DUPLICATE DSN, ALIAS, OR MASK ENCOUNTERED -- IGNORED: sssssss

Explanation:
The product determined that more than a serial number or mask was specified more than one time.

User response:
Correct the value.

CKM11295W  MASK/DSN VALIDATION ERROR FOR xxxx OR yyyy DESCRIPTION OF ERROR: eeeeeeeeeeeeee

Explanation:
During application of masks and/or discrete DSNs in an inclusion list or an exclusion list, against the list of alias names and usercatalog names found in the named CM catalogs, the product determined that either the dsn/mask to be included or excluded was invalid, or the alias name or the usercatalog name found in the mastercatalog was invalid. This would be highly unlikely since the name from the inclusion or exclusion list has already been checked, and the names from the catalog have been validated by OS/390 before being placed there.

User response:
Contact Technical Support.

CKM11296E  CANNOT CONTINUE WITH THIS FAILURE

Explanation:
DIAGNOSE ALIAS has detected a serious error that prohibits it from continuing execution.

User response:
See the error message immediately before this one for the exact problem and refer to that error message explanation.

CKM11297W  ATTEMPT FOR DYNAMIC allocation (c) HAS FAILED FOR dddddd

Explanation:
The product was unable to dynamically allocate a catalog or the FIXDATASET. There will be one or more IKJ messages describing the error.

User response:
For FIXDATASET, specify the correct data set name. For all others, this indicates the catalog does not exist. This may or may not be valid, depending on the IKJ messages.

CKM11301W  allocation FAILED FOR DSN: datasetname  DEallocation FAILED FOR DDN: ddname

Explanation:
Dynamic allocation for a dataset failed, or, dynamic deallocation for a ddname failed. The associated OS/390 messages are displayed. If an allocation failure occurs for a user catalog, processing continues. Any other allocation failure will terminate processing.

User response:
If unable to determine the reason for the failure from the associated OS/390 messages, contact Technical Support. Have available the listing containing these messages.

CKM11304E  INTERNAL LOGIC ERROR - Description CODE=xxxxxx

Explanation:
The DIAGNOSE BCS-VVDS program detected an abnormal and unexpected condition due to a possible logic error. The description will vary, depending upon the nature of the problem. The CODE= value is information that is meaningful only to Technical Support. Other descriptive information will usually follow immediately after this error message.

User response:
Report this problem to Technical Support. Save all spooled output from this execution (including the JES execution job logs) and provide this to Technical Support.
Support as part of the problem documentation.

**CKM11305E OPEN FAILED FOR DDNAME: ddname**

**Explanation:**
DIAG BCS-VVDS was unable to open the file. Processing terminates.

**User response:**
Check that the JCL has the indicated ddname specified. If unable to determine the cause of the failure, contact Technical Support. Have available the listing that contains this message.

**CKM11306E ERROR CALLING CKM01VV1 tttttttttt**

**FUNCTION:** function R15=nnnnnn
R0=nnnnnnnnnnn LOC=llll

**Explanation:**
During DIAG BCS-VVDS processing, a problem occurred using a dataspace. tttttttttt is the name of the internal table. lllll is the internal location where the error occurred. Processing terminates.

**User response:**
Report this message to Technical Support. Save all spooled output from this execution (including the JES execution log files) and provide this to Technical Support as part of the problem documentation.

**CKM11307E ERROR CALLING TABLE FUNC=xxx**

**RC=xxx CODE=xxx**

**Explanation:**
The DIAGNOSE BCS-VVDS program detected an abnormal and unexpected condition due to a possible logic or resource error. Information provided by this message is meaningful only to Technical Support. Other descriptive information can often follow immediately after this error message.

**User response:**
Report this problem to Technical Support. Save all spooled output from this execution (including the JES execution log files) and provide this to Technical Support as part of the problem documentation.

**CKM11309I VSAM CATALOG RETURN CODE IS rc - REASON CODE IS module - rsn**

**Explanation:**
An error occurred while invoking Catalog Management Services. The return code and reason code can usually be found in the “System Messages” manual under message IDC3009I. In most cases, processing continues.

**User response:**

**CKM11310E MVS OPERATING SYSTEM INCOMPATIBILITY. CODE=xxxxx os/level**

**Explanation:**
Program determined that the software level of the current operating system is not compatible. The code provides information for Technical Support.

**User response:**
Notify Technical Support.

**CKM11312I ANALYSIS BASED UPON ALTERNATE MASTERCATALOG alt.mast.catalog**

**Explanation:**
Informational.

**User response:**
None. These messages indicate the name of the current system and its actual master catalog BCS and, if the MASTERCATALOG keyword specifies a different BCS name, the assumed master catalog BCS for this execution of DIAGNOSE BCS-VVDS.

**CKM11313E MESSAGE-TEXT VALUES CAN BE “FULL” OR “NONE”**

**Explanation:**
The MESSAGE-TEXT keyword was requested with an argument that was not FULL or NONE.

**User response:**
Correct the argument or remove the MESSAGE-TEXT keyword.

**CKM11315I THE FOLLOWING FILES WILL BE USED FOR PRODUCING OUTPUT FOR FIX COMMANDS:**

**Explanation:**
A list of the targeted FIX Files follows this message.
CKM11316W  DDNAME=dd INVALID FOR FIXFILE USE.

Explanation:
A dataset name or file name specified via the FIXES FIXFILE or FIXDATASET keywords was invalid. Processing continues without the fix file.

User response:
Specify a valid DDNAME or Dataset Name. It is possible that the DDNAME conflicts with another DDNAME reserved for other functions.

CKM11316W  DDNAME=dd INVALID FOR FIXFILE USE.

Explanation:
A dataset name or file name specified via the FIXES FIXFILE or FIXDATASET keywords was invalid. Processing continues without the fix file.

User response:
Specify a valid DDNAME or Dataset Name. It is possible that the DDNAME conflicts with another DDNAME reserved for other functions.

CKM11316W  DDNAME=dd INVALID FOR FIXFILE USE.

Explanation:
A dataset name or file name specified via the FIXES FIXFILE or FIXDATASET keywords was invalid. Processing continues without the fix file.

User response:
Specify a valid DDNAME or Dataset Name. It is possible that the DDNAME conflicts with another DDNAME reserved for other functions.

CKM11317W  NO FIX CLASSES DEFINED FOR CLASS(class).

Explanation:
The CLASS Subparameter of the FIXES keyword specified one or more fix classes that were invalid or not defined.

User response:
Correct the CLASS specification.

CKM11318E  SYNTAX ERROR IN keyword STRING STARTING WITH ‘text’

Explanation:
Command Syntax Error.

User response:
Correct the Syntax Error.

CKM11319I  EXCLUDE-STORAGEGROUP NAME sssssss DID NOT AFFECT VOLUME SELECTION.

Explanation:
The identified selection criteria did not exclude the intended volumes, or were superfluous.

User response:
None, or, remove the selection item causing the message.

CKM11319I  EXCLUDE-STORAGEGROUP NAME sssssss DID NOT AFFECT VOLUME SELECTION.

Explanation:
The identified selection criteria did not exclude the intended volumes, or were superfluous.

User response:
None, or, remove the selection item causing the message.

CKM11319I  EXCLUDE-STORAGEGROUP NAME sssssss DID NOT AFFECT VOLUME SELECTION.

Explanation:
The identified selection criteria did not exclude the intended volumes, or were superfluous.

User response:
None, or, remove the selection item causing the message.

CKM11319I  TO STORAGEGROUP NAME sssssss DID NOT AFFECT VOLUME SELECTION.

Explanation:
The identified selection criteria did not include the intended volumes, or were superfluous.

User response:
None, or, remove the selection item causing the error.
CKM11319W • CKM11326W

CKM11319W TO STORAGEGROUP NAME sssssss
DID NOT AFFECT VOLUME SELECTION.
Explanation:
The identified selection criteria did not include the intended volumes, or were superfluous.
User response:
None, or, remove the selection item causing the error.

CKM11319W TO STORAGEGROUP NAME sssssss
DID NOT AFFECT VOLUME SELECTION.
Explanation:
The identified selection criteria did not include the intended volumes, or were superfluous.
User response:
None, or, remove the selection item causing the error.

CKM11320E KEYWORD: keyword MAXIMUM LENGTH: nnn EXCEEDED
Explanation:
The operand entered for a keyword exceeded the maximum length allowed for the operand. nnn is the maximum allowed length for the keyword. Processing terminates.
User response:
Correct the length of the keyword's operand.

CKM11321E KEYWORD HAS MORE THAN 1 OPERAND; ONLY 1 ALLOWED:
keyword
Explanation:
Multiple operands were detected for a keyword; only one operand is permitted. Processing terminates.
User response:
Correct the keyword to use one operand.

CKM11322E REQUIRED KEYWORD MISSING:
keyword
Explanation:
A keyword required for DIAG BCS-VVDS processing has been omitted. Processing terminates.
User response:
Specify the required keyword.

CKM11323E NOTHING SPECIFIED FOR KEYWORD:
keyword
Explanation:
A keyword was entered without an appropriate operand. Processing terminates.
User response:
Specify an appropriate operand for the keyword.

CKM11324I DUPLICATE IGNORED; KEYWORD:
keyword ENTRY: entry
Explanation:
The specified 'entry' for the keyword was previously specified. Processing continues.
User response:
None.

CKM11325W NO VOL/STG MATCH FOUND;
KEYWORD: keyword ENTRY: entry
Explanation:
The specified 'entry' for the keyword was not matched. For VOL, the specified volser, or, the volser derived from a storage group, was not found. For STG, the specified storage group was not found. Processing continues.
User response:
None required.

CKM11326W - NO ACCESSIBLE BCS CATALOGS MATCHING THE MASK WERE FOUND.
Explanation:
While searching a list of all connected catalogs, none were found that matched the specified name or mask. To be accessible, the BCS must be connected to the current master catalog, even when MASTERCATALOG(...) is specified.
User response:
If the BCS name is superfluous, do not specify it via the indicated keyword. If the BCS actually exists, ensure that it is connected to the current master catalog.

CKM11326W - NO ACCESSIBLE BCS CATALOGS MATCHING THE MASK WERE FOUND.
Explanation:
While searching a list of all connected catalogs, none were found that matched the specified name or mask. To be accessible, the BCS must be connected to the current master catalog, even when MASTERCATALOG(...) is specified.
User response:
If the BCS name is superfluous, do not specify it via the indicated keyword. If the BCS actually exists, ensure that it is connected to the current master catalog.

CKM11326W  NO ACCESSIBLE BCS CATALOGS MATCHING THE MASK WERE FOUND.

Explanation:
While searching a list of all connected catalogs, none were found that matched the specified name or mask. To be accessible, the BCS must be connected to the current master catalog, even when MASTERCATALOG(...) is specified.

User response:
If the BCS name is superfluous, do not specify it via the indicated keyword. If the BCS actually exists, ensure that it is connected to the current master catalog.

CKM11327E  INVALID VOLSER IN KEYWORD:

Keyword

Explanation:
The volume serial number specified is invalid. Processing terminates.

User response:
Correct the volser specification.

CKM11328E  INVALID VALUE IN KEYWORD:

Keyword VALUE: value error

Explanation:
The value in the keyword is invalid. 'error' indicates the problem detected with the value. Processing terminates.

User response:
Correct the value specified in the keyword.

CKM11329E  NO BCS HAS BEEN SELECTED

Explanation:
No BCS has been found for DIAGNOSE BCS-VVDS to process. Processing terminates.

User response:
Check that the name specified in COMPAREBCS is correct. Check if the BCS’s have been removed by the use of EXCLUDEBCS.

CKM11330I  DSN/MASKS FOR KEYWORD:

Keyword list of dsns/masks

Explanation:
Parsing found the listed dsns/masks for the keyword.

User response:
None.

CKM11331I  THE FOLLOWING BCS(S) WILL BE DIAGNOSED: list of BCS’s

Explanation:
DIAG BCS-VVDS will use the listed BCS(s) during processing.

User response:
None.

CKM11332I  THE FOLLOWING VOLSERS ARE ELIGIBLE: list of volsers

Explanation:
DIAG BCS-VVDS found the listed volsers online and not excluded by an exclude keyword. Any of these volsers found in a BCS being diagnosed will be checked.

User response:
None.

CKM11333I  VOLSERS OR MASKS FOR KEYWORD:

Keyword VOLSERS DERIVED FOR KEYWORD: keyword list of volsers

Explanation:
Parsing found the listed volsers/masks for a keyword, or, derived the listed volsers from a storage group keyword.

User response:
None.

CKM11334I  STORAGE GROUPS/MSKS FOR KEYWORD:

Keyword

Explanation:
Parsing found the listed storage groups/masks for the keyword.

User response:
None.

CKM11335I  NO FIXES WILL BE GENERATED

Explanation:
DIAG BCS-VVDS processing message.

User response:
None.
CKM11336E  UCBSCAN ERROR; RETURN CODE=nn
REASON CODE=nn

Explanation:
An error occurred during UCBSCAN processing. Processing terminates.

User response:
Contact Technical Support. Have available the listing containing this message.

CKM11337E  CKM01SMF ERROR; RETURN CODE=nnnn LOC: llllll entry

Explanation:
An error occurred using CKM01SMF to obtain SSI information for the 'entry'. llllll is the internal location where the error occurred. Processing terminates.

User response:
Contact Technical Support. Have available the listing containing this message.

CKM11338E  NO STORAGE GROUPS RETURNED BY SSI

Explanation:
SSI did not return any storage groups to CKM01SMF. Processing terminates.

User response:
Check that storage groups are defined on the system. If unable to determine the cause of this message, contact Technical Support. Have available the listing containing this message.

CKM11339W  NO VOLUME SERIALS RETURNED FOR STORAGE GROUP: storage group

Explanation:
SSI did not return any volsers for the storage group to CKM01SMF. Processing continues.

User response:
None. The volser is ignored and processing continues.

CKM11340I  hh.mm.ss DIAG BCS-VVDS STEP: process step STARTED/COMPLETED

Explanation:
DIAG BCS-VVDS processing message

User response:
None.

CKM11341I  variable message text

Explanation:
When keyword MESSAGE-TEXT(FULL) is specified, DIAGNOSE BCS-VVDS will provide progress messages and timings as each BCS and Volume is being scanned for datasets.

User response:
None. If you do not want these messages to appear, then specify MESSAGE-TEXT(NONE), which is also the default.

CKM11343W  VVDS FOR volser ALREADY EXCLUDED VIA STORAGEGROUP storgrp

Explanation:
A volser was specified via TOVVDS that was already included as part of a storage group specified by TOSTORAGEGROUP; or, a volser was specified via EXCLUDE-VVDS that was already excluded as a part of a storage group specified by EXCLUDE-STORAGEGROUP.

User response:
None. The volser is ignored and processing continues.

CKM11344W  STRUCTURAL ERROR ENCOUNTERED IN ccc RECORD. CODE=xxxxxx

Explanation:
Structural metadata errors were encountered while reading either a BCS or VVDS. The record types indicated by this message are BCS, VVR, and NVR. The CODE= value is information that is meaningful only to Technical Support. This message is immediately followed by one or more message lines describing the error in further detail. The error is tolerated, but may result in inconsistent analysis.

User response:
Report this problem to Technical Support. Save all
spooled output from this execution (including the JES execution job logs) and provide this to Technical Support as part of the problem documentation. Technical Support may request that you run IDCAMS EXAMINE against the BCS that was reported in error, or the DIAGNOSE VVDS-VTOC command against the VVDS that was reported in error.

---

**CKM11345I** SOME ERRORS FOR DATASETS CREATED AFTER yyyy/mm/dd MIGHT NOT BE REPORTED. CKM11345I AGE-TOLERANCE (0) OR (NO) IN EFFECT. NOTE: DATASETS IN TRANSIT COULD BE INCORRECTLY IDENTIFIED AS ERRORS.

**Explanation:**

Informational. The reported date is a result of the AGE-TOLERANCE value specified either in the command, or defaulted to via the CKMINI SCKMPARM member. The second form of the message will appear if the AGE-TOLERANCE function has been overridden.

**User response:**

None.

---

**CKM11346I** SYMBOL `&symbol` NOT RESOLVABLE.

**Explanation:**

The system symbolic could not be resolved. The symbolic volume serial value for this dataset entry will be interpreted, as is, as a permanently unavailable volume.

**User response:**

Recatalog the dataset to a specific volser, or, specify a symbolic that appears with the "D SYMBOLS" system command, or, review the IEASYMxx parameters in SYS1.PARMLIB.

---

**CKM11347I** SYSTEM MLA VALUE IS n, ASSUMED VALUE CHANGED TO n

**Explanation:**

Informational. The current system MLA value is displayed. If the current MLA has been overridden by the command, then the assumed alternate value is also displayed.

**User response:**

None.

---

**CKM11348E** INI ERROR IN SECTION `section-name` - token-name VALUE INVALID: `value`

**Explanation:**

The indicated parameter value is invalid. Processing Terminates.

**User response:**

Correct the value specified in the token.

---

**CKM11349E** MISSING_NVR_ERROR VALUE INVALID: `value`

**Explanation:**

The value specified in token MISSING_NVR_ERROR in section DIAG_BCS_VVDS_OPTIONS of CKMINI SCKMPARM member is invalid. Processing terminates.

or

The value specified in token SPACE_MANAGEMENT in named section of CKMINI SCKMPARM member is invalid. Processing terminates.

**User response:**

Correct the value specified in the token.

---

**CKM11351W** DATASETS: PROBLEM(S) DETECTED

**Explanation:**

The dataset report will indicate the problem(s).

**User response:**

None.

---

**CKM11352E** ACCEPTEXAMINE VALUES CAN BE "I", "W", "E", or "D"

**Explanation:**

During command interpretation, the command preceding this message did not have the correct value inside the ACCEPTEXAMINE keyword. The value must be "I", "W", "E", or "D".

**User response:**

Correct the coding of the ACCEPTEXAMINE keyword.

---

**CKM11353I** DEFAULT IN EFFECT: defaulted keyword

**Explanation:**

A default is being used for a keyword.

**User response:**

None.

Explanation:
A security violation and/or SAF related error occurred while performing authorization checking for the use of the command DIAGNOSE BCS-VVDS. More specific information will immediately precede this message. Processing Terminates. This error results in a return code 90.

User response:
If the message indicates RC=8 and the SAF violation condition is not appropriate, then your security administrator should be contacted. If the message indicates RC=12 or higher, then contact Technical Support.

CKM11355I  IDCAMS EXAMINE OUTPUT FOLLOWS: BCS=catalog.name

Explanation:
The IDCAMS EXAMINE command was executed against the indicated BCS catalog. The output from IDCAMS immediately follows these messages.

The CKM11355I will be present when MESSAGE-TEXT(FULL) is specified and no problems were detected. Otherwise, the messages imply that EXAMINE had encountered one or more structural VSAM errors with the BCS cluster.

When errors have been detected by EXAMINE, DIAGNOSE BCS-VVDS may draw inaccurate conclusions regarding the catalog entries from this BCS. Often, orphaned C/I’s will produce what appears to be unavailable datasets, or missing parts of datasets.

User response:
If errors are detected, the BCS catalog may be damaged. FIXLIST output from DIAGNOSE BCS-VVDS might not be accurate. Contact Technical Support for further assistance. Have the full sysout execution listing available, including the joblog. Further documentation may be requested.

CKM11355W  IDCAMS EXAMINE OUTPUT FOLLOWS: BCS=catalog.name

Explanation:
The IDCAMS EXAMINE command was executed against the indicated BCS catalog. The output from IDCAMS immediately follows these messages.

The CKM11355W will be present when MESSAGE-TEXT(FULL) is specified and problems were detected. Otherwise, the messages imply that EXAMINE had encountered one or more structural VSAM errors with the BCS cluster.

When errors have been detected by EXAMINE, DIAGNOSE BCS-VVDS may draw inaccurate conclusions regarding the catalog entries from this BCS. Often, orphaned C/I’s will produce what appears to be unavailable datasets, or missing parts of datasets.

User response:
If errors are detected, the BCS catalog may be damaged. FIXLIST output from DIAGNOSE BCS-VVDS might not be accurate. Contact Technical Support for further assistance. Have the full sysout execution listing available, including the joblog. Further documentation may be requested.
To change the EXAMINE options, alternate values can be specified as subparameters of the EXAMINE keyword. These subparameter keywords follow the syntax rules of the IDCAMS EXAMINE command.

User response:
None.

CKM11358I NOEXAMINE OPTION IN EFFECT FOR ALL CATALOGS.
Explanation:
Informational.
User response:
None.

CKM11359E PROCESSING TERMINATED DUE TO IDCAMS EXAMINE RETURN CODE
Explanation:
While processing BCS for DIAGNOSE BCS-VVDS, IDCAMS EXAMINE was invoked to ensure the integrity of the object. EXAMINE determined a structural error and returned a error code of magnitude 8. DIAGNOSE BCS-VVDS will skip this BCS and continue processing other selected catalogs (unless ACCEPTEXAMINE(E) is specified).

User response:
Since IDCAMS EXAMINE indicates an INDEX or DATA component structural error, this catalog may require recovery. Refer to the Users Guide for details on recovering a catalog. If the errors are determined to be of insufficient cause to stop processing, remove the ACCEPTEXAMINE keyword from the DIAGNOSE command or specify ACCEPTEXAMINE(E).

CKM11359W BCS BYPASSED DUE TO IDCAMS EXAMINE RETURN CODE
Explanation:
While processing BCS for DIAGNOSE BCS-VVDS, IDCAMS EXAMINE was invoked to ensure the integrity of the object. EXAMINE determined a structural error and returned a error code of magnitude 8. DIAGNOSE BCS-VVDS will skip this BCS and continue processing other selected catalogs (unless ACCEPTEXAMINE(E) is specified).

User response:
Since IDCAMS EXAMINE indicates an INDEX or DATA component structural error, this catalog may require recovery. Refer to the Users Guide for details on recovering a catalog. If the errors are determined to be of insufficient cause to stop processing, remove the ACCEPTEXAMINE keyword from the DIAGNOSE command or specify ACCEPTEXAMINE(E).
CKM11371W DATASET DOES NOT PHYSICALLY EXIST.

Explanation:
A BCS catalog entry refers to a dataset that does not have any physical components existing on the indicated volumes. In most cases, the entry can be uncataloged.

User response:
Refer to the text following this message. A fix can be made available by this program.

CKM11372W DATASET IS NOT SALVAGEABLE. CRITICAL PARTS ARE MISSING.

Explanation:
A BCS catalog entry refers to a dataset that has some but not all physical components existing on the indicated volumes. The missing components prevent the dataset from being functional. In most cases, the entry can be uncataloged, and the remnants scratched and/or removed from the volume(s).

User response:
Refer to the text following this message. A fix can be made available by this program.

CKM11373W NVR IS MISSING FOR NON-VSAM SMS DATASET.

Explanation:
A BCS catalog entry refers to a non-VSAM dataset on an SMS managed volume that is missing the NVR in the VVDS. This dataset is functional, but can have problems in other areas such as backup, recovery, delete, rename, and migration.

User response:
Refer to the text following this message. A fix can be made available by this program that will only delete this dataset. If the dataset represents valid data, it must be copied to another correctly allocated dataset.

CKM11374W MASTERCATALOG BCS ALIAS CONFLICT.

Explanation:
A dataset is inaccessible through the normal catalog search path because of a discrepancy with the aliases defined in the master catalog. A CLASS-03 fix will be generated if this the only problem found with this dataset structure.

User response:
Refer to the text following this message. A fix can be made available by this program, but you must verify that the aliases in the Master Catalog and the current MLA value are correctly defined and set up.

CKM11375W DATASET ATTRIBUTES CONFLICT.

Explanation:
The Volume cell for a dataset in a BCS record, and the corresponding VVR on the VVDS for that dataset contain conflicting information regarding the Primary or Overflow status of the component. IDCAMS DIAGNOSE ICFCAT COMPARedd will also identify this error with message IDC21364I REASON 14. A Class-03 fix will be generated to advise a manual procedure to repair the discrepancy.

User response:
Refer to the text generated in the fix file for more detailed information.

CKM11376W BCS ENTRY FOR INDEXED VTOC.

Explanation:
A catalog entry for an Indexed VTOC Dataset was found in a BCS. Any dataset beginning with 'SYS1.VTOCIX' in the first 13 characters is considered to be an Indexed VTOC, regardless of the contents of the remaining portion of the dataset name. The operating system does not use these BCS entries when locating the Indexed VTOC dataset on a volume. This is not a critical error.

User response:
Run the CLASS-01 fix generated in the fix file for this anomaly. Also, review your local procedures that allocate SYS1.VTOCIX datasets and ensure that the JCL does not catalog the dataset.

CKM11377E BCS RECORD CONTAINS INVALID DATA: field_name

Explanation:
While processing the BCS, each record is checked for valid data. A record contained invalid data in "field_name." The key of the record is then shown.

User response:
Consider calling Technical Support for assistance. You will probably be required to use ZAP to either DELETE or PATCH the record.

CKM11377W BCS RECORD CONTAINS INVALID DATA: field_name

Explanation:
While processing the BCS, each record is checked for valid data. A record contained invalid data in "field_name." The key of the record is then shown.

User response:
Consider calling Technical Support for assistance.
will probably be required to use ZAP to either DELETE or PATCH the record.

**CKM11378E** ERROR CALLING CKM01HEX;
FUNCTION: xxxxxxx R15=xxxx
LOC=xxxx

**Explanation:**
While attempting to format the hexadecimal dump of a BCS record, an internal error occurred.

**User response:**
Contact Technical Support.

**CKM11379W** DATASET INCONSISTENCY DETECTED.

**Explanation:**
A dataset or a set of conflicting datasets have been identified as problematic. This may or may not be a problem. Analysis routines have elected not to expound on the condition, other than to list the components and pertinent information. This can occur when multiple errors have been found, or when the situation appears ambiguous.

**User response:**
Refer to the text following this message, and take the appropriate actions, if necessary. No fix will be generated by this program. If the condition appears to be common and fixable, please contact Technical Support and submit a request for enhancement.

**CKM11380I** CLASS-xx FIX CREATED. FIX NUMBER = nn

**Explanation:**
A fix has been generated for this anomaly.

**User response:**
None.

**CKM11381I** NO FIX CREATED.

**Explanation:**
A fix was not generated for this anomaly.

**User response:**
None.

**CKM11382I** CLASS-xx ANOMALY. (description)

**Explanation:**
Explains class of fix generated.

**User response:**
None.

**CKM11383I** FIXES WRITTEN TO DD(ddname) DS(dsname)

**Explanation:**
Summary of fixes created.

**User response:**
None.

**CKM11384I** ERRORS REPORTED WITH NO FIX AVAILABLE

**Explanation:**
Summary of Class-00 Errors.

**User response:**
None.

**CKM11389I** DEBUG_WORKQ_DD=ddname OPENED FOR DIAGNOSTICS.

**Explanation:**
Diagnostic anomaly queue information.

**User response:**
None.

**CKM11390E** ERROR ACCESSING MASTER CATALOG: bcs.dataset

**Explanation:**
A VSAM error occurred accessing the specified catalog. If the error occurs processing the master catalog, processing terminates. If the error occurs processing a user catalog, processing continues.

**User response:**
See associated MSC341nnE error messages. If unable to resolve problem, contact Technical Support. Have the listing that contains these messages available.

**CKM11390W** ERROR ACCESSING BCS INFORMATION. BCS=bcs.dataset

**Explanation:**
A VSAM error occurred accessing the specified catalog. If the error occurs processing the master catalog, processing terminates. If the error occurs processing a user catalog, processing continues.

**User response:**
See associated MSC341nnE error messages. If unable to resolve problem, contact Technical Support. Have the listing that contains these messages available.
Chapter 25. Messages and Codes for Advanced Catalog Management 421
accuracy of the space estimation algorithms.

User response:
None. To suppress this message, specify DEBUG_LEVEL = 0 in the CKMINI SCKMPARM member.

CKM11400I DIAGNOSE VOLUME-BCS MAINTENANCE LEVEL:

Explanation:
Informational. Indicates the current version of the DIAGNOSE VOLUME-BCS program. When reporting DIAGNOSE VOLUME-BCS errors to Technical Support, the information provided by this message is highly significant for problem resolution.

User response:
When reporting problems to Technical Support, this message should be included as part of the communication.

CKM11401I hh:mm:ss DIAGNOSE VOLUME-BCS: processing step status

Explanation:
Informational. Indicates the execution status of various processing phases within the DIAGNOSE VOLUME-BCS program.

User response:
None.

CKM11403E DIAGNOSE VOLUME-BCS IS TERMINATING DUE TO ERRORS.

Explanation:
Prior critical errors have forced DIAGNOSE VOLUME-BCS to terminate execution prematurely.

User response:
Prior messages will indicate the nature of the original problem. Save all spooled output from this execution (including the JES execution job logs) and provide this to Technical Support as part of the problem documentation.

CKM11404E INTERNAL LOGIC ERROR - Description CODE=xxxxxx

Explanation:
The DIAGNOSE VOLUME-BCS program detected an abnormal and unexpected condition due to a possible logic error. The description will vary, depending upon the nature of the problem. The CODE= value is information that is meaningful only to Technical Support. Other descriptive information will usually follow immediately after this error message.

User response:
Report this problem to Technical Support. Save all spooled output from this execution (including the JES execution job logs) and provide this to Technical Support as part of the problem documentation.

CKM11405E SYSTEM INTERFACE ERROR - Description CODE=xxxxxx

Explanation:
The DIAGNOSE VOLUME-BCS program received an abnormal and unexpected response from an MVS system service. The description will vary, depending upon the nature of the problem. The CODE= value is information that is meaningful only to Technical Support. Other descriptive information will usually follow immediately after this error message.

User response:
Report this problem to Technical Support. Save all spooled output from this execution (including the JES execution job logs) and provide this to Technical Support as part of the problem documentation.

CKM11405W SYSTEM INTERFACE ERROR - Description CODE=xxxxxx

Explanation:
The DIAGNOSE VOLUME-BCS program received an abnormal and unexpected response from an MVS system service. The description will vary, depending upon the nature of the problem. The CODE= value is information that is meaningful only to Technical Support. Other descriptive information will usually follow immediately after this error message.

User response:
Report this problem to Technical Support. Save all spooled output from this execution (including the JES execution job logs) and provide this to Technical Support as part of the problem documentation.

CKM11406E DATASPACE FAILURE OCCURRED IN -dspname- RC=xxxxxxxx RSN=xxxxxxx CODE=xxxxxx

Explanation:
The DIAGNOSE VOLUME-BCS program detected an error or a resource shortage while storing information into a dataspace. The CODE= value is information that is meaningful only to Technical Support. Other descriptive information will usually follow immediately after this error message.

User response:
Report this problem to Technical Support. Save all spooled output from this execution (including the JES execution job logs) and provide this to Technical Support as part of the problem documentation.
Support as part of the problem documentation.

**CKM11407E**  CKMINI Maximum of n dataset components reached. CODE=xxxxxx
Reduced Analysis for DSN=data.set.name

**Explanation:**
While the DIAGNOSE VOLUME-BCS program was considering various permutations of possible dataset structural views based upon the volume metadata, the control block threshold was reached. For the “Reduced Analysis” error, the permutations analysis abandoned, and dataset validation is performed based upon the available BCS information for that dataset. When the “Failed Analysis” condition occurs, processing for the jobstep terminates. The CODE= value is information that is meaningful only to Technical Support. The Threshold value is specified in the CKMINI SCKMPARM member in the :DIAG_VOLUME_BCS_OPTIONS section via the DSN_COMPONENT_MAX token. Each component control block uses approximately 640 bytes of Rmode(31) private storage. A value of 1024 for DSN_COMPONENT_MAX is usually sufficient, however, extreme values may lead to 878 and 80A abends.

**User response:**
Increment the DSN_COMPONENT_MAX value in the CKMINI member as needed, and rerun DIAGNOSE VOLUME-BCS. If this error persists or requires a value higher than 8192, then report this problem to Technical Support. Save all spooled output from this execution (including the JES execution job logs) and provide this to Technical Support as part of the problem documentation.

**CKM11408E**  SAF Command-Level Security Error - RC=nn.

**Explanation:**
A security violation and/or SAF related error occurred while performing authorization checking for the use of the command DIAGNOSE VOLUME-BCS. More specific information will immediately precede this message. Processing Terminates.

**User response:**
If the message indicates RC=8 and the SAF violation condition is not appropriate, then your security administrator should be contacted. If the message indicates RC=12 or higher, then contact Technical Support.

**CKM11410E**  - token-name VALUE INVALID: value

**Explanation:**
The indicated parameter value is invalid. With message CKM11410E, Processing Terminates. With message CKM11410W, the value is ignored and processing continues.

**User response:**
Correct the value specified in the token.
Correct the value specified in the token.

**CKM11410W** - token-name VALUE INVALID: value

**Explanation:**
The indicated parameter value is invalid. With message CKM11410E, Processing Terminates. With message CKM11410W, the value is ignored and processing continues.

**User response:**
Correct the value specified in the token.

**CKM11411E** KEYWORD NOT VALID - keyword

**Explanation:**
An unknown keyword was encountered while parsing the command input. With message CKM11411E, Processing Terminates. With message CKM11411W, the value is ignored and processing continues.

**User response:**
Correct the value specified in the command syntax.

**CKM11412E** ONLY SINGLE VALUE SUPPORTED FOR KEYWORD=keyword

**Explanation:**
The indicated keyword in the command syntax contained more than one subparameter, and only one subparameter can be specified for it. Processing Terminates.

**User response:**
Correct the value specified in the command syntax.

**CKM11413E** INVALID CHARACTERS IN KEYWORD=keyword

**Explanation:**
The indicated keyword in the command syntax contained values or characters that are not valid for it. Processing Terminates.

**User response:**
Correct the value specified in the command syntax.

**CKM11414E** COMMAND SYNTAX ERROR: COMMAND INPUT IGNORED:

**Explanation:**
A syntax error or invalid value was encountered while parsing the command input. This message is immediately followed by one or more message lines describing the error in further detail. With message CKM11414E, Processing Terminates. With message CKM11414W, the value is ignored and processing continues.

**User response:**
Correct the value specified in the command syntax.

**CKM11415E** VALUE LENGTH EXCEEDED - KEYWORD=

**Explanation:**
The indicated keyword in the command syntax contained a subparameter value that exceeded the allowable length. Processing Terminates.

**User response:**
Correct the value specified in the command syntax.

**CKM11416E** NO VALUES SPECIFIED FOR KEYWORD=

**Explanation:**
The indicated keyword in the command syntax requires a subparameter value, but none was provided. Processing Terminates.

**User response:**
Correct the value specified in the command syntax.

**CKM11417I** NOTE: FIXES WILL NOT BE GENERATED.

**Explanation:**
Informational. The FIXFILE parameter was not specified in the command. As a result, DIAGNOSE VOLUME-BCS will not generate fixes for any of the...
dataset anomalies it encounters. Processing continues.

User response:
None.

CKM11418E FIXES PARAMETER ERROR:
Explanation:
A syntax error or invalid value was encountered while parsing the FIXES keyword of the command input. This message is immediately followed by one or more message lines describing the error in further detail. With message CKM11418E, processing terminates. Otherwise, the value is ignored and processing continues.

User response:
Correct the value specified in the command syntax.

CKM11418I FIXES PARAMETER ERROR:
Explanation:
A syntax error or invalid value was encountered while parsing the FIXES keyword of the command input. This message is immediately followed by one or more message lines describing the error in further detail. With message CKM11418E, processing terminates. Otherwise, the value is ignored and processing continues.

User response:
Correct the value specified in the command syntax.

CKM11418W FIXES PARAMETER ERROR:
Explanation:
A syntax error or invalid value was encountered while parsing the FIXES keyword of the command input. This message is immediately followed by one or more message lines describing the error in further detail. With message CKM11418E, processing terminates. Otherwise, the value is ignored and processing continues.

User response:
Correct the value specified in the command syntax.

CKM11419E INVALID VALUE IN KEYWORD:

User response:
Correct the value specified in the command syntax.

Explanation:
An invalid value was encountered while parsing the command input. With message CKM11419E, Processing Terminates. With message CKM11419W, the value is ignored and processing continues.

CRCM11420I CURRENT MLA VALUE IS:
Explanation:
Informational. Depending upon the circumstances, this message ID can contain additional text forms pertaining to factors affecting the catalog search process.

CRCM11420I CURRENT MLA VALUE IS:
Explanation:
Informational. Depending upon the circumstances, this message ID can contain additional text forms pertaining to factors affecting the catalog search process.

CRCM11421E CATALOG allocation FAILURE.

User response:
Report this problem to Technical Support. Save all spooled output from this execution (including the JES execution job logs) and provide this to Technical Support as part of the problem documentation.
CKM11421W • CKM11424E

CKM11421W CATALOG allocation UNSUCCESSFUL.
CODE=xxxxxx

Explanation:
While attempting to access a BCS DIAGNOSE VOLUME-BCS encountered an allocation failure. Other related messages from allocation are usually present immediately preceding this message. The CODE= value is information that is meaningful only to Technical Support. Further information such as the name of the catalog being accessed is provided in messages immediately following. When CKM11421W issued, some of the DIAGNOSE VOLUME-BCS analysis can produce inaccurate results.

User response:
Determine whether the indicated BCS is valid and is properly connected to the master catalog. If the BCS belongs to another system and is not intended to be accessed by the current system, then it should be specified under the EXCLUDE-BCS keyword.

CKM11422E CATALOG OPEN FAILURE.
CODE=xxxxxx

Explanation:
While attempting to access a BCS DIAGNOSE VOLUME-BCS encountered a VSAM OPEN failure. The CODE= value is information that is meaningful only to Technical Support. Further information such as the name of the catalog being accessed is provided in messages immediately following. The CKM11422E message indicates that DIAGNOSE VOLUME-BCS could not continue processing due to this error. Processing terminates.

User response:
Report this problem to Technical Support. Save all spooled output from this execution (including the JES execution job logs) and provide this to Technical Support as part of the problem documentation. Technical Support may request that you run IDCAMS EXAMINE against the BCS that was reported in error.

CKM11422W CATALOG OPEN UNSUCCESSFUL.
CODE=xxxxxx

Explanation:
While attempting to access a BCS DIAGNOSE VOLUME-BCS encountered a VSAM OPEN error. Other related messages from allocation are usually present immediately preceding this message. The CODE= value is information that is meaningful only to Technical Support. Further information such as the name of the catalog being accessed is provided in messages immediately following. Processing continues, however it is possible that DIAGNOSE VOLUME-BCS can produce some inaccurate results.

User response:
Report this problem to Technical Support. Save all spooled output from this execution (including the JES execution job logs) and provide this to Technical Support as part of the problem documentation. Technical Support may request that you run IDCAMS EXAMINE against the BCS that was reported in error.

CKM11423E CATALOG READ FAILURE.
CODE=xxxxxx

Explanation:
While attempting to access a BCS DIAGNOSE VOLUME-BCS encountered a VSAM READ failure. The CODE= value is information that is meaningful only to Technical Support. Further information such as the name of the catalog being accessed is provided in messages immediately following. When the CKM11423E form of the message issued, DIAGNOSE VOLUME-BCS cannot continue execution, and processing terminates. Otherwise, the error is tolerated, but may result in inconsistent analysis.

User response:
Report this problem to Technical Support. Save all spooled output from this execution (including the JES execution job logs) and provide this to Technical Support as part of the problem documentation. Technical Support may request that you run IDCAMS EXAMINE against the BCS that was reported in error.

CKM11423W CATALOG READ FAILURE.
CODE=xxxxxx

Explanation:
While attempting to access a BCS DIAGNOSE VOLUME-BCS encountered a VSAM READ failure. The CODE= value is information that is meaningful only to Technical Support. Further information such as the name of the catalog being accessed is provided in messages immediately following. When the CKM11423E form of the message issued, DIAGNOSE VOLUME-BCS cannot continue execution, and processing terminates. Otherwise, the error is tolerated, but may result in inconsistent analysis.

User response:
Report this problem to Technical Support. Save all spooled output from this execution (including the JES execution job logs) and provide this to Technical Support as part of the problem documentation. Technical Support may request that you run IDCAMS EXAMINE against the BCS that was reported in error.

CKM11424E STRUCTURAL ERROR ENCOUNTERED IN ccc RECORD. CODE=xxxxxx

Explanation:
Structural metadata errors were encountered while reading either a BCS or VVDS. The record types
indicated by this message are BCS, VVR, and NVR. The CODE= value is information that is meaningful only to Technical Support. This message is immediately followed by one or more message lines describing the error in further detail. When the CKM11424E form of the message issued, DIAGNOSE VOLUME-BCS cannot continue execution, and processing terminates. Otherwise, the error is tolerated, but may result in inconsistent analysis.

**User response:**

Report this problem to Technical Support. Save all spooled output from this execution (including the JES execution job logs) and provide this to Technical Support as part of the problem documentation. Technical Support may request that you run IDCAMS EXAMINE against the BCS that was reported in error, or the MSCC_LongName. DIAGNOSE VVDS-VTOC command against the VVDS that was reported in error.

---

**CKM11429I NONSMS_POOLS TABLE LOADED FROM SCKMPARM(CKMINI).**

**Explanation:**

Informational. DIAGNOSE VOLUME-BCS is now enabled to optionally accept volume selection based upon the INCLUDE-POOL and EXCLUDE-POOL keywords for Non-SMS managed volumes. The information used to build the tables have been accessed from the CKMINI member in the MSCC_LongName. SCKMPARM library.

**User response:**

None.
CKM11430I  nnm VOLUMES HAVE BEEN SELECTED ...

Explanation:
Informational. This message summarizes the volume count selected for DIAGNOSE VOLUME-BCS processing. Immediately following this message is an itemized list of these volume serial numbers.

User response:
None.

CKM11431I THE FOLLOWING VOLUMES WERE EXCLUDED FROM ...

Explanation:
Informational. This message indicates that one or more of the EXCLUDE keywords has in effect removed volumes from the internal selection list. Immediately following this message is an itemized list of these excluded volume serial numbers that would have been otherwise selected.

User response:
None.

CKM11432E Keyword(PoolName) NAME NOT DEFINED IN CKMINI MEMBER.

Explanation:
An invalid SMS Storage Group Name or Mask was specified via the COMPARE-STORAGEGROUP or EXCLUDE-STORAGEGROUP keywords, or, an invalid Non-SMS Pool Name or mask was specified via the COMPARE-POOL or EXCLUDE-POOL keywords.

User response:
Provide the correct Storage Group or Pool name or mask.

CKM11432E Keyword(PoolName) NAME NOT DEFINED IN CKMINI MEMBER.

Explanation:
An invalid SMS Storage Group Name or Mask was specified via the COMPARE-STORAGEGROUP or EXCLUDE-STORAGEGROUP keywords, or, an invalid Non-SMS Pool Name or mask was specified via the COMPARE-POOL or EXCLUDE-POOL keywords.

User response:
Provide the correct Storage Group or Pool name or mask.

CKM11433W VOLUME volser WILL NOT BE PROCESSED DUE TO ERRORS.

Explanation:
While attempting to read the VTOC and VVDS of a volume, critical errors were encountered that prevented DIAGNOSE VOLUME-BCS from accessing this information. The error is tolerated, but this may result in the inconsistent analysis of other multivolume datasets.

User response:
Report this problem to Technical Support. Save all spooled output from this execution (including the JES execution job logs) and provide this to Technical Support as part of the problem documentation. Technical Support may request that you run the &MSCC_LongName. DIAGNOSE VVDS-VTOC command against the volume that was reported in error.

CKM11434I Accessing Volume xxxxxx ...

Explanation:
The VVDS and VTOC of the indicated volser is being read and analyzed. This message issued as a progress report.

User response:
Informational.

CKM11435I nnn DATASETS IGNORED DUE TO AGE-TOLERANCE(n) OPTION.

Explanation:
Informational. Datasets created after the implied AGE-TOLERANCE date have been excluded from analysis. If the number of datasets is relatively small, an itemized list of these dataset names is also printed immediately following this message.

User response:
None. AGE-TOLERANCE(NO) can be specified to disable dataset create-date filtering. This the recommend option.

CKM11436W OPEN FAILED FOR DDNAME=ddname

Explanation:
The OPEN for Input processing failed for the indicated DDNAME. Other related messages may also accompany this error message, particularly in the JES execution log. The error is tolerated and processing continues.

User response:
If the cause of the problem is not self-evident, report this problem to Technical Support. Save all spooled output from this execution (including the JES execution job logs) and provide this to Technical Support as part
The BCS being opened was defined as not sharable with other MVS images. Unlike SHR(3,4) catalogs, when catalog updates occur they often are not immediately reflected in the physical dataset. Since DIAGNOSE VOLUME-BCS accesses the BCS physically, the information may be out-of-date due to the unwritten buffers in the Catalog Address Space. When the Master Catalog has been defined with SHR(3,3), there may be discrepancies with catalog alias names, for instance. The catalog buffers can usually be flushed to the physical dataset using the command: MODIFY CATALOG,CLOSE(bcs.name)

User response:
When this message occurs, and, DIAGNOSE appears to be producing inaccurate analyses for datasets related to this BCS, then issue the MODIFY CATALOG command(s) and rerun DIAGNOSE.

Duplicate HLQ hlq encountered in mastercat. Analysis of datasets under this level may be inaccurate.

Explanation:
DIAGNOSE VOLUME-BCS encountered the same High Level Qualifier Alias name associated with two different user catalogs in the current master catalog. It is possible that this alias name happened to be changed during the execution of DIAGNOSE, or the master catalog may contain logical errors that might or might not be detected by IDCAMS DIAGNOSE.

User response:
If the problem persists as a consistent error, then contact Technical Support for assistance. It is possible that DIAGNOSE has encountered pre-existing damage within the master catalog.
CKM11445I · CKM11453I

CKM11445I  SYMBOLIC-VOLSER REFERENCE
SUMMARY:

Explanation:
Informational. Immediately following this messages is a list of symbolic volser substitutions that occurred. Substitutions specified through the SYMBOLIC-VOLSER keyword are also listed, as well as symbolic volser that remained unresolved.

User response:
None. If certain symbolic volser did not appear to resolve appropriately, you should consult with your Systems Programmer. All symbolic volser can be overridden via the SYMBOLIC-VOLSER keyword.

CKM11446W  MISSING HIGH-LEVEL-QUALIFIER
USERCATALOG ALIASES:

Explanation:
Warning Attention. During Dataset analysis, one or more entries would be cataloged into the master catalog. Except for system datasets, this generally not desirable. DIAGNOSE VOLUME-BCS reports these questionable high-level qualifier names because no applicable usercatalog alias entry was found in the master catalog, and, no other similar HLQ datasets currently exist in the master catalog.

User response:
To exclude specific HLQ names from being reported, the EXCLUDE-DATASET keyword can be used. To ensure that the delete commands for the not-cataloged datasets will be generated, specify the MASTERCATALOG keyword with DELETE-ENTRIES. Otherwise, define the appropriate ALIAS entries for the usercatalog(s) in the master catalog, and then rerun DIAGNOSE VOLUME-BCS.

CKM11447W  VVDS/VTOC ANOMALIES DETECTED
ON ACCESSED VOLUMES:

Explanation:
Warning Attention. During the volume scan process, one or more volser were found to have anomalous conditions between the VVDS and the VTOC, which calls for further investigation and repairs. Immediately following this message is a list of these volser. A fix under CLASS=03 is available to perform further analysis and repairs.

User response:
Locate the CLASS=03 fix that executes DIAGNOSE VVDS-VTOC and run MSCC_LongName. using this input after removing the "/*" comment prefixing the command. To perform the recommended repairs, remove or comment-out the SIMULATE keyword.

CKM11448W  UNSUPPORTED DATASET TYPE FOUND AND EXCLUDED.

Explanation:
While analyzing the metadata on a volume, DIAGNOSE encountered a dataset type that is not supported by this program. The dataset is automatically excluded and ignored. Other message lines will indicate the exact reasons.

User response:
You may request that support these dataset types in a future release by opening an Enhancement Request.

CKM11449I  DATASET IN TRANSIT:
DSN=data.set.name

Explanation:
The metadata attributes of the indicated dataset have changed while DIAGNOSE was executing. This dataset will be excluded from analysis during this run.

User response:
None.

CKM11450W  DATASET PROBLEMS DETECTED

Explanation:
Warning Attention. DIAGNOSE VOLUME-BCS has detected one or more dataset problems.

User response:
None.

CKM11451I  CLASS-xx ANOMALY. (description)

Explanation:
Informational. This message appears in the fix list files, and identifies the class that the current error incident has been assigned to.

User response:
None.

CKM11453I  NO FIX CREATED. INCIDENT NUMBER = nnn

Explanation:
Informational. This message appears in the fix list files, and indicates that a fix was not or could not be created for the current error incident.

User response:
None.
**CKM11454I**  FIX nnnn-n CREATED - < additional text >

**Explanation:**
Informational. A corrective fix has been generated to repair or clean up a problem that was detected with the metadata for a dataset.

**User response:**
None.

**---**

**CKM11455I**  NO DATASET ERRORS DETECTED.

**Explanation:**
Informational. After scanning the selected volumes, no dataset errors were encountered.

**User response:**
None.

**---**

**CKM11456I**  EXPORT DATA WRITTEN FOR DSN=data.set.name

**Explanation:**
Informational. Per the direction of Technical Support, the EXPORT-FILE keyword was specified, and metadata information regarding the reported dataset has been written to the export file. The contents of the export file will be used by to perform problem resolution and debugging functions.

**User response:**
The contents of the EXPORT-FILE is intended to be transmitted to in binary EBCDIC form for further technical analysis. Refer to information provided to you directly from Technical Support.

**---**

**CKM11457I**  INCIDENT NUMBER = nnnn

**Explanation:**
Informational. This message appears in the fix list files, and indicates the incident number that has been assigned to this dataset anomaly.

**User response:**
None.

**---**

**CKM11500I**  DIAGNOSE VVDS-VTOC MAINTENANCE LEVEL:

**Explanation:**
Informational. Indicates the current version of the DIAGNOSE VVDS-VTOC program.

**User response:**
None.

**---**

**CKM11504E**  INTERNAL LOGIC ERROR - CODE=xxxxx

**Explanation:**
An error occurred that was due to program logic.

**User response:**
Contact Technical Support. Have the listing containing this message available.

**---**

**CKM11506E**  DATASPACE FAILURE OCCURRED IN xxxx RC=xxxx RSN=xxxx

**Explanation:**
An error occurred while managing one of the internal dataspaces. This could also mean that more dataspace area was required than what was available.

**User response:**
Contact Technical Support. Have the listing containing this message available.

**---**

**CKM11508E**  COMMAND ACCESS VIOLATION, PROFILE: DIAGNOSE VVDS-VTOC

**Explanation:**
A locally defined security product has rejected your request to execute the DIAGNOSE VVDS-VTOC program.

**User response:**
Contact your Security Administrator.

**---**

**CKM11510E**  - token-name VALUE INVALID: value

**Explanation:**
The indicated parameter value is invalid. Processing Terminates.

**User response:**
Correct the value specified in the token.

**---**

**CKM11511I**  THE FOLLOWING DIAGNOSE VVDS-VTOC OPTIONS ARE IN EFFECT:

**Explanation:**
Informational.

**User response:**
None.

**---**

**CKM11514E**  COMMAND SYNTAX ERROR:

**Explanation:**
The indicated parameter value is invalid. Processing Terminates.
User response:
Correct the indicated parameter in the command.

---
CKM11514W  COMMAND INPUT IGNORED:
Explanation:
A parameter was specified that was redundant or otherwise unnecessary. Processing continues.
User response:
None.

---
CKM11516E  CKM01SMF ERROR; RC=nnn
CODE=xxxxxx
Explanation:
A problem was encountered while accessing the SMS subsystem. Processing Terminates. CODE= is a value that is meaningful to Technical Support.
User response:
Contact Technical Support. Have the listing containing this message available.

---
CKM11517E  SYSTEM UCBSCAN ERROR; RC=nnnn
RSN=nnnnnnnnn
Explanation:
A problem was encountered during the process of locating and pinning a UCB. Processing Terminates.
User response:
Contact Technical Support. Have the listing containing this message available.

---
CKM11518E  VTOC OBTAIN ERROR: RC=nnnn
VOL=volser DSN=data.set.name
CODE=xxxxxx
Explanation:
A problem with CVAF was encountered while accessing a Format-1 DSCB from the VTOC. Processing Terminates. CODE= is a value that is meaningful to Technical Support.
User response:
Contact Technical Support. Have the listing containing this message available.

---
CKM11519E  NO VOLUMES WERE SELECTED. TERMINATING.
Explanation:
While constructing a list of volumes to be processed, the command keywords affecting volser selection resulted in an empty list. Processing Terminates.

User response:
Review the volume selection parameters in the command.

---
CKM11520I  NNN VOLUMES HAVE BEEN SELECTED FOR VVDS-VTOC ANALYSIS:
Explanation:
Informational. The command keywords affecting volser selection resulted in the listed set of volume serial numbers. Each volume is then listed, along with the specific keyword and value combination that ultimately led to its selection.
User response:
None.

---
CKM11521W  NOTE: THE FOLLOWING FILTERING CRITERIA DID NOT AFFECT VOLUME SELECTION:
Explanation:
Certain command keyword values involved with volser selection did not have any effect. The value could have been mistyped, or it could have been preempted by a set of more specific values. Processing continues.
User response:
Review the CKM11520I message details and determine if the volume list incorporates the desired volser. If this list appears correct, then the keyword value can be omitted.

---
CKM11522I  THE FOLLOWING VOLUMES WERE EXCLUDED FROM VVDS-VTOC PROCESSING:
Explanation:
The EXCLUDE-VVDS and/or EXCLUDE-STORAGEGROUP keywords successfully excluded a set of volumes for processing that were initially selected by INCLUDE-VVDS and/or INCLUDE-STORAGEGROUP. This volumes are then itemized, along with the keyword and value that ultimately led to the filtering result.
User response:
None. Informational Message.

---
CKM11527E  ERROR CALLING TABLE FUNC=xxx
RC=xxx CODE=xxxxxx
Explanation:
The DIAGNOSE VVDS-VTOC program detected an abnormal and unexpected condition due to a possible logic or resource error. Information provided by this message is meaningful only to Technical Support. Other
CKM11528W  CKM11534E

Chapter 25. Messages and Codes for Advanced Catalog Management  433

descriptive information can often follow immediately after this error message. CODE= is a value that is meaningful to Technical Support.

User response:
Report this problem to Technical Support. Save all spooled output from this execution (including the JES execution job logs) and provide this to Technical Support as part of the problem documentation.

CKM11528W  VVDS STRUCTURAL PROBLEMS DETECTED ON VOLUME volser.

Explanation:
Critical problems have been detected within the indicated VVDS. These errors are then itemized in detail. In most cases, DIAGNOSE VVDS-VTOC will repair these when AUTOFIX is specified.

User response:
None.

CKM11529W  VTOC-INDEX ON VOL(volser) DOES NOT MATCH OS-VTOC.

Explanation:
The indicated volume has a mismatch problem between the VTOC Index and the OS VTOC. If there are duplicate Dataset Names in the OS-VTOC, these should be resolved immediately. After all duplicates have been eliminated, the VTOC Index should be disabled (if not already done) and then rebuilt using the BUILDIX command of the ICKDSF utility. When this occurs, this generally due improper SYSTOC RESERVE propagation on shared DASD, or improper use of the AMASPZAP utility against the OS VTOC. However, this occasionally known to occur due to hardware failures as well.

User response:
Disable the VTOC Index, Resolve any duplicate Format-1 DSCB issues, and then BUILDIX the VTOC Index again. Multiple runs of DIAGNOSE VVDS-VTOC may be appropriate.

CKM11530E  VOLUME ACCESS ERROR ON VOL(volser) DEV(ucb) - error_text

Explanation:
Errors were encountered while interfacing with the IOS Subsystem, and are probably hardware related. Refer to the "error_text" for additional details. Processing terminates.

User response:
Contact Technical Support. Have the listing containing this message available.

CKM11531E  SYSZVVDS/SYSVTOC DEADLOCK ON VOL=volser (ucb) DETECTED.

Explanation:
While attempting to issue a RESERVE against both the VTOC and VVDS, a deadlock condition was about to occur. In SIMULATE mode, processing continues, but results may be unpredictable. In AUTOFIX mode, processing terminates.

User response:
None.

CKM11532W  VOL=volser HAS DUPLICATE FORMAT-1 DSCBS FOR DSN=dataset

Explanation:
The VTOC for this volume is in an abnormal condition. This may lead DIAGNOSE VVDS-VTOC to perform inaccurate analysis. These situations are extremely rare, but were historically common with earlier operating system releases prior to 1980. Processing Continues.

User response:
Determine which systems share this DASD volume, and ensure that the proper rules for RESERVE serialization are upheld. It is possible that this entire volume is corrupted with several other problems as well, in which case, a full-volume restore may be more appropriate.

CKM11533E  CVAF ERROR - volser (ucb) RC=nnn STAT=nnn error_text

Explanation:
While accessing VTOC information, an unexpected condition was returned from CVAF. The "error_text" describes the function request and/or what component was being accessed.

User response:
Contact Technical Support. Have the listing containing this message available.

CKM11534E  VVDS LOGICAL ERROR - SYS1.VVDS.Vvolser - error_text

Explanation:
While accessing the VVDS, critical problems were encountered that prevent its analysis. DIAGNOSE VVDS-VTOC will bypass further processing for this volume. The "error_text" provides a brief description of the error. This usually an indication that the VVDS has been physically damaged beyond repair, and needs to be recovered or deleted.
If the volume does not contain any datasets other than the VVDS and Indexed VTOC, then it should be reinitialized. If the volume is non-SMS and does not contain any VSAM datasets then the VVDS can be deleted using ALTER SYS1-VVDS. Otherwise, the VVDS and/or the volume needs to be recovered from the last backup. For further assistance, Contact Technical Support. Have the full sysout listing available, including the joblog.

**CKM11535W** VTOC FOR VOL=volser INCOMPATIBLE WITH PHYSICAL DEVICETYPE.

**Explanation:**
The total number of cylinders on the physical device does not match the total cylinder count in the Format-4 DSCB. This message is immediately followed by more details regarding the discrepancy. Under this condition, unpredictable results can occur, including disablement of the Indexed VTOC. This usually indicates that the volume has been moved from one device to another, without taking into account a change in device capacity.

**User response:**
If the volume does not contain any datasets other than the VVDS and Indexed VTOC, then it should be reinitialized. If the volume contains data, then an ICKDSF REFORMAT should be run to rebuild the VTOC and Indexed VTOC. Otherwise, the volume needs to be recovered from the last full-volume backup. For further assistance, Contact Technical Support. Have the full sysout listing available, including the joblog.

**CKM11536W** INTERNAL LOGICAL FETCH ERROR OCCURRED.

**Explanation:**
An internal logic error occurred within the DIAGNOSE VVDS-VTOC program. Report this immediately.

**User response:**
Contact Technical Support. Have the full sysout listing available, including the joblog.

**CKM11537W** qname xxx RESERVE TO VOLUME volser (ucb) FAILED, RC rc **

**Explanation:**
An unexpected error was encountered while issuing a RESERVE request to the volume. Processing Terminates.

**User response:**
Contact Technical Support. Have the full sysout listing available, including the joblog. (The contents of message CKM11500I is always significant).

**CKM11538W** VVDS C/I Space Mapping Error Encountered

**Explanation:**
While analyzing the internal VVDS Free Space mapping inconsistencies and/or corruption was detected. One or more messages immediately following this message will provide further details on this error. As a result, DIAGNOSE will not rely upon the accuracy of the VVCR/VVCM records in the VVDS in order to identify empty C/ls, and will therefore read all C/ls in the VVDS. This could be a minor problem that can be corrected by the AUTOFIX keyword.

**User response:**
If the AUTOFIX option fails to correct this problem, then please contact Technical Support immediately. Have the full SYSOUT listing available, including the JOB log.

**CKM11540I** hh.mm.ss ** STARTING ANALYSIS OF VOLUME volser **

**Explanation:**
Informational.

**User response:**
None.

**CKM11541I** VOLUME volser HAS NO DETECTED PROBLEMS.

**Explanation:**
The VVDS for this volume is structurally sound, and the contents of VVDS and VTOC concur. In AUTOFIX mode, this also implies that there was no need to update the VVDS or VTOC on this volume.

**User response:**
None.

**CKM11542I** hh.mm.ss ** STARTING AUTOFIX UPDATES TO VOLUME volser **

**Explanation:**
Informational. Analysis for this volume has completed, and corrective updates to the VVDS have been staged. AUTOFIX was explicitly specified in the command, and DIAGNOSE VVDS-VTOC is about to apply these changes directly to the volume.

**User response:**
None.
** CKM11544D  ** AUTOFIX UPDATE FAILED ON VOLUME volser **

Explanation:
A critical error occurred during the AUTOFIX Update phase for this volume. The VVDS may be damaged as a result.

User response:
This a serious error. Refer to other error messages regarding this volume. Rerun DIAGNOSE VVDS-VTOC for this volume in SIMULATE mode to determine if the VVDS has been left with problems. Contact Technical Support, immediately. Have the full sysout listing available, including the joblog.

** CKM11545I  ** AUTOFIX UPDATES COMPLETE ON VOLUME volser

Explanation:
Informational.

User response:
None.

** CKM11546I  ** hh.mm.ss  ** function COMPLETE FOR VOLUME volser - RETURN CODE rc

Explanation:
Informational. "Function" is SIMULATE or AUTOFIX.

User response:
None.

** CKM11547W  ** AUTOFIX UPDATE BYPASSED FOR VOLUME volser DUE TO PRIOR RC=rc

Explanation:
Informational Warning. Processing on a prior volume set a return-code of 8 or higher, which automatically switched the current execution from AUTOFIX to SIMULATE mode.

User response:
None. Refer to the summary report produced at the end of the listing to determine which volume had the critical error.

** CKM11548I  ** AUTOFIX UPDATE BYPASSED FOR VOLUME volser, NO FIXES STAGED.

Explanation:
Problems with the volume were detected, but no VVDS repairs were performed. This could be due to specifying options SCRATCH(NO) or EXTENT-REPAIR(NO), or, there may have been conditions that were too ambiguous to attempt repairs for.

** CKM11549D  ** DIAGNOSE VVDS-VTOC TERMINATING.

Explanation:
A critical problem occurred that prevented DIAGNOSE VVDS-VTOC from continuing the current execution. Generally, this will be due to a resource shortage or table capacity error. A prior level-E or level-D error message will provide more specific details.

User response:
Contact Technical Support. Have the full sysout listing available, including the joblog.

** CKM11550D  ** VVR UPDATE LOGICAL ERROR.

Explanation:
A problem occurred while attempting to update a VVR. This message is immediately followed with details regarding the situation and cause.

User response:
Contact Technical Support. Have the full sysout listing available, including the joblog.

** CKM11552D  ** VVCN UPDATE LOGICAL ERROR.

Explanation:
A problem occurred while attempting to add a BCS name to the VVCR/VVCN Catalog Names List. This message is immediately followed with details regarding the situation and cause.

User response:
Contact Technical Support. Have the full sysout listing available, including the joblog.

** CKM11554D  ** VVCM CHAIN REPAIR FAILED **

Explanation:
A problem occurred while attempting to repair the internal VVCR/VVCM Space Map records in the VVDS.

User response:
Contact Technical Support. Have the full sysout listing available, including the joblog.

** CKM11555D  ** VVDS RECOVERY REQUIRED FOR SYS1.VVDS.vvolser **

Explanation:
A serious problem occurred while updating the VVDS,
and the resultant condition of the VVDS is partially updated. DIAGNOSE VVDS-VTOC was unable to backout the changes.

**User response:**
This a serious error. Refer to other error messages regarding this volume. Rerun DIAGNOSE VVDS-VTOC for this volume in SIMULATE mode to determine if the VVDS has been left with problems. Contact Technical Support, immediately. Have the full sysout listing available, including the joblog.

---

**CKM11558E CATALOG MANAGEMENT FAILURE OCCURRED DURING VVR/NVR INSERT PROCESSING.**

**Explanation:**
Catalog Management returned an error condition while attempting to insert or replace a VVR or NVR into the VVDS. This message is immediately followed with details regarding the situation and cause. Other updates to this volume may have successfully completed, but the condition of the VVDS and the VTOC is functionally intact.

**User response:**
Refer to the error messages from the MVS bookshelf for message IDC3009I return code 050 to determine the exact nature of the error. Contact Technical Support. Have the full sysout listing available, including the joblog.

---

**CKM11561I VVDS-VTOC VOLUME ANALYSIS SUMMARY REPORT**

**Explanation:**
Informational.

**User response:**
None. This report can be referenced to identify which volumes had critical errors if the execution ended with a non-zero return-code.

---

**CKM11562I VVDS-VTOC VOLUME AUTOFIX UPDATES REPORT:**

**Explanation:**
Informational.

**User response:**
None. This report can be referenced to identify which volumes had critical errors if the execution ended with a non-zero return-code.

---

**CKM11563W Analysis I Simulate proposes the following actions to volume xxxxxx:**

**Explanation:**
Warning. Immediately following this message is a summarized list of the proposed updates to the volume. In SIMULATE mode, these actions will not be actually performed.

**User response:**
None.

---

**CKM11564W SIMULATE HAS IDENTIFIED PROBLEMS ON VOLUME xxxxxx**

**Explanation:**
Informational Warning. This message sets an RC=4 condition for the job because the SIMULATE option has identified at least one volume that had detected problems.

**User response:**
None. To proceed with making the repairs to the volume, rerun the job using the AUTOFIX keyword.

---

**CKM11565W No READ access to DASDVOL for xxx, volume will not diagnosed**

**Explanation:**
The security server has prevented DIAGNOSE from viewing data on volume xxx because the assigned user does not have READ access to the DASDVOL profile. When the user does not have READ access to the DASDVOL profile of the identified volume, DIAGNOSE does not diagnose that volume and will proceed to the next volume.

**User response:**
If the identified volume should be diagnosed by this user, the user will need at least READ access to the DASDVOL profile for the volume.

Message CKM11566W has additional information concerning security access for errors resolved when DIAGNOSE ... SCRATCH has been specified.

Message CKM11567W has additional information concerning security access for errors resolved when DIAGNOSE ... AUTOFIX has been specified.

The first occurrence of this message will be preceded by your security server's messages on the console and in SYSPRINT. The messages from the security server will appear one time and be suppressed thereafter.
CKM11566W No UPDATE access on DSN ddd VOL vvv, SCRATCH fix will not be done

Explanation:
User has READ authority to volume vvv but not UPDATE access for the identified dataset for the purpose of scratching the dataset based on the SCRATCH(YES) keyword.

User response:
The user will need UPDATE access to this DSN if it is to be updated by DIAGNOSE (SCRATCH).

The first occurrence of this message will be preceded by your security server's messages on the console and in SYSPRINT. The messages from the security server will appear one time and be suppressed thereafter.

CKM11567W No UPDATE access to DASDVOL facility for yyy, AUTOFIX fix will not be done

Explanation:
The user will need UPDATE access the DASDVOL profile if this volume is to be updated by DIAGNOSE ... AUTOFIX.

If the user does not have UPDATE access to DASDVOL of the identified volume, DIAGNOSE cannot apply the fixes that it has identified.

User response:
If the identified volume should be updated by this user, the user will need UPDATE access to the DASDVOL profile for that volume.

The first occurrence of this message will be preceded by your security server's messages on the console and in SYSPRINT. The messages from the security server will appear one time and be suppressed thereafter.

CKM11601I (multi-line message; see Explanation)

Explanation:
CKM00116 Maintenance level (REV=rev,PMR=pmr,REVDATE=date) where
rev is the last revision number for this module.

pmr is the tracking number of the last change.

date is the date of the last revision.
The maintenance level is listed for the DIAGNOSE BCS.

User response: Provide this information to Technical Support if requested.

CKM11602I The Catalogs to be diagnosed.

Explanation:
DIAGNOSE BCS displays the catalogs that match the INCLUDE-BCS and EXCLUDE-BCS keywords.

User response: None.

CKM11604E Installation security server text

Explanation:
DIAGNOSE BCS was check to see if this user has authorization to execute the command. Your local security server product has either refused access to the command or there is an error in obtaining that access right.

User response: If you have been denied, then you must resolve be granted access to the command by your security administrator. If you receive an error obtaining authorization, contact Technical Support.

CKM11605E MLA value is number

Explanation:
The current system MLA value is displayed.

User response: None.

CKM11608W Offset: offset, Record has offline volume: volume

Explanation:
DIAGNOSE BCS found an error with a catalog record whose record DIAGNOSE and key was written in the last CKM11661I message. This catalog record has a volume cell for a disk dataset that names a volume that is not online. The offset refers to the offset in the record where the volume name appears.

User response: DIAGNOSE BCS records this problem with the problem number written in the last CKM11632W message. On completion of reading the current catalog, DIAGNOSE BCS will create fixes based on the DIAGNOSE BCS keywords specified after analyzing all other problems identified for related records.

CKM11610I (multi-line message; see Explanation)

Explanation:
Record counts for catalog: dsn

A - NonVSAM count

U - Catalog connector count

C - VVDS count

C - Catalog count

C - Cluster count
On completion of processing each catalog, DIAGNOSE
BCS displays the count of the record types found.

User response: None.

CKM11612E Mask validation error for entry: text

Explanation:
During parsing of the INCLUDE-BCS or EXCLUDE-BCS
keyword, the displayed value was found and it is not a
valid data set mask.

User response: Correct the value and resubmit the
DIAGNOSE BCS JOB.

CKM11615E UCB SCAN error; return code: rc
reason code: reason

Explanation:
DIAGNOSE BCS retrieves disk volume address using a
UCB SCAN. This process failed with the displayed
return code and reason code.

User response: Contract Technical Support with the
output of this JOB.

CKM11621W Unresolved symbols, DSN: dsn volume: volume

Explanation:
While checking the volume cell of a data set, a symbolic
system symbol was found that could not be translated
on this system. This entry can be valid for another
LPAR that has a different set of system symbols.

User response: DIAGNOSE BCS records this
problem with the problem number written in the last
CKM11632W message. On completion of reading the
current catalog, DIAGNOSE BCS will create fixes based
on the DIAGNOSE BCS keywords specified after
analyzing all other problems identified for related
records.

CKM11625I DSN: dsn references alias: alias with
symbolic-relate

Explanation:
During processing of a non-VSAM catalog record
association which is not an alias, associations were
found when checking an alias that uses symbolic relate.

User response: None

CKM11630E Allocation failed for: dsn

Explanation:
DIAGNOSE BCS was unable to allocate the displayed
catalog so that it could read it.

User response: Validate that the data sets named by
the INCLUDE-BCS refer to catalogs, correct, and
resubmit. If you cannot resolve this error, call Technical
Support.

CKM11631E Sequential read error after key: key

Explanation:
DIAGNOSE BCS as unable to sequentially read the
current catalog.

User response: If you cannot resolve this error, call
Technical Support.

CKM11632W Problem: number

Explanation:
DIAGNOSE BCS detected a problem with the catalog
record name in the last CKM11641I message.
User response: None. This message shows a problem number that will be referenced when fixes are generated. The next message explains the problem detected.

**CKM11633I (U) UCAT connector for: catalog, has no aliases**

**Explanation:**
This message is only generated when the TRACE(U-NO-A) keyword is coded and a catalog record for a user catalog has no entries within the association cell (representing catalog aliases). This seems to be a normal result of (1) creating a user catalog and defining no aliases or (2) having a user catalog with aliases, then deleting the last alias.

User response: No action.

**CKM11637E CHECK(INDEX) failed, key: key**

**Explanation:**
This message is only generated when the CHECK(INDEX) keyword is coded and a catalog record is found that cannot be found by directing reading using the catalog.

User response: DIAGNOSE BCS terminates because the catalog is broken.

**CKM11638W Offline volumes found**

**Explanation:**
On completion of reading a complete catalog, DIAGNOSE BCS displays the disk volumes that were found.

User response: None.

**CKM11641I Record Type: type key: key**

**Explanation:**
DIAGNOSE BCS displays this message if MESSAGES-TEXT(FULL) is specified or if DIAGNOSE BCS finds an error with a catalog record.

User response: No action required for this message, but if subsequent warning messages are generated for errors in catalog records, those errors refer to the last CKM11641I message.

**CKM11643W (multi-line message; see Explanation)**

**Explanation:**
Offset: $offset, cell-type element length is zero, where cell-type is Association or AIX REL

Both the association cell and the AIX REL cell of a catalog records contains an array of elements with length attributes. One of those elements has a zero length.

User response: This catalog record is broken and should be carefully analyzed to determine now to either fix it with ZAP BCS or delete it with IDCAMS.

**CKM11645E Unable to open FIXFILE DDN: ddn**

**Explanation:**
DIAGNOSE BCS was unable to open the DDN (displayed), specified in the FIXFILE keyword.

User response: Check your JCL to ensure that the DD name specifies a dataset to which you can write. Correct the JOB and resubmit.

**CKM11661I VVDS record found for offline volume**

**Explanation:**
The volumes, listed after this message, have catalog records for the VVDS on that volume, but the volume is offline. Catalog management ensures that each catalog has catalog records for the VVDS on which those records reside. For SMS managed volumes, any dataset catalog on a disk volume require a catalog record for that volume’s VVDS. For non-SMS managed volumes, only clusters require a catalog record for that volume’s VVDS.

User response: DIAGNOSE BCS will create fixes to delete the VVDS records from the catalog along with data sets that reference these volumes. If these volumes are expected to be online, do not use the fixes provided but rather facilitate getting the volumes online.

**CKM11662W VVDS records for the following volumes are not needed**

**Explanation:**
The volumes listed after this message have catalog records for the VVDS on that volume, but these records are not necessary. IDCAM’s DIAGNOSE ICFCAT has a similar message, IDC11362W. Catalog management ensures that each catalog has catalog records for the VVDS on which those records reside. For SMS managed volumes, any dataset catalog on a disk volume require a catalog record for that volume’s VVDS. For non-SMS managed volumes, only clusters require a catalog record for that volume’s VVDS.

User response: These catalog records are small and are unnecessary. When required, catalog management adds the required VVDS records. You can delete these catalog records.
Explanation:
The following entries had error-type msgid errors:
where msgid is CKM11641I, CKM11666I, or other.

DIAGNOSE BCS has completed processing catalog records and then (1) with this message, lists the record keys with CKM111664I messages if any (2) with this message, lists the record keys with CKM111666I messages if any (3) with this message, lists the record keys with other messages if any.

User response: None.

Explanation:
Reason Code: $reason[, offset: $offset] $text where
(reason is the reason code, as enumerated below.

$offset optionally the number of bytes in hex from the beginning of the record that the error was found.

$text is the description of the error.

DIAGNOSE BCS found an error with a catalog record whose record DIAGNOSE and key was written in the last CKM11661I message. The reason codes are explained in detail below. The CKM11664I message is modeled after IDCAM's message IDC21364I with matching reason codes as documented by IBM in z/OS MVS System Messages Volume 6 (GOS - IEA).

User response:

DIAGNOSE BCS records this problem with the problem number written in the last CKM11632W message. On completion of reading the current catalog, DIAGNOSE BCS will create fixes based on the DIAGNOSE BCS keywords specified after analyzing all other problems identified for related records.

1. Cell length is zero. A catalog record is made up of cells starting with a two-byte length. This record has a cell length of zero. Beware that a prior cell's length may be incorrect causing the start of the next cell to be incorrect.

2. Cell type not recognized. A catalog record is made up of cells starting with a two-byte length followed by a cell type. This record has an unknown cell type. Beware that a prior cell's length may be incorrect causing the start of the next cell to be incorrect.

3. Record type not recognized. A catalog record is made up of cells starting with a two-byte length followed by a cell type. The first cell's type is also the record type. This record has an unknown record type.

4. Component length is zero. The catalog record types that support datasets such as a cluster, alternate index, and a GDG are defined as one or more components consisting of a set of related cells. For example, the data component and the index component of a cluster are each made up of a group of related cells. The initial cell of these components has a length attribute that is the total of all of the lengths of the cells of the component. In this record, this component length is zero.

5. Cell length too large [for record]. A catalog record is made up of cells starting with a two-byte length followed by a cell type. The first cell's type is also the record type. Each of the cell types has a minimum possible length and most have a maximum possible length. In this record, a cell is either too large according to its type or its length would overlap the end of the record. DIAGNOSE BCS considers this record to be broken and not automatically fixable. The record is dumped so that you can evaluate how to resolve it. If you need help with this, call Technical Support.

6. Cell lengths sum and component length disagree. The catalog record types that support datasets such as a cluster, alternate index, and a GDG are defined as one or more components consisting of a set of related cells. For example, the data component and the index component of a cluster are each made up of a group of related cells. The initial cell of these components has a length attribute that is the total of all of the lengths of the cells of the component. In this record, this component length is does not match the sum of the lengths of the component's cells.

7. Repeating cell not valid. A catalog record is made up of cells starting with a two-byte length followed by a cell type. Many cell types may appear in a record multiple times, but cell types such as: o Hex 02 - security cell o Hex 05 - GAT cell o Hex 06 - REL cell of an AIX can only appear once. DIAGNOSE BCS considers this record to be broken and not automatically fixable. The record is dumped so that you can evaluate how to resolve it. If you need help with this, call Technical Support.

8. Record length incorrect. The length of the catalog record in the first two bytes of the record does not agree with the length return by the read. DIAGNOSE BCS considers this record to be broken and not automatically fixable. The record is dumped so that you can evaluate how to resolve it. If you need help with this, call Technical Support.

9. Incomplete EXTEND detected. The cell definition for a cluster's data or index (if it exists) has an 'Incomplete EXTEND detected' attribute. This attribute is set when the
component grows in extents and is reset on completion. This record has the "Incomplete EXTEND detected" attribute on indicating a problem with the last extend operation. DIAGNOSE BCS considers this record to be broken and not automatically fixable. The record is dumped so that you can evaluate how to resolve it. If you need help with this, call Technical Support.

11 Incomplete DELETE detected. The cell definition for a cluster's data or index (if it exists) has an 'Incomplete DELETE detected' attribute. This attribute is set when the component is deleted and is reset on completion. This record has the 'Incomplete DELETE detected' attribute on indicating a problem with the last DELETE operation. DIAGNOSE BCS considers this record to be broken and not automatically fixable. The record is dumped so that you can evaluate how to resolve it. If you need help with this, call Technical Support.

20 Association record not found [ Truename SymbolicRelate]. Data set types such as clusters are made up of multiple catalog records and part of the association is defined by a record having an association cell that names the keys of other associated records. For example,

- a VSAM KSDS has cluster record and two truename records and may have a path record
- a VSAM KSDS with one AIX has cluster record and multiple truename records and multiple path records
- a non-VSAM dataset and its alias will have both a non-VSAM record and an alias record.

One of this record's related records is missing where the relationship is defined by an association cell. The message indicates if the related record was a truename record or was linked via a symbolic relate.

21 Association loop failure. Data set types such as clusters are made up of multiple catalog records and part of the association is defined by a record having an association cell that names the keys of other associated records. For example,

- a VSAM KSDS has cluster record and two truename records and may have a path record
- a VSAM KSDS with one AIX has cluster record and multiple truename records and multiple path records
- a non-VSAM dataset and its alias will have both a non-VSAM record and an alias record.

This record has a related record that was found but that related record has no knowledge of this record. There are two distinct favors of this related loop failure: (1) one involving truenames/clusters (RC=23) and this (RC=21) which primarily occurs with Non-VSAM/Alias loop failures and User catalog/Alias Loop failures.

22 Truename record not found [REL cell entry]. Data set types such as clusters are made up of multiple catalog records and part of the association is defined by a record having an association cell that names the keys of other associated records. For example,

- a VSAM KSDS has cluster record and two truename records and may have a path record
- a VSAM KSDS with one AIX has cluster record and multiple truename records and multiple path records
- a non-VSAM dataset and its alias will have both a non-VSAM record and an alias record. One of this record's truename records is missing.

23 Truename loop failure. Data set types such as clusters are made up of multiple catalog records and part of the association is defined by a record having an association cell that names the keys of other associated records. For example,

- a VSAM KSDS has cluster record and two truename records and may have a path record
- a VSAM KSDS with one AIX has cluster record and multiple truename records and multiple path records
- a non-VSAM dataset and its alias will have both a non-VSAM record and an alias record.

This record has a related record that was found but that related record has no knowledge of this record. There are two distinct favors of this related loop failure: (1) one involving truenames/clusters (RC=23) and this (RC=21) which primarily occurs with Non-VSAM/Alias loop failures and User catalog/Alias Loop failures.

24 Required cell missing Field : type - text. A catalog record is made up of cells starting with a two-byte length followed by a cell type. Depending on the record type, some cell types are required. For example, a cluster must have a data cell. DIAGNOSE BCS considers this record to be broken and not automatically
33 Incomplete UPDATE detected. The cell definition for a cluster's data or index (if it exists) has an 'Incomplete UPDATE detected' attribute. This attribute is set when an update/move operation has not completed. This record has the 'Incomplete UPDATE detected' attribute on indicating a problem with the last extend operation. DIAGNOSE BCS considers this record to be broken and not automatically fixable. The record is dumped so that you can evaluate how to resolve it. If you need help with this, call Technical Support.

26 Cell type invalid in context. A catalog record is made up of cells starting with a two-byte length followed by a cell type. In this record a cell was found that either: (1) based on the record type, was not appropriate or (2) did not follow a proper sequence. DIAGNOSE BCS considers this record to be broken and not automatically fixable. The record is dumped so that you can evaluate how to resolve it. If you need help with this, call Technical Support.

27 GDS not found in the GAT. A GDG has a GAT (generation aging table) cell type hex-05 that stores all of the generations and has a GDS cell type C'H' for each of the generation. This catalog record has at least one GDS cell that is not recorded in the GAT.

28 GAT cell entry has no GDS cell. A GDG has a GAT (generation aging table) cell type hex-05 that stores all of the generations and has a GDS cell type C'H' for each of the generation. This catalog record has at least one GAT entry which has no corresponding GDS cell.

29 Entry missing from REL cell. A cluster catalog record representing a data set with an AIX, has a REL (relationship table) cell type hex-056 that stores all of the AIX names which also have AIX type C'G' cells. This catalog record has at least one AIX cell that is not also in the REL cell table.

30 REL Cell entry not found. A cluster catalog record representing a data set with an AIX has a REL (relationship table) cell type HEX-06 that stores all of the AIX names which also have AIX type C'G' cells. This catalog record has at least one REL cell table entry that does not have a corresponding AIX cell.

32 VVDS has wrong record type. A catalog record is made up of cells starting with a two-byte length followed by a cell type. The first cell's type is also the record type. This record for a data set whose name starts with 'SYS1.VVDS.V' is not cluster, truename, or a non-VSAM record type.

33 Incomplete UPDATE detected. The cell definition for a cluster's data or index (if it exists) has an 'Incomplete UPDATE detected' attribute. This attribute is set when an update/move operation has not completed. This record has the 'Incomplete UPDATE detected' attribute on indicating a problem with the last extend operation. DIAGNOSE BCS considers this record to be broken and not automatically fixable. The record is dumped so that you can evaluate how to resolve it. If you need help with this, call Technical Support.

36 Length of name invalid in name cell. A catalog record is made up of cells starting with a two-byte length followed by a cell type. The first cell's type is also the record type. All of the initial cells as well as the Data/Index and AIX cells are 'name' cells in that they describe a named object. The name of a name cell consists of a data set name followed by the extension byte. This record has a name cell whose name is defined to be 0 or more than 45 bytes long.

37 Association cell of a VVDS was not found. A catalog record is made up of cells starting with a two-byte length followed by a cell type. This truename record for a VVDS does not have an association cell to locate the cluster record. It is typical that VVDS entries are not truename records but cluster records which do not need to have a truename record.

38 SMS mismatch, cluster: cluster, extension: extension. When a cluster record is too large to store in the catalog (due to small CI size and/or lots of AIX and/or lots of volume cells), the AIX portion is placed into one or more extension records. This record and one of its extensions do not agree on if the cluster is SMS managed or not.

39 Base or component cell not found. VSAM data sets are defined with multiple catalog records, minimally a cluster record and a truename record that has the data component's data set name. Additional truename records are required for an index component and for each AIX, data, and index component of an AIX. The primary data or index or AIX truename records for data set have an association cell with an entry that names the cluster record key or extension record key where the data and index cells can be found. The data, or index truename records for an AIX parts of a data set have an association cell with an entry that names the AIX that the data or index belongs. This catalog record is a truename record but either (1) the record key identified in the association cell is not a record in the catalog or (2) the AIX component named in the association cell could not be found in the record from (1).

40 Data component cell not found. A catalog record is made up of cells starting with a two-byte length followed by a cell type. This catalog record is a cluster type record but there is no data type cell in the record.

53 Reserved bits on in alias entry. A catalog
record is made up of cells starting with a two-byte length followed by a cell type. This catalog record is a alias type record and it has bits set in a reserved field.

**CKM11665I** *(multi-line message; see Explanation)*

**Explanation:**

ICFCAT record type: rtype record type: type Key: key

where

- **rtype** ‘Primary’ for the current catalog record that is being processed sequentially or ‘Related’ for a catalog record that was read while checking the primary record.
- **type** the record type of the record.

A  NonVSAM
B  GDG
C  Cluster
E  Cluster extension
J  GDG extension
R  Path
T  Truename
U  Catalog connector
X  Non-VSAM or catalog Alias

**key** is the description of the error.

DIAGNOSE BCS found an error with a catalog record whose record type and key was written in the last CKM11661I message. The reason codes are explained in detail below.

**User response:**

DIAGNOSE BCS records this problem with the problem number written in the last CKM11632W message. On completion of reading the current catalog, DIAGNOSE BCS will create fixes based on the DIAGNOSE BCS keywords specified after analyzing all other problems identified for related records.

1  Cell length too small. A catalog record is made up of cells starting with a two-byte length followed by a cell type. The first cell’s type is also the record type. Each of the cell types has a minimum possible length and most have a maximum possible length. In this record, a cell is too small according to its type. DIAGNOSE BCS considers this record to be broken and not automatically fixable. The record is dumped so that you can evaluate how to resolve it. If you need help with this, call Technical Support.

2  Record length not equal to total cell lengths. A catalog record is made up of cells starting with a two-byte length followed by a cell type. The first cell’s type is also the record type. Each of the cell types has a minimum possible length and most have a maximum possible length. In this record, two-byte record length does not equal the sum of the two-byte cell lengths. DIAGNOSE BCS considers this record to be broken and not automatically fixable. The record is dumped so that you can evaluate how to resolve it. If you need help with this, call Technical Support.

3  Vol count is low. A catalog record is made up of cells starting with a two-byte length followed by a cell type. The volume cell (type X'04') occurs multiple times based on a count in another cell’s volume count field. In this record, there are more volume cells than the count allows.

4  Vol count is high. A catalog record is made up of cells starting with a two-byte length followed by a cell type. The volume cell (type X'04') occurs multiple times based on a count in another cell’s volume count field. In this record, there are fewer volume cells than the count allows.

5  Invalid characters in volume name. This catalog record’s volume cell (X'04') has invalid characters in to volume name.

6  Duplicate AIX cell names. A catalog record is made up of cells starting with a two-byte length followed by a cell type. The AIX cell (H) occurs multiple times, one for each AIX defined. This catalog record has two AIX cells with the same name.
CKM11668E

7 More than one volume cell. A catalog record is made up of cells starting with a two-byte length followed by a cell type. The volume cell (type X'04') occurs multiple times for some record types. In this user catalog record, more than one volume cell was found.

8 SMS Cell and non-SMS volume. A catalog record is made up of cells starting with a two-byte length followed by a cell type. There is also an SMS sub-cell (X'26') that lives in another cell that indicates that the data set is SMS managed. This catalog record has an SMS sub-cell but the record has volume cells (X'04') that name a non-SMS volume.

9 Non-SMS data set on SMS volume. A catalog record is made up of cells starting with a two-byte length followed by a cell type. There is also an SMS sub-cell (X'26') that lives in another cell that indicates that the data set is SMS managed. This catalog record has no SMS sub-cell but the record has volume cells (X'04') that name an SMS volume.

10 Duplicate [ASC 0 REL] cell entries. A catalog record is made up of cells starting with a two-byte length followed by a cell type. Both the ASC cell (HEX-03 ) and the REL cell (hex-06 ] have zero or more entries. This catalog record has two entries in the identified type with the same value.

11 [ Cluster 0 GDG ] extension not expected. A catalog record is made up of cells starting with a two-byte length followed by a cell type. The first cell's (name cell) cell type is the record's type. When a cluster (type 'C' or a GDG type('B') record is too large to store in the catalog, the excess parts are placed into extension records as type 'E' for cluster extensions or 'J' for GDG extensions. In addition the last byte of the key, which is usually zero, is set to an incrementing value. This record is an extension record of the type displayed, but the non-extension record does not exist.

12 [ Cluster 0 GDG ] extension has no non-extension. A catalog record is made up of cells starting with a two-byte length followed by a cell type. The first cell's (name cell) cell type is the record's type. When a cluster (type 'C' or a GDG type('B') record is too large to store in the catalog, the excess parts are placed into extension records as type 'E' for cluster extensions or 'J' for GDG extensions. In addition the last byte of the key, which is usually zero, is set to an incrementing value. This record indicates that there should be extension records, but at least one of the extension records does not exist.

13 Keyrange data set found. A catalog record is made up of cells starting with a two-byte length followed by a cell type. A volume cell (type X'04') indicates that this data set is a keyrange dataset. DIAGNOSE BCS considers this record to be broken and not automatically fixable. Keyrange data sets cannot be created or re-cataloged. The record is dumped so that you can evaluate how to resolve it. If you need help with this, call Technical Support.

14 Volcat found but not SYS1.VOLCAT.VGENERAL. A catalog record for a volcat other than SYS1.VOLCAT.VGENERAL was found, but SYS1.VOLCAT.VGENERAL is not defined in this catalog. A minimal configuration for a volcat consists of at least one catalog SYS1.VOLCAT.VGENERAL. Addition volcats can be defined with names that start with SYS1.VOLCAT.V

15 IO Error reading association. A catalog record is made up of cells starting with a two-byte length followed by a cell type. An association cell (type HEX-03 ) provides the keys to related records. DIAGNOSE BCS had an IO error reading the related record. IO errors are most likely do to either a spanned record error, where the a part of a spanned record has been updated but the other not. This can be a permanent error or due to contention. DIAGNOSE BCS repeatedly retried this error. Re-run DIAGNOSE BCS if the error re-occurs, then the problem is likely do to the spanned record error. If you need help with this, call Technical Support.

16 IO Error reading extension. A catalog record is made up of cells starting with a two-byte length followed by a cell type. When a record becomes large than the CI-size, it is broken up into multiple records. DIAGNOSE BCS had an IO error reading one of the base or extension records. IO errors are most likely do to either an spanned record error, where the a part of a spanned record has been updated but the other not. This can be a permanent error or due to contention. DIAGNOSE BCS repeatedly retried this error. Re-run DIAGNOSE BCS if the error re-occurs, then the problem is likely do to the spanned record error. If you need help with this, call Technical Support.

99 Developer said record is bad (test message)

CKM11668E  Catalog OPEN failed Field: DSN=dsn
             Return code: return

Explanation:
DIAGNOSE BCS could not open the displayed catalog.
The data set is not a viable catalog.

User response:  Review the prior CKMERR
messages to determine the problem with the displayed catalog. If you cannot resolve this problem, call Technical Support and provide the JOB listing.

---

**CKM11669E I/O Error on catalog**

**Explanation:**
DIAGNOSE BCS failed reading the current catalog. The data set is not a viable catalog.

**User response:** Review the prior CKMERR* messages to determine the problem with the displayed catalog. If you cannot resolve this problem, call Technical Support and provide the JOB listing.

---

**CKM11671I Record display suppressed, already dumped.**

**Explanation:**
DIAGNOSE BCS had identified a problem with a catalog message as identified by messages CKM11641I and CKM11632W. DIAGNOSE BCS prints the failing record in hex following this message unless it has already been printed (CKM11671I).

**User response:** None.

---

**CKM11674W VVDS missing**

**Explanation:**
The volumes listed after this message do not have catalog records for the VVDS on that volume, as required by catalog management. Catalog management ensures that each catalog has catalog records for the VVDS on which those records reside. For SMS managed volumes, any dataset catalog on a disk volume require a catalog record for that volume’s VVDS. For non-SMS managed volumes, only clusters require a catalog record for that volume’s VVDS.

**User response:** DIAGNOSE BCS will create IDCAMS commands to catalog these missing VVDS.

---

**CKM11676W Input catalog has no VVDS entries**

**Explanation:**
DIAGNOSE BCS did not find any VVDS catalog records. A VVDS catalog record is required minimally for the volume that the catalog resides. In addition VVDS entries are required for each SMS volume that has entries in this catalog and for non-SMS, each volume that has VSAM data sets in this catalog.

**User response:** None

---

SOLUTIONS:

### #Alias-P1

An alias record references a user catalog but the user catalog does not have an association for the alias. There are no other errors involving this alias. DIAGNOSE BCS re-establishes this alias under the assumption that you still want it.

DIAGNOSE BCS

1. DELETE the alias
2. Define the alias

### #Alias-P2

A user catalog record has an association for an alias but the alias does not know about the user catalog. There are no other errors involving this alias. Because the alias is
CKM11683I

Currently not defined, DIAGNOSE BCS will re-establish clear the alias. This requires that DIAGNOSE BCS
1. Define the alias to that user catalog
2. DELETE the alias

#Alias-P1-P2
Two or more errors involving the same catalog alias have been found.
1. An alias record points to a user catalog which does not have an association for the alias.
2. A user catalog record has an association for an alias that does not have an association for the user catalog.

DIAGNOSE BCS will need to clear the alias from each of the user catalogs by doing DEFINE then DELETE. Before hand DIAGNOSE BCS will delete the alias record and then re-DEFINE it at the end.
1. DELETE the alias.
2. DEFINE the alias to each related catalog, then DELETE it.
3. DEFINE the alias that was initially set.

#Alias-AssociationMissing
An internal error has occurred as reported by message CKM11688E. Notify Technical Support providing the JOB output and fix files if created.

#Alias-CellContext Situation
DIAGNOSE BCS found data sets that are cataloged with invalid characters in the volume serial name. DIAGNOSE BCS builds DELETE NOSCRATCH commands for IDCAMS. You should review these data sets to insure that they are cataloged on the correctly and no longer required.

#Alias-CellsBroken Situation
DIAGNOSE BCS found data sets that are cataloged with invalid characters in the volume serial name. DIAGNOSE BCS builds DELETE NOSCRATCH commands for IDCAMS. You should review these data sets to insure that they are cataloged on the correctly and no longer required.

#Alias-LoopFailure
An internal error has occurred as reported by message CKM11688E. Notify Technical Support providing the JOB output and fix files if created.

#Alias-NoAscCell
An internal error has occurred as reported by message CKM11688E. Notify Technical Support providing the JOB output and fix files if created.

#Alias-RequiredCell
An internal error has occurred as reported by message CKM11688E. Notify Technical Support providing the JOB output and fix files if created.

#Alias-RelatedBrokenCells
An internal error has occurred as reported by message CKM11688E. Notify Technical Support providing the JOB output and fix files if created.

#Alias-SsConvertVol
An internal error has occurred as reported by message CKM11688E. Notify Technical Support providing the JOB output and fix files if created.

#Alias-IOErrorAssociation
An internal error has occurred as reported by message CKM11688E. Notify Technical Support providing the JOB output and fix files if created.

#Alias-?
An internal error has occurred as reported by message CKM11688E. Notify Technical Support providing the JOB output and fix files if created.

#Any-BrokenSdr
The first and only the first record of a BCS has a key of low-values. Situation: DIAGNOSE BCS found that the key of the first record is not low-values or the key of another record has low-values. DIAGNOSE BCS will not provide a fix. The catalog is severely damaged. Please report this to Technical Support for analysis.

#Bcs-VVDS-Extra
Catalog management defines VVDS records in this catalog for
1. The volume on which this catalog resides
2. The volume on which each VSAM data set cataloged in this catalog resides.
3. The volume of each non-VSAM data set that resides on SMS managed volumes.

Situation: DIAGNOSE BCS found that in addition to the VVDS records that are required in this catalog, other VVDS records exist. DIAGNOSE BCS deletes the extra VVDS.

#Bcs-VVDS-Missing
Catalog management defines VVDS records in this catalog for
1. The volume on which this catalog resides
2. The volume on which each VSAM data set cataloged in this catalog resides.
3. The volume of each non-VSAM data set that resides on SMS managed volumes.
Situation: DIAGNOSE BCS found that some of these VVDS records are missing in this catalog. DIAGNOSE BCS re-catalogs the missing VVDS.

#Cluster-Keyrange
An automated fix has not been provided for this problem. Situation: A cluster was defined with KEYRANGE. Although there may be nothing wrong with the data set, you will be unable to re-catalog this data set in order to repair it. If you are unable to resolve this problem yourself, notify Technical Support.

#Cluster-VolserOffline
Situation: DIAGNOSE BCS found data sets that are cataloged to disk devices that are not online. DIAGNOSE BCS builds DELETE NOSCRATCH commands for IDCAMS. You should review these datasets to insure that they are cataloged on the correct device type and no longer required.

#Cluster-AixRelNoMatch
An internal error has occurred as reported by message CKM11688E. Notify Technical Support providing the JOB output and fix files if created.

#Cluster-AixNotInRel
An internal error has occurred as reported by message CKM11688E. Notify Technical Support providing the JOB output and fix files if created.

#Cluster-AssociationMissing
An internal error has occurred as reported by message CKM11688E. Notify Technical Support providing the JOB output and fix files if created.

#Cluster-CellContext
DIAGNOSE BCS has detected a problem with the structure of the catalog record and cannot create an automated solution. DIAGNOSE BCS creates two sample fixes that are commented out. The IDCAMS fix if uncommented would delete the object. The ZAP fix is in the form of a ZAP DELETE that can be used to delete the record or can be edited into a ZAP REPLACE. Please call Technical Support for help in this effort.

#Cluster-VolserBad
DIAGNOSE BCS found data sets that are cataloged with invalid characters in the volume serial name. DIAGNOSE BCS builds DELETE NOSCRATCH commands for IDCAMS. You should review these datasets to insure that they are cataloged on the correctly and no longer required.

#Cluster-ReservedBits
An internal error has occurred as reported by message CKM11688E. Notify Technical Support providing the JOB output and fix files if created.

#Cluster-RelatedBrokenCells
An internal error has occurred as reported by message CKM11688E. Notify Technical Support providing the JOB output and fix files if created.

#Cluster-SmsMismatch
An internal error has occurred as reported by message CKM11688E. Notify Technical Support providing the JOB output and fix files if created.

#Cluster-RequiredCell
An internal error has occurred as reported by message CKM11688E. Notify Technical Support providing the JOB output and fix files if created.

#Cluster-ZeroComponentLength
An internal error has occurred as reported by message CKM11688E. Notify Technical Support providing the JOB output and fix files if created.
message CKM11688E. Notify Technical Support providing the JOB output and fix files if created.

#Cluster-IOErrorAssociation
An internal error has occurred as reported by message CKM11688E. Notify Technical Support providing the JOB output and fix files if created.

#Cluster-IOErrorExtension
An internal error has occurred as reported by message CKM11688E. Notify Technical Support providing the JOB output and fix files if created.

#Cluster-
An internal error has occurred as reported by message CKM11688E. Notify Technical Support providing the JOB output and fix files if created.

#ClusterExtension-Base
A cluster record expanded to include extensions. Situation: An extension record for a cluster has been found but the base record is missing. DIAGNOSE BCS will create a ZAP command to delete the extension records.

#ClusterExtension-VolserOffline
DIAGNOSE BCS found data sets that are cataloged to disk devices that are not online. DIAGNOSE BCS builds DELETE NOSCRATCH commands for IDCAMS. You should review these data sets to ensure that they are cataloged on the correct device type and no longer required.

#ClusterExtension-AixRelNoMatch
An internal error has occurred as reported by message CKM11688E. Notify Technical Support providing the JOB output and fix files if created.

#ClusterExtension-AixNotInRel
An internal error has occurred as reported by message CKM11688E. Notify Technical Support providing the JOB output and fix files if created.

#ClusterExtension-AssociationMissing
An internal error has occurred as reported by message CKM11688E. Notify Technical Support providing the JOB output and fix files if created.

#ClusterExtension-CellsBroken
DIAGNOSE BCS has detected a problem with the structure of the catalog record and cannot create an automated solution. DIAGNOSE BCS creates two sample fixes that are commented out. The IDCAMS fix if uncommented would delete the object. The ZAP fix is in the form of a ZAP DELETE that can be used to delete the record or can be edited into a ZAP REPLACE. Please call Support for help in this effort.

#ClusterExtension-CellContext
DIAGNOSE BCS has detected a problem with the structure of the catalog record and cannot create an automated solution. DIAGNOSE BCS creates two sample fixes that are commented out. The IDCAMS fix if uncommented would delete the object. The ZAP fix is in the form of a ZAP REPLACE that can be used to delete the record or can be edited into a ZAP REPLACE. Please call Support for help in this effort.

#ClusterExtension-IncompleteChange
An internal error has occurred as reported by message CKM11688E. Notify Technical Support providing the JOB output and fix files if created.

#ClusterExtension-LoopFailure
An internal error has occurred as reported by message CKM11688E. Notify Technical Support providing the JOB output and fix files if created.

#ClusterExtension-NoAscCell
An internal error has occurred as reported by message CKM11688E. Notify Technical Support providing the JOB output and fix files if created.

#ClusterExtension-SmsMismatch
An internal error has occurred as reported by message CKM11688E. Notify Technical Support providing the JOB output and fix files if created.

#ClusterExtension-RequiredCell
An internal error has occurred as reported by message CKM11688E. Notify Technical Support providing the JOB output and fix files if created.

#ClusterExtension-TruenameMissing
An internal error has occurred as reported by message CKM11688E. Notify Technical Support providing the JOB output and fix files if created.

#ClusterExtension-TruenameLoopFailure
An internal error has occurred as reported by message CKM11688E. Notify Technical Support providing the JOB output and fix files if created.

#ClusterExtension-ZeroComponentLength
An internal error has occurred as reported by message CKM11688E. Notify Technical Support providing the JOB output and fix files if created.

#ClusterExtension-VolserBad
DIAGNOSE BCS found data sets that are cataloged with invalid characters in the volume
serial name. DIAGNOSE BCS builds DELETE NOSCRATCH commands for IDCAMS. You should review these datasets to insure that they are cataloged on the correctly and no longer required.

#ClusterExtension-ReservedBits
An internal error has occurred as reported by message CKM11688E. Notify Technical Support providing the JOB output and fix files if created.

#ClusterExtension-RelatedBrokenCells
An internal error has occurred as reported by message CKM11688E. Notify Technical Support providing the JOB output and fix files if created.

#ClusterExtension-SmsError
An internal error has occurred as reported by message CKM11688E. Notify Technical Support providing the JOB output and fix files if created.

#ClusterExtension-IOErrorAssociation
An internal error has occurred as reported by message CKM11688E. Notify Technical Support providing the JOB output and fix files if created.

#ClusterExtension-IOErrorExtension
An internal error has occurred as reported by message CKM11688E. Notify Technical Support providing the JOB output and fix files if created.

#ClusterExtension-
An internal error has occurred as reported by message CKM11688E. Notify Technical Support providing the JOB output and fix files if created.

#Gdg-VolCount
GDG records and their extensions contain GDS cells for each of the generations. A record for a GDG has been found and at least one GDS has a volume count that does not match the number of volume cells, type X'04'. DIAGNOSE BCS will create a ZAP command to change the count the number of volume cells found.

#Gdg-VolserOffline
DIAGNOSE BCS found data sets that are cataloged to disk devices that are not online. DIAGNOSE BCS builds DELETE NOSCRATCH commands for IDCAMS. You should review these datasets to ensure that they are cataloged on the correct device type and no longer required.

#Gdg-AssociationMissing
An internal error has occurred as reported by message CKM11688E. Notify Technical Support providing the JOB output and fix files if created.

#Gdg-CellContext
DIAGNOSE BCS has detected a problem with the structure of the catalog record and cannot create an automated solution. DIAGNOSE BCS creates two sample fixes that are commented out. The IDCAMS fix if uncommented would delete the object. The ZAP fix is in the form of a ZAP DELETE that can be used to delete the record or can be edited into a ZAP REPLACE. Please call Support for help in this effort.

#Gdg-CellsBroken
DIAGNOSE BCS has detected a problem with the structure of the catalog record and cannot create an automated solution. DIAGNOSE BCS creates two sample fixes that are commented out. The IDCAMS fix if uncommented would delete the object. The ZAP fix is in the form of a ZAP DELETE that can be used to delete the record or can be edited into a ZAP REPLACE. Please call Support for help in this effort.

#Gdg-GatEntryUnused
An internal error has occurred as reported by message CKM11688E. Notify Technical Support providing the JOB output and fix files if created.

#Gdg-GdsNotInRelGdg
An internal error has occurred as reported by message CKM11688E. Notify Technical Support providing the JOB output and fix files if created.

#Gdg-LoopFailure
An internal error has occurred as reported by message CKM11688E. Notify Technical Support providing the JOB output and fix files if created.

#Gdg-NoAscCell
An internal error has occurred as reported by message CKM11688E. Notify Technical Support providing the JOB output and fix files if created.

#Gdg-MissingRel4Gat
An internal error has occurred as reported by message CKM11688E. Notify Technical Support providing the JOB output and fix files if created.

#Gdg-SmsMismatch
An internal error has occurred as reported by message CKM11688E. Notify Technical Support providing the JOB output and fix files if created.

#Gdg-?
An internal error has occurred as reported by message CKM11688E. Notify Technical Support providing the JOB output and fix files if created.
An internal error has occurred as reported by message CKM11688E. Notify Technical Support providing the JOB output and fix files if created.

DIAGNOSE BCS found data sets that are cataloged with invalid characters in the volume serial name. DIAGNOSE BCS builds DELETE NOSCRATCH commands for IDCAMS. You should review these datasets to ensure that they are cataloged on the correctly and no longer required.

DIAGNOSE BCS has detected a problem with the structure of the catalog record and cannot create an automated solution. DIAGNOSE BCS creates two sample fixes that are commented out. The IDCAMS fix if uncommented would delete the object. The ZAP fix is in the form of a ZAP DELETE that can be used to delete the record or can be edited into a ZAP REPLACE. Please call Support for help in this effort.

An internal error has occurred as reported by message CKM11688E. Notify Technical Support providing the JOB output and fix files if created.

An internal error has occurred as reported by message CKM11688E. Notify Technical Support providing the JOB output and fix files if created.

An internal error has occurred as reported by message CKM11688E. Notify Technical Support providing the JOB output and fix files if created.

DIAGNOSE BCS has detected a problem with the structure of the catalog record and cannot create an automated solution. DIAGNOSE BCS creates two sample fixes that are commented out. The IDCAMS fix if uncommented would delete the object. The ZAP fix is in the form of a ZAP DELETE that can be used to delete the record or can be edited into a ZAP REPLACE. Please call Technical Support for help in this effort.

An internal error has occurred as reported by message CKM11688E. Notify Technical Support providing the JOB output and fix files if created.

An internal error has occurred as reported by message CKM11688E. Notify Technical Support providing the JOB output and fix files if created.

An internal error has occurred as reported by message CKM11688E. Notify Technical Support providing the JOB output and fix files if created.

An internal error has occurred as reported by message CKM11688E. Notify Technical Support providing the JOB output and fix files if created.

An internal error has occurred as reported by message CKM11688E. Notify Technical Support providing the JOB output and fix files if created.

A GDG record expanded to include extensions. Situation: An extension record for a GDG has been found but the base record is missing. DIAGNOSE BCS will create a ZAP command to delete the extension records.

A GDG record expanded to include extensions. GDG records and their extensions contain GDS cells for each of the generations. Situation: An extension record for a GDG has been found and at least one GDS has a volume count that does not match the number of volume cells, type X'04'. DIAGNOSE BCS will create a ZAP command to change the count the number of volume cells found.

A GDG record expanded to include extensions. Situation: An extension record for a GDG has been found and at least one GDS has a volume count that does not match the number of volume cells, type X'04'. DIAGNOSE BCS will create a ZAP command to change the count the number of volume cells found.

A GDG record expanded to include extensions. Situation: An extension record for a GDG has been found and at least one GDS has a volume count that does not match the number of volume cells, type X'04'. DIAGNOSE BCS will create a ZAP command to change the count the number of volume cells found.
message CKM11688E. Notify Technical Support providing the JOB output and fix files if created.

#GdgExtension-MissingRel4Gat
An internal error has occurred as reported by message CKM11688E. Notify Technical Support providing the JOB output and fix files if created.

#GdgExtension-SmsMismatch
An internal error has occurred as reported by message CKM11688E. Notify Technical Support providing the JOB output and fix files if created.

#GdgExtension-RequiredCell
An internal error has occurred as reported by message CKM11688E. Notify Technical Support providing the JOB output and fix files if created.

#GdgExtension-ZeroComponentLength
An internal error has occurred as reported by message CKM11688E. Notify Technical Support providing the JOB output and fix files if created.

#GdgExtension-VolserBad
DIAGNOSE BCS found data sets that are cataloged with invalid characters in the volume serial name. DIAGNOSE BCS builds DELETE NOSCRATCH commands for IDCAMS. You should review these datasets to insure that they are cataloged on the correct device type and no longer required.

#GdgExtension-VolserOffline
An internal error has occurred as reported by message CKM11688E. Notify Technical Support providing the JOB output and fix files if created.

#GdgExtension-DeferredRollInState
An internal error has occurred as reported by message CKM11688E. Notify Technical Support providing the JOB output and fix files if created.

#GdgExtension-IOErrorAssociation
An internal error has occurred as reported by message CKM11688E. Notify Technical Support providing the JOB output and fix files if created.

#GdgExtension-IOErrorExtension
An internal error has occurred as reported by message CKM11688E. Notify Technical Support providing the JOB output and fix files if created.

#GdgExtension-?
An internal error has occurred as reported by message CKM11688E. Notify Technical Support providing the JOB output and fix files if created.

#Nv-Volcount
Non-VSAM records have a volume count that should match the number of volume cells, type X’04’. A record for a non-VSAM data set has been found and the volume count that does not match the number of volume cells, type X’04’. DIAGNOSE BCS will create a ZAP command to change the count the number of volume cells found.

#Nv-VolserOffline
DIAGNOSE BCS found data sets that are cataloged to disk devices that are not online. DIAGNOSE BCS builds DELETE NOSCRATCH commands for IDCAMS. You should review these datasets to insure that they are cataloged on the correct device type and no longer required.

#Nv-DeferredRollInState
An internal error has occurred as reported by message CKM11688E. Notify Technical Support providing the JOB output and fix files if created.

#Nv-LoopFailure
An internal error has occurred as reported by message CKM11688E. Notify Technical Support providing the JOB output and fix files if created.

#Nv-CellsBroken
DIAGNOSE BCS has detected a problem with the structure of the catalog record and cannot create an automated solution. DIAGNOSE BCS creates two sample fixes that are commented out. The IDCAMS fix if uncommented would delete the object. The ZAP fix is in the form of a ZAP DELETE that can be used to delete the record or can be edited into a ZAP REPLACE. Please call Support for help in this effort.

#Nv-CellContext
DIAGNOSE BCS has detected a problem with the structure of the catalog record and cannot create an automated solution. DIAGNOSE BCS creates two sample fixes that are commented out. The IDCAMS fix if uncommented would delete the object. The ZAP fix is in the form of a ZAP DELETE that can be used to delete the record or can be edited into a ZAP REPLACE. Please call Support for help in this effort.
An internal error has occurred as reported by message CKM11688E. Notify Technical Support providing the JOB output and fix files if created.

#Nv-NoAscCell
An internal error has occurred as reported by message CKM11688E. Notify Technical Support providing the JOB output and fix files if created.

#Nv-SmsMismatch
An internal error has occurred as reported by message CKM11688E. Notify Technical Support providing the JOB output and fix files if created.

#Nv-RequiredCell
An internal error has occurred as reported by message CKM11688E. Notify Technical Support providing the JOB output and fix files if created.

#Nv-VolserBad
DIAGNOSE BCS found data sets that are cataloged with invalid characters in the volume serial name. DIAGNOSE BCS builds DELETE NOSCRATCH commands for IDCAMS. You should review these datasets to ensure that they are cataloged on the correctly and no longer required.

#Nv-ReservedBits
An internal error has occurred as reported by message CKM11688E. Notify Technical Support providing the JOB output and fix files if created.

#Nv-RelatedBrokenCells
An internal error has occurred as reported by message CKM11688E. Notify Technical Support providing the JOB output and fix files if created.

#Nv-DeferredRollIN
An internal error has occurred as reported by message CKM11688E. Notify Technical Support providing the JOB output and fix files if created.

#Nv-SmsError
An internal error has occurred as reported by message CKM11688E. Notify Technical Support providing the JOB output and fix files if created.

#Nv-IOErrorAssociation
An internal error has occurred as reported by message CKM11688E. Notify Technical Support providing the JOB output and fix files if created.

#Nv-SsConvertVol
An internal error has occurred as reported by message CKM11688E. Notify Technical Support providing the JOB output and fix files if created.

#Path-NoBase
VSAM data sets are defined by multiple catalog records. A VSAM data set's path record has an association that names the key of the cluster record. The key is not defined in the catalog for the association in this path record. DIAGNOSE BCS will generate an ZAP DELETE command that can remove this path record.

#Path-NoError
An internal error has occurred as reported by message CKM11688E. Notify Technical Support providing the JOB output and fix files if created.

#Path-CellsBroken
DIAGNOSE BCS has detected a problem with the structure of the catalog record and cannot create an automated solution. DIAGNOSE BCS creates two sample fixes that are commented out. The IDCAMS fix if uncommented would delete the object. The ZAP fix is in the form of a ZAP DELETE that can be used to delete the record or can be edited into a ZAP REPLACE. Please call Support for help in this effort.

#Path-CellContext
DIAGNOSE BCS has detected a problem with the structure of the catalog record and cannot create an automated solution. DIAGNOSE BCS creates two sample fixes that are commented out. The IDCAMS fix if uncommented would delete the object. The ZAP fix is in the form of a ZAP DELETE that can be used to delete the record or can be edited into a ZAP REPLACE. Please call Support for help in this effort.

#Path-LoopFailure
An internal error has occurred as reported by message CKM11688E. Notify Technical Support providing the JOB output and fix files if created.

#Path-NoAscCell
An internal error has occurred as reported by message CKM11688E. Notify Technical Support providing the JOB output and fix files if created.

#Path-RequiredCell
An internal error has occurred as reported by message CKM11688E. Notify Technical Support providing the JOB output and fix files if created.

#Path-ReservedBits
An internal error has occurred as reported by
message CKM11688E. Notify Technical Support providing the JOB output and fix files if created.

#Path-RelatedBrokenCells
An internal error has occurred as reported by message CKM11688E. Notify Technical Support providing the JOB output and fix files if created.

#Path-IOErrorAssociation
An internal error has occurred as reported by message CKM11688E. Notify Technical Support providing the JOB output and fix files if created.

#Path-
An internal error has occurred as reported by message CKM11688E. Notify Technical Support providing the JOB output and fix files if created.

#Truename-AssociationMissing
An internal error has occurred as reported by message CKM11688E. Notify Technical Support providing the JOB output and fix files if created.

#Truename-CellsBroken
DIAGNOSE BCS has detected a problem with the structure of the catalog record and cannot create an automated solution. DIAGNOSE BCS creates two sample fixes that are commented out. The IDCAMS fix if uncommented would delete the object. The ZAP fix is in the form of a ZAP DELETE that can be used to delete the record or can be edited into a ZAP REPLACE. Please call Support for help in this effort.

#Truename-CellContext
DIAGNOSE BCS has detected a problem with the structure of the catalog record and cannot create an automated solution. DIAGNOSE BCS creates two sample fixes that are commented out. The IDCAMS fix if uncommented would delete the object. The ZAP fix is in the form of a ZAP DELETE that can be used to delete the record or can be edited into a ZAP REPLACE. Please call Support for help in this effort.

#Truename-LoopFailure
An internal error has occurred as reported by message CKM11688E. Notify Technical Support providing the JOB output and fix files if created.

#Truename-NoAscCell
An internal error has occurred as reported by message CKM11688E. Notify Technical Support providing the JOB output and fix files if created.

#Truename-RequiredCell
An internal error has occurred as reported by message CKM11688E. Notify Technical Support providing the JOB output and fix files if created.

#Truename-ReservedBits
An internal error has occurred as reported by message CKM11688E. Notify Technical Support providing the JOB output and fix files if created.

#Truename-RelatedBrokenCells
An internal error has occurred as reported by message CKM11688E. Notify Technical Support providing the JOB output and fix files if created.

#Truename-IOErrorAssociation
An internal error has occurred as reported by message CKM11688E. Notify Technical Support providing the JOB output and fix files if created.

#Truename-?
An internal error has occurred as reported by message CKM11688E. Notify Technical Support providing the JOB output and fix files if created.

#Truename-NoBase
VSAM data sets are defined by multiple catalog records. A VSAM data set’s truename record has an association that names the key of the cluster record. Situation: The key is not defined in the catalog for the association in this truename record. DIAGNOSE BCS will generate an ZAP DELETE command that can remove this truename record.

#Ucat-VolserOffline
DIAGNOSE BCS found data sets that are cataloged to disk devices that are not online. DIAGNOSE BCS builds DELETE NOSCRATCH commands for IDCAMS. You should review these datasets to insure that they are cataloged on the correct device type and no longer required.

#Ucat-CellContext
DIAGNOSE BCS has detected a problem with the structure of the catalog record and cannot create an automated solution. DIAGNOSE BCS creates two sample fixes that are commented out. The IDCAMS fix if uncommented would delete the object. The ZAP fix is in the form of a ZAP DELETE that can be used to delete the record or can be edited into a ZAP REPLACE. Please call Support for help in this effort.

#Ucat-CellsBroken
DIAGNOSE BCS has detected a problem with the structure of the catalog record and cannot create an automated solution. DIAGNOSE
BCS creates two sample fixes that are commented out. The IDCAMS fix if uncommented would delete the object. The ZAP fix is in the form of a ZAP DELETE that can be used to delete the record or can be edited into a ZAP REPLACE. Please call Support for help in this effort.

#Ucat-LoopFailure
An internal error has occurred as reported by message CKM11688E. Notify Technical Support providing the JOB output and fix files if created.

#Ucat-NoAscCell
An internal error has occurred as reported by message CKM11688E. Notify Technical Support providing the JOB output and fix files if created.

#Ucat-RequiredCell
An internal error has occurred as reported by message CKM11688E. Notify Technical Support providing the JOB output and fix files if created.

#Ucat-VolserBad
DIAGNOSE BCS found data sets that are cataloged with invalid characters in the volume serial name. DIAGNOSE BCS builds DELETE NOSCRATCH commands for IDCAMS. You should review these datasets to ensure that they are cataloged on the correctly and no longer required.

#Ucat-VolserOffline
An internal error has occurred as reported by message CKM11688E. Notify Technical Support providing the JOB output and fix files if created.

#Ucat-ReservedBits
An internal error has occurred as reported by message CKM11688E. Notify Technical Support providing the JOB output and fix files if created.

#Ucat-RelatedBrokenCells
An internal error has occurred as reported by message CKM11688E. Notify Technical Support providing the JOB output and fix files if created.

#Ucat-BadVolCount
An internal error has occurred as reported by message CKM11688E. Notify Technical Support providing the JOB output and fix files if created.

#Ucat-NoVolcatVgeneral
A specific fix has not been provided for this problem. Situation: A vol-cat other than SYS1.VOLCAT.VGENERAL was found. DIAGNOSE BCS checked if SYS1.VOLCAT.VGENERAL is defined and it was not. SYS1.VOLCAT.VGENERAL is a required dataset for the volcat facility to function. If you are unable to resolve this problem yourself, notify Technical Support.

#Ucat-IOErrorAssociation
An internal error has occurred as reported by message CKM11688E. Notify Technical Support providing the JOB output and fix files if created.

#Ucat-SsConvertVol
An internal error has occurred as reported by message CKM11688E. Notify Technical Support providing the JOB output and fix files if created.

User response:
(multiple possible responses; see Explanation)

CKM11685I Messages reported

Explanation:

CKM11687E Open failure for: dsn - damaged catalog. Control area access ended, changing to keyed access. Fixes disabled.

Explanation:

CKM11688E (multi-line message; see Explanation)

Explanation:

Internal error: text1 [ fact: text2] where text1 INIGET failure OPEN failure for DSN: dsn Message text for: solution not found Unhandled problem code: code text2 If present, brief description of error found.

DIAGNOSE BCS locates a text file in a PDS for displaying some messages. This data set could not be accessed. The data set name is found from the
MSGLIB token in the INSTALLATION_DATASETS section of the INI file.

**User response:** Insure that the MSGLIB value of the INSTALLATION_DATASETS section of the INI file is correct and resubmit JOB. For unhandled problem, call Technical Support. If you need further help with this catalog, call Technical Support.

---

**CKM11689W Catalog: dsn, text**

**Explanation:**

A catalog identified from the INCLUDE BCS/EXCLUDE-BCS keywords, cannot be used because it is not available as a catalog. Either the catalog is not connected to the master catalog or it is not on an online volume.

Catalog: dsn, not found in the master catalog—The name was not found in the master catalog.

Catalog: dsn, not connected as a catalog—The name was found in the master catalog but was not a catalog connector.

Catalog: dsn, on offline volume: vol—The name was found in the master catalog but the volume is not online.

**User response:** Correct your DIAGNOSE BCS command and resubmit.

---

**CKM11690E Value entered for keyword longer than:**

*length Keyword: keyword; Start of string: text*

**Explanation:**

During parsing of the INCLUDE-BCS or EXCLUDE-BCS keywords, an invalid data set name or mask was found.

**User response:** Correct your DIAGNOSE BCS command and resubmit.

---

**CKM11691E Keyword: keyword has no operands.**

**Explanation:**

During parsing of the DIAGNOSE BCS command, the displayed keyword was found to have no value specified.

**User response:** Correct your DIAGNOSE BCS command and resubmit.

---

**CKM11692E No catalogs selected**

**Explanation:**

DIAGNOSE BCS found no catalogs that match the INCLUDE-BCS or EXCLUDE-BCS keywords criteria.

**User response:** Correct your DIAGNOSE BCS command and resubmit.

---

**CKM11693E Error at error-text DSN: dsn**

**Explanation:**

DIAGNOSE BCS failed in opening and or accessing the displayed catalog.

**User response:** If you cannot resolve this problem, call Technical Support.

---

**CKM11694E Duplicate DSN, alias, or mask encountered: text**

**Explanation:**

DIAGNOSE BCS found same input string twice in the INCLUDE-BCS or EXCLUDE-BCS keywords criteria.

**User response:** Correct your DIAGNOSE BCS command and resubmit.

---

**CKM11695E Catalog: dsn, a VOLCAT, is not supported by DIAGNOSE BCS**

**Explanation:**

DIAGNOSE BCS found that a VOLCAT was explicitly requested by the INCLUDE-BCS keyword. DIAGNOSE BCS does not support VOLCAT and will terminate.

**User response:** Correct your DIAGNOSE BCS command and resubmit.

---

**CKM11697E Allocation failed [Fix Msg] DSN: dsn**

**Explanation:**

Fix DSN: The DIAGNOSE BCS command specified a fix dataset that could not be allocated. Text DSN: DIAGNOSE BCS locates a text file in a PDS for displaying some messages. This data set could not be allocated. The data set name is found from the MSGLIB token in the INSTALLATION_DATASETS section of the INI file.

**User response:** If you cannot resolve this problem, call Technical Support.

---

**CKM11698E No authority to read catalog: dsn**

**Explanation:**

The current user does not have read access or the current catalog.
**CKM11699E • CKM12009I**

**User response:** Determine which authorizations should use DIAGNOSE BCS or correct have the security administrator allow read access to this catalog.

**CKM11699E De-allocation failed DDN: ddn [ DSN: dsn ]

Explanation:**
DIAGNOSE BCS was unable to free the display DD-name that was allocated by dynamic allocation.

**User response:** Call Technical Support and provide the JOB output.

**CKM12000I text

Explanation:**
Command execution progress message.

**User response:** Generally none.

**CKM12001E Dynamic allocation of source catalog failed

Explanation:**
MERGECAT was unable to dynamically allocate the input catalog.

**User response:**
If unable to determine the reason for the failure or to correct it, contact Technical Support.

**CKM12002E Required keyword missing: keyword

Explanation:**
The missing keyword is one of INBCS, OUTBCS or JOURNAL. The keywords are required for MERGECAT to execute.

**User response:**
Add the required keyword to the MERGECAT input control statements.

**CKM12003E Dynamic allocation of target catalog failed

Explanation:**
MERGECAT was unable to dynamically allocate the output catalog.

**User response:**
If unable to determine the reason for the failure or to correct it, contact Technical Support.

**CKM12005E Dynamic allocation of journal failed

Explanation:**
MERGECAT was unable to dynamically allocate the journal dataset.

**User response:**
If unable to determine the reason for the failure or to correct it, contact Technical Support.

**CKM12006E Deallocation failed DDNAME: XXXXXX

Explanation:**
When attempting to de-allocate the DDName specified in the message, a failure occurred.

**User response:**
If unable to determine the reason for the failure or to correct it, contact Technical Support.

**CKM12007I RESERVE issued | released for INBCS | OUTBCS: ( source | target )xxxxxx

Explanation:**
An ENQ (RESERVE) has been issued for the indicated BCS for the duration of the command or released at command completion.

**User response:**
None.

**CKM12008E Error opening target|source catalog

Explanation:**
An error occurred when attempting to open the indicated catalog.

**User response:**
If unable to determine the reason for the failure or to correct it, contact Technical Support.

**CKM12009I Record copied to OUTBCS|INBCS: (t) xxxxxx

Previously copied to OUTBCS|INBCS: (t) xxxxxx

Explanation:**
Movement of entry xxxxxx to the target has started. If COPYONLY was specified, the operation is now complete for this record. Catalog entry type is 't'. The message "Previously copied" normally means that this is a RESTART or a BACKOUT and MERGECAT has detected that the indicated record is already in the target catalog. Processing continues as if it had just been copied normally in the current execution.

**User response:**
None.
CKM12010E Duplicate name with different content in source and target records: rrrr

Explanation:
A record in the target catalog was encountered with the same name as a record in the source catalog, but the records do not match. The record was not moved/copied to the output catalog and has not been deleted from the input catalog. If the number of duplicates is less than that set by the MAXDUP parameter, processing continues, else the job fails.

User response:
Determine which copy of the duplicately named record should be retained and delete the other. If the record from the input catalog is to be retained and this is not a SIMULATE run, it will generally be necessary to run MERGECAT again (using ENTRIES) to move the leftover records after the corresponding record in the output catalog has been manually deleted.

CKM12010W (multiple lines in message; see Explanation)

Explanation:
Duplicate name with different content in source and target records: rrrr
Record will NOT be deleted from source catalog
record lengths unequal llll mmmm
length of ccc cell differs llll mmmm
content of ccc cell differs
ccc cell present in source | target record but not present in target | source record
A record in the target catalog was encountered with the same name as a record in the source catalog, but the records do not match. The record was not moved/copied to the output catalog and has not been deleted from the input catalog. If the number of duplicates is less than that set by the MAXDUP parameter, processing continues, else the job fails.

User response:
Determine which copy of the duplicately named record should be retained and delete the other. If the record from the input catalog is to be retained and this is not a SIMULATE run, it will generally be necessary to run MERGECAT again (using ENTRIES) to move the leftover records after the corresponding record in the output catalog has been manually deleted.

CKM12011I Record deleted from INBCSiOUTBCS: (t) xxxxxx

Explanation:
Movement of entry xxxxxx to the target has ended. Catalog entry type is ‘t’.

User response:
None.

CKM12012E Error opening/reading/closing source catalog - fast reader

Explanation:
An error occurred when attempting to open, read, or close the input catalog.

User response:
If unable to determine the reason for the failure or to correct it, contact Technical Support.

CKM12014I Identical duplicate record found in target catalog -- ignored: rrrr

Explanation:
A record to be moved/copied already exists in the output catalog, possibly from a prior interrupted operation. If this is not a COPYONLY operation, the record will be deleted from the source catalog as if it had been copied from source to target.

User response:
If unable to determine the reason for the failure or to correct it, contact Technical Support.

CKM12015W No catalog entries matching LEVEL|ENTRIES found

Explanation:
No entries were found in the input catalog that match either the LEVEL or ENTRIES parameters.

User response:
Correct the parameter. If unable to determine the reason for the failure or to correct it, contact Technical Support.

CKM12016E Error opening journal

Explanation:
An error occurred when attempting to open the journal dataset.

User response:
If unable to determine the reason for the failure or to correct it, contact Technical Support.

CKM12017E Dynamic allocation of master catalog failed | Dynamic allocation of MOVEALIAS catalog failed

Explanation:
For “master catalog”, MERGECAT was unable to dynamically allocate the master catalog specified either
CKM12017E • CKM12022W

by default or with the MASTERCATALOG control statement.

For “MOVEALIAS catalog”, MERGECAT was unable to
dynamically allocate the master catalog specified in the
MOVEALIAS control statement.

For “MOVEALIAS CATALOG”, MERGECAT was unable
to dynamically allocate the master catalog specified in
the MOVEALIAS control statement.

User response:
If unable to determine the reason for the failure or to
correct it, contact Technical Support.

CKM12017E Dynamic allocation of master catalog
failed | Dynamic allocation of
MOVEALIAS catalog failed

Explanation:
For “master catalog”, MERGECAT was unable to
dynamically allocate the master catalog specified either
by default or with the MASTERCATALOG control
statement.

For “MOVEALIAS catalog”, MERGECAT was unable to
dynamically allocate the master catalog specified in the
MOVEALIAS control statement.

User response:
If unable to determine the reason for the failure or to
correct it, contact Technical Support.

CKM12018E Error opening|reading|closing master
catalog - Fast Reader

Explanation:
MERGECAT was unable to open the master catalog, or
an error occurred when attempting to read or close the
input master catalog.

User response:
If unable to determine the reason for the failure or to
correct it, contact Technical Support.

CKM12019W Defined alias contains more levels (n)
than current system setting: xxxxxxxx

Explanation:
Catalog alias xxxxxxxx is defined with n levels, which is
greater than the current system setting supports.
MERGECAT will process the level regardless. This may
or may not result in some catalog entries being
unreachable by normal catalog entry lookup.

User response:
Either delete the alias or update the MLA setting. It may
then be necessary to move some of the entries to the
appropriate catalog.

CKM12020E LEVEL|x-LEVEL|MOVE-ALIAS value
too long: xxxxxx

Explanation:
The value specified for the indicated keyword exceeds
the maximum length allowed.

User response:
Specify a shorter value.

CKM12021E MAXDUP entries exceeded

Explanation:
More duplicate entries were found in the target catalog
than were allowed by the MAXDUPS parameter.

User response:
If this not an error, either delete the duplicate entries
from the target catalog or increase the MAXDUPS
value.

CKM12022W Non-VSAM alias entry will not be
moved: dddddddd Association name
does not match: aaaaaaaaa x’xxxxxxxx’
Non-VSAM alias entry will not be
copied: dddddddd Association name
does not match: aaaaaaaaa x’xxxxxxxx’

Explanation:
An alias entry with a name that did not match the
LEVEL or ENTRIES parameter was found for a
non-VSAM data set. This can also occur when the
current master catalog is being copied (COPYONLY),
and the target catalog had catalog aliases associated
with it. For “moved”, the alias entry has been orphaned.
For “copied”, the alias entry has been ignored.
dddddddd is the entry name. aaaaaaaaa is the
association name related to the entry. xxxxxxxx is the
hex decomposition of the association name.

User response:
For “moved”, delete the alias entry from the source
catalog and define it in the target catalog. For “copied”,
none.

CKM12022W Non-VSAM alias entry will not be
moved: dddddddd Association name
does not match: aaaaaaaaa x’xxxxxxxx’
Non-VSAM alias entry will not be
copied: dddddddd Association name
does not match: aaaaaaaaa x’xxxxxxxx’

Explanation:
An alias entry with a name that did not match the
LEVEL or ENTRIES parameter was found for a
non-VSAM data set. This can also occur when the current master catalog is being copied (COPYONLY), and the target catalog had catalog aliases associated with it. For “moved”, the alias entry has been orphaned. For “copied”, the alias entry has been ignored.

dddddddd is the entry name. aaaaaaaa is the association name related to the entry. xxxxxxxxx is the hex decomposition of the association name.

User response:
For “moved”, delete the alias entry from the source catalog and define it in the target catalog. For “copied”, none.

CKM12023W INBCS maximum recordsize sssss exceeds OUTBCS recordsize ttttt

Explanation:
MERGECAT will not be able to move/copy any records from the source catalog which are larger than the maximum recordsize of the target catalog. Any such records will be noted and will cause the corresponding alias level and any associated alias levels to not be moved/copied.

User response:
If any records are subsequently listed as being too large to move/copy, either select a different target catalog, or first copy the target catalog and redefine it with an appropriate maximum recordsize.

CKM12024E Installation security server has denied access to this command | Installation security server has returned failure codes xxxx xxxx

Explanation:
During command processing, the product has communicated with the installation security server. For the message “has denied access to this command”, the Security Server has determined that you do not have authority to use the MERGECAT command. For the message “has returned failure codes xxxx xxxx”, the Security Server has determined an error other than “DENIED ACCESS”. Refer to the OS390 Security Server RACROUTE manual for a description of these codes. The first is the “SAFRETURN” value and the second is the “SAFREASON” value.

User response:
Contact the installation security administrator if this is unexpected. You will need to tell them the name of the command in use. In this case it is MERGECAT.

CKM12025E Journal file not empty - RESTART | BACKOUT not specified

Explanation:
The journal dataset is not empty. This valid only when doing a restart or a backout.

User response:
Correct the error and retry the job.

CKM12026E Journal MERGECAT control record missing

Explanation:
When attempting a restart or a backout, the control record was not found in the journal. Either the wrong journal dataset was specified or the RESTART / BACKOUT parameters were used incorrectly.
Correct the error and retry the job.

Explanation:
For the first form of the message: When attempting a RESTART or a BACKOUT, one or more keywords and/or keyword values specified for the current execution do not match a keyword or keyword value specified in the original execution. This message is followed by several informational messages, CKM12000I, which display the keyword and keyword values as recorded in the JOURNAL record compared to the same keyword and its value specified from the SYSIN record. With the exception of INBCS and OUTBCS, the keyword and keyword value may be implicitly specified by default. That is, MCAT, if not explicitly specified in SYSIN, is implicitly specified and its implicit value is the executing system's Master Catalog.

For the second form of the message: This version of MERGECAT cannot process this journal because it was created by a different, incompatible version of MERGECAT.

User response:
For the first form of the message: Compare the keyword values to determine the discrepancy. The values specified through SYSIN must be made to match the JOURNAL record values in order for the RESTART or BACKOUT to proceed. If the BACKOUT or RESTART must proceed, correct the SYSIN values and resubmit the job.

For the second form of the message: Rerun the job using the same version of MERGECAT which was used to create this journal.

MCAT specification invalid - more than one entry not allowed

Explanation:
MCAT or MASTERCATALOG keyword was specified with more than one catalog name.

User response:
The MERGECAT function is terminated with an error. Review the MASTERCATALOG (or MCAT) keyword to ensure that only one catalog name is specified.

RESTART | BACKUP not available: Journal build not completed
RESTART | BACKUP not available: Previous execution complete

Explanation:
For "Journal build not completed": When attempting a RESTART or a BACKOUT, the control record indicates that the previous job did not get far enough to allow a restart.

For "Previous execution complete": The previous job processed through the end of the journal. All processing was attempted and either completed or encountered an error.

User response:
For "Journal build not completed": Since the previous job did not get far enough to change either the source or target catalog, neither RESTART nor BACKOUT is necessary.

For "Previous execution complete": Create a new MERGECAT job to perform the desired moves.

IDCAMS (n) issued return code cc

Explanation:
While attempting to perform an internal IDCAMS function, an IDCAMS error was encountered.

User response:
If unable to determine the reason for the failure or to correct it, contact Technical Support.

Alias deleted: xxxxxx in catalog yyyyyy

Explanation:
In preparation of redefining it to the correct catalog, alias entry xxxxxx was deleted in catalog yyyyyy.

User response:
None

Alias defined: xxxxxx in catalog yyyyyy

Explanation:
Alias entry xxxxxx was defined in catalog yyyyyy.

User response:
None

SYS1.VVDS.Vxxxxxx added to TARGET|SOURCE BCS

Explanation:
Enter SYS1.VVDS.Vxxxxxx was copied to the target or source catalog, as indicated.
CKM12036W No catalog changes to backout

Explanation:
A BACKOUT was requested but the journal indicated there were no changes to back out.

User response:
None, if this message is correct. Ensure that the correct journal dataset was specified. If unable to determine the reason for the failure or to correct it, contact Technical Support.

CKM12038I nnn identical duplicate records did not need to be copied and have been deleted from the source BCS

Explanation:
Some records to be moved/copied from the source catalog were found to already be in the target catalog, probably from a previous execution of MERGECAT. These records were byte-for-byte identical and therefore this is not considered to be an error. If this is not a COPYONLY operation, the identical records were deleted from the source catalog as if they had been copied normally.

User response:
None

CKM12039I MERGECAT is now restartable

Explanation:
Informational message indicating that this MERGECAT process is restartable should it terminate abnormally or encounter some other error that causes the process to terminate without completing.

User response:
None

CKM12040E Errors encountered during catalog LOCK | UNLOCK process

Explanation:
IDCAMS ALTER entry_name LOCK|UNLOCK set RETURN CODE greater than ZERO.

User response:
Review IDCAMS error messages preceding this message. If IDCAMS MAXCC=4, MERGECAT continues processing. Otherwise, the MERGECAT command is terminated. If the error occurred during UNLOCK, all MERGECAT processing has completed.

CKM12041I Catalog now LOCKED: | UNLOCKED: xxxxxx

Explanation:
MERGECAT locks the source and target catalogs before starting processing and unlocks them when there is a successful completion.

User response:
None if there is a successful completion. If the job ends with a completion code > 4, the catalogs are not unlocked and must be unlocked externally.

CKM12042I The number of catalog records moved/copied is: value

Explanation:
Informational only. Continuation lines list the number of catalog records of each type which were moved (or copied) to the target catalog.

User response:
None

CKM12043I xxx volumes were affected; vvvvv VVDS entries were updated

Explanation:
Informational only. This message informs the user of the number of volumes that had VVDS changes and the total number of VVDS changes.

User response:
None

CKM12044E Conflicting keywords: SHORTENQ/LONGENQ for INBCS|OUTBCS

Explanation:
Both LONGENQ and SHORTENQ were specified (or one of their variants) and the operands conflict.

User response:
Examine the control card specification for SHORTENQ and LONGENQ and eliminate the conflict. In general, SHORTENQ should not be specified. LONGENQ is the default for both INBCS and OUTBCS. If you desire to change the default action for either or both BCS datasets, use a SHORTENQ specification by itself:

SHORTENQ (same as SHORTENQ(INBCS,OUTBCS))
SHORTENQ(INBCS) changes the ENQ action for ONLY the INBCS
SHORTENQ(OUTBCS) changes the ENQ action for ONLY the OUTBCS
The only valid combinations of SHORTENQ and LONGENQ are:

LONGENQ(INBCS) SHORTENQ(OUTBCS)
or
LONGENQ(OUTBCS) SHORTENQ(INBCS)

CKM12045W VVDS entry for: xxxxxx on volume: yyyyyy not found

Explanation:
When attempting to update the catalog back pointer for xxxxxx, no VVDS entry was found on volume yyyyyy.

User response:
If unable to determine the reason for the failure or to correct it, contact Technical Support.

CKM12046W Error reading VVDS entry: t xxxxxx on volume yyyyyy

Explanation:
An error occurred when attempting to read the VVDS entry for xxxxxx on volume yyyyyy. The catalog entry type is "t".

User response:
If unable to determine the reason for the failure or to correct it, contact Technical Support.

CKM12047I VVRINVR in VVDS yyyyyy updatedunchanged for xxxxxx

Explanation:
The catalog back-pointer for xxxxxx on volume yyyyyy has been successfully updated. Or if no update is necessary, the entry is left unchanged.

User response:
None

CKM12048E Error re-writing VVDS entry: t xxxxxx on volume: yyyyyy RC nnnn

Explanation:
An error occurred when attempting to rewrite the VVDS entry for xxxxxx on volume yyyyyy. The catalog entry type is "t". The VVDS Manager return code is nnnn.

User response:
If unable to determine the reason for the failure or to correct it, contact Technical Support.

CKM12049E MERGECAT would self-corrupt access to the target catalog | source catalog | journal data set DSN=dataset.name | Moving pointers to this data set can lead to VSAM errors and loss of backout/restart capability.

Explanation:
Neither the source catalog, the target catalog, nor the journal file can have their defining BCS entries moved from one catalog to another during MERGECAT processing.

User response:
Fix the error and retry the job.

CKM12050W Discrete RACF profile exists for: xxxxxx - volser may need to be changed.

Explanation:
The catalog indicated that there was a discrete RACF profile for dataset xxxxxx. The target catalog is on a different volume than the source catalog.

User response:
If necessary, the RACF discrete profile will have to be modified.

CKM12051E name SPACE_MANAGEMENT value invalid

Explanation:
The value of token SPACE_MANAGEMENT in named section of the INI is invalid.

User response:
Correct the error and retry.
CKM12052E Valid ACCEPTDIAGNOSE and ACCEPTEXAMINE values are "I", "W", or "E"

Explanation:
During command interpretation, the command preceding this message did not have the correct value inside the ACCEPTDIAGNOSE or ACCEPTEXAMINE keyword. The value must be "I", "W", or "E".

User response:
Correct the coding of the ACCEPTDIAGNOSE keywords.

CKM12053W IDCAMS EXAMINE failed for INBCS|OUTBCS bbbbbbbb

Explanation:
While preparing to do a MERGECAT, IDCAMS was invoked to execute an EXAMINE on BCS bbbbbbbb and the return code indicates that EXAMINE processing detected a problem.

User response:
The catalog being examined has a VSAM structural failure. The catalog may be functioning correctly, but certain catalog functions may not work. The catalog should be repaired before proceeding.

CKM12054W IDCAMS DIAGNOSE failed for INBCS|OUTBCS bbbbbbbb

Explanation:
While preparing to do a MERGECAT, IDCAMS was invoked to execute a DIAGNOSE on BCS bbbbbbbb and the return code indicates that DIAGNOSE processing detected a problem.

User response:
The catalog has a logical structural problem that can be corrected with the appropriate IDCAMS commands. The catalog should be repaired before proceeding.

CKM12055E No alias entry found in master catalog for LEVEL entry : xx

Explanation:
No ALIAS was found in the master catalog that matched xx.

User response:
The job fails. Fix the error and retry the job.

CKM12056E Source and target catalogs are the same

Explanation:
INBCS and OUTBCS specified the same catalog name. This not allowed.

User response:
The job fails. Fix the error and retry the job.

CKM12057W Catalog entry not found in source catalog: xxxxx

Explanation:
Catalog entry xxxxx was found in the source catalog during initial processing, was not found during the move phase. Processing continues. The most likely reason is that a dataset was deleted in the interim. A second possibility is that the source catalog has a corrupted index that does not point to an entry that exists in the catalog's data component.

User response:
If this was a SIMULATE run, then rerun the MERGECAT SIMULATE with EXAMINE(DATATEST). Otherwise, use IDCAMS to perform EXAMINE DATATEST on the source catalog.

CKM12058W BCS entries for the journal dataset will be ignored and not copied.

Explanation:
During COPYONLY processing, MERGECAT determined that the BCS entries for the journal dataset would become orphans if copied to the target catalog.

User response:
None.

CKM12059E IGGCSI00 non-zero RC processing journal

Explanation:
While attempting to obtain Hi-Used-RBA for the journal, the supplied routine IGGCSI00 returned an error.

User response:
Validate the catalog using EXAMINE and DIAGNOSE, fix any errors, and re-run. If the problem persists, contact Technical Support.

CKM12060E IGGCSI00 no entries for JOURNAL journal_name

Explanation:
While attempting to obtain Hi-Used-RBA for the journal, the supplied routine IGGCSI00 determined there were
no catalog entries for a VSAM object with the journal's
name.

User response:
Validate the name of the journal file specified, and
ensure that it is the name of a KSDS.

CKM12061E IGGCSI00 no associations for
JOURNAL

Explanation:
While attempting to obtain Hi-Used-RBA for the journal,
the supplied routine IGGCSI00 determined there were
no associations in the catalog for the object.

User response:
Validate the name of the journal file specified, and
ensure that it is the name of a KSDS.

CKM12062E JOURNAL has a non-zero hi-used-rba -
delete and redefine before re-running

Explanation:
The journal specified for the MERGECAT has already
been used. The journal must have a Hi-Used-RBA of
zero unless a BACKOUT or RESTART is being
requested.

User response:
If this not a BACKOUT or RESTART, ensure a DELETE
and DEFINE of the journal precedes the MERGECAT
request.

CKM12063E MOVEALIAS catalog cannot be same
as source or target catalog: xxxxxx

Explanation:
The MOVEALIAS control statement specifies a catalog
name that is the same as the INBCS catalog name or
the OUTBCS catalog name.

User response:
Ensure that both INBCS and OUTBCS specify the
desired catalog names and remove any conflicting
catalog name from the MOVEALIAS control statement.

CKM12064W Maximum number (32) of MOVEALIAS
entries has been exceeded | 
MOVEALIAS entry ignored: entry_name

Explanation:
The number of entries in the MOVEALIAS CONTROL
STATEMENT EXCEEDS THE MAXIMUM OF 32.
entry_name is excluded from processing.

User response:
Processing continues. Any ALIAS entries in the
specified entry-name catalog must be moved by other
means.

CKM12065W MOVEALIAS catalog entry already in
list: entry_name

Explanation:
entry_name has already appeared in the list of entries
in the MOVEALIAS control statement.

User response:
Processing continues as if the duplicate entry_name
was not specified.

CKM12066W No related alias records found in
catalog: xxxxxx

Explanation:
The specified catalog does not contain any ALIAS
entries related to the source BCS. The specified catalog
can be one of the following: (1) the Master catalog of
the executing system, (2) the catalog specified in the
MASTERCATLOG keyword, or (3) a catalog specified
in the MOVEALIAS keyword.

User response:
If the specified catalog is the executing system
MASTER catalog, ensure the MERGECAT job is
running on the correct system. If the specified catalog is
from either the MASTERCATLOG keyword or the
MOVEALIAS keyword, ensure the correct catalog was
specified.

Otherwise, the specified catalog will not be updated by
MERGECAT.

CKM12067E INBCS|OUTBCS volume name vvv in
connector record in ccccc doesn’t
match www in connector record in
mmmmm

Explanation:
While scanning an additional master catalog ccccc
specified in MOVEALIAS, a connector (alias) record for
the INBCS or OUTBCS was found, but the volume
name (vvv) for that BCS in catalog ccccc differs from the volume name (www) found in that BCS’s connector record in master catalog mmmmm.

**User response:**
Verify which volume the indicated BCS is on, remove the incorrect connector records using EXPORT DISCONNECT, and create correct connector records using IMPORT CONNECT. Then re-run the MERGECAT job.

---

**CKM12068E** No connector record for target|source BCS in catalog_name

**Explanation:**
MERGECAT did not find catalog connector records in the MASTER catalog for either the target or source BCS (or both). The MASTER catalog can be either the executing system MASTER catalog, or the catalog specified in the MASTERCATALOG keyword.

**User response:**
Ensure the target and source BCS datasets have catalog connector records in catalog_name. Catalog connector records can be established with the IDCAM IMPORT CONNECT function.

---

**CKM12069W** The following selected aliases are not related to INBCS and will not be moved: Aliases related to uuu xxx yyy zzz ...

**Explanation:**
Aliases were selected and were found in the master catalog, however the alias is related to a user catalog other than the specified INBCS. MERGECAT will not move these entries and will not redefine the alias pointer.

**User response:**
If an alias is currently pointing to the wrong catalog, manually delete and define it to the correct catalog, then re-run the move of that level. If the catalog entries for a listed level are not in the specified INBCS, then no action is required for that level. It may also be appropriate to adjust the LEVEL specification for MERGECAT to not include such levels.

---

**CKM12070I** MAXDUPS(99999) specified - there will be no limit enforced for duplicate records

**Explanation:**
Because MAXDUPS(99999) is specified, MERGECAT will continue regardless of how many duplicately-named records are encountered.

**User response:**
None.

---

**CKM12071W** VVDSUPDATE substituted for NOVVDSUPDATE | NOVVDSUPDATE substituted for VVDSUPDATE

**Explanation:**
During either BACKOUT or RESTART MERGECAT detects that the current specification of VVDSUPDATE or NOVVDSUPDATE is different from that of the original execution.

**User response:**
None. The original VVDSUPDATE|NOVVDSUPDATE is enforced.

---

**CKM12072E** IGGCSI00 no entries for JOURNAL journal_cmp_name

**Explanation:**
While attempting to obtain Hi-Used-RBA for the journal, the supplied routine IGGCSI00 determined there were no catalog entries for a VSAM object with the journal’s component name.

**User response:**
Validate the name of the journal file specified, and ensure that it is the name of a KSDS.

---

**CKM12073I** Journal build started/completed | Journal build completed; nnn records selected to be moved/copied | Catalog update started/completed

**Explanation:**
Informational time-stamped messages for the major processing phases. For ‘Journal build completed’, the number of catalog records found which will be moved or copied is shown.

**User response:**
None.

---

**CKM12074E** OUTBCS max recsize less than length nnnnn of record: rrr | This level and levels for all associated/related records cannot be moved/copied

**Explanation:**
MERGECAT determined that the length of record rrr is too large for the target catalog’s maximum RECORDSIZE. The record cannot be moved/copied to the specified OUTBCS. If ENTRIES was not specified, the alias level and any other associated and related alias levels will not be moved/copied.

**User response:**
The maximum RECORDSIZE of the target catalog must be large enough to accommodate the largest record being moved/copied from the source. If this is a SIMULATE,
increase the maximum RECORDSIZE in the target or do not move the entry or alias level. If not SIMULATE, MERGECAT does not move the record or level.

**CKM12075E** The following alias levels could not be moved for reasons previously noted: 

**Explanation:**
Some alias levels specified for processing cannot be moved/copied due to errors noted in preceding messages. 

**User response:**
Review preceding messages to decide what action to take.

**CKM12076E** Alias level cannot be moved/copied: 

**Explanation:**
Due to a problem noted in a preceding message, alias level has been flagged as unmoveable. 

**User response:**
Review preceding messages to decide what action to take.

**CKM12078I NOVVDSUPD or COPYONLY specified - VVDS/VVCN and VVDS backpointers will not be updated**

**Explanation:**
NOVVDSUPD or COPYONLY was specified in the MERGECAT control statement. The VVR records for the entries will not be updated. 

**User response:**
None.

**CKM12079I Catalog already exists in VVCR/VVCN record on:** 

**Explanation:**
Informational only. This message informs the user that catalog yyyy is already in the VVCR/VVCN record in the VVDS on volume xxxxxx. 

**User response:**
None.

**CKM12080I Catalog added to VVCR/VVCN on:** 

**Explanation:**
Informational only. This message informs the user that the VVCR or VVCN record in the VVDS on volume xxxxxx has been updated with catalog named yyyy.

**User response:**
None.

**CKM12086I MOVEALIAS filter included catalog **

**Explanation:**
A masked name in the MOVEALIAS keyword includes catalog for MOVEALIAS processing. 

**User response:**
None.

**CKM12087I System Multi-Level-Alias setting is**

**Explanation:**
Displays the current setting of the maximum number of levels allowed in a Multi-Level-Alias. 

**User response:**
None.

**CKM12088E All-inclusive mask may not be combined with any other specification:**

**Explanation:**
A mask which would match everything was specified in a list of values. If such a mask is desired, it must be the only entry in the list. 

**User response:**
Correct the MERGECAT control statement and re-run the job.

**CKM12099E MERGECAT internal error - **

**Explanation:**
A MERGECAT internal error has occurred. 

**User response:**
Contact Technical Support.

**CKM120C1E Catalog record for component contains multiple associations:**

**Explanation:**
Either the input catalog record has a structural error or there has been an internal MERGECAT error. 

**User response:**
Save all of the job output and contact Technical Support.
Catalog record for component contains multiple associations: ccccc

**Explanation:**
Either the input catalog record has a structural error or there has been an internal MERGECAT error.

**User response:** Save all of the job output and contact Technical Support.

---

Moving to the master catalog requires the TO-MASTER-CATALOG keyword

**Explanation:**
As a safety precaution, when MERGECAT detects that the OUTBCS is the master catalog, MERGECAT requires that the TO-MASTER-CATALOG keyword also be specified.

**User response:** Specify the TO-MASTER-CATALOG keyword if appropriate.

---

Moving from the master catalog requires the FROM-MASTER-CATALOG keyword

**Explanation:**
As a safety precaution, when MERGECAT detects that the INBCS is the master catalog, MERGECAT requires that the FROM-MASTER-CATALOG keyword also be specified.

**User response:** Specify the FROM-MASTER-CATALOG keyword if appropriate.

---

Source BCS is the master catalog -- skipping check for aliases

**Explanation:**
Records are being moved from the master catalog; there can be no aliases pointing to the master catalog.

**User response:** None.

---

LEVEL masks not allowed when source BCS is master catalog

**Explanation:**
When INBCS specifies the master catalog, MERGECAT does not allow masks in the LEVEL keyword as a safety precaution.

**User response:**
Specify a list of non-masked alias levels in the LEVEL keyword.

---

Moving SYS1 from master catalog is not allowed

**Explanation:**
MERGECAT does not allow SYS1.xx records to be moved from the master catalog.

**User response:**
If appropriate, run the command with COPYONLY and then if needed, manually delete the entries from the old master catalog.

---

Implementation restriction: only one HLQ or MLA may be specified per MERGECAT WHILE-OPEN execution

**Explanation:**
MERGECAT WHILE-OPEN was requested for more than one HLQ or MLA. This is not currently supported.

**User response:** Run a separate MERGECAT step for each HLQ or MLA.

---

Sphere too large for MERGECAT architectural limits

**Explanation:**
The volume / association / relation table for a sphere has caused a journal record to exceed the maximum size. This should not occur.

**User response:** Save the job output and contact Technical Support.

---

On RESTART | BACKOUT, the WHILE-OPEN specification does not match the original specification in the journal

**Explanation:**
BACKOUT or RESTART was specified with WHILE-OPEN but WHILE-OPEN was not specified on the original MERGECAT command, or WHILE-OPEN was specified on the original MERGECAT command but was not specified on this BACKOUT or RESTART run.

**User response:** Correct the command and resubmit the job.

---

Data set in use; moving this entry may cause errors: dddd

**Explanation:**
The catalog entry for data set dddd has been selected to be moved and MERGECAT has detected that the data set is allocated to another job. Catalog errors may occur in the other job.

**User response:**
If this is a SIMULATE, run the actual move when the data sets listed in CKM120U1W are not in use. If this was not a SIMULATE run and the other jobs are still running and have not yet encountered errors, it may be possible to avoid the catalog errors in the other jobs by immediately moving those entries back to the original catalog.

**CKM120U2E** Data set in use -- this entry and it alias level will not be moved: dddd

**Explanation:**
The catalog entry for data set dddd has been selected to be moved and MERGECAT has detected that the data set is allocated to another job. To avoid possible catalog errors in the other job this entry and all associated index levels will not be moved.

**User response:**
Re-run the MERGECAT when the data sets listed in CKM120U2E are not in use. If this is not possible and the risk of catalog errors in the other job(s) is acceptable, these entries may be moved by specifying the MOVE-IN-USE keyword on the MERGECAT command.

**CKM120U3I** In use by jobnames (sysnames):
jjjj1 (ssss1) jjjj2 (ssss2) (partial list)

**Explanation:**
This message lists the first few jobnames and their system names which have the indicated data set allocated. If 'partial list' appears, there are more names than fit on one message line.

**User response:**
None. Refer to the action in the preceding CKM120U1W or CKM120U2E message.

**CKM120U9W** Unexpected ISGQUERY return code:
R15=xxxxxxx R0=xxxxxxx
Count=nnnnn Answer_length=xxxxxxx

**Explanation:**
A MERGECAT internal error or a GRS error has occurred.

**User response:**
Contact Technical Support.

**CKM12102E** No systems defined for cross-system communications task

**Explanation:**
The cross-system communications task parmlib member which should specify every system in the sysplex which shares the INBCS and/or the OUTBCS does not list any systems.

**User response:**
Verify that all systems in the sysplex which share the INBCS and OUTBCS specified for this MERGECAT execution are shown as Active in CKM12104I lines. If not, review the CKMSYSxx parmlib member and correct as necessary.

**CKM12103I** Sys Name System Status Hostname / IP address MERGECAT Level and Build

**Explanation:**
Header line for the systems table for WHILE-OPEN

**User response:**
None.

**CKM12104I** nnnn sssssss hhhhhhhhhh hhhhhhhhhhh

**Explanation:**
Shows the status of system nnnn.
The status sssssss may be:

- **Active**
  - TCP/IP Communication with system nnnn is operative.

- **Excluded**
  - Communication with system nnnn is not operative; the system has been excluded via the EXCLUDE-SYSTEMS keyword to allow MERGECAT execution to continue.

- **Active, Excluded**
  - Communication is operative but the indicated system has been excluded via the EXCLUDE-SYSTEMS keyword

**This System**
Indicates the system on which MERGECAT is executing.

hhhhhhhhhhh.hhh is the hostname or IP address as defined in the CKMSYSxx parmlib member.

hhhhhhhhhhh - Shows the level of MERGECAT on the indicated system.

**User response:**
Verify that system hhhhhhhhhhhh.hhh is active, its TCP/IP communications are working, its CKM started task is properly initialized, and that TCP/IP is working on the local system. Correct any problems and rerun the MERGECAT job. If the indicated system is down and will remain down for the duration of the MERGECAT WHILE-OPEN execution, specify **CKM12105E** **unknown not responding** hhhhhhhhhh.hhh

**Explanation:**
TCP/IP Communication with host hhhhhhhhhhhh.hhh defined in the CKMSYSxx parmlib member is not available.

**User response:**
Verify that system hhhhhhhhhhhh.hhh is active, its TCP/IP communications are working, its CKM started task is properly initialized, and that TCP/IP is working on the local system. Correct any problems and rerun the MERGECAT job. If the indicated system is down and will remain down for the duration of the MERGECAT WHILE-OPEN execution, specify
**CKM12105E** 
*nnnn incompatible ver hhhhhhh.hhh*

**Explanation:**
The version of MERGECAT on system *nnnn* is not compatible with the version of MERGECAT on this system.

**User response:** Ensure that all systems in the sysplex are running compatible versions of MERGECAT, then re-run the job.

---

**CKM12106E** 
**MERGECAT terminating due to cross-system errors**

**Explanation:**
An error in the cross-system setup prevents MERGECAT WHILE-OPEN from executing.

**User response:** Correct the errors shown in preceding messages and rerun the job.

---

**CKM12107E** 
**Incompatible MERGECAT release levels in sysplex**

**Explanation:**
Some systems are running a different, incompatible level of MERGECAT.

**User response:** Bring all systems to the same level or level documented as compatible, and rerun the job.

---

**CKM12108E** 
**Local system cannot be excluded**

**Explanation:**
The local system was listed in the EXCLUDE-SYSTEMS subkeyword of WHILE-OPEN.

**User response:** Remove the incorrect specification and rerun the job.

---

**CKM12109I** 
**Single-system MERGECAT requested; other defined systems will not participate.**

**Explanation:**
MERGECAT WHILE-OPEN(SINGLE) was specified. MERGECAT will not communicate catalog updates to any other system. Various errors may occur, such as jobs on other systems which have open VSAM objects in the INBCS will encounter catalog errors, generally at CLOSE time. Jobs on other systems may encounter “data set not found” conditions. Duplicate catalog entries may be created in the INBCS and OUTBCS.

**User response:** Ensure that all systems sharing the INBCS and OUTBCS are down prior to executing MERGECAT WHILE-OPEN(SINGLE).
CKM12122E  CKM12136E

User response: None. This is an informational message.

CKM12122E ** Unexpected ISGQUERY return code: R15=cccccccc R0=rrrrrr

Explanation:
MERGECAT issued ISGQUERY to determine whether a VSAM component is in use. ISGQUERY failed.

User response: Save the job output and contact Technical Support.

CKM12131I sss spheres with SYSVSAM enqueues; rrr spheres are being redirected

Explanation:
Upon completion of movement of all catalog records for this alias level, there are sss spheres which have open components in the INBCS, and rrr spheres which have components requiring that catalog communications continue to manage these entries after MERGECAT terminates.

User response: None.

CKM12124E ** IARV64 DETACH failed rc = cccccccc reason code = rrrrrrrr

Explanation:
MERGECAT was unable to detach the Shared Memory Object from the MERGECAT job.

User response: Save the job output and contact Technical Support.

CKM12131E ** Unexpected return code from communications task: nn function ffff request rrr.

Explanation:
The interface module to the CKM communications task returned a return code of nn. ffff and rrr provide information needed for problem diagnosis.

User response: Refer to other messages for specific information. If necessary, contact Technical Support for assistance.

CKM12132I Initiating CAS communication with system ssss hostname hhhh

Explanation:
MERGECAT is establishing communication with the Catalog Address Space on system ssss. The TCP/IP hostname for system ssss is hhhh.

User response: None.

CKM12133I CAS communication ready with system ssss

Explanation:
MERGECAT has successfully established communication with the Catalog Address Space on system ssss.

User response: None.

CKM12134E ** Unable to establish CAS communication with system ssss hostname hhhh

Explanation:
MERGECAT could not connect to the Catalog Address Space on system ssss. The TCP/IP host name or IP address is hhhh.

User response: Verify that the TCP/IP communication link to system ssss is operational and that the CKM started tasks are active. Rerun the job after correcting the problem.

CKM12135E 08330 rc = nnn

Explanation:
The interface to the CKM started task returned return code nnn when attempting to invoke function ffff.

User response: Save the job output and contact Technical Support.

CKM12136E ** Connection to system ssss lost; system is now excluded from further processing

Explanation:
MERGECAT was unable to continue communicating with its support task on system ssss. This could be due to the system failing or being shut down, the communications task failing or being shut down, or a TCP/IP communications outage. The operator was unable to correct the problem and replied 'DOWN' to CKM833004E indicating that MERGECAT should continue without further interaction with the indicated system.

User response: If the system failed or was shut down and was left down until MERGECAT WHILE-OPEN completed, no action is required. Otherwise, depending on the stage of processing, catalog errors or abends may occur on system ssss. Contact Technical Support if necessary.
CKM12137E ** Connection to system ssss lost;  
MERGECAT termination requested via reply to CKM833004E

Explanation:
MERGECAT was unable to continue communicating with its support task on system ssss. This could be due to the system failing or being shut down, the communications task failing or being shut down, or a TCP/IP communications outage. The operator was unable to correct the problem and replied to a WTOR indicating that MERGECAT should terminated processing.

User response: Depending on the stage of MERGECAT processing, catalog errors or abends may occur on any system accessing the catalog entries being moved. Contact Technical Support if necessary.

CKM12138E ** Request qqqq on system ssss RC = cccc reason = rrrr

Explanation:
A MERGECAT processing routine, usually on a secondary system, was unable to complete a request.

User response: Correct the problem which caused the request to fail and rerun the job if appropriate. If necessary, contact Technical Support for assistance.

CKM12182I Sending catalog information to system ssss

Explanation:
Information regarding the catalog records being moved is being sent to system ssss.

User response: None.

CKM12184I nnnn sssssss hhhhhhhhhhhh.ccc

Explanation:
Shows the status of system nnnn.

The status sssssss may be:

Active TCP/IP Communication with system nnnn is operative.

Excluded Communication with system nnnn is not operative; the system has been excluded via the EXCLUDE-SYSTEMS keyword to allow MERGECAT execution to continue.

Active, Excluded Communication is operative but the indicated system has been excluded via the EXCLUDE-SYSTEMS keyword

hhhhhhhhhhhhh.ccc is the hostname or IP address as defined in the CKMSYSxx parmlib member.

ccc - If MERGECAT received a non-zero return code from any of its routines on system nnnn, the highest such return code is shown.

User response: None.

CKM12185E ** nnnn Failed hhhhhhhhhhhh System, 
TCP/IP, or CKM task failure.

Explanation:
MERGECAT was initially communicating with system nnnn but during processing, communication was lost. This could be due to system nnnn having failed, getting shut down, a TCP/IP failure, or the CKM communications task on system nnnn having failed. The operator was unable to correct the problem and replied 'DOWN' to CKM833004E.

User response: If nnnn remained operational during this MERGECAT, verify that catalog entries which were moved in this MERGECAT WHILE-OPEN are correctly accessible on system nnnn. Note that if any VSAM objects were open on both system nnnn and on any of the other systems involved in the MERGECAT WHILE-OPEN, there may be integrity issues and/or catalog errors. Contact Technical Support if necessary.

CKM12199E MERGECAT internal error - cccc

Explanation:
A MERGECAT internal error has occurred.

User response: Save all of the job output and contact Technical Support.
Explanation:
This is a generic informational WTO message.

User response: None.

CKM12205E INTERNAL LOGIC ERROR - Description
CODE=xxxxxx

Explanation:
An abnormal and unexpected condition was detected
due to a possible logic error. The description will vary,
depending upon the nature of the problem. The CODE=
value is information that is meaningful only to Technical
Support. Other descriptive information will usually follow
immediately after this error message.

User response: Report this problem to Technical
Support. Save all spooled output from this execution
(including the JES execution job logs) and provide this
to Technical Support as part of the problem
documentation.

CKM12403I SHAREMEMOBJ Complete - ASID(xxxx)
Job(jobname).

Explanation:
The indicated Address Space is now connected to the
Mergecat While-Open Memory Object, in support of
moving catalog entries from one catalog to another.

User response: None.

CKM12404E SHAREMEMOBJ Failed - RC=nn
RSN=rrr - ASID(xxxx) Job(jobname).

Explanation:
An error occurred while an Address Space attempted to
connect with the Mergecat While-Open Memory Object.
The Reason Code will be the same as what is
documented for the IBM System Code of a DC2 Abend.
The shared memory object may persist on this system
after it is no longer needed.

User response: Report this problem to Technical
Support. Save all spooled output from this execution
(including the JES execution job logs) and provide this
to Technical Support as part of the problem
documentation.

CKM12405I Memory Object Local Detach Complete
- ASID(xxxx) Job(jobname).

Explanation:
The indicated Address Space has disconnected from
the Mergecat While-Open Memory Object.

User response: None.

CKM12406W Memory Object Local Detach Failed
- RC=nn RSN=rrr - ASID(xxxx)
Job(jobname).

Explanation:
An error occurred while an Address Space was
disconnecting from the Mergecat While-Open Memory
Object. The Reason Code will be the same as what is
documented for the IBM System Code of a DC2 Abend.
The shared memory object may persist on this system
after it is no longer needed.

User response: Report this problem to Technical
Support. Save all spooled output from this execution
(including the JES execution job logs) and provide this
to Technical Support as part of the problem
documentation.

CKM12407I Memory Object SYSTEM Detach Complete - ASID(xxxx) Job(jobname).

Explanation:
The Mergecat While-Open Memory Object has been
freed of storage and deleted from above-the-bar shared
memory.

User response: None.

CKM12408W Memory Object SYSTEM Detach Failed
- RC=nn RSN=rrr - ASID(xxxx)
Job(jobname).

Explanation:
An error occurred while an Address Space was
attempting to delete the Mergecat While-Open Memory
Object. The Reason Code will be the same as what is
documented for the IBM System Code of a DC2 Abend.
The shared memory object may persist on this system
after it is no longer needed.

User response: Report this problem to Technical
Support. Save all spooled output from this execution
(including the JES execution job logs) and provide this
to Technical Support as part of the problem
documentation.

CKM12409I SYSVSAM Redirect
Sphere=dataset.name

Explanation:
A VSAM Dataset that had been open prior to having its
catalog entries moved to another BCS is being opened,
or is being interrogated in a way similar to VSAM Open.
The indicated dataset is also currently open for another
task. MERGECAT will cause VSAM to use ENQ names
that still reference the old catalog to maintain dataset
integrity.

User response: None.
CKM12411I SYSVSAM Destage
Sphere=dataset.name

Explanation:
Support for redirecting VSAM OPEN routines to the old BCS is being dropped because the dataset is no longer open by any task on any of the systems at this moment in time.

User response: None.

CKM12412I text

Explanation:
When the trace option is internally activated, this message denotes an event.

User response: None.

CKM12501E ** LOCATE failed rc = nnn reason = xxxxxxxx - CAS unable to open BCS bbbb

Explanation:
BCS bbbb was not open on the indicated system and did not open when LOCATE was issued against it. The return code and reason codes from LOCATE are shown.

User response: Be sure that BCS bbbb is correctly connected to the master catalog on the corresponding system and rerun the job.

CKM12502E ** No CAXWA found ACB not open after LOCATE for BCS bbbb

Explanation:
CAS did not allocate and open BCS bbbb.

User response: Be sure that BCS bbbb is correctly connected to the master catalog on the corresponding system and rerun the job.

CKM12510I Catalog information received

Explanation:
Catalog information sent from the primary system on which MERGECAT is executed has been successfully received on the indicated secondary system.

User response: None.

CKM12511E ** Creation of shared memory object failed, rc = nnn reason xxxxxxxx

Explanation:
IARV64 GETSHARE failed with return code nnn (decimal) and reason code xxxxxxxx.

User response: Based on the return code and reason code given, correct the problem and rerun the job.

CKM12599E text

Explanation:
A MERGECAT internal error has occurred.

User response: Save all of the job output and contact Technical Support.

CKM13000I REORG Maintenance Level: CKM00130/REV=nn

Explanation:
Informative message to indicate the revision level (nn) of the REORG function.

User response:
Use this information when reporting problems to Technical Support.

CKM13001E DATASET allocation FAILED

Explanation:
An error occurred during the allocation of the BCS name specified in the BCS keyword.

User response:
Ensure the name specified in the BCS keyword is spelled correctly. Review the sysprint and joblog datasets for prior dynamic allocation error messages that describe the nature of the problem and take appropriate action as indicated by those messages.

CKM13002E Error on VSAM OPEN ACBn: RC=X’rr’, ACBERFLG=X’ee’

Explanation:
An error occurred during processing of a VSAM OPEN request for the BCS. “rr” and “ee” are the hexadecimal return and reason code values, respectively, from VSAM OPEN. The return and reason code values are described in IBM manual “z/OS V1R3.0 DFSMS Macro Instructions for Data Sets” in the chapter VSAM Macro Instructions in the section entitled “Vsam VSAM Macro Return and Reason Codes”.

User response:
Review the return and reason code descriptions from the above referenced document for an explanation of the error and for any appropriate action to take.

CKM13003E Error RESERVEing BCS: w1 w2 w3

Explanation:
An error occurred while issuing a RESERVE for the resource SYSIGGV2 bcsname, where “bcsname” is the dataset name of the BCS that is to be reorganized.
bytes of return information is shown in the three hexadecimal word values - w1, w2, w3.

**User response:**

A description of the meaning the 12 bytes of return is found in IBM manual "z/OS V1R4.0 MVS Auth Assm Services Reference LLA-SDU" for the "RESERVE" macro. Contact Technical support for further assistance.

---

**CKM13004E Error: Control Card Parameter WHILEOPEN must be specified when BCS is OPEN and ACTIVE.**

**Explanation:**

The BCS specified in the REORG command is OPEN and ACTIVE by the Catalog Address Space. The WHILEOPEN parameter was not specified. Hence the REORG command terminates without performing the reorg function.

**User response:**

To reorganize the BCS while it is OPEN to the Catalog Address Space, specify WHILEOPEN in the REORG command control statement.

---

**CKM13005E Error: Catalog is LOCKed**

**Explanation:**

The REORG command has discovered that the BCS is LOCKed.

**User response:**

Determine the reason the BCS is LOCKed. Some other function was run against this BCS and may not have completed successfully. The LOCK attribute can be removed from the BCS using the IDCAMS ALTER BCSNAME UNLOCK command. Once the LOCK is removed, recommend running IDCAMS EXAMINE INDEXTEST DATATEST to verify the structural integrity of the BCS. Then resubmit the REORG request.

---

**CKM13006E Error: DSI/DSB Cell not found for BCS**

**Explanation:**

REORG could not locate the DSI and/or the DSB cell of the VVR records for the BCS.

**User response:**

This not a likely error since it is almost impossible to OPEN a BCS without valid DSI/DSB cells in the VVR records for the BCS. This indicative of some damage to the VVDS dataset on the volume where the BCS resides. DIAGNOSE VVDS should be run against the VVDS to determine the errors and possibly repair the VVDS.

---

**CKM13007E The current Master Catalog cannot be the object of a REORG command.**

**Explanation:**

REORG determined that the BCS name specified in the BCS keyword is the Master Catalog of the running system.

**User response:**

The REORG command will not reorganize the Master Catalog of the running system.

---

**CKM13008E Error: The internal backup dataset is not DASD**

**Explanation:**

REORG requires that the internal backup dataset be direct access storage (DASD). REORG detected a non-DASD device type.

**User response:**

Review the system allocation messages from the batch job. If the internal backup dataset has been overridden through JCL, insure the UNIT parameter specifies a DASD device type.

---

**CKM13009E Error: Unable to allocate backup dataset**

**Explanation:**

An error occurred during the dynamic allocation of the internal backup dataset.

**User response:**

Review the sysprint and joblog datasets for any previous error messages issued by Dynamic allocation. Take appropriate action as indicated. The most likely cause is not enough available DASD space. The internal backup dataset is allocated as a system temporary dataset with unit 3390. The amount of space requested depends on the size of the BCS being reorganized.

---

**CKM13010E Error: Unable to Open backup dataset**

**Explanation:**

An error occurred opening the internal backup dataset.

**User response:**

Review the sysprint and joblog datasets for any previous error message issued by MVS Open processing. Take appropriate action as indicated. If the OUTFILE parameter is used, one like cause is a mismatch between the name specified in the OUTFILE parameter and the DDNAME specified in the JCL.
Internal Backup Summary: Index CI Index CI Index CI Index CI Data CI Data
Data CIs ... n n n n n ... Reads Writes Reads Writes

Explanation:
Provides record counts of the internal backup process:
Index CI Reads: The number of Index Control Intervals
read from the BCS.
Index CI Writes: The number of Index Control Intervals
written to the internal backup dataset.
Data CI Reads: The number of Data Control Intervals
read from the BCS.
Data CI Writes: The number of Data control Intervals
written to the internal backup dataset.
Free Data CIs: The number of free Data Control
Intervals derived from the Index Sequence Set.
Empty Data CIs: The number of Data Control
Intervals with no records. This value usually includes Free Data
CIs as well.
Output Records: Total number of records written to the
internal backup dataset. This number should equal the
sum of the Index and Data CI write counts.
Output Blocks: Number of blocks written to the internal
backup dataset.

User response:
None.

Error Opening Master Catalog:
mcatname RC=X'rr' ... ...
ACBERFLG=X'ee'

Explanation:
An error occurred opening the Master Catalog.
mcatname is the name of the Master Catalog. "rr" is the
hexadecimal return code from OPEN, and "ee" is the
hexadecimal reason code. The Master Catalog is being
opened in order to read the BCS connector record for
the BCS that is being reorganized.

User response:
The Open return code and reason code are
documented in the IBM manual: "z/OS V1R3.0 DFSMS
Macro Instructions for Data Sets" in the chapter VSAM
Macro Instructions in the section entitled "Vsam VSAM
Macro Return and Reason Codes". Take appropriate
action as indicated and contact Technical Support for
further assistance if necessary.

Error allocating Master Catalog
Explanation:
An error occurred while allocating the Master Catalog

User response:
Review syslog and joblog datasets for prior error
messages issued by Dynamic allocation to explain the
reason for the error.

Error: No Connector record found for
BCS in Master Catalog
Explanation:
For the BCS name specified in the BCS keyword,
REORG did not find a corresponding User Catalog
Connector record in the Master Catalog.

User response:
Verify the spelling of the name specified in the BCS
keyword. If the name is correct, then this BCS is not
known (connected) to this system as a user catalog.
REORG cannot process this BCS. Resubmit the
REORG job on a system where the BCS is connected
as a User Catalog or connect this BCS to the system
using IDCAMS IMPORT CONNECT. See "z/OS DFSMS
Access Method Services for Catalogs" for information
about IDCAMS IMPORT CONNECT.

Backup File DD(ddn) was Successfully
Created
Explanation:
When the OUTFILE keyword specifies a backup file for
recovery purposes, this message indicates that the
catalog backup was created.

User response:
None. Message is informational only. Subsequent
message CKM13014W indicates the status of the
backup.

Backup File DD(ddn) status-text
Explanation:
When the OUTFILE keyword specifies a backup file for
recovery purposes, this message indicates the status of
that catalog backup.

Possible Warning status descriptions are:
Empty The Backup Dataset has been reset to empty.
Incomplete The Backup was Unsuccessful.
Complete The Backup was created but the file was not
closed.
CKM13015E - CKM13021E

Not Opened
The Backup Dataset could not be opened.

Note: If the file contained a prior backup version and the indicated status is Empty, then the former backup was erased. The backup file is opened for Output at a very early stage of the primary REORG process.

User response: None. However, CKM13014W indicates that the file cannot be used for recovery, or should be first tested for validity using it as input to RECOVER BCS SIMULATE.

CKM13015E Error allocating OUTDATASET
Explanation:
OUTDATASET(dsname) was specified in the REORG control statements and an error occurred in Dynamic allocation when attempting to allocate dsname.

User response:
Review the sysprint and joblog datasets for any prior Dynamic allocation error messages. Take appropriate action as indicated. One common cause for this error is an incorrect spelling of the dsname.

CKM13016E Error OPENing OUTFILE or OUTDATASET
Explanation:
An OPEN error occurred while attempting to OPEN the DDNAME specified in OUTFILE or the dataset specified in OUTDATASET.

User response:
Review sysprint and joblog datasets for any prior error messages issued by OPEN processing. Take appropriate action as indicated and contact Technical Support for further assistance if necessary.

CKM13017E Error: No Self Describing Record (SDR)
Explanation:
The BCS does not contain a self describing record. A self describing record has a key of 45 hex zeros and is the first record in a BCS.

User response:
This error is indicative of a damaged BCS. REORG cannot process this BCS.

CKM13018E Re-org request rejected by Operator
Explanation:
The OPERATOR replied “N” to WTOR message CKM13030I terminates the REORG request without reorganizing the BCS.

User response: An “N” reply to WTOR message CKM13030I terminates the REORG request without reorganizing the BCS.

CKM13019E Installation Security Server... ...denied access to this command ...returned failure codes xxxx xxxx
Explanation:
REORG has requested from the Installation Security Server (RACF, ACF2, Top Secret) whether the access is authorized to execute the REORG command. The Installation Security Server either denied access or returned a failure while attempting to validate the authorization.

User response:
Contact the installation security administrator if this unexpected. You will need to tell them the name of the command in use. In this case it is REORG.

CKM13020E Error: Index Record has invalid Horizontal Pointer... RBA HHP HURBA
X'rrrrrrrr' X'hhhhhhhh X'uuuuuuuu'
Explanation:
While reading the Index Set of the BCS, REORG found an Index Set record which appears to be invalid. RBA is the hex RBA value of the record, HHP is the hex base value the Index record controls, HURBA is the RBA hexadecimal value of the high used RBA value of the Index.

User response:
This indicative of a structural error in the BCS Index. If REORG determines that the Index Sequence Set is still intact REORG may continue to reorganize the BCS. Otherwise, REORG terminates without reorganizing the BCS. Use DIAGNOSE BCS or IDCAMS EXAMINE to get more details about the structure problems. If “REPAIR” is specified, the REORG process continues, overriding the error condition.

CKM13021E Error: Index|SEQNC Set Vertical Pointer Error...
X'rrrrrrrr' X'bbbbbbbb' X'vvvvvv' X'uuuuuu'
Explanation:
While Reading the BCS Index, either an Index Set or Sequence Set record has an invalid vertical pointer. “rrrrrr” is the hex RBA value of the record “bbbbbbbb” is the hex base value the Index record controls, “vvvvvv” is the hex CI number of the vertical pointer, and “uuuuuu” is the high used hex CI number of the BCS Index.

User response:
This indicative of a structural error in the BCS Index. If
REORG determines that the Index Sequence Set is still intact REORG may continue to reorganize the BCS. Otherwise, REORG terminates without reorganizing the BCS. Use DIAGNOSE BCS or IDCAMS EXAMINE to get more details about the structure problems. If “REPAIR” is specified, the REORG process continues, overriding the error condition.

**CKM13022E Error in Data CI, RBA X’rrrrrrrr’**

**Expecting Segment... ...Continuation or End**

**Explanation:**
During Deblocking of a Data control interval, REORG encountered an error in processing a spanned record. A segment start record has been processed and the next record found is neither an intermediate nor an end segment. “rrrrrrrr” is the hex RBA of the Data CI.

**User response:**
The logical BCS record is incomplete. REORG will terminate if “REPAIR” is not specified. REORG will terminate after the Verify Phase completes, and the BCS is not reorganized. If “REPAIR” IS specified, the REORG process continues.

**CKM13023E Error in Data CI, RBA X’rrrrrrrr’ - Expecting segment start**

**Explanation:**
During deblocking of a Data control interval, REORG encountered an error in processing a spanned record. The RDF in the CI indicates the record is spanned, but the segment descriptor word is not a segment start record.

**User response:**
The logical BCS record is incomplete. REORG will terminate if “REPAIR” is not specified. REORG will terminate after the Verify Phase completes, and the BCS is not reorganized. If “REPAIR” IS specified, the REORG process continues.

**CKM13024E Error in Data CI, RBA X’rrrrrrrr’ - Logical Sequence error: ...bcskey**

**Explanation:**
During deblocking of a Data control interval, REORG detected an “out of sequence” condition in the record structure. i.e. the bcs key of the current record is lower than the previous key.

**User response:**
The logical records in the Data CI appear to be corrupted. If “REPAIR” is not specified, the REORG process will terminate after the Verify Phase completes, and the BCS is not reorganized. If “REPAIR” IS specified, the REORG process continues.

**CKM13025E Sequence Error Detected During Load/Verify - Prev Key pkey... ...Next Key nkey**

**Explanation:**
During Verify Load or LOAD processing REORG detected a logical record sequence error. “pkey” is the BCS key of the previous logical record. “nkey” is the BCS key of the current BCS record. “nkey” is lower in sequence than “pkey”.

**User response:**
If the error occurs during the Verify process, the BCS REORG is terminated without reorganizing the BCS and the BCS does not need to be recovered. If the error occurs during the LOAD process, an attempt is made to recover the BCS to its original state. If the recovery fails, the BCS will need to be recovered from a previous backup. Use the compatible backup created during REORG (unless NOBACKUP was specified).

**CKM13026I SIMULATE Mode Selected: BCS REORG is BYPASSED**

**Explanation:**
SIMULATE was specified

**User response:**
The BCS is NOT reorganized.

**CKM13027E Error: Not all Data CIs accounted for**

**Explanation:**
The number of Data CIs that contain data plus the number of fully free Data CIs does not match the high used RBA value for the Data component.

**User response:**
If “REPAIR” is NOT specified, the BCS REORG is terminated without reorganizing the BCS.

If “REPAIR” IS specified, the BCS REORG will continue with the REORG process.

Before contacting Technical support, obtain the following output from IDCAMS:

EXAMINE NAME(cat-name) DATATEST
LISTCAT ENT(cat-name) ALL CAT(cat_name)

**CKM13028E Error: A discrepancy was found between the Unload and the Preload record counts.**

**Explanation:**
During the Preload Verify process, the number of logical records found during preload does not match the number of logical records found during the unload process. If the discrepancy is due to duplicate records
found in the BCS during the unload phase, then this may account for the difference.

**User response:**

If "REPAIR" is NOT specified, the BCS REORG is terminated without reorganizing the BCS. If "REPAIR" IS specified, the BCS REORG will continue with the REORG process.

**CKM13029E VSAM Error at line sequence:**

nnnnnn, RPLERRCD=X'eeeee'... ...,
Request Type: GET GETIX PUT PUTIX POINT Other

**Explanation:**

A VSAM request, indicated by "Request Type", at program line sequence "nnnnnnnn" end with an error "eeeee".

**User response:**

Contact Technical Support for further assistance. A Recovery of the BCS may occur depending on the progress the REORG has made at the time of error. Review the sysprint for recovery message CKM13050E to indicated if a RECOVERY was attempted.

**CKM13030I Re-org for catalog requested: bcsname volser**

**Explanation:**

Catalog accesses temporarily suspended by jjjjjj aaaa sssssssss Reply 'Y' to proceed, 'N' to reject request

A REORG process is requested for "bcsname" on "volser". "jjjjjj" is the jobname of the request, "aaaa" is the ASID, and "ssssssss" is the system name.

**User response:**

Reply "Y" to allow the REORG request to proceed. Reply "N" to terminate the request.

**CKM13031I Catalog Re-org in progress - DO NOT CANCEL**

**Explanation:**

A REORG is in progress. This message issued when the reformattting of the bcs has begun.

**User response:**

None. The job should NOT be canceled. If the job is canceled, the BCS may be damaged and have to be recovered. The REORG job will automatically attempt to recover the BCS. If that fails, the BCS will have to be recovered manually.

**CKM13032I Catalog Re-org Completed**

Successfully RC=n with warnings with errors

**Explanation:**

A REORG has completed. The message will indicate if the REORG ended "Successfully", "with warnings", or "with errors". "n" is the return code from the REORG. 0 is associated with "Successfully", 4 with warnings, and 8 and higher with errors.

**User response:**

None. If the REORG completed "with warnings" or "with errors" look for previous error messages for an indication of the warnings or the errors.

**CKM13033E "NOBACKUP" Specified - A product compatible backup will not be created.**

**Explanation:**

NOBACKUP keyword was specified on the REORG command request causing the creation of a product backup to be bypassed.

**User response:**

None. However, it is strongly recommended that a backup be created. Remove the "NOBACKUP" keyword in order to produce a product compatible backup. This backup can be used to recover the catalog in case the REORG recovery process is unable to recover the catalog when the REORG fails.

**CKM13034E VSAM Record Length: nnnnn BCS Claimed Length: nnnnn **Rejected****

**Explanation:**

During the unload of the catalog, a catalog record was found in which the catalog record length, "BCS Claimed length", is not equal to the "VSAM Record Length". A dump of the catalog record follows the message. The catalog length is contained in first two bytes of the dumped record.

**User response:**

This considered an error. The REORG of the catalog will not proceed unless "REPAIR" is specified. The bad records should be reviewed to perhaps discover how they were added to the catalog.

**CKM13035E DATA HARBA ERROR:**

XERBA=X'xxxxxxxx' AERBA=X'xxxxxxxx' INDEX IMBED

**Explanation:**

There is a High allocated RBA (HARBA) discrepancy in the indicated component, DATA, INDEX, IMBED. XERBA is the high RBA value taken from the component’s extents. AERBA is the RBA value taken
from the components VVR volume cell.

User response:
This considered an error. The REORG of the catalog will not proceed unless “REPAIR” is specified. If “REPAIR” is specified, the component’s VVR volume cell high allocated RBA value is reset based on the high extent RBA value, XERBA.

CKM13036E  VVDS Manager Error - RC=X’cc’,
             REASON=X’rrrrrrrr’

Explanation:
A call to the VVDS manager has failed with return code ‘cc’ and reason code ‘rrrrrrrr’. The VVDS Manager parameter list follows this message.

User response:
The return code and reason code are described in IBM message IEC331I. Some new versions of the IBM message manual omit explanations for certain return codes. In this case, older versions of the IBM message manual can be consulted. This error message along with the dump of the VVDS parameter list should be given to Technical support when reporting this problem.

CKM13037I  Catalog REPAIR Successful | NOT Successful

Explanation:
A “REPAIR” process was performed on the CATALOG. The message indicates whether the REPAIR process was successful or not successful.

User response:
If the repair process was not successful, review previous to determine the cause.

CKM13038I  SDUMPX Successful

Explanation:
REORG issued an SDUMPX macro to produce an SVC dump. The SDUMPX was successful.

User response:
Save the SVC dump for use in problem determination. Contact Technical support to report the problem and for instructions to send the dump.

CKM13039E  SDUMPX Failed, RC=X’hhhhrrrrc’

Explanation:
REORG issued an SDUMPX macro to produce an SVC dump. The SDUMPX failed. The RC value contains the reason code, rr, and the return code, cc.

User response:
Report the problem to Technical support. The reason code and return code are described in IBM manual “z/OS MVS Auth Assm Services Reference LLA-SDU” under the “SDUMPX” heading.

CKM13040I  Preload Verify Started ddmmmyyyy
             hh.mm.ss

Explanation:
Indicates the start of the Preload Verify process

User response:

CKM13041I  Preload Verify Ended ddmmmyyyy
             hh.mm.ss

Explanation:
Indicates the end of the Preload Verify process

User response:

CKM13042I  IMBEDIReplicate Catalog will be
             converted to NOIMBEDIReplicate

Explanation:
The Catalog has the IMBED and/or REPLICATE attribute. REORG will convert the catalog to NOIMBED and/or NOREPLICATE.

User response:

CKM13043I  NOCONVERT Specified -
             IMBEDIReplicate catalog will not be
             converted to NOIMBEDIReplicate.

Explanation:
The Catalog has the IMBED and/or REPLICATE attribute. The NOCONVERT keyword was specified and so the catalog will not be converted to NOIMBED and/or NOREPLICATE.

User response:

CKM13044I  VERIFY/RELOAD ended with RC=X’hh’.
             Review previous error messages | SORT detected an error.

Explanation:
The VERIFY or RELOAD process ended with a non-zero return, hex value “hh”.

User response:
Check for previous error messages issued due to VSAM error, or some other error indication. If the return code is
X'10' or higher and the error came from SORT, then “SORT detected an error” is displayed rather than “Review previous error messages”. SORT messages are issued to the SORTMSG DD. If the SORTMSG DD is missing some SORT messages may be issued to the JOBLOG. If the error cannot be resolved from this review, contact Technical Support with this information and information from previous error messages and/or SORT messages.

CKM13045I  Unload Start for bcsname ddmmmyyyy (yyyyjjj) hh.mm.ss... ...Ver v.v

Explanation:
Indicates the start of the unload process for the BCS.

User response:
None.

CKM13046I  RECORD SUMMARY FOR UNLOAD/VERIFY/LOAD

Explanation:
BCS record count summary for the indicated process, Unload, Verify, or Load. The record types are:

CLUSTER indicates the number of base cluster records (type code of "C"). Alternate index (AIX) information is stored within the base cluster record, so it does not appear as a separate record type. The key of each record is the base cluster name.

GDG indicates the number of generation data set (GDS) records (type code of "B"). Each individual generation of a GDS is stored within the overall GDG record, so they do not appear as a separate record type. The key of each record is the base data set name (i.e., the fully qualified data set name, without a GxxxxVxx value)

E indicates an extension record (type code of "E") to a base cluster record. Extension records are created whenever a cluster record exceeds the maximum record size specified for the BCS. The key of an extension record is the base cluster data set name, with a sequence number in the last byte of the key.

J indicates an extension record (type code of "J") to a base generation data set (GDS) record. Extension records are created whenever a GDS record exceeds the maximum record size specified for the BCS. The key of an extension record is the base generation data set name, with a sequence number in the last byte of the key.

NONVSAM indicates the number of nonVSAM data set records (type code of "A"). The key of record is the nonVSAM data set name.

TRUENAME indicates the number of truename records (type code of "T"). Each component of a base cluster or alternate index cluster, as well as the alternate index cluster itself, will have a truename record. The key of each truename record is component name, or in the case of an alternate index, the alternate index name.

PATH indicates the number of path records (type code of "R"). Typically, each alternate index is associated to its base cluster with a path record, resulting in one path record for each alternate index. In unusual circumstances there can be a path for just a base cluster.

UCAT indicates the number of usercatalog connector records (type code of "x"). Typically, these records would be in a BCS that is used as a master catalog, indicating the user catalog BCSs that are connected to it. ALIAS indicates the number of alias records (type code of "x"). Typically, these records would be in a BCS that is used as a master catalog, and are used by the catalog order of search logic to determine which BCS to search for a data set. OTHER indicates all other types of catalog records that are connected to it.

ALIAS indicates the number of alias records (type code of "x"). Typically, these records would be in a BCS that is used as a master catalog, and are used by the catalog order of search logic to determine which BCS to search for a data set.

OTHER indicates all other types of catalog records that are processed during BACKUP processing.

TOTAL indicates the total number of records that were backed up from the BCS named in the BACKUP command.

TOTAL BYTES indicates the total number of bytes that were backed up from the BCS named in the BACKUP command.

Spanned Record Count indicates the number of records found that are that span a control interval; i.e. larger than the CISIZE.

Record Length Errors indicates the number of records found where the catalog record length (i.e. the first two bytes of the record) does not equal the VSAM record length (i.e. the length recorded by VSAM in the RDF).

User response:
None.

CKM13047I  Unload End for bcsname ddmmmyyyy (yyyyjjj) hh.mm.ss... ...Ver v.v

Explanation:
Indicates the end of the unload process for the BCS.

User response:
None.
CKM13048I  Reload Start for bcsname ddmmmyyyyy (yyyyjjj) hh.mm.ss... Ver v.v

Explanation:
Indicates the start of the reload process for the BCS.

User response:
None.

CKM13049I  Reload End for bcsname ddmmmyyyyy (yyyyjjj) hh.mm.ss... Ver v.v

Explanation:
Indicates the end of the reload process for the BCS.

User response:
None.

CKM13050E  BCS Recovery Start ddmmmyyyyy hh.mm.ss

Explanation:
An error was encountered during BCS REORG which a recovery of the BCS.

User response:
Review previous error messages to determine the reason for the recovery. If the recovery is not successful (see messages CKM13052I and CKM13053E), the BCS will have to be recovered from another backup.

CKM13051E  BCS Recovery End ddmmmyyyyy hh.mm.ss

Explanation:
The BCS recovery process has ended.

User response:
Review previous error messages to determine the reason for the recovery. If the recovery is not successful (see messages CKM13052I and CKM13053E), the BCS will have to be recovered from another backup.

CKM13052I  BCS Recovery Successful

Explanation:
The BCS recovery process was successful.

User response:
Review previous error messages to determine the reason for the recovery. The BCS Recovery was successful. Verify access to the BCS by running IDCAMS EXAMINE INDEXTEST DATATEST.

CKM13053E  BCS Recovery unsuccessful, RC=X’rr’

Explanation:
The BCS recovery process was NOT successful.

User response:
Review previous error messages to determine the reason for the recovery. The BCS Recovery was NOT successful. The BCS must be recovered from a previous backup.

CKM13054W  Warning: ESTAE Retry Routine Entered

Explanation:
An abnormal error condition caused the REORG ESTAE routine to be entered.

User response:
Review previous error messages to determine the reason for the error. The ESTAE retry routine will determine if a BCS recovery is required.

CKM13055E  REORG not performed and BCS does NOT require recovery

Explanation:
An abnormal error condition caused the REORG ESTAE retry routine to be entered. The BCS was NOT reorganized and the BCS does not need to be recovered.

User response:
Review previous error messages to determine the reason for the error. Verify access to the BCS by running an IDCAMS EXAMINE INDEXTEST DATATEST.

CKM13056E  Keyword SYSTEM must be specified for all systems sharing target catalog.

Explanation:
Required SYSTEM keyword is missing.

User response:
REORG terminates. Specify SYSTEM keyword for every SYSTEM sharing the target catalog. If the target catalog is NOT shared, specify a single SYSTEM keyword for the system running the REORG.

CKM13057E  Unable to serialize REORG ENQ resource. QNAME=SIS2000, RNAME=REORG bcsname

Explanation:
REORG is unable to serialize the target catalog for REORG processing. Another job is executing for the same bcsname.

User response:
REORG terminates. Only one REORG job for a specific BCS can be executing at any given time. Make sure the correct target BCS was specified, or wait until the other job completes.

**CKM13058I** BACKUP WRITTEN to `ddname|datasetname`

**Explanation:**
Informational message to indicate that REORG has written a product compatible backup to the file pointed to by "ddname" in the JCL, or by "datasetname" if OUTDATASET was specified.

**User response:**
None.

**CKM13059E** BCS Keyword not specified

**Explanation:**
The required BCS keyword was omitted from the request

**User response:**
The BCS Keyword is require. Specify the BCS keyword along with the BCS name value and resubmit the job. Refer to the documentation for more details.

**CKM13060E** Error creating/deleting catalog component

**Explanation:**
NEWVOLSER was specified and REORG encountered a problem either creating or deleting a catalog component on the new volume. "deleting" only occurs during error recovery when REORG is trying to backout a completed new allocation.

**User response:**
Check preceding messages for specific errors and act accordingly. For assistance with problem resolution contact Technical support.

**CKM13061E** High Level Index Inconsistent

**Explanation:**
`D_INDEX_SET ICIT_xxxxx ICIT_yyyyy`

`xxxxxx icit_value icit_value`

`nnnnnnpppppphhhhhhvvvvvvrrrrrrrrll1122`

A structural error was detected in the index. Two index records at the same index level are inconsistent with each other.

**User response:**
The REORG process will terminate unless "REPAIR" is specified. "xxxxxx" is the current known relative CI number specified. Additional information concerning this structural error may be obtained with IDCAMS' EXAMINE command. Provide the complete REORG listing and the output from EXAMINE before contacting Technical Support.

In the message, "xxxxxx" is the current known relative CI number of the high level index record. ICIT_xxxxx, ICIT_yyyyyy display the Index CI Table entries for the respective relative Index CI records. The ICIT values have the format

`nnnnnnpppppphhhhhhvvvvvvrrrrrrrrll1122`

where:

`nnnnn` is the next index CI number

`ppppp` is the previous index CI number

`hhhhhh` is the index CI number of the higher level pointer

`vvvvv` is the first vertical pointer

`rrrrr` is base RBA value for this CI

`ll` is Index level number

`11` is the flag1 value

`22` is the flag2 value

Flag1 takes the following values:

- X'80' Empty CI
- X'40' Unformatted CI
- X'20' Orphaned CI
- X'10' Key error
- X'01' CA ptr error

Flag2 takes the following values:

- X'80' Index length error
- X'40' Index control information length error
- X'20' Vertical pointer length error
- X'10' Base RBA error
- X'08' Horizontal pointer error
- X'04' Index level error
- X'02' Free space offset error
- X'01' First and/or last section entry offset

**CKM13062E** BACKWARD/FORWARD POINTER CHAIN ERROR

**Explanation:**

`VP OFFSET VP CINUM ICIT_NUM ICIT_ENTRY`

`xxxxxx yyyyyyy zzzzzz icit_value`

There is a structural inconsistency in the vertical pointers contained in the index record. "xxxxxx" is the offset of the vertical pointer in the index control interval
displayed. "yyyyyy" is the vertical pointer to be chained into the Index Control Interval Table entry, ICIT_ENTRY. "zzzzzz" is the index Control Interval number. See message CKM13061E for the description of the icit_value.

**User response:**

The REORG process will terminate unless "REPAIR" is specified. Additional information concerning this structural error may be obtained with IDCAMS' EXAMINE command. Provide the complete REORG listing and the output from EXAMINE before contacting Technical Support.

---

**CKM13063E  CKM01HEX ERROR FORMATTING BUFFER, RC=X'xxxxxxx'**

**Explanation:**

CKM01HEX program had an error formatting a data buffer.

**User response:**

Buffer formatting is terminated. Contact Technical support to report the problem.

---

**CKM13064E  INDEX STRUCTURAL ERRORS FOUND:**

**Explanation:**

INDEX CINUM ICIT_ENTRY
xxxxxx nnnnnpppppphhhhhvvvvrrrrrrrrll1122
REORG has determined that an index records has one or more structural errors. "xxxxxx" is the relative CI number of the index record. See message CKM13061E for description of the ICIT entry. A display of the complete index record follows.

**User response:**

REORG terminates unless "REPAIR" is specified.

---

**CKM13065E  ERRORS ENCOUNTERED - "REPAIR" SPECIFIED, REORG WILL CONTINUE**

**Explanation:**

Errors in the BCS were found during the REORG.

**User response:**

REORG continues. See previous error messages for the specific errors.

---

**CKM13066E  ERRORS ENCOUNTERED - "REPAIR" NOT SPECIFIED, REORG WILL TERMINATE**

**Explanation:**

Errors in the BCS were found during the REORG.

**User response:**

REORG terminates. See previous error messages for the specific errors.

---

**CKM13067E  INVALID VALUES(S) SPECIFIED for FREESPACE PARAMETER**

**Explanation:**

One or both values for FREESPACE are in error.

**User response:**

Review the values specified for FREESPACE. The CI and CA freespace values must be in the range of 0-100.

---

**CKM13068E  SOME INTERNAL BACKUP RECORDS NOT READ: COUNT=n**

**Explanation:**

During the Preload Verify phase or the Reload phase, REORG did not read all the internal backup records that were written. "n" is the number of backup records that were read.

**User response:**

Compare the value "n" with the value for "Data CI Writes" from message CKM13011I. They should be the same.

REORG terminates. If this the Preload Phase, the catalog has not been modified. If this the LOAD Phase, REORG may attempt a recovery of the BCS. Review the termination messages for the action taken.

---

**CKM13069E  PARAMETER VALUE LENGTH TOO LONG FOR KEYWORD keyword**

**Explanation:**

The digit length of a numeric value is too long. For readability, some numerically valued keyword fields are long enough to allow use of commas.

For example, NEW-DATA-PRIMARY(1,000,000) is valid if space type is KILOBYES. However, if one does not use commas it is possible to specify a value of 100000000 which is too large.

**User response:**

Review the value specified in "keyword" and ensure it within the limits indicated in the keyword syntax.

REORG terminates.

---

**CKM13070E  NO VALUE SPECIFIED FOR KEYWORD: keyword**

**Explanation:**

"keyword" requires a value and none was specified.

**User response:**

Review the syntax for "keyword" and specify required value. REORG terminates.
CKM13071E  INVALID VALUE FOR KEYWORD: keyword

Explanation:
If "keyword" requires a numeric value, then the value specified was not a valid numeric value. If the keyword requires a text value, then the value specified was not one of the text values allowed.

User response:
Review the syntax for "keyword" and correct the value specified. REORG terminates.

CKM13072E  VALUE vvvvv OUT of RANGE (lower_bnd, upper_bnd) FOR KEYWORD: keyword

Explanation:
"vvvvv" is the value specified for "keyword" which is not in the range indicated by (lower_bnd upper_bnd).

User response:
Review the syntax for "keyword" and correct the value specified. REORG terminates.

CKM13073E  NEW CI SIZE MUST BE MULTIPLE OF 512 (512-8192), OR 2048 (8192-32768): NEW-DATA-CISIZE | NEW-INDEX-CISIZE

Explanation:
For either component the CISIZE value must be a multiple of 512 if the CISIZE is in the range of 512-8192, or 2048 if CISIZE is in the range of 8192-32768.

User response:
Correct the CISIZE value. REORG terminates.

CKM13074E  HIGH-USED INDEX RBA does not equal HIGHEST RBA found: HIGH-USED INDEX RBA is m HIGHEST RBA found is n

Explanation:
The INDEX HIGH-USED RBA value (HURBA) does not equal the largest relative byte address plus INDEX CI size encountered while processing the INDEX.

User response:
REORG terminates with return code 8. If "REPAIR" is specified, REORG will continue processing and the HIGH-USED INDEX RBA value will be corrected after the reload phase completes.

CKM13075E  SOFTWARE EOF different from HIGH-USED DATA RBA. SOFTWARE EOF found at m HIGH-USED DATA RBA is n

Explanation:
The data component software end-of-file indicator was found in a data control interval with an RBA value different from the HIGH-USED DATA RBA value.

User response:
REORG terminates with return code 8. If "REPAIR" is specified, REORG will continue processing and the SOFTWARE EOF will be corrected after the reload phase successfully completes.

CKM13076E  Volume volser does not contain sufficient free DSCBs.

Explanation:
NEWVOLSER was specified and the new volume does not contain enough free DSCBs to allow the allocation of the new catalog components.

User response:
REORG terminates with return code 8. Delete some datasets from volume to free up additional DSCBs, or specify a different volume that has enough free DSCBs. The volume needs at least 2 free DSCBs and may need more if the BCS components must be allocated in extents.

CKM13077I  For recovery purposes, source VVRs not deleted.

Explanation:
Execute the following IDCAMS commands to delete the source VVRs:

ALLOC FI(Vvolser) DS('SYS1.VVDS.Vvolser') SHR
DEL bcsdatacomponent VVR FILE(Vvolser)
DEL bcsindexcomponent VVR FILE(Vvolser)

If the VVDS is not cataloged, add to the ALLOC command: .

VOLUME(volser) UNIT(unitname)

NEWVOLSER was specified. After REORG completes successfully, the original BCS components still remain

User response:
If REORG completes successfully and the reallocated BCS is functioning properly, the old components may be deleted using sample statements provided. If for some reason, the BCS may be recataloged to the original components by using appropriate DEFINE RECATALOG idcams control statements.
CKM13078E NEW-VOLSER is the same as the current volser.

Explanation:
NEWVOLSER was specified and the volume given is the same as the current volume where the BCS resides.

User response:
REORG terminates with RC=8. Specify a different volume or remove the NEW-VOLSER keyword.

CKM13079E VOLSER vvvvv is not available.

Explanation:
NEWVOLSER was specified and the volume given is not online to the system.

User response:
REORG terminates with RC=8. Vary the volume online, or specify a different online volser, or remove the NEW-VOLSER keyword.

CKM13080I Attribute value same as original for: keyword

Explanation:
“keyword” was specified with new value. However, new is the same as the old value.

User response:
REORG continues. No changes made to attribute indicated by “keyword”. For subsequent executions, remove keyword if new value is desired, specify new value different from current value.

CKM13081I Attribute Change Summary

Explanation:

OLD NEW
VALUE VALUE
----- -----
attribute ooooo nnnnn

Lists the attributes of the catalog that will change showing the old value, “oooooo” and the replacing new value, “nnnnnn”.

User response:
REORG continues. If CI/CA freespace values are non-zero, adjusting to lower value will help. Review primary and secondary space allocations and adjust to higher values.

CKM13082I No Attribute changes

Explanation:
No catalog attributes will change.

User response:
None. Informational.

CKM13083W Overriding old new INDEX CI Size, mm,mmm, with nn,nnn.

Explanation:
The existing or new INDEX CI size, mm,mmm, is not sufficient for the current or new DATA CI size. The INDEX CI size is changed to nn,nnn. The overriding value, nn,nnn, is calculated using 15 as the average compressed key length in an index record along with the data CI per CA value.

User response:
None. REORG continues.

CKM13084E Catalog requires approximately tttttt tracks for the data component and may exceed 123 extents. This condition would prevent the successful completion of the process. Consider adjusting space allocation parameters up and/or adjusting freespace values down.

Explanation:
After the initial unload, REORG has taken the total number of bytes and records and calculated approximately the amount of DASD space required to reload the catalog, taking into account the CI and CA freespace values, the available space on the catalog volume, the size of the available extents (including the current allocation), and the primary and secondary space allocation values. It does not appear that the reload of the catalog will complete successfully given the mix of the above mentioned factors.

User response:
REORG terminates. If CI/CA freespace values are non-zero, adjusting to lower value will help. Review primary and secondary space allocations and adjust to higher values.

CKM13085E CVAFxxx function Error: RC=X’rrrr’, CVSTAT=X’ss’

Explanation:
A CVAF error occur for “function” with return code “rrrr” and CVSTAT code of “ss”, “xxx” can be any of “DIR”, “DSM”, as in CVAFDIR, CVAFDSM. “function” can be any of “READ”, “WRITE”, “RLSE”, “MAPDATA”.

User response:
REORG terminates. Review the SYSPRINT to determine if the catalog needs to be manually recovered. Save all the SYSOUT from the REORG job. Report problem to Technical Support. Save SVC dump if any taken.
CKM13086I  nnn Extents released from Data | Index
Explanation:
The EXTENT-RELEASE keyword was specified. REORG released "nnn" number of extents from the indicated component (Data or Index). "nnn" may be 0 if REORG was not able to release any extents.
User response:
None. Informational.

CKM13087E Secondary Space value is zero and Primary Space allocation is not sufficient.
Explanation:
The primary space allocation is not sufficient to hold records from the catalog. The secondary space value is zero so that no extents may be taken if needed.
User response:
Review primary and secondary space allocations. This situation can happen when a new primary space allocation is specified which is too space to hold the catalog and the secondary space value is zero, not allowing any extents. Review CI/CA Freespace values and if non-zero, adjust to smaller values or zero.

CKM13088E Data component requires approximately nnnnnnnn tracks. This exceeds the device capacity for volume vvvvvv.
Explanation:
REORG have determined that the catalog requires more DASD tracks than the device capacity.
User response:
This usually occurs when CI/CA Freespace values are too large which will force only partial use of control intervals and control areas. Adjust CI/CA freespace values lower.

CKM13089E Catalog requires approximately nnnnnnnn tracks for the data component and volume vvvvvv does not have enough free space
Explanation:
REORG has determined that there is not enough free space on volume "vvvvvv" (including the current allocation).
User response:
The primary and/or secondary allocation value may be too large. There may actually be enough free tracks, but not in allocation sizes large enough to accommodate the primary and/or secondary space values. Review the tracks available on the volume and review the primary and secondary space values to see if new values for either or both can be specified.

CKM13090E Original allocation has changed. BCS must be recovered manually.
Explanation:
An error occurred which caused the REORG RECOVERY routine to get control to recover the BCS. However, the original space allocation has been released due to specification of new primary and/or secondary space allocation keywords, e.g. NEW-DATA-PRIMARY. Therefore REORG cannot recover the catalog back to its original state prior to the REORG process.
User response:
The catalog must be recovered manually using a backup created during the REORG process or from the most recent backup. Save the complete REORG job syout and report problem to Technical Support.

CKM13091I SIMULATE specified - EXTENT-RELEASE bypassed manually.
Explanation:
EXTENT-RELEASE was requested. However, REORG is running in SIMULATE mode and therefore, the EXTENT-RELEASE process is bypassed.
User response:
None. Informational.

CKM13092I INDEX PRIMARY/SECONDARY allocation insufficient - reverting to original value or substituting with new value
Explanation:
Given the data component space allocation, REORG determined the INDEX PRIMARY or SECONDARY allocation value is not sufficient to accommodate the data component. The INDEX allocation should be large enough to allow enough INDEX records for the data component control areas.
User response:
REORG adjusts the INDEX PRIMARY or SECONDARY space value. If NEW-INDEX-PRIMARY or NEW-INDEX-SECONDARY was specified and the new value is the same as the original allocation value, "reverting to original value" appears in the message. Other, "substituting with new value" appears in the message and the new value is displayed in message CKM13081I, the attribute change summary.
CKM13093I  CKM13093I  DATAINDEX component space type converted to cylinders

Explanation:
The indicated component, DATA or INDEX, is currently allocated in tracks (TRK). However, both primary and secondary allocation values equal or exceed the tracks per cylinder value for the device. Therefore, REORG converts the allocation unit from tracks to cylinders and converts both values to cylinder equivalents.

User response:
None. Informational.

CKM13094I  CKM13094I  Update performed to Catalog Address Space on system xxxx SIMULATED
Update performed to Catalog Address Space on system xxxx

Explanation:
The Catalog Address SPACE (CAS) on system "sysid" has refreshed its catalog information for BCS "bcsname".

User response:
None. Informational.

CKM13095E  CKM13095E  Catalog component already allocated to volume volser.

Explanation:
NEWVOLSER was specified and there are already catalog components allocated.

User response:
Insure the correct volser is specified in NEWVOLSER. Research the reason why volser might already have catalog components allocated. If necessary, and research deems appropriate, delete the components from the volume.

CKM13096I  CKM13096I  VVRI/TOC entry deleted from volser: component

Explanation:
Informational message indicating the component entry was deleted from the VVDS or VTOC, as indicated.

User response:
None. Informational.

CKM13097E  CKM13097E  Error updating Catalog Address Space on system xxxx | SIMULATED
Error updating Catalog Address Space on system xxxx

Explanation:
An error was encountered when attempting to refresh the catalog information on system 'xxxx'.

User response:
Reorg terminates RC=8. Review messages to determine what action may need to be taken to effect recovery.

CKM13098E  Security Server has denied access to BCS. See Security Server messages in JOBLOG.

Explanation:
REORG requires UPDATE access to both the DATA and INDEX component of the BCS. The Security Server (i.e. RACF, ACF2, Top Secret, et. al.) determined the access id does not have UPDATE access to one or both components.

User response:
Review the security messages in the JOBLOG. Determine which BCS components are involved and review the access rules. Resubmit the REORG job with an ACCESS id that has permission to update the BCS components OR change the access rules.

CKM13099E  Error in routine rrrrrrrr, function ffffffff, line number llllll, RC=x'cccccccc',
RSN=x'ssssssss'

Explanation:
This a generalized error reporting message indicating the routine name, "rrrrrrr", in the program where the error occurred, the function, "fffffff", being performed, the program listing line number of the error, the return code, "cccccccc", and reason code, "ssssssss".

User response:
REORG terminates. Save complete REORG job listing and report error to Technical Support.

CKM130A1I  Submit REORG notification job on system sysid.

Explanation:
SYSTEM(sysid) specified and the secondary REORG job on "sysid" is not active yet.

User response:
Submit secondary REORG job on "sysid" if it has not been submitted yet. Insure secondary REORG job is executing on "sysid". REORG will terminate if it cannot detect the secondary REORG job.
secondary REORG to sign on with the primary REORG job.

User response:

REORG terminates. Determine if secondary REORG was submitted. If more time is needed in order to coordinate job submission specify WAIT(nn) where nn designates minutes. 5 minutes is the default wait time.

CKM130A3I NOTIFYPENDING received from system sysid.

Explanation:

SYSTEM(sysid) specified and the secondary REORG job running on system "sysid" has signed on to the primary REORG job.

User response:

none. Informational.

CKM130A4I Notification completed on system sysid.

Explanation:

SYSTEM(sysid) specified and the secondary REORG job running on system "sysid" has indicated to the primary REORG job that it has completed successfully.

User response:

none. Informational. See corresponding messages in the secondary REORG job sysprint dataset.

CKM130A5W Notification aborted on system sysid.

Explanation:

SYSTEM(sysid) specified and the secondary REORG job running on system "sysid" has indicated to the primary REORG job that it has aborted the notification process.

User response:

See previous messages in the primary and secondary REORG jobs for an indication of why the notification was aborted.

CKM130A6W Immediately execute the following IDCAMS statements on system ssssssss: IMPORT CONNECT - OBJECTS(catname - DEVT(dddddddd) VOL(vvvvvv)) ALIAS

Explanation:

The reload of the catalog completed successfully. However, there were some post-reload errors during the CATALOG Address Space notification. Hence, the CATALOG Address Space may not yet know about the reorg of the catalog.

User response:

Execute the IDCAMS statements on the designated system to notify the CATALOG Address Space status change.

CKM130A7W Error inserting SYS1.VVDS.Vnnnnnn

Explanation:

When NEWVOLSER is specified, the REORG process may insert a catalog entry for SYS1.VVDS.Vnnnnnn, where nnnnnn is the new volser. This message indicates REORG encountered a problem attempting to add the entry.

User response:

None. This is not a critical error. It is not necessary for SYS1.VVDS.Vnnnnnn to exist.

CKM130A8I SYS1.VVDS.Vnnnnnn inserted

Explanation:

When NEWVOLSER is specified, the REORG process may insert a catalog entry for SYS1.VVDS.Vnnnnnn, where nnnnnn is the new volser. It will do so when there is a SYS1.VVDS.Voooooo, where oooooo is the volser of the original volume.

User response:

None.

CKM130A9I SYS1.VVDS.Vnnnnnn will be inserted during load phase.

Explanation:

When NEWVOLSER is specified, the REORG process may insert a catalog entry for SYS1.VVDS.Vnnnnnn, where nnnnnn is the new volser. It will do so when there is a SYS1.VVDS.Voooooo, where oooooo is the volser of the original volume. This message issued during the preload verify phase to indicate the entry will be inserted during the load phase.

User response:

None.

CKM130B0E VVRIVTOC delete error on volser: component

Explanation:

REORG encountered an error while deleting "component" from volume volser.

User response:

REORG terminates RC=8. Review previous and subsequent messages to determine status of REORG. In some cases, a recovery action may be necessary.
CKM130B2E  ECS-Active Catalog Support Not Installed.

**Explanation:**
REORG detected that the catalog is currently in an ECS-Active state, and logic to support this has not yet been installed for this product. This feature is either available through current maintenance, or will soon become available within the very near future. REORG Terminates RC=8.

**User response:**
Remove the BCS from ECS before running REORG. The following steps must be performed:
1. ALTER bcs.name NOECSHR
2. On ALL systems sharing this catalog: LISTC
   ENT(bcs.name) CAT(bcs.name)
3. Run the REORG job(s). Optional steps follow:
4. When REORG completes successfully: ALTER
   bcs.name ECSHR
5. If AUTOADD is not in effect: F
   CATALOG,ECSHR(ENABLE,bcs.name)

Failure to perform steps (1) and (2) correctly prior to running REORG on an ECS-Active catalog will cause permanent damage to the catalog.

CKM130C0E  Did not receive INITIALIZE message from Primary REORG job.

**Explanation:**
A secondary REORG job is waiting for communication from the Primary REORG job. Waiting time has expired.

**User response:**
REORG terminates RC=8. Review messages in secondary and primary REORG jobs to determine cause. Insure SIS2000 queue name is treated as a GLOBAL resource across all the systems involved in the REORG. In general, this usually not a problem with systems using GRS. Systems using MIM may need to explicitly specify SIS2000 as a GLOBAL resource.

CKM130C1I  WHILEOPEN option is in effect. WHILEOPEN option is NOT in effect.

**Explanation:**
For Primary REORG Jobs, this message reflects the presence or absence of the WHILE-OPEN Keyword in the REORG command. For Secondary REORG Jobs, this message states whether or not the WHILE-OPEN option is in effect based upon the mode of operation from the Primary Job. The WHILEOPEN keyword is basically ignored by REORG when NOTIFY is specified.

**User response:**
None.

CKM130C2I  BCS Local Sync-Point on sysname
            TIME=hh:mm:ss.thmiju

**Explanation:**
This message denotes the precise time that the catalog has been made unavailable to other jobs on the local system. All new requests to access the BCS after this point in time will be suspended.

**User response:**
None.

CKM130C3I  BCS is now Synchronized.
            TIME=hh:mm:ss.thmiju

**Explanation:**
REORG now has full control of the BCS and is about to proceed with the actual REORG or REORG Simulation function for the catalog.

**User response:**
None.

CKM130C4I  BCS Control Released on sysname
            TIME=hh:mm:ss.thmiju

**Explanation:**
This message denotes the precise time that the catalog has been made available to other jobs on the local system. Pending requests to access the catalog are resumed.

**User response:**
None.

CKM130C5W  Duplicate record found. Rule nn applied.

**Explanation:**
During a load phase, REORG detected two records with the same key. This can happen when a catalog is damaged. REORG examines each record and determines which record to keep based on a set of rules. The rule used to determine the status is indicated by "nn" in the message. The rules used are listed below. The duplicate records are printed for review.

**User response:**
None. Decision Rules:
1. Records equal in length and content - keep previous.
2. Keep record with latest creation date.
3. If GDG base, keep record with highest generation.
   (Note: the following rules involve checking volser and vtoc.)
   (The first volume in a record is used for comparison, unless)
CKM130C6I  ECS Re-Enabled for BCS(bcs.name)

Explanation:
The equivalent of ALTER bcs ECSHR is been performed on the catalog to enable ECS.

User response:  If AUTOADD is not in effect for the sysplex, then the following MVS command should be issued on one of the systems to put the BCS back into ECS Active status:

```
F CATALOG,ECSHR(ENABLE,bcs.name)
```

CKM130C7I  BCS(bcs.name) VALIDATED AND READY FOR GENERAL USE.

Explanation:
At the completion of the REORG processing, access to catalog to the catalog using conventional methods has been performed successfully on the current system. The BCS is now fully functional for general usage.

User response:  None.

CKM130C8E  Primary has signaled an Error Condition.

Explanation:
An error with REORG has occurred on one or more its subsequent functions should not be performed. The secondary job will terminate RC=8.

User response:  Review the sysout listings of the Primary and/or all Secondary jobs to determine the nature of this error.

CKM130C9E  BCS(bcs.name) INACCESSIBLE. REORG TERMINATING.

Explanation:
At the start of REORG Processing, the BCS has been found to be either invalid or unable to be allocated for one or more reasons. The issues found are itemized immediately following this message. If secondary jobs have already connected with this Primary job, they are terminated.

User response:  Ensure the correct BCS name was specified.

CKM130D0W  Did not receive notification acknowledgment from SYSTEM sysid.

Explanation:
The Primary REORG job completed the REORG and has instructed the secondary REORG job on SYSTEM sysid to complete its notification process. The secondary REORG has not responded to this request.

User response:
REORG terminates RC=4. Review the status of secondary REORG job on SYSTEM sysid. It may be necessary to issue IDCAMS IMPORT CONNECT OBJ((catname DEVT(unit) VOL(volser))) ALIAS to get the catalog "catname" refreshed on SYSTEM sysid.

CKM130D1W  Error obtaining notification acknowledgment from SYSTEM sysid.

Explanation:
The Primary REORG job completed the REORG and has instructed the secondary REORG job on SYSTEM sysid to complete its notification process. The secondary REORG has not responded to this request.

User response:
REORG terminates RC=4. Review the status of secondary REORG job on SYSTEM sysid. It may be necessary to issue IDCAMS IMPORT CONNECT OBJ((catname DEVT(unit) VOL(volser))) ALIAS to get the catalog "catname" refreshed on SYSTEM sysid.

CKM130D2W  Post RELOAD errors occurred.

Explanation:
The reload phase of the reorg completed successfully. However, some errors occurred in subsequent processing. Typically, the error has something to do with notifying the CATALOG Address Space of the change.

User response:
CKM130D3W  Allocation amount reduced to fit the volume.

**Explanation:**
While allocating space for a BCS component, the target volume did not have sufficient free space to honor the full amount requested. Instead, a smaller amount was used, based upon the immediately available space on the volume.

**User response:**
If the space shortage on the volume was due to other datasets, consider moving the either the catalog or other datasets onto another volume. If free-space accounting on the volume is inaccurate, the VTOC-Index should be rebuilt. Free-space accounting errors can be checked for by running the ADDRSSU DEFRA utility with PARM='TYPRUN=NORUN'.

CKM130F8E  Default SMS Class Names could not be determined.

**Explanation:**
NEW-VOLSER was specified. The new volume is SMS Managed, but the original volume was Non-SMS. However, the local ACS STORCLAS routine did not assign an SMS class name, which is required for an SMS managed dataset. Processing terminates before the REORG attempt.

**User response:**
Review the STORCLAS ACS routine logic. The most common problem is due to a dataset name convention conflict. Otherwise, NEW-VOLSER needs to somehow reference a non-SMS volume.

CKM130F8I  Default SMS Class Names assumed:

**Explanation:**
NEW-VOLSER was specified. The new volume is SMS Managed, but the original volume was Non-SMS. The default SMS Class Names have been derived via the local ACS routines for the given BCS name and New Volser. These class names are displayed in the lines immediately following this message.

**User response:**
None. However, the SMS Class names can be overridden using the IDCAMS ALTER command against the BCS after the REORG job has successfully completed.

CKM13200I  Support Module CKM 00132/Rev=nn active

**Explanation:**
Informational message.

**User response:**
None.

CKM130D5E  BCS-VOL volser does not have an Indexed VTOC. | NEW-VOL volser does not have an Indexed VTOC.

**Explanation:**
The indicated volume(s) involved with the BCS REORG process are in OS-VTOC mode. REORG requires the availability of the VTOC Index to perform updates to the VTOC with integrity. Processing Terminates before REORG is attempted.

**User response:**
Use the BUILDIX function of the ICKDSF utility to create or rebuild the VTOC Index of the indicated volume. Then re-attempt REORG, first using the SIMULATE option.
**CKM14002E INI PROBLEM WITH SPECIFICATION;**  
**SECTION=section TOKEN=token**  
**VALUE FOUND: value**

**Explanation:**
An error was found in SCKMPARM INI member. Processing terminates.

**User response:**
Correct the value in SCKMPARM INI member.

**CKM14003I Ignoring console response: MVS RESPONSE**

**Explanation:**
In response to the console command, MVS responded with a message that is not significant for the requested operation.

**User response:**
None

**CKM14004E INSTALLATION SECURITY SERVER HAS RETURNED FAILURE CODES NNNN NNNN**

**Explanation:**
During command processing, the product has communicated with the installation security server.

For the message "HAS DENIED ACCESS TO THIS COMMAND", the Security Server has determined that you do not have authority to use the SUPERCLIP command.

For the message "HAS RETURNED FAILURE CODES NNNN NNNN", the Security Server has determined an error other than "DENIED ACCESS". Refer to the OS390 Security Server RACROUTE manual for a description of these codes. The first is the "SAFRETURN" value and the second is the "SAFREASON" value.

**User response:**
Contact the installation security administrator if this unexpected. You will need to tell them the name of the command in use. In this case it is SUPERCLIP.

**CKM14005E Device xxxx vary offline pending**

**Explanation:**
In response to the vary offline command, MVS indicated that it can’t complete the task - because other jobs have datasets on that volume allocated. SUPERCLIP will retry.

**User response:**
Try to determine what other jobs have datasets allocated on this volume, either on this or other systems. If those jobs terminate or are terminated, SUPERCLIP will be able to continue when the device becomes available.

**CKM14006W message indicating that the user catalog was cataloged to the new volser.**

**User response:**
None.

**CKM14006W message indicating that the user catalog was cataloged to the new volser.**

**User response:**
None.

**CKM14007I CAS Command not needed : MVS RESPONSE**

**Explanation:**
In response to an operator command that asks the catalog address space to unallocate a specific user catalog:

**CAS command successful:**

The catalog address space had the user catalog allocated and has now freed it.

**CAS Command not needed**

The catalog address space did not have the user catalog allocated. This operator command wasn’t necessary.
CKM14007I CAS Command not needed : MVS

RESPONSE

Explanation:
In response to an operator command that asks the catalog address space to unallocate a specific user catalog:
CAS command successful:
The catalog address space had the user catalog allocated and has now freed it.
CAS Command not needed
The catalog address space did not have the user catalog allocated. This operator command wasn’t necessary.
User response:
None

CKM14008E SUPERCLIP function found old and new volume online

Explanation:
A RESTART or BACKOUT has been requested with SUPERCLIP responsible for doing VARY offline/online. SUPERCLIP found that both old and new volumes are online. This indicates that some other system action has created a new volume with the old volser or new volser, invalidating the validation done during the initial SUPERCLIP run.
User response:
Investigate how your environment has changed.

CKM14009I SUPERCLIP FUNCTION COMPLETE. RETURN CODE nnnn

Explanation:
Command execution termination message.
User response:
Generally none.

CKM14010E SUPERCLIP function found volume offline

Explanation:
A RESTART or BACKOUT has been requested with SUPERCLIP responsible for doing VARY offline/online. The volume is not online. A common scenario for this CLIP execution that varies the device offline that fails. 1 Either a RESTART or BACKOUT run without varying the device offline.

User response:
Vary the volume back online and rerun the job.

CKM14011E OLDVOLSER FOUND ONLINE

Explanation:
OLDVOLSER was found online. SUPERCLIP only processes offline volumes.
User response:
Change the specification of OLDVOLSER or insure that volume is offline.

CKM14012E NEWVOLSER FOUND ONLINE

Explanation:
NEWVOLSER was found on the system. Processing terminates.
User response:
Correct the specified NEWVOLSER.

CKM14013E OLDVOLSER not found online

Explanation:
NEWVOLSER was found on the system. Processing terminates.

User response:
for RESTART or BACKOUT This message can occur with a rerun after the initial SUPERCLIP fails because the unit has been varied offline. Vary the device online and then retry.

for initial SUPERCLIP run Correct the specified NEWVOLSER or if you need to process an offline volume, specify the DEVNUM keyword.

CKM14014I oldvolser SUCCESSFULLY CHANGED TO newvolser

Explanation:
SUPERCLIP run type message.
User response:
None.

CKM14014I oldvolser SUCCESSFULLY CHANGED TO newvolser

Explanation:
SUPERCLIP run type message.
User response:
None.
CKM14014I oldvolser SUCCESSFULLY CHANGED TO newvolser
Explanation:
SUPERCLIP run type message.
User response:
None.

CKM14014I oldvolser SUCCESSFULLY CHANGED TO newvolser
Explanation:
SUPERCLIP run type message.
User response:
None.

CKM14014I oldvolser SUCCESSFULLY CHANGED TO newvolser
Explanation:
SUPERCLIP run type message.
User response:
None.

CKM14015E UNRECOGNIZED DEVICE TYPE: devicetype
Explanation:
The UCBTYP for OLDVOLSER is not defined to SUPERCLIP. Processing terminates.
User response:
Contact Technical Support. Have available the listing that contains this message.

CKM14016W VARY waiting de-allocate
Explanation:
After varying the volume offline, MVS won't vary the volume offline until all users have deallocated it.
User response:
SUPERCLIP will wait for the volume to go offline.

CKM14017E Error processing VVCNs: message
Explanation:
An error occurred during VVDS processing. Processing terminates.
User response:
Contact Technical Support. Have available the listing containing this message.

CKM14018E RETRY CONTROL OF UCB: ucb
Explanation:
SUPERCLIP unable to control UCB and will retry waiting for another job to complete.
User response:
If superclip doesn't complete successfully, contact Technical Support. Have available the listing containing this message.

CKM14019W Update UCAT Connections for user catalog xxx in xxx not needed
Explanation:
See prior

CKM14020I hh.mm.ss SUPERCLIP STEP: text
Explanation:
SUPERCLIP processing message
Texts:
Create journal records started
Indicates that the discovery phase has begun to record in the journal, records that will be used by recovery.
Create journal records completed
Indicates that the discovery phase has completed recording in the journal, records that will be used by recovery.
Save UCAT/ALIAS in Journal not required
Indicates that SUPERCLIP has found no catalogs on the target volume so that no processing of user catalogs an aliases is required.
Save UCAT/ALIAS in Journal started
Indicates that SUPERCLIP has found catalogs on the target volume so that processing of user catalogs an aliases is required. The recovery information is starting to be written into the journal.
Save UCAT/ALIAS in Journal ended
Indicates that SUPERCLIP has found catalogs on the target volume so that processing of user catalogs an aliases is required. The recovery information has been written into the journal.
BACKOUT enabled
Indicates that SUPERCLIP has checkpointed itself so that any subsequent changes can be backed out.
RESTART and BACKOUT disabled
Indicates that SUPERCLIP has completed processing and the restart information is now invalid.
OS format VTOC no VTOCIIX found

User's Guide
Indicates that SUPERCLIP has found an OS format VTOC.
Apply VTOC/VTOCIX/VVDS updates started
Indicates that SUPERCLIP has started updating the target volume's VTOC, VTOCIX, and VVDS.
Apply VTOC/VTOCIX/VVDS updates not required
Indicates that SUPERCLIP doesn't need to update the target volume's VTOC, VTOCIX, and VVDS because a prior run has already accomplished that.
Apply VTOC/VTOCIX/VVDS updates completed
Indicates that SUPERCLIP has completed updating the target volume's VTOC, VTOCIX, and VVDS.

Update the offline catalogs STARTED
Indicates that SUPERCLIP has started updating the target volume's user catalogs.
Update the offline catalogs not required
Indicates that SUPERCLIP does not need to update the target volume user catalogs because either a prior run has already accomplished that or there are none.
Update the offline catalogs ENDING
Indicates that SUPERCLIP has completed updating the target volume's user catalogs.

Update external F1 DSCBS started
Indicates that SUPERCLIP has started updating the VTOC entries on volumes other than the target volume because of multi-volume datasets.
Update external F1 DSCBS not required
Indicates that SUPERCLIP does not need to update other volumes because either a prior run has already accomplished that or there are no multi-volume datasets requiring updates.
Update external F1 DSCBS completed
Indicates that SUPERCLIP has completed updating the VTOC entries on volumes other than the target volume because of multi-volume datasets.

Update external catalogs started
Indicates that SUPERCLIP has started updating catalogs on volumes other than the target volume.
Update external catalogs not required
Indicates that SUPERCLIP doesn't need to update catalogs because a prior run has already accomplished that.
Update external catalogs completed
Indicates that SUPERCLIP has completed updating catalogs on volumes other than the target volume.

Update UCAT Connections started
Indicates that SUPERCLIP has started updating catalogs user catalog connector records and aliases.
Update UCAT Connections not required
Indicates that SUPERCLIP doesn't need to update catalogs because either a prior run has already accomplished that or there are no catalogs on the target volume.
Update UCAT Connections completed
Indicates that SUPERCLIP has completed updating catalogs user catalog connector records and aliases.

Re-catalog ABR model DSCB started
Indicates that SUPERCLIP has started re-cataloging the ABR model DSCB.
Re-catalog ABR model DSCB failed
Indicates that SUPERCLIP has failed re-cataloging the ABR model DSCB. Refer to prior messages when contacting Technical Support.
Re-catalog ABR model DSCB ended
Indicates that SUPERCLIP has completed re-cataloging the ABR model DSCB.

User response:
None.

CKM14021E  UCBLOOK ERROR FOR
VOLSER=volser  RETURN CODE=nn
REASON CODE=nn

Explanation:
An error occurred during UCBLOOK processing. Processing terminates.

User response:
Contact Technical Support. Have available the listing containing this message.

CKM14022E  ERROR ACCESSING VVDS function

Explanation:
A VSAM VVDS error occurred accessing the VVDS on oldvol. Processing terminates.
See associated CKM341nnE error messages. If unable to resolve problem, contact Technical Support. Have available the listing that contains these messages.

CKM14023E  JOURNAL FILE HAS NO HEADER
RECORD; LOC=loc

Explanation:
The specified journal file has no header record. Processing terminates.
User response:

If the journal file was the correct name, contact Technical Support. Have available the listing containing this message. If this a RESTART or BACKOUT run, listings for the initial run should also be made available.

CKM14024I DD=ddname allocated FOR DSN=datasetname

Explanation:

'ddname' has been dynamically allocated for the specified dataset.

User response:

None.

CKM14025E Incorrect Journal file during xxxxx Value : dtype ucb ov nv

Explanation:

The journal file does not match the OLDVOLSER and NEWVOLSER specified in the input command. Processing terminates.

User response:

Correct the journal file specified or correct the volser specified for OLDVOLSER or NEWVOLSER.

CKM14026E ERROR UNPINNING UCB; RETURN CODE=nnnn REASON CODE=nnnn

Explanation:

A UCBPIN error occurred attempting to unpin the UCB for OLDVOLSER. Processing terminates.

User response:

Contact Technical Support. Have available the listing containing this message.

CKM14027E allocation FAILED FOR datasetname

Explanation:

Dynamic allocation for a dataset failed. The associated OS/390 messages are displayed. For a failure attempting to allocate a dataset, processing will terminate; for a failure attempting to deallocate a DD, processing will continue.

User response:

If unable to determine the reason for the failure from the associated OS/390 messages, contact Technical Support. Have available the listing containing these messages.

CKM14028E IDCAMS ERROR function

Explanation:

A non-zero return code from IDCAMS was detected during the specified function. The associated IDCAMS messages precede this message. Processing terminates.

User response:

Check the associated IDCAMS messages for problem determination.

CKM14029E ERROR ACCESSING JOURNAL FILE; LOC=location

Explanation:

A VSAM error occurred accessing the journal file. Processing terminates.

User response:

See associated MSC041nnE error messages. If unable to resolve problem, contact Technical Support. Have available the listing that contains these messages.

CKM14030E JOURNAL FILE IS EMPTY

Explanation:

The journal file contains no records. Processing terminates. RESTART or BACKOUT are driven by journal records from a CLIP or CLIP SIMULATE.

User response:

Check that the correct journal file has been specified for RESTART or BACKOUT processing.

CKM14031E ERROR CALLING CKM01VV1 tttttttt FUNCTION: function R15=nnnn LOC=lllll

Explanation:

During SUPERCLIP processing, a problem occurred using a dataspace. tttttttt is the name of the internal table. lllll is the internal location where the error
Chapter 25. Messages and Codes for Advanced Catalog Management 497

occurred. Processing terminates.

User response:
Report this message to Technical Support. Have available the listing that contains this message and the SCKMPARM member that controls execution.

CKM14032E  ERROR ACCESSING CATALOG catalog dsn LOC=xxxx
Explanation:
A VSAM error occurred accessing the specified catalog. Processing terminates.

User response:
See associated MSC341nnE error messages. If unable to resolve problem, contact Technical Support. Have available the listing that contains these messages.

CKM14033E  xxx prohibited because of prior successful completion.
Explanation:
Superclip ran successfully to completion on a prior run with this Journal file.

User response:
If you need to change the volume back to the original name, run a standard SUPERCLIP with the old and new volumes reversed.

CKM14034W  DATASET ddname1 WILL NOT BE RE-CATALOGED TO dsname2
Explanation:
SUPERCLIP detected a dataset cataloged in a catalog that resides on the online volume that is being renamed. This dataset will be renamed by SUPERCLIP but will not be recataloged by SUPERCLIP.

User response:
Uncatalog the old name and catalog the new name on the new volume.

CKM14035E  JOURNAL FILE IS NOT EMPTY
Explanation:
The journal file contains records. Processing terminates. CLIP or CLIP SIMULATE add records to an empty journal file.

User response:
Check that the correct journal file has been specified for CLIP or CLIP SIMULATE processing.

---

CKM14032E  CKM14042I

CKM14036I  Updating BCS x for UCAT y
Explanation:
OLDVOL has user catalogs that are recorded in one or more master catalogs. This message indicates the master catalog (current system master catalog or INI's MCAT entry) being updated.

User response:
None required.

CKM14039E  SECURITY PRODUCT DENIED ACCESS TO dsn
Explanation:
RACF, or a security product, has denied access to a dataset on the volume that need to be updated by SUPERCLIP. Processing terminates.

User response:
Obtain the required access permission (ALTER) to update any protected dataset on OLDVOLSER.

CKM14040E  SECURITY PRODUCT DENIED ACCESS TO CATALOG(S)
Explanation:
RACF, or a security product, has denied access to one or more of the BCS's that need to be updated by SUPERCLIP. Processing terminates. The BCS's with access denied have been indicated in the 'REPORT OF CATALOGS' with '** ACCESS DENIED **'.

User response:
Obtain the required access permission (ALTER) to update any BCS that will be updated for datasets on OLDVOLSER.

CKM14041E  RACROUTE ERROR; SAF RC=nnnn RACF RC=nnnn RACF REASON CODE=nnnn
Explanation:
An unexpected return code from SAF or RACF occurred. Processing terminates.

User response:
Contact Technical Support. Have available the listing containing this message.

CKM14042I  VSAM DATASETS IN CATALOGS ON OLDVOLSER SHOULD BE CHECKED FOR DISCRETE RACF PROFILES
Explanation:
There are BCS(s) on OLDVOLSER.

User response:
None, unless discrete RACF profiles are used for VSAM datasets. If discrete RACF profiles are used, RACF will have to be updated for the NEWVOLSER when SUPERCLIP has completed processing.

**CKM14043I** NUMBER OF DATASETS ON OLDVOLSER: nnnnn

**Explanation:**
SUPERCLIP found nnnnn datasets on OLDVOLSER.

**User response:**
None.

**CKM14044W** UNCATALOGUED DATASET:
datasetname EXPECTED IN BCS: bcsname

**Explanation:**
The dataset was not catalogued or was not found in the indicated BCS.

**User response:**
None a warning. See subsequent CKM14047E message.

**CKM14045W** NOT CATALOGUED ON OLDVOL:
datasetname BCS: bcsname

**Explanation:**
The dataset was not catalogued on oldvolser. Processing continues. No attempt will be made to update BCS volume cells for the dataset.

**User response:**
None required for SUPERCLIP processing.

**CKM14046I** DD=ddn FREED FOR DSN=datasetname

**Explanation:**
The catalog was freed.

**User response:**
None.

**CKM14047E** TERMINATING - UNCATALOGUED DATASET: datasetname BCS: bcsname

**Explanation:**
The dataset was not catalogued or was not found in the indicated BCS. Processing continues or end based on the UNCATALOGED-DSN command keyword. If UNCATALOGED-DSN(CONTINUE is specified, no attempt will be made to update BCS volume cells for the dataset.

**User response:**
None.

**CKM14048I** INI SPACE_MANAGEMENT = XXX

**Explanation:**
Shows one of the INI SPACE_MANAGEMENT values. Message will occur once for each space manager specified.

**User response:**
None.

**CKM14049I** ABR model DSCB found in VTOC

**Explanation:**
Indicates that SUPERCLIP has found the DSCB in the catalog.

**User response:**
None.

**CKM14049I** ABR model DSCB found in VTOC

**Explanation:**
Indicates that SUPERCLIP has found the DSCB in the catalog.

**User response:**
None.

**CKM14050W** MLA level N lower than alias: xxxxx

**Explanation:**
The ALIAS specified has more nodes than the MLA value allows.

**User response:**
SUPERCLIP will not use this alias to determine the catalog for non-VSAM on non-SMS volume.

**CKM14051W** ERROR ACCESSING BCS; condition

**Explanation:**
An error occurred attempting to access the indicated BCS. Datasets catalogued in the indicated BCS will be treated as uncataloged; no attempt will be made to update BCS volume cells. Processing continues.

**User response:**
This could occur if the BCS is not available to the system where SUPERCLIP is executing. You may need to use the ALTER BCS-VOLSER function to correct the volume cells in the BCS after SUPERCLIP has completed.
CKM14053I  NO F1 DSCB FOUND; LOC=lllll DSN: datasetname

Explanation:
A dataset was named in the VVDS but has no corresponding VTOC entry. Processing continues.

User response:
Contact Technical Support. Have available the listing containing this message.

CKM14056W SYMBOL symbol UNRESOLVED; r15=nnnn Err=error text dataset name

Explanation:
The system symbol could not be resolved. The symbol was found as a volser for the specified dataset. 'error text' is the error message from CKM01KSS. Processing continues. No attempt will be made to update the BCS volume cells for the dataset(s).

User response:
None.

CKM14057W SYMBOL xxx resolved to yyy

Explanation:
The value of symbolic name found has been found.

User response:
None.

CKM14058E Error during IEEVARYD operation : response

Explanation:
The vary offline or vary online operation has failed. SUPERCLIP terminates

User response:
Contact Technical Support.

CKM14059E BAD RETURN CODE FROM CKM00143 RESTORE

Explanation:
Updating of the volumes label, VVDS, VTOC, and VTOCIDX failed.

User response:
Check for prior messages to clarify the problem. If you can resolve, contact Technical Support.

CKM14062W VOLUME=volser NOT FOUND FOR DATASET=datasetname

Explanation:
volser for the dataset was not found on the system. The F1 DSCB on the 'missing' volser will not be updated. Processing continues.

User response:
None.

CKM14063W VOLUME #NNN OF MULTI-VOLUME DATASET NOT FOUND ON VOLUME

Explanation:
No F1 DSCB for the dsname was found on volser. Processing continues.

This message indicates that dataset on OLDVOL is cataloged on another volume.

The message is expected for non-DMS datasets cataloged with volume names for extents that have not been allocated on those volumes.

User response:
ACTION: None.

CKM14064E CFAF ERROR: RETURN CODE=nn STATUS CODE=nn LOC=lllll VOLUME=volser DSN=datasetname

Explanation:
An error occurred during CVAF processing for the dsname on the volser. lllll is the internal location where the error occurred. Processing terminates. Return code Status code Reason 4 0F Volume not mounted

User response:
Contact Technical Support. Have available the listing containing this message.

CKM14065E MCS ERROR; RETURN CODE=nnnn REASON CODE=nnnn function

Explanation:
An error occurred using MCS facilities. Processing terminates.

User response:
Contact Technical Support. Have available the listing containing this message.

CKM14066W DATASET=datasetname NOT FOUND IN BCS=bc datasetname

Explanation:
The dataset was not found in the BCS. No catalog entry
CKM14067E • CKM14078E

for the dataset will be updated to the NEWVOLSER. Processing continues.

User response:
None required for SUPERCLIP processing.

CKM14067E IEEVARYD operation failed : command text

Explanation:
Processing terminates.
1. A VARY operation failed.

User response:
If unable to determine the reason for the failure from the console messages listed, contact Technical Support. Have available the listing that contains these messages. The SYSLOG at the time of the error may also be requested.

CKM14078E Invalid length of value for: keyword
Explanation:
A keyword required for SUPERCLIP processing doesn’t appear to be valid. Processing terminates.

User response:
Modify the keyword.

CKM14070E Invalid VVDS name, found xx, Expected yy
Explanation:
SUPERCLIP found that the VVDS name on the volume was not correct.

User response:
Contact Technical Support. Have available the listing containing this message.

CKM14072I Opening offline catalog xxx
Explanation:
SUPERCLIP is starting to process an offline catalog.

User response:
None.
**CKM14079E  JR_VOLUMES NOT SET**

**Explanation:**
The SUPERCLIP routine detected that the number of volumes for a dataset is zero. This illogical. recatalog.

**User response:**
Contact Technical Support. Have available the listing that contains this message.

---

**CKM14080I  Volume xxxxxx is not SMS managed**

**Explanation:**
SUPERCLIP determined the storage group for OLDVOL or NEWVOL because your INI parameters indicate that HSM is your storage manager. See INI tokens:
SPACE_MANAGEMENT = HSM

**User response:**
None unless CKM14081E is the next message.

---

**CKM14081E  Changing into or out of SMS is not permitted**

**Explanation:**
One of the OLDVOL or NEWVOL keywords name an SMS managed volume, but the other keyword does not.

**User response:**
Use SMS to change the storage groups so that the old and new volumes are both either managed by SMS or not.

---

**CKM14082I  Storage manager is xxx**

**Explanation:**
SUPERCLIP determined the storage manager from the INI tokens. See section SPACE_MANAGEMENT = HSM/ABR/DMS

**User response:**
Verify that the correct storage manager is being used. Setting HSM insures that the volume cannot be renamed into or out of SMS.

---

**CKM14083E  Parsing error in xxxxx**

**Explanation:**
SUPERCLIP processing of the SYSIN commands has failed with the identified error.

**User response:**
Contact Technical Support. Have available the listing that contains this message.

---

**CKM14084E  XXSETR FAILED**

**Explanation:**
SUPERCLIP initialization of the offline catalog processor failed.

**User response:**
Contact Technical Support. Have available the listing that contains this message.

---

**CKM14085E  Parsing error returned from xxxxxxx**

**Explanation:**
An internal error has occured with SUPERCLIP. Processing terminates.

**User response:**
Specify an appropriate operand for the keyword.

---

**CKM14087E  INVALID VOLSER IN KEYWORD: keyword**

**Explanation:**
The volume serial number specified is invalid. Processing terminates.

**User response:**
Correct the volser specification.

---

**CKM14088E  INVALID DATASETNAME IN KEYWORD: keyword DSN: dsname error**

**Explanation:**
The dsname in the keyword is invalid. 'error' indicates the problem detected with the datasetname. Processing terminates.

**User response:**
Correct the dsname specification.

---

**CKM14089E  INVALID digits IN device name**

**Explanation:**
Device names are hexadecimal values.

**User response:**
Correct the device name specification.
CKM14090E • CKM14098E

CKM14090E  Key length of Journal incorrect, should be 133

Explanation:
Version 6.31 of the product changed the key length of the journal.

User response:
In IDCAMS step that defines the Journal, change the LRECL to 133.

User response:
None

CKM14091I  Operation : text

Explanation:
Displays SUPERCLIP operation

User response:
None

CKM14092I  Console NAME already in use on this MVS, will try next ID

Explanation:
CKM14092I Console NAME acquired for UNallocate of catalogs
A console session has been acquired so that SUPERCLIP UNallocate user catalogs to facilitate varying the device offline.
CKM14092I Console NAME already in use, will try next

User response:
The displayed name is already in use, probably from another copy of SUPERCLIP. SUPERCLIP will increment the number portion of the name and try again.

User response:
None

CKM14092I  Console NAME already in use on this MVS, will try next ID

Explanation:
CKM14092I Console NAME acquired for UNallocate of catalogs
A console session has been acquired so that SUPERCLIP UNallocate user catalogs to facilitate varying the device offline.
CKM14092I Console NAME already in use, will try next

User response:
The displayed name is already in use, probably from another copy of SUPERCLIP. SUPERCLIP will increment the number portion of the name and try again.

User response:
None

CKM14093E  Unable to acquire a console

Explanation:
SUPERCLIP has attempted to acquire a console for performing operator commands. It failed and will terminate.

User response:
Contact Technical Support

User response:
None

CKM14094I  Console freed

Explanation:
The operator console has been freed.

User response:
None

CKM14095I  Console message action TEXT

Explanation:
This message provides diagnostic information if there is a subsequent failure.

User response:
None

CKM14097I  CKM00140 Maintenance Level (REV=x,PMR=Y,lastfix,fixdate)

Explanation:
Shows the maintenance level of CKM00140 module. This information is intended for use only by Technical Support.

User response:
Provide to Technical Support when asked.

User response:
None

CKM14098E  NON-ZERO RETURNED BY IDCAMS; RC=nnnn

Explanation:
An IDCAMS command failed with return code nnnn. The IDCAMS messages are displayed. Processing may continue depending on the IDCAMS function being attempted.

User response:
If message CKM14028E issued, determine from the IDCAMS messages the reason for the failure.
CKM14098E  NON-ZERO RETURNED BY IDCAMS;
RC=nnnn

Explanation:
An IDCAMS command failed with return code nnnn. The
IDCAMS messages are displayed. Processing may
continue depending on the IDCAMS function being
attempted.

User response:
If message CKM14028E issued, determine from the
IDCAMS messages the reason for the failure.

CKM14099I  Leak Detected text

Explanation:
This informational message is intended for
development.

User response:
No action required.

CKM14209E  VVDS Access Error VOL=volser,
IDC3009I  RC=n RSN=n, DSN=dsn

Explanation:
An error was encountered while attempting to access
dataset component information in the VVDS.

User response:
Refer to the Message Description manual for message
IDC3009I using the RC and RSN values.

CKM14220E  VOLUME xxxxxx NOT ONLINE.

Explanation:
Even for EXCP access the specified volume must be
varied online. Processing terminates.

User response:
Vary the volume online. If the volume is incorrect, then
the value from the catalog for the object is invalid.

CKM14221E  APF AUTHORIZATION FAILURE.

Explanation:
The EXCP access routine requires APF authorization.
Processing terminates.

User response:
The load library being used (or one in the
concatenation) is not APF authorized. Ensure all
specified load libraries are authorized on that LPAR.

CKM14222E  SAF DATASET ACCESS VIOLATION.

Explanation:
Access is denied to the object by the security facility.
Processing terminates.

User response:
Ensure that the correct SAF profile is in existence for
the user to access the object being processed.

CKM14224E  LDS DATASETS NOT SUPPORTED

Explanation:
An attempt was made to process a LDS using
EXCPMODE. LDS support is not anticipated.
Processing terminates.

User response:
Only process LDS using record mode technology, not
EXCP. This message should not occur, as the invoking
code should be aware of the EXCPMODE inability.

CKM14226W  DSN=component not found on volser
VTOC.

Explanation:
The Format-1 DSCB for the VSAM component was not
found on the VTOC. EXCP processing will attempt to
use the dataset extents carried in the VVR, instead.
However, I/O errors may occur if the physical data on
the tracks has been reused by another dataset.

User response:
None. Informational warning message.

CKM14227E  ERROR CALLING CKM01VV1
TABLE=tablename FUNC=function
R15=register15 R0=register0
LOC=location

Explanation:
An error occurred processing an internal table.
Processing terminates.

User response:
Contact Technical Support.

CKM14228E  UCB CAPTURE FAILED FOR VOLUME
volser, ADR=ucbaddress,
RC='returncode', RSN='reasoncode'

Explanation:
An error occurred will attempting to acquire the UCB for
the specified volume. Processing terminates.

User response:
Contact Technical Support.
CKM14229E  VVR IS MISSING volumeinformationcell
DSN=dsname

Explanation:
The VSAM Volume Record for the specified DSN was not located in the VVDS. Processing terminates.

User response:
Ensure the validity of VVDS by executing a DIAGNOSE. If the problem persists call Technical Support, for assistance.

CKM14231E  UCBLOOK FAILED FOR VOLUME
volser, RC='returncode',
RSN='reasoncode'

Explanation:
An error occurred will attempting to pin the UCB for the specified volume. Processing terminates.

User response:
Contact Technical Support.

CKM14232E  DSN=dsname NOT FOUND -
module(returncode - reason code)

Explanation:
An error occurred will attempting to retrieve volume data from the catalog. Processing terminates.

User response:
Contact Technical Support.

CKM14233A  DEBLOCK ERROR(code) volser
CCHHR=cyl_head_record
RDF_OFFSET=offset

Explanation:
An error occurred while deblocking a control interval. Processing continues, but certain affected logical records may be unrecoverable. The CCHHR value indicates the physical block that is in error on the DASD device. The physical contents of that track can be displayed using the ADRDSSU PRINT command. ADRDSSU command example: PRINT TRACKS
(X'cccc',X'hh',X'cccc',X'hh') INDY(volser)

User response:
Contact Technical Support. Provide the sysout of the failing job, including the Joblog output. Tech Support may also request the ADRDSSU output for the PRINT TRACKS command.

CKM14234A  Invalid CIDF Data X'cccccccc' volser
CCHHR=cccc_hhhh_rr

Explanation:
A control interval failed validation and could not be deblocked. Processing continues, but certain affected logical records may be unrecoverable. The CCHHR value indicates the physical block that is in error on the DASD device. The physical contents of that track can be displayed using the ADRDSSU PRINT command.

ADRDSSU command example: PRINT TRACKS
(X'cccc',X'hh',X'cccc',X'hh') INDY(volser)

User response:
Contact Technical Support.

CKM14235A  SPANNED RECORD ERROR - volser
CCHHR=cccc_hhhh_rr

Explanation:
While processing a spanned record, an error occurred. Spanned records, for all but ESDS, must be re-assembled by using the data an the index entry - specifically the sequence of segments is controlled by the FLP in the index entry. The Volser and CCHHR value represents the physical address of the beginning of the Control Interval that is in error. Processing continues.

User response:
Refer to other associated messages issued in conjunction with this error.

CKM14236W  TRUNCATED RECORD -
RBA=X'xxxxxxxx.xxxxxxxx'

Explanation:
While processing a spanned record, an error occurred. Processing continues.

User response:
Refer to other associated messages issued in conjunction with this error.

CKM14238E  EXTENDED-FORMAT STRIPPED DATASETS NOT SUPPORTED.

Explanation:
An attempt was made to process a striped object in EXCPMODE. This not supported. Processing terminates.

User response:
Contact Technical Support.
CKM14239E  EXTENDED-FORMAT COMpressed DATASETS NOT SUPPORTED.

Explanation:
An attempt was made to process a compressed object in EXCPMODE. This is not supported. Processing terminates.

User response:
Contact Technical Support.

CKM14240E  DATASET NOT FOUND OR NOT SPECIFIED

Explanation:
The EXCPMODE interface was incorrectly used. Processing terminates.

User response:
Contact Technical Support.

CKM14241E  INVALID XXSET CALL

Explanation:
The XXSET macro had one or more incorrectly specified arguments. Processing terminates.

User response:
Contact Technical Support.

CKM14242E  VOLSER NOT SPECIFIED

Explanation:
The XXSET macro had no VOLSER argument coded. Processing terminates.

User response:
Contact Technical Support.

CKM14243E  INVALID VOLSEQ VALUE SPECIFIED

Explanation:
The XXSET macro had an invalid SEQ argument coded. Processing terminates.

User response:
Contact Technical Support.

CKM14244E  DUPLICATE XXSET FOR component DSN=datasetname VOL=volser SEQ=sequence#

Explanation:
Multiple XXSET macros with the same arguments were processed. Processing terminates.

User response:

CKM14245E  First VOLSEQ Missing for Data Component DSN=comp.name

Explanation:
The first volume of a multi-volume set for the Data Component was not identified. Processing cannot continue because necessary information such as the C/I Size cannot be determined. Processing for this dataset terminates.

User response:
Contact Technical Support. Provide the sysout listing for the JOB execution, including the Joblog. Technical Support may ask for additional listings from various utilities to identify the problem.

CKM14245W  First VOLSEQ Missing for Index Component DSN=comp.name

Explanation:
The first volume of a multi-volume set for the Index Component was not identified. Processing continues without the Index Component to assist in reassembling spanned logical records. However, if any spanned records are encountered, deblocking errors are likely to occur.

User response:
None. Informational warning message.

CKM14246E  First Data Component VVR not a "Z" record, DSN=comp.name

Explanation:
The first volume's VVR for the Data Component was an unexpected type. Processing cannot continue because necessary information such as the C/I Size cannot be determined. Processing for this dataset terminates.

User response:
Contact Technical Support. Provide the sysout listing for the JOB execution, including the Joblog. Technical Support may ask for additional listings from various utilities to identify the problem.

CKM14246W  First Index Component VVR not a "Z" record, DSN=comp.name

Explanation:
The first volume's VVR for the Index Component was an unexpected type. Processing continues without the Index Component to assist in reassembling spanned logical records. However, if any spanned records are encountered, deblocking errors are likely to occur.

User response:
CKM14247E • CKM14310E

None. Informational warning message.

**CKM14247E** EXCP Error - cmd descr volser cc_hh_r dsn

**Explanation:**
An EXCP error occurred while reading the dataset. Information is extracted from the standard SYNAD Message. It is likely that the dataset has been physically corrupted. Processing cannot continue.

**User response:**
Contact Technical Support. Provide the sysout listing for the JOB execution, including the Joblog. Technical Support may ask for additional listings from various utilities to identify the problem.

**CKM14247W** EXCP Error - cmd descr volser cc_hh_r dsn

**Explanation:**
An EXCP error occurred while reading the dataset. Information is extracted from the standard SYNAD Message. It is likely that the dataset has been physically corrupted. The nature of this error is not considered immediately critical. Processing continues.

**User response:**
None. Informational warning message.

**CKM14300I** CKM00143 CKM00143 Maintenance Level (REV=x,PMR=y,fix,date

**Explanation:**
Program CKM00143 displaying its versioning information.

**User response:**
None.

**CKM14301E** CKM00143 Parameter Error. <parameter description>

**Explanation:**
CKM00143 has detected invalid parameters from the calling routine. This an internal error.

**User response:**
Contact Technical Support. Have the execution output listing available.

**CKM14302I** PGM CKM00143 cccccccc Function on VOL=volser UNIT=addr - PROGRAM REV=rrr

**Explanation:**
Program CKM00143 is acknowledging a request to DUMP or RESTORE the VTOC and VVDS of the indicated volume.

**User response:**
None.

**CKM14304E** DSPSERV CREATE Error
RC=xx,RSN=yy, requesting nnnnn 4K Dataspace Blocks.

**Explanation:**
Dataspace Creation failed with the above Return and Reason codes.

**User response:**
Contact Technical Support. Have the execution output listing available.

**CKM14305E** ALESERV ADD Error R15=xx Creating Dataspace Alet

**Explanation:**
An error occurred while attempting to add an entry into the DU-AL for a private dataspace that has been created.

**User response:**
Contact Technical Support. Have the execution output listing available.

**CKM14306I** PGM CKM00143 cccccccc Processing Completed RC=xx < timestamp >

**Explanation:**
Program CKM00143 processing is terminating with the above return-code.

**User response:**
If RC=00, None. If the Return-Code is any non-zero value, then contact Technical Support, and have the execution output listing available. There will be previous messages indicating the error causing the bad return code.

**CKM14310E** CKM00143 ABENDED S-xxx

**Explanation:**
Program CKM00143 has suffered an abend and is taking appropriate recovery and cleanup actions. The requested function appearing in the CKM14300I message has failed.

**User response:**
Contact Technical Support. Have the execution listings and the SYSUDUMP output available. Also, make note of the MVS operating system release, and the type of hardware that was being accessed.
CKM14320E I/O Error Reading Volume Label on Device /xxxx

Explanation:
Program CKM00143 was unable to read the volume label at the indicated device address.

User response:
Determine if the device at the indicated address can be varied OFFLINE and ONLINE. The volume may be uninitialized. If the volume can be successfully mounted, then contact Technical Support. Have the execution output listing available. Also, make note of the MVS operating system release, and the type of hardware that was being accessed.

CKM14321E Validation on Device /xxxx failed. Detected VOL=yyyyy

Explanation:
Program CKM00143 read the volume label at the indicated device address and found a volume serial number that was different than what was expected.

User response:
Contact Technical Support. Have the execution output listing available.

CKM14333E DataSpace size is Insufficient.

Explanation:
While preparing to DUMP the VTOC and/or VVDS of the volume indicated by the CKM14300I message, program CKM00143 was unable to allocate a private dataspace of a sufficient size.

User response:
Contact Technical Support. Have the execution output listing available. Also, make note of the MVS operating system release.

CKM14334E OPEN OUTPUT(EXTEND) Failed for DD=xxxxxxxx DSN=dsname

Explanation:
While preparing to DUMP the VTOC and/or VVDS of the volume indicated by the CKM14300I message, OPEN processing to write to the sequential backup file was unsuccessful.

User response:
Check the job log listing for any standard IEC messages that may have been issued for the indicated DDname and DSN. If you cannot resolve the problem on your own, then contact Technical Support. Have the execution output listing available.

CKM14341I volser Volume Restore SUCCESSFUL.

Explanation:
Informational.

User response:
None.

CKM14342E ** WARNING: Volume volser may be UNUSABLE **

Explanation:
RESTORE the VTOC and/or VVDS of the indicated volume was unsuccessful. If integrity of the volume is at risk, the second warning message is also issued.

User response:
Contact Technical Support, and have the execution output listing available. There will be previous messages indicating the error causing the failure detection. Also, make note of the MVS operating system release, and the type of hardware that was being accessed.
output listing available. There will be previous messages indicating the error causing the failure detection. Also, make note of the MVS operating system release, and the type of hardware that was being accessed.

**CKM14343E** CLOSE Unsuccessful for DD=xxxxxxxx DSN=dsname

**Explanation:**
While preparing to RESTORE the VTOC and/or VVDS of the volume indicated by the CKM14300I message, OPEN or CLOSE processing to the sequential backup input file was unsuccessful.

**User response:**
Check the job log listing for any standard IEC messages that may have been issued for the indicated DDname and DSN. If you cannot resolve the problem on your own, then contact Technical Support. Have the execution output listing available.

**CKM14344E** Backup Data for VOL=yyyyyy not found in DSN=dsname

**Explanation:**
While preparing to RESTORE the VTOC and/or VVDS of the indicated volume, CKM00143 could not locate the dump records in the sequential backup dataset.

**User response:**
Contact Technical Support. Have the execution output listing available. If possible, save the backup dataset indicated by this message in case it is requested by Technical Support.

**CKM14345E** EOF Encountered after Record ID nnnnnnn

**Explanation:**
While preparing to RESTORE the VTOC and/or VVDS of the indicated volume, CKM00143 has determined that the logical contents of the sequential backup dataset are invalid.

**User response:**
Contact Technical Support. Have the execution output listing available. If possible, save the backup dataset indicated by this message in case it is requested by Technical Support.

**CKM14346I** VOL=vvvvvv Dataspace Load Complete: <timestamp>

**Explanation:**
Informational.

**User response:**
None.

**CKM14347E**  ccccc-K used up to this point.
**Explanation:**
While preparing to RESTORE the VTOC and/or VVDS of the indicated volume, CKM00143 exceeded a predetermined dataspace size.
**User response:**
Contact Technical Support. Have the execution output listing available. If possible, save the backup dataset indicated by this message in case it is requested by Technical Support.

**CKM14347E**  ccccc-K used up to this point.
**Explanation:**
While preparing to RESTORE the VTOC and/or VVDS of the indicated volume, CKM00143 exceeded a predetermined dataspace size.
**User response:**
Contact Technical Support. Have the execution output listing available. If possible, save the backup dataset indicated by this message in case it is requested by Technical Support.

**CKM14347E**  ccccc-K used up to this point.
**Explanation:**
While preparing to RESTORE the VTOC and/or VVDS of the indicated volume, CKM00143 exceeded a predetermined dataspace size.
**User response:**
Contact Technical Support. Have the execution output listing available. If possible, save the backup dataset indicated by this message in case it is requested by Technical Support.

**CKM14347E**  ccccc-K used up to this point.
**Explanation:**
While preparing to RESTORE the VTOC and/or VVDS of the indicated volume, CKM00143 exceeded a predetermined dataspace size.
**User response:**
Contact Technical Support. Have the execution output listing available. If possible, save the backup dataset indicated by this message in case it is requested by Technical Support.

**CKM14348E**  Invalid Dump Record. ID cccccccc
**Explanation:**
While preparing to RESTORE the VTOC and/or VVDS of the indicated volume, CKM00143 has determined that the logical contents of the sequential backup dataset are invalid.
**User response:**
Contact Technical Support. Have the execution output listing available. If possible, save the backup dataset indicated by this message in case it is requested by Technical Support.

**CKM14349E**  Buffer Capacity Exceeded. TYPE=cccc
**Explanation:**
RESTORE processing has failed due to incorrect buffer size calculations. This an internal error.
**User response:**
Contact Technical Support, and have the execution output listing available. Also, make note of the MVS operating system release, and the type of hardware that was being accessed.

**CKM14350E**  Synad: \(\text{<SYNAD error=}"\rangle\)
**Explanation:**
An uncorrectable error has occurred to the device being DUMPed or RESTORed while CKM00143 was performing I/O using the EXCP access method.
**User response:**
Contact Technical Support, and have the execution output listing available. Also, make note of the MVS operating system release, and the type of hardware that was being accessed.

**CKM14350E**  Synad: \(\text{<SYNAD error=}"\rangle\)
**Explanation:**
An uncorrectable error has occurred to the device being DUMPed or RESTORed while CKM00143 was performing I/O using the EXCP access method.
**User response:**
Contact Technical Support, and have the execution output listing available. Also, make note of the MVS operating system release, and the type of hardware that was being accessed.

**CKM14350E**  Synad: \(\text{<SYNAD error=}"\rangle\)
**Explanation:**
An uncorrectable error has occurred to the device being DUMPed or RESTORed while CKM00143 was performing I/O using the EXCP access method.
**User response:**
Contact Technical Support, and have the execution output listing available. Also, make note of the MVS operating system release, and the type of hardware that was being accessed.

**CKM14354E**  Reason: \(\text{<IOS Message=}"\rangle\)
**Explanation:**
While attempting to access the device, CKM00143 could not identify an available channel path to the device slated for DUMP or RESTORE processing.
User response:
Verify that channel paths are available to device by issuing MVS display commands such as D M=DEV(xxxx) and D M=CHP(yy). If device pathing appears valid, then contact Technical Support, and have the execution output listing available. Also, make note of the MVS operating system release, and the type of hardware that was being accessed.

CKM14354E Reason: <IOS Message="">
Explanation:
While attempting to access the device, CKM00143 could not identify an available channel path to the device slated for DUMP or RESTORE processing.

User response:
Verify that channel paths are available to device by issuing MVS display commands such as D M=DEV(xxxx) and D M=CHP(yy). If device pathing appears valid, then contact Technical Support, and have the execution output listing available. Also, make note of the MVS operating system release, and the type of hardware that was being accessed.

CKM14361I <variable text="">
Explanation:
Informational statistics regarding DUMP processing.

User response:
None.

CKM14361W Note: Requested VVDS Dataset not in use.
Explanation:
Informational warning regarding DUMP processing. The caller of CKM00143 specified a non-standard dataset name for the VVDS, which was not found on the volume. The correct dataset name for the VVDS was found, and will be assumed as valid for DUMP processing.

User response:
None. DUMP processing continues.

CKM14361E ** ERROR ** Required VVDS Dataset Not Found.
Explanation:
A VVDS was not found on the volume that was being processed for dump. In addition, the volume was SMS managed, and/or contained VSAM datasets.

User response:
Verify that the volume is usable. If not, then a volume restore is in order. In either case, contact Technical Support, and have the execution output listings available.

CKM14362E Volume Dump for cccccc is Unusable.
Explanation:
While attempting to RESTORE the VTOC and VVDS, program CKM00143 detected that the location of the VTOC does not match the CCHHR address at the time of the DUMP.

User response:
If the DUMP backup dataset is current, then contact Technical Support, and have the execution output listing available.

CKM14362E Volume Dump for cccccc is Unusable.
Explanation:
While attempting to RESTORE the VTOC and VVDS, program CKM00143 detected that the location of the
VTOC does not match the CCHHR address at the time of the DUMP.

**User response:**
If the DUMP backup dataset is current, then contact Technical Support, and have the execution output listing available.

**CKM14362I**

**Explanation:**
Informational statistics regarding RESTORE processing.

**User response:**
None.

**CKM14399I**

**Explanation:**
Informational messages typically used for performance feedback purposes.

**User response:**
None.

**CKM15007E**

**Explanation:**
The MAP command requires either DSN or BCS keyword.

**User response:**
Alter the input parameters and retry.

**CKM15008E**

**Explanation:**
The DSN or BCS keyword has a space in the middle of DSN.

**User response:**
Alter the input parameters and retry.

**CKM15009I**

**Explanation:**
Command execution termination message.

**User response:**
Generally none.

**CKM15101I**

Global parameter 'LINECOUNT': 'DSN LIMIT' now set to xxxxxxxx.

**Explanation:**
In the case of 'LINECOUNT', all reports produced throughout this execution by VSAM Manager, the value indicated by xxxxxxxx is number of lines to be printed per page. The default is 58. In the case of 'DSN LIMIT', the maximum number of dataset names that can be selected has been set to xxxxxxxx.

**User response:**
None.

**CKM15102I**

**Explanation:**
An internal logic error has occurred in the execution of the VSAM Manager module named in the message, where x is either 8 or 9, identifying the originating module of the error.

**User response:**
Contact Technical Support.

**CKM15103I**

Suppressing report(s): rrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrr
CKM15105I  Extended Architecture (XA) detected; device model translation bypassed.

Explanation:
When executing on XA, certain facilities of MVS are not available for VSAM Manager. In this case, translating UCBTYP fields to specific model types is not possible.
User response:
None.

CKM15106W Global parameter OPTIONS already coded. Ignore this.

Explanation:
Only one OPTIONS command statement can be coded in the input stream, and it must precede any MAP or MAPBCS statements. If another OPTIONS command is found in the input stream, or it is not the first command in the input stream, this message is printed.
User response:
Remove one of the OPTIONS statements, or move it to the first command.

CKM15107W Global parameter OPTIONS not allowed once the work has begun

Explanation:
Only one OPTIONS command statement can be coded in the input stream, and it must precede any MAP or MAPBCS statements. If another OPTIONS command is found in the input stream, or it is not the first command in the input stream, this message is printed.
User response:
Remove one of the OPTIONS statements, or move it to the first command.

CKM15109I  (xx yy) VSAM Manager execution complete. MVS data: mmmmmmm

Explanation:
This message is printed at completion of VSAM Manager execution. The values xx is the revision level of the VSAM Manager yy is the fix level of the VSAM Manager mmm describe the level of MVS and DFP in the format of verprodn prodi mdl cvtdcb OSLVL_0 OSLVL_4 SMS:pp.vv,rr
ver DFP version 112, 113 or 113+
PRODN System Control Program procut level
PRODI Product name of the control program
MDL CPU model number
DCB CVTDCB/CVTDCBA
OSLVL_0 CVTOSLVL - first 4 bytes
OSLVL_4 CVTOSLVL - next 4 bytes
pp.vv,rr
DFAPROD DFP product
DFAVER version
DFARLSE release
This valuable for determining the cause of unforeseen problems.
User response:
None

CKM15110E  Abend S-xxx at PSW ppppppp

Explanation:
VSAM Manager ABENDed during its execution. The ABEND was intercepted, this message was produced, and VSAM Manager will terminate normally.
User response:
Contact Technical Support.

CKM15111E  File is not a KSDS or BCS.  DSName=xxxxxxx

Explanation:
A dataset name specified in a CATLIST control statement was not a VSAM file (CLUSTER), user catalog (UCAT), non VSAM, or generation dataset (GDG).
User response:
Ensure the name specified fits into one of the four above catagories.

CKM15112E  Data set must be a CLUSTER, UCAT, nonVSAM or GDG for 'CATLIST' service.  DSN='

Explanation:
A dataset name specified in a CATLIST control statement was not a VSAM file (CLUSTER), user catalog (UCAT), non VSAM, or generation dataset (GDG).
User response:
Ensure the name specified fits into one of the four above catagories.

CKM15113E  Open failed for: xxxxxx ACBERRO
          code= yyyy

Explanation:
The open process for xxxxx dataset failed. The ACBERRO code is the value that was received from this process.
User response:
The failed open could be due to someone currently using the file with DISP=OLD. If not, call Technical Support.

**CKM15114E** allocation failed for: xxxxxx Error code= yyyy zzzz

**Explanation:**
The allocation process for xxxxxx dataset failed. The ERROR code is the value that was received from this process.

**User response:**
The failed allocation could be due to the file currently being accessed with DISP=OLD. If not, call Support.

**CKM15115E** Deallocate failed for: xxxxxx Error code= yyyy zzzz

**Explanation:**
The deallocation process for xxxxxx dataset failed. The ERROR code is the value that was received from this process.

**User response:**
The failed deallocation could be due to the file currently being accessed with DISP=OLD. If not, call Support.

**CKM15116E** Internal logic error in 'module'

**Explanation:**
An internal logic error has occurred in the execution of the VSAM Manager module named in the message, where x is either 8 or 9, identifying the originating module of the error.

**User response:**
Contact Technical Support.

**CKM15117E** Internal logic error.

**Explanation:**
After syntax checking input control statements for accuracy, code could not determine what it syntax checked.

**User response:**
Contact Technical Support.

**CKM15118E** VSAM MANAGER is not executing from an authorized library, therefore ‘MAPBCS’ can not be used

**Explanation:**
Reading a catalog must be done via a MVS authorized program.

**User response:**
Ensure VSAM Manager is executing from an authorized library and all concatenations to the //STEPLIB are authorized.

**CKM15119E** No dataset name specified.

**Explanation:**
During syntax checking of the MAP or MAPBCS control statements, no dataset name value was found. Either the control statement was coded incorrectly, or control statements used with a VSAM Manager version prior to 3.3 were submitted. Prior to release 3.3, the MAP (or MAPBCS) control statement format was: MAP(data.set.name). Beginning with release 3.3, the format is MAP(NAME(data.set.name)).

**User response:**
Correct the MAP or MAPBCS control statement to contain a valid dataset name.

**CKM15120E** xxxxx exceeds the max of 64 levels of index. Mapping ends

**Explanation:**
The named file has an index with greater than 64 levels of index, and the number of internal counters within VSAM Manager for mapping the index is set to a limit of 64. This message should never occur, unless a dataset of extraordinary circumstances is encountered.

**User response:**
Contact Technical Support.

**CKM15121E** The number of different CA split counts per location exceeded a rational value. Recording of CA split locations ends.

**Explanation:**
During processing that builds the CA Split Distribution Report, the number of different CA split counts per location exceeded 3,072. This message would be virtually impossible to receive, unless the dataset was defined with a very small CA size. In that case, the dataset undoubtedly has severe problems that are causing performance degradation and DASD space wastage.

**User response:**
Contact Technical Support.

**CKM15122E** INDEX GET failed. RPLFDBWD data=yyyyyyyyy RBA=zzzzzzzzz Mapping ends...

**Explanation:**
During the direct access processing of the Sequence Set records from the file’s index component, if a GETIX
command fails, this message will be printed.

User response:
Contact Technical Support.

CKM15123E The Sequence Set is circular. Run 'EXAMINE' immediately. INDEX RBA=zzzzzzzz MAPPING ENDS...

Explanation:
During the direct access processing of the Sequence Set records from the file's index component, a serious structural error was encountered in following the horizontal record pointers, resulting in a never-ending loop. This error message indicates the file's index is probably damaged and it is suggested that an IDCAMS EXAMINE command is immediately run with the INDEXTEST option against the dataset to determine the extent of damage. It all likelihood, the dataset's index is damaged beyond repair, and recovery of the dataset should be seriously considered. If a current backup of the file is not available, one suggestion would be to attempt a "scavenge" of dataset's records by REPRO'ing the file as an ESDS, then sorting the records into key sequence, and after DELETE'ing and DEFINE'ing the file again, REPRO'ing the sorted records into the new file.

User response:
Contact Technical Support.

CKM15124E VERIFY failed. RPLFDBWD data=yyyyyyyy

Explanation:
During the direct access processing of the Sequence Set records from the file's index component a out of bounds RBA access was attempted. This was typically due to a concurrently executing task performing a CA split. The VERIFY issued to correct the problem failed.

User response:
Contact Technical Support.

CKM15125E Freespace calculation error. Suspect INDEX damage. Execute IDCAMS' 'EXAMINE' command immediately. Mapping ends...

Explanation:
During VSAM MANAGER testing and development, a bug in VSAM was encountered that disrupted VSAM Manager execution. The problem was an unreported VSAM bug, and there is no confirmation that it has been fixed by PTF. The problem related to the pointer to the unused area in the Sequence Set record to be less than 24 (x18'), which is impossible.

User response:

Execute the IDCAMS EXAMINE command with the INDEXTEST operand immediately. There is a strong possibility the file's index structure has a problem. Contact Technical Support.

CKM15126E GET failed during vertical INDEX processing. RPLFDBWD=yyyyyy RBA=xxxxxxxx xxxxxxxx Mapping ends...

Explanation:
During VSAM Manager's mapping of the index structure, an error was encountered when an attempt was made to read an index record using the record address value from the next higher index level record.

User response:
Execute the IDCAMS EXAMINE command with the INDEXTEST operand immediately. There is a strong suspicion that the file's index structure has a problem. Contact Technical Support.

CKM15127E The INDEX hierarchy is faulty. Run 'EXAMINE' Immediately. INDEX RBA=yyyyyyyy Mapping ends...

Explanation:
During VSAM Manager's mapping of the index structure, a serious error was encountered.

User response:
Execute the IDCAMS EXAMINE command with the INDEXTEST operand immediately. There is a strong suspicion that the file's index structure has a problem. Contact Technical Support.

CKM15129W There are more than y unique record sizes. New size ignored. Increase the 'RECORDCOUNTERS(...)’ value

Explanation:
During record sampling, VSAM Manager can tally record size occurrences for only 2,048 (default value) different sizes. This considered sufficient for virtually all files, but if this message is received, the file being mapped has more than 2,048 different record sizes in it.

User response:
As the message indicates, specify the RECORDCOUNTERS(...) parameter on the OPTIONS statement, with a value that is greater than the expected number of different record sizes to be found within the file, and rerun the job.

514 User's Guide
CKM15130E Catalog search error. r15=nnnn Error code=yyyy (x'zzzz'). Processing for dddd can not continue.

Explanation:
During Catalog Listing report processing, a catalog error was encountered. Typically, this is a VVDS Manager error, where the component's VVR record(s) do not exist, particularly when the R15 value is 50. For further information, see IBM message IDC3009I.

User response:
Run an IDCAMS DIAGNOSE command, one each for ICFCATALOG and VVDS, for the BCS and associated volume serial number for which the dataset is supposed to reside on.

CKM15131E Error in pattern for DSN selection.
Explanation:
An error was found in the parameter specification for the DSN parameter.

User response:
Correct the error in the DSN parameter and resubmit the job.

CKM15132E Error in pattern for VOLUME selection.
Explanation:
An error was found in the parameter specification for the VOLUME parameter.

User response:
Correct the error in the OWNER parameter and resubmit the job.

CKM15133E Error in pattern for OWNER selection.
Explanation:
An error was found in the parameter specification for the OWNER parameter.

User response:
Correct the error in the OWNER parameter and resubmit the job.

CKM15134E Error in values for ATTRIBUTE check.
Explanation:
An error was found in the value specified in the ATTRIBUTE parameter.

User response:
Correct the error in the ATTRIBUTE parameter and resubmit the job.

CKM15135E Invalid numeric or operator in cccccccccccc
Explanation:
An error was found in the comparand operator specified. All of the Dataset Characteristics parameters, such as CISPLITS, requires that a comparand such as GT, EQ, LT, etc. be specified, along with a value specification.

User response:
Correct the specification and resubmit the job.

CKM15136E 'NAME' keyword must be specified.
Explanation:
The Select statement requires specification of the NAME parameter.

User response:
Correct the specification and resubmit the job.

CKM15137E xxxxxxxx search error. R15=nnnn Error code=cccc (X'hhhh'). Cannot process nnnnnnnnnnnnn
Explanation:
During Catalog Listing report processing, a catalog error was encountered. Typically, this is a VVDS Manager error, where the component's VVR record(s) do not exist, particularly when R15 value is 50. See IBM message IDC3009I for more details.

User response:
Run an IDCAMS DIAGNOSE command, one each for ICFCATALOG and VVDS, for the BCS and associated volume serial number for which the dataset is supposed to reside on.

CKM15138E Error in values for 'RESULT' keyword
Explanation:
An error was encountered in parsing the parameter specification for the RESULT operand keyword. Accompanying message contains the error.

User response:
Correct the specification and resubmit the job.

CKM15139E More room needed for selected dsname storage. Use the 'SELECTNAMES' parameter, or choose different selection parameters.
Explanation:
More than 2,048 dataset names passed the filtering criteria specified on the SELECT statement.
CKM15140E • CKM15148E

User response:
Either change the filtering parameters, in order to reduce the number of dataset names that are selected, or increase the size of the name list using the SELECTNAMES parameter.

CKM15140E  RESULT' keyword must be specified
Explanation:
The Select statement requires specification of the RESULT parameter.
User response:
Correct the specification and resubmit the job.

CKM15141E No datasets were selected from a list of xxxxxx
Explanation:
After processing the ICF Catalog identified by the SELECT statement filtering criteria, no datasets were found that matched the criteria.
User response:
Change the filtering criteria and resubmit the job. If you feel you received this message in error, contact Technical Support.

CKM15142E Unable to obtain the xxx,xxxK selection workarea. Increase region size.
Explanation:
The virtual storage requirements as a result of the specified OPTIONS SELECTNAMES(...) were so large that VSAM Manager could not acquire the necessary storage. For every 2,048 selectnames, an additional 1 MEG of virtual storage work area is required, and this storage must be acquired from the user's private address space area.
User response:
Either increase the REGION parameter for the job, or reduce the SELECTNAMES value and resubmit the job.

CKM15143I Datasets considered: cccc Datasets selected: ssss
Explanation:
After filtering the datasets, this message gives a summary of how many dataset names were presented to VSAM Manager by MVS, and how many fit the filter criteria. Following this message is the list of selected names. The names appear in columns, and the count of columns change based on the largest dataset name selected. The collating name value of the dataset names increases, top to bottom, then left to right.

User response:
Information only, no action required.

CKM15144E Specified DDname not in JCL.
Explanation:
The FILE keyword was specified on the SELECT statement, but the DDNAME named in the FILE parameter was not found in the JCL.
User response:
Either remove the FILE parameter, or include the appropriate JCL DD statement specified by the FILE parameter.

CKM15145E DCB'S record format must be fixed ('F') or variable ('V').
Explanation:
As the message states, the DCB attributes for the file specified by the FILE parameter must be either fixed or variable format.
User response:
Correct the DCB attributes and resubmit the job.

CKM15146E DCB’S logical record length must be at least 58 for fixed length or 62 for variable length records.
Explanation:
As the message states, the DCB attributes for the file specified by the FILE parameter must be of one of the lengths mentioned.
User response:
Correct the DCB attributes and resubmit the job.

CKM15147E Error in values for 'DSTYPE' keyword.
Explanation:
An error was detected in specification of the DSTYPE parameter. The cause of the error is specified in the associated message found with this message.
User response:
The appropriate action to be taken is indicated by the accompanying message to this one.

CKM15148E  'DSTYPE' keyword cannot be used with 'RESULT(MAP)'.
Explanation:
As the message states, the DSTYPE cannot be specified when the RESULT parameter with the MAP specification is also specified. By definition, VSAM Manager only "maps" VSAM KSDS files, and since
VSAM KSDS is the default value for DSTYPE, it is not allowed to specify DSTYPE if MAP is requested.

User response:
Remove either the DSTYPE or RESULT(MAP) parameter and resubmit the job.

CKM15149W Selection keywords are not used with nonVSAM datasets and/or GDGS.

Explanation:
This warning message indicates that attribute keywords will not be recognized when the DSTYPE parameter specifies any type of nonVSAM dataset.

User response:
Since this a warning message, execution continues, but the specified attribute keywords are not considered in the selection process.

CKM15150W Unable to obtain all of the xxx,xxx selection workarea. Using XXX,XXX

Explanation:
This warning message indicates that a large SELECTNAMES keyword value was coded, and only a portion of the storage was available for use.

User response:
Either increase the REGION parameter for the job, or reduce the SELECTNAMES value and resubmit the job.

CKM15151W Previous "SELECT(NAME(...))" value invalid/nonexistent and cannot be used.

Explanation:
This warning message indicates that a "NAME(=)" was coded indicating that VSAM Manager should reuse the last set of DSNs retrieved, but there was no previous set of names to use.

User response:
There must be a "SELECT (NAME(mask-value) ..." which executes properly before using "SELECT (NAME(=) ..."

CKM15152I Using previous "SELECT(NAME(...))" value of xxxxxxxxxx

Explanation:
This message indicates that a "NAME(=)" was coded indicating that VSAM Manager should reuse the last set of DSNs retrieved, and there was a previous set of names to use.

User response:
None.

CKM15155E Invalid dsname for mapping

Explanation:
The dataset name to map is not valid. “Sys1.*” is a dataset mask, not a dataset name “dsn1 dsn2 dsn3” only one dsn allowed in field.

User response:
Edit your input parameters.

CKM15161I THERE ARE ENOUGH DEAD CI’S TO WARRANT NEW INDEX AND/OR DATA CONTROL INTERVAL SIZES

Explanation:
RECOMMENDATION #1:
Change INDEX CISZ to a,aaa to solve the dead CI problem in bbb CA’S (ccc% of the problem)
Change INDEX CISZ to d,ddd to solve the dead CI problem in eee CA’S (fff% of the problem)
Change INDEX CISZ to g,ggg to solve the dead CI problem in hhh CA’S (iii% of the problem)
or
RECOMMENDATION #2:
There are \textit{n}nnn cases where the key compression is so poor that a 32,768 INDEX CI is too small to hold all the keys. Re-execute after making the following changes:

1. Ensure that the DATA CA size is 1 cylinder. This will reduce the CI PER CA count.
2. Increase the DATA CONTROL INTERVAL size. This will further reduce the CI per CA count. It also alters the relation of the keys that VSAM uses for key compression. This generally gives better compression values.

This recommendation suggests possible corrections for the dead CI problem caused by Sequence Set records that are too small to index all CIs within the CA. This message is "triggered" by the Index CI Size Analysis of the Index Structure report.

Rather than printing a single recommendation that guarantees correcting 100\% of the problem, at the expense of causing other problems that may be even worse, a list of possible index component CI sizes will normally be displayed, indicating the number of CAs currently containing dead CIs that would be fixed with this change, and providing the percentage of the overall problem that will be corrected with this change. For example, increasing the index CI size from 1,536 to 2,048 might correct 92\% of the problem, whereas 2,560 might fix 100\% of the problem. However, with an on-line CICS LSR buffer pool, opting for 2,048 CI size would keep the index using the predominant 2K buffers in the LSR pool, while 2,560 would probably force the data set’s index component to use the LSR buffer pool’s 4K buffers for all of its I/O. Faced with this choice, 2K would most likely be the better option.

On the other hand, the difference between 92\% and 100\% is 8\%, so on a 4,000 cylinder file, this could mean dead CIs in over 320 cylinders. If these dead CIs correspond with the intentional free CIs that were requested at the bottom of each CA to be used for CI splits, the result could be very large numbers of needless CA splits. In this case, increasing the index CI size to whatever value will correct 100\% of the problem might be the best choice. Choose the most appropriate recommendation.

RECOMMENDATION \#2 is provided as an alternative, for those situations where the hoped for result can only be achieved by specification of an index CI size that is otherwise deemed to be too large. For example, if a file has a data CI size of 2,048, and is recommending 8,192 in RECOMMENDATION \#1 for the index CI size, RECOMMENDATION \#2 might be showing that a 4K data CI size and 4K index CI size is an alternative choice. On RECOMMENDATION \#2, it will indicate a recommendation to either MAINTAIN or CHANGE the index CI size. The message CKM15169I is displayed if only a small number of DEAD CIs across the file are found, but the number was not large enough to cause a recommendation to be displayed. In rare cases where the combination of large key size, very poor compression, and high number of CI/CA, the following additional text may be printed in conjunction with message CKM15169I.

This message is the result of the product determination that after increasing the index CI size to the maximum 32,768 value, it would still not protect from dead CIs as a result of the Sequence Set record prematurely filling up with CI entries. The recommendation is attempting to change other, related parameter values that affect this situation, so that the number of CIs/CAs will be reduced and therefore, the problem will be solved.

A common suggestion to this particular problem is usually to change the file’s allocation parameter from CYL to TRK, with a small secondary amount specified, resulting in a smaller CA size. This is a very poor solution to the problem, as the result will almost invariably be a significantly ‘taller’ index (in terms of levels), and the data set will likely have much worse performance. The solution given here by the product is a much preferred solution.

\begin{Verbatim}
CKM15162I  SUGGESTED NON SHARED RESOURCES (NSR) BUFFERING VALUES:
\end{Verbatim}

\textbf{Explanation:}

The error message also provides you with the following information:

- Sequential processing (read access): \textbf{BUFND=xx BUFNI=xx} (total buffer storage requirements: \textit{xx.xK})
- (load mode): \textbf{BUFND=xx BUFNI=xx} (total buffer storage requirements: \textit{xx.xK})
- Direct key processing: \textbf{BUFND=xx BUFNI=xx} (total buffer storage requirements: \textit{xx.xK})
- Mixed (SEQ/DIR) processing: \textbf{BUFND=xx BUFNI=xx} (total buffer storage requirements: \textit{xx.xK})

Each item in the error message is addressed in its own section below.
Important: These buffer requirements are no longer correct once the suggested changes have been made to the INDEX and/or DATA control interval sizes.

Sequential processing (read access)

This field indicates the recommended buffering values to be applied with any program processing this file in sequential read access mode, using NSR buffering, as opposed to LSR.

The product calculates the BUFND value based on buffer numbers that will read an entire track's worth of CIs in a single I/O operation, and also providing for overlapped processing.

The BUFNI value is based on having access to the single Sequence Set record that is recognized by VSAM at any time with NSR buffer processing.

The TOTAL BUFFER STORAGE REQUIREMENTS value indicates the amount of virtual storage that must be available in the user program address space in order to support this BUFND and BUFNI set of values.

Sequential processing (load mode)

This field indicates the recommended buffering values to be applied with any program processing this file in sequential write access mode, using NSR buffering.

The product calculates the BUFND value based on buffer numbers that will write an entire track's worth of CIs in a single I/O operation, and also providing for overlapped processing.

The BUFNI value is based on the total number of levels of index for the file, allowing VSAM to hold one record from each level in a buffer at all times during load mode processing. This improves performance by enabling VSAM to update each higher level record without having to re-retrieve it each time it is required.

The TOTAL BUFFER STORAGE REQUIREMENTS value indicates the amount of virtual storage that must be available in the user program address space in order to support this BUFND and BUFNI set of values.

Direct key processing

This field indicates the recommended buffering values to be applied with any program processing this file in direct key access mode, either for read or write processing, using NSR buffering.

The product automatically sets the BUFND value at '2', on the assumption that additional data buffers for direct key processing will not yield sufficient look aside 'hits' to warrant the additional virtual storage cost. The user should make a determination of whether this conclusion is correct, based on the file's actual processing, as additional data buffers will achieve performance gains when the file is experiencing CA splits, or when the processing is clustered in a very small area of the file. In this case, increasing the BUFND value to, say, '10' might be worth considering.

The BUFNI value is based on a formula inside the product that enables the file's entire Index Set of records (i.e., all of those above Level 1 Sequence Set records) to be held resident in virtual storage. This enables direct key searches to achieve maximum record look aside 'hits' while making vertical searches through the index, eliminating a physical I/O for each level of index.

The TOTAL BUFFER STORAGE REQUIREMENTS value indicates the amount of virtual storage that must be available in the user program address space in order to support this BUFND and BUFNI set of values.

Mixed (SEQ/DIR) processing

This field indicates the recommended buffering values to be applied with any program processing this file in mixed mode read or write access, using NSR buffering.

Mixed mode means that the Assembler Language program has specified SEQ and DIR in the file's ACB. In COBOL, mixed mode means the program has specified DYNAMIC on the ACCESS MODE clause.

The product calculates the BUFND value based on buffer numbers that will read or write an entire track's worth of CIs in a single I/O operation, and also providing for overlapped processing. The BUFNI value is based on a formula inside The product that enables the file's entire Index Set of records (i.e., all of those above Level 1 Sequence Set records) to be held resident in virtual storage. This will enable direct key searches to achieve maximum record look aside 'hits' while making vertical searches through the index, eliminating a physical I/O for each level of index.

The TOTAL BUFFER STORAGE REQUIREMENTS value indicates the amount of virtual storage that must be available in the user program address space in order to support this BUFND and BUFNI set of values.

In the situation where a change has been recommended to the index component CI size in the Index Structure report, the following explanatory message will be printed at the conclusion of the 'SUGGESTED ... BUFFER VALUES':
User response:

Since the product's buffer recommendation values are based on the actually loaded file, the user will have to evaluate whether the recommended values will continue to be appropriate after any changes have been made at the next reorganization. If a file is 'dirty' due to incorrect parameters that are currently specified, another report might have to be run after the changes have been made and the file reorganization is complete.

DO NOT USE REPLICATE WITH A KSDS/VRRDS ON A 3390 DISK, ESPECIALLY WHEN 'CACHED'. (IF YOU MUST CODE 'REPLICATE', THEN AT LEAST CODE 'IMBED' AS WELL.)

Explanation:

This recommendation is displayed only if the product finds the file to have the REPLICATE parameter specified. While there are cases where REPLICATE can provide a small amount of performance improvement, performance is usually hurt more than helped with any form of record replication in today's typical disk environment.

As the message indicates, this is especially true when the volume containing the file is 'backed' by cache memory in the disk controller. Since the primary benefit derived from caching comes from repeated, frequent I/O's against a track, and if a record is repeated around a track to reduce rotational delay, there are no other records on the track that the program will be requesting.

User response: Follow the instructions in the error message and explanation.

There are no (or very few) inserts observed on this data set. Set 'FREESPACE' to '(0,0)'.

Explanation:

At this point very few new records are being added.

User response: Consider changing the FREESPACE value if the dataset is static.

USE OF "RECOVERY" WHEN SEQUENTIALLY LOADING A KSDS HAS NO BENEFITS. CODE "SPEED" AND SEQUENTIAL LOADS WILL BE FASTER.

Explanation:

This recommendation is displayed only if the product finds the file to have the RECOVERY parameter specified. While the RECOVERY parameter is the DEFINE CLUSTER command default, it is in fact an unworkable feature for a KSDS. In theory, RECOVERY is intended to provide a restart capability in the event of a failure during initial load of a VSAM file (i.e., when the HURBA=0 at the beginning of the load), but due to the failure of the VERIFY command to execute on a file whose HURBA=0, the only recourse if a failure occurs is to delete, define, and reload the file. RECOVERY costs triple I/O (actually triple data transfer across the channel to the device), plus a longer elapsed time to load than SPEED, for a feature that doesn't even work, so allowing this parameter to be in effect for a KSDS is a bad choice. RECOVERY is the DEFINE CLUSTER command default, though, so SPEED must be explicitly specified if it is desired.

User response: Follow the instructions in the Explanation.
This message is displayed only if the product finds a difference in the total number of Sequence Set records when it reads horizontally across the level versus the vertical search through high level records. During Control Area Analysis processing, the product begins with the first Sequence Set record (i.e., the one that corresponds with the file’s first CA), and by following the horizontal pointer from each Sequence Set record to the next, the entire first level of the index is processed. During that pass, the product keeps a tally of every Sequence Set record that is processed. At completion, the product then begins at the top level record for the file and accesses vertically (downward) from it through every possible search path, to ensure that every index record is properly connected and accessed. This results in a count of every record, at every level of the index, and this information is displayed in the INDEX Structure Summary report. If there is a discrepancy in the Sequence Set records that are tallied from the two processes, the above warning message is displayed.

The message indicates two possible reasons behind the discrepancy:

1. There is a structural integrity problem with the Sequence Set record horizontal chain, the probable result of a break in the address from one Sequence Set record to another. This is the least likely reason.

2. The file is currently open to another task at the time the product is processing through one or the other paths of access, with CA splits occurring between the time the product begins and completes it processing. This is the most likely reason.

User response:

If there is any concern that the message might be due to cause #1 above, it would be prudent to run an IDCAMS EXAMINE ... INDEXTEST function against the file at the next opportunity, in order to obtain a full report on the index structure. If the file is concurrently open during the EXAMINE process, it may also report a similar message, in which case the EXamine should be run again after the file is next closed.

If this message is due to cause #2 above, there should be no particular concern of index structure error, and a subsequent execution of the product would probably not receive this message.

---

This message is displayed only if the product finds a difference in the total number of Sequence Set records when it reads horizontally across the level versus the computed number of Sequence Set records that the program determines the file should have when it divides the file’s current HURBA value the CA size in bytes.

During Control Area Analysis processing, the product begins with the first Sequence Set record (i.e., the one that corresponds with the file’s first CA), and by following the horizontal pointer from each Sequence Set record to the next, the entire first level of the index is processed. During that pass, the product keeps a tally of every Sequence Set record that is processed. At completion, the product accesses the file’s HURBA from the in-storage control blocks and divides that value by the number of bytes in a CA (derived from data component CI size times CI/CA).

This gives the total number of used CAs for the file, which should be equal to the number of Sequence Set records. The number of Sequence Set records determined by the two methods is then compared, and if there is a discrepancy, the above warning message is displayed. The message indicates two possible reasons behind the discrepancy:

1. There is a structural integrity problem with the Sequence Set record horizontal chain, the probable result of a break in the address from one record to another. This is the least likely reason.

2. The file is currently open to another task, with CA splits occurring, and VSAM’s Control Block Update Facility (CBUF) is not being invoked to fetch the current HURBA for the product’s access. This is the most likely reason.

User response:

If there is any concern that the message might be due to cause #1 above, it would be prudent to run an IDCAMS EXAMINE ... INDEXTEST function against the file at the next opportunity, in order to obtain a full report on the index structure. If the file is concurrently open during the EXAMINE process, it may also report a similar message, in which case the EXamine should be run again after the file is next closed.

If this message is due to cause #2 above, it is more likely due to the file being open for update through a program running on another MVS system, where the CBUF facility is not able to copy critical control blocks across to the system on which the product is running, or the file has SHAREOPTIONS(3) defined (in which case, the CBUF capability is not in effect). If this is the case, there should be no particular concern of index structure error, and a subsequent execution of the product would probably not receive this message.

---

This message also displays the following information:

- They do not occur often enough to warrant new INDEX CISZ, which is global across the entire file.
However, for 100% utilization of the DATA component, a larger INDEX CI could be selected.

This message is displayed if the product finds at least one occurrence of dead CIs across the file, but its analysis determines that it is a sufficiently small number of occurrences to warrant a recommendation for correcting the situation. Through a complicated algorithm, VSAM makes an arbitrary determination of what 'sufficiently small' is, based on the cube root of the CIs per CA, and the cube root of the number of used CAs in the file. This message is intended for information only, it is not suggested that any action be taken as a result of it. If a sufficiently large number of dead CIs is found, the message CKM15161I is displayed, in which case, corrective action should be considered.

User response:
None.

CKM15170I  MOST EFFICIENT KSDS PROCESSING OCCURS WITH A ONE CYLINDER CONTROL AREA SIZE.

Explanation:
This message is displayed if the product determines that the file is larger than one cylinder, yet has a CA size less than a cylinder. When this occurs, there is an increased likelihood of the file having an inefficient index structure that results in lowered performance.

User response:
The easiest way to correct this is to allocate the file with the CYLINDERS parameter, as this will automatically result in a cylinder sized CA. If allocating with RECORDS, KILOBYTES, or MEGABYTES, ensure that both the primary and secondary allocation quantities specified will result in sizes greater than a cylinder. When this occurs, IDCAMS will round and modify the primary and/or secondary quantities (which are actually allocating internally in TRACKS) to cylinder sized units, with the result that the CA will be set to one cylinder.

CKM15171I  THE CA SPLIT COUNT WAS VERY LOW COMPARED TO THE FILE SIZE, YET THERE WAS A FSPC-CA% CODED.

Explanation:
The dataset has very few CA splits but the FSPC-CA% was code meaning space is being reserved for splits that are not occurring.

User response:
Consider removing FSPC-CA% so that you do not waste DASD space.

CKM15172W  THIS FILE IS APPROACHING THE VSAM LIMIT OF 4,294,967,296 BYTES WHICH IS APPROXIMATELY 5,825 CYLINDERS ON A 3390 DEVICE. CURRENTLY USING nnn.n % OF THE LIMIT.

Explanation:
This message is displayed if this non-Extended Format file has reached 85% of the 4.2 gigabyte maximum file size, as indicated by the PERCENT OF VSAM MAX field in the Statistical Summary report. Once this maximum size is reached, any further VSAM allocations for the file will fail, and since application requests (such as CA splits, or additional records to the end of file) are causing these allocation requests, the associated application programs are probably failing.

User response:
The file will have to be reorganized, resulting in possibly even worse (or continuing) problems, or the application will have to be redesigned to break the file into smaller logical files or the file redefined as an Extended Format file.

CKM15173W  THIS FILE HAS SHAREOPTIONS x,y WHICH GIVES LITTLE FILE INTEGRITY AT A LARGE I/O COST

Explanation:
This message is displayed if the product finds a SHAREOPTIONS specification of: cross region of 3 or 4; or cross system of 4. While there are certainly valid reasons for files to have these SHAREOPTIONS values in rare circumstances, the values are sufficiently dangerous enough, and worse, sufficiently misunderstood, to warrant a warning message any time the value(s) are found.

In particular, in an MVS system, it is absolutely inappropriate for these values to be specified for any file that will be processed by a high level language program (such as COBOL, PL/1, etc.), unless there are I/O exit routines to Assembler Language subroutines that manage the program and file integrity during the I/O request. These SHAREOPTIONS require extensive code support for ENQ/DEQ macros, and they are only available from Assembler Language.

CICS Command Level language programs that issue the ENQ/DEQ macros are not able to support file and program integrity with these SHAREOPTIONS values, so do not attempt to use these values to allow batch program updates to files that are currently on-line to CICS.

As a rule, these SHAREOPTIONS values can only be successfully used with Program Product software that was specifically written to support the very intensive program and file integrity requirements that these values entail. This support must ensure that simultaneous
record, CI, and CA access is controlled, that critical
VSAM control blocks are maintained synchronized, and
that valid buffer contents are always used. Even then,
the support requirements are so onerous that some
level of integrity loss must probably be accepted,
making the decision to use them very sensitive.

If your installation is a former DOS/VSE user (or VM,
where DOS/VSE VSAM support is used), and
SHAREOPTIONS (4 y) or (x 4) were allowed to
successfully control and manage file and program
integrity through VSE-issued CI level locking support,
you should be aware that this integrity support is not
provided in MVS, and therefore, this SHAREOPTIONS
is extremely dangerous after the conversion to MVS.
These files should be changed to a SHAREOPTIONS
value that does not allow concurrent update activity, or
the updating programs should be changed to Assembler
Language with the necessary ENQ/DEQ support
inserted.

User response:
Follow the instructions in the Explanation.

CKM15174W THIS FILE HAS SHAREOPTIONS a,b
ON THE DATA COMPONENT AND
SHAREOPTIONS c,d ON THE INDEX
COMPONENT

Explanation:
This message is displayed if the product finds that the
SHAREOPTIONS specifications on the Data
Component do not match those on the Index
Component. There is no imaginable valid purpose in
defining different SHAREOPTIONS values for the two
components, so it must be assumed it is an oversight or
a mistake.

User response:
Correct the SHAREOPTIONS specifications.

CKM15175W THE DATA AND INDEX COMPONENT
TIMESTAMPS MISMATCH. THE CAUSE
OF THIS MUST BE IDENTIFIED.

Explanation:
This message is displayed if the product finds that the
SYSTEM TIMESTAMPS (or as listed in the CATALOG
LISTING report, LAST UPDATE TIMESTAMP) are
unequal.

User response:
This is the result of two situations, both of which are a
serious problem for the file and must be immediately
corrected:
1. One volume of multi-volume data set being restored,
without the other volume being restored, where one
volume contains the Data Component of the file,
and the other volume contains the Index
Component.

2. A user program has opened either the Data
Component or the Index Component separately from
the other, in update mode, causing the update
timestamp for the affected component to be set at a
higher value than the other. In all likelihood, the only
recourse for this situation is to begin a complete file
restoration, as there is no way of knowing whether
the components of the file are synchronized. Do not
attempt super zapping the timestamps equal, as this
will only mask the problem without fixing it.

CKM15176I DATA CISZ IS NOT EFFICIENT, BASED
ON THE CURRENT HIGH ALLOCATED
RBA, CHANGING THE CISZ TO AT
LEAST 4,096 WOULD RESULT IN AN
ALLOCATION OF nnn CYLINDERS,
SAVING nnn CYLINDERS.

Explanation:
The DATA CISZ is not optimal.

User response:
Consider changing your DATA CISZ.

CKM15176I DATA CISZ IS NOT EFFICIENT. BASED
ON THE CURRENT HIGH USED RBA,
CHANGING THE CISZ TO AT LEAST
4,096 WOULD RESULT IN AN
ALLOCATION OF nnn CYLINDERS,
SAVING nnn CYLINDERS.

Explanation:
The DATA CISZ is not optimal.

User response:
Consider changing your DATA CISZ.

CKM15176I DATA CISZ IS NOT EFFICIENT,
HOWEVER, BASED ON THE HIGH
ALLOCATED RBA, CHANGING THE
CISZ WOULD RESULT IN A TRIVIAL (<
10 CYLINDER) SAVINGS.

Explanation:
The DATA CISZ is not optimal.

User response:
None.

CKM15176I DATA CISZ IS NOT EFFICIENT,
HOWEVER, BASED ON THE HIGH
USED RBA, AND ELIMINATING THE
OVERALLOCATION (IF ANY),
CHANGING THE CISZ WOULD RESULT
IN A TRIVIAL (10 CYL) SAVINGS.

Explanation:
The DATA CISZ is not optimal.
CKM15196E • CKM18100I

User response:
None.

CKM15196E Unexpected return code (R15='rc'
Reason code='e'r') from SVC 26.
Mapping ends...

Explanation:
An catalog management call has produced a non-zero return code. This message should never occur, but just in case SVC 26 does return with a non-zero return code, this the message that will be produced.

User response:
Contact Technical Support.

CKM15197E File is not cataloged. DSName=xxxxxxx

Explanation:
A dataset name specified on a MAP control statement was not located in the catalog that was searched based on the dataset name's high-level qualifier(s). Either the dataset does not exist, the dataset name was incorrectly specified, or the dataset is cataloged in a catalog whose alias does not match the high-level qualifier(s) of the specified dataset name.

User response:
Ensure the dataset is cataloged in the ICF Catalog whose alias matches the dataset's high-level qualifier(s).

CKM15198E CMD is MAPBCS but file is not a catalog. DSName=xxxxxxx

Explanation:
The MAPBCS command can only be used to map an ICF Catalog BCS file.

User response:
If the file you wish to map is a BCS, but the file name was incorrectly specified, correct the name. If the file that you wish to map is a KSDS, change the command to MAP.

CKM15199E CMD is MAP but file is a catalog. DSName=xxxxxxx

Explanation:
The MAP command can only be used to map a VSAM KSDS file.

User response:
If the file you wish to map is a KSDS, but the file name was incorrectly specified, correct the name. If the file that you wish to map is a BCS, change the command to MAPBCS.

CKM18001E module MODULE MISSING FOR SUBCOMMAND subcommand

Explanation:
The module corresponding to ALTER subcommand was not found in the load module libraries.

User response:
Via IEHLIST, AMBLIST, ISPF, or some other installation utility, prepare a listing of the load module library directory and contact Technical Support.

CKM18002E UNRECOGNIZABLE SUBCOMMAND OF ALTER: subcommand

Explanation:
The specified ALTER subcommand is not valid.

User response:
Correct the specified ALTER subcommand.

CKM18003E COMMAND HAS NO OPERANDS

Explanation:
No keyword operands were specified for ALTER.

User response:
Add the appropriate operands.

CKM18009I ALTER FUNCTION COMPLETE. RETURN CODE nnnn

Explanation:
Command execution termination message.

For return code 90
Your product code and/or license for the product is not valid or you are not licensed for this command.

User response:
Generally none.
For return code 90 - Contact Technical Support.

CKM18100I ALTER BCS-VOLSER Maintenance Level: CKM00181/REV=nn

Explanation:
Informational message giving the current revision number of the specific program.

User response:
None required. In the event of a problem, Technical Support may request the revision number.
CKM18101E  allocation FAILED FOR datasetname
Explanation:
Dynamic allocation for a dataset failed, or, dynamic deallocation for a ddname failed. The associated OS/390 messages are displayed. For an allocation failure, processing is terminated. For a deallocation failure, processing continues.
User response:
If unable to determine the reason for the failure from the associated OS/390 messages, contact Technical Support. Save all spooled output from this execution (including the JES execution job logs) and provide this to Technical Support as part of the problem documentation.

CKM18101W  DEallocation FAILED FOR DDN: ddname
Explanation:
Dynamic allocation for a dataset failed, or, dynamic deallocation for a ddname failed. The associated OS/390 messages are displayed. For an allocation failure, processing is terminated. For a deallocation failure, processing continues.
User response:
If unable to determine the reason for the failure from the associated OS/390 messages, contact Technical Support. Save all spooled output from this execution (including the JES execution job logs) and provide this to Technical Support as part of the problem documentation.

CKM18104E  ERROR ACCESSING
             MCAT=alt.master.cat CODE=xxxx
Explanation:
A VSAM error occurred accessing the specified catalog. Processing terminates.
User response:
See associated MSC341nnE error messages, if they are present. If unable to resolve problem, contact Technical Support. Save all spooled output from this execution (including the JES execution job logs) and provide this to Technical Support as part of the problem documentation.

CKM18105I  DD=ddname allocated for
             DSN=datasetname
Explanation:
'ddname' has been dynamically allocated for the specified dataset.
User response:
None.

CKM18106E  Internal Logic Error - Code=xxxxxx
Explanation:
During ALTER processing, an unexpected internal condition was detected. This message is immediately followed by more specific details on the nature of the situation, and processing terminates. The value for CODE= is relevant only for Technical Support's reference.
User response:
Report this message to Technical Support. Save all spooled output from this execution (including the JES execution job logs) and provide this to Technical Support as part of the problem documentation.

CKM18108I  PROCESSING ENTRIES FOR BCS: bcs
datastname ** SIMULATED **
Explanation:
ALTER BCS-VOLSER information message. If PRINT(KEY) or PRINT(DATA) is in effect, the entries for the BCS follow this message. Processing continues.
User response:
None.
CKM18109E  Error calling IGGCSI00 - RC=xx -  
Code=xxxxxx

Explanation:
An error occurred while invoking the module IGGCSI00. 
The value for CODE= is relevant only for Technical 
Support's reference.

User response:
Report this message to Technical Support. Save all 
spooled output from this execution (including the JES 
execution job logs) and provide this to Technical 
Support as part of the problem documentation.

CKM18109W  Error calling IGGCSI00 - RC=xx -  
Code=xxxxxx

Explanation:
An error occurred while invoking the module IGGCSI00. 
The value for CODE= is relevant only for Technical 
Support's reference.

User response:
Report this message to Technical Support. Save all 
spooled output from this execution (including the JES 
execution job logs) and provide this to Technical 
Support as part of the problem documentation.

CKM18111I  RECORDS SIMULATED FOR UPDATE 
IN BCS=catalog.name

Explanation:
Indicates changing entries in the BCS. Processing 
continues.

User response:
None.

CKM18111I  RECORDS SIMULATED FOR UPDATE 
IN BCS=catalog.name

Explanation:
Indicates changing entries in the BCS. Processing 
continues.

User response:
None.

CKM18112I  NO CHANGES REQUIRED FOR 
BCS=catalog.name

Explanation:
No entries were found in the current BCS that required 
a change from oldvolser to newvolser. Processing 
continues.

User response:
None.

CKM18120I  <variable.text> Update for 
DSN=dataset.name

Explanation:
Informational. This describes what was or will be 
updated in a volume cell for the Dataset. Processing 
continues.

User response:
None.

CKM18121W  SYMBOLIC VOLSER NOT APPLIED TO 
"NON" NON-VSAM DSN=dsname

Explanation:
NEW-VOLSER contained a system symbolic. A BCS 
entry referencing OLD-VOLSER was encountered, 
which was not a non-VSAM dataset. The change to a 
Symbolic Volser was not performed, because it would 
be invalid for this type of dataset. Processing continues.

User response:
None.

CKM18122W  SYMBOLIC VOLSER NOT APPLIED TO 
SMS-MANAGED DSN=dsname

Explanation:
NEW-VOLSER contained a system symbolic. A BCS 
entry referencing OLD-VOLSER was encountered, 
which was SMS Managed. The change to a Symbolic 
Volser was not performed, because it would be invalid 
for this type of dataset. Processing continues.

User response:
None.

CKM18123W  WARNING: DEVICETYPE X'xdevt' 
UNKNOWN TO THE SYSTEM EDT.

Explanation:
NEW-DEVICETYPE was specified using the hex format. 
The device code was not found in the EDT (HCD 
IOP). This situation may or may not be an error, but 
the value will be accepted, anyway. Processing 
continues.

User response:
Ensure that this devicetype is valid for your system, 
and/or, consult your MVS Systems Programmer.

CKM18124W  BECAUSE NEW-VOLSER IS 
SYMBOLIC, NEW-DEVICETYPE WILL 
BE OVERRIDDEN TO X'00000000'

Explanation:
NEW-DEVICETYPE was specified, but the 
NEW-VOLSER was specified as a system symbolic
value. Typically, symbolic volser entries, by default, have a devicetype of X'00000000'. The NEW-DEVICETYPE value is disregarded, and the null device type is assumed. Processing continues.

User response:
Remove the NEW-DEVICETYPE parameter, or specify it with the "null" devicetypes X'00000000' or 0000.

CKM18125E NEW-DEVICETYPE(...) IS REQUIRED TO RESOLVE NEW-VOLSER volser

Explanation:
OLD-VOLSER was specified with a system symbolic value, and, NEW-VOLSER specified a discrete volser, and, NEW-DEVICETYPE was not specified. In addition, ALTER BCS-VOLSER was not able to determine the appropriate device type code for the NEW-VOLSER device. It is possible that the NEW-VOLSER is not online to the current system. Processing continues.

User response:
Specify NEW-DEVICETYPE with a valid device type that is appropriate for the volser in NEW-VOLSER, or, vary online the NEW-VOLSER volume to the current system.

CKM18125E NEW-DEVICETYPE(...) IS REQUIRED TO RESOLVE NEW-VOLSER volser

Explanation:
OLD-VOLSER was specified with a system symbolic value, and, NEW-VOLSER specified a discrete volser, and, NEW-DEVICETYPE was not specified. In addition, ALTER BCS-VOLSER was not able to determine the appropriate device type code for the NEW-VOLSER device. It is possible that the NEW-VOLSER is not online to the current system. Processing continues.

User response:
Specify NEW-DEVICETYPE with a valid device type that is appropriate for the volser in NEW-VOLSER, or, vary online the NEW-VOLSER volume to the current system.

CKM18126E Maximum Error Limit Reached.

Explanation:
While reading a BCS, a structural error was detected in a BCS record. This message is immediately followed by more specific details on the nature of the situation. When a predetermined error limit threshold for a BCS is reached, then processing terminates. The value for CODE= is relevant only for Technical Support's reference.

User response:
Report this problem to Technical Support. Save all spooled output from this execution (including the JES execution job logs) and provide this to Technical Support as part of the problem documentation.

CKM18126W Logical Error Detected in BCS Record Structure - CODE=xxxxxx

Explanation:
While reading a BCS, a structural error was detected in a BCS record. This message is immediately followed by more specific details on the nature of the situation. When a predetermined error limit threshold for a BCS is reached, then processing terminates. The value for CODE= is relevant only for Technical Support's reference.

User response:
Report this message to Technical Support. Save all spooled output from this execution (including the JES execution job logs) and provide this to Technical Support as part of the problem documentation.

CKM18127E Error Calling Table xxxx FUNC=xxx RC=xxx Code=xxxxxx

Explanation:
An abnormal and unexpected condition was detected due to a possible logic or resource error. Information provided by this message is meaningful only to Technical Support. Other descriptive information will usually follow immediately after this error message.

User response:
Report this problem to Technical Support. Save all spooled output from this execution (including the JES execution job logs) and provide this to Technical Support as part of the problem documentation.

CKM18130I Proposed Image of Record in BCS=catalog.name

Explanation:
Informational. PRINT(DATA) was specified, and the contents of the BCS record after-image is displayed. Processing continues.

User response:
None.

CKM18130I Proposed Image of Record in BCS=catalog.name

Explanation:
Informational. PRINT(DATA) was specified, and the contents of the BCS record after-image is displayed. Processing continues.

User response:
None.
CKM18134E Command-Level Security Authorization Failure.

Explanation:
Local system security definitions have denied the availability of the ALTER BCS-VOLSER command.

User response:
Contact the installation security administrator if this unexpected.

CKM18135W Volume Cell Not Updated for DSN=dataset.name

Explanation:
Local system security definitions have denied the ability for ALTER BCS-VOLSER to update the volume cells for this dataset name. Processing Continues.

User response:
Contact the installation security administrator if this unexpected.

CKM18136W BCS-Level Security Authorization Failure.

Explanation:
Local system security definitions have denied the ability for ALTER BCS-VOLSER to update the current catalog name. Processing Continues for the other catalogs named in command.

User response:
Contact the installation security administrator if this unexpected.

CKM18170E KEYWORD: keyword MAXIMUM LENGTH: nnn EXCEEDED

Explanation:
The operand entered for a keyword exceeded the maximum length allowed for the operand. nnn is the maximum allowed length for the keyword. Processing terminates.

User response:
Correct the length of the keyword's operand.

CKM18171E KEYWORD HAS MORE THAN 1 OPERAND; ONLY 1 ALLOWED: keyword

Explanation:
Multiple operands were detected for a keyword; only one operand is permitted. Processing terminates.

User response:
Correct the keyword to use one operand.

CKM18172E REQUIRED KEYWORD MISSING: keyword

Explanation:
A keyword required for ALTER BCS-VOLSER processing has been omitted. Processing terminates.

User response:
Specify the required keyword.

CKM18173E NOTHING SPECIFIED FOR KEYWORD: keyword

Explanation:
A keyword was entered without an appropriate operand. Processing terminates.

User response:
Specify an appropriate operand for the keyword.

CKM18176I OPTION IN EFFECT: option

Explanation:
ALTER BCS-VOLSER processing message.

User response:
None.

CKM18177E INVALID VOLSER IN KEYWORD: keyword

Explanation:
The volume serial number specified is invalid. Processing terminates.

User response:
Correct the volser specification.

CKM18178E INVALID VALUE IN KEYWORD: keyword VALUE value error

Explanation:
The value in the keyword is invalid. 'error' indicates the problem detected with the value. Processing terminates.

User response:
Correct the value's specification.

CKM18179E NO BCS’S HAVE BEEN SELECTED FOR PROCESSING

Explanation:
No match was found for the BCS's specified in the INCLUDEBCS keyword, or, the names/masks specified in EXCLUDEBCS eliminated the includes. Processing terminates.
User response:
Correct the INCLUDEBCS and/or EXCLUDEBCS specification.

---

**CKM18180I UNREFERENCED DSNS/MASKS FOR KEYWORD: keyword**

**Explanation:**
During ALTER BCS-VOLSER processing, certain names and/or masks that were specified by the keyword were not matched during the filtering process. Processing Continues.

**User response:**
None.

---

**CKM18180W UNREFERENCED DSNS/MASKS FOR KEYWORD: keyword**

**Explanation:**
During ALTER BCS-VOLSER processing, certain names and/or masks that were specified by the keyword were not matched during the filtering process. Processing Continues.

**User response:**
None.

---

**CKM18181I The Following Catalogs have been Selected for Processing:**

**Explanation:**
Informational. Immediately following this message is a list of catalog names selected based upon the INCLUDE-BCS and/or the EXCLUDE-BCS keywords.

**User response:**
None.

---

**CKM18200I ALTER BCS-BACK-POINTERS MAINTENANCE LEVEL:**

**Explanation:**
Informational. Indicates the current version of the ALTER BCS-BACK-POINTERS program. When reporting ALTER BCS-BACK-POINTERS errors to Technical Support, the information provided by this message is highly significant for problem resolution.

**User response:**
When reporting problems to Technical Support, this message should be included as part of the communication.

---

**CKM18202W VOLUME xxxxxx CONTAINS NO VVDS; THEREFORE NO BCS BACK POINTERS MAY BE ALTERED**

**Explanation:**
No VVDS was cataloged on the listed DASD volume. ALTER BCS-BACK-POINTER is only applicable to those DASD volumes that have a cataloged VVDS. The listed DASD volume was not processed.

**User response:**
Remove the volume from the INCLUDE-VOLSER list, or code the volume as an argument to the EXCLUDE-VOLSER keyword.

---

**CKM18207I TOTAL NUMBER OF VVDS ENTRIES AFECTED: nnnnnnn**

**Explanation:**
ALTER BCS-BACKPOINTERS termination message. nnnnnnn is the number of VVDS records that were changed.

**User response:**
None.

---

**CKM18207I TOTAL NUMBER OF VVDS ENTRIES AFECTED: nnnnnnn**

**Explanation:**
ALTER BCS-BACKPOINTERS termination message. nnnnnnn is the number of VVDS records that were changed.

**User response:**
None.

---

**CKM18208I PROCESSING ENTRIES ON VOLUME SERIAL: volser ** SIMULATED **

**Explanation:**
ALTER BCS-BACKPOINTERS information message. If PRINT(KEY) or PRINT(DATA) is in effect, the entries for the volser follow this message. Processing continues.

**User response:**
None.
CKM18208I • CKM18218W

CKM18208I  PROCESSING ENTRIES ON VOLUME SERIAL: volser ** SIMULATED **

Explanation:
ALTER BCS-BACKPOINTERS information message. If PRINT(KEY) or PRINT(DATA) is in effect, the entries for the volser follow this message. Processing continues.

User response:
None.

CKM18209I  NO BCS IN VVCR/VVCN

Explanation:
The ALTER BCS-BACK-POINTER requested the REMOVE option. This message indicates that, for the current volume being processed, there were no BCS entries in the VVCR or VVCN records.

User response:
None required.

CKM18211I  Number of Entries Simulated on <volser>: nnn

Explanation:
Indicates the number of entries changed in the current VVDS. Processing continues.

User response:
None.

CKM18211I  Number of Entries Simulated on <volser>: nnn

Explanation:
Indicates the number of entries changed in the current VVDS. Processing continues.

User response:
None.

CKM18212I  No Backpointer changes Required on <volser>.

Explanation:
No entries were found in the current VVDS that have oldbcs in the backpointer. Processing continues.

User response:
None.

CKM18213I  -> dataset.name

Explanation:
The dataset name (or VSAM Component name) has been selected to have the BCS backpointer modified. Processing continues.

User response:
None.

CKM18214I  BCS=<bcsname> Removed from <volser> VVCR/VVCN.

Explanation:
No other VVR/NVR records in the VVDS for the volume referenced the catalog name in the VVCR/VVCN list. The catalog name has been removed from the VVDS. Processing continues.

User response:
None.

CKM18215I  BCS=<bcsname> Registered in <volser> VVCR/VVCN.

Explanation:
One or more VVR or NVR records in the VVDS referenced a catalog name that was not in the VVCR/VVCN list. The catalog name has been registered into the VVDS. Processing continues.

User response:
None.

CKM18216I  NEWBCS ADDED TO VVCR/VVCN ON VOLUME SERIAL: volser

Explanation:
The BCS in keyword NEWBCS has been added to the VVCR/VVCN on the indicated volume serial. Processing continues.

User response:
None.

CKM18217I  OLDBCS DELETED FROM VVCR/VVCN ON VOLUME SERIAL: <volser>

Explanation:
The BCS in keyword OLDBCS does not own any other datasets on the indicated volume serial. It has been removed from the VVCR/VVCN. Processing continues.

User response:
None.

CKM18218W  BCS=<bcsname> Not Removed from <volser> VVCR/VVCN. One or more VVR/NVR records in the VVDS reference this Catalog Name.

Explanation:
One or more objects on the volume have back-pointers in their associated VVR or NVR referencing the BCS in keyword OLDBCS. Message IEC331I 050-038 will appear on console log. Processing continues.

**User response:**
None.

---

**CKM18219I**  SYS1.VVDS.Vvolser ____STATUS____

**Explanation:**
These messages report the status of the catalogs in the VVCR, or report that the catalog was not referenced in any VVR/NVR and was removed as a consequence.

**User response:**
None.

---

**CKM18220I**  (multiple possible messages; see Explanation)

**Explanation:**
- `catalog name` BCS-ON-VOLUME
- `catalog name` IN-USE
- `catalog name` VALID-RELATION
- `catalog name` NOT-IN-USE
- `catalog name` MISSING
- `catalog name` REMOVED
- `catalog name` ADDED
- `catalog name` WILL-BE-REMOVED
- `catalog name` WILL-BE-ADDED

These messages report the status of the catalogs in the VVCR, or report that the catalog was not referenced in any VVR/NVR and was removed as a consequence.

**User response:**
None.

---

**CKM18221W**  BCS=<bcsname> Not Found in <volser> VVCR/VVCN.

**Explanation:**
There was no reference in the VVCR/VVCN to the BCS in keyword OLDBCS. Processing Continues.

**User response:**
None.

---

**CKM18227E**  Error Calling Table xxxx FUNC=xxx RC=xxx Code=xxxxxx

**Explanation:**
An abnormal and unexpected condition was detected due to a possible logic or resource error. Information provided by this message is meaningful only to Technical Support. Other descriptive information will usually follow immediately after this error message.

**User response:**
Report this problem to Technical Support. Save all spooled output from this execution (including the JES execution job logs) and provide this to Technical Support as part of the problem documentation.

---

**CKM18229W**  Error calling IGGCSI00 - RC=xx - Code=xxxxxx

**Explanation:**
An error occurred while invoking the module IGGCSI00. The value for CODE= is relevant only for Technical Support's reference.

**User response:**
Report this message to Technical Support. Save all spooled output from this execution (including the JES execution job logs) and provide this to Technical Support as part of the problem documentation.

---

**CKM18231W**  DSN=<dataset> not selected for processing.

**Explanation:**
Local system security definitions prevent actions by the ALTER BCS-BACK-POINTERS command for the specific dataset name.

**User response:**
Contact the installation security administrator if this is unexpected.

---

**CKM18232W**  Volume <volser> not Authorized for Update Processing.

**Explanation:**
Local system security definitions prevent update actions by the ALTER BCS-BACK-POINTERS command to the specific volume serial. Processing continues for this volume in Simulate mode, only.

**User response:**
Contact the installation security administrator if this is unexpected.

---

**CKM18233W**  Volume <volser> not selected for processing.

**Explanation:**
Local system security definitions prevent actions by the ALTER BCS-BACK-POINTERS command for the specific volume serial.

**User response:**
Contact the installation security administrator if this is unexpected.
Contact the installation security administrator if this unexpected.

**CKM18234E** Command-Level Security Authorization Failure.

**Explanation:**
Local system security definitions have denied the availability of the ALTER BCS-BACK-POINTERS command.

**User response:**
Contact the installation security administrator if this unexpected.

**CKM18235E** SMS Subsystem Call Error - Code=xxxxxx

**Explanation:**
During ALTER processing, an unexpected result from the SMS Subsystem was received. This message is immediately followed by more specific details on the nature of the situation, and processing terminates. The value for CODE= is relevant only for Technical Support’s reference.

**User response:**
Report this message to Technical Support. Save all spooled output from this execution (including the JES execution job logs) and provide this to Technical Support as part of the problem documentation.

**CKM18236E** Internal Logic Error - Code=xxxxxx

**Explanation:**
During ALTER processing, an unexpected internal condition was detected. This message is immediately followed by more specific details on the nature of the situation, and processing terminates. The value for CODE= is relevant only for Technical Support’s reference.

**User response:**
Report this message to Technical Support. Save all spooled output from this execution (including the JES execution job logs) and provide this to Technical Support as part of the problem documentation.

**CKM18237W** Error processing Volume xxxxxx - Code=xxxxxx

**Explanation:**
During ALTER processing, an unexpected error was encountered on a Volume. This message is immediately followed by more specific details on the nature of the situation, and processing continues. The value for CODE= is relevant only for Technical Support’s reference.

**User response:**
Correct the length of the keyword’s operand.

**CKM18238W** Error processing VVR/NVR - Code=xxxxxx

**Explanation:**
During ALTER processing, an unexpected error was found within a VVR or NVR in the VVDS. This message is immediately followed by more specific details on the nature of the situation, and processing continues. The value for CODE= is relevant only for Technical Support’s reference.

**User response:**
Report this message to Technical Support. Save all spooled output from this execution (including the JES execution job logs) and provide this to Technical Support as part of the problem documentation.

**CKM18239W** Catalog Management Error - Code=xxxxxx

**Explanation:**
During ALTER processing, an unexpected error resulted from a Catalog Management Call. This message is immediately followed by more specific details on the nature of the situation, and processing continues. The value for CODE= is relevant only for Technical Support’s reference.

**User response:**
Report this message to Technical Support. Save all spooled output from this execution (including the JES execution job logs) and provide this to Technical Support as part of the problem documentation.

**CKM18270E** KEYWORD: keyword MAXIMUM LENGTH: nnn EXCEEDED

**Explanation:**
The operand entered for a keyword exceeded the maximum length allowed for the operand. nnn is the maximum allowed length for the keyword. Processing terminates.

**User response:**
Correct the length of the keyword’s operand.

**CKM18271E** KEYWORD HAS MORE THAN 1 OPERAND; ONLY 1 ALLOWED:

**Explanation:**
Multiple operands were detected for a keyword; only
one operand is permitted. Processing terminates.

**User response:**
Correct the keyword to use one operand.

---

**CKM18272E**  
**REQUIRED KEYWORD MISSING:**  
keyword

**Explanation:**
A keyword required for ALTER BCS-BACKPOINTERS processing has been omitted. Processing terminates.

**User response:**
Specify the required keyword.

---

**CKM18273E**  
**NOTHING SPECIFIED FOR KEYWORD:**  
keyword

**Explanation:**
A keyword was entered without an appropriate operand. Processing terminates.

**User response:**
Specify an appropriate operand for the keyword.

---

**CKM18276I**  
**OPTION IN EFFECT:**  
option

**Explanation:**
ALTER BCS-BACKPOINTERS processing message.

**User response:**
None.

---

**CKM18278E**  
**INVALID VALUE IN KEYWORD:**  
keyword  
VALUE: value  
error

**Explanation:**
The value in the keyword is invalid. 'error' indicates the problem detected with the value. Processing terminates.

**User response:**
Correct the value's specification.

---

**CKM18280W**  
**UNREFERENCED DSNS/MASKS FOR KEYWORD:**  
keyword

**Explanation:**
During ALTER BCS-BACK-POINTERs processing, certain names and/or masks that were specified by the keyword were not matched during the filtering process. Processing Continues.

**User response:**
None.

---

**CKM18281I**  
**THE FOLLOWING VOLSERS ARE ELIGIBLE:**  
list of volsers

**Explanation:**
The listed volsers will be used by ALTER BCS-BACKPOINTERS processing. Processing continues.

**User response:**
None.

---

**CKM18285E**  
**UCBSCAN ERROR; RETURN CODE=nn  
REASON CODE=nn**

**Explanation:**
An error occurred during UCBSCAN processing. Processing terminates.

**User response:**
Contact Technical Support. Have available the listing containing this message.

---

**CKM18287E**  
**NO STORAGE GROUPS RETURNED BY SSI**

**Explanation:**
SSI did not return any storage groups to CKM01SMF. Processing terminates.

**User response:**
Check that storage groups are defined on the system. If unable to determine the cause of this message, contact Technical Support. Have available the listing containing this message.

---

**CKM18289E**  
**NO VOLUME SERIALS HAVE BEEN SELECTED**

**Explanation:**
No volume serials have been found for ALTER BCS-BACKPOINTERS to process. Processing terminates.

**User response:**
Check if eligible volume serials have been removed by
the use of EXCLUDEVOLSER and/or EXCLUDESTORAGEGROUP.

**CKM18290E**  THE "REMOVE" OPTION REQUIRES "OLD-BCS(ALL)" TO BE SPECIFIED.

**Explanation:**
The REMOVE function is mutually exclusive with the OLD-BCS(old.ucat) and NEW-BCS(new.ucat) options.

**User response:**
Specify OLD-BCS(ALL) or remove the REMOVE keyword.

**CKM18291W**  Note: NEW-BCS(bcs.name) Not Found on System(sysname).

**Explanation:**
The Back Pointer will be set to a BCS name that is unknown to the current system. This may or may not be a problem, depending upon your scenario of intent. Processing Continues.

**User response:**
If the NEW-BCS name had been unintentionally entered incorrectly, appropriate actions may be necessary to undo or correct the updated VVDS entries if SIMULATE was not specified.

**CKM18300I**  ALTER BCS-DEVICETYPE Maintenance Level: CKM00183/REV=nn

**Explanation:**
Informational message giving the current revision number of the specific program.

**User response:**
None required. In the event of a problem, Technical Support may request the revision number.

**CKM18301E** allocation failed for datasetname

**Explanation:**
Dynamic allocation for a dataset failed, or, dynamic deallocation for a ddname failed. The associated OS/390 messages are displayed. For an allocation failure, processing is terminated. For a deallocation failure, processing continues.

**User response:**
If unable to determine the reason for the failure from the associated OS/390 messages, contact Technical Support. Have available the listing containing these messages.

**CKM18302W**  BCS=bcs on VOL=volser is Inaccessible from System(sysname).

**Explanation:**
An alternate Master Catalog was specified for the MASTER-CATALOG keyword, and the selected BCS not accessible from the current operating system. Additional information immediately follows this message. The BCS is excluded from processing.

**User response:**
To allow this BCS to be processed from the current system, the IDCAMS IMPORT CONNECT command can be used.

**CKM18303E** Error accessing MCAT=alt.master.cat - Code=xxxxxx

**Explanation:**
The alternate Master Catalog specified in the MASTER-CATALOG keyword was not accessible from the current system. Additional information immediately follows this message. Processing terminates.

**User response:**
Ensure that the catalog name specified in the MASTER-CATALOG keyword is correct, and that it is accessible from the current system.

**CKM18304E** Error accessing BCS=bcs datasetname - Code=xxxxxx

**Explanation:**
A VSAM error occurred accessing the specified catalog. Processing terminates.

**User response:**
See associated MSC341nnE error messages. If unable to resolve problem, contact Technical Support. Have available the listing that contains these messages.
CKM18305I DD=ddname allocated for DSN=datasetname

Explanation:
'ddname' has been dynamically allocated for the specified dataset.

User response:
None.

CKM18307I Total number of BCS records affected: nnnnnnn

Explanation:
ALTER BCS-DEVICETYPE termination message. nnnnnnn is the number of BCS records that were changed.

User response:
None.

CKM18307I Total number of BCS records affected: nnnnnnn

Explanation:
ALTER BCS-DEVICETYPE termination message. nnnnnnn is the number of BCS records that were changed.

User response:
None.

CKM18307I Total number of BCS records affected: nnnnnnn

Explanation:
ALTER BCS-DEVICETYPE termination message. nnnnnnn is the number of BCS records that were changed.

User response:
None.

CKM18308I Processing entries for BCS: bcs datasetname ** Simulated **

Explanation:
ALTER BCS-DEVICETYPE information message. If PRINT(KEY) or PRINT(DATA) is in effect, the entries for the BCS follow this message. Processing continues.

User response:
None.

CKM18309E Error calling IGGCSI00 - RC=xx - Code=xxxxxx

Explanation:
An error occurred while invoking the module IGGCSI00. The value for CODE= is relevant only for Technical Support’s reference.

User response:
Report this message to Technical Support. Save all spooled output from this execution (including the JES execution job logs) and provide this to Technical Support as part of the problem documentation.

CKM18311I Number of BCS records changed: nnnnnnn

Explanation:
Indicates the number of records changed in the BCS. Processing continues.

User response:
None.

CKM18312I No changes required for BCS

Explanation:
No entries were found in the current BCS that required a change from olddevicetype to newdevicetype. Processing continues.

User response:
None.
CKM18313I  >SIMULATED VOL(volser) Update for DSN=dataset.name

Explanation:
Informational. This describes what was or will be updated in a volume cell for the Dataset. Processing continues.

User response:
None.

CKM18313I  >SIMULATED VOL(volser) Update for DSN=dataset.name

Explanation:
Informational. This describes what was or will be updated in a volume cell for the Dataset. Processing continues.

User response:
None.

CKM18314I  Proposed Image of Record in BCS=catalog.name

Explanation:
Informational. PRINT(DATA) was specified, and the contents of the BCS record after-image is displayed. Processing continues.

User response:
None.

CKM18314I  Proposed Image of Record in BCS=catalog.name

Explanation:
Informational. PRINT(DATA) was specified, and the contents of the BCS record after-image is displayed. Processing continues.

User response:
None.

CKM18320E  SMS Subsystem Call Error - Code=xxxxxx

Explanation:
During ALTER processing, an unexpected result from the SMS Subsystem was received. This message is immediately followed by more specific details on the nature of the situation, and processing terminates. The value for CODE= is relevant only for Technical Support's reference.

User response:
Report this message to Technical Support. Save all spooled output from this execution (including the JES execution job logs) and provide this to Technical Support as part of the problem documentation.

CKM18321E  No Storage Group Names Returned from SMS Subsystem.

Explanation:
INCLUDE-STORAGEGROUP and/or EXCLUDE-STORAGEGROUP was specified, and the SMS Subsystem did not have any TYPE(POOL) storage groups defined to it. Processing terminates.

User response:
Check that storage groups are defined on the system. If this a recovery-mode system and SMS is currently running in a minimal state, then STORAGEGROUP cannot be used as a volser filtering criteria.

CKM18322W  No Volume Serials returned for Storage Group: storagegroup

Explanation:
The SMS Subsystem indicated that the storage group does not include any DASD volsers. Processing continues.

User response:
None.

CKM18326E  Maximum Error Limit Reached.

Explanation:
While reading a BCS, a structural error was detected in a BCS record. This message is immediately followed by more specific details on the nature of the situation. When a predetermined error limit threshold for a BCS is reached, then processing terminates. The value for CODE= is relevant only for Technical Support's reference.

User response:
Report this message to Technical Support. Save all spooled output from this execution (including the JES execution job logs) and provide this to Technical Support as part of the problem documentation.

CKM18326W  Logical Error Detected in BCS Record Structure - CODE=xxxxxx

Explanation:
While reading a BCS, a structural error was detected in a BCS record. This message is immediately followed by more specific details on the nature of the situation. When a predetermined error limit threshold for a BCS is reached, then processing terminates. The value for CODE= is relevant only for Technical Support's reference.

User response:
Report this message to Technical Support. Save all spooled output from this execution (including the JES execution job logs) and provide this to Technical Support as part of the problem documentation.

**CKM18327E** Error Calling Table xxxx FUNC=xxx RC=xxx Code=xxxxxx

**Explanation:**
An abnormal and unexpected condition was detected due to a possible logic or resource error. Information provided by this message is meaningful only to Technical Support. Other descriptive information will usually follow immediately after this error message.

**User response:**
Report this problem to Technical Support. Save all spooled output from this execution (including the JES execution job logs) and provide this to Technical Support as part of the problem documentation.

**CKM18336W** BCS-Level Security Authorization Failure.

**Explanation:**
Local system security definitions have denied the ability for ALTER BCS-DEVICETYPE to update the current catalog name. Processing Continues for the current BCS in SIMULATE mode.

**User response:**
Contact the installation security administrator if this unexpected.

**CKM18336W** Internal Logic Error - Code=xxxxxx

**Explanation:**
During ALTER processing, an unexpected internal condition was detected. This message is immediately followed by more specific details on the nature of the situation, and processing terminates. The value for CODE= is relevant only for Technical Support’s reference.

**User response:**
Report this message to Technical Support. Save all spooled output from this execution (including the JES execution job logs) and provide this to Technical Support as part of the problem documentation.

**CKM18337E** SAF Command-Level Security Error - RC=nn.

**Explanation:**
A security violation and/or SAF related error occurred while performing authorization checking for the use of the command ALTER BCS-DEVICETYPE. More specific information will immediately precede this message. Processing Terminates.

**User response:**
If the message indicates RC=8 and the SAF violation condition is not appropriate, then your security administrator should be contacted. If the message indicates RC=12 or higher, then contact Technical Support.

**CKM18338I** Volsers affected by DEVICETYPE Updates:

**Explanation:**
Following this message is a list of all volsers that were affected by this command in at least one BCS Volume Cell.

**User response:**
None. Informational.

**CKM18370E** Keyword: keyword Maximum length: nnn exceeded

**Explanation:**
The argument entered for a keyword exceeded the maximum length allowed for the argument. nnn is the maximum allowed length for the keyword. Processing terminates.

**User response:**
Correct the length of the keyword’s argument.
CKM18371E  Keyword has multiple arguments; only 1 allowed: keyword

Explanation:
Multiple arguments were detected for a keyword; only one argument is permitted. Processing terminates.

User response:
Correct the keyword to use one argument.

CKM18372E  Required keyword missing: keyword

Explanation:
A keyword required for ALTER BCS-DEVICETYPE processing has been omitted. Processing terminates.

User response:
Specify the required keyword.

CKM18373E  Nothing specified for keyword: keyword

Explanation:
A keyword was entered without an appropriate argument. Processing terminates.

User response:
Specify an appropriate argument for the keyword.

CKM18376I  OPTION IN EFFECT: option

Explanation:
ALTER BCS-DEVICETYPE processing message.

User response:
None.

CKM18377E  Invalid devicetype in keyword: keyword

Explanation:
The device type specified is invalid. Processing terminates.

User response:
Correct the device type specification.

CKM18378E  Invalid value in keyword: keyword value: value error

Explanation:
The value in the keyword is invalid. 'error' indicates the problem detected with the value. Processing terminates.

User response:
Correct the value's specification.

CKM18379E  No BCS Catalogs Selected for Processing.

Explanation:
No match was found for the BCS's specified in the INCLUDE-BCS keyword, or, the names/masks specified in EXCLUDE-BCS eliminated the includes. Processing terminates.

User response:
Correct the INCLUDE-BCS and/or EXCLUDE-BCS specification.

CKM18380I  Unreferenced <keyword items=""> follow:

Explanation:
During ALTER BCS-DEVICETYPE processing, certain names and/or masks that were specified by the keyword were not matched during the filtering process. Processing Continues.

User response:
None.

CKM18380W  Unreferenced <keyword items=""> follow:

Explanation:
During ALTER BCS-DEVICETYPE processing, certain names and/or masks that were specified by the keyword were not matched during the filtering process. Processing Continues.

User response:
None.

CKM18381I  The Following Catalogs have been Selected for Processing:

Explanation:
Informational. Immediately following this message is a list of catalog names selected based upon the INCLUDE-BCS and/or the EXCLUDE-BCS keywords.

User response:
None.

CKM18382E  OLDNEW-DEVICETYPE device class = TAPE(X'80')|DASD(X'20')

Explanation:
This message indicates the UCB device type device class for the value entered for the specified keyword.

User response:
No action necessary unless accompanied by message CKM18383E. If accompanied by message CKM18383E,
see ACTION section for message CKM18383E.

CKM18383E Changing DEVICETYPE device class not permitted.

Explanation:
The devicetype device class for NEW-DEVICETYPE value is of a different device class than that specified by OLD-DEVICETYPE. i.e. NEW-DEVICETYPE may be DASD class and OLD-DEVICETYPE TAPE class. This not allowed. See accompanying message CKM18382I.

User response:
The ALTER command is not performed. Change the value in keyword OLD-DEVICETYPE or NEW-DEVICETYPE so that both values specify the same device class - either TAPE or DASD.

CKM18384W NEW-DEVICETYPE restricted to VOLUMES("****") or VOLUMES(&symbl;), &symbl; a system symbol defined in IEASYMxx

Explanation:
The NEW-DEVICETYPE value specified is "'0000" or X'00000000'. This modification will only be done for datasets that have a volume serial of "****" or a system symbolic which begins with "&". System symbolics are defined in the system PARMLIB dataset in member IEASYMxx.

User response:
This a warning message. The ALTER command is processed.

CKM18385E Unsupported device class

Explanation:
The KEYWORD value for OLDNEW-DEVICETYPE, as indicated in message CKM18382I, is not a DASD or TAPE device class.

User response:
The ALTER is not performed. Specify a device type value which is either DASD or TAPE device class.

CKM18386W NEW-DEVICETYPE specifies esoteric devicetype

Explanation:
This a warning message. The keyword value for NEW-DEVICETYPE specifies an ESOTERIC device type rather than a GENERIC device type.

User response:
The ALTER command performs the indicated change. It is not recommended that device types be ESOTERIC device types. Review the specified change to ensure the action is desired.

CKM18387I Keyword verified from table: keyword

Explanation:
This an informational message. The device type value specified is not defined in to the system. However, the value was found in the generic device table list. "kwd" is the affected keyword OLDNEW-DEVICETYPE and its variants.

User response:
No action required. This message may happen when modifying BCS entries on behalf of systems which have devices defined not found on the executing system.

CKM18388E OLD-DEVICETYPE and NEW-DEVICETYPE are equivalent.

Explanation:
The device type criteria will not result in any changes to the BCS volume cells because the DEVT code for OLD and NEW are the same. Processing Terminates.

User response:
None.

CKM18389I xxx-DEVICETYPE(xxxx) is X'xxxxxxxx'

Explanation:
Informational Message. The implied translation of specified value from the OLD-DEVICETYPE or NEW-DEVICETYPE is shown.

User response:
None.

CKM18401I ALTER SYS1-VVDS MAINTENANCE LEVEL: program/REV=level

Explanation:
Informational.

User response:
None.
CKM18406E • CKM18413E

expedite Technical Support's research process while handling problem reports or other assistance requests.

---

** CKM18406E ** INTERNAL PROGRAM LOGIC ERROR - CODE=xxxxxx **

Explanation:
An unexpected internal logic error was detected.

User response:
Contact Technical Support.

---

** CKM18407E ** ERROR CALLING CKM01VV1 tablename FUNCTION: func R15=rc R0=rsn LOC=xxxxxx

Explanation:
An internal error occurred during internal table processing.

User response:
Contact Technical Support.

---

** CKM18408E ** COMMAND ACCESS VIOLATION, PROFILE: ALTER.SYS1-VVDS

Explanation:
A locally defined security product has rejected your request to execute the ALTER SYS1-VVDS program.

User response:
Contact your Security Administrator.

---

** CKM18410E ** ALTER REQUEST WILL NOT BE PROCESSED **

Explanation:
A request to delete or rename a VVDS dataset has been denied.

User response:
Refer to messages following this one for further details regarding the nature of this error.

---

** CKM18411E ** DSN=SYS1.VVDS.Vvolser RESIDES ON VOLUME volser WHICH IS SMS MANAGED. PLEASE USE IDCAMS 'DELETE RECOVERY' INSTEAD OF CATALOG FOR THIS. THIS COMMAND WILL NOT DELETE OR RENAME A VALID VVDS ON SMS VOLUMES.

Explanation:
A request to delete or rename a VVDS dataset has been denied, because the selected VVDS dataset is also the active VVDS for an SMS-Managed Volume.

User response:
Do not use ALTER SYS1-VVDS to perform this task. Instead, follow procedures to recover a VVDS for an SMS-managed volume to avoid permanent loss of data.

---

** CKM18412E ** DSN=SYS1.VVDS.Vxxxxxx ON volser CONTAINS VALID VVR ENTRIES. * "FORCE" OPTION REQUIRED TO ALTER THIS VVDS DATASET *

Explanation:
Volume "xxxxxx" is different from the volser that this VVDS dataset resides on, and recoverable VVR's have been detected within this VVDS which has an incorrect name. If loss of data is acceptable, then the FORCE option can be used to override this warning. Otherwise, ALTER VVDS, in conjunction with BACKUP VVDS and RECOVER VVDS, can be used to reapply these VVR's into the correct VVDS dataset via SMF Forward recovery. After successful forward recovery, the bad VVDS can be deleted without the FORCE option.

User response:
Forward recover the active VVDS for this volume using the SMFILE option, or, use the FORCE option to override the condition.

---

** CKM18413E ** "FORCE" NOT VALID FOR VVDS DATASETS THAT HAVE ALREADY BEEN RENAMED. * REMOVE THE "FORCE" OPTION *

Explanation:
ALTER SYS1-VVDS is willing to delete or rename the indicated VVDS dataset, however, the FORCE option was inappropriately specified. FORCE is only valid when the VVDS dataset is still in its 'SYS1.VVDS.Vvolser' form, and, it contains no recoverable VVR's.

User response:
Remove the FORCE option.
**CKM18414I** ******************** SIMULATE MODE ********************

**Explanation:**
Informational.

**User response:**
None.

**CKM18415I** VVDS DATASET APPROVED FOR DELETE - VOL=volser DSN=dsnname ‘SIMULATE’ IS BYPASSING ACTUAL DELETE ATTEMPT

**Explanation:**
Informational.

**User response:**
None.

**CKM18416E** SIMULATE IS ONLY VALID WITH DELETE OR RENAME.

**Explanation:**
SIMULATE is not supported with SMFILE.

**User response:**
Remove the SIMULATE option when specifying SMFILE.

**CKM18417E** VVDS DATASET ALREADY RENAMED - RENAME REQUEST IS INVALID.

**Explanation:**
The specified VVDS Dataset name was already in the temporary dataset name format for a RENAME request. Renaming a temporary dataset to another temporary dataset name is not supported. Once a SYS1.VVDS.Vvolser dataset has been renamed to a temporary dataset name by ALTER VVDS, it cannot be renamed back to a SYS1.VVDS name because it has been converted into a non-VSAM sequential dataset.

**User response:**
Select an option other than RENAME for this temporary dataset name, such as DELETE.

**CKM18418I** SIMULATED RENAME ON VOL=volser SUCCESSFUL. VVDS ORIGINAL DSN=SYS1.VVDS.Vxxxxxx VVDS RENAMED DSN=SYSyyddd.Thhmmss.RA000.VVDS.Vvolser

**Explanation:**
Informational. The volser included as part of the renamed dataset name represents the original volser that was in effect when the VVDS was initially allocated on the physical device, and does not necessarily reflect the name of the current volser nor the original name of the dataset.

**User response:**
None.

**CKM18419I** &&TEMP; VVDS ATTRIBUTES IN RENAMED STATE IS NOW:

**Explanation:**

1. NOT CATALOGED - NON-VSAM DSORG=PSU
2. SMS WITH MISSING NVR (REQUIRES IDCAMS DELETE NVR)
3. RECFM=F LRECL=4096 BLKSIZE=4096

Informational.

**User response:**
None.

**CKM18420W** WARNING: “FORCE” OVERIDES UNRECOVERED VVR’S

**Explanation:**
Warning Message.

The FORCE option was validly specified with DELETE or RENAME, and, the target VVDS contains entries that have been detected as being recoverable. If this occurs in conjunction with DELETE then loss of data can result. This may or may not be acceptable.

**User response:**
None. Processing continues.

**CKM18421E** REQUIRED KEYWORD MISSING - KEYWORD=keyword

**Explanation:**
A required parameter was omitted in the ALTER SYS1-VVDS command syntax.

**User response:**
Review the command syntax.
A keyword specified multiple values, and only one value is valid for it.

**User response:**
Review the command syntax.

---

**CKM18423E** INVALID OR MASK CHARACTERS IN KEYWORD=keyword

**Explanation:**
A value specified for a keyword contained characters that failed syntax validation.

**User response:**
Review the command syntax.

---

**CKM18425E** VALUE LENGTH EXCEEDED - KEYWORD=keyword

**Explanation:**
A value specified for a keyword exceeded the expected maximum length in characters.

**User response:**
Review the command syntax.

---

**CKM18426E** EITHER DELETE, RENAME, OR SMFFILE(...) MUST BE SPECIFIED.

**Explanation:**
A keyword specifying an action for ALTER SYS1-VVDS was not specified.

**User response:**
Review the command syntax and select an action keyword.

---

**CKM18427E** EITHER OUTFILE OR OUTDATASET MUST BE SPECIFIED WITHIN SMFFILE.

**Explanation:**
The SMFFILE option was specified, but no sub-values were provided that identify the output dataset or file name.

**User response:**
Review the command syntax and provide appropriate subparameters for the SMFFILE keyword.

---

**CKM18430E** OBTAIN F4 DSCB FAILED, VOL=volser, RC=rc

**Explanation:**
An error occurred in DADSM while accessing the VTOC.

**User response:**
If the error appears inconsistent with other environmental events, contact Technical Support.

---

**CKM18431E** DATASET NOT FOUND ON VOLUME volser, DSN=dsname

**Explanation:**
The dataset specified through the DSN/VOLSER combination in the ALTER SYS1-VVDS command was not found.

**User response:**
Review the values specified for DSN and VOLSER.

---

**CKM18432E** OBTAIN F3 DSCB FAILED, VOL=volser, RC=rc, CCHHR=cchhr

**Explanation:**
An error occurred in DADSM while accessing the VTOC.

**User response:**
If the error appears inconsistent with other environmental events, contact Technical Support.

---

**CKM18433E** VOLUME NOT ONLINE TO SYSTEM - VOLSER=volser

**Explanation:**
ALTER SYS1-VVDS tried to locate the UCB for the volser, but could not be found.

**User response:**
Either vary the indicated volser online to the current system, or correct the VOLSER in the command syntax. If the error appears inconsistent with other environmental events, contact Technical Support.

---

**CKM18434E** UCBLOOK FAILED FOR VOLUME volser, ADR=ucb, RC=rc, RSN=rsn

**Explanation:**
ALTER SYS1-VVDS tried to locate and PIN the UCB for the volser, but a failure occurred in IOS services.

**User response:**
Contact Technical Support.

---

**CKM18435E** UCB CAPTURE FAILED FOR VOLUME volser, ADR=ucb, RC=rc, RSN=rsn

**Explanation:**
ALTER SYS1-VVDS tried to Capture the UCB for the volser, but a failure occurred in IOS services.

**User response:**
Contact Technical Support.
CKM18436E  DATASET ON volser IS NOT A VVDS, DSN=dataset

Explanation:
The dataset specified through the DSN/VOLSER combination in the ALTER SYS1-VVDS command failed validation as a VVDS. This could be due to the dataset name, or can be the result of invalid contents within that dataset.

User response:
Review the values specified for DSN and VOLSER.

CKM18438E  SECURITY VIOLATION:
CLASS(DASDVOL) ENTITY(volser)
INTENT(access)

Explanation:
A SAF call was issued to the system’s security product, and access was denied.

User response:
Contact your Security Administration.

CKM18440E  allocation FAILED FOR SMF OUTPUT DSN=dataset

Explanation:
ALTER SYS1-VVDS attempted to dynamically allocate the SMF output file that was specified as a subparameter under the SMFFILE keyword. Dynamic allocation Failed.

User response:
Either pre-allocate and/or catalog the dataset, or, specify a dataset name for SMFFILE(OUTDATASET(dsname)) that already exists.

CKM18441E  SMF OUTPUT DDNAME=ddname NOT FOUND IN JCL.

Explanation:
ALTER SYS1-VVDS attempted to prepare a DCB for OPEN, but the specified DDNAME was not found in the current allocation environment.

User response:
Either provide a DD statement for this DDNAME in the execution JCL, or, specify a DDNAMEt name for an existing allocation in the SMFFILE(OUTFILE(ddname)) parameter in the ALTER SYS1-VVDS command.

CKM18442E  SMF OUTPUT DDNAME=ddname IS AN INVALID DATASET TYPE.

Explanation:
The DDNAME specified via SMFFILE(OUTFILE(ddname)) represents a dataset type that is not a sequential. Datasets must be DSORG=PS, and cannot be partitioned, VSAM, HFS, Sysout, Dummy, etc.

User response:
Ensure the output dataset is a sequential file.

CKM18443E  SMF OUTPUT DATASET NOT FOUND ON VOL=volser, DSN=dataset

Explanation:
The dataset implied via the SMFFILE subparameters resides on a DASD device, but the Format-1 DSCB for it could not be found in the VTOC. This equivalent to a S-213/04 abend at OPEN time.

User response:
Ensure the output DASD dataset physically exists.

CKM18444E  SMF OUTPUT DATASET IS AN INVALID TYPE. DSN=dataset

Explanation:
The dataset specified via SMFFILE(OUTDATASET(dsname)) represents a dataset type that is not a sequential. Datasets must be DSORG=PS, and cannot be partitioned, VSAM, HFS, Sysout, Dummy, etc.

User response:
Ensure the output dataset is a sequential file.

CKM18445E  OPEN FAILED FOR SMF OUTPUT FILE, DDNAME=ddname, DSN=dataset

Explanation:
QSAM OPEN failed for the indicated dataset.

User response:
Examine the SYSLOG and/or job execution listing to identify system messages that describe the error in greater detail.

CKM18446E  SMF DATA WRITTEN TO DDNAME=ddname DSN=dataset SMF TYPE-60 RECORD COUNT=nnnn TIME RANGE FOR ‘SMFDUMP’ FILE:
FROMDATE(yyyyddd)
FROMTIME(hh:mm:ss)
TODATE(yyyyddd) TOTIME(hh:mm:ss)

Explanation:
Informational. The pseudo-SMF dump dataset has been successfully created. The file can be used to forward recover the active VVDS for this volume using a VVDS BACKUP that was created prior to the FROM date and time. The time range can optionally be “screen-scraped” from this output and be provided as command input to
the RECOVER VVDS command.

User response:
None.

CKM18447W WARNING: THE SMF DATA CONTAINS RECORDS THAT WILL REGRESS EXISTING VVRS. nnn DATASETS ON volser WILL BE BACKLEVELED IF SMF IS APPLIED WITH VVDS RECOVERY.

Explanation:
The REPLACE sub-operand was specified within the SMFFILE keyword. This causes all valid VVR entries found in the old VVDS to be written as SMF type-60 records, even if matching entries exist in the current and active VVDS for this volume. The REPLACE option is not recommended and is intentionally omitted from documentation because it can cause permanent damage to the volume if the SMF data is used for VVDS recovery.

User response:
None.

CKM18448W WARNING: RECOVERY OF A VVDS WILL REQUIRE ACCESS(ALTER) TO THE MASTER CATALOG. YOU CURRENTLY HAVE ACCESS(ccccc) TO DATASET(mastercat)

Explanation:
Informational Warning. SMFFILE records have been generated that will enable VVDS forward recovery of the active VVDS for this volume to reclaim the lost VVR's. VVDS recovery requires ALTER access to the current system's master catalog ... something that is not well documented in the manuals. The purpose of this message is to provide advance warning of a restriction that could be somewhat untimely during the recovery procedure.

User response:
None. Processing Continues.

CKM18450I DELETE SUCCESSFUL. DATASET ON volser WAS DSN=&&dataset;

Explanation:
Informational. The dataset was successfully removed from the volume.

User response:
None.

CKM18451E DELETE ATTEMPT FAILED - RC=rc volser DSN=&&dataset;

Explanation:
An error occurred within DADSM while attempting to delete the indicated dataset.

User response:
Contact Technical Support

CKM18452W DELETE ATTEMPT UNSUCCESSFUL - volser DSN=&&dataset;

Explanation:
An error occurred within DADSM while attempting to delete the indicated dataset.

User response:
Contact Technical Support

CKM18453E F1DSCB VALIDATION FAILED. RETRY ALTER COMMAND.

Explanation:
The Format-1 DSCB changed unexpectedly during delete or rename processing. This could be the result of global serialization integrity exposures.

User response:
If there are no known global serialization integrity exposures, contact Technical Support.

CKM18454I F1DSCB UPDATED. VVDS DATASET IS NOW NON-VSAM. NEW DATASET NAME IS: new.dataset.name

Explanation:
Informational. The Format-1 DSCB of the old VVDS dataset has been successfully renamed and converted to Non-VSAM. The Indexed VTOC, if it exists, has also been successfully updated to reflect the name change.

User response:
None.

CKM18455E SUBTASK IDENTIFY FAILED RC=rc

Explanation:
Internal Program Error.

User response:
Contact Technical Support
CKM18456W SECURITY ACCESS ERROR. RC=rc
RSN=rsn
Explanation:
Internal Program Error.
User response:
Contact Technical Support

CKM18457E SUBTASK ATTACH FAILED, ... reason
text ...
Explanation:
Internal Program Error.
User response:
Contact Technical Support

CKM18458E SYSDSN ENQ UNAVAILABLE FOR
DSN=dataset
Explanation:
A delete or rename of a VVDS dataset was requested,
but another task has the dataset allocated.
User response:
Determine who has the dataset allocated. Retry the
request when the dataset becomes available.

CKM18459W SCRATCH DIAGNOSTICS: RC=rc
STAT=stat DIAG=(diagcode)
Explanation:
An error occurred within DADSM during the scratch of a
dataset on a non-SMS managed volume.
User response:
Contact Technical Support.

CKM18460W EXCP ERROR ON VOLUME volser
OCCURRED ... text ...
Explanation:
An I/O error occurred during EXCP processing. This
may or may not be critical, depending upon other
messages that are present.
User response:
Refer to other messages associated with this error.

CKM18461W BLOCK ADDRESS - CCHHR=cc.hh.r
BLOCK-LEN=nnn ACTUAL-LEN=nnn
Explanation:
An I/O error occurred during EXCP processing. This
may or may not be critical, depending upon other
messages that are present.

CKM18462I IOS000I ... text ...
Explanation:
An I/O error occurred during EXCP processing. This
may or may not be critical, depending upon other
messages that are present.
User response:
Refer to other messages associated with this error.

CKM18463W VVDS FAILED VALIDATION -
VOL=volser DSN=vvds.dataset INVALID
block-name AT RBA=rba
CCHHR=cc.hh.r
Explanation:
An I/O error occurred while analyzing the VVDS
dataset. The error prevents further processing.
User response:
None. The VVDS dataset is invalid and unreadable.

CKM18464W UNEXPECTED END OF VVCM CHAIN
IN VVDS FOR VOL=volser DSN=dsn
Explanation:
Informational Warning. The VVDS dataset contains
some structural damage which does not necessarily
prevent processing from continuing.
User response:
None. Processing Continues the best it can.

CKM18465I ** VVDS IS EMPTY, OR CONTAINS NO
VALID VVR ENTRIES **
Explanation:
Informational. There are no recoverable VVR’s in this
VVDS. Any information in this VVDS, if it exists, either
does not represent datasets residing on the current
volume, or, more current VVR’s exist for the same
datasets in the active and valid VVDS for this volume.
This means that the VVDS can be deleted without the
FORCE option, and without causing loss of data.
User response:
None.

CKM18466W ** DATASET IS NOT PROCESSABLE
AS A VVDS **
Explanation:
Various errors and/or validation failures have rendered
this dataset to be not processable as a VVDS. It is
possible that the tracks have been overwritten by another file.

User response:
None. The VVDS dataset is invalid.

Explanation:
Informational. This message precedes a detail listing of all VVR's in the targeted VVDS dataset, along with their status from analysis.

User response:
None.

CKM18470E CVAF ERROR - RC=rc STAT=stat - text ..

Explanation:
An unexpected error occurred during CVAF processing.

User response:
Contact Technical Support

CKM18471E IDCAMS FAILED RC=rc WHILE ISSUING DELETE NVR

Explanation:
A delete request to a temporary dataset on an SMS-Managed volume was unsuccessful. There may also be associated messages such as IDC3009I appearing with this message.

User response:
Contact Technical Support

CKM18505E ** xxxxxxx REQUEST NOT EXECUTED **

Explanation:
Processing of a SCRATCH, NEW-NAME, or SYNC-NVR request terminated due to errors.

User response:
Review messages appearing prior to this message for the specific reasons for the command termination.

CKM18506D INTERNAL LOGIC ERROR - <text>

Explanation:
Processing of a SCRATCH, NEW-NAME, or SYNC-NVR request terminated due to errors.

User response:
Contact Technical Support. Have the full sysout listing available, including the joblog.

CKM18507E ERROR calling CKM00327 - <text>

Explanation:
A program logic error was detected while managing internal table data.

User response:
Contact Technical Support. Have the full sysout listing available, including the joblog.

CKM18508E COMMAND ACCESS VIOLATION, PROFILE: ALTER.NONVSAM

Explanation:
A locally defined security product has rejected your request to execute the ALTER NONVSAM program.

User response:
Contact your Security Administrator.

CKM18510I ALTER NONVSAM INITIAL DATASET STATUS:

Explanation:
A series of messages follow that describe the details of the dataset specified by the DATASET and VOLSER keywords. This listing can be suppressed using the NOLIST keyword.

User response:
None.

CKM18511I ALTER NONVSAM MAINTENANCE LEVEL:

Explanation:
Informational. Indicates the current version of the ALTER NONVSAM program.

User response:
None.

CKM18512I THE FOLLOWING INFORMATION WILL BE USED FOR THE UPDATED NVR:

Explanation:
Informational. An NVR is being changed and/or renamed. A series of messages follow that describe the attributes of the proposed NVR before it is written to the VVDS. This listing can be suppressed using the NOLIST keyword.

User response:
None.
CKM18513E - token-name VALUE INVALID: value
Explanation:
The indicated parameter value is invalid. Processing Terminates.
User response:
correct the value specified in the token.

CKM18513E - token-name VALUE INVALID: value
Explanation:
The indicated parameter value is invalid. Processing Terminates.
User response:
correct the value specified in the token.

CKM18520I >> SIMULATE OPTION IN EFFECT <<
CKM18520I >> EXECUTE OPTION IN EFFECT <<
Explanation:
Informational. In Simulate mode, ALTER NONVSAM will run through all logic, but will not update the volume. EXECUTE mode will proceed with updating the volume if no critical errors have been detected.
User response:
None.

CKM18521E REQUIRED KEYWORD MISSING - KEYWORD=keyword
Explanation:
A required keyword of the ALTER NONVSAM command was not specified.
User response:
Review the syntax of keyword values on the ALTER NONVSAM command.

CKM18522E ONLY SINGLE VALUE SUPPORTED FOR KEYWORD=keyword
Explanation:
A keyword parameter specified multiple values, but only one value is allowed.
User response:
Review the syntax of keyword values on the ALTER NONVSAM command.

CKM18523E INVALID OR MASK CHARACTERS IN KEYWORD=keyword
Explanation:
A keyword parameter contained invalid characters, was syntactically incorrect, or contained mask characters.
User response:
Review the syntax of keyword values on the ALTER NONVSAM command.

CKM18525E VALUE LENGTH EXCEEDED - KEYWORD=keyword
Explanation:
A keyword value exceeded the maximum length.
User response:
Review the syntax of keyword values on the ALTER NONVSAM command.

CKM18526W LISTONLY OPTION IN EFFECT. SCRATCH, NEW-NAME, OR SYNC-NVR WAS NOT SPECIFIED.
Explanation:
Neither SCRATCH, NEW-NAME, SYNC-NVR, nor LIST-ONLY were specified as part of the ALTER NONVSAM command. The assumed default is LIST-ONLY, which does not cause any update actions to take place.
User response:
Review the syntax of keyword values on the ALTER NONVSAM command.

CKM18527E THE OLD NAME AND NEW NAME ARE IDENTICAL - RENAME REQUEST REJECTED.
Explanation:
An illogical RENAME request was encountered.
User response:
Review the syntax of keyword values on the ALTER NONVSAM command.

CKM18528W SMS/NVR RELATED KEYWORDS DISREGARDED. ...
Explanation:
Keywords relating to the content of new values in the NVR were specified. However, the end result of the command would not leave an NVR in the VVDS for the given DATASET and VOLSER. Processing continues.
User response:
Review the syntax of keyword values on the ALTER NONVSAM command.

**CKM18528W SMS/NVR RELATED KEYWORDS DISREGARDED.**...

**Explanation:**
Keywords relating to the content of new values in the NVR were specified. However, the end result of the command would not leave an NVR in the VVDS for the given DATASET and VOLSER. Processing continues.

**User response:**
Review the syntax of keyword values on the ALTER NONVSAM command.

**CKM18530I SYSDSN ENQ BYPASS IS IN EFFECT.**

**Explanation:**
Informational. The NOENQ parameter was specified or was defaulted to. The ENQ bypass for SYSDSN was successful for this dataset.

**User response:**
None.

**CKM18531E SUBTASK IDENTIFY FAILED RC=X’rc’**

**Explanation:**
An internal programming error occurred.

**User response:**
Contact Technical Support

**CKM18532E SUBTASK ATTACH FAILED, --reason--**

**Explanation:**
An internal programming error occurred.

**User response:**
Contact Technical Support

**CKM18533E VOLUME NOT ONLINE TO SYSTEM - VOLSER=volser**

**Explanation:**
The requested volser was not online to the current operating system.

**User response:**
Vary the required volume online to the system, or correct the volser in the ALTER NONVSAM command.

**CKM18534E UCBLOOK FAILED FOR VOLUME volser,RC=X’rc’,RSN=X’rsn’**

**Explanation:**
An internal programming error occurred.

**User response:**
Contact Technical Support

**CKM18535E DATASET ON volser IS A VSAM COMPONENT, DSN=dataset.name**

**Explanation:**
ALTER NONVSAM cannot be used to Scratch or Rename datasets that are VSAM Components. Instead, IDCAMS should be used to delete the VVR along with the VTOC entry.

**User response:**
Use IDCAMS DELETE VVR.

**CKM18536E THE NEW-STORAGECLASS KEYWORD IS REQUIRED FOR THIS DATASET.**

**Explanation:**
ALTER NONVSAM was unable to determine the Storage Class name to use for a new NVR, and the DSCB for this dataset indicates VOLSEQ=1 for an SMS-Managed Volume. By definition, SMS Managed datasets must have a valid Storage Class value. Processing terminates.

**User response:**
Provide a valid storage class using the NEW-STORAGECLASS keyword, or, review and modify the SMS ACS routine that assigns storage classes to datasets.

**CKM18537E ** DEQ SVC INTERCEPT UNSUCCESSFUL **

**Explanation:**
An internal programming error occurred.

**User response:**
Contact Technical Support
** DEQ SVC INTERCEPT UNSUCCESSFUL **

Explanation:
An internal programming error occurred.

User response:
Contact Technical Support

UCB CAPTURE FAILED FOR VOLUME volser, ADR=ucb, RC=rc, RSN=rsn

Explanation:
ALTER NOVSAM tried to Capture the UCB for the volser, but a failure occurred in IOS services.

User response:
Contact Technical Support.

Dataset Rename Simulated on volume vvvvv

Explanation:
Informational.

User response:
None.

RENAM ATTEMPT FAILED. RC=rc OLD-DSN=dataset.name

Explanation:
An internal programming error occurred. The rename of the dataset did not occur.

User response:
Contact Technical Support

KEYWORD NEW-STORCLAS(storclas) NOT AUTHORIZED. KEYWORD NEW-MGMTCLAS(mgmtclas) NOT AUTHORIZED.

Explanation:
The local Installation Security has failed the request to change the SMS Construct Name for this Dataset.

User response:

DATASET NOT FOUND ON VOLUME volser, DSN=dataset.name

Explanation:
The requested dataset was not found on the volume.

User response:
Correct the dataset name in the ALTER NONVSAM command. If the dataset name and the volume are correct, then ensure that the dataset actually exists on the volume indicated.

DUPLICATE DATASET ON VOLUME volser, NEW-NAME=dataset.name

Explanation:
A rename operation was requested, but the another dataset already exists on the indicated volume by the name that was specified as the new name.

User response:
Correct the dataset name(s) in the ALTER NONVSAM command. If the dataset names and the volume are correct, then verify that the dataset actually exists on the volume indicated.

SYSDSN ENQ CONFLICT FOR DSN=dataset.name

Explanation:
The ENQ option was in effect for the requested function, and another task within the complex has allocated a dataset by the same name. This may or may not be the same physical dataset residing on the requested volume.

User response:
Verify that the dataset in use is not the same one that physically exists on the specified volume. Then rerun using the NOENQ option.

SECURITY ACCESS ERROR. RC=rc RSN=rsn

Explanation:
A system security product such as RACF has denied access to scratching or renaming the dataset.

User response:
Contact your Security Administrator.
CKM18547E  VTOC READ ERROR - RC=nn volser
DSN=data.set.name
Explanation:
A DADSM error occurred while attempting to read the Format-1 DSCB for the indicated Dataset.
User response:
Contact Technical Support. Have the full sysout listing available, including the joblog.

CKM18549E  RENAME DIAGNOSTICS: --diagnostic information --
Explanation:
An internal programming error occurred.
User response:
Contact Technical Support

CKM18550I  SCRATCH SIMULATED FOR DSN=data.set.name ON VOL=volser
Explanation:
Informational.
User response:
None.

CKM18551E  SCRATCH ATTEMPT FAILED. RC=rc DSN=dataset.name
Explanation:
An internal programming error occurred. The scratch of the dataset did not occur.
User response:
Contact Technical Support

CKM18552E  SCRATCH ATTEMPT UNSUCCESSFUL. DSN=dataset.name
Explanation:
A request to scratch an existing dataset did not work. More messages describing the nature of the problem follow. The scratch of the dataset did not occur.
User response:

CKM18553E  DATASET NOT FOUND ON VOLUME volser, DSN=dataset.name
Explanation:
The requested dataset was not found on the volume.
User response:
Correct the dataset name in the ALTER NONVSAM command. If the dataset name and the volume are correct, then ensure that the dataset actually exists on the volume indicated.

CKM18559E  SCRATCH DIAGNOSTICS: --diagnostic information --
Explanation:
An internal programming error occurred.
User response:
Contact Technical Support

CKM18560E  SMS NON-VSAM COMPONENT <dsn> ON <vol> IS CATALOGED.
Explanation:
The request to scratch or rename a Non-VSAM SMS managed component that appears to be validly cataloged in a BCS is denied. The capability to perform this function can be enabled through granting access to the security profile 'STGADMIN.IGG.DELNVR.NOBCSCHK' in the FACILITY class.
User response:
Contact your Security Administrator, or Technical Support.

CKM18561E  VVDS allocation FAILED FOR VOL=volser
Explanation:
An internal programming error occurred.
User response:
Contact Technical Support

CKM18562I  IDCAMS INVOKED TO SCRATCH DSN=data.set ON VOL volser.
Explanation:
Informational.
User response:
None.
CKM18563E  IDCAMS RETURN-CODE IS nn

Explanation:
Informational. If the return-code is non-zero, refer to the prior messages for details of the error.

User response:
None.

CKM18563I  IDCAMS RETURN-CODE IS 0

Explanation:
Informational. If the return-code is non-zero, refer to the prior messages for details of the error.

User response:
None.

CKM18564E  CVAF ERROR ACCESSING VOLUME <vol> - RC=nn CVSTAT=nn

Explanation:
An error occurred during DADSM processing.

User response:
Contact Technical Support

CKM18565E  CATALOG MANAGEMENT ERROR ACCESSING THE VVDS ON VOLUME volser

Explanation:
An error occurred during VVDS processing.

User response:
Contact Technical Support

CKM18566E  DEFAULT NVR CANNOT BE BUILT FOR STRIPED NON-VSAM DATASETS

Explanation:
The dataset being processed was missing an NVR, and flags in the Format-1 DSCB indicate that there are special SMS attributes that are defined in the NVR. For certain extended attributes, the dataset might be still functional with a default NVR, depending upon the nature of the unknown information.

User response:
The dataset may require recovery.

CKM18566E  DEFAULT NVR CANNOT RECOVER NONVSAM EXTENDED ATTRIBUTES

Explanation:
The dataset being processed was missing an NVR, and flags in the Format-1 DSCB indicate that there are special SMS attributes that are defined in the NVR. For certain extended attributes, the dataset might be still functional with a default NVR, depending upon the nature of the unknown information.

User response:
The dataset may require recovery.

CKM18567I  VVDS UPDATES FOR NVR RENAME PROCESSING:

Explanation:
Informational. Specific detail messages follow.

User response:
None.

CKM18567I  VVDS UPDATES FOR NVR RENAME PROCESSING:

Explanation:
Informational. Specific detail messages follow.

User response:
None.

CKM18567I  VVDS UPDATES FOR NVR RENAME PROCESSING:

Explanation:
Informational. Specific detail messages follow.

User response:
None.

CKM18567I  VVDS UPDATES FOR NVR RENAME PROCESSING:

Explanation:
Informational. Specific detail messages follow.

User response:
None.

CKM18568W  VVDS UPDATE NOT REQUIRED.

Explanation:
An NVR synchronization request found that all VVDS and VTOC components for this dataset were correct, and no modifications to the volume were required.

User response:
CKM22000E  CKM22109W

None.

**CKM22000E**  

**ModuleName**  

**Explanation:**

The module corresponding to GENERATE command does not appear to be in the load module libraries.

**User response:**

Via IEHLIST, AMBLIST, ISPF, or some other installation utility, prepare a listing of the load module library directory and Contact Technical Support.

---

**CKM22002E**  

**ModuleName**  

**Explanation:**

The GENERATE command is not in the supported list of subcommands.

**User response:**

Ensure that the subcommand of GENERATE is specified correctly.

---

**CKM22003E**  

**ModuleName**  

**Explanation:**

The GENERATE command had no operands.

**User response:**

Ensure that the subcommand of GENERATE is specified correctly. Most likely, the command was continued on a second line but the continuation marker was not present.

---

**CKM22009I**  

**ModuleName**  

**Explanation:**

Command execution termination message.

For return code 90

Your product code and/or license for the product valid or you are not licensed for this command.

**User response:**

Generally none.

For return code 90 - Contact Technical Support.

---

**CKM22100I**  

**ModuleName**  

**Explanation:**

Informational.

---

**CKM22107E**  

**ModuleName**  

**Explanation:**

An internal logic error occurred within the GENERATE BCS-UNLOAD program.

**User response:**

Contact Technical Support.

---

**CKM22108E**  

**ModuleName**  

**Explanation:**

A locally defined security product has rejected your request to execute the BCS-UNLOAD program.

**User response:**

Contact your Security Administrator.

---

**CKM22109I**  

**ModuleName**  

**Explanation:**

An error occurred in Catalog Management Services. The return-code and reason-code will usually correspond with those of the IDC3009I message that is documented in the messages manuals.

**User response:**

If unable to determine the nature of the problem, or if the problem appears to be incorrectly handled, contact Technical Support.

---

**CKM22109W**  

**ModuleName**  

**Explanation:**

An error occurred in Catalog Management Services. The return-code and reason-code will usually correspond with those of the IDC3009I message that is documented in the messages manuals.

**User response:**

If unable to determine the nature of the problem, or if the problem appears to be incorrectly handled, contact Technical Support.
CKM22110I  hh.mm.ss GENERATE BCS-UNLOAD
EXECUTION ENDING

Explanation:
Informational.

User response:
None.

CKM22111I  BCS RECORD TYPE SUMMARY:

Explanation:
Informational. This presents a list of all catalog entry
types handled by the GENERATE BCS-UNLOAD command. Each type is summarized by the number of
entries considered, the number excluded due to DSN or VOLSER filtering, and the number generated in the
output file.

User response:
None.

CKM22113I  TOTAL OUTPUT ENTRIES
GENERATED: nnnnnnn

Explanation:
Informational. The number represents a count of
IDCAMS commands generated.

User response:
None.

CKM22114I  TOTAL OUTPUT LINES GENERATED:
nnnnnnnn

Explanation:
Informational. The number represents a count of
IDCAMS statements generated.

User response:
None.

CKM22115W  NO OUTPUT LINES GENERATED.

Explanation:
Based upon the values specified on the GENERATE
BCS-UNLOAD command, no IDCAMS commands were
generated to the output file.

User response:
If this result was unexpected, review the choice of
keyword values on the GENERATE BCS-UNLOAD
class.

CKM22116W  THE FOLLOWING CRITERIA DID NOT
MATCH ANY ENTRIES FROM THE BCS:

Explanation:
A list of filtering keywords and values are displayed that
did not affect processing.

User response:
If this result was unexpected, review the choice of
keyword values on the GENERATE BCS-UNLOAD
class.

CKM22120E  RELATIVE-GENERATIONS requires that
GDS be selected

Explanation:
The keyword RELATIVE-GENERATIONS permits a
subset of the GDS for eligible GDGs to be processed.
Therefore it is not applicable when GDS are not
explicitly or implicitly requested.

User response:
Either remove the RELATIVE-GENERATIONS keyword
or change the INCLUDE-TYPE and EXCLUDE-TYPE so
that GDS are requested.

CKM22121E  REQUIRED KEYWORD MISSING -
KEYWORD=xxxxxxxx

Explanation:
A required keyword of the GENERATE BCS-UNLOAD
class was not specified.

User response:
Review the syntax of keyword values on the
GENERATE BCS-UNLOAD command.

CKM22122E  ONLY SINGLE VALUE SUPPORTED
FOR KEYWORD=xxxxxxx

Explanation:
A keyword parameter specified multiple values, but only
one value is allowed.

User response:
Review the syntax of keyword values on the
GENERATE BCS-UNLOAD command.
CKM22123E  MASK CHARACTERS NOT SUPPORTED FOR
  KEYWORD=xxxxxxx

Explanation:
A keyword parameter contained mask characters, and mask characters are not allowed for this particular keyword.

User response:
Review the syntax of keyword values on the GENERATE BCS-UNLOAD command.

CKM22124I  Default in effect: xxxxxxxxxxx

Explanation:
An informational message indicating that neither the specific keyword nor any alternative was not coded on the command. So the default for that option was to be used in processing.

User response:
None, unless the default is not the option required.

CKM22125E  INCONSISTENT USE OF PARENTHESSES - KEYWORD=xxxxxxx

Explanation:
Subparameter nesting levels were exceeded for this keyword.

User response:
Review the syntax of keyword values on the GENERATE BCS-UNLOAD command.

CKM22126E  EXCESSIVE PARAMETERS IN SUBFIELD GROUP - KEYWORD=xxxxxxx

Explanation:
The number of positional subparameters exceeded that which is allowed for this keyword.

User response:
Review the syntax of keyword values on the GENERATE BCS-UNLOAD command.

CKM22127E  ERROR CALLING CKM01VV1 tablename FUNCTION: func R15=rc R0=rsn LOC=xxxxxx

Explanation:
An internal error occurred during internal table processing.

User response:
Contact Technical Support.

CKM22128E  INVALID PARAMETER - KEYWORD=xxxx

Explanation:
A command keyword contained one or more parameters that caused a syntax error.

User response:
Review the syntax of keyword values on the GENERATE BCS-UNLOAD command.

CKM22129W  DUPLICATE SPECIFICATION - KEYWORD=xxxx

Explanation:
A command keyword subparameter was specified multiple times.

User response:
Review the syntax of keyword values on the GENERATE BCS-UNLOAD command.

CKM22130E  DDNAME NOT FOUND IN JCL allocation - KEYWORD=xxxx

Explanation:
OUTFILE was specified, but the DDNAME was not allocated to the current task.

User response:
Ensure that the specified DDNAME matches the desired DDNAME in the JCL.

CKM22131E  DATASET allocation UNSUCCESSFUL - KEYWORD=xxxx

Explanation:
Dynamic allocation failed for the dataset specified by the identified keyword.

User response:
Ensure that the specified dataset name is correct, and is available for dynamic allocation.

CKM22132E  DATASET NOT ON VOLUME - VOL=volser DSN=dataset.name

Explanation:
The dataset name specified via the OUTDATASET or OUTFILE keywords could not be found on the VTOC of the VOLSER. This condition would normally cause a S-213-04 abend.

User response:
Check the health of the cataloged dataset name identified by this message.
Chapter 25. Messages and Codes for Advanced Catalog Management

CKM22133W MEMBER NAME FOR SEQUENTIAL DATASET IGNORED. M=member DSN=dataset.name

**Explanation:**
The dataset name specified via the OUTDATASET specified a PDS member name, or, the OUTFILE keyword or the corresponding DD statement in the JCL specified a PDS member name, and, the dataset is not a PDS or PDSE.

**User response:**
Remove the member name specification, or re-allocate the sequential dataset as a PDS or PDSE.

CKM22134W DEFAULT MEMBER NAME FOR PDS DATASET ASSIGNED. M=member DSN=dataset.name

**Explanation:**
The dataset name specified via the OUTDATASET specified a PDS, or the OUTFILE keyword or the corresponding DD statement in the JCL specified a PDS, and no member name was specified.

**User response:**
Either specify a member name on the OUTDATASET/OUTFILE keyword, or, if using the OUTFILE keyword, via the DD statement. Rename TEMPNAME in the PDS to the required name.

CKM22135E ERROR ACCESSING BCS=catalog.name LOC=xxxxx

**Explanation:**
An error occurred while attempting to read the BCS dataset.

**User response:**
The catalog may be damaged. Run IDCAMS DIAGNOSE against this BCS to determine if this catalog has problems. If unable to determine the cause, contact Technical Support.

CKM22136E OPEN FAILED FOR DDNAME=ddname DSN=dataset.name LOC=xxxxx

**Explanation:**
An error occurred while attempting to open the output dataset specified via the OUTDATASET or OUTFILE keywords. This message is usually accompanied with an "IEC" message in the job's message log execution listing.

**User response:**
Check the system messages and the attributes of this dataset. Ensure that the DCB attributes are consistent with LRECL=80 RECFM=FB.

CKM22137E DATASET TYPE IS UNSUPPORTED - KEYWORD=xxxxxx

**Explanation:**
The indicated keyword specifies a dataset that is not supported by this program. These types include HFS files, VIO, VSAM, and dummy dataset, among others.

**User response:**
Select a different type of dataset for output usage.

CKM22138W STOW FOR ISPF STATS UPDATE FAILED - RC=X'rc' RSN=X'rsn' DSN=dataset.name

**Explanation:**
An error occurred while attempting to close an output PDS member with ISPF statistics. If the error is due to close processing, then the error is usually accompanied with an "IEC" message the job's message log execution listing. Otherwise, this typically due to a depletion of directory space in a non-PDSE partitioned dataset. If close processing was successful, but the ISPF statistics update failed, processing continues, and the output member is created without ISPF statistics.

**User response:**
Check the system messages and the attributes of this dataset. If this a non-PDSE partitioned dataset, ensure that sufficient directory space exists. If unable to determine or correct the problem, contact Technical Support.

CKM22139W VVR BCS BACKPOINTER CONFLICT - DSN=dataset.name

**Explanation:**
The BCS Back Pointer in the VVR for the indicated VSAM Data component name conflicts with the assumed BCS name that the DEFINE RECATALOG statement would be run against. If a catalog name was specified using the NEW-BCS keyword, then the Backpointer in the VVR does not match this name. Otherwise, the backpointer currently conflicts with the BCS name that GENERATE is running against. Under either of these conditions a DEFINE RECATALOG attempt would fail with IDC3009I 050-088. If the NO-VVDS-CHECK or NEW-BCS(NONE) options are in effect then the DEFINE RECATALOG statement is generated anyway, and the current BCS Back Pointer value is listed in the comments with that command. Otherwise, the DEFINE RECATALOG statement is not generated for this cluster.

**User response:**
If the intent is to change the BCS for this dataset, then the BCS entry for this dataset and components can be moved using either the IDCAMS REPRO MERGECAT command or the MERGECAT command. If the BCS
Back Pointers of the dataset are currently incorrect, then all of the VSAM Components can be corrected using the ALTER BCS-BACK-POINTERS command.

**CKM22140W**  
NVR BCS BACKPOINTER CONFLICT -  
DSN=dataset.name

**Explanation:**

ccccc

**User response:**


**CKM22141W**  
REQUIRED VVR NOT FOUND -  
DSN=dataset.name

**Explanation:**

A required VVDS entry for the component or dataset was not found. GENERATE BCS-UNLOAD did not generate a DEFINE RECATALOG command for this entry. A DEFINE RECATALOG command would fail in this situation.

**User response:**

The dataset has structural problems. Refer to DIAGNOSE commands to address the repair or residual cleanup of this dataset.

**CKM22141W**  
REQUIRED VVR NOT FOUND -  
DSN=dataset.name

**Explanation:**

A required VVDS entry for the component or dataset was not found. GENERATE BCS-UNLOAD did not generate a DEFINE RECATALOG command for this entry. A DEFINE RECATALOG command would fail in this situation.

**User response:**

The dataset has structural problems. Refer to DIAGNOSE commands to address the repair or residual cleanup of this dataset.

**CKM22142W**  
NVR NOT FOUND ON VOL=volser FOR  
DSN=dataset.name

**Explanation:**

The catalog entry for a Non-VSAM dataset indicated that the dataset is SMS Managed. However, the NVR entry in the VVDS on that volume could not be found or could not be accessed. Given the conditions at GENERATE time, the resulting DEFINE NONVSAM RECATALOG would fail with IDC3009I 086-022.

**User response:**

Verify that the indicated volume is online. If this a pseudo-volser used for dataset migration purposes, it should be entered in the ARCHIVE_VOLSERS token in the INI SCKMPARM member. Otherwise, the dataset may be repairable via the DIAGNOSE VVDS-BCS or ALTER NONVSAM commands.

**CKM22143W**  
Format 4 DSCB not found for Volume:  
xxxxxx Generating DELETE NOSCRATCH for DSName:  
data.set.name

**Explanation:**

During allocate processing, the number of tracks per cylinder is obtained from the format 4 DSCB of the object’s volser. OBTAIN was unable to locate the F4 DSCB, because either the volume was offline or is no longer in the DASD farm. A DELETE NOSCRATCH was generated for the data set on that volume. The DELETE was created as a comment.

**User response:**

If the indicated volume is offline and the data set is to be removed, remove the comments from the generated DELETE command.

**CKM22144W**  
Format 1 DSCB not found for Volume:  
xxxxxx Generating DELETE NOSCRATCH for DSName:  
data.set.name

**Explanation:**

During allocate processing, information from the format 1 DSCB is required to generate the meta data required for the allocate. OBTAIN was unable to locate the F1 DSCB, because the data set name was not in the VTOC. A DELETE NOSCRATCH was generated for the data set on that volume. The DELETE was created as a comment.

**User response:**

If the data set is no more, remove the comments from the DELETE command. If the data set is on another volume, create a DEFINE NONVSAM(NAME(…)
VOLUME(…)
DEVICETYPE(…)) to cause the object to be re-cataloged on the correct volume.

**CKM22149E**  
ARCHIVE_VOLSERS VALUE INVALID:  
token value

**Explanation:**

The value specified in the SPACE_MANAGEMENT or ARCHIVE_VOLSERS token of SCKMPARM INI member is invalid. Processing terminates.

**User response:**

Correct the value specified in the token.
ARCHIVE_VOLSERS token of SCKMPARM INI member is invalid. Processing terminates.

**User response:**
Correct the value specified in the token.

---

**CKM22160I** THE FOLLOWING CATALOG ENTRY TYPES WILL BE HANDLED AS FOLLOWS:

**Explanation:**
Informational. This presents a list of all catalog entry types handled by the GENERATE BCS-UNLOAD command based upon the INCLUDE-TYPE and EXCLUDE-TYPE keywords.

**User response:**
None.

---

**CKM22162E** NO CATALOG ENTRY TYPES WERE SELECTED.

**Explanation:**
Based upon the values specified by the INCLUDE-TYPE and/or EXCLUDE-TYPE keywords, no entry types were selected.

**User response:**
Review the choice of selections specified by the INCLUDE-TYPE and/or EXCLUDE-TYPE keywords.

---

**CKM22163I** OUTPUT FILE IS: dataset.name(member)

**Explanation:**
Informational.

**User response:**
None.

---

**CKM22164I** INPUT BCS IS: catalog.name

**Explanation:**
Informational.

**User response:**
None.

---

**CKM22170E** ERROR IN RELATIVE GENERATIONS ARGUMENT BEGINNING: xxxxxxx

**Reason:** yyyyyyyyy

**Explanation:**
The RELATIVE-GENERATIONS keyword has been requested. One or more arguments are in error. The arguments must be numeric integers in the range 0 (zero) through -254 (negative two hundred and fifty four). For example: RELATIVE-GENERATIONS(-1 -3 0)

**User response:**
Correct the argument(s) and re-submit.

---

**CKM22171E** NEW-BCS(catalog.name) MAY NOT BE USED WHEN MULTIPLE BCS REQUESTED

**Explanation:**
The NEW_BCS keyword has been requested with an argument value that was not NONE. This not acceptable if multiple BCS are specified on the BCS keyword, or if multiple BCS are selected due to a mask being coded on the BCS keyword.

**User response:**
Remove the NEW-BCS request, or only request a single BCS to be processed.

---

**CKM22172E** DATASET FREE UNSUCCESSFUL - KEYWORD=xxxxx

**Explanation:**
Dynamic De-allocation failed for the dataset specified by the identified keyword.

**User response:**
Ensure that the specified dataset name is correct, and is available for dynamic allocation/de-allocation.

---

**CKM22173E** EXCLUDE-BCS ARGUMENT NOT WITHIN REQUESTED BCS. BCS NAME: xxxxxxx.xxxx

**Explanation:**
The EXCLUDE-BCS keyword has been requested. The BCS name in the error message was not found in the list of BCS selected for processing.

**User response:**
Ensure that the specified BCS name is correct, and determine why the BCS was not in the list for processing.

---

**CKM22174E** ILLEGAL USE OF MASK CHARACTERS > 7. KEYWORD: xxxxxxx

**Explanation:**
A member name has been specified directly on the OUTDATASET or OUTFILE keyword argument. This keyword may have from 1 (one) to 7 (seven) trailing + signs as part of the member name. The + signs will be over-written by a numeric integer of the same dimension as the number of + signs. This designed for use when multiple BCS are to be processed and the output for each BCS is to be written to a different PDS member.

**User response:**
Code the member name with at least one leading alphanumeric character followed by one or more + signs for a maximum of 8 (eight) characters total. For example: OUTDATASET(pds.name(BCS+++++)) This will create member BCS00000 for the first BCS, BCS00001 for the second...

**CKM22176E MEMBER NAME HAS EMBEDDED +.**

**Explanation:**
A member name has been specified directly on the OUTDATASET or OUTFILE keyword argument. The member name contains one or more + signs. + signs are valid only if they follow the leading alphanumeric portion of the member name.

**User response:**
Code the member name with at least one leading alphanumeric character followed by one or more + signs for a maximum of 8 (eight) characters total.

**CKM22177W ARGUMENT: xxxx IS IGNORED WHEN USED WITH: yyyyyyyyyyyyy.**

**Explanation:**
Either NONE has been coded as an argument for INCLUDE-TYPE or ALL has been coded as an argument for EXCLUDE-TYPE. Either would result in all catalog records being excluded from processing, as a result, the request is ignored.

**User response:**
Either remove the INCLUDE-TYPE or EXCLUDE-TYPE keyword and argument from the request, or request one or more of the other arguments.

**CKM30105E **Messages Truncated due to Virtual Storage Shortage**

**Explanation:**
During the dynamic invocation of IDCAMS, not all messages could be delivered.

**User response:**
Increase the available region size for above-the-line RMODE(31) virtual storage, and rerun the job.

**CKM30106E **ATTACH to PGM=IDCAMS Failed, RC=xx**

**Explanation:**
Dynamic invocation of IDCAMS failed. Refer to the MVS Authorized Assembler Services Reference manual regarding the ATTACH macro for a description of the Return Code value.

**User response:**
Report this problem to Technical Support. Save all spooled output from this execution (including the JES execution job logs) and provide this to Technical Support as part of the problem documentation.

**CKM30108E **IDCAMS Utility Abended S/xxx-xx**

**Explanation:**
Dynamic invocation of IDCAMS failed. If the abend code is S/878-10, then you may need to increase the region size for the job or step. Technical Support may ask you to recreate the abend with a //SYSABEND DD statement if the cause cannot be immediately identified.

**User response:**
Report this problem to Technical Support. Save all spooled output from this execution (including the JES execution job logs) and provide this to Technical Support as part of the problem documentation.

**CKM32209E VVDS Access Error VOL=volser, IDC3009I RC=n RSN=n, DSN=dsn**

**Explanation:**
An error was encountered while attempting to access dataset component information in the VVDS.

**User response:**
Refer to the Message Description manual for message IDC3009I using the RC and RSN values.

**CKM32220E VOLUME xxxxxx NOT ONLINE.**

**Explanation:**
Even for EXCP access the specified volume must be varied online. Processing terminates.

**User response:**
Vary the volume online. If the volume is incorrect, then the value from the catalog for the object is invalid.

**CKM32221E APF AUTHORIZATION FAILURE.**

**Explanation:**
The EXCP access routine requires APF authorization. Processing terminates.

**User response:**
The load library being used (or one in the concatenation) is not APF authorized. Ensure all specified load libraries are authorized on that LPAR.

**CKM32222E SAF DATASET ACCESS VIOLATION.**

**Explanation:**
Access is denied to the object by the security facility. Processing terminates.
User response:
Ensure that the correct SAF profile is in existence for the user to access the object being processed.

**CKM32224E LDS DATASETS NOT SUPPORTED**

**Explanation:**
An attempt was made to process a LDS using EXCPMODE. LDS support is not anticipated. Processing terminates.

**User response:**
Only process LDS using record mode technology, not EXCP. This message should not occur, as the invoking code should be aware of the EXCPMODE inability.

**CKM32226W DSN=component not found on volser VTOC.**

**Explanation:**
The Format-1 DSCB for the VSAM component was not found on the VTOC. EXCP processing will attempt to use the dataset extents carried in the VVR, instead. However, I/O errors may occur if the physical data on the tracks has been reused by another dataset.

**User response:**
None. Informational warning message.

**CKM32227E ERROR CALLING CKM01VV1**

**TABLE=tablename FUNC=function**

**R15=register15 R0=register0**

**LOC=location**

**Explanation:**
An error occurred processing an internal table. Processing terminates.

**User response:**
Contact Technical Support.

**CKM32228E DEBLOCK ERROR(code) volser**

**CCHHR=cyl_head_record**

**RDF_OFFSET=offset**

**Explanation:**
An error occurred while deblocking a control interval. Processing continues, but certain affected logical records may be unrecoverable. The CCHHR value indicates the physical block that is in error on the DASD device. The physical contents of that track can be displayed using the ADRDSSU PRINT command. ADRDSSU command example: PRINT TRACKS (X'cccc',X'hh',X'cccc',X'hh') INDY(volser)

**User response:**
Contact Technical Support. Provide the sysout of the failing job, including the Joblog output. Tech Support may also request the ADRDSSU output for the PRINT TRACKS command.

**CKM32234A Invalid CIDF Data X'cccccccc' volser**

**CCHHR=cccc_hhhh_rr**

**Explanation:**
A control interval failed validation and could not be deblocked. Processing continues, but certain affected logical records may be unrecoverable. The CCHHR value indicates the physical block that is in error on the DASD device. The physical contents of that track can be displayed using the ADRDSSU PRINT command.

**User response:**
Contact Technical Support. Provide the sysout of the failing job, including the Joblog output. Tech Support may also request the ADRDSSU output for the PRINT TRACKS command.
CKM32235A • CKM32245E

ADRDSSU command example: PRINT TRACKS
(X'cccc',X'hh',X'cccc',X'hh') INDY(volser)

User response:
Contact Technical Support. Provide the sysout of the failing job, including the Joblog output. Tech Support may also request the ADRDSSU output for the PRINT TRACKS command.

CKM32235A SPANNED RECORD ERROR - volser
CCHHR=cccc_hhhh_rr

Explanation:
While processing a spanned record, an error occurred. Spanned records, for all but ESDS, must be re-assembled by using the data an the index entry - specifically the sequence of segments is controlled by the FLP in the index entry. The Volser and CCHHR value represents the physical address of the beginning of the Control Interval that is in error. Processing continues.

User response:
Refer to other associated messages issued in conjunction with this error.

CKM32236W TRUNCATED RECORD - RBA=X'xxxxxxxx.xxxxxxxx'

Explanation:
While processing a spanned record, an error occurred. Processing continues.

User response:
Refer to other associated messages issued in conjunction with this error.

CKM32238E EXTENDED-FORMAT STRIPED DATASETS NOT SUPPORTED.

Explanation:
An attempt was made to process a striped object in EXCPMODE. This not supported. Processing terminates.

User response:
Contact Technical Support.

CKM32239E EXTENDED-FORMAT COMPRESSED DATASETS NOT SUPPORTED.

Explanation:
An attempt was made to process a compressed object in EXCPMODE. This not supported. Processing terminates.

User response:
Contact Technical Support.

CKM32240E DATASET NOT FOUND OR NOT SPECIFIED

Explanation:
The EXCPMODE interface was incorrectly used. Processing terminates.

User response:

Contact Technical Support.

CKM32241E INVALID XXSET CALL

Explanation:
The XXSET macro had one or more incorrectly specified arguments. Processing terminates.

User response:
Contact Technical Support.

CKM32242E VOLSER NOT SPECIFIED

Explanation:
The XXSET macro had no VOLSER argument coded. Processing terminates.

User response:
Contact Technical Support.

CKM32243E INVALID VOLSEQ VALUE SPECIFIED

Explanation:
The XXSET macro had an invalid SEQ argument coded. Processing terminates.

User response:
Contact Technical Support.

CKM32244E DUPLICATE XXSET FOR component
DSN=datasetname VOL=volser
SEQ=sequence#

Explanation:
Multiple XXSET macros with the same arguments were processed. Processing terminates.

User response:
Contact Technical Support.

CKM32245E First VOLSEQ Missing for Data Component DSN=comp.name

Explanation:
The first volume of a multi-volume set for the Data Component was not identified. Processing cannot continue because necessary information such as the C/I Size cannot be determined. Processing for this dataset terminates.
Contact Technical Support. Provide the sysout listing for the JOB execution, including the Joblog. Technical Support may ask for additional listings from various utilities to identify the problem.

**CKM32245W First VOLSEQ Missing for Index Component DSN=comp.name**

**Explanation:**
The first volume of a multi-volume set for the Index Component was not identified. Processing continues without the Index Component to assist in reassembling spanned logical records. However, if any spanned records are encountered, deblocking errors are likely to occur.

**User response:**
None. Informational warning message.

**CKM32246E First Data Component VVR not a ‘Z’ record, DSN=comp.name**

**Explanation:**
The first volume’s VVR for the Data Component was an unexpected type. Processing cannot continue because necessary information such as the C/I Size cannot be determined. Processing for this dataset terminates.

**User response:**
Contact Technical Support. Provide the sysout listing for the JOB execution, including the Joblog. Technical Support may ask for additional listings from various utilities to identify the problem.

**CKM32246W First Index Component VVR not a ‘Z’ record, DSN=comp.name**

**Explanation:**
The first volume’s VVR for the Index Component was an unexpected type. Processing continues without the Index Component to assist in reassembling spanned logical records. However, if any spanned records are encountered, deblocking errors are likely to occur.

**User response:**
None. Informational warning message.

**CKM32247E EXCP Error - cmd descr volser cc_hh_r dsn**

**Explanation:**
An EXCP error occurred while reading the dataset. Information is extracted from the standard SYNAD Message. It is likely that the dataset has been physically corrupted. The nature of this error is not considered immediately critical. Processing continues.

**User response:**
None. Informational warning message.

**CKM33305D Program Logic Error. Code=xxxxxx**

**Explanation:**
An internal Logic Error has occurred. Additional diagnostic text may follow.

**User response:**
Report this problem to Technical Support.

**CKM33308I SAF Authorization Failure.**

**Explanation:**
Informational error message. Catalog issued a SAF security check and the current user did not have sufficient access. Other associated messages will provide further details to help determine corrective security changes when the access violation is not appropriate for the given situation.

**User response:**
None.

**CKM33321D CONSTANT Area Unavailable. Code=xxxxxx**

**Explanation:**
An internal Logic Error has occurred.

**User response:**
Report this problem to Technical Support.

**CKM33510I GLOBAL_EXCLUDE table built using nnnK of Private Storage.**

**Explanation:**
Informational. The Global Exclude table was successfully constructed based upon the SCKMPARM INI tokens under the .GLOBAL_EXCLUDE section.

**User response:**
None.

**CKM33511I** The following GLOBAL_EXCLUDE values will be processed:

**Explanation:**
Informational. The content of the GLOBAL_EXCLUDE section of the INI is shown. These Volsers and/or DSNames will be excluded from processing by this function.

**User response:**
None.

**CKM33520I** GLOBAL_EXCLUDE table switched to Dataspace.

**Explanation:**
Informational. The TABLE_SIZE token under the SCKMPARM INI section :GLOBAL_EXCLUDE specified an amount of storage that was deemed inappropriate for Private Storage.

**User response:**
None.

**CKM33521W** GLOBAL_EXCLUDE TABLE_SIZE value <value> Invalid.

**Explanation:**
Informational Warning. An unrecognized parameter value was specified for the TABLE_SIZE token under the SCKMPARM INI section :GLOBAL_EXCLUDE. This value will be ignored.

**User response:**
Correct the Parameter value.

**CKM33522E** Func(DspCreate) failed RC=rc RSN=rsn

**Explanation:**
Critical Error. An internal system call failed while attempting to create a DataSpace.

**User response:**
Contact Technical Support. Provide the execution listing of the job, including the joblog for the run.

**CKM33523E** Func(AleCreate) failed RC=rc RSN=rsn

**Explanation:**
Critical Error. An internal system call failed while attempting to create a DataSpace.

**User response:**
Contact Technical Support. Provide the execution listing of the job, including the joblog for the run.

**CKM33524E** Table Space Exceeded at nnnK at <token> <value>

**Explanation:**
Capacity Error. The amount and type of storage was insufficient to handle the number of Global Exclude entries.

**User response:**
Adjust the TABLE_SIZE token under the SCKMPARM INI section :GLOBAL_EXCLUDE to specify an adequate amount of storage. If this does not resolve the problem, then Contact Technical Support. Provide the execution listing of the job, including the joblog for the run.

**CKM33525W** INI GLOBAL_EXCLUDE <token> object <value> Invalid.

**Explanation:**
Specification Error. Not Critical. An entry in the Global Exclude table was syntactically incorrect. These parameters are specified under the SCKMPARM INI section :GLOBAL_EXCLUDE.

**User response:**
If the GLOBAL_EXCLUDE token's syntax appears to be correct, then Contact Technical Support. Provide the execution listing of the job, including the joblog for the run.

**CKM34102I** DSN: usercat name

**Explanation:**
User Catalog cannot be accessed

**User response:**
Follow the Programmer Response for message IEC161I found in JESYSMSGs or eliminate the usercat from the selection list.
CKM34115I  PROCESSOR REASON CODE: nnn

Explanation:
This the decimal value of the failure reason code. Usually this followed by message CKM34120I containing text explanation of the reason code. If a text explanation is not available, CKM34118I issued, “NO DESCRIPTION FOR REASON CODE”.

User response:
If message CKM34118I follows CKM34115I and the error is determined by OPEN, CLOSE or VSAM (as indicated by message CKM34119I), additional information about the reason code can be obtained by consulting the manual “z/OS Macro Instruction for Data Sets” section “VSAM Macro Return and Reason Codes”. There are sub-sections for “OPEN”, “CLOSE” and “Record Management” respectively.

CKM341xxI  CKM341xxI

Explanation:
These messages are issued when the Catalog Fast Reader, Catalog Keyed Updater, or VVDS Handler encounter an error.

User response:
Depends on other CAT messages. Generally, these messages are designed to be self explanatory, and are used by staff for extended debugging.

CKM34502I  Volume Access statistics for <volser>

Explanation:
Information regarding the read statistics for the indicated volume follows.

User response:
None.

CKM34516E  Illogical Request. 016-nnn ID=...

Explanation:
Internal Interface Error.

User response:
Notify Technical Support. Provide the full sysout listing of this job, including the Joblog. The “ID=” field is for Technical Support.

CKM34520E  2nd Parm (Command) Invalid. 020-002 ID=...

Explanation:
Internal Interface Error.

User response:
Notify Technical Support. Provide the full sysout listing of this job, including the Joblog. The “ID=” field is for Technical Support.

CKM34532E  Dataspace Create Error - RC=nnn RSN=xxxxxxx ID=...

Explanation:
A Dataspace Create Request failed. Error codes are provided. RC is decimal. RSN is Hexadecimal.

User response:
Notify Technical Support. Provide the full sysout listing of this job, including the Joblog. The “ID=” field is for Technical Support.

CKM34533E  Dataspace Alet Error - RC=nnn RSN=xx ID=...

Explanation:
A Dataspace Create Request failed. Error codes are provided. RC is decimal. RSN is Hexadecimal.

User response:
Notify Technical Support. Provide the full sysout listing of this job, including the Joblog. The “ID=” field is for Technical Support.
CKM34534E  CKM34545E

of this job, including the Joblog. The "ID=" field is for Technical Support.

CKM34534E  UCB Uncapture Error - volser,ucbx
RC=nnn  RSN=xx  ID=...

Explanation:
UCB Uncapture failure. Error codes are provided. RC, and RSN are Hexadecimal.

User response:
Notify Technical Support. Provide the full sysout listing of this job, including the Joblog. The "ID=" field is for Technical Support.

CKM34535E  UCB Unpin Error - volser,ucbx RC=nnn
RSN=xx  ID=...

Explanation:
UCB Unpin failure. Error codes are provided. RC, and RSN are Hexadecimal.

User response:
Notify Technical Support. Provide the full sysout listing of this job, including the Joblog. The "ID=" field is for Technical Support.

CKM34536A  Resource Manager Deq Error - RC=nnn
ID=...

Explanation:
The destage of the Resource Manager routine encountered an error. RC is decimal.

User response:
Notify Technical Support. Provide the full sysout listing of this job, including the Joblog. The "ID=" field is for Technical Support.

CKM34537A  Dataspace Alet Error - RC=nnn
ID=...

Explanation:
A Dataspace Delete Request failed. Error codes are provided. RC is decimal.

User response:
Notify Technical Support. Provide the full sysout listing of this job, including the Joblog. The "ID=" field is for Technical Support.

CKM34538E  Volume Not Online - volser  ID=...

Explanation:
Requested DASD Volser was not Online to the current system.

User response:
Notify Technical Support. Provide the full sysout listing of this job, including the Joblog. The "ID=" field is for Technical Support.

CKM34539E  UCB Capture Error - volser,ucbx
RC=xx  RSN=xx  ID=...

Explanation:
A System Error occurred while capturing the DASD UCB for the indicated volser. RC and RSN are Hexadecimal.

User response:
Notify Technical Support. Provide the full sysout listing of this job, including the Joblog. The "ID=" field is for Technical Support.

CKM34540E  Non-ECKD Device - volser,ucbx,ucbtype  ID=...

Explanation:
The Hardware Device and/or Controller types are not supported by this program. RC and RSN are Hexadecimal.

User response:
Notify Technical Support. Provide the full sysout listing of this job, including the Joblog. Also provide information regarding the type of hardware this volume resides on. The "ID=" field is for Technical Support.

CKM34541E  UCBPIN Error - volser=RC=xx  RSN=xx
ID=...

Explanation:
A System Error occurred while pinning the DASD UCB for the indicated volser. RC, and RSN are Hexadecimal.

User response:
Notify Technical Support. Provide the full sysout listing of this job, including the Joblog. The "ID=" field is for Technical Support.

CKM34542E  qname Reserve Conflict - volser,ucbx
RC=xx  ID=...

Explanation:
A duplicate Reserve request was attempted against the indicated volser resource. RC is Hexadecimal.

User response:
Notify Technical Support. Provide the full sysout listing of this job, including the Joblog. The "ID=" field is for Technical Support.
CKM34546E Reserve Deadlock Aborted - volser,ucbx ID=...

Explanation:
Reserves to the device for both SYSVTOC and SYSZVVDSD were attempted, and a deadlock condition was aborted.

User response:
Notify Technical Support. Provide the full sysout listing of this job, including the Joblog. The “ID=” field is for Technical Support.

CKM34547A TRKCALC Error - blksiz - volser,ucbx,ucbtyp RC=xx ID=...

Explanation:
TRKCALC Failed for this devicetype.

User response:
Notify Technical Support. Provide the full sysout listing of this job, including the Joblog. The “ID=” field is for Technical Support.

CKM34549E Volume Not Usable - volser,ucbx,ucbtyp ID=...

Explanation:
Conditions have been detected that indicate this volume cannot be accessed.

User response:
Notify Technical Support. Provide the full sysout listing of this job, including the Joblog. The “ID=” field is for Technical Support.

CKM34550E Dataspace capacity exceeded - volser,ucbx ID=...

Explanation:
The work dataspace did not have sufficient space to work with the current volume.

User response:
Notify Technical Support. Provide the full sysout listing of this job, including the Joblog. If possible, also provide information regarding the number of datasets, and the sizes of the VVDS, VTOC, and VTOC Index. The “ID=” field is for Technical Support.

CKM34551E Resource Manager Add Error - RC=nnn ID=...

Explanation:
An error was encountered while activating a Resource Manager routine. RC is decimal.

User response:
Notify Technical Support. Provide the full sysout listing of this job, including the Joblog. It is possible that the volume is critically corrupted, or that some of the product modules are backleveled for the current release of the operating system. The “ID=” field is for Technical Support.

CKM34552E Dataspace Page Fix | Unfix Error - RC=nnn RSN=xxxxxxxx ID=...

Explanation:
A request to Fix or Unfix frames in a dataspace was unsuccessful. RC is decimal. RSN is Hexadecimal.

User response:
Notify Technical Support. Provide the full sysout listing of this job, including the Joblog. The “ID=” field is for Technical Support.

CKM34553A I/O Error Reading the <ccc> - vol,ucbx,ucbtyp ID=...

Explanation:
A critical I/O error occurred while reading the dataset on the indicated volume. Other diagnostic text messages follow.

User response:
Notify Technical Support. Provide the full sysout listing of this job, including the Joblog. The “ID=” field is for Technical Support.

CKM34553E I/O Error Reading the <ccc> - vol,ucbx,ucbtyp ID=...

Explanation:
A critical I/O error occurred while reading the dataset on the indicated volume. Other diagnostic text messages follow.

User response:
Notify Technical Support. Provide the full sysout listing of this job, including the Joblog. The “ID=” field is for Technical Support.

CKM34554A Unexpected | Unrecognized Block in vol dset ID=...

Explanation:
An unidentifiable or unexpected metadata record type was read in from the specified dataset and volume. Diagnostic messages follow.

User response:
Notify Technical Support. Provide the full sysout listing of this job, including the Joblog. It is possible that the volume is critically corrupted, or that some of the product modules are backleveled for the current release of the operating system. The “ID=” field is for Technical Support.
CKM34555E • CKM34564A

CKM34555E  Unrecognized Block error limit reached.

Explanation:
The limit of CKM34554A error messages was reached. Subsequent block displays of the same genre of errors are not likely to be meaningful towards problem resolution.

User response:
Refer to message CKM34554A.

 CKM34556E  Fx DSCB Read Error - volser,ucbx
 RC=nnn RSN=nnn ID=...

Explanation:
An unexpected error occurred while attempting to access the Format-4 or a Format-1 DSCB from the VTOC. RC and RSN are Decimal.

User response:
Notify Technical Support. Provide the full sysout listing of this job, including the Joblog. The “ID=” field is for Technical Support.

CKM34557I  <volser> does not have a VVDS.
 DSN=vvds not found.

Explanation:
VVDS information was requested, and the indicated volume does not have a valid VVDS.

User response:
None.

CKM34558E  DSN=<vvds> on <volser> is inaccessible. ID=...

Explanation:
The VVDS has physical and/or structural errors which render it unusable for Catalog Management.

User response:
Notify Technical Support. Provide the full sysout listing of this job, including the Joblog. Technical Support may request ADRDSSU PRINT listings for areas of the VVDS that appear to have problems. The “ID=” field is for Technical Support.

CKM34560E  Volume Not Offline - volser,ucbx ID=...

Explanation:
Requested DASD Device number was Online to the current system, and processing requires this device to be offline.

User response:
Notify Technical Support. Provide the full sysout listing of this job, including the Joblog. The “ID=” field is for Technical Support.

CKM34561E  Device Not Defined to System - ucbx ID=...

Explanation:
Requested DASD Device number was not defined e within the current system configuration.

User response:
Notify Technical Support. Provide the full sysout listing of this job, including the Joblog. The “ID=” field is for Technical Support.

CKM34562E  Device has No Paths Available - VOL=.
 DEVN=. SYS=.

Explanation:
No channel paths were available to perform I/O operations against the indicated device. All path(s) to the device are either varied offline, not operational, or physically inaccessible to the current system.

User response:
Issue the MVS command “D M=DEV(xxxx)” on the system where the error was detected. Determine if there are hardware configuration problems, or if a new configuration install was in transit. If the problem does not appear to be hardware related, then contact Technical Support. Provide the “DM” command output, and the full sysout listing of this job, including the Joblog.

CKM34563E  Volume Label conflict on Device <ucbx>. ID=...

Explanation:
A conflict exists between the UCB and the volume label record. The contents of both are displayed.

User response:
The volser on this device has probably been changed without varying this device offline to the current system. If this device cannot be varied offline and re-mounted, notify Technical Support. Provide the full sysout listing of this job, including the Joblog. The “ID=” field is for Technical Support.

CKM34564A  Logical VTOC Error Detected - volser,ucbx,ucbtyp ID=...

Explanation:
A structural error was detected in the VTOC or the VTOC Index. More specific information follows this message. The block in error is formatted.

User response:
CKM34564E  Logical VTOC Error Detected - volser,ucbx,ucbtyp ID=...

Explanation:
A structural error was detected in the VTOC or the VTOC Index. More specific information follows this message. The block in error is formatted.

User response:
Notify Technical Support. Provide the full sysout listing of this job, including the Joblog. The “ID=” field is for Technical Support.

CKM34590E  Product Authorization Failure.

Explanation:
A conflict exists between the UCB and the volume label record. The contents of both are displayed.

User response:
Notify Technical Support to obtain a temporary product authorization code.

CKM34601E  xxxxx Function Failed - RC=x - CKM00356/Rev=xx

Explanation:
Informational.

User response:
Refer to other messages prior to this message.

CKM34601I  xxxxx Function Completed - RC=x - CKM00356/Rev=xx

Explanation:
Informational.

User response:
Refer to other messages prior to this message.

CKM34605E  Program Logic Error. CODE=xxxxxx

Explanation:
An abnormal or unexpected condition occurred due to a possible logic error. The CODE= value is information that is meaningful only to Technical Support. Other descriptive information will usually follow immediately after this error message.

User response:
Report this problem to Technical Support. Save all spooled output from this execution (including the JES execution job logs) and provide this to Technical Support as part of the problem documentation.

CKM34606E  Program Interface Error. <descr>
CODE=xxxxxx

Explanation:
An abnormal or unexpected condition occurred due to an internal program error. The description will vary, depending upon the nature of the problem. The CODE= value is information that is meaningful only to Technical Support. Other descriptive information will usually follow immediately after this error message.

User response:
Report this problem to Technical Support. Save all spooled output from this execution (including the JES execution job logs) and provide this to Technical Support as part of the problem documentation.

CKM34611E  Parameter-x is in error. CODE=xxxxxx

Explanation:
An abnormal or unexpected condition occurred due to a possible logic error. The CODE= value is information that is meaningful only to Technical Support.

User response:
Report this problem to Technical Support. Save all spooled output from this execution (including the JES execution job logs) and provide this to Technical Support as part of the problem documentation.

CKM34612E  RENAME requested, but the Old and New names are identical.

Explanation:
A request was made to rename an existing dataset name to itself.

User response:
Correct the specification of the old or new dataset name.

CKM34613E  DSCB Update request failed Verify.

Explanation:
A request was made to update an existing DSCB, but the “before” image did not match the actual DSCB at the given CCHHR location. Snap images of the DSCBs follow.

User response:
Report this problem to Technical Support. Save all spooled output from this execution (including the JES execution job logs) and provide this to Technical Support as part of the problem documentation.
CKM34614E  DSCB Update with Indexed VTOC
Rejected. Code=xxxxxx

Explanation:
A request was made to update an existing DSCB, and the volume had an active VTOC Index. The type of update being requested would cause the VTOC Index to become no longer valid, and lead to disablement. However, the same DSCB update request might be valid when the volume is in OS-VTOC mode. The CODE= value is information that is meaningful only to Technical Support. Other descriptive information will usually follow immediately after this error message.

User response:
Disable the VTOC Index for the volume and retry the DSCB update request.

CKM34615E  DSCB Update request for Format-4
Rejected. Code=xxxxxx

Explanation:
A request was made to update the Format-4 DSCB of the VTOC, and the changed fields would cause all datasets on the volume to no longer be accessible. The CODE= value is information that is meaningful only to Technical Support. Other descriptive information will usually follow immediately after this error message.

User response:
None. The request is not valid.

CKM34616E  UPDATE requested for a DSCB with no changes.

Explanation:
A request was made to update an existing DSCB, but there were no changes specified with the update request.

User response:
Report this problem to Technical Support. Save all spooled output from this execution (including the JES execution job logs) and provide this to Technical Support as part of the problem documentation.

CKM34620E  UCB at <addr> is not an Actual or Captured UCB.

Explanation:
The calling routine provided an invalid device address to the CKM00346 service routine.

User response:
Report this problem to Technical Support. Save all spooled output from this execution (including the JES execution job logs) and provide this to Technical Support as part of the problem documentation.

CKM34621E  Device ucbadr is not online.

Explanation:
The calling routine provided an invalid device address to the CKM00346 service routine.

User response:
Report this problem to Technical Support. Save all spooled output from this execution (including the JES execution job logs) and provide this to Technical Support as part of the problem documentation.

CKM34622E  Exclusive RESERVE for SYSVTOC not owned.

Explanation:
The module calling CKM00346 did not successfully acquire exclusive control of the device for updating the VTOC.

User response:
Report this problem to Technical Support. Save all spooled output from this execution (including the JES execution job logs) and provide this to Technical Support as part of the problem documentation.

CKM34623E  UCB Capture Error
*,<devadr>,<devtyp> RC=<rc>
RSN=<rsn>

Explanation:
The UCB resided above RMODE(24) storage, and an attempt to capture it was unsuccessful.

User response:
Report this problem to Technical Support. Save all spooled output from this execution (including the JES execution job logs) and provide this to Technical Support as part of the problem documentation.

CKM34624E  UCB Uncapture Error
<volser>,<devadr> RC=<rc>
RSN=<rsn>

Explanation:
The UCB resided above RMODE(24) storage, and an attempt to Uncapture it was unsuccessful.

User response:
Report this problem to Technical Support. Save all spooled output from this execution (including the JES execution job logs) and provide this to Technical Support as part of the problem documentation.
CKM34625E  I/O Error Reading DSCB - <volser>,<devadr>,<devtyp>
Code=xxxxxx

Explanation:
An I/O failure occurred while attempting to read a DSCB in the VTOC. An IOS000I message will immediately follow this message, which can provide further information. This could be the result of a program problem, a hardware problem, or, the VTOC might be permanently damaged. The CODE= value is information that is meaningful only to Technical Support. Other descriptive information will usually follow immediately after this error message.

User response:
Report this problem to Technical Support. Save all spooled output from this execution (including the JES execution job logs) and provide this to Technical Support as part of the problem documentation.

CKM34626E  I/O Error Updating the OSVTOC on <volser>,<devadr>,<devtyp>
Code=xxxxxx

Explanation:
An I/O failure occurred while attempting to update the VTOC. An IOS000I message will immediately follow this message, which can provide further information. This could be the result of a program problem, a hardware problem, or, the VTOC might be permanently damaged. The CODE= value is information that is meaningful only to Technical Support. Other descriptive information will usually follow immediately after this error message.

User response:
Report this problem to Technical Support. Save all spooled output from this execution (including the JES execution job logs) and provide this to Technical Support as part of the problem documentation.

CKM34627E  ERROR CALLING TABLE FUNC=xxx
RC=xxx CODE=xxxxxx

Explanation:
An abnormal and unexpected condition occurred due to a possible logic or resource error. Information provided by this message is meaningful only to Technical Support. Other descriptive information can often follow immediately after this error message.

User response:
Report this problem to Technical Support. Save all spooled output from this execution (including the JES execution job logs) and provide this to Technical Support as part of the problem documentation.

CKM34628E  VTOC Index for VOL(volser) has a VRF Active Status. A prior VTOC update function has not completed.

Explanation:
VRF recovery is pending for this volume due to a prior failed VTOC update attempt. The volume currently has an active VTOC Index. The CKM00346 program will not perform any further updates to the VTOC until the recovery action has taken place and completed.

VRF recovery can usually be induced by allocating a new dataset to the volume. If VRF cannot repair and synchronize the VTOC and the VTOC Index, the volume will be forced into OS-VTOC mode by automatically disabling the VTOC Index.

Once the VRF Pending state is cleared, this request can be retried.

User response:
Allocate and/or delete a dataset to this volume to force VRF Recovery to occur. Then retry the request. If the VTOC Index became disabled, the ICKDSF utility can be used to rebuild the index at some point in time.

CKM34629E  CVAF <function> Failed, VOL=<volser>
RC=<rc> CVSTAT=<rsn> Code=xxxxxx

Explanation:
While updating the VTOC Index of a volume, an abnormal or unexpected result was encountered from CVAF services. The CODE= value is information that is meaningful only to Technical Support. Other descriptive information will usually follow immediately after this error message.

User response:
Report this problem to Technical Support. Save all spooled output from this execution (including the JES execution job logs) and provide this to Technical Support as part of the problem documentation.

CKM34630E  DSN(data.set.name) not found on VOL(volser).

Explanation:
A request was made to delete or rename an existing dataset name on a volume. The dataset name does not appear to exist.

User response:
Correct the specification of the dataset name.

CKM34631E  DSN(data.set.name) not at CCHHR=cccc-hhhh-rr in OS-VTOC for VOL(volser).

Explanation:
A request was made to delete or rename an existing dataset name on a volume. The request was qualified with a specific CCHHR address for the Format-1 DSCB in the VTOC. However, the DSCB residing at that address was not a Format-1 DSCB that matched the specified dataset name.

**User response:**
Correct the specification of the CCHHR address and/or the dataset name.

---

**CKM34632E Duplicate Format-1 DSCBs detected on VOL(volser).**

**Explanation:**
A request was made to delete or rename an existing dataset name on a volume. However, duplicate dataset names were encountered in the VTOC. Since the request was not qualified with the CCHHR specification, the CKM00346 program could not select the correct Format-1 DSCB to perform the requested function upon.

**User response:**
Retry the request specifying an explicit CCHHR address for the selected Format-1 DSCB in the VTOC.

---

**CKM34633E DSN(dataset.name) already exists on VOL(volser).**

**Explanation:**
A request was made to rename an existing dataset name to a new name on a volume. The new name is already in use on that volume for another dataset.

**User response:**
Correct the specification of the new dataset name, or delete (scratch) the existing new name and retry the rename request.

---

**CKM34634E CCHHR=cchhr is Not Valid for VOL(volser) Device. I CCHHR=cchhr not within VOL(volser) VTOC Extent.**

**Explanation:**
A request was made to delete or rename an existing dataset name on a volume. The request was qualified with a specific CCHHR address for the Format-1 DSCB in the VTOC. However, the CCHHR address was either invalid, or, represented a track that was not within the OS-VTOC extents.

**User response:**
Correct the specification of the CCHHR address.

---

**CKM34634W CCHHR=cchhr ignored, not within VOL(volser) VTOC Extent.**

**Explanation:**
A request was made to delete or rename an existing dataset name on a volume. The request was qualified with a specific CCHHR address for the Format-1 DSCB in the VTOC. However, the CCHHR address was either invalid, or, represented a track that was not within the OS-VTOC extents.

**User response:**
Correct the specification of the CCHHR address.

---

**CKM34635E Unexpected DSCB read for DSN(dataset.name) on VOL(volser).**

**Explanation:**
While reading the VTOC by direct address, a DSCB type was found that was not of the expected type. The VTOC may have some critical integrity problems with its structure. A snap listing of the DSCB in question will follow this message.

**User response:**
Report this problem to Technical Support. Save all spooled output from this execution (including the JES execution job logs) and provide this to Technical Support as part of the problem documentation.

---

**CKM34636E Possible F3DSCB Chaining Loop Detected.**

**Explanation:**
While reading the chain of Format-3 DSCBs for a dataset, the pointer to the next Format-3 DSCB referred to a DSCB that had already been read. A snap listing of the DSCB in question will follow this message.

**User response:**
Report this problem to Technical Support. Save all spooled output from this execution (including the JES execution job logs) and provide this to Technical Support as part of the problem documentation.

---

**CKM34637E DSCB Extent Info Corruption Detected in Format-3 DSCB.**

**Explanation:**
While reading the chain of Format-3 DSCBs for a dataset, an extent descriptor entry duplicates or overlaps another extent entry. A snap listing of the DSCB in question will follow this message.

**User response:**
Report this problem to Technical Support. Save all spooled output from this execution (including the JES execution job logs) and provide this to Technical Support as part of the problem documentation.
Support as part of the problem documentation.

**CKM34638E** Broken DSCB Chaining on VOL(volser) VTOC.

**Explanation:**

While reading the chain of Format-3 DSCBs for a dataset, the forward chain pointer indicated an invalid CCHHR address, or an inappropriate DSCB format type.

**User response:**

Report this problem to Technical Support. Save all spooled output from this execution (including the JES execution job logs) and provide this to Technical Support as part of the problem documentation.

**CKM34639E** OS-VTOC for VOL(volser) is Full.

**Explanation:**

The size of the OS-VTOC is too small. The CODE= value is information that is meaningful only to Technical Support. Other descriptive information will usually follow immediately after this error message.

**User response:**

If this message appears inappropriate for the situation, then report this problem to Technical Support. Save all spooled output from this execution (including the JES execution job logs) and provide this to Technical Support as part of the problem documentation. Otherwise, the data should be moved to another volume that has a sufficient VTOC size.

**CKM34640E** I/O Error Reading the Device - 

**Explanation:**

An I/O failure occurred while attempting to access the device. An IOS000I message will immediately follow this message, which can provide further information. This could be the result of a program problem, a hardware problem, or, an uninitialized volume. The CODE= value is information that is meaningful only to Technical Support. Other descriptive information will usually follow immediately after this error message.

**User response:**

Report this problem to Technical Support. Save all spooled output from this execution (including the JES execution job logs) and provide this to Technical Support as part of the problem documentation.

**CKM34641E** Non-ECKD Device - 

**Explanation:**

The device hardware does not support standard ECKD protocol for I/O channel commands. The CODE= value is information that is meaningful only to Technical Support.

**User response:**

Report this problem to Technical Support. Save all spooled output from this execution (including the JES execution job logs) and provide this to Technical Support as part of the problem documentation.

**CKM34642E** TRKCALC Error - 

**Explanation:**

An unexpected result was received from the TRKCALC routine when calculating the number of DSCB’s per track. The CODE= value is information that is meaningful only to Technical Support.

**User response:**

Report this problem to Technical Support. Save all spooled output from this execution (including the JES execution job logs) and provide this to Technical Support as part of the problem documentation.

**CKM34643W** Format-7 DSCB Freespace Error on VOL(volser).

**Explanation:**

While reading and processing the free space extents for the volume, an error was detected in the Format-5 or Format-7 DSCB chain in the OS-VTOC. The CODE= value is information that is meaningful only to Technical Support. The delete of the dataset will proceede, and the IEC603I message will be issued. The next ensuing DADSM activity to this volume will invoke the VTOC Convert Routine to automatically rebuild the Free Space DSCB chain.

**User response:**

None. However, this may be indicative of some more serious problems that may be present.
IEC603I message will be issued. The next ensuing DADSM activity to this volume will invoke the VTOC Convert Routine to automatically rebuild the Free Space DSCB chain.

**User response:**

None. However, this may be indicative of some more serious problems that may be present.

---

**CKM35100I Support Module CKM 00351/Rev=nn active**

**Explanation:**

Informational message.

**User response:**

None.

---

**CKM39010I CKM00390/REV=x was called by x, Request=x Error RC=x RSN=x**

**Explanation:**

When a journaling error occurs, this message will be included to provide additional information to Technical Support.

**User response:**

This message should be included as part of the SYSOUT listing when a journaling error is being reported to Technical Support.

---

**CKM39020E Journal File not Open.**

**Explanation:**

A critical Journaling Error has occurred. The content and meaning of this message is primarily intended for Technical Support reference.

**User response:**

Report this problem to Technical Support. Provide the execution listing of the job, including the joblog for the run.

---

**CKM39021E Error Creating Dataspace**

**Explanation:**

A critical Journaling Error has occurred. The content and meaning of this message is primarily intended for Technical Support reference.

**User response:**

Report this problem to Technical Support. Provide the execution listing of the job, including the joblog for the run.

---

**CKM39022E Journal Index Record has reached its maximum size.**

**Explanation:**

A critical Journaling Error has occurred. The content and meaning of this message is primarily intended for Technical Support reference.

**User response:**

Report this problem to Technical Support. Provide the execution listing of the job, including the joblog for the run.

---

**CKM39023E Dynamic Allocation Failure for Journal Data Set.**

**Explanation:**

A critical Journaling Error has occurred. The content and meaning of this message is primarily intended for Technical Support reference.

**User response:**

Report this problem to Technical Support. Provide the execution listing of the job, including the joblog for the run.

---

**CKM39025E Extent Capacity for Journal Data Set Exceeded**

**Explanation:**

A critical Journaling Error has occurred. The content and meaning of this message is primarily intended for Technical Support reference.

**User response:**

Report this problem to Technical Support. Provide the execution listing of the job, including the joblog for the run.

---

**CKM39026E Block Map Capacity for Journal Data Set Exceeded**

**Explanation:**

A critical Journaling Error has occurred. The content and meaning of this message is primarily intended for Technical Support reference.
CKM39027E I/O Error Occurred while performing Erase of new Extent.

Explanation:
A critical Journaling Error has occurred. The content and meaning of this message is primarily intended for Technical Support reference.

User response:
Report this problem to Technical Support. Provide the execution listing of the job, including the joblog for the run.

CKM39028E I/O Error Occurred while rewriting a block to the Journal Dataset.

Explanation:
A critical Journaling Error has occurred. The content and meaning of this message is primarily intended for Technical Support reference.

User response:
Report this problem to Technical Support. Provide the execution listing of the job, including the joblog for the run.

CKM39029E VIO invalid device type for Journal datasets.

Explanation:
Dynamic allocation for a Journal Dataset acquired a VIO unit type. VIO cannot be used for this purpose, not only due to the type of I/O being performed, but also because the total storage capacity requirement is grossly unpredictable and somewhat unrelated to the initial allocation sizes. Although it is not likely, a journal file system could theoretically expand itself to a size that would severely impact the auxiliary storage subsystem, whereas the temporary depletion of free space in a work pool would have the lesser operational impact. The allocation parameters can be modified by defining keyword values in the SCKMPARM INI section "::CKM00390_VALUES". Immediately following the CKM39029E message will be recommendations indicating which INI keywords should be considered. You will need to specify applicable values that will direct the dynamic allocations to physical Non-VIO DASD.

User response:
Update SCKMPARM INI as recommended by the messages following CKM3902E, and rerun the job. If problems persist, then report this issue to Technical Support. Provide the execution listing of the job, including the joblog for the run.

CKM39030E Invalid Record Area Passed to Journal Request

Explanation:
A critical Journaling Error has occurred. The content and meaning of this message is primarily intended for Technical Support reference.

User response:
Report this problem to Technical Support. Provide the execution listing of the job, including the joblog for the run.

CKM39031E Logical Record Length Exceeds Journal Dataset Capacity

Explanation:
A critical Journaling Error has occurred. The content and meaning of this message is primarily intended for Technical Support reference.

User response:
Report this problem to Technical Support. Provide the execution listing of the job, including the joblog for the run.

CKM39032E I/O Error Occurred while writing a new block to the Journal Data Set.

Explanation:
A critical Journaling Error has occurred. The content and meaning of this message is primarily intended for Technical Support reference.

User response:
Report this problem to Technical Support. Provide the execution listing of the job, including the joblog for the run.

CKM39033E Invalid Record-ID Passed to Journal Request

Explanation:
A critical Journaling Error has occurred. The content and meaning of this message is primarily intended for Technical Support reference.

User response:
Report this problem to Technical Support. Provide the execution listing of the job, including the joblog for the run.
CKM39034W • CKM39041E

CKM39034W Logical Record Length exceeds Buffer Size
Explanation:
A critical Journaling Error has occurred. The content and meaning of this message is primarily intended for Technical Support reference.

User response:
Report this problem to Technical Support. Provide the execution listing of the job, including the joblog for the run.

CKM39035E Record Segment Not Found on Physical Block
Explanation:
A critical Journaling Error has occurred. The content and meaning of this message is primarily intended for Technical Support reference.

User response:
Report this problem to Technical Support. Provide the execution listing of the job, including the joblog for the run.

CKM39035W Record Segment Not Found on Physical Block
Explanation:
A critical Journaling Error has occurred. The content and meaning of this message is primarily intended for Technical Support reference.

User response:
Report this problem to Technical Support. Provide the execution listing of the job, including the joblog for the run.

CKM39036E Internal Block Queueing Error
Explanation:
A critical Journaling Error has occurred. The content and meaning of this message is primarily intended for Technical Support reference.

User response:
Report this problem to Technical Support. Provide the execution listing of the job, including the joblog for the run.

CKM39037E Extent not found for Block
Explanation:
A critical Journaling Error has occurred. The content and meaning of this message is primarily intended for Technical Support reference.

User response:
Report this problem to Technical Support. Provide the execution listing of the job, including the joblog for the run.

CKM39038E I/O Error Occurred while Reading a Physical Block.
Explanation:
A critical Journaling Error has occurred. The content and meaning of this message is primarily intended for Technical Support reference.

User response:
Report this problem to Technical Support. Provide the execution listing of the job, including the joblog for the run.

CKM39039E Back-Fill Logic Error during Add Processing
Explanation:
A critical Journaling Error has occurred. The content and meaning of this message is primarily intended for Technical Support reference.

User response:
Report this problem to Technical Support. Provide the execution listing of the job, including the joblog for the run.

CKM39040E Get-Next attempted after EOF
Explanation:
A critical Journaling Error has occurred. The content and meaning of this message is primarily intended for Technical Support reference.

User response:
Report this problem to Technical Support. Provide the execution listing of the job, including the joblog for the run.

CKM39041E Get-Next position lost
Explanation:
A critical Journaling Error has occurred. The content and meaning of this message is primarily intended for Technical Support reference.

User response:
Report this problem to Technical Support. Provide the execution listing of the job, including the joblog for the run.
CKM39042E Logical Record Not Found
Explanation:
A critical Journaling Error has occurred. The content and meaning of this message is primarily intended for Technical Support reference.
User response:
Report this problem to Technical Support. Provide the execution listing of the job, including the joblog for the run.

CKM39043E Logical Record Segmentation Error Detected
Explanation:
A critical Journaling Error has occurred. The content and meaning of this message is primarily intended for Technical Support reference.
User response:
Report this problem to Technical Support. Provide the execution listing of the job, including the joblog for the run.

CKM39044E Journal Index Dataset Name is Invalid.
Explanation:
A critical Journaling Error has occurred. The content and meaning of this message is primarily intended for Technical Support reference.
User response:
Report this problem to Technical Support. Provide the execution listing of the job, including the joblog for the run.

CKM39045E Journal Index Dataset Disposition Error.
Explanation:
A critical Journaling Error has occurred. The content and meaning of this message is primarily intended for Technical Support reference.
User response:
Report this problem to Technical Support. Provide the execution listing of the job, including the joblog for the run.

CKM39046E Journal Index Dataset allocation Error.
Explanation:
A critical Journaling Error has occurred. The content and meaning of this message is primarily intended for Technical Support reference.
User response:

CKM39047E Open Failed for Journal Index Dataset, DSN=ccc
Explanation:
A critical Journaling Error has occurred. The content and meaning of this message is primarily intended for Technical Support reference.
User response:
Report this problem to Technical Support. Provide the execution listing of the job, including the joblog for the run.

CKM39048W I/O Error reading the Journal Index Dataset.
Explanation:
A critical Journaling Error has occurred. The content and meaning of this message is primarily intended for Technical Support reference.
User response:
Report this problem to Technical Support. Provide the execution listing of the job, including the joblog for the run.

CKM39049I Journal Index Dataset being reformatted, DSN=cc
Explanation:
Informational.
User response:
None.

CKM39050W I/O Error writing to the Journal Index Dataset.
Explanation:
A critical Journaling Error has occurred. The content and meaning of this message is primarily intended for Technical Support reference.
User response:
Report the problem to Technical Support. Provide the execution listing of the job, including the joblog for the run.

CKM39051E I/O Error during CLEAR of Journal Files
Explanation:
A critical Journaling Error has occurred. The content and meaning of this message is primarily intended for
CKM39052E  I/O Error during Extend/Format of new Journal File Extent

Explanation:
A critical Journaling Error has occurred. The content and meaning of this message is primarily intended for Technical Support reference.

User response:
Report this problem to Technical Support. Provide the execution listing of the job, including the joblog for the run.

CKM39053E  I/O Error during Journal Block Inventory Processing

Explanation:
A critical Journaling Error has occurred. The content and meaning of this message is primarily intended for Technical Support reference.

User response:
Report this problem to Technical Support. Provide the execution listing of the job, including the joblog for the run.

CKM39054E Unexpected Results from DASD I/O Request.

Explanation:
An I/O request to read data on a DASD volume completed successfully with no error indicators. However, the physical record attributes do not resemble what was originally written. The data has lost integrity. This can often be the result of malfunctioning microcode in the hardware of the in channel path, director, or DASD storage subsystem.

User response:
Check the system log for IOS error messages to the device in question. If it has been determined that the hardware appears to be functioning properly, report this problem to Technical Support. Provide the execution listing of the job, including the joblog for the run.

CKM39056E SYSTEMS ENQ for the Journal Index Dataset failed.

Explanation:
A critical Journaling Error has occurred. The content and meaning of this message is primarily intended for Technical Support reference.

User response:
Report this problem to Technical Support. Provide the execution listing of the job, including the joblog for the run.

CKM50000E Error parsing SCKMPARM INI member

Explanation:
Invalid record found in INI

User response:
Check that all values in the INI are coded correctly. If problem persists contact Technical Support.

CKM50001E ALLOC of DD DIR failed

Explanation:
Allocation of ddname DIR failed

User response:
Validate that the DD DIR is not currently allocated. If so then free it and try again. If problem persists contact Technical Support.

CKM50002E Error freeing DIR

Explanation:
Free of ddname DIR failed

User response:
If problem persists, contact Technical Support.

CKM50003E CKM01PLD attach failed, RC: xx

Explanation:
Loader sub-task failed to attach.

User response:
Attempt to invoke the application again. If problem persists contact Technical Support.

CKM50004E LIBDEF ISPPLIB/ISPLIB/ISPTLIB failed, RC:

Explanation:
Allocation of ISPPLIB/ISPLIB/ISPTLIB failed

User response:
Contact Technical Support
CKM50005E  Undo LIBDEF ISPLIB/ISPMLIB/ISPTLIB failed, RC: xx
Explanation:
Undo of LIBDEF of ISPLIB/ISPMLIB/ISPTLIB failed
User response:
Contact Technical Support

CKM50006E  INI access failure. RC: xx Section: xxxxxxxx Token: xxxxxxxxxx
Explanation:
The TOKEN in the specific SECTION of the INI is malformed.
User response:
Check the INI data set, locate the SECTION and the TOKEN. Correct any obvious error. If no obvious error is seen, contact Technical Support.

CKM50007E  Error defining variable pool #
Explanation:
Variable pool # could not be created.
User response:
Try panel option again. If problem persists contact Technical Support.

CKM70301E  allocation was unsuccessful
Explanation:
The generalized allocation routine encountered an error while attempting to allocate a dataset.
User response:
Contact Support.

CKM70302E  Unallocation failed
Explanation:
The generalized allocation routine encountered an error while attempting to unallocate a dataset.
User response:
Contact Support.

CKM70303I  Unallocation was good
Explanation:
The generalized allocation routine successfully unallocated the dataset.
User response:
Information only.

CKM70501E  Audit type missing
Explanation:
Authorization processing has detected that the audit type parameter statement for this jobstep is missing.
User response:
Check that the appropriate audit type parameter is coded on the execution statement for this jobstep.

CKM70502E  Support Module Missing.
Explanation:
Identified module is not in the load library.
User response:
Validate that your JCL is correct. If you can’t resolve this problem, call support.

CKM70503E  is an invalid auth Parm.
Explanation:
Authorization processing has detected that the audit type parameter statement for this jobstep is invalid.
User response:
Check that the appropriate audit type parameter is coded on the execution statement for this jobstep.

CKM70504E  Unable to initialize INI
Explanation:
During program start, one or more problems occurred during decoding of the //INI member. As the //INI provides vital information for this product, the program cannot continue execution.
User response:
Contact Support. Have available the listing that contains this message and the SCKMPARM member that controls execution of this product.

CKM70505E  No CONTROL DD statement
Explanation:
The program tried to determine what kind of tape is being audited but was unable to open the control dataset.
User response:
Contact support.

CKM70701I  HSM audits are enabled
Explanation:
Informational message.
CKM70702E • CKM71702E

User response:
No action required.

CKM70702E  HSM audits are disabled
Explanation:
Authorization processing has detected that the audit type code is not licensed.
User response:
Check that the appropriate audit type parameter is coded on the execution statement for this jobstep. If you believe you have received this message is error, contact support.

CKM70901I  DASD audits are enabled
Explanation:
Informational message.
User response:
No action required.

CKM70902E  DASD audits are disabled
Explanation:
Authorization processing has detected that the audit type code is not licensed.
User response:
Check that the appropriate audit type parameter is coded on the execution statement for this jobstep. If you believe you have received this message is error, contact support.

CKM71101I  Tape audits are enabled
Explanation:
Informational message.
User response:
No action required.

CKM71102E  TAPE audits are disabled
Explanation:
Authorization processing has detected that the audit type code is not licensed.
User response:
Check that the appropriate audit type parameter is coded on the execution statement for this jobstep. If you believe you have received this message is error, contact support.

CKM71301I  Catalog audits are enabled
Explanation:
Informational message.
User response:
No action required.

CKM71302E  Catalog audits are disabled
Explanation:
Authorization processing has detected that the audit type code is not licensed.
User response:
Check that the appropriate audit type parameter is coded on the execution statement for this jobstep. If you believe you have received this message is error, contact support.

CKM71501I  Audit MEDIACONTROLS audits are enabled
Explanation:
Informational message.
User response:
No action required.

CKM71502E  Audit MEDIACONTROLS audits are disabled
Explanation:
Authorization processing has detected that the audit type code is not licensed.
User response:
Check that the appropriate audit type parameter is coded on the execution statement for this jobstep. If you believe you have received this message is error, contact support.

CKM71701E  Read JFCB failed on member list
Explanation:
An attempt to open the member list for the messages PDS failed.
User response:
Contact support.

CKM71702E  Open of MESSAGE member failed
Explanation:
An attempt to open a message member in the messages PDS failed.
CKM71703E Open for MSGDIR failed
Explanation:
An attempt to open the DDNAME MSGDIR failed.
User response:
Contact support.

CKM72302E xxxxxxxx close failed
Explanation:
Program processing was unable to close the DFHSM Control Dataset.
User response:
Contact Support.

CKM72702E Read of extension failed
Explanation:
An attempt was made to read the next extension of a data set.
User response:
Contact support.

CKM72703E Bad primary computation
Explanation:
The program encountered a problem when try to compute the total number of primary allocation trks of the ds.
User response:
Contact support.

CKM72901E xxxxxxxx had bad function call
Explanation:
The function code passed to program processing was inaccurate.
User response:
Contact Support.

CKM73102E Failed to write reformatted record
Explanation:
The universal formatter routine did not successfully write out the record passed to it.
User response:
Contact Support.

CKM73103E xxxx was the return code from format routine.
Explanation:
The universal formatter routine did not successfully write out the record passed to it.
User response:
Contact Support.

CKM73104E failed to process the JCL data set.
Explanation:
The rdjfcb on the JCL file failed.
User response:
Contact Technical Support.

CKM73105E xxxxxxxx with this plan member
Explanation:
xxxxxxxxx is the plan member which access failed.
User response:
Contact Support.

CKM73106E failed to find proper format
Explanation:
The function passed to the universal formatter was not found.
User response:
Contact Support.

CKM73107E XXXXXXXX failed to find prescribed fix
Explanation:
PLANS dataset open processing failed; xxxxxxxx is the name of the fix member.
User response:
Contact Support.

CKM73108E XXXXXXXX close failed processing fix
Explanation:
PLANS dataset close processing failed; xxxxxxxx is the name of the fix member.
User response:
Contact Support.
CKM73109E • CKM73501E

CKM73109E  failed to process PLANS JFCB
Explanation:
PLANS dataset rdjfcb processing failed.
User response:
Contact Support.

CKM73110E  Bad untranslated record
Explanation:
The universal formatter failed to put jcl record.
User response:
Contact Support.

CKM73301E  Selection of fixes failed
Explanation:
Selection of fix from INI member failed.
User response:
Contact Support.

CKM73302E  Failed to write reformatted record
Explanation:
The universal formatter routine did not successfully write
out the record passed to it.
User response:
Contact Support.

CKM73303E  xxxxx was the return code from format routine.
Explanation:
The universal formatter routine did not successfully write
out the record passed to it.
User response:
Contact Support.

CKM73304E  failed to process the JCL data set.
Explanation:
The rdjfcb on the JCL file failed.
User response:
Contact Technical Support.

CKM73305E  xxxxxxxx with this plan member
Explanation:
xxxxxxxxx is the plan member which access failed.
User response:

Contact Support.

CKM73306E  failed to find proper format
Explanation:
The function passed to the universal formatter was not
found.
User response:
Contact Support.

CKM73307E  xxxxxxxx failed to find prescribed fix
Explanation:
PLANS dataset open processing failed; xxxxxxxx is the
name of the fix member.
User response:
Contact Support.

CKM73308E  xxxxxxxx close failed processing fix
Explanation:
PLANS dataset close processing failed; xxxxxxxx is the
name of the fix member.
User response:
Contact Support.

CKM73309E  failed to process PLANS JFCB
Explanation:
PLANS dataset rdjfcb processing failed.
User response:
Contact Support.

CKM73310E  Bad untranslated record
Explanation:
The universal formatter failed to put jcl record.
User response:
Contact Support.

CKM73311E  xxxxxxxx with this plan member
Explanation:
xxxxxxxxx is the plan member which access failed.
User response:
This might mean that HSM is not running on the same
system as the audit job. Make sure HSM is active on
the same system the audit is running on.

CKM73501E  Internal Error 2
Explanation:
An attempt to access the HSM address space
information for the migration or backup prefix has failed.
User response:

CKM73502E  Internal Error 3
Explanation:
An attempt to access the HSM address space information for the migration or backup prefix has failed.
User response:
This might mean that HSM is not running on the same system as the audit job. Make sure HSM is active on the same system the audit is running on.

CKM74302E  xxxxxxxx close failed
Explanation:
A VSAM close was attempted but failed. The DDNAME is xxxxxxxx.
User response:
Contact Technical Support.

CKM74501I  pppppppp ffffffff trace SELECTs
Explanation:
Informational message. pppppppp is the plan and ffffffff is the fix.
User response:
None.

CKM74502E  pppppppp dddddd member in DDNAME failed
Explanation:
The plan pppppppp in DDNAME dddddd has failed.
User response:
Examine the plan and ensure correct formatting.

CKM74902E  xxxxx Volume not found in system
Explanation:
UCBSCAN unable to locate the volume xxxxx.
User response:
Check that the volume is online and available.

CKM74903E  had a bad UCBSCAN
Explanation:
UCBSCAN encountered an error.
User response:
Check the UCBSCAN messages. Correct and resubmit.

CKM75101E  Format 3 DSCB READ FAILED
Explanation:
An attempt to read the Format 3 DSCB failed.
User response:
Contact Support.

CKM75301E  xx Excessive TIME parameter passed
Explanation:
A TIME parameter was passed to this program and its value is greater than 59.
User response:
Check the parameter and insure it is between 10 and 59 inclusive.

CKM75302E  Setting 59 seconds as default
Explanation:
Informational message.
User response:
None.

CKM75303E  Excessive TIME parameter passed
Explanation:
A TIME parameter was passed to this program and its value or format is not proper. Make sure the parameter is a value between 10 and 59 inclusive.
User response:
Check the parameter and insure it is between 10 and 59 inclusive.

CKM75304E  Setting 10 seconds as default
Explanation:
Informational message.
User response:
None.

CKM75701E  Unknown function requested
Explanation:
An unknown function was passed to the program. The function must be END, FIND, BUILD or IDCAMS.
User response:
Check the parameter being passed. Insure it is one of the values in the list.
CKM75702E  Active SI27 table failed to close
Explanation:
A function of EOD was passed to the program signaling the program to close the table. The close failed.
User response:
Contact support.

CKM75901E  AMSOPEN failed
Explanation:
An open to Access Method Services Failed.
User response:
Contact support.

CKM75902E  nnn message number sent from CKM07759
Explanation:
An AMS message number nnn issued.
User response:
Contact support.

CKM76071I  xxxxxxxxxx processing option
Explanation:
xxxxxxxxxxx is the processing option.
User response:
Informational only.

CKM76702E  Non-VSAM found for catalog
Explanation:
A non-VSAM data set was found for a catalog.
User response:
Processing continues

CKM76703W  xxx CAT number allocation failed
Explanation:
Audit retrieves a list of catalogs to read from the Master Catalog. Each catalog name is assigned a number. In this instance the catalog could not be allocated. This may be a defunct catalog or otherwise legitimately not processable.
User response:
Browse data set PFX.AUDIT.CATLIST to determine the name of the catalog by the specified number. If this catalog is no longer in use this message may be ignored.

CKM76705E  xxx CAT number obtain failed
Explanation:
The catalog extraction module attempts to verify that a catalog is on the volume it is cataloged to. In this instance the user catalog was not on the volume it was cataloged to.
User response:
Browse data set PFX.AUDIT.CATLIST to determine the name of the catalog by the specified number. If this catalog is no longer in use this message may be ignored.

CKM76706E  xxx bad return, catalog abandoned
Explanation:
Catalog extraction has found a catalog name in the Master Catalog but was unable to list its contents.
User response:
Browse data set PFX.AUDIT.CATLIST to determine the name of the catalog by the specified number. If this catalog is no longer in use this message may be ignored.

CKM76711I  xxxxxxxxxx Support Module Missing.
Explanation:
Identified module is not in the load library.
User response:
Validate that your JCL is correct. If you can't resolve this problem, call support.

CKM76902E  xxxxxxxx Support Module Missing.
Explanation:
Identified module is not in the load library.
User response:
Validate that your JCL is correct. If you can't resolve this problem, call support.

CKM76903E  xxx is an invalid auth Parm
Explanation:
Authorization processing has detected that the audit type parameter statement for this jobstep is invalid.
User response:
Check that the appropriate audit type parameter is coded on the execution statement for this jobstep.
CKM76904E Unable to initialize INI

Explanation:
During program start, one or more problems occurred during decoding of the //INI member. As the //INI provides vital information for this product, the program cannot continue execution.

User response:
Contact Technical Support. Have available the listing that contains this message and the SCKMPARM member that controls execution of this product.

CKM76905E No CONTROL DD statement

Explanation:
The program tried to determine what kind of tape is being audited but was unable to open the control dataset.

User response:
Contact support.

CKM77101E LOCATE failed for master catalog

Explanation:
The catalog extraction module attempted to retrieve information from the master catalog but could not find it.

User response:
Browse data set PFX.AUDIT.CATLIST to determine the name of the Master Catalog indicated by a flag of M.

CKM77701E xxxx function failed

Explanation:
The function passed to this program xxxx, is unknown. It should be OPEN, CLOSE, or GET.

User response:
Contact support.

CKM78101W bad repl

Explanation:
An attempt was made to replace the key, but failed.

User response:
Processing continues.

CKM78102W Node count update had blank key

Explanation:
Informational message.

User response:
Processing continues.

CKM78103W Node count update had a 000 key

Explanation:
Informational message.

User response:
Processing continues.

CKM78104W Node count update had B FFF key

Explanation:
Informational message.

User response:
Processing continues.

CKM78105E xxxxxxxxxx was bad repl key

Explanation:
A replace was attempted with key xxxxxxxxxx but it failed.

User response:
Contact support.

CKM78301E xxxxxxxxxx was bad repl key

Explanation:
A replace was attempted with key xxxxxxxxxx but it failed.

User response:
Contact support.

CKM80301E INCLUDE/EXCLUDE option ambiguous

Explanation:
The include/exclude processor found an option it could not interpret.

User response:
The first line in the Include/Exclude file must be either INCLUDES FOLLOW or EXCLUDES follow.

CKM80302E xxxxxxxx

Explanation:
The include/exclude processor found an option it could not interpret.

User response:
The first line in the Include/Exclude file must be either INCLUDES FOLLOW or EXCLUDES follow.
CKM80303E  xxxxxxxx was incorrect  
Explanation:  
The ACS filter pattern was found to be incorrect.  
User response:  
Check the ACS filter pattern.  

CKM80501E  INCLUDE/EXCLUDE option ambiguous
CKM80502E  xxxxxxxx  
Explanation:  
The include/exclude processor found an option it could not interpret.  
User response:  
The first line in the Include/Exclude file must be either INCLUDES FOLLOW or EXCLUDES follow.  

CKM80902I  Failed to allocate, verify by SVC 26  
Explanation:  
The first issue of the message is the catalog name that failed to open. Audit attempts to verify any diagnostic related to the catalog by verifying that the error condition still exists. It does so by allocating and individual catalog and reading each entry by key. If a catalog can not be allocated and opened, then verification will be performed by SVC 26. This can cause a very long run time.  
User response:  
It could be that a reorg or backup EXPORT was being performed. It may be better to rerun the audit than to wait for the verifications to complete. Make sure that maintenance activities are complete on the catalogs and resubmit the audit.  

CKM810105I  stcname now accepting commands:  
Explanation:  
The product address space is now active and able to receive commands.  
User response:  
None.  

CKM810901I  Command Received:  command  
Explanation:  
Command  command was received and is now being processed.  
User response:  
None.  

CKM81101W  VOL GT 125  
Explanation:  
The number of volumes has exceeded 125.  
User response:  
Informational message. Processing continues.  

CKM816001I  Waiting for TCP/IP connections to terminate  
Explanation:  
The product address space is shutting down and waiting for TCP/IP connections to end.  
User response:  
None.  

CKM816101E  No system connections listed.  
Explanation:  
No CONNECTION= parameters were coded in the active CKMCMDxx member.  
User response:  
Add one CONNECTION= parameter to the CKMCMDxx member for each system that is to be connected to the local system. There should be one CONNECTION= parameter that matches the LOCALCONN= parameter.
CKM816203W  Lost connection to \texttt{jobname}(version) on \texttt{sysname} using \texttt{connection}

\textbf{Explanation:}

The connection to \texttt{jobname} running on system \texttt{sysname} at version \texttt{version} was lost.

\textbf{User response:}

Check \texttt{jobname} on \texttt{sysname} for messages to indicate why the connection was lost. Contact Technical Support for further assistance.

CKM816204W  Unable to establish connection with \texttt{connection}

\textbf{Explanation:}

The initial connection to \texttt{connection} failed.

\textbf{User response:}

If the secondary system that is identified by \texttt{connection} is not active yet, then this is okay. Contact Technical Support for further assistance.

CKM81702E  \texttt{xxxxxxx} Support Module Missing.

\textbf{Explanation:}

Identified module is not in the load library.

\textbf{User response:}

Validate that your JCL is correct. If you can't resolve this problem, call Technical Support.

CKM81703E  \texttt{xxxx} is an invalid auth Parm

\textbf{Explanation:}

Authorization processing has detected that the audit type parameter statement for this jobstep is invalid.

\textbf{User response:}

Check that the appropriate audit type parameter is coded on the execution statement for this jobstep.

CKM81704E  Unable to initialize INI

\textbf{Explanation:}

During program start, one or more problems occurred during decoding of the //INI member. As the //INI provides vital information for this product, the program cannot continue execution.

\textbf{User response:}
Contact Support. Have available the listing that contains this message and the SCKMPARM member that controls execution of this product.

CKM81705E No CONTROL DD statement
Explanation:
The program tried to determine what kind of tape is being audited but was unable to open the control dataset.
User response:
Contact support.

CKM823502W ddname not found in JCL
Explanation:
$ddname$ was not found allocated to the current job.
User response:
Review other messages to see what impact this may have had on the current process. Contact Technical Support for further assistance.

CKM823512W dsname is empty.
Explanation:
A data set was opened for input processing and found to be empty.
User response:
For most instances this can be ignored. Contact Technical Support for further assistance.

CKM830101W CKM already active in this session.
CKM can only be entered once within a session.
Explanation:
An attempt was made to enter CKM more than once (by invoking the CLIST CKMSTART) at the same time.
User response:
Use the active session of CKM. Contact Technical Support for further assistance.

CKM830102E The CKM address space is either not active or has not completed initializing.
Explanation:
The CKM address space (program CKMAM001), must be active on the system to make requests to CKM.
User response:
Start the CKM address space. Sample JCL can be found in member CKMJMAIN. Contact Technical Support for further assistance.

CKM830104E Error retrieving Name/Token pair,
Rc=rc, Name='name'
Explanation:
An attempt to retrieve the Name/Token pair of $name$ failed with a return code of $rc$.
User response:
Exit CKM completely and attempt to re-enter the product to retry the request. Contact Technical Support for further assistance.

CKM830105W Access to CKM data restricted
Explanation:
Access to CKM has been restricted.
User response:
Contact Technical Support for further assistance.

CKM832017E Invalid column specified.
Explanation:
The column name or number specified in the last scroller command is not valid for this report.
User response:
Press HELP to find a list of valid column names for the report. Contact Technical Support for further assistance.

CKM832019E Invalid parameter. '$parm$
Explanation:
An invalid parameter was entered was entered in the last command.
User response:
Press HELP to find a list of valid commands and parameters associated with those commands. Contact Technical Support for further assistance.

CKM832022W Line number number does not qualify for command cmd, Cond='condition'
Explanation:
The current line, specified by $number$, does not qualify for the line command $cmd$. The condition $condition$ was not true for the selected line.
User response:
Try the line command against a line where $condition$ will be true. Contact Technical Support for further assistance.
CKM832034W  Invalid command entered.

Explanation:
An invalid command was entered.

User response:
Enter a valid command or the name of a report within the product. Contact Technical Support for further assistance.

CKM833001E  CKM started task services are unavailable.

Explanation:
The CKM started task is not either not active or not able to provide any services.

User response:
Ensure the started task is active and reply accordingly to the CKM833002E message. Contact Technical Support for further assistance.

CKM833002E  Reply 'RETRY' to retry request or 'TERM' to terminate.

Explanation:
The current function needs direction on how to proceed.

User response:
Reply 'RETRY' to allow the current function to attempt to communicate with the system again. Communication to the system will automatically be retried after a short period if no reply is provided. Reply 'TERM' to abort the communication request and the remaining function processing. Replying 'TERM' after the current function has successfully communicated to any system already may result in errors.

User response:
Reply 'DOWN' to skip the system. If the system is not down and shares resources with the local system, then errors may result. This reply should only be used for when the system is down and inaccessible.

Contact Technical Support for further assistance.

CKM833003E  Unable to communicate with secondary system ip address / dns

Explanation:
A secondary system listed in the CKMCMDxx member through a CONNECTION parameter is not available for cross system communication.

User response:
Check to see why the secondary system identified is not available and reply to the CKM833004E message accordingly. Contact Technical Support for further assistance.

CKM833004E  Reply 'RETRY' when the system is available, 'TERM' to terminate, or 'DOWN' to skip system.

Explanation:
A secondary system listed in the CKMCMDxx member through a CONNECTION parameter is not available for cross system communication. The current function needs direction on how to proceed. Action:

User response:
Check to see why the secondary system identified is not available.

- Reply 'RETRY' to allow the current function to attempt to communicate with the system again. Communication to the system will automatically be retried after a short period if no reply is provided.
- Reply 'TERM' to abort the communication request and the remaining function processing. Replying 'TERM' after the current function has successfully communicated to any system already may result in errors.
- Reply 'DOWN' to skip the system. If the system is not down and shares resources with the local system, then errors may result. This reply should only be used for when the system is down and inaccessible.

Contact Technical Support for further assistance.

CKM84101I  xxxxxxxx processing option

Explanation:
Processing with this option.

User response:
None. Informational message.

CKM84501E  TMSVOL replace failed, critical error

Explanation:
An attempt to replace a record with the catalog indicator switch failed.

User response:
Contact support.

CKM85901E  R15 is lost, has zeroes

Explanation:
Unable to determine appropriate label.

User response:
Next label is processed. Processing continues.

CKM85902E  xxxxxxxx label not found.

Explanation:
Label xxxxxxxx was not found.

User response:
Contact Technical Support.
CKM86101E Values in line will exceed 255 characters

Explanation:
The limit of 255 character per line has been reached. The line will be truncated.

User response:
Processing continues.

CKM86102E label search ended prematurely

Explanation:
A search for a label ended prematurely.

User response:
Processing continues.

CKM86103E xxxxxxx not found.

Explanation:
The label with key xxxxxxx was not found.

User response:
Processing continues.

CKM86104E premature end reached at INCR2

Explanation:
Progression message.

User response:
Processing continues.

CKM86105E xxx recomputed line length

Explanation:
Progression message.

User response:
Processing continues.

CKM86301E Found improper parameters

Explanation:
The processing program is unable to continue. The program was unable to find a proper parameter.

User response:
Contact support.

CKM86302E xxxxxxxx DDNAME not found

Explanation:
The DDNAME xxxxxxxx was not found. Insure JCL has this DDNAME coded.

User response:

CKM86303E failed to find dictionary member

Explanation:
The dictionary member was not found in the PDS.

User response:
Processing continues.

CKM86304E Dictionary failed to open

Explanation:
Unable to open the dictionary member. Review the dictionary name for proper spelling.

User response:
If dictionary name is correct and present in the PDS, then contact support.

CKM86306E bad return from format

Explanation:
A call to the format routine received a non-zero return code. A message stating the number of records processed follows.

User response:
Contact support.

CKM86307E xxxxxxx was number of records processed

Explanation:
A call to the format routine received a non-zero return code. This message states the number of records that were processed.

User response:
Contact support.

CKM86501E xxxxxxx was invalid function

Explanation:
An invalid function name was given.

User response:
Supply a valid function name of OPEN, CLOSE or GET.

CKM86502E ERR1 key not found

Explanation:
VSAM key read failed. Processing is terminated.

User response:
Validate that your JCL is correct. If you can't resolve this problem, call support.

**CKM90501I**  xxxx is number of indices to print

Explanation:  Progression message.

User response:  None. Information only.

**CKM90503I**  xxx xxxxxxxx is counted blocks/track

Explanation:  Progression message.

User response:  None. Information only.

**CKM90504I**  xxx xxxxxxxx was calculated blocks/track

Explanation:  Progression message.

User response:  None. Information only.

**CKM90505I**  xxx LL x blocks/track.

Explanation:  Progression message.

User response:  None. Information only.

**CKM90506I**  xxxx last block on track

Explanation:  Progression message.

User response:  None. Information only.

**CKM90507I**  xxxx xxxxxxxx Max blocks in table

Explanation:  Progression message.

User response:  None. Information only.

**CKM90508I**  xxxxx xxxxxxxx is kenlen+4

Explanation:  Progression message.

User response:  None. Information only.

**CKM90509I**  xxxxx xxxxxxxx max index

Explanation:  Progression message.

User response:  None. Information only.

**CKM90510I**  xxxxx xxxxxxxx is increment

Explanation:  Progression message.

User response:  None. Information only.

**CKM90511I**  xxxxxxxx assigned xxx buffers

Explanation:  Progression message.

User response:  None. Information only.

**CKM90512E**  XXXXXXXX empty file

Explanation:  DDNAME of xxxxxxxx is an empty file.

User response:  Abend 1111 occurs. Contact support.
CKM90513I  xxxxxxxx xxxxxxxx Length of last block
Explanation: Progression message.
User response: None. Information only.

CKM90514I  xxxxxxxx LKEY EOD
Explanation: Progression message.
User response: None. Information only.

CKM90515I  xxxxx xxxxxxxx was the index count
Explanation: Progression message.
User response: None. Information only.

CKM90516I  xxxxx was index key
Explanation: Progression message.
User response: Contact support.

CKM90701I  XXXX end at relative block
Explanation: Progression message.
User response: Informational message.

CKM90702I  XXXX end at max blocks
Explanation: Progression message.
User response: Informational message.

CKM90703I  XXXXXXXXXXXXXXX XXXXX MAXBLKS key of ARG
Explanation: Progression message.
User response: Action: Contact support.

CKM90901E  Buffer inventory has been over-layed
Explanation: There has been a problem in buffer management. Abend 130 follows.
User response: Contact support.

CKM90902E  140 FOUND AT GOLOW
Explanation: A condition has been found at location GOLOW.
User response: Processing continues.

CKM91001I  was number of index read
Explanation: Displays the number of index records read.
User response: Informational message.

CKM91002E  lost in next
Explanation: DESCRIPTION: These messages are issued when the program encounters a situation it can not recover from. An abend follows.
User response: Action: Contact support.
CKM91002E lost in next
Explanation:
DESCRIPTION: These messages are issued when the
program encounters a situation it can not recover from.
An abend follows.
User response:
ACTION: Contact support.

CKM91002E lost in next
Explanation:
DESCRIPTION: These messages are issued when the
program encounters a situation it can not recover from.
An abend follows.
User response:
ACTION: Contact support.

CKM91701I Loading SUB MODULES
Explanation:
Informational message.
User response:
None. Processing continues.

CKM91702E Dynamic table is exhausted
Explanation:
The end of the table has been reached. A return code
of 12 has been issued.
User response:
Contact support.

CKM91703E allocation of CATIN001 was bad
Explanation:
allocation failed.
User response:
Contact support.

CKM91704E Deallocate of CATIN001 was bad
Explanation:
Deallocate failed.
User response:
Contact support.

CKM91901E xxxx failed allocation
Explanation:
Multivol allocation routine failed to allocate.
User response:
Contact support.

CKM91902E xxxx volume failed allocation
Explanation:
Multivol allocation failed. Volume is displayed.
User response:
Contact support.

CKM91903E xxxx DDNAME failed ALLOC
Explanation:
Multivol allocation failed. DDNAME is displayed.
User response:
Contact support.

CKM91904E xxxx DSN failed
Explanation:
Multivol allocation failed. DSN is displayed.
User response:
Contact support.

CKM91905E no parms found
Explanation:
No parameters were passed to the program.
User response:
Contact support.

CKM91907E allocation was unsuccessful
Explanation:
Dynamic allocation was unsuccessful.
User response:
Contact support.

CKM91908E Unallocation failed
Explanation:
Unallocation of data set was unsuccessful.
User response:
Contact support.
CKM91910I  Unallocation was good
Explanation:
Informational message.
User response:
None. Processing continues.

CKM92301I  xxxxxxxx DSN
Explanation:
Informational message.
User response:
None. Processing continues.

CKM92302I  xxxxxxxx List of VOLS
Explanation:
Informational message.
User response:
None. Processing continues.

CKM92303E  DSN has exceeded five volumes  xxxxx
Explanation:
While attempting to open one of the extracted files for auditing, it was determined that the file exceeded the five volume limit. This message is followed by the DSN in question.
User response:
The calling program will abend with a user abend. Ensure the extracts do not exceed five volumes.

CKM92305E  xxxxxxxx not cataloged
Explanation:
The dataset xxxxxxxx is not cataloged.
User response:
Contact support.

CKM92306E  DSNAME shows no volumes
Explanation:
The DSNAME shows no volsers.
User response:
The dataset is not cataloged. Check the dataset.

CKMCSM01I  CKM01CSM Maintenance Level (rev id date)
Explanation:
Shows revision number, fix id, and fix date of CKM01CSM
User response:
None.

CKMCSM09E  Migration keywords kw1 requires keyword kw2
Explanation:
If you specify xxx-MIGRATION-TAPE you must also specify the corresponding xxx-MIGRATION-DASD.
If you specify xxx-MIGRATION-DASD you must also specify the corresponding xxx-MIGRATION-TAPE.
Valid GDS-MIGRATION* variations.
1. Explicit GDS-MIGRATED, specify only GDS-MIGRATED
2. Implicit GDS-MIGRATED, specify no GDS migrated keywords so the INI values for GDS migration are used.
3. GDS migrated by migrated type, specify GDS-MIGRATED-DASD and GDS-MIGRATED-TAPE
Valid NONVSAM-MIGRATION* variations
1. Explicit NONVSAM-MIGRATED, specify only NONVSAM-MIGRATED
2. Implicit NONVSAM-MIGRATED, specify no NONVSAM migrated keywords so the INI NONVSAM migration are used.
3. NONVSAM migrated by migrated type, specify NONVSAM-MIGRATED-DASD with NONVSAM-MIGRATED-TAPE
Valid VSAMSPERE-MIGRATION* variations
1. Explicit VSAMSPERE-MIGRATED, specify only VSAMSPERE-MIGRATED
2. Implicit VSAMSPERE-MIGRATED, specify no VSAMSPERE migrated keywords so the INI VSAMSPERE migration are used.
3. VSAMSPERE migrated by migrated type, specify VSAMSPERE-MIGRATED-DASD and VSAMSPERE-MIGRATED-TAPE
User response:
Edit the CATSCRUB command and rerun.
CKMCSM21E Keyword KWD has mutually exclusive keywords KWDS

Explanation:
CATSCRUB COMMAND contains invalid parm for 1 of the 3 parm token names (DISP, RC(n), PROC). DELETE or KEEP can be specified but not both. CONTINUE or END can be specified but not both.

User response:
Correct CATSCRUB COMMAND parm in error and restart

CKMCSM13E INI token value is invalid - section: CATSCRUB_OPTIONS token: token name

Explanation:
CATSCRUB INI token value is invalid

User response:
Correct and restart

CKMCSM12E Severe error when attempting to retrieve INI data - section: CATSCRUB token: token name

Explanation:
Unable to find CATSRUB entry in CATINI

User response:
Check CATINI and make sure CATSCRUB TOKEN is correct

CKMCSM14E INI section/token missing or invalid - section: CATSCRUB_OPTION token: name

Explanation:
CATSCRUB INI SECTION/TOKEN missing or invalid

User response:
Correct and restart

Use of the xxx-MIGRATION-DASD or xxx-MIGRATION-TAPE keywords, makes the corresponding xxx-MIGRATION keyword invalid.

Valid GDS-MIGRATION* variations
1. Explicit GDS-MIGRATED, specify only GDS-MIGRATED
2. Implicit GDS-MIGRATED, specify no GDS migrated keywords so the INI values for GDS migration are used.
3. GDS migrated by migrated type, specify GDS-MIGRATED-DASD and GDS-MIGRATED-TAPE

Valid NONVSAM-MIGRATION* variations
1. Explicit NONVSAM-MIGRATED, specify only NONVSAM-MIGRATED
2. Implicit NONVSAM-MIGRATED, specify no NONVSAM migrated keywords so the INI NONVSAM migration are used.
3. NONVSAM migrated by migrated type, specify NONVSAM-MIGRATED-DASD with NONVSAM-MIGRATED-TAPE

Valid VSAMSPERE-MIGRATION* variations
1. Explicit VSAMSPERE-MIGRATED, specify only VSAMSPERE-MIGRATED
2. Implicit VSAMSPERE-MIGRATED, specify no VSAMSPERE migrated keywords so the INI VSAMSPERE migration are used.
3. VSAMSPERE migrated by migrated type, specify VSAMSPERE-MIGRATED-DASD and VSAMSPERE-MIGRATED-TAPE

User response:
Remove the keywords that you do not need and rerun.

CKMCSM10E (multiple line message; see Explanation)

Explanation:
Invalid to use migration keyword kw1 with kw2 where

<table>
<thead>
<tr>
<th>kw1</th>
<th>kw2</th>
</tr>
</thead>
<tbody>
<tr>
<td>GDS-MIGRATED-DASD</td>
<td>GDS-MIGRATED</td>
</tr>
<tr>
<td>GDS-MIGRATED-TAPE</td>
<td>GDS-MIGRATED</td>
</tr>
<tr>
<td>NONVSAM-MIGRATED-DASD</td>
<td>NONVSAM-MIGRATED</td>
</tr>
<tr>
<td>NONVSAM-MIGRATED-TAPE</td>
<td>NONVSAM-MIGRATED</td>
</tr>
<tr>
<td>VSAMSPERE-MIGRATED-DASD</td>
<td>VSAMSPERE-MIGRATED</td>
</tr>
<tr>
<td>VSAMSPERE-MIGRATED-TAPE</td>
<td>VSAMSPERE-MIGRATED</td>
</tr>
</tbody>
</table>

User response:
Revise CATSCRUB command and rerun.
CKMCSM22E  RC value not in numeric or not in range of 0 to 4095

Explanation:
CATSCRUB COMMAND contains invalid RC parm value. Value must be numeric and in the range of 0 to 4095.

User response:
Correct CATSCRUB COMMAND parm in error and restart.

CKMCSM92E  Error in the input command

Explanation:
The CATSCRUB command is invalid as shown by prior messages.

User response:
Correct CATSCRUB COMMAND parm in error and restart.

CKMCSM93E  Error setting up the parser

Explanation:
CATSCRUB command is unable to continue because of an internal error.

User response:
Report error to Technical Support.

CKMCSM97E  Mask for keyword x more than 44 characters, starting with y

Explanation:
The named keyword contains one or more strings, the identified string is too long for a dataset(44) or a volume(6)

User response:
Correct CATSCRUB COMMAND parm in error and restart.

CKMCSM97E  Mask for keyword x more than 44 characters, starting with y

Explanation:
The named keyword contains one or more strings, the identified string is too long for a dataset(44) or a volume(6)

User response:
Correct CATSCRUB COMMAND parm in error and restart.

CKMCSM99E  Invalid mask for xxx found yyy

Explanation:
The named keyword contains one or more strings, the identified string is not a valid mask.

User response:
Correct CATSCRUB COMMAND parm in error and restart.

CKMCSS01I  Maintenance level

(REV=cc,PMR=cccccccc,REVDAT=cc/ cc/cccc)

Explanation:
Describes the version of the CKM01CSS module

User response:
None required. Provide value if asked by Technical Support.

CKMCSS02E  CSI failed when calling for master catalog name

Explanation:
This an internal error.

User response:
Contact Technical Support.

CKMCSS03E  Error calling CSI - MOD ID

Explanation:
This an internal error.

User response:
Contact Technical Support.

CKMCSS04E  (aaa) bbb failed filter: ccc DSN=dddd

Explanation:
CATSCRUB has determined that a value ccc retrieved from the master catalog is invalid. If the value is a volume name, the DSN= value will indicate the name of the dataset with the problem. Otherwise, the dataset name is invalid.

User response:
The message indicates that you have/had a catalog entry that is in error. Depending on your CATSCRUB parameters, CATSCRUB may have deleted the dataset - so that no other action is required. If CATSCRUB didn't delete the dataset, you ought to remove the problem dataset - although CATSCRUB continued processing normally.
CKMCSS04E (aaa) bbb failed filter: ccc DSN=dddd

Explanation:
CATSCRUB has determined that a value ccc retrieved from the master catalog is invalid. If the value is a volume name, the DSN= value will indicate the name of the dataset with the problem. Otherwise, the dataset name is invalid.

User response:
The message indicates that you have/had a catalog entry that is in error. Depending on your CATSCRUB parameters, CATSCRUB may have deleted the dataset - so that no other action is required. If CATSCRUB didn’t delete the dataset, you ought to remove the problem dataset - although CATSCRUB continued processing normally.

CKMCSS06I DSN excluded by EXCLUDE-BCS keyword, will not be processed.

Explanation:
The identified catalog will not be processed because of an EXCLUDE-BCS mask.

User response:
None.

CKMCSS08E Deallocate failed for: cccc

Explanation:
Un allocation failed for catalog cccc.

User response:
Determine the reason for and fix the problem, Retry the function.

CKMCSS09E allocation failed for: cccc

Explanation:
allocation failed for catalog cccc. Highest Return code 150

User response:
Add Usercat cccc to the EXCLUDE-BCS list and retry.

CKMCSS10E UCBSCAN error; return code=RC reason code=RSN

Explanation:
This an internal error.

User response:
Contact Technical Support.

CKMCSS11E while seeking VTOC information for Dataset xxxxx UCB dump:

Explanation:
An error occurred while retrieving the VTOC for a volume. A hex dump of the UCB is printed.

User response:

Different return codes have different explanations and user responses:

RC = 4 Error accessing one or more datasets.
RC = 8 Error accessing VTOC.
The volume identified was found online but the VTOC wasn’t of the correct format. This can occur on VM/CMS volumes that are online to MVS.
RC = 12 Error accessing VVDS - Either the VVDS is missing from the volume or a VVR or NVR record could not be found in the VVDS.
RC = 16 Getmain/Freemain error. This condition should not occur. Internal error.
RC = 32 Parm list error. This condition should not occur.
RC = 320 Cannot acquire enough memory.

User response:
RC = 4 Check status of the volume.
CATSCRUB will continue as per message CKMCSS34E.
RC = 8 Check status of dataset and the volume.
If the volume is a VM/CMS volume, then the catalog entry is incorrect, the volume should not be online to MVS. CATSCRUB will continue as per message CKMCSS34E.
RC = 12 Take corrective action.
CATSCRUB will continue as per message CKMCSS34E.
RC = 16 Contact Technical Support.
RC = 32 Contact Technical Support.
RC = 320 USE REGION=0M on the EXEC PGM= JCL statement and rerun CATSCRUB.
### CKMCSS11E • CKMCSS16I

**Explanation:**
An error occurred while retrieving the VTOC for a volume. A hex dump of the UCB is printed.

**Explanation:**
Different return codes have different explanations and user responses:

<table>
<thead>
<tr>
<th>RC</th>
<th>Error</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>Error accessing one or more datasets.</td>
</tr>
<tr>
<td>8</td>
<td>Error accessing VTOC. The volume identified was found online but the VTOC wasn't of the correct format. This can occur on VM/CMS volumes that are online to MVS.</td>
</tr>
<tr>
<td>12</td>
<td>Error accessing VVDS - Either the VVDS is missing from the volume or a VVR or NVR record could not be found in the VVDS.</td>
</tr>
<tr>
<td>16</td>
<td>Getmain/Freemain error. This condition should not occur. Internal error.</td>
</tr>
<tr>
<td>32</td>
<td>Parm list error. This condition should not occur.</td>
</tr>
<tr>
<td>320</td>
<td>Cannot acquire enough memory.</td>
</tr>
</tbody>
</table>

**User response:**

- **RC = 4** Check status of the volume.
  CATSCRUB will continue as per message CKMCSS34E.
- **RC = 8** Check status of dataset and the volume.
  If the volume is a VM/CMS volume, then the catalog entry is incorrect, the volume should not be online to MVS. CATSCRUB will continue as per message CKMCSS34E.
- **RC = 12** Take corrective action.
  CATSCRUB will continue as per message CKMCSS34E.
- **RC = 16** Contact Technical Support.
- **RC = 32** Contact Technical Support.
- **RC = 320** USE REGION=0M on the EXEC PGM= JCL statement and rerun CATSCRUB.

### CKMCSS12E

**Error calling CKM01VV1 xxxx R15=rc R0=rea ID=nn**

**Explanation:**
This is an internal error.

**User response:**
Contact Technical Support.

### CKMCSS13I xxxx : entry deleted - yyyy

**Explanation:**
If a data set is in the catalog but not found on the volume specified in catalog being scrubbed, then the data set ( xxxx) is deleted for the reason ( yyyy).

**User response:**
Verify that the data set ( xxxx) was deleted for the reason ( yyyy) specified.

### CKMCSS14W data set name : keyword option : RC=nn

**Explanation:**
Message appears when RC for keyword option set = 4 and the DISP value is 'KEEP'. If a data set is in the catalog but a volume is not in the VOLUME ONLINE list this message will be displayed. The volume is excluded from the VOLUME ONLINE list by actually not being online, not being in the MATCHVOLSER list if present, or by being in the EXCLUDEMATCHVOLSER list if present.

**User response:**
Determine what action you wish to take for this anomaly.

### CKMCSS15E data set name : CATSCRUB keyword option : RC=nn

**Explanation:**
Message appears when RC for keyword option set > 4

**User response:**
Determine what action you wish to take for this anomaly.

### CKMCSS16I data set name : ASSOC NON-VSAM ALIAS DELETED - reason

**Explanation:**
This non-VSAM alias has been deleted due to DELETE in NONVSAM_ALIAS_NO_REALNAME specification.

**User response:**
None.
**Chapter 25. Messages and Codes for Advanced Catalog Management**

<table>
<thead>
<tr>
<th>Message</th>
<th>Description</th>
<th>User Response</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>CKMCSS18I</strong> data set name: PATH ENTRY</td>
<td><strong>DELETED - reason</strong>&lt;br&gt;Explanation: This VSAM entry has been deleted due to DELETE in one of the VSAM-SPHERE keywords.</td>
<td>None. Informational message.</td>
</tr>
<tr>
<td><strong>CKMCSS19I</strong> data set name: TRUENAME ENTRY</td>
<td><strong>DELETED - reason</strong>&lt;br&gt;Explanation: This VSAM entry has been deleted due to DELETE in one of the VSAM-SPHERE keywords.</td>
<td>None. Informational message.</td>
</tr>
<tr>
<td><strong>CKMCSS20E</strong> GDG base name: catalog sharing error</td>
<td><strong>Explanation:</strong>&lt;br&gt;This error occurs if record we are to rebuild has changed since we read it.</td>
<td>Stop sharing of catalog and restart.</td>
</tr>
<tr>
<td><strong>CKMCSS21I</strong> data set name: GDS entry deleted - reason</td>
<td><strong>Explanation:</strong>&lt;br&gt;This GDS entry has been deleted due to DELETE in one of the GDS- keywords.</td>
<td>None.</td>
</tr>
<tr>
<td><strong>CKMCSS22I</strong> data set name: GDG base deleted - reason</td>
<td><strong>Explanation:</strong>&lt;br&gt;This GDG base entry has been deleted due to DELETE in the GDDBASE-NO-ACTIVE-GENS keyword.</td>
<td>None.</td>
</tr>
<tr>
<td><strong>CKMCSS23I</strong> CATSCRUB processing prematurely terminated due to 'END' request on xxx</td>
<td><strong>Explanation:</strong>&lt;br&gt;The named keyword specified END for the anomaly found.</td>
<td>Verify that the informational message is correct.</td>
</tr>
<tr>
<td><strong>CKMCSS24E</strong> Error opening catalog. RC: 16 - catalog catame</td>
<td><strong>Explanation:</strong>&lt;br&gt;This error occurs while trying to open catalog for read next.</td>
<td>Determine cause of error and fix or add catalog name to EXCLUDE_BCS keyword string.</td>
</tr>
<tr>
<td><strong>CKMCSS25E</strong> Error opening catalog for update. RC: 16 - CATALOG catame</td>
<td><strong>Explanation:</strong>&lt;br&gt;This error occurs while trying to open catalog for update.</td>
<td>Determine cause of error and fix or add catalog name to EXCLUDE_BCS keyword string.</td>
</tr>
<tr>
<td><strong>CKMCSS27E</strong> No catalogs meet specifications for CATSCRUB</td>
<td><strong>Explanation:</strong>&lt;br&gt;The BCS keyword did not specify a mask for an existing catalog.</td>
<td>Change the BCS keyword so that the mask or DSN matches one or more catalogs.</td>
</tr>
<tr>
<td><strong>CKMCSS28I</strong> No processing needed for this catalog.</td>
<td><strong>Explanation:</strong>&lt;br&gt;Either the catalog is empty or there are no conditions in the catalog that meet the CATSCRUB command string.</td>
<td>Verify that the informational message is correct.</td>
</tr>
<tr>
<td><strong>CKMCSS29W</strong> BCS not in master catalog - ignored bcs mask</td>
<td>bcs name</td>
<td><strong>Explanation:</strong>&lt;br&gt;The bcs mask</td>
</tr>
</tbody>
</table>
CKMCSS30I Expected record not found - ignored:
  xxx record key
Explaination:
A record was being read for update but was not found.
User response:
None. Processing continues.

CKMCSS31E Error rebuilding GDG sphere: key
Explaination:
A GDG Sphere record read but was not found.
User response:
Processing continues. Report this Technical Support.

CKMCSS32I List of MATCH-VOLSER volumes minus EXCLUDE-MATCH-VOLSER follows
Explaination:
This information is provided to help you validate your MATCH-VOLSER and EXCLUDE-MATCH-VOLSER selection.
User response:
None.

CKMCSS33W MATCH-VOLSER volumes minus EXCLUDE-MATCH-VOLSER volumes yields no VOLUMEs
Explaination:
Using these keywords and the disk volumes online leave no match volumes. The purpose of CATSCRUB is to delete all catalog entries for datasets that are not on the matched volumes CATSCRUB will now delete all items in the catalogs that you have specified - depending on your anomaly keywords.
User response:
None.

CKMCSS35I Retry after error reading catalog, key= xxx
Explaination:
CATSCRUB received a retraceble error while reading the current catalog sequentially.
User response:
CATSCRUB logs this message and continues

CKMDEF11E REQUIRED USING STATEMENT FOR COPYLIB NOT FOUND
Explaination:
The USING statement that describes a plan must define a Cobol copy or be DEFERED. The USING statement was not found in the source.
User response:
Correct your input statements and resubmit.

CKMDEF12E DYNAMIC allocation FAILED FOR COPYLIB DATA SET
Explaination:
The building of the rules from the plan could not allocate the file referenced by the USING statement. Plan execution is terminated.
User response:
Correct your input statements and resubmit.

CKMDEF13E MEMBER OF PDS FOR PLAN OR USING NOT FOUND
Explaination:
The member of a PDS referenced by the USING statement did not exist in the PDS directory.
User response:
Correct your input statements and resubmit.

CKMDIC01E RDJFCB FAILED ON DDDDDDDD. PROCESSING TERMINATED.
Explaination:
A dictionary statement was required but the file containing it does not exist.
User response:
Correct your input statements and resubmit.

CKMDIC02E LEGEND CHARACTERS DO NOT MATCH LABELS
Explaination:
The format of the LEGEND characters do not match the legends found on the rows.
User response:
Correct your input statements and resubmit.

CKMDIC03E NO DICTIONARY ELEMENTS WERE FOUND IN THE INPUT FILE
Explaination:
The format process is dependent on a dictionary. In this
case the dictionary in the form of legends was not available.

**User response:**
Correct your input statements and resubmit.

---

**CKMDIC04E NO DICTIONARY PROTOCOL WAS FOUND IN INPUT DATA SET AND DICTNRY DDNAME WAS MISSING**

**Explanation:**
Neither the DICTNRY no the legends were available to define the fields in the file.

**User response:**
Correct your input statements and resubmit.

---

**CKMDIC05E DICTNRY FILE DOES NOT CONTAIN PROPER FORMAT**

**Explanation:**
The dictionary found in the DICTNRY file does not contain the proper format.

**User response:**
Correct your input statements and resubmit.

---

**CKMDIN01E LABEL IN RULES NOT FOUND IN DICTIONARY**

**Explanation:**
A deferred plan has no selected records to Process.

**User response:**
Correct your input statements and resubmit.

---

**CKMDIN02E UNKNOWN DATA TYPE, LEGEND CHARMS CANNOT BE SUBSTITUTED**

**Explanation:**
A deferred plan could not determine the type of record from the legend characters.

**User response:**
Correct your input statements and resubmit.

---

**CKMDIN03E FROM DATA SET MISSING FROM RULES**

**Explanation:**
A deferred plan could not find an input data set.

**User response:**
Correct your input statements and resubmit.

---

**CKMDIN04E USING DEFERRED STATEMENT MISSING IN RULES**

**Explanation:**
A deferred plan could not verify the plan contained a USING DEFERRED

**User response:**
Correct your input statements and resubmit.

---

**CKMDIN05E DATA SET FAILED TO allocate FOR DICTIONARY**

**Explanation:**
The allocation of the FROM data set of the deferred plan could not be allocated.

**User response:**
Correct your input statements and resubmit.

---

**CKMDYN01E (multiple line message; see Explanation)**

**Explanation:**
SYNTAX ERROR IN VALUE OF XXXXXXX -n
Illegal character in input text
CKM01PSN not available
IEFDB476 not available
Unknown request type
Function complete. RC=0
DSN failed RACF test
Not enough text units -
Critical keyword missing: xxxxx

SVC 99 (F) FAILURE. R15: xx ERROR: xxxx INFO: xxxx

Indicates CKM01DYN failed during a dynamic allocation function.

**User response:**
Report this error and associated product errors to Technical Support.

---

**CKMELE01E LABEL NOT FOUND ON SELECT CARD**

**Explanation:**
The syntax of a SELECT label was incorrect.

**User response:**
Correct your input statements and resubmit.

---

**Chapter 25. Messages and Codes for Advanced Catalog Management**

599
**CKMELE02E Requested Label Not In CopyLib Member**

**Explanation:**
The search of the dictionary for the label specified in the SELECT statement failed.

**User response:**
Correct your input statements and resubmit.

---

**CKMELE11E FROM Statement Not Found In MSQ Requests**

**Explanation:**
FROM data set syntax not found in a plan.

**User response:**
Correct your input statements and resubmit.

---

**CKMELE12E SELECT Statement Not Found In MSQ Requests**

**Explanation:**
The SELECT statement is required in a plan and none was found.

**User response:**
Correct your input statements and resubmit.

---

**CKMELE13E TO Statement Present, DSN Incorrect**

**Explanation:**
The data set name requested by the FROM statement has a syntax error.

**User response:**
Correct your input statements and resubmit.

---

**CKMENG01E No Data Set Found In Rules Data Set**

**Explanation:**
The execution of a rules found no input data set to allocate.

**User response:**
Correct your input statements and resubmit.

---

**CKMERR001 Object Access Failure, DDName: ddn**

**Explanation:**
These messages are issued when the Catalog Fast Reader, Catalog Keyed Updater, or VVDS Handler encounter an error.

**User response:**
Depends on other messages. Generally, these messages are designed to be self explanatory, and are used by staff for extended debugging. Please contact Technical Support.

---

**CKMERR01I VVDS Access Failure, DDName: ddn**

**Explanation:**
These messages are issued when the Catalog Fast Reader, Catalog Keyed Updater, or VVDS Handler encounter an error.

**User response:**
Depends on other messages. Generally, these messages are designed to be self explanatory, and are used by staff for extended debugging. Please contact Technical Support.

---

**CKMERR02I DSN: usercat name**

**Explanation:**
User Catalog cannot be accessed

**User response:**
Follow the Programmer Response for message IEC161I found in JESYSMSGs or eliminate the usercat from the selection list.

---

**CKMERR03I No DD allocation Found**

**Explanation:**
These messages are issued when the Catalog Fast Reader, Catalog Keyed Updater, or VVDS Handler encounter an error.

**User response:**
Depends on other messages. Generally, these messages are designed to be self explanatory, and are used by staff for extended debugging. Please contact Technical Support.

---

**CKMERR04I Failing module Function: ##,description**

**Explanation:**
These messages are issued when the Catalog Fast Reader, Catalog Keyed Updater, or VVDS Handler encounter an error.

**User response:**
Depends on other messages. Generally, these messages are designed to be self explanatory, and are used by staff for extended debugging. Please contact Technical Support.
CKMERR05I PREVIOUS module FUNCTION: #, description

Explanation:
These messages are issued when the Catalog Fast Reader, Catalog Keyed Updater, or VVDS Handler encounter an error.

User response:
Depends on other messages. Generally, these messages are designed to be self explanatory, and are used by staff for extended debugging. Please contact Technical Support.

CKMERR06I PROGRAM CSECT: csect
Explanation:
These messages are issued when the Catalog Fast Reader, Catalog Keyed Updater, or VVDS Handler encounter an error.

User response:
Depends on other messages. Generally, these messages are designed to be self explanatory, and are used by staff for extended debugging. Please contact Technical Support.

CKMERR08I statement ERROR ID: listingID#
Explanation:
These messages are issued when the Catalog Fast Reader, Catalog Keyed Updater, or VVDS Handler encounter an error.

User response:
Depends on other messages. Generally, these messages are designed to be self explanatory, and are used by staff for extended debugging. Please contact Technical Support.

CKMERR09I statement ASM LISTING LINE #: line#
Explanation:
These messages are issued when the Catalog Fast Reader, Catalog Keyed Updater, or VVDS Handler encounter an error.

User response:
Depends on other messages. Generally, these messages are designed to be self explanatory, and are used by staff for extended debugging. Please contact Technical Support.

CKMERR10I R15 = #, description
Explanation:
These messages are issued when the Catalog Fast Reader, Catalog Keyed Updater, or VVDS Handler encounter an error.

User response:
Depends on other messages. Generally, these messages are designed to be self explanatory, and are used by staff for extended debugging. Please contact Technical Support.

CKMERR12I module ASM LISTING LINE #: line
Explanation:
These messages are issued when the Catalog Fast Reader, Catalog Keyed Updater, or VVDS Handler encounter an error.

User response:
Depends on other messages. Generally, these messages are designed to be self explanatory, and are used by staff for extended debugging. Please contact Technical Support.

CKMERR14I PROCESSOR R15: r15
Explanation:
These messages are issued when the Catalog Fast Reader, Catalog Keyed Updater, or VVDS Handler encounter an error.

User response:
Depends on other messages. Generally, these messages are designed to be self explanatory, and are used by staff for extended debugging. Please contact Technical Support.

CKMERR15I PROCESSOR REASON CODE: nnn
Explanation:
This the decimal value of the failure reason code. Usually this followed by message CKMERR20I containing text explanation of the reason code. If a text explanation is not available, CKMERR18I issued, "NO DESCRIPTION FOR REASON CODE".

User response:
If message CKMERR18I follows CKMERR15I and the error is determined by OPEN, CLOSE or VSAM (as indicated by message CKMERR19I), additional information about the reason code can be obtained by consulting manual “z/OS Macro Instruction for Data Sets” section “VSAM Macro Return and Reason Codes”. There are sub-sections for “OPEN”, “CLOSE” and “Record Management” respectively.
CKMERR16I  SVC99 ERROR CODE:
Explanation:
These messages are issued when the Catalog Fast Reader, Catalog Keyed Updater, or VVDS Handler encounter an error.
User response:
Depends on other messages. Generally, these messages are designed to be self explanatory, and are used by staff for extended debugging. Please contact Technical Support.

CKMERR17I  SVC99 INFORMATION CODE:
Explanation:
These messages are issued when the Catalog Fast Reader, Catalog Keyed Updater, or VVDS Handler encounter an error.
User response:
Depends on other messages. Generally, these messages are designed to be self explanatory, and are used by staff for extended debugging. Please contact Technical Support.

CKMERR18I  NO DESCRIPTION FOR REASON CODE
Explanation:
These messages are issued when the Catalog Fast Reader, Catalog Keyed Updater, or VVDS Handler encounter an error.
User response:
Depends on other messages. Generally, these messages are designed to be self explanatory, and are used by staff for extended debugging. Please contact Technical Support.

CKMERR19I  ERROR DETERMINED BY:
Explanation:
These messages are issued when the Catalog Fast Reader, Catalog Keyed Updater, or VVDS Handler encounter an error.
User response:
Depends on other messages. Generally, these messages are designed to be self explanatory, and are used by staff for extended debugging. Please contact Technical Support.

CKMERR20I  description
Explanation:
These messages are issued when the Catalog Fast Reader, Catalog Keyed Updater, or VVDS Handler encounter an error.

User response:
Depends on other messages. Generally, these messages are designed to be self explanatory, and are used by staff for extended debugging. Please contact Technical Support.

CKMERR21I  ** IMPLICIT OPEN
Explanation:
These messages are issued when the Catalog Fast Reader, Catalog Keyed Updater, or VVDS Handler encounter an error.
User response:
Depends on other messages. Generally, these messages are designed to be self explanatory, and are used by staff for extended debugging. Please contact Technical Support.

CKMERR22I  ** IMPLICIT CLOSE
Explanation:
These messages are issued when the Catalog Fast Reader, Catalog Keyed Updater, or VVDS Handler encounter an error.
User response:
Depends on other messages. Generally, these messages are designed to be self explanatory, and are used by staff for extended debugging. Please contact Technical Support.

CKMERR23I  ** IMPLICIT REPOSITION
Explanation:
These messages are issued when the Catalog Fast Reader, Catalog Keyed Updater, or VVDS Handler encounter an error.
User response:
Depends on other messages. Generally, these messages are designed to be self explanatory, and are used by staff for extended debugging. Please contact Technical Support.

CKMERR24I  OPEN CLASSIFICATION:
Explanation:
These messages are issued when the Catalog Fast Reader, Catalog Keyed Updater, or VVDS Handler encounter an error.
User response:
Depends on other messages. Generally, these messages are designed to be self explanatory, and are used by staff for extended debugging. Please contact Technical Support.
CKMERR25I  CALLING PARM LRECL:
Explanation:
These messages are issued when the Catalog Fast Reader, Catalog Keyed Updater, or VVDS Handler encounter an error.

User response:
Depends on other messages. Generally, these messages are designed to be self explanatory, and are used by staff for extended debugging. Please contact Technical Support.

CKMERR26I  CALLING PARM KEYLEN:
Explanation:
These messages are issued when the Catalog Fast Reader, Catalog Keyed Updater, or VVDS Handler encounter an error.

User response:
Depends on other messages. Generally, these messages are designed to be self explanatory, and are used by staff for extended debugging. Please contact Technical Support.

CKMERR27I  LRECL:
Explanation:
These messages are issued when the Catalog Fast Reader, Catalog Keyed Updater, or VVDS Handler encounter an error.

User response:
Depends on other messages. Generally, these messages are designed to be self explanatory, and are used by staff for extended debugging. Please contact Technical Support.

CKMERR28I  CI RBA REQUESTED:
Explanation:
These messages are issued when the Catalog Fast Reader, Catalog Keyed Updater, or VVDS Handler encounter an error.

User response:
Depends on other messages. Generally, these messages are designed to be self explanatory, and are used by staff for extended debugging. Please contact Technical Support.

CKMERR29I  VVR/NVR KEY REQUESTED:
Explanation:
These messages are issued when the Catalog Fast Reader, Catalog Keyed Updater, or VVDS Handler encounter an error.

User response:
Depends on other messages. Generally, these messages are designed to be self explanatory, and are used by staff for extended debugging. Please contact Technical Support.

CKMFCN01E  RDJFCB FAILED ON DDNAME TO PROCESS THE OUTPUT
Explanation:
FILE. PROCESSING TERMINATED The target file to contain the formatted output failed to process properly. Further processing is impossible.

User response:
Correct your input statements and resubmit.

CKMFCN02E  BAD RETURN CODE FROM CKM03FOT, PROCESSING TERMINATED
Explanation:
A bad return code was received from the actual format process.

User response:
Correct your input statements and resubmit.
CKMFOT01E - CKM01IKB LOAD FAIL, RC = ___

Explanation:
An unrecoverable error occurred during processing.

User response:
CONFIRM THAT CKM01IKB IS IN YOUR STEPLIB
CONCATENATION. IF IT IS, CONTACT TECHNICAL SUPPORT.

CKMGET03E - ABEND CODE = ___

Explanation:
AN ERROR OCCURRED CALLING A MODULE
THROUGH IKJEFTSR RRRRRRRR IS THE RETURN CODE FROM IKJEFTSR CCCCCCCC IS THE
RETURN CODE FROM THE CALLED PROGRAM...
CKMIK103E  •  CKMINI05E

AAAABBBB IS ANY ABEND THAT MAY HAVE OCCURRED

User response:

ACTION 1. CONFIRM THAT ALL OF THE LIBRARIES IN YOUR STEPLIB CONCATENATION ARE APF AUTHORIZED 2. CONFIRM THAT CKM01IKB IS IN THE AUTHTSF NAMES LIST IN THE IKJTSO MEMBER OF SYS1.PARMLIB. 3. IF ALL THE ABOVE ARE TRUE, CONTACT TECHNICAL SUPPORT.

CKMIK103E  ABEND CODE = ___

Explanation:

AN ERROR OCCURRED CALLING A MODULE THROUGH IKJEFTSR RRRRRRRR IS THE RETURN CODE FROM IKJEFTSR CCCCCCCC IS THE RETURN CODE FROM THE CALLED PROGRAM AAAAAAAA IS ANY ABEND THAT MAY HAVE OCCURRED

User response:

ACTION 1. CONFIRM THAT ALL OF THE LIBRARIES IN YOUR STEPLIB CONCATENATION ARE APF AUTHORIZED 2. CONFIRM THAT CKM01IKB IS IN THE AUTHTSF NAMES LIST IN THE IKJTSO MEMBER OF SYS1.PARMLIB. 3. IF ALL THE ABOVE ARE TRUE, CONTACT TECHNICAL SUPPORT.

CKMINI04E  AUTHORIZED PROGRAM NOT IN AUTHORIZED LIB

Explanation:

You are executing an authorized program but it is not in an authorized library.

User response:

ACTION CONFIRM THAT ALL OF THE LIBRARIES IN YOUR STEPLIB CONCATENATION ARE APF AUTHORIZED

CKMINI01E  R2 DOES NOT POINT TO VALID VECTOR TABLE

Explanation:

No parameter(s) passed to CKM01PLD.

User response:

Contact Technical Support.

CKMINI02E  CKM01INI, VAR KEY LEN NOT 1-25

Explanation:

An unrecoverable error occurred during processing.

User response:

CONTACT Technical Support.

CKMINI03E  CKM01INI, 2ND PARM, NO VL BIT

Explanation:

An unrecoverable error occurred during processing.

User response:

Contact Technical Support.

CKMINI04E  CKM01VS1 GETDIR RC nnnnnnnn

Explanation:

An unrecoverable error occurred during processing.

User response:

Contact Technical Support.

CKMINI05E  VAR TOKEN REC SHORTER THAN KEY

Explanation:

An unrecoverable error occurred during processing.

User response:
**CKMINI06E • CKMINP07E**

**User response:**
Contact Technical Support.

---

**CKMINI06E • TOKEN VALUE LONGER THAN PARM3**

**Explanation:**
An unrecoverable error occurred during processing.

**User response:**
Contact Technical Support.

---

**CKMINI07E • RECLEN NOT FROM 1 TO 4081**

**Explanation:**
An unrecoverable error occurred during processing.

**User response:**
Contact Technical Support.

---

**CKMINI08E • VARPUT, CKM01VS1 PUT FAILED**

**Explanation:**
An unrecoverable error occurred during processing.

**User response:**
Contact Technical Support.

---

**CKMINI09E • CKM01VS1 END FAILED**

**Explanation:**
An unrecoverable error occurred during processing.

**User response:**
Contact Technical Support.

---

**CKMINP00I • CKM01INP starting**

(REV=nn,PMR=xxxxxxx,fixdate=xxxxxxxx)

**Explanation:**
Message shows current version of the module.

**User response:**
None.

---

**CKMINP01E • Error parsing SCKMPARM INI member on line n**

**Explanation:**
An error was found in when parsing an INI member.

**User response:**
Look for subsequent messages repair the SCKMPARM(xxxINI) or SCKMPARM(xxxINI#) member as indicated.

---

**CKMINP02E • Continued statement at end of file**

**Explanation:**
An end-comment (/*) was found for which there was no begin-comment (/**).

**User response:**
Remove the end-comment or insert a begin-comment in the appropriate location.

---

**CKMINP05E • Token name longer than 72**

**Explanation:**
A Token name longer than 72 bytes was found on the specified line.

**User response:**
Reduce the length of the token to 72 or less.

---

**CKMINP06E • Expected = after token name**

**Explanation:**
An equal sign (=) was not found after the Token name.

**User response:**
Insert an equal sign (=) between the Token and its value.

---

**CKMINP07E • Expected = after token name**

**Explanation:**
An equal sign (=) was not found after the Token name.

**User response:**
Insert an equal sign (=) between the Token and its value.
Chapter 25. Messages and Codes for Advanced Catalog Management

CKMINP08E  Found non-NOTES token before 1st section name
Explanation:
A Token was found before any Section was specified. Only the "Notes" Token is allowed before a section name. Reminder, Notes is provided for the customer and no product code can access the Notes value.
User response:
Ensure that the first non-comment line and non-Notes token is a Section name

CKMINP09E  (Multiple line message; see Explanation)
Explanation:
Duplicate Section/Token found
Section
Token
A token can not be defined twice for the same section.
User response:
Remove the redundant token and retry.

CKMINP10E  file function FAIL, RC = nnnnnnn
Explanation:
An unrecoverable error occurred during processing.
User response:
Contact Technical Support.

CKMINP11E  (Multiple line message; see Explanation)
Explanation:
Open failure, DD ddname
DD INI OPEN FAILURE
DD SYSPRINT open failure
DD UPDATE open failure
DD TRACEDD open failure
An unrecoverable error occurred during processing.
User response:
Contact Technical Support.

CKMINP12E  EXPECTED PARM VALUE OR RECORD, FOUND function
Explanation:
An unrecoverable error occurred during processing.
User response:
Contact Technical Support.

CKMINP14E  Error parsing MSCINI
Explanation:
MSCINI INIMERGE failed to parse the MSCINI input because it could not find the INIMERGE_SECTION values.
User response:
Use the INI# member distributed by and retry. If you need help with this contact Technical Support.

CKMINP15W  Columns 73-80 not blank on line
Explanation:
INI parser detected characters in columns 73-80. Technical Support has found that many INI errors occur because the person editing the INI doesn't see text in columns 73-80.
User response:
Edit the SCKMPARM INI member so that columns 73-80 are blank.

CKMINP21E  Sysplex name more than 8 characters
Explanation:
The sysplex value on an INI section statement is invalid because it is too long.
User response:
Repair the section name and retry.

CKMINP22E  System name more than 8 characters
Explanation:
The system value on an INI section statement is invalid because it is too long.
User response:
Repair the section name and retry.

CKMINP31E  Section name longer that 72
Explanation:
The section name is limited in size.
User response:
Repair the section name and retry.

CKMINP32E  Invalid section name
Explanation:
The section name can have alphanumeric characters in addition to a period, dash, underscore or slash.
User response:
Repair the section name and retry.
CKMINP33E Period ("." ) found in INI# section
Explanation:
A period character in the section name is valid in a customer INI for denoting sysplex and system names but is not valid in the distributed INI#.
User response:
Repair the section name and retry.

CKMINP34E Qualified PRODUCT_INFO in INI
Explanation:
These sections can not qualified by sysplex and/or system name.
User response:
Repair the section name and retry.

CKMINP35E Two INIMERGE_VALUES sections found
Explanation:
The INIMERGE_VALUES may only appear once in the INI.
User response:
Repair the section name and retry.

CKMINP36E Qualified section after generic
Explanation:
A section was found with sysplex and/or system qualifications but it follows the same section without such qualification. This section can never be accessed and is invalid.
User response:
Repair the section name and retry.

CKMINP37E (Multiple possible messages; see Explanation)
Explanation:
Duplicate qualified section
or
Duplicate unqualified section found

CKMINP38E Trailing period on section statement
Explanation:
A section statement has one of the following formats
:sectionname.sysplexname.systemname
:sectionname.sysplexname
:sectionname..systemname
User response:
Repair the section name and retry.

CKMINP39E INI# columns 73-80 are not blank, line nnnn
Explanation:
Historically, placing text in columns 73-80 makes debugging errors in the INI difficult.
User response:
Repair the section name and retry.

CKMINP40E Right of INI#’s section not blank
Explanation:
INI#’s section statement must be all blanks after section name to facilitate customers entering sysplex/system names.
User response:
Repair the section name and retry.

CKMINP41I Nothing copied
Explanation:
The customer INI had no special sections to copy
User response:
Nothing delete

Explanation:
No INI parameters were deleted.

User response:
None.

Input: input line

Explanation:
A previously noted error occurred on the line shown.

User response:
See prior error message.

Token non-NOTES before 1st section

Explanation:
NOTES is the only token allowed before the first section statement.

User response:
Repair the INI and resubmit.

Token NOTES found in INI#

Explanation:
NOTES is only allowed in the customer INI.

User response:
Repair the INI and resubmit.

Error parsing MSCINI (INI#), see JOB Log

Explanation:
INIMERGE used the INI parser to validate the INI but the INI parser was unsuccessful.

User response:
For INI#, Contact Technical Support.

Passed section length invalid length

Explanation:
An unrecoverable error occurred during processing.

User response:
Contact Technical Support.

INIGET 3RD PARM, NO VL BIT

Explanation:
An unrecoverable error occurred during processing.

User response:
Contact Technical Support.

INI token rec shorter than key section/token

Explanation:
An unrecoverable error occurred during processing.
CKMINS06E • CKMINV09E

User response:
Contact Technical Support.

CKMINS06E TOKEN VALUE LONGER THAN RECEIVING PARM SECTION/TOKEN
token TOKEN VALUE value

Explanation:
An unrecoverable error occurred during processing.

User response:
Contact Technical Support.

CKMINS07E BAD REG 2 PTR TO VECTOR TABLE

Explanation:
An unrecoverable error occurred during processing.

User response:
Contact Technical Support.

CKMINV01E Error parsing SCKMPARM INI member on line n

Explanation:
An error was found in when parsing an INI member.

User response:
Look for subsequent messages repair the SCKMPARM(xxxINI) or SCKMPARM(xxxINI#) member as indicated.

CKMINV01E Error parsing SCKMPARM INI member on line n

Explanation:
An error was found in when parsing an INI member.

User response:
Look for subsequent messages repair the SCKMPARM(xxxINI) or SCKMPARM(xxxINI#) member as indicated.

CKMINV02E Continued statement at end of file

Explanation:
An end-comment ("/") was found for which there was no begin-comment ("/").

User response:
Remove the end-comment or insert a begin-comment in the appropriate location.

CKMINV05E Token name longer than 72

Explanation:
A Token name longer than 72 bytes was found on the specified line.

User response:
Reduce the length of the token to 72 or less.

CKMINV06E Expected = after token name

Explanation:
An equal sign (=) was not found after the Token name.

User response:
Insert an equal sign (=) between the Token and its value.

CKMINV07E Expected = after token name

Explanation:
An equal sign (=) was not found after the Token name.

User response:
Insert an equal sign (=) between the Token and its value.

CKMINV08E Found non-NOTES token before 1st section name

Explanation:
A Token was found before any Section was specified. Only the "Notes" Token is allowed before a section name. Reminder, Notes is provided for the customer and no product code can access the Notes value.

User response:
Ensure that the first non-comment line and non-Notes token is a Section name

CKMINV09E Token

Explanation:
A token can not be defined twice for the same section.

User response:
Remove the redundant token and retry.
CKMINV09E Token
Explanation:
A token can not be defined twice for the same section.
User response:
Remove the redundant token and retry.

CKMINV10E file function FAIL, RC = nnnnnnn
Explanation:
An unrecoverable error occurred during processing.
User response:
Contact Technical Support.

CKMINV11E DD TRACEDD open failure
Explanation:
An unrecoverable error occurred during processing.
User response:
Contact Technical Support.

CKMINV12E EXPECTED PARM VALUE OR
RECORD, FOUND function
Explanation:
An unrecoverable error occurred during processing.
User response:
Contact Technical Support.

CKMINV14E Error parsing MSCINI
Explanation:
MSCINI INIMERGE failed to parse the MSCINI input because it could not find the INIMERGE_SECTION values.
User response:
Use the INI# member distributed by Technical Support and retry. If you need help with this contact Technical Support.

CKMINV15W Columns 73-80 not blank on line
Explanation:
INI parser detected characters in columns 73-80. Technical Support has found that many INI errors occur because the person editing the INI doesn't see text in columns 73-80.
User response:
Edit the SCKMPARM INI member so that columns 73-80 are blank.

CKMINV21E Sysplex name more than 8 characters
Explanation:
The sysplex value on an INI section statement is invalid because it is too long.
User response:
Repair the section name and retry.

CKMINV22E System name more than 8 characters
Explanation:
The system value on an INI section statement is invalid because it is too long.
User response:
CKMINV31E • CKMINV39E

Repair the section name and retry.

CKMINV31E  Section name longer that 72
Explanation:
The section name is limited in size.
User response:
Repair the section name and retry.

CKMINV32E  Invalid section name
Explanation:
The section name can have alphanumeric characters in addition to a period, dash, underscore or slash.
User response:
Repair the section name and retry.

CKMINV33E  Period(“.”) found in INI# section
Explanation:
A period character in the section name is valid in a customer INI for denoting sysplex and system names but is not valid in the distributed INI#.
User response:
Repair the section name and retry.

CKMINV34E  Qualified PRODUCT_INFO in INI
Explanation:
These sections can not qualified by sysplex and/or system name.
User response:
Repair the section name and retry.

CKMINV35E  Two INIMERGE_VALUES sections found
Explanation:
The INIMERGE_VALUES may only appear once in the INI.
User response:
Repair the section name and retry.

CKMINV36E  Qualified section after generic
Explanation:
A section was found with sysplex and/or system qualifications but it follows the same section without such qualification. This section can never be accessed and is invalid.
User response:
Repair the section name and retry.

CKMINV37E  Duplicate unqualified section found
Explanation:
Two section names match exactly, then are either
1. Both unqualified
2. Both specify the same Sysplex and system names.
Section names must be unique.
User response:
Repair the section name and retry.

CKMINV38E  Trailing period on section statement
Explanation:
A section statement has one of the following formats
:sectionname.sysplexname.systemname
:sectionname..systemname
User response:
Repair the section name and retry.

CKMINV39E  INI# columns 73-80 are not blank, line nnnn
Explanation:
Historically, placing text in columns 73-80 makes debugging errors in the INI difficult.
User response:
Repair the section name and retry.
Chapter 25. Messages and Codes for Advanced Catalog Management

CKMINV39W INI columns 73-80 are not blank, line nnnn
Explanation:
Historically, placing text in columns 73-80 makes debugging errors in the INI difficult.
User response:
Repair the section name and retry.

CKMINV40E Right of INI#’s section not blank
Explanation:
INI#’s section statement must be all blanks after section name to facilitate customers entering sysplex/system names.
User response:
Repair the section name and retry.

CKMINV41I Nothing copied
Explanation:
The customer INI had no special sections to copy
User response:
None

CKMINV42I Nothing delete
Explanation:
No INI parameters were deleted
User response:
None

CKMINV50I INPUT: input line
Explanation:
A previously noted error occured on the line shown.
User response:
See prior error message.

CKMINV51E Token non-NOTES before 1st section
Explanation:
NOTES is the only token allowed before the first section statement.
User response:
Repair the INI and resubmit.

CKMINV52E Token NOTES found in INI#
Explanation:
NOTES is only allowed in the customer INI.
User response:
Repair the INI and resubmit.

CKMINV53E Error parsing the customer INI, see JOB Log
Explanation:
INIMERGE used the INI parser to validate the INI but the INI parser was unsuccessful.
User response:
For INI#, Contact Technical Support
User response:
For the customer INI, repair the INI based on the messages in the JOB log and resubmit.

CKMINV71E Section in INI# but not INI:
Explanation:
INI view can find section in INI that was found in the INI#.
User response:
Repair the INI and resubmit.

CKMINV72I All INI# sections found in INI
Explanation:
All of the INI# sections were found in the INI.
User response:
None.
CKMINV73E  CKMJCL20I

CKMINV73E  Error in SYSPARM
Explanations:
CKM01INV SYSPARM is incorrect. Valid forms are:
SYSPARM= for current SYSPLEX and SYS name
SYSPARM=" for current SYSPLEX and SYS name
SYSPARM=';' for current SYSPLEX and SYS name
SYSPARM=plexname,sysname'

User response:
Correct the SYSPARM on your execute statement and resubmit.

CKMJCL00I (Multiple possible messages; see Explanation)
Explanations:
Completed member xxxxxxxx
Processing member xxxxxxxx
STOWing alias xxxxxxxx ttr xxxxxxxx
Message shows JCL members processed
User response:
None

CKMJCL01I  PDS has member | PDS has alias
xxxxxxx of xxxxxxxx
Explanations:
Program has found member name in directory.
User response:
None

CKMJCL02E (Multiple possible messages; see Explanation)
Explanations:
Open failed for JCLIN
Open failed for JCLOUT
Open failed for JCLDIR
Open failed for SYSPRINT
operation FAILED FOR ddname
The operation failed for the specified DD.
User response:
If operation is OPEN, make sure the JCL contains a DD card for ddname. Otherwise, contact Technical Support.

CKMJCL03E  Errors found reading INI
Explanations:
The JOB log shows the errors detected in the INI
User response:
Correct the INI

CKMJCL04E element error | PROCNAME TOO LONG
Explanations:
The specified element had the specified error.
User response:
Correct the error.

CKMJCL05E Unknown JCL type
Explanations:
A line of JCL was found that could not be scanned.
User response:
Contact Technical Support.

CKMJCL06E Expecting PARM: XXXX in section: XXXX
Explanations:
A parameter of a proc wasn’t defined in the INI within the section specified.
User response:
Contact Technical Support.

CKMJCL10I  Maintenance:
Explanations:
Specified line number with displayed text is incorrect.
User response:
Contact Technical Support.

CKMJCL11I  CKM01JCL processing ended successfully
Explanations:
All JCL was processed with no errors.
User response:
None.

CKMJCL20I  found - JCL record
Explanations:
Indicates a target JCL component to be changed.
User response:
None required

CKMJCL21I  delete - JCL record
Explanation:
Indicates a JCL record to be deleted.
User response:
None required

CKMJCL22I  Insert - JCL record
Explanation:
Indicates a JCL record to be added.
User response:
None required

CKMJCL30I  Using JCL_PROC_PARMS Section | Using SIS_PROC_PARMS Section
Explanation:
Indicates the INI section that will be used to drive the JCL customization. This name varies by product and version.
User response:
None required

CKMJCL99E  Internal errors
Explanation:
An unrecoverable internal error occurred.
User response:
Correct the JCL error.

CKMJIN03E  SYNTAX - CREATE DATA SET NOT SPECIFIED
Explanation:
The JOIN and WITH data sets are combined to CREATE or APPEND a data set containing the joined values. The CREATE or APPEND statement is missing.
User response:
Correct your input statements and resubmit.

CKMJIN04E  SYNTAX - CREATE DATA SET NOT CORRECT
Explanation:
Internal error. The CREATE data set was not in the rules as a create or the APPEND data set was not in the rules as an append data set.
User response:
Correct your input statements and resubmit.

CKMJOI05E  SYNTAX JOIN ARGUMENTS NOT FOUND
Explanation:
A series of arguments are required before a JOIN function can process. No arguments were found.
User response:
Correct your input statements and resubmit.

CKMJOI06E  SYNTAX WHERE LABELS NOT IN TABLE
Explanation:
A LABEL in the WHERE for a join function was not found in the dictionary created by MQF from the LEGEND.
User response:
Correct your input statements and resubmit.

CKMJOI07E  SYNTAX SORT LABELS NOT IN TABLE
Explanation:
The ORDER BY statement referenced a label Not found in the LEGEND.
User response:
Correct your input statements and resubmit.

CKMJOI08E  SYNTAX SORT CONTINUATION MISSING
Explanation:
The ORDER BY statement was continued to a second
CKMK0201E • CKMLIC06E

statement but the syntax was wrong.

User response:
Correct your input statements and resubmit.

CKMK0201E KEY NOT FOUND
Explanation:
The POINT was issued for a value that was beyond the last value in the cluster.

User response:
Correct your input statements and resubmit.

CKMKRD01E KEY NOT FOUND
Explanation:
A POINT was issued by the VSAM access program but the value of the literal exceeded the last record in the cluster.

User response:
Correct your input statements and resubmit.

CKMLIC01E No valid AUTHCODE= or LICENSES= in INI
Explanation:
During program start, the product licensing values were found to be in error.

User response:
Compare the //INI member’s "Product_security" section entries with those sent by Technical Support. If the contents agree, letter for letter, contact Technical Support. Have available the listing that contains this message and the INI SCKMPARM member.

CKMLIC02E AUTHCODE LENGTH NOT 12
Explanation:
During program start, the authorization code value was found to be in error.

User response:
Compare the //INI member’s "Product_security" section entries with those sent by Technical Support. If the contents agree, letter for letter, contact Technical Support. Have available the listing that contains this message and the INI SCKMPARM member.

CKMLIC03W Authorization - days remaining: nnnn

RC=0 | 4

Explanation:
Your license for this product will no longer be valid after the days shown. This product will function normally until the license expires although the minimum return code may be 4. The RC=4 indicates that either EXPIRATION_WARNING_RC was not specified in the INI or the value was 4, meaning that the calling program was warned of this message, setting the minimal JOB step return code to 4. The RC=0 indicates that EXPIRATION_WARNING_RC = 0 was specified in the INI, meaning that the calling program received a return code zero. EXPIRATION_WARNING_RC = 0 allows those sites who need a return code zero even with a warning message so subsequent steps of batch JOBS will execute correctly based on the return code.

User response:
If you are trialing this product, your evaluation period will end soon as agreed by your trial agreement. Contact your sales representative for further information. If you have purchased a license for this product, you need to contact Technical Support for an extension of your license in accord with your contact.

CKMLIC04E ERROR FETCHING EXPIRATION_DATE
Explanation:
During program start, the expiration date value was found to be in error.

User response:
Compare the //INI member’s "Product_security" section entries with those sent by Technical Support. If the contents agree, letter for letter, contact Technical Support. Have available the listing that contains this message and the INI SCKMPARM member.

CKMLIC05E EXPIRATION_DATE LENGTH NOT 6
Explanation:
During program start, the expiration date value was found to be in error.

User response:
Compare the //INI member’s "Product_security" section entries with those sent by Technical Support. If the contents agree, letter for letter, contact Technical Support. Have available the listing that contains this message and the INI SCKMPARM member.

CKMLIC06E ERROR FETCHING A CPUID
Explanation:
During program start, the CPUID value was found to be in error.

User response:
Compare the //INI member’s "Product_security" section entries with those sent by Technical Support. If the contents agree, letter for letter, contact Technical Support. Have available the listing that contains this message and the INI SCKMPARM member.
CKMLIC07E A CPUID LENGTH WAS NOT 16
Explanation:
During program start, the CPUID value was found to be in error.
User response:
Compare the //INI member’s “:Product_security” section entries with those sent by Technical Support. If the contents agree, letter for letter, contact Technical Support. Have available the listing that contains this message and the INI SCKMPARM member.

CKMLIC08E License is too short
Explanation:
During program start, one of the LICENSEs= values was found to be in error.
User response:
Compare the //INI member’s “:Product_security” section entries with those sent by Technical Support. If the contents agree, letter for letter, contact Technical Support. Have available the listing that contains this message and the INI SCKMPARM member.

CKMLIC84E EXPIRATION_WARNING_DAYS invalid
Explanation:
During program start, the EXPIRATION_WARNING_DAYS value of the :PRODUCT_SECURITY INI section was found to not specify a number between 0 and 9999.
User response:
Change value and resubmit.

CKMLIC85E EXPIRATION_WARNING_RC not 0 or 4
Explanation:
During program start, the EXPIRATION.WARNING_RC value of the :PRODUCT_SECURITY INI section was found to not specify 0 or 4.
User response:
Change value and resubmit.

CKMM0001W Non-Zero Return Code from program

Explanation:
A Non-Zero return code was received from program. The return rc and reason codes rs srs are listed.
User response:
Review other messages received with this message for a further explanation of the error. Contact Technical Support for further assistance.

CKMM0002W Non-Zero Return Code from function

Explanation:
A Non-Zero return code was received from function. The return rc and reason codes rs srs are listed.
User response:
Review other messages received with this message for a further explanation of the error. Contact Technical Support for further assistance.

CKMM0003W Task is not running APF authorized
Explanation:
The current started task or batch job is not running with APF authorized libraries.
User response:
Verify that all libraries listed in STEPLIB are APF authorized and rerun process. Contact Technical Support for further assistance.

CKMM0004S (multiple possible messages; see Explanation)

Explanation:
Unable to obtain storage, Rc=rc, Length=len, Key=key, Subpool=sp

or
Unable to obtain memory objects, Rc=rc, Rs=rs, Length=len, Key=key

CKM was unable to obtain storage during one or more of its processes.
User response:
Review the message, increase the Region size or MEMLIMIT, if appropriate, and rerun process. Contact Technical Support for further assistance.

CKMM0005W (multiple possible messages; see Explanation)

Explanation:
Error releasing storage, Rc=rc, Address=adr, Length=len, Subpool=sp, Key=key

or
Unable to release storage, Rc=rc, Address=adr, Length=len, Subpool=sp, Key=key

or
Unable to release memory objects, Rc=rc, Rs=rs, Token=tok

or

Unable to release memory object, Rc=rc, Rs=s, Address=s

CKM was unable to release storage during one or more of its processes.

**User response:**
Contact Technical Support if this persists.

---

**CKMM0006I** A product release started task is already active in this system.

**Explanation:**
The CKM started task is already running on this system. Only one copy of the CKM started task can be active on a system at a time.

**User response:**
Contact Technical Support for further assistance.

---

**CKMM0007W** Unable to setup recovery environment...Rc=rc

**Explanation:**
Abend recovery was not established.

**User response:**
Review messages for more information. Contact Technical Support for further assistance.

---

**CKMM0008W** Unable to remove recovery environment...Rc=rc

**Explanation:**
The abend recovery environment could not be removed.

**User response:**
Review messages for more information. Contact Technical Support for further assistance.

---

**CKMM0010I** product release Initialized on sysname

**Explanation:**
This message indicates the product name product and release level release of the current process that has successfully initialized on system sysname.

**User response:**
None.

---

**CKMM0011W** Error loading module 'mod', Rc=rc, Rs=rs, SubRs=srs

**Explanation:**
Module mod was unable to be loaded. The return code rc and reason codes rs srs provide diagnostic information about the failures.

**User response:**
Attempt to rerun the process that failed. Contact Technical Support for further assistance.

---

**CKMM0012S** Error matching pattern, Rc=rc
  Msg=msg Pattern='pattern'
  'String'=string

**Explanation:**
An error occurred while trying to match a pattern pattern with a string string.

**User response:**
Refer to msg, pattern, and string to determine the error. Attempt to correct the error and rerun the process. Contact Technical Support for further assistance.

---

**CKMM0013I** product release Stopped on sysname

**Explanation:**
This message indicates the product name product and release level release of the current process that has stopped on system sysname.

**User response:**
None.

---

**CKMM0014I** product release Starting on sysname

**Explanation:**
This message indicates the product name product and release level release of the current process that is attempting to start on system sysname.

**User response:**
None.

---

**CKMM0015I** product release Terminating on sysname

**Explanation:**
This message indicates the product name product and release level release of the current process that is terminating on system sysname.

**User response:**
None.
CKMM0016W Unable to deallocate DD 'dd', R15=rc, S99ERROR=err, S99INFO=info

Explanation:
An error occurred while trying to deallocate dd from the current task.

User response:
Look in MVS Programming: Authorized Assembler Services Guide under Requesting Dynamic Allocation Functions. Use rc, err, and info to analyze the error that occurred. Contact Technical Support for further assistance.

CKMM0017I text

Explanation:
This message will appear with other messages.

User response:
Refer to other messages that appear with this message for more information. Contact Technical Support for further assistance.

CKMM0018W Unable to allocate DD 'dd' or DSN 'dsn', R15=rc, S99ERROR=err, S99INFO=info

Explanation:
An error occurred while trying to allocate dd or dsn to the current task.

User response:
Look in MVS Programming: Authorized Assembler Services Guide under Requesting Dynamic Allocation Functions. Use rc, err, and info to analyze the error that occurred. Contact Technical Support for further assistance.

CKMM0020E Unable to locate DSAB for ddname, Rc=rc, Rs=rs

Explanation:
An attempt to locate the DSAB pointer for ddname failed with return code rc and reason code rs.

User response:
Contact Technical Support for further assistance.

CKMM0021I text

Explanation:
An error occurred while trying to access CKM data.

User response:
Consult other CKM messages that were issued with this message for more information. Contact Technical Support for further assistance.

CKMM0022E The CKM address space is no longer available.

Explanation:
Something has caused the CKM address space to no longer be available for services.

User response:
Consult other CKM messages that were issued with this message for more information and check the status of the CKM address space. Contact Technical Support for further assistance.

CKMM0023E Unable to gain control of major/minor, Rc=rc, Rs=rs

Explanation:
A request to obtain control of a resource, major/minor, failed with return code rc and reason code rs.

User response:
Consult other CKM messages that were issued with this message for more information and check the status of the CKM address space. Contact Technical Support for further assistance.

CKMM0024W Unable to release control of major/minor, Rc=rc, Rs=rs

Explanation:
A request to release control of a resource, major/minor, failed with return code rc and reason code rs.

User response:
Consult other CKM messages that were issued with this message for more information and check the status of the CKM address space. Contact Technical Support for further assistance.

CKMM0030E Unable to perform ALESERV/ADD for 'name', Rc=rc

Explanation:
An attempt to gain access to the specified resource name using ALESERV failed with the return code rc.

User response:
Contact Technical Support for further assistance.

CKMM0031E Unable to perform ALESERV/DELETE for 'name', Rc=rc

Explanation:
An attempt to remove the connection between the current address space and the resource failed with return code rc.

User response:
CKMM0032E  CKMMER00I

Consult other CKM messages that were issued with this message for more information. Contact Technical Support for further assistance.

CKMM0032E Unable to create data space, Rc=rc, Rs=rs

Explanation:
An attempt to create a new data space failed with return code rc and reason code rs.

User response:
Consult other CKM messages that were issued with this message for more information. Contact Technical Support for further assistance.

CKMM0033E Unable to delete data space name, Rc=rc, Rs=rs, Stoken=stoken

Explanation:
An attempt to delete an old data space failed with return code rc and reason code rs.

User response:
Consult other CKM messages that were issued with this message for more information. Contact Technical Support for further assistance.

CKMM0034E VGET failed, Rc=rc, Name=name

Explanation:
A request to retrieve the value of an ISPF variable failed with return code rc.

User response:
The name of the variable can be found in name. Consult other CKM messages that were issued with this message for more information. Contact Technical Support for further assistance.

CKMM0035E VPUT failed, Rc=rc, Name=name

Explanation:
A request to update an ISPF variable failed with return code rc.

User response:
The name of the variable can be found in name. Consult other CKM messages that were issued with this message for more information. Contact Technical Support for further assistance.

CKMM0036E TBADD failed for table, Rc=rc

Explanation:
A request to add a row to ISPF table table failed with return code rc.

User response:
Consult other CKM messages that were issued with this message for more information. Contact Technical Support for further assistance.

CKMM0039I  TCP/IP Server Init Complete
IPAddr(LOCALCONN),Port(PORTNUM), Timeout(TIMEOUT)

Explanation:
TCP/IP services have successfully started for LOCALCONN on port PORTNUM. The timeout value for communication to other systems is TIMEOUT.

User response:
None.

CKMM010I  TCPIP Server Init Failed
IPAddr(LOCALCONN),Port(PORTNUM), Timeout(TIMEOUT),rc(rc)

Explanation:
TCP/IP services have failed to initialize for LOCALCONN on port PORTNUM. The timeout value for communication to other systems is TIMEOUT. The return code from the initialization services is rc.

User response:
This may be the result of starting the CKM address space too soon after a previous shutdown. In this situation, stop the address space and wait a couple of minutes before attempting to restart. This may also be the result of the PORTNUM being in use by another address space. Attempt to use another port number. Contact Technical Support for further assistance.

CKMM016I  TCP Message Service Started

Explanation:
TCP/IP message services are now available for this address space.

User response:
None.

CKMMER00I  CKM01MER starting
(REV=nn,PMR=xxxxxxx,fixdate=xxxxxxxx)

Explanation:
Message shows current version of the module.

User response:
None.
CKMMER01E  Error parsing SCKMPARM INI member on line n
Explanation:
An error was found in when parsing an INI member.
User response:
Look for subsequent messages repair the SCKMPARM(XXXINI) or SCKMPARM(XXXINI#) member as indicated.

CKMMER01E  Error parsing SCKMPARM INI member on line n
Explanation:
An error was found in when parsing an INI member.
User response:
Look for subsequent messages repair the SCKMPARM(XXXINI) or SCKMPARM(XXXINI#) member as indicated.

CKMMER02E  Continued statement at end of file
Explanation:
An end-comment (/*) was found for which there was no begin-comment (/*).
User response:
Remove the end-comment or insert a begin-comment in the appropriate location.

CKMMER02E  Continued statement at end of file
Explanation:
An end-comment (/*) was found for which there was no begin-comment (/*).
User response:
Remove the end-comment or insert a begin-comment in the appropriate location.

CKMMER05E  Token name longer than 72
Explanation:
A Token name longer than 72 bytes was found on the specified line.
User response:
Reduce the length of the token to 72 or less.

CKMMER06E  Expected = after token name
Explanation:
An equal sign (=) was not found after the Token name.
User response:
Insert an equal sign (=) between the Token and its value.

CKMMER07E  Expected = after token name
Explanation:
An equal sign (=) was not found after the Token name.
User response:
Insert an equal sign (=) between the Token and its value.

CKMMER08E  Found non-NOTES token before 1st section name
Explanation:
A Token was found before any Section was specified. Only the “Notes” Token is allowed before a section name. Reminder, Notes is provided for the customer and no product code can access the Notes value.
User response:
Ensure that the first non-comment line and non-Notes token is a Section name

CKMMER09E  Token
Explanation:
A token can not be defined twice for the same section.
User response:
Remove the redundant token and retry.

CKMMER09E  Token
Explanation:
A token can not be defined twice for the same section.
User response:
Remove the redundant token and retry.

CKMMER09E  Token
Explanation:
A token can not be defined twice for the same section.
User response:
Remove the redundant token and retry.

CKMMER10E  file function FAIL, RC = nnnnnnn
Explanation:
An unrecoverable error occurred during processing.
User response:
Contact Technical Support.
CKMMER11E DD TRACEDD open failure
Explanation:
An unrecoverable error occurred during processing.
User response:
Contact Technical Support.

CKMMER11E DD TRACEDD open failure
Explanation:
An unrecoverable error occurred during processing.
User response:
Contact Technical Support.

CKMMER11E DD TRACEDD open failure
Explanation:
An unrecoverable error occurred during processing.
User response:
Contact Technical Support.

CKMMER11E DD TRACEDD open failure
Explanation:
An unrecoverable error occurred during processing.
User response:
Contact Technical Support.

CKMMER12E EXPECTED PARM VALUE OR RECORD, FOUND function
Explanation:
An unrecoverable error occurred during processing.
User response:
Contact Technical Support.

CKMMER14E Error parsing MSCINI
Explanation:
MSCINI INIMERGE failed to parse the MSCINI input because it could not find the INIMERGE_SECTION values.
User response:

Use the INI# member distributed by Technical Support and retry. If you need help with this contact Technical Support.

CKMMER15W Columns 73-80 not blank on line
Explanation:
INI parser detected characters in columns 73-80. Technical Support has found that many INI errors occur because the person editing the INI doesn't see text in columns 73-80.
User response:
Edit the SCKMPARM INI member so that columns 73-80 are blank.

CKMMER21E Sysplex name more than 8 characters
Explanation:
The sysplex value on an INI section statement is invalid because it is too long.
User response:
Repair the section name and retry.

CKMMER22E System name more than 8 characters
Explanation:
The system value on an INI section statement is invalid because it is too long.
User response:
Repair the section name and retry.

CKMMER31E Section name longer that 72
Explanation:
The section name is limited in size.
User response:
Repair the section name and retry.

CKMMER32E Invalid section name
Explanation:
The section name can have alphanumeric characters in addition to a period, dash, underscore or slash.
User response:
Repair the section name and retry.
User response:
Repair the section name and retry.

CKMMER37E Duplicate unqualified section found
Explanation:
Two section names match exactly, then are either
1. Both unqualified
2. Both specify the same Sysplex and system names.
   Section names must be unique.
User response:
Repair the section name and retry.

CKMMER38E Trailing period on section statement
Explanation:
A section statement has one of the following formats
:sectionname.sysplexname.systemname
:sectionname.sysplexname
:sectionname..systemname
User response:
Repair the section name and retry.

CKMMER39E INI# columns 73-80 are not blank, line nnnn
Explanation:
Historically, placing text in columns 73-80 makes debugging errors in the INI difficult.
User response:
Repair the section name and retry.

CKMMER39W INI columns 73-80 are not blank, line nnnn
Explanation:
Historically, placing text in columns 73-80 makes debugging errors in the INI difficult.
User response:
Repair the section name and retry.

CKMMER40E Right of INI#’s section not blank
Explanation:
INI#’s section statement must be all blanks after section name to facilitate customers entering sysplex/system names.
User response:
Repair the section name and retry.
CKMMER41I  Nothing copied
Explanation:
The customer INI had no special sections to copy
User response:
None

CKMMER42I  Nothing delete
Explanation:
No INI parameters were deleted
User response:
None

CKMMER50I  INPUT: input line
Explanation:
A previously noted error occurred on the line shown.
User response:
See prior error message.

CKMMER51E  Token non-NOTES before 1st section
Explanation:
NOTES is the only token allowed before the first section statement.
User response:
Repair the INI and resubmit.

CKMMER52E  Token NOTES found in INI#
Explanation:
NOTES is only allowed in the customer INI.
User response:
Repair the INI and resubmit.

CKMMER53E  Error parsing the customer INI, see JOB Log
Explanation:
INIMERGE used the INI parser to validate the INI but the INI parser was unsuccessful.
User response:
For INI#, Contact Technical Support
User response:
For the customer INI, repair the INI based on the messages in the JOB log and resubmit.

CKMMER71E  Section in INI# but not INI:
Explanation:
INI view can find section in INI that was found in the INI#.
User response:
Repair the INI and resubmit.

CKMMER72I  All INI# sections found in INI
Explanation:
All of the INI# sections were found in the INI.
User response:
None.

CKMMER73E  Error in SYSPARM
Explanation:
CKM01INV SYSPARM is incorrect
Valid forms are:
SYSPARM= for current SYSPLEX and SYS name
SYSPARM="" for current SYSPLEX and SYS name
SYSPARM=',' for current SYSPLEX and SYS name
SYSPARM='plexname,sysname'
User response:
Correct the SYSPARM on your execute statement and resubmit.

CKMML111E (Multiple possible messages; see Explanation)
Explanation:
Authorization - cpu timed out
Authorization - invalid chars in authcode
Authorization - invalid juldate
Authorization - julian date does not match
Authorization - product expired
Bad input character in License xxxxxxxxxx
The displayed license or product code is invalid for a variety of reasons.

User response:
Contact Technical Support concerning your licenses. Be ready to provide the text from the message.

CKMML112E Authorization - CPUID parity is invalid for CPUID: xxxx
Explanation:
DESCRIPTION: An error was found in your CPUID values

User response:
ACTION: Contact Technical Support concerning your licenses. provide the text from the message.

CKMML112E Authorization - CPUID parity is invalid for CPUID: xxxx
Explanation:
DESCRIPTION: An error was found in your CPUID values

User response:
ACTION: Contact Technical Support concerning your licenses. provide the text from the message.

CKMML112E Authorization - CPUID parity is invalid for CPUID: xxxx
Explanation:
DESCRIPTION: An error was found in your CPUID values

User response:
ACTION: Contact Technical Support concerning your licenses. provide the text from the message.

CKMML113E Authorization - product mismatch
Explanation:
Product code provided is not for this product.

User response:
Contact Technical Support concerning your licenses. provide the text from the message.

CKMML114E Authorization - CPU S/N = xxxxxxxxxx

Explanation:
A license wasn't found for this CPU.

User response:
Contact Technical Support concerning your licenses. provide the text from the message.

CKMML114E Authorization - CPU S/N = xxxxxxxxxx

Explanation:
A license wasn't found for this CPU.

User response:
Contact Technical Support concerning your licenses. provide the text from the message.

CKMML115E Authorization - seq mismatch in FEATURE-1
Explanation:
A license wasn't found for this CPU.

User response:
Contact Technical Support concerning your licenses. provide the text from the message.

CKMML115E Authorization - seq mismatch in FEATURE-1
Explanation:
A license wasn't found for this CPU.

User response:
Contact Technical Support concerning your licenses. provide the text from the message.

CKMML116E Authorization - validation failed
Explanation:
This product can't be used because of licensing problems displayed in prior messages.

User response:
Contact Technical Support concerning your licenses. provide the text from the message.

CKMML134E Invalid block check of license xxxxxxxxxx
Explanation:
The displayed license isn't consistent.

User response:
Contact Technical Support concerning your licenses. provide the text from the message.
CKMMOD01I  CKMMPA02E

CKMMOD01I  Starting (rev=xxx, ptf=xxx, fixdate=xxx)
Explanation:
Indicates CKM01MOD is starting and its version.
User response:
Informational only

CKMMOD02E  DIFF option requires SYSUT2
Explanation:
DIFF compares loadlibs SYSUT1 and SYSUT2.
User response:
Correct JCL or execution parameter

CKMMOD02I  Terminating
Explanation:
Indicates CKM01MOD is terminating.
User response:
Informational only

CKMMOD03E  Unable to open SYSUT1
Explanation:
SYSUT1 is a required DD statement.
User response:
Correct JCL or execution parameter

CKMMOD04E  A duplicate PMR found module
Explanation:
The same PMR number was used twice in the same module.
User response:
Informational only

CKMMOD05E  No PMR data available for 'SYSUT1 xxxxxxxxxx' | No PMR data available for 'SYSUT2 xxxxxxxxxx'
Explanation:
The load module has an EHDR, not MSCHDR/MSCPMR macros.
User response:
Informational only

CKMMOD06E  No header data available for 'SYSUT1 xxxxxxxxxx' | No header data available for 'SYSUT2 xxxxxxxxxx'
Explanation:
The load module does not have MSCHDR/MSCPMR or EHDR macros.
User response:
Informational only

CKMMOD30E  FATAL ERROR IN CKM01VV1
           TABLE(table)  FUNC(func)  RC(rc)
Explanation:
An error occurred using an CKM01VV1 table.
User response:
Please report this message to Technical Support.

CKMMOD91E  Error READ_PDSE ERROR - terminating
Explanation:
An error occurred reading a PDSE (not a PDS)
User response:
Please report this message to Technical Support.

CKMMOD92E  Error READ_PDS ERROR - terminating
Explanation:
An error occurred reading a PDS (not a PDSE)
User response:
Please report this message to Technical Support.

CKMMPA01E  LABEL DECODING OF LABEL INCOMPLETE.
Explanation:
The parsing process failed to find the end of the label before 30 characters.
User response:
Correct your input statements and resubmit.

CKMMPA02E  LABEL DECODED LABEL NOT IN DICTIONARY PROCESSING TERMINATED
Explanation:
The symbolic label (/LABEL) was not found in the dictionary representing the data in the file.
User response:
Correct your input statements and resubmit.

---

**CKMMSL01E  PGM NAME PARM REQUIRED**

**Explanation:**
No program name was passed to CKM01MSL.

**User response:**
Contact Technical Support.

---

**CKMMSL02E  PGM NAME PARM REQUIRED**

**Explanation:**
No program name was passed to CKM01MSL.

**User response:**
Contact Technical Support.

---

**CKMMSL03E  SECOND PARM FROM SELECT**

**Explanation:**
CMD/PGM NOT 10 BYTES LEN = nnnnnnnn MSVECTOR = program-vector-data

An unrecoverable error occurred during processing.

**User response:**
Contact Technical Support.

---

**CKMMSL04E  R2 NOT POINTING TO MSVECTBL**

**Explanation:**
An unrecoverable error occurred during processing.

**User response:**
Contact Technical Support.

---

**CKMMSL05E  R2 DOES NOT POINT TO VALID VECTOR TABLE R2 ADDRESS(DEC): nnnnnnnnnn**

**Explanation:**
An unrecoverable error occurred during processing.

**User response:**
Contact Technical Support.

---

**CKMMSL06E  LOAD OF PGM FAILED module-name**

**Explanation:**
An error occurred loading module-name

**User response:**
Determine that all appropriate load libraries (including the one containing module-name) are specified as LOADn parameters in SCKMPARM(xxxINI)

---

**CKMMSL07E  DELETE OF PGM FAILED module-name**

**Explanation:**
An error occurred deleting module-name

**User response:**
Contact Technical Support.

---

**CKMMSL08E  LOAD OF PGM FAILED module-name**

**Explanation:**
An error occurred loading module-name

**User response:**
Determine that all appropriate load libraries (including the one containing module-name) are specified as LOADn parameters in SCKMPARM(xxxINI)

---

**CKMMSL09E  DELETE OF PGM FAILED module-name**

**Explanation:**
An error occurred deleting module-name

**User response:**
Contact Technical Support.

---

**CKMORD11E  ORDER VERB WAS MISSING IN PLAN**

**Explanation:**
A WHERE or ORDER is required for a plan. Neither one was found.

**User response:**
Correct your input statements and resubmit.

---

**CKMORD20E  EXPECTED CONTINUATION OF ORDER BY NOT FOUND**

**Explanation:**
A continuation of the ORDER BY function was incorrect.

**User response:**
Correct your input statements and resubmit.

---

**CKMORD21E  ORDER BY LABEL NOT IN SELECT LIST**

**Explanation:**
An ORDER BY LABEL but the LABEL was not From the SELECT list

**User response:**
Correct your input statements and resubmit.
CKMORD22E • CKMPAR17E

CKMORD22E  UNKNOWN VERB IN ORDER STATEMENT
Explanation:
ORDER DISTINCT or BY and a label and sort Direction (A/D) is allowed. A statement not Recognized as one of these was found in the ORDER statement.
User response:
Correct your input statements and resubmit.

CKMPAR00I <variable message=""> 
Explanation:
Message produced when parser is in tracing mode CKMPAR011: which you specified as a keyword of xxxx from line yyy
Explanation:
Message provide context for the actual error on a previous line.

CKMPAR11E  (multiple line message; see Explanation)
Explanation:
Error on line ______ , processing keyword ______
(1) <Literal not terminated before end of line
(2) <Literal not terminated before end of input
(3) <Literal not terminated before end of line
(4) <Literal not terminated before end of line
A literal was not properly terminated
User response:
Correct the identified literal and resubmit.

CKMPAR12E  (multiple line message; see Explanation)
Explanation:
Error on line ______ , processing keyword ______
(1) Error processing keyword - KEYWORD
(2) Missing continuation character after keyword - KEYWORD
(3) Missing continuation character after keyword - KEYWORD
(4) Missing continuation character after keyword - Value for identified keyword was not specified.
User response:
Correct the identified keyword and resubmit.

CKMPAR13E  (multiple line message; see Explanation)
Explanation:
Error on line ______ , processing keyword ______
(1) Simple keyword should have at most one operand -
A right parenthesis must follow the identified keyword's parameters.
User response:
Correct the identified keyword and resubmit.

CKMPAR15E  (multiple line message; see Explanation)
Explanation:
Error on line ______ , processing keyword ______
(1) Found end of data, expected parameter for - KEYWORD
(2) Found end of data, expected parameter for - KEYWORD
(3) Missing continuation character '
(4) Found end of data, expected parameter for - KEYWORD
(5) Found end of data, expected parameter for - KEYWORD
(7) End of data while expecting parameter for - KEYWORD
(8) End of data while expecting parameter for - KEYWORD
(9) End of data while expecting parameter for - KEYWORD
Identified keyword is not closed properly.
User response:
Correct the identified keyword and resubmit.

CKMPAR16E  (multiple line message; see Explanation)
Explanation:
Error on line ______ , processing keyword ______
(1) Left parenthesis not valid after - KEYWORD
(2) Left parenthesis not valid after - KEYWORD
(3) Left parenthesis not valid after - KEYWORD
Identified keyword is not closed properly.
User response:
Correct the identified keyword and resubmit.

CKMPAR17E  (multiple line message; see Explanation)
Explanation:
Error on line ______ , processing keyword ______
(1) Missing continuation character after -
(2) Missing continuation character after -
(4) Missing continuation character after -
(5) Missing continuation character after -
Chapter 25. Messages and Codes for Advanced Catalog Management

(6) Missing continuation character after keyword -
(7) Missing continuation character
Identified keyword is not closed properly.
**User response:**
Correct the identified keyword and resubmit.

**CKMPAR18E** *(multiple line message; see Explanation)*

**Explanation:**
Error on line _____, processing keyword _____
(1) Right parenthesis not valid after -
(2) Right parenthesis not valid after -
(3) Right parenthesis not valid after -
Identified keyword is not closed properly.
**User response:**
Correct the identified keyword and resubmit.

**CKMPAR18I** *(1) Missing continuation missing*

**Explanation:**
Keyword not completed before end of command
**User response:**
Add a continuation character to the end of the line

**CKMPAR20E** Expecting right parenthesis or keyword for ___

**Explanation:**
This keyword's operands are an ordered list of keywords that end with a right parenthesis.
**User response:**
Correct the identified keyword and resubmit.

**CKMPAR21E** *(multiple line message; see Explanation)*

**Explanation:**
Error on line ____, comment block that started on line ____
(1) End of data while expecting "*/"
(2) End of data while expecting "*/"
(3) End of data while expecting "*/"
(4) Found end of data, expected expecting "*/"
(5) End of data while expecting "*/"
A block comment was started on the indicated line but was not terminated.
**User response:**
Correct the identified block comment and resubmit.

**CKMPAR30E** *(1) Missing "=" after keyword -
Explanation:
This keyword's operands are an ordered list of keywords that end with a right parenthesis.
**User response:**
Correct the identified keyword and resubmit.

**CKMPAR30I** Error on line _____, processing keyword _____

**Explanation:**
This keyword's operands are an ordered list of keywords that end with a right parenthesis.
**User response:**
Correct the identified keyword and resubmit.

**CKMPAR31I** Error on line _____, processing keyword _____

**Explanation:**
This keyword's operands are an ordered list of keywords that end with a right parenthesis.
**User response:**
Correct the identified keyword and resubmit.

**CKMPAR32E** *(3) Missing continuation - _
Explanation:
Continuation of line is expected and not found.
**User response:**
Correct the identified keyword and resubmit.

**CKMPAR32I** Error on line _____, processing keyword _____

**Explanation:**
Continuation of line is expected and not found.
**User response:**
Correct the identified keyword and resubmit.

**CKMPAR33E** *(1) Expecting left parenthesis after left parenthesis -_
Explanation:
List of list of keywords requires two left parenthesis.
**User response:**
Correct the identified keyword and resubmit.
CKMPAR33I · CKMPAR52E

**CKMPAR33I** Error on line ______ , processing keyword ______

**Explanation:**
List of list of keywords requires two left parenthesis.

**User response:**
Correct the identified keyword and resubmit.

**CKMPAR34E** (1) Missing left parenthesis after =

**Explanation:**
Expecting "Keyword=" but missing the left parenthesis.

**User response:**
Correct the identified keyword and resubmit.

**CKMPAR34I** Error on line ______ , processing keyword ______

**Explanation:**
Expecting "Keyword=" but missing the left parenthesis.

**User response:**
Correct the identified keyword and resubmit.

**CKMPAR35E** Unknown keyword found - KEYWORD

**Explanation:**
The language doesn't have this keyword.

**User response:**
Correct the identified keyword and resubmit.

**CKMPAR35I** Error on line ______ , processing keyword ______

**Explanation:**
The language doesn't have this keyword.

**User response:**
Correct the identified keyword and resubmit.

**CKMPAR36E** Error with no prior "/", found -

**Explanation:**
"*/" found without prior matching "/"

**User response:**
Correct the identified comment block and resubmit.

**CKMPAR36I** Error on line ______ , processing keyword ______

**Explanation:**
"*/" found without prior matching "/"

**User response:**
Correct the identified comment block and resubmit.

**CKMPAR37E** Literal string exceeds limit of 1024 characters

**Explanation:**
Probable error with single and or double quotes.

**User response:**
Correct the quoting and resubmit.

**CKMPAR37I** Error on line ______ , processing keyword ______

**Explanation:**
Probable error with single and or double quotes.

**User response:**
Correct the quoting and resubmit.

**CKMPAR51I** Error on line ______ , processing keyword ______

**Explanation:**
Input stream contains the indicated keyword twice. Keywords can only occur once within a set of parenthesis.

**User response:**
Correct the find the replicated keyword, remove one, and resubmit.

**CKMPAR52E** (1) Wrong number of reoccurring parms for keyword -

**Explanation:**
The grammar requires that the parameters for the identified keyword appears in groups of 2, 3, 4 ...

**User response:**
Correct the parameters for the identified keyword and resubmit.

**CKMPAR52E** (1) Wrong number of reoccurring parms for keyword -

**Explanation:**
The grammar requires that the parameters for the identified keyword appears in groups of 2, 3, 4 ...

**User response:**
Correct the parameters for the identified keyword and resubmit.
Chapter 25. Messages and Codes for Advanced Catalog Management 631
CKMPAR58E  Value must be numeric for keyword - KEYWORD

Explanation:
The indicated keyword permits only numeric values consisting only of the digits 1234567890.

User response:
Correct the parameter for the identified keyword and resubmit.

CKMPAR59I  Error on line _____ , processing keyword _____

Explanation:
The indicated keyword permits only numeric values consisting only of the digits 1234567890.

User response:
Correct the parameter for the identified keyword and resubmit.

CKMPAR59E  An incorrect count of parameters for keyword - KEYWORD

Explanation:
You have exceeded the allowed number of parameters for the identified keyword or have not specified enough parameters.

User response:
Correct the parameters for the identified keyword.

CKMPAR59I  Error on line _____ , processing keyword _____

Explanation:
You have exceeded the allowed number of parameters for the identified keyword or have not specified enough parameters.

User response:
Correct the parameters for the identified keyword.

CKMPAR60E  Invalid HEX value

Explanation:
Hexidecimal literals require 1. format of x'abcd' or X'abcd'. 2. have an even number of valid hex digits 0123456789abcdefABCDEF

User response:
Correct the parameters for the identified keyword.

CKMPAR71E  Error on line _____ , processing keyword _____

Explanation:
Hexidecimal literals require 1. format of x'abcd' or X'abcd'. 2. have an even number of valid hex digits 0123456789abcdefABCDEF

User response:
Correct the parameters for the identified keyword.

CKMPAR72E  More right parenthesis found than left parenthesis

Explanation:
While processing another error, the parser discovered that there is not a matching set of left and right parenthesis.

User response:
Determine if prior error was caused by missing or extra parenthesis.

CKMPAR73E  More left parenthesis found than right parenthesis

Explanation:
While processing another error, the parser discovered that there is not a matching set of left and right parenthesis.

User response:
Determine if prior error was caused by missing or extra parenthesis.

CKMPAR75E  Unable to open input DDNAME xxx

Explanation:
DDNAME was missing or invalid

User response:
Modify the your jcl to include the DDN show

CKMPAR91E  (11) Internal error, get_keyword found invalid

Explanation:
An unrecoverable error occurred during processing.

User response:
Contact Technical Support.

CKMPAR91E  (11) Internal error, get_keyword found invalid

Explanation:
An unrecoverable error occurred during processing.
**CKMPAR98E • CKMPLA12E**

**CKMPAR98E** Kw_names properties not coded grammar

**Explanation:**
An error has occurred during parsing.

**User response:**
Contact Technical Support.

---

**CKMPAR99E**

**Explanation:**
An error has occurred during parsing.

**User response:**
Read following messages for more information.

---

**CKMPJO01E** JOIN OPTIONS STATEMENT IS INCORRECT. NULLSONLY OR NONULLS IS ALLOWED

**Explanation:**
A statement other than NULLONLY or NONULLS was found in conjunction with the JOIN OPTIONS.

**User response:**
Correct your input statements and resubmit.

---

**CKMPJO02E** WHERE OR WITH STATEMENT HAS IMPROPER SYNTAX

**Explanation:**
A WHERE LABEL EQ statement is required for a JOIN function. The plan was missing this or it was coded incorrectly.

**User response:**
Correct your input statements and resubmit.

---

**CKMPJO03E** WHERE/WITH LABEL EXCEEDS 30 CHARACTERS

**Explanation:**
All labels in MQFL are limited to 30 characters or less.

**User response:**
Correct your input statements and resubmit.

---

**CKMPJO04E** CARD CONTINUATION SYMBOL IS INVALID

**Explanation:**
A continuation symbol (+) or (-) was found as the Last character on a statement indicating a continuation of the WHERE but the following Statement was not valid.

**User response:**
Correct your input statements and resubmit.

---

**CKMPJO05E** JOIN ARRUMENT. MUST BE =, EQ OR EQUAL

**Explanation:**
The evaluation of two labels in the JOIN must be = or EQ. The syntax was coded properly.

**User response:**
Correct your input statements and resubmit.

---

**CKMPJO06E** DATA SET NAME NOT FOUND BEFORE END OF CARD

**Explanation:**
A data set name was not found after the JOIN statement.

**User response:**
Correct your input statements and resubmit.

---

**CKMPJO07E** SEARCH FOR VALID VERB FOR JOIN PLAN NOT FOUND

**Explanation:**
Syntax in a JOIN plan is limited to JOIN, ORDER, WITH, CREATE, APPEND, AND, WHERE and OPTION. A verb other than these was found in the plan.

**User response:**
Correct your input statements and resubmit.

---

**CKMPLA11E** REQUIRED USING STATEMENT FOR COPYLIB NOT FOUND

**Explanation:**
All plans except JOINS require a USING statement that provides a map of the FROM data set or a USING DEFERRED that will create a map from the data set legend.

**User response:**
Correct your input statements and resubmit.

---

**CKMPLA12E** DYNAMIC allocation FAILED FOR COPYLIB DATA SET DATA SET

**Explanation:**
The allocation of a data set referenced by USING failed allocation.

**User response:**
Correct your input statements and resubmit.
Chapter 25. Messages and Codes for Advanced Catalog Management
CKMPP100I  •  CKMPSE21E

User response:
Contact Technical Support.

CKMPP100I text
Explanation:
Message produced when command input is read.
User response:
None.

CKMPP101E Input file not open
Explanation:
Message produced when command input is parsed.
User response:
Contact Technical Support.

CKMPP102E Input file LRECL invalid
Explanation:
Message produced when command input is parsed.
This error typically occurs if SYSIN DD statement refers to a dataset with LRECL other than 80.
User response:
Correct the command input and resubmit.

CKMPP103E Blank record invalid here
Explanation:
Message produced when command input is parsed.
User response:
Correct the command input and resubmit.

CKMPP104E Expected continuation not found
Explanation:
Message produced when command input is parsed.
User response:
Correct the command input and resubmit.

CKMPP105W Input flushed
Explanation:
Message produced when command input is parsed and a prior error has been detected.
User response:
Review the prior CKMPP1 error messages. Correct the command input and resubmit.

CKMPP106E Unmatched parenthesis
Explanation:
Message produced when command input is parsed.
User response:
Correct the command input and resubmit.

CKMPP107E Paren nesting error
Explanation:
Message produced when command input is parsed.
User response:
Correct the command input and resubmit.

CKMPP108E Line buffer full
Explanation:
Message produced when command input is parsed.
User response:
Contact Technical Support.

CKMPP109E String delimiters not balanced
Explanation:
Message produced when command input is parsed. Second quotation character not found.
User response:
Correct the command input and resubmit.

CKMPP110E Input record buffer length invalid
Explanation:
Message produced when command input is parsed.
User response:
Contact Technical Support.

CKMPSE20I Command ended
Explanation:
Message produced when command input is parsed and a prior error has been detected.
User response:
Review the prior CKMPSE error messages. Correct the command input and resubmit.

CKMPSE21E Keyword not found : text
Explanation:
Message produced when command input is parsed. The
displayed keyword is not valid for this command or parent keyword.

**User response:**
Review the prior CKMPSE error messages. Correct the command input and resubmit.

**CKMPSE22E  Module not found: module-name**

**Explanation:**
Message produced when command input is parsed.

**User response:**
Contact Technical Support.

**CKMPSE23E  Operand not supported for: text**

**Explanation:**
Message produced when command input is parsed. The displayed keyword is not implemented.

**User response:**
Correct the command input and resubmit.

**CKMPSE24E  Operand truncated for:**

**Explanation:**
Message produced when command input is parsed. The value specified for the displayed keyword is longer than the keyword accepts.

**User response:**
Correct the command input and resubmit.

**CKMPSE25E  Empty or missing parmlist**

**Explanation:**
Message produced when command input is parsed and a prior error has been detected.

**User response:**
Contact Technical Support.

**CKMPSE26W  Command abandoned**

**Explanation:**
Message produced when command input is parsed and a prior error has been detected.

**User response:**
Review the prior CKMPSE error messages. Correct the command input and resubmit.

**CKMPSE28E  Operand required for keyword:**

**keyword**

**Explanation:**
Message produced when command input is parsed. The displayed keyword requires a value.

**User response:**

**CKMPSE29E  Conflicting keywords specified with:**

**keyword1 keyword2**

**Explanation:**
Message produced when command input is parsed. Two mutually exclusive keywords have been specified.

**User response:**
Correct the command input and resubmit.

**CKMPSE30E  Multiple use of keyword not allowed**

**Explanation:**
Message produced when command input is parsed. Two mutually exclusive keywords have been specified.

**User response:**
Correct the command input and resubmit.

**CKMREP01I  CKM01REP IS STARTING**

**(REV=_,ptf=_,pmr=_,fixdate=_**

**Explanation:**
This message shows the version of the report writer program(CKM01REP) executing.

**User response:**
Provide REV,ptf,prm, and fixdate information to Technical Support when reporting a problem with the report writer.

**CKMREP02E  field name not in field list**

**Explanation:**
During parsing of a REPORT definition, a field name was used that wasn’t named in the FIELDS keyword. Keywords such as SORTFIELDS, BREAKFIELDS, and BLANK-DUPFIELDS name fields that have been specified in the report’s FIELDS keyword.

**User response:**
Change the keyword specification to use only those fields specified in the report’s FIELDS keyword.
CKMREP03E  REPORT not specified
Explanation:
REPORT keyword not found in SYSIN but input had correct syntax meaning that input was for DICTIONARY or MODIFICATION.
User response:
SYSIN input must contain REPORT and cannot contain the DICTIONARY or MODIFICATION keywords. Change SYSIN input.

CKMREP04E  total of field widths greater than REPORT-WIDTH by
Explanation:
The width of each specified field was added together with the allowance for separator bytes between columns. The result was greater than the specified REPORT-WIDTH.
User response:
You must reduce the amount of data written or increase the REPORT-WIDTH. To reduce the output width you can remove fields, reduce COLUMN-HEADER text width, or reduce DISPLAY-WIDTH.

CKMREP05E  REPORT-WIDTH greater than output LRECL by - 'nnnn'
Explanation:
You coded a REPORT-WIDTH that was greater than the record length of the output file by nnn characters.
User response:
You must reduce the REPORT-WIDTH or increase the dataset's logical record length.

CKMREP06E  LINES-PER-PAGE is too low
Explanation:
The number of TITLE lines, and COLUMN-HEADER lines plus a separator line, is greater than the LINES-PER-PAGE value specified. This allows no lines for data to be written.
User response:
You must reduce the number of TITLE or COLUMN-HEADER lines or you must increase the LINES-PER-PAGE value.

CKMREP09E  dictionary name must be 1 to 8 characters
Explanation:
You specified an invalid dictionary name. Dictionary entries are members of a PDS and must have 1 to 8 characters.

CKMREP10E  keyword allowed only in dictionary
Explanation:
You specified a keyword that may only be specified in the data dictionary. The FIELD-OFFSET, FIELD-LENGTH, and FIELD-TYPE keywords are only allowed in the data dictionary.
User response:
Remove the specification of the keyword from the REPORT or MODIFICATION definition.

CKMREP11E  field named twice in dictionary
Explanation:
A field name was specified twice in the data dictionary. The field names must be unique within the dictionary.
User response:
Remove the duplicate specification from the data dictionary.

CKMREP12E  field named twice in modification
Explanation:
A field name was specified twice in the customer MODIFICATION. The field names must be unique in the MODIFICATION.
User response:
Remove the duplicate specification from the data dictionary.

CKMREP13E  modification field name not in dictionary
Explanation:
A MODIFICATION definition specified a field name that was not specified in the data dictionary. The MODIFICATION alters an existing field definition within a DICTIONARY.
User response:
Correct the name of the field name by reviewing its spelling from the data dictionary. Field names are not case sensitive.

CKMREP14E  field name not in dictionary
Explanation:
During parsing of a REPORT definition, a field name was found that is not in the data dictionary.
User response:
Correct the name of the field name by reviewing its spelling from the data dictionary. Field names are not case sensitive.

CKMREP15E  Error during open of input file
Explanation:
The DD statement named by the INPUT-DD keyword failed open processing.
User response:
Correct the specification of the INPUT-DD or the DD statement that it names.

CKMREP16E  Error during open of output file
Explanation:
The DD statement named by the OUTFILE keyword failed open processing.
User response:
Correct the specification of the OUTFILE or the DD statement that it names.

CKMREP17E  input record too short
Explanation:
The report uses a variable length input dataset for input. A record in that dataset is shorter than the data dictionary input.
User response:
Correct the input dataset and specify a dataset extracted by a product.

CKMREP18E  unable to open DATADICT DD statement
Explanation:
The DATADICT DD statement could not be opened. The DATADICT DD statement names one or more PDS or PDSE datasets that contain the data dictionary and optionally customer modifications.
User response:
Correct the JCL to specify the appropriate libraries.

CKMREP19E  DATADICT DD missing dictionary member
Explanation:
The DATADICT DD statement does not have the member that was specified in the DATA-DICTIONARY keyword of either a report or a customer modification definition.

User response:
Correct the DATA-DICTIONARY specification to name a member of the datasets associated with the DATADICT DD statement.

CKMREP20E  INDATASET name has an invalid length
Explanation:
The INDATASET keyword defines a RECFM=PS dataset or a member of a PDS. This name was not specified or was specified to be longer than 44 characters for the dataset name, 8 for the member name, and two for parenthesis.
User response:
Correct the INDATASET specification.

CKMREP21E  INDATASET dataset allocation error
Explanation:
The INDATASET dataset could not be allocated.
User response:
Correct the INDATASET specification.

CKMREP22E  DELIMITER incorrectly specified
Explanation:
The DELIMITER must be a 1 characters, specified in quotes ',' or "" as hex literal x'05' or X'05'
User response:
Correct the DELIMITER specification. in quotes '"' or "" as hex literal x'05' or X'05'

CKMREP23E  TEXT-QUALIFIER incorrectly specified
Explanation:
The TEXT_QUALIFIER must be either: a single character text_qualifier('') a hex character text_qualifier(X'xx')
User response:
Correct the TEXT-QUALIFIER specification.

CKMREP24E  Failure reading from SYSIN
Explanation:
The report writer was unable to read from SYSIN.
User response:
Correct the SYSIN DD statement in your JCL.
CKMREP25E INFILENAME has incorrect length
Explanation:
A DDNAME must be between 1 and 8 characters long.
User response:
Correct the INFILEAME statement.

CKMREP26E INFILE has an invalid name
Explanation:
A DDNAME specified can not be one of the following:
SYSIN, SYSPRINT, SORTMSG, STEPLIB, or SYSUDUMP.
User response:
Correct the INFILEAME statement.

CKMREP27E INFILEAME not specified in JCL
Explanation:
You must have a DD statement with the name of the
INFILEAME.
User response:
Correct the INFILEAME statement.

CKMREP29E OUTFILE has incorrect length
Explanation:
A DDNAME must be between 1 and 8 characters long.
User response:
Correct the OUTFILE statement.

CKMREP30E OUTFILE has an invalid name
Explanation:
A DDNAME specified can not be one of the following:
SYSIN, SYSPRINT, SORTMSG, STEPLIB, or SYSUDUMP.
User response:
Correct the OUTFILE statement.

CKMREP31E OUTFILE not specified in JCL
Explanation:
You must have a DD statement with the name of the
OUTFILE.
User response:
Correct the OUTFILE statement.

CKMREP32E Report format requires a title
Explanation:
You must specify a title if output is neither delimited nor
a flatfile.
User response:
Add a title statement.

CKMREP33E DICTIONARY statement must come before FIELDS
Explanation:
The report writer requires that DICTIONARY proceeds
FIELDS and FIELDS proceeds SORT-FIELDS,
BLANK_DUPL, etc.
User response:
Re-order your statements.

CKMREP34E FIELDS required before a field can be used
Explanation:
The report writer requires that DICTIONARY proceeds
FIELDS and FIELDS proceeds SORT-FIELDS,
BLANK_DUPL, etc.
User response:
Re-order your statements.

CKMREP35E No dictionary fields specified
Explanation:
At least one field from the data dictionary is required for the
report writer.
User response:
Specify one or more fields from the data dictionary.

CKMREP36E OUTDATASET dataset allocation error
Explanation:
The OUTDATASET dataset could not be allocated OLD.
User response:
Correct the OUTDATASET specification.
CKMREP37E  CKMREP99I

CKMREP37E  total of field widths greater than LRECL by

Explanation:
The width of each specified field was added together with the allowance for separator bytes between columns. The result was greater than the output dataset’s LRECL.

User response:
You must reduce the amount of data written or increase the LRECL. To reduce the output width you can remove fields, reduce COLUMN-HEADER text width, or reduce DISPLAY-WIDTH.

CKMREP38E  (multiple line message; see Explanation)

Explanation:
(1) duplicate field name in SORT_FIELDS is
(2) duplicate field name in BREAK_FIELDS is
(3) duplicate field name in BLANK_DUPFIELDS is

Each field name specified in this list should occur only once.

User response:
Remove the duplicate field name and rerun.

CKMREP39E  HLQ(n) not allowed for field

Explanation:
HLQ(n) was specified for a field that does not support HLQ.

User response:
Remove HLQ(n) from the unsupported field and rerun.

CKMREP40E  SORT Failed with return code rc

Explanation:
Your installation's sort software was called because you specified SORTFIELDS. The most probable cause of sort failing is that you are trying to sort more records than sort can handle with no SORTWK** DD statements. Check for error messages in your output in the SORTMSG DD output.

User response:
Add SORTWK** statements. For example:
//SORTWK01 DD UNIT=SYSDA,SPACE=(CYL,(300))
//SORTWK02 DD UNIT=SYSDA,SPACE=(CYL,(300))
//SORTWK03 DD UNIT=SYSDA,SPACE=(CYL,(300))

CKMREP80I  ERROR processing DICTIONARY-NAME

Explanation:
An error has occurred while processing the DICTIONARY-NAME keyword.

User response:
Review the error messages that follow to determine the cause of the error. This error could be caused by:
1. Specifying a member of the datasets associated with the DATADICT DD statement that is not a DICTIONARY or MODIFICATION definition.
   Action: change the DATA-DICTIONARY specification to name a DICTIONARY or MODIFICATION member of the DATADICT DD statement.
2. Specifying a DICTIONARY definition that has an error.
   Action: Report this error including the SYSPRINT text to Technical Support.
3. Specifying a MODIFICATION definition that has an error.
   Action: Report this error to the individual who created or changed the MODIFICATION.

CKMREP91I  Formating report - started

Explanation:
This message shows that the report writer is starting to format a report.

User response:
None.

CKMREP92I  Formating report - ended

Explanation:
This message shows that the report writer is ending the formatting of one report.

User response:
None.

CKMREP99I  CKM01REP IS ENDING

Explanation:
This message shows that the report writer is terminating.

User response:
None.
CKMTOO01E • CKMUSS13E

---

**CKMTOO01E** FORMAT REQUESTED NO DICTIONARY AVAILABLE.

Explanation:
A FORMAT FOLLOWS function was found but no corresponding dictionary was found for the fields.

User response:
Correct your input statements and resubmit.

---

**CKMTOO02E** THE NUMBER OF .F STATEMENTS EXCEED THREE, PROCESSING <F8>TERMINATED

Explanation:
The multiple format .F format lines exceed three. The MQFL limit is two.

User response:
Correct your input statements and resubmit.

---

**CKMTOO03E** THE CALL TO THE FORMAT PROCESS FAILED, PROCESSING TERMINATED

Explanation:
The call to format the records failed. A further diagnostic issued by the failing module.

User response:
Correct your input statements and resubmit.

---

**CKMTOO04E** DDNAME RDJFCB FAILED FOR THIS DDNAME

Explanation:
An attempt to verify the validity of a file failed.

User response:
Correct your input statements and resubmit.

---

**CKMTOO05E** DUPLICATES PROCESS FAILED TO FIND THIS LABEL

Explanation:
A DUPLICATES(/LABEL) request failed because the label identified by the leading value was not in the dictionary.

User response:
Correct your input statements and resubmit.

---

**CKMTOO06E** DDNAME DD STATEMENT FOR MULTI-FORMAT REQUEST MISSING

Explanation:
A logic problem has been discovered because the named DD statement could not be found. Further execution cannot be processed.

User response:
Correct your input statements and resubmit.

---

**CKMUFR01E** FUNCTION INVALID FUNCTION REQUEST ENCOUNTERED.

Explanation:
The function FUNCTION was invalid for the formatter.

User response:
Correct your input statements and resubmit.

---

**CKMUS10E** xxxxxxxx Subtask Not Responsive.

Explanation:
The OMVS Thread Subtask managing the Unix Systems Services interface failed.

User response:
Report this problem to Technical Support. Provide the SYSPRINT execution listing with the problem report.

---

**CKMUS11E** OMVS Create_Thread Failed.

Explanation:
An attempt to create a thread to the OMVS Unix Systems Services failed. Further messages will provide more specific information regarding the nature of the error.

User response:
Report this problem to Technical Support. Provide the SYSPRINT execution listing with the problem report.

---

**CKMUS12E** Program Logic Error.
Code=xx_xxxxxx

Explanation:
An internal logic error or condition was detected by the CKM01USS program. The 'Code=' information is meaningful only to Technical Support.

User response:
Report this problem to Technical Support. Provide the SYSPRINT execution listing with the problem report.

---

**CKMUS13E** xxxxxxxx Subtask Abended S-xxx.
Code=xx_xxxxxx

Explanation:
The indicated subtask abended unexpectedly. The 'Code=' information is meaningful only to Technical Support.

User response:
Report this problem to Technical Support. Provide the SYSPRINT execution listing with the problem report.

CKMUSS20E 'bpxccc' Service Request Not Defined.

Explanation:
The calling routine requested a Unix Systems Services function that is not defined to the interface routine.

User response:
Report this problem to Technical Support. Provide the SYSPRINT execution listing with the problem report.

CKMUSS21E 'bpxccc' Service Not Defined on this System.

Explanation:
The calling routine requested a Unix Systems Services function that is not available on the current operating system.

User response:
Report this problem to Technical Support. Provide the SYSPRINT execution listing with the problem report.

CKMUSS22E 'bpxccc' Service Requested with no parameters.

Explanation:
The calling routine issued an invalid call to the OMVS Thread interface.

User response:
Report this problem to Technical Support. Provide the SYSPRINT execution listing with the problem report.

CKMVE101E NO INIT FUNCTION RECEIVED.

Explanation:
This an internal error.

User response:
Contact Technical Support.

CKMVE103E UNKNOWN FUNCTION: xxxx

Explanation:
This an internal error.

User response:
Contact Technical Support.

CKMVE104E ERROR CALLING CKM01VV1 xxxx r15=rc r0=rea id=nn

Explanation:
This an internal error.

User response:
Contact Technical Support.

CKMVE105E MLA VALUE FOUND GREATER THAN 4

Explanation:
This an internal error.

User response:
Contact Technical Support.

CKMVE106E MASK FAILED EVALUATION CHECK: xxxx

Explanation:
Mask xxxx is invalid.

User response:
Fix the error and retry the function.

CKMVE107E CSI FAILED WHEN CALLING FOR MASTER CATALOG NAME

Explanation:
This an internal error.

User response:
Contact Technical Support.

CKMVE108E MASK FAILED EVALUATION CHECK: xxxx - yyyyy

Explanation:
Mask xxxx is invalid for reason yyyyy

User response:
Fix the error and retry the function.
CKMVE109E • CKMVE119E

CKMVE109E UN-allocation FAILED FOR: cccc
Explanation:
Un -allocation failed for catalog cccc.
User response:
Determine the reason for and fix the problem, Retry the function.

CKMVE110E allocation FAILED FOR: cccc
Explanation:
allocation failed for catalog cccc.
User response:
Determine the reason for the allocation failure and retry.

CKMVE111E UCBLOOK ERROR FOR: VVVV - RETURN CODE:RC REASON CODE:RSN
Explanation:
This an internal error.
User response:
Contact Technical Support.

CKMVE112E VOLUME NOT MOUNTED: vvvv
DSN=nnnn DEVTYPE:ttt
Explanation:
A catalog entry specified that a dataset was cataloged to a volume, vvvv, that was not mounted for dsn nnnn on device type tt.
User response:
Mount the volume, uncatalog the dataset, or respecify the selection masks. Retry the function.

CKMVE113E IOSCAPU ERROR FOR: VVVV - RETURN CODE:RC REASON CODE:RSN
Explanation:
This an internal error.
User response:
Contact Technical Support.

CKMVE114E nnnn : VOLSER=vvvv
RC=rrr,REAS=sss,DESC=zzzz
Explanation:
An error occurred when trying to access the VVDS on volume vvvv for dataset nnnn. rrr = Returncode. sss = Reason code. zzzz = description when available.
User response:
If unable to determine the cause of the error or to fix it, contact Technical Support for assistance.

CKMVE115E UCBPIN ERROR FOR: VVVV - RETURN CODE:RC REASON CODE:RSN
Explanation:
This an internal error.
User response:
Contact Technical Support.

CKMVE116E CVAF ERROR: RETURN CODE:rc
STATUS CODE:sc VOLUME:vvvv ID=nnn
PREV FUNC:ffff
Explanation:
This an internal error.
User response:
Contact Technical Support.

CKMVE117E ERROR OBTAINING VTOC DATA FROM VVVV : nnnn
Explanation:
An error occurred when trying to access the VTOC on volume vvvv for dataset nnnn.
User response:
If unable to determine the cause of the error or to fix it, contact Technical Support for assistance.

CKMVE118E HSM MCVT NOT FOUND
Explanation:
An error occurred when trying to access the HSM control blocks. The most probable cause is HSM has not been started.
User response:
If unable to determine the cause of the error or to fix it, contact Technical Support for assistance.

CKMVE119E HSM DATA EXTRACT ENDED WITH ERRORS
Explanation:
An error occurred when trying to access the HSM control blocks. The most probable cause is HSM has not been started.
User response:
If unable to determine the cause of the error or to fix it, contact Technical Support for assistance.
CKMVE120E MIGRATED DATASET NOT FOUND IN MCDS: nnnn

Explanation:
The catalog indicated that dataset nnnn was migrated, but no entry was found in the HSM MCDS.

User response:
If unable to determine the cause of the error or to fix it, contact Technical Support for assistance.

CKMVE121W NO CATALOG ENTRIES FOUND FOR MASK(S)

Explanation:
No catalog entries were found for any of the masks passed to CKM01VE1.

User response:
If this result was not expected, try to determine the reason for the problem and retry the function. If help is needed, contact Technical Support for assistance.

CKMVE122E ASSOCIATED ENTRY NOT FOUND IN CATALOG - nnnn

Explanation:
A non-VSAM alias entry with an association of nnnn. nnnn was not found in the catalog. The most probable cause is an orphaned catalog entry.

User response:
Determine the reason for and fix the problem. Retry the function. If help is needed, contact Technical Support for assistance.

CKMVE123E UNEXPECTED CATALOG RECORD CONSTRUCT - ASSOCIATION CELL NOT WHERE EXPECTED

Explanation:
Catalog entry for entry mentioned above is invalid.

User response:
Determine the reason for and fix the problem. Retry the function. If help is needed, contact Technical Support for assistance.

CKMVE124E TYPE "J" RECORD WITH NO MATCHING "B" RECORD: nnnn

Explanation:
Catalog entry nnnn is an extension record for a catalog record that does not exist.

User response:
Determine the reason for and fix the problem. Retry the function. If help is needed, contact Technical Support for assistance.

CKMVE125E ERROR READING SELF DESCRIBING RECORD FROM CATALOG: nnnn

Explanation:
This an internal error.

User response:
Contact Technical Support.

CKMVE126E RECEIVED A "GET" REQUEST BEFORE RECEIVING A MASK

Explanation:
This an internal error.

User response:
Contact Technical Support.

CKMVE127E INPUT CONTROL BLOCK IS NOT COMPATIBLE

Explanation:
This an internal error.

User response:
Contact Technical Support.

CKMVE129E HSM IS NOT ACTIVE - UNABLE TO RETRIEVE REQUESTED DATA

Explanation:
HSM must be active for MCDS data to be retrieved.

User response:
Start HSM and retry the function.

CKMVE130E allocation FAILED FOR: nnnn - WILL NOT BE USED FOR SEARCH

Explanation:
Unable to allocate catalog nnnn. No entries that may reside in this catalog will be retrieved.

User response:
Informational only. Processing continues.

CKMVE131E VOLUME NOT MOUNTED: vvvv

Explanation:
A catalog entry specified that a dataset was cataloged to a volume, vvv, that was not mounted for dsn nnn on device type ttt.
Mount the volume, uncatalog the dataset, or re-specify the selection masks. Retry the function.

**CKMVE132E NO MCDS DATASET WITH VALID KEY-RANGE FOUND**

Explanation:
An attempt was made to find a dsn in the HSM MCDS but no MCDS found in the HSM address space had a key-range that would accommodate the dsn.

User response:
Processing continues. No mcds data will be included for this dataset.

**CKMVE133E NO MCDS DSN(S) FOUND IN HSM ADDRESS SPACE**

Explanation:
An attempt was made to find the dataset name(s) of the MCDS(s) allocated to HSM. The attempt failed.

User response:
Processing continues. No mcds data will be included for this dataset.

**CKMVE134W ERROR CALLING CKMHSM RC=RC**

Explanation:
This an internal error.

User response:
Processing continues. No MCDS data will be included. If the reason for the failure cannot be determined, contact Technical Support.

**CKMVE135E nnnn : VOLSER=vvvvvv - VVDS NOT OPEN**

Explanation:
A previous open failed for the VVDS on volume vvvvvv failed.

User response:
Processing continues. No VVDS related data is returned for dataset nnnn.

**CKMVE137W OPEN FAILED FOR: nnnn - WILL NOT BE USED FOR SEARCH**

Explanation:
Unable to open catalog nnnn. No entries that may reside in this catalog will be retrieved.

User response:
Informational only. Processing continues.

**CKMVE138E CLUSTER NOT FOUND FOR TRUENAME IN CATALOG –**

Explanation:
An error has been detected in your catalog. A VSAM true name record was found without an associated cluster entry.

User response:
Informational only. Processing continues. Evaluate catalog entries for the identified dataset.

**CKMVE139I RETRYING ERROR OBTAINING cccccccc FOR dsn - ucat**

Explanation:
An error occurred when trying to access the VTOC, VVDS, or MCB information for a dataset. This message will occur the catalog is incorrect. This message may occur if the dataset is being migrated so that the catalog is temporarily out of date.

User response:
No action required for this message unless subsequent errors CKMVE117E, CKMCAx20E, or CKMCAx14E occur. See action for these messages.

**CKMVE201E NO INIT FUNCTION RECEIVED.**

Explanation:
This an internal error.

User response:
Contact Technical Support.

**CKMVE202E INIT FUNCTION RECEIVED WITHOUT INTERVENING TERM**

Explanation:
This an internal error.

User response:
Contact Technical Support.

**CKMVE203E UNKNOWN FUNCTION: xxxx**

Explanation:
This an internal error.

User response:
Contact Technical Support.
**User response:**
Contact Technical Support.

---

**CKMVE205E MLA VALUE FOUND GREATER THAN 4**
**Explanation:**
This an internal error.
**User response:**
Contact Technical Support.

---

**CKMVE206E MASK FAILED EVALUATION CHECK: xxxx**
**Explanation:**
Mask xxxx is invalid.
**User response:**
Fix the error and retry the function.

---

**CKMVE207E CSI FAILED WHEN CALLING FOR MASTER CATALOG NAME**
**Explanation:**
This an internal error.
**User response:**
Contact Technical Support.

---

**CKMVE208E MASK FAILED EVALUATION CHECK: xxxx - yyyyy**
**Explanation:**
Mask xxxx is invalid for reason yyyyy
**User response:**
Fix the error and retry the function.

---

**CKMVE209E UN-allocation FAILED FOR: cccc**
**Explanation:**
Un-allocation failed for catalog cccc.
**User response:**
Determine the reason for and fix the problem, Retry the function.

---

**CKMVE210E allocation FAILED FOR: cccc**
**Explanation:**
allocation failed for catalog cccc.
**User response:**
Determine the reason for the allocation failure and retry.

---

**CKMVE211E UCBLOOK ERROR FOR: VVVV - RETURN CODE:RC REASON CODE:RSN**
**Explanation:**
This an internal error.
**User response:**
Contact Technical Support.

---

**CKMVE212E VOLUME NOT MOUNTED: vvvv**
**DSN=nnn DEVTYPE=ttt**
**Explanation:**
A catalog entry specified that a dataset was cataloged to a volume, vvvv, that was not mounted for dsn nnn on device type ttt.
**User response:**
Mount the volume, uncatalog the dataset, or respecify the selection masks. Retry the function.

---

**CKMVE213E IOSCAPU ERROR FOR: VVVV - RETURN CODE:RC REASON CODE:RSN**
**Explanation:**
This an internal error.
**User response:**
Contact Technical Support.

---

**CKMVE214E nnnn : VOLSER=vvvv RC=rrr,REAS=sss,DESC=zzzz**
**Explanation:**
An error occurred when trying to access the VVDS on volume vvvv for dataset nnnn. rrr = Returncode. sss = Reason code. zzzz = description when available.
**User response:**
If unable to determine the cause of the error or to fix it, contact Technical Support for assistance.

---

**CKMVE215E UCBPIN ERROR FOR: VVVV - RETURN CODE:RC REASON CODE:RSN**
**Explanation:**
This an internal error.
**User response:**
Contact Technical Support.
CKMVE216E • CKMVE225E

CKMVE216E CVAF ERROR: RETURN CODE:rc
STATUS CODE:sc VOLUME:vvv ID=nn
PREV FUNC:ffff

Explanation:
This an internal error.
User response:
Contact Technical Support.

CKMVE217E ERROR OBTAINING VTOC DATA FROM
vvv : nnnn

Explanation:
An error occurred when trying to access the VTOC on
volume vvvv for dataset nnnn.
User response:
If unable to determine the cause of the error or to fix it,
contact Technical Support for assistance.

CKMVE218E HSM MCVT NOT FOUND

Explanation:
An error occurred when trying to access the HSM
control blocks. The most probable cause is HSM has
not been started.
User response:
If unable to determine the cause of the error or to fix it,
contact Technical Support for assistance.

CKMVE219E HSM DATA EXTRACT ENDED WITH
ERRORS

Explanation:
An error occurred when trying to access the HSM
control blocks. The most probable cause is HSM has
not been started.
User response:
If unable to determine the cause of the error or to fix it,
contact Technical Support for assistance.

CKMVE220E MIGRATED DATASET NOT FOUND
IN
MCDS: nnnn

Explanation:
The catalog indicated that dataset nnnn was migrated,
but no entry was found in the HSM MCDS.
User response:
If unable to determine the cause of the error or to fix it,
contact Technical Support for assistance.

CKMVE221E NO CATALOG ENTRIES FOUND FOR
MASK(S)

Explanation:
No catalog entries were found for any of the masks
passed to CKM01VE2.
User response:
If this result was not expected, try to determine the
reason for the problem and retry the function. If help is
needed, contact Technical Support for assistance.

CKMVE222E ASSOCIATED ENTRY NOT FOUND IN
CATALOG - nnnn

Explanation:
A non-VSAM alias entry with an association of nnnn.
nnnn was not found in the catalog. The most probable
cause is an orphaned catalog entry.
User response:
Determine the reason for and fix the problem. Retry the
function. If help is needed, contact Technical Support for
assistance.

CKMVE223E UNEXPECTED CATALOG RECORD
CONSTRUCT - ASSOCIATION CELL
NOT WHERE EXPECTED

Explanation:
Catalog entry for entry mentioned above is invalid.
User response:
Determine the reason for and fix the problem. Retry the
function. If help is needed, contact Technical Support for
assistance.

CKMVE224E TYPE "J" RECORD WITH NO
MATCHING "B" RECORD: nnnn

Explanation:
Catalog entry nnnn is an extension record for a catalog
record that does not exist.
User response:
Determine the reason for and fix the problem. Retry the
function. If help is needed, contact Technical Support for
assistance.

CKMVE225E ERROR READING SELF DESCRIBING
RECORD FROM CATALOG: nnnn

Explanation:
This an internal error.
User response:
Contact Technical Support.
CKMVE226E RECEIVED A "GET" REQUEST BEFORE RECEIVING A MASK

Explanation:
This an internal error.

User response:
Contact Technical Support.

CKMVE227E INPUT CONTROL BLOCK IS NOT COMPATIBLE

Explanation:
This an internal error.

User response:
Contact Technical Support.

CKMVE229E HSM IS NOT ACTIVE - UNABLE TO RETRIEVE 'REQUESTED DATA

Explanation:
HSM must be active for MCDS data to be retrieved.

User response:
Start HSM and retry the function.

CKMVE230E allocation FAILED FOR: nnnn - WILL NOT BE USED FOR SEARCH

Explanation:
Unable to allocate catalog nnnn. No entries that may reside in this catalog will be retrieved.

User response:
Informational only. Processing continues.

CKMVE231E VOLUME NOT MOUNTED: vvvv
DSN=nnnn DEVTYPE:ttt

Explanation:
A catalog entry specified that a dataset was cataloged to a volume, vvvv, that was not mounted for dsn nnnn on device type ttt.

User response:
Mount the volume, uncatalog the dataset, or re-specify the selection masks. Retry the function.

CKMVE232E NO MCDS DATASET WITH VALID KEY-RANGE FOUND

Explanation:
An attempt was made to find a dsn in the HSM MCDS but no MCDS found in the HSM address space had a key-range that would accommodate the dsn.

User response:
Processing continues. No mcds data will be included for this dataset.

CKMVE233E NO MCDS DSN(S) FOUND IN HSM ADDRESS SPACE

Explanation:
An attempt was made to find a the dataset name(s) of the MCDS(s) allocated to HSM. The attempt failed.

User response:
Processing continues. No mcds data will be included for this dataset.

CKMVE234W ERROR CALLING CKM01HSM RC=RC

Explanation:
This an internal error.

User response:
Processing continues. No MCDS data will be included. If the reason for the failure cannot be determined, contact Technical Support.

CKMVE235E nnnn : VOLSER=vvvvvv - VVDS NOT OPEN

Explanation:
A previous open failed for the VVDS on volume vvvvvv failed.

User response:
Processing continues. No VVDS related data is returned for dataset nnnn.

CKMVE237W OPEN FAILED FOR: nnnn - WILL NOT BE USED FOR SEARCH

Explanation:
A previous open failed for the VVDS on volume vvvvv failed.

User response:
Processing continues. No VVDS related data is returned for dataset nnnn.

CKMVE238E CLUSTER NOT FOUND FOR TRUENAME IN CATALOG -

Explanation:
An error has been detected in your catalog. A VSAM true name record was found without an associated cluster entry.

User response:
Informational only. Processing continues. Evaluate catalog entries for the identified dataset.
**CKMVE239I • CKMVSE07E**

**CKMVE239I** RETRYING ERROR OBTAINING cccccc FOR dsn - ucat

**Explanation:**
An error occurred when trying to access the VTOC, VVDS, or MCB information for a dataset. This message will occur if the catalog is incorrect. This message may occur if the dataset is being migrated so that the catalog is temporarily out of date.

**User response:**
No action required for this message unless subsequent errors CKMVE217E, CKMCA120E, CKMCA114E, CKMCA220E, or CKMCA214E. See action for these messages.

**CKMVSE00E** VSAM FAILURE, DDNAME: ddname
VSAM DSN: dataset name or NO DD allocation FOUND

**Explanation:**
A VSAM failure occurred attempting to open, access, or close a VSAM dataset used by a product via product's common VSAM I/O routine (CKM01VSI).

**User response:**
See additional messages. Although many errors could be caused by internal errors, look for any messages with ** USER CORRECTABLE **. These could include problems such as insufficient region size, unable to allocate extents, etc. Some errors could be the result of incorrectly defining a dataset. Compare values returned for catalog lrecl, key length, and key offset to the specifications for the dataset as documented in the appropriate product manual. LRECL and KEYLEN to be compared are those supplied with messages CKMVSE21 and CKMVSE22, not CKMVSE19 and CKMVSE20. If the error does not appear to be user correctable, please include all CKMVSEnn messages in documentation supplied to Technical Support. Also supply to Support the output from a LISTCAT ENT(...) ALL for the failing dataset.

**CKMVSE01E** FAILING CKM01VSI FUNCTION: nnn
and PREVIOUS CKM01VSI FUNCTION: nnn

**Explanation:**
Last and previous (if any) VSAM function performed.

**User response:**
Message provided for debugging. However, other messages could indicate a user correctable situation. Note that this is the last logical request made by a product program. Because of implicit opens and closes, see message CKMVSE13E to determine the exact VSAM function last requested when determining which set of documented return/reason codes apply.

**CKMVSE03E** PROGRAM CSEC: csect name

**Explanation:**
Csect name of failing program.

**User response:**
Message provided for debugging. However, other messages could indicate a user correctable situation.

**CKMVSE04E** VWHEN ERROR ID: id

**Explanation:**
Internally assigned id of last VSAM I/O call.

**User response:**
Message provided for debugging. However, other messages could indicate a user correctable situation.

**CKMVSE05E** VWHEN ASM LISTING LINE #: line number

**Explanation:**
Source listing line number of last VSAM I/O call.

**User response:**
Message provided for debugging. However, other messages could indicate a user correctable situation.

**CKMVSE06E** message associated with CKM01VSI
Register 15 value

**Explanation:**
message associated with a non-VSAM error - i.e. a non-zero return code from CKM01VSI or a VSAM OPEN, ACCESS, or CLOSE.

**User response:**
Message provided for debugging. However, other messages could indicate a user correctable situation. If last function is OPEN, and return code is 16: RLS NOT AVAILABLE - NO SMSVSAM SERVER this may be user correctable if the product SCKMPARM INI member specified RLS for the dataset and in fact RLS is not supported on the image.

**CKMVSE07E** message associated with VSAM
Register 15 value

**Explanation:**
message associated with VSAM Register 15 value.

**User response:**
See message CKMVSE10 and CKMVSE11 for VSAM reason code and description. If CKMVSE12 is produced instead of CKMVSE11, see the manual for a description of the reason code.
CKMVSE08E  SVC99 ERROR CODE: code
Explanation:
Error code from SVC99 - dynamic allocation.
User response:
Use this error code in conjunction with the SVC99 information code (CKMVSE09E) to determine the cause of failure.

CKMVSE09E  SVC99 INFORMATION CODE: code
Explanation:
Information code from SVC99 - dynamic allocation.
User response:
Use this error code in conjunction with the SVC99 error code (CKMVSE08E) to determine the cause of failure.

CKMVSE10E  VSAM REASON CODE: code
Explanation:
Reason code returned from VSAM open, access, or close.
User response:
Use this error code in conjunction with the description provided by message CKMVSE11E to determine the cause of the failure. See additional comments for CKMVSE11E.

CKMVSE11E  vsam reason code description
Explanation:
Abbreviated description for selected VSAM reason codes.
User response:
The error handling module producing CKMVSEEnn messages includes many VSAM reason code descriptions. Note that these messages are abbreviated in comparison to the messages documented. For this reason, users should also refer to the documentation for the reason code displayed with message CKMVSE10. Because documented reason codes are distinguished by open/close versus access, see message CKMVSE13E for the last access attempted. CKMVSE13E will indicate OP for open, and CL for close. Consider any other value as ACCESS. Note especially any reason code descriptions with the string ** USER CORRECTABLE as these may be situations correctable without support.

CKMVSE12E  NO DESCRIPTION FOR REASON CODE
Explanation:
Description for reason code not included in error handling table.
User response:
Refer to the description of the reason code (CKMVSE10E) for the last function requested (CKMVSE13E) in documentation.

CKMVSE13E  VSAM CCODE: code
Explanation:
This a product value indicating the last VSAM request issued.
User response:
This value is necessary if looking up the return and reason codes in documentation. CCODE will be OP for an open and CL for a close. Consider any other value as ACCESS.

CKMVSE14E  CKM01VSI IMPLICIT OPEN
Explanation:
Indicator that last program request required that the dataset be re-opened.
User response:
Primarily for product debugging.

CKMVSE15E  CKM01VSI IMPLICIT CLOSE
Explanation:
Indicator that a close was the result of one task losing control to another.
User response:
Primarily for product debugging.

CKMVSE16E  CKM01VSI IMPLICIT REPOSITION
Explanation:
Indicator that the positioning had to be re-established as a result of losing control to another task.
User response:
Primarily for product debugging.

CKMVSE17E  OPEN CLASSIFICATION: value
Explanation:
Product internal value indicating intended use of the dataset.
User response:
Primarily for product debugging.

CKMVSE18E BUFFERING TECHNIQUE: value
Explanation:
Product internal value indicating selected buffering technique.
User response:
Primarily for product debugging.

CKMVSE19E CKM01VSI PARM LRECL: lrecl
Explanation:
Last lrecl set in CKM01VSI parm field.
User response:
Primarily for product debugging.

CKMVSE20E CKM01VSI PARM KEYLEN: key length
Explanation:
Last key length set in CKM01VSI parm field.
User response:
Primarily for product debugging.

CKMVSE21E CKM01VSI CATALOG LRECL: lrecl
Explanation:
Max lrecl fetched from catalog at open time.
User response:
This should be used to verify that the cluster as defined matches the requirements for the dataset as defined in product documentation.

CKMVSE22E CKM01VSI CATALOG KEYLEN: key length
Explanation:
Key length fetched from catalog at open time.
User response:
This should be used to verify that the cluster as defined matches the requirements for the dataset as defined in product documentation.

CKMVSE23E CKM01VSI CATALOG KEY OFFSET: key offset
Explanation:
Key offset fetched from catalog at open time.
User response:
This should be used to verify that the cluster as defined matches the requirements for the dataset as defined in product documentation.

CKMVV136E Invalid LRECL: value
Explanation:
LRECL must be a positive integer
User response:
correct the LRECL value.

CKMVV137E Dataspaces defined over 2 GIG
Explanation:
Dataspaces are limited to 2 GIG or 2097152 K. The corresponding SI027_VALUES in INI are specified in K, so the limit is 2097152.
User response:
Correct the SI027_Values section of the INI

CKMVV138E Error creating dataspace rc=xx reason yyyyyyyyy
Explanation:
CKM01VV1 attempted to create a dataspace. The error indicates that the parameters were incorrect.
User response:
Correct the SI027_Values section of the INI

CKMVV139E Error extending dataspace rc=xx reason yyyyyyyyy
Explanation:
CKM01VV1 attempted to expand a dataspace. The error indicates that the parameters were incorrect.
User response:
Correct the SI027_Values section of the INI

CKMVV140E Bad Token: INITIAL_SIZE
Explanation:
Value specified is larger than the value allowed (2097152).
User response:
Correct the INITIAL_SIZE value in the INI

CKMVV141E Bad Token: MAXIMUM_SIZE
Explanation:
Value specified is larger than the value allowed (2097152).
User response:
Correct the MAXIMUM_SIZE value in the INI

CKMVV142E Bad Token:
MAXIMUM_DATASPACE_SIZE

Explanation:
Value specified is larger than the value allowed (2097152).

User response:
Correct the MAXIMUM_DATASPACE_SIZE value in the INI

CKMWHE01E LABEL NOT FOUND ON CARD

Explanation:
The decoding of the PLAN SYNTAX failed to find a label of a field in the plan.

User response:
Correct your input statements and resubmit.

CKMWHE02E REQUESTED LABEL NOT IN COPYLIB MEMBER

Explanation:
A decoded label name was not in the map described by the USING statement.

User response:
Correct your input statements and resubmit.

CKMWHE03E VALID OPERATION CODE NOT FOUND

Explanation:
No Boolean operator (EQ, NE, etc.) was found after a WHERE statement.

User response:
Correct your input statements and resubmit.

CKMWHE04E OPERATION CODE NOT VALID

Explanation:
An invalid Boolean operator (EQ, NE, etc.) was encountered when decoding the plan.

User response:
Correct your input statements and resubmit.

CKMWHE05E INVALID SEARCH ARGUMENT (SYNTAX)

Explanation:
An IS operator was found and the following syntax was incorrect. It must be NOT, NULL or NUMERIC.

User response:
Correct your input statements and resubmit.

CKMWHE06E SEARCH ARGUMENT IS MISSING

Explanation:
After a label and a Boolean operator was coded, a valid literal or label was not found.

User response:
Correct your input statements and resubmit.

CKMWHE07E SEARCH ARGUMENT LITERAL IS BIGGER THAN THE REQUESTED FIELD

Explanation:
A literal was specified that was longer than the field being searched.

User response:
Correct your input statements and resubmit.

CKMWHE08E TEXT INVALID AND/OR CONNECTOR

Explanation:
The AND/OR logic in a plan is not complete.

User response:
Correct your input statements and resubmit.

CKMWHE09E REQUESTED FIELD REQUIRES NUMERICS

Explanation:
A non numeric argument was specified for a numeric field.

User response:
Correct your input statements and resubmit.

CKMWHE10E REQUESTED VALUE EXCEEDS 32756 OF HALF WORD BINARY DATA

User response:
Correct your input statements and resubmit.
<table>
<thead>
<tr>
<th>Error Code</th>
<th>Error Message</th>
<th>User Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>CKMWHE11E</td>
<td>WHERE OR ORDER VERB WAS MISSING IN PLAN</td>
<td>Correct your input statements and resubmit.</td>
</tr>
<tr>
<td>CKMWHE12E</td>
<td>WHERE STATEMENT NOT FOUND IN MSQ REQUEST</td>
<td>Correct your input statements and resubmit.</td>
</tr>
<tr>
<td>CKMWHE13E</td>
<td>BIT MAP VALUES ARE INVALID</td>
<td>Correct your input statements and resubmit.</td>
</tr>
<tr>
<td>CKMWHE14E</td>
<td>HEX LITERAL IS NOT EXPRESSED IN EVEN BYTES</td>
<td>Correct your input statements and resubmit.</td>
</tr>
<tr>
<td>CKMWHE15E</td>
<td>HEX LITERAL IS NOT VALID</td>
<td>Correct your input statements and resubmit.</td>
</tr>
<tr>
<td>CKMWHE16E</td>
<td>PLUS VALUE ON LABEL IS NOT VALID</td>
<td>Correct your input statements and resubmit.</td>
</tr>
<tr>
<td>CKMWHE17E</td>
<td>THE COMPARE OF TWO FIELDS ARE NOT SAME TYPE</td>
<td>Correct your input statements and resubmit.</td>
</tr>
<tr>
<td>CKMWHE18E</td>
<td>THE IS NUMERICS REFERENCES A NON NUMERIC FIELD</td>
<td>Correct your input statements and resubmit.</td>
</tr>
<tr>
<td>CKMX0101E</td>
<td>cmd can only be run while in ISPF.</td>
<td>Contact Technical Support for further assistance.</td>
</tr>
<tr>
<td>CKMX0102E</td>
<td>Failure invoking command cmd...Rc=rc</td>
<td>Contact Technical Support for further assistance.</td>
</tr>
<tr>
<td>CKMX0103W</td>
<td>CKM is not active.</td>
<td>Start the CKM primary started task (program CKMMAIN) and rerun process. Contact Technical Support for further assistance.</td>
</tr>
<tr>
<td>CKMX0105E</td>
<td>Unable to setup library concatenation...Rc=rc</td>
<td>Access to CKM product files could not be established. rc is the return code from either ALTLIB or LIBDEF.</td>
</tr>
<tr>
<td>CKMX0105E</td>
<td>Unable to allocate file(s) to dd...Rc=rc</td>
<td>Review any messages that may have appeared for more information. Contact Technical Support for further assistance.</td>
</tr>
</tbody>
</table>
Review information on ALTLIB/LIBDEF and rerun process. Contact Technical Support if this persists.

**Audit Diagnostic Messages**

**6001W  DATA SET ON TAPE, NOT IN CATALOG**

**Explanation:**
Audit Suite has compared the RMM CDS contents against the Catalog entries and has found an un-expired tape data set having no reference in the catalog.

**User response:**
Recommended default fix:

NONE

FIELD 1 ERROR NUMBER 6001W
FIELD 2 DSN NAME P390#2.BACKUP.EH0001.G0093V00
FIELD 3 TAPE VOLSER 000411
FIELD 4 VOLUME SEQUENCE NUMBER 001
FIELD 5 DEVICE TYPE 32008003
FIELD 6 FILE SEQUENCE NUMBER 00002
FIELD 7 CREATION DATE 1999306
FIELD 8 EXPIRATION DATE 1999313
FIELD 9 RMM TAPE STATUS M
FIELD 10 RELATIVE CATALOG NUM 008
FIELD 11 TARGET CATALOG MVSV5.UCAT2.CATALOG

**6002W  DATA SET ON TAPE, MISMATCH VOL SEQUENCE**

**Explanation:**
Audit Suite has compared the RMM CDS contents against the Catalog entries and has found a mismatch in the volume sequence number from the catalog to the RMM CDS.

**User response:**
Recommended default fix:

NONE

FIELD 1 ERROR NUMBER 6002W
FIELD 2 DSN NAME P390#2.BACKUP.EH0001.G0093V00
FIELD 3 TAPE VOLSER 000411
FIELD 4 VOLUME SEQUENCE NUMBER 001
FIELD 5 DEVICE TYPE 32008003
FIELD 6 FILE SEQ FROM RMM 00002
FIELD 7 FILE SEQ FROM CATALOG 00001
FIELD 8 EXPIRATION DATE 1999313
FIELD 9 RMM TAPE STATUS M
FIELD 10 RELATIVE CATALOG NUM 008
FIELD 11 TARGET CATALOG MVSV5.UCAT2.CATALOG

**6003W  DATA SET ON TAPE, MISMATCH FILE SEQUENCE**

**Explanation:**
Audit Suite has compared the RMM CDS contents against the Catalog entries and has found a mismatch in the file sequence number from the catalog to the RMM CDS.

**User response:**
Recommended default fix:

NONE

FIELD 1 ERROR NUMBER 6003W
FIELD 2 DSN NAME P390#2.BACKUP.EH0001.G0093V00
FIELD 3 TAPE VOLSER 000411
FIELD 4 VOLUME SEQUENCE NUMBER 001
FIELD 5 FILE SEQUENCE NUMBER 00001
FIELD 6 FILE SEQ FROM RMM 00002
FIELD 7 FILE SEQ FROM CATALOG 00001
FIELD 8 EXPIRATION DATE 1999313
FIELD 9 RMM TAPE STATUS M
FIELD 10 RELATIVE CATALOG NUM 008
FIELD 11 TARGET CATALOG MVSV5.UCAT2.CATALOG

**6004W  DATA SET IN CATALOG, NOT IN TAPE INVENTORY**

**Explanation:**
Audit Suite has compared the RMM CDS contents against the Catalog entries and has found a catalog entry that has no entry in the RMM CDS.

**User response:**
Recommended default fix:

NONE

FIELD 1 ERROR NUMBER 6004W
FIELD 2 DSN NAME P390#2.BACKUP.EH0001.G0093V00
FIELD 3 TAPE VOLSER 000411
FIELD 4 VOLUME SEQUENCE NUMBER 001
FIELD 5 DEVICE TYPE 32008003
FIELD 6 FILE SEQUENCE NUMBER 00002
FIELD 7 VOL SEQ FROM CATALOG 002
FIELD 8 EXPIRATION DATE 1999313
FIELD 9 RMM TAPE STATUS M
FIELD 10 RELATIVE CATALOG NUM 008
FIELD 11 TARGET CATALOG MVSV5.UCAT2.CATALOG
**6005W • 6007W**

FIELD 1 ERROR NUMBER 6004W
FIELD 2 DSNAME EH.ATAPE1.ASM
FIELD 3 TAPE VOLSER 348001
FIELD 4 VOLUME SEQUENCE NUMBER 001
FIELD 5 DEVICE TYPE 78008080
FIELD 6 FILE SEQ FROM CATALOG 00001
FIELD 7 CREATION DATA 1999129
FIELD 8 EXPIRATION DATE 0000000
FIELD 9 CATALOG STATUS 0000
FIELD 10 RELATIVE CATALOG NUM 007
FIELD 11 TARGET CATALOG MVSV5.UCAT1.CATALOG

**6005W** DATA SET CATALOGED TO TAPE THAT IS SCRATCH

Explanation:
Audit Suite has compared the RMM CDS contents against the Catalog entries and has found a catalog entry matching an RMM entry but the RMM status of the volume is scratch. The cataloged data set is in danger of being written over and data lost.

User response:
Recommended default fix:
NONE

FIELD # DESCRIPTION EXAMPLE
FIELD 1 ERROR NUMBER 6006W
FIELD 2 DSNAME P390#2.BACKUP.HFSUS1.G0001V00
FIELD 3 TAPE VOLSER 000408
FIELD 4 VOLUME SEQUENCE NUMBER 001
FIELD 5 DEVICE TYPE 78048081
FIELD 6 FILE SEQ FROM CATALOG 00005
FIELD 7 CREATION DATA 1999197
FIELD 8 EXPIRATION DATE 1999195
FIELD 9 CATALOG STATUS 1001
FIELD 10 RELATIVE CATALOG NUM 008
FIELD 11 TARGET CATALOG MVSV5.UCAT2.CATALOG

**6007W** TAPE DSN COUNT DISAGREES WITH CATALOG COUNT

Explanation:
Audit Suite had determined the expected number of data sets from the RMM volume record (field 3), has counted the number of data sets from the RMM DSNAME records (field 4), and has counted the number of data sets cataloged to the volume (field 5). This diagnostic is produced when the number of cataloged data sets is less than the count from the RMM inventory. This very useful in determining the strategy of stacked data sets on one tape. Typically these are GDG data sets. If the GDG sphere records are not defined the same, or if jobs that create data sets are not in synch, these tapes can be under catalog control longer than expected. Considering the expense of the expanded capacity tapes, this a useful diagnostic to research the stacking strategy of your installation.

User response:
Recommended default fix:
NONE

FIELD # DESCRIPTION EXAMPLE
FIELD 1 ERROR NUMBER 6006W
FIELD 2 DSNAME P390#2.BACKUP.HFSUS1.G0001V00
FIELD 3 TAPE VOLSER 000408
FIELD 4 VOLUME SEQUENCE NUMBER 001
FIELD 5 DEVICE TYPE 78048081
FIELD 6 FILE SEQ FROM CATALOG 00005
FIELD 7 CREATION DATA 1999197
FIELD 8 EXPIRATION DATE 1999195
FIELD 9 CATALOG STATUS 1001
FIELD 10 RELATIVE CATALOG NUM 008
FIELD 11 TARGET CATALOG MVSV5.UCAT2.CATALOG

**6006W** DATA SET IN CATALOG NOT CONNECTED TO MASTCAT

Explanation:
Audit Suite has read the contents of a catalog and has found an entry that has no ALIAS entry in the master catalog. This data set can not be referenced from the system.

User response:
Recommended default fix:
NONE

FIELD # DESCRIPTION EXAMPLE
FIELD 1 ERROR NUMBER 6007W
FIELD 2 TAPE VOLSER 200013
FIELD 3 NUM OF DSN FROM VOL 000013
FIELD 4 NUM OF DSN FROM RMM 000013
FIELD 5 NUM OF DSN FROM CAT 000000

7001W  DATA SET ACTIVE ON TAPE, NOT IN CATALOG

Explanation:
When Audit Suite read the CA1 TMC, it found an active data set on tape that was not cataloged. A tape is not considered active when the expiration date is 9998000, which indicates that it is a foreign tape in the TMC inventory. A tape data set is considered active when it has an expiration date greater than today, PERMANENT CATALOG, 9999nnn or 9998nnn and the tape status is not D (delete) or S (scratch).

User response:
Recommended default fix:
NONE

FIELD # DESCRIPTION EXAMPLE
FIELD 1 ERROR NUMBER 7001W
FIELD 2 TAPE DSN NAME DSN.ON.TAPE
FIELD 3 VOLSER NUMBER T00001
FIELD 4 VOL SEQ NUMBER 001
FIELD 5 TAPE DEVICE TYPE 34008003
FIELD 6 FILE SEQUENCE NUMBER 00001
FIELD 7 CREATION DATE 1999314
FIELD 8 EXPIRATION DATE 1998112
FIELD 9 TMS TAPE STATUS A
FIELD 10 TMS FLAG BYTE 1 E0
FIELD 11 TMS FLAG BYTE 2 40
FIELD 12 TMS FLAG BYTE 3 00
FIELD 13 TMS FLAG BYTE 4 00
FIELD 14 RELATIVE CATALOG # 001
FIELD 15 CATALOG NAME ICF.MASTER.R26.SYSEP

7002W  DATA SET CATALOGED ON SCRATCH OR DELETE TAPE

Explanation:
When Audit Suite read the CA1 TMC, it found a data set cataloged to a tape that CA1 TMS has marked Delete (D) or scratch (S). Review Field 9 for the Tape Status Indicator. Since the tape data set is still cataloged, it is in danger of being written over. This could cause permanent loss of data.

User response:
Recommended default fix:
NONE

FIELD # DESCRIPTION EXAMPLE
FIELD 1 ERROR NUMBER 7002W
FIELD 2 TAPE DSN NAME DSN.ON.TAPE
FIELD 3 VOLSER NUMBER T00001
FIELD 4 VOL SEQ NUMBER 001
FIELD 5 TAPE DEVICE TYPE 34008003
FIELD 6 FILE SEQUENCE NUMBER 00001
FIELD 7 CREATION DATE 1999314
FIELD 8 EXPIRATION DATE 1998112
FIELD 9 TMS TAPE STATUS S
FIELD 10 TMS FLAG BYTE 1 E0
FIELD 11 TMS FLAG BYTE 2 40
FIELD 12 TMS FLAG BYTE 3 00
FIELD 13 TMS FLAG BYTE 4 00
FIELD 14 RELATIVE CATALOG # 001
FIELD 15 CATALOG NAME ICF.USER.CATALOG.PPL204

7004W  TAPE ENTRY HAS CATALOG CONFLICT

Explanation:
When Audit Suite read the CA1 TMC, it found an active data set that is cataloged but to a different volume. This may or may not be an error but it is certainly a health indicator of the TMC inventory. If a large number of data sets have an expiration of CATALOG, CA1 TMS should have an exit in the system that intercepts ‘uncatalogs’ on tape. When this event occurs, the expiration date is set to the current day.

User response:
Recommended default fix:
NONE

FIELD # DESCRIPTION EXAMPLE
FIELD 1 ERROR NUMBER 7004W
FIELD 2 TAPE DSN NAME DSN.ON.TAPE
FIELD 3 VOLSER NUMBER T00001
FIELD 4 VOL SEQ NUMBER 001
FIELD 5 TAPE DEVICE TYPE 34008003
FIELD 6 FILE SEQUENCE NUMBER 00001
FIELD 7 CREATION DATE 1999314
FIELD 8 EXPIRATION DATE CATALOG
FIELD 9 TMS TAPE STATUS A
FIELD 10 TMS FLAG BYTE 1 E0
7005W  •  7007W

FIELD 11 TMS FLAG BYTE 2 40
FIELD 12 TMS FLAG BYTE 3 00
FIELD 13 TMS FLAG BYTE 4 00
FIELD 14 RELATIVE CATALOG # 015
FIELD 15 CATALOG NAME
ICF.USER.CATALOG.PPL204

7005W  CATALOGED TAPE DATA SET NOT IN TMC

Explanation:
When Audit Suite read the extraction from the catalogs, it found a data set that was cataloged to a tape but the corresponding TMC record was not found. If an expiration date is found in the catalog record, it is displayed as found, otherwise the expiration date will contain zeros. The Catalog Status field should always contain four zeros. Each volume in a multivolume data set is checked so you may see the same data set repeated for each volume.

User response:
Recommended default fix:
NONE

FIELD # DESCRIPTION EXAMPLE
FIELD 1 ERROR NUMBER 7005W
FIELD 2 TAPE DSNAME DSN.ON.TAPE
FIELD 3 VOLSER NUMBER T00001
FIELD 4 VOL SEQ NUMBER 001
FIELD 5 TAPE DEVICE TYPE 78048080
FIELD 6 FILE SEQUENCE NUMBER 00001
FIELD 7 CREATION DATE 1999314
FIELD 8 EXPIRATION DATE 0000000
FIELD 9 CATALOG STATUS 0000
FIELD 10 RELATIVE CATALOG # 015
FIELD 11 CATALOG NAME
ICF.USER.CATALOG.PPL204

7006W  BAD COMBINATION OF FILE AND VOLUME SEQUENCES

Explanation:
When Audit Suite read the extraction from the catalogs, it found a data set that was cataloged to a tape, but the volume sequence and file sequence numbers were unusual. This probably an error in the catalog structure. In the example given below, the file sequence number is 00003 and the volume sequence number is 002. In normal tape processing, the data set on the first volume can start anywhere (file sequence number). When the system reaches an End Of Volume status and more data is to be written, a scratch tape is mounted. This means that the data set entry for every subsequent volume should have a file sequence number of 00001. If the customer were to use this information to rebuild a catalog, it would generate an error in the catalog structure.

User response:
Recommended default fix:
NONE

FIELD # DESCRIPTION EXAMPLE
FIELD 1 ERROR NUMBER 7006W
FIELD 2 TAPE DSNAME DSN.ON.TAPE
FIELD 3 VOLSER NUMBER T00001
FIELD 4 VOL SEQ NUMBER 002
FIELD 5 TAPE DEVICE TYPE 78048080
FIELD 6 FILE SEQUENCE NUMBER 00003
FIELD 7 CREATION DATE 1999314
FIELD 8 EXPIRATION DATE 0000000
FIELD 9 CATALOG STATUS 0000
FIELD 10 RELATIVE CATALOG # 015
FIELD 11 CATALOG NAME
ICF.USER.CATALOG.PPL204

7007W  DATA SET IN CATALOG NOT CONNECTED TO MASTCAT

Explanation:
When Audit Suite read the extraction from the catalogs, it found a data set that was cataloged to a tape, but there was no corresponding ALIAS connector in the master catalog. Field 9 should always contain 1001. This data set could be written over, or it could remain on tape longer than it should if it is under catalog control.

User response:
Recommended default fix:
NONE

FIELD # DESCRIPTION EXAMPLE
FIELD 1 ERROR NUMBER 7007W
FIELD 2 TAPE DSNAME DSN.ON.TAPE
FIELD 3 VOLSER NUMBER T00001
FIELD 4 VOL SEQ NUMBER 001
FIELD 5 TAPE DEVICE TYPE 78048080
FIELD 6 FILE SEQUENCE NUMBER 00001
FIELD 7 CREATION DATE 1999314
FIELD 8 EXPIRATION DATE CATALOG
FIELD 9 CATALOG STATUS 1001
FIELD 10 RELATIVE CATALOG # 015
FIELD 11 CATALOG NAME
ICF:USER,CATALOG.PPL204
Chapter 26. Notices

This information was developed for products and services offered in the U.S.A. IBM may not offer the products, services, or features discussed in this document in other countries. Consult your local IBM representative for information on the products and services currently available in your area. Any reference to an IBM product, program, or service is not intended to state or imply that only that IBM product, program, or service may be used. Any functionally equivalent product, program, or service that does not infringe any IBM intellectual property right may be used instead. However, it is the user's responsibility to evaluate and verify the operation of any non-IBM product, program, or service.

IBM may have patents or pending patent applications covering subject matter described in this document. The furnishing of this document does not give you any license to these patents. You can send license inquiries, in writing, to:

IBM Director of Licensing
IBM Corporation
North Castle Drive
Armonk, NY 10504-1785
U.S.A.

For license inquiries regarding double-byte (DBCS) information, contact the IBM Intellectual Property Department in your country or send inquiries, in writing, to:

IBM World Trade Asia Corporation
Licensing
2-31 Roppongi 3-chome, Minato-ku
Tokyo 106-0032, Japan

The following paragraph does not apply to the United Kingdom or any other country where such provisions are inconsistent with local law:

INTERNATIONAL BUSINESS MACHINES CORPORATION PROVIDES THIS PUBLICATION “AS IS” WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF NON-INFRINGEMENT, MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. Some states do not allow disclaimer of express or implied warranties in certain transactions, therefore, this statement may not apply to you.

This information could include technical inaccuracies or typographical errors. Changes are periodically made to the information herein; these changes will be incorporated in new editions of the publication. IBM may make improvements and/or changes in the product(s) and/or the program(s) described in this publication at any time without notice.

Any references in this information to non-IBM Web sites are provided for convenience only and do not in any manner serve as an endorsement of those Web sites. The materials at those Web sites are not part of the materials for this IBM product and use of those Web sites is at your own risk.

IBM may use or distribute any of the information you supply in any way it believes appropriate without incurring any obligation to you.

Licensees of this program who wish to have information about it for the purpose of enabling: (i) the exchange of information between independently created programs
and other programs (including this one) and (ii) the mutual use of the information
which has been exchanged, should contact:

IBM Corporation
J46A/G4
555 Bailey Avenue
San Jose, CA 95141-1003
U.S.A.

Such information may be available, subject to appropriate terms and conditions,
including in some cases, payment of a fee.

The licensed program described in this information and all licensed material
available for it are provided by IBM under terms of the IBM Customer Agreement,
IBM International Program License Agreement, or any equivalent agreement
between us.

Any performance data contained herein was determined in a controlled
environment. Therefore, the results obtained in other operating environments may
vary significantly. Some measurements may have been made on development-level
systems and there is no guarantee that these measurements will be the same on
generally available systems. Furthermore, some measurements may have been
estimated through extrapolation. Actual results may vary. Users of this document
should verify the applicable data for their specific environment.

Information concerning non-IBM products was obtained from the suppliers of those
products, their published announcements or other publicly available sources. IBM
has not tested those products and cannot confirm the accuracy of performance,
compatibility or any other claims related to non-IBM products. Questions on the
capabilities of non-IBM products should be addressed to the suppliers of those
products.

All statements regarding IBM’s future direction or intent are subject to change or
withdrawal without notice, and represent goals and objectives only.

All IBM prices shown are IBM’s suggested retail prices, are current and are subject
to change without notice. Dealer prices may vary.

This information is for planning purposes only. The information herein is subject to
change before the products described become available.

This information contains examples of data and reports used in daily business
operations. To illustrate them as completely as possible, the examples include the
names of individuals, companies, brands, and products. All of these names are
fictitious and any similarity to the names and addresses used by an actual business
enterprise is entirely coincidental.

COPYRIGHT LICENSE:

This information contains sample application programs in source language, which
illustrate programming techniques on various operating platforms. You may copy,
modify, and distribute these sample programs in any form without payment to IBM,
for the purposes of developing, using, marketing or distributing application programs
conforming to the application programming interface for the operating platform for
which the sample programs are written. These examples have not been thoroughly
tested under all conditions. IBM, therefore, cannot guarantee or imply reliability,
serviceability, or function of these programs. You may copy, modify, and distribute
these sample programs in any form without payment to IBM for the purposes of developing, using, marketing, or distributing application programs conforming to IBM’s application programming interfaces.

Each copy or any portion of these sample programs or any derivative work, must include a copyright notice as follows:

© (your company name) (year). Portions of this code are derived from IBM Corp. Sample Programs. © Copyright IBM Corp. _enter the year or years_. All rights reserved.

If you are viewing this information softcopy, the photographs and color illustrations may not appear.

**Trademarks**

The following terms are trademarks of International Business Machines Corporation in the United States, other countries, or both.

<table>
<thead>
<tr>
<th>IBM</th>
<th>z/OS</th>
</tr>
</thead>
<tbody>
<tr>
<td>IBM logo</td>
<td>OS/390</td>
</tr>
<tr>
<td>ibm.com</td>
<td>RACF</td>
</tr>
<tr>
<td>AIX</td>
<td>MVS</td>
</tr>
<tr>
<td>BookManager</td>
<td>OMEGAMON</td>
</tr>
<tr>
<td>DFSMS</td>
<td>DFSMShsm</td>
</tr>
<tr>
<td>DFSMSdfp</td>
<td>DFSORT</td>
</tr>
<tr>
<td>DFSMSdss</td>
<td>REXX</td>
</tr>
</tbody>
</table>

Adobe, Acrobat, PostScript and all Adobe-based trademarks are either registered trademarks or trademarks of Adobe Systems Incorporated in the United States, other countries, or both.

Intel, Intel logo, Intel Inside, Intel Inside logo, Intel Centrino, Intel Centrino logo, Celeron, Intel Xeon, Intel SpeedStep, Itanium, and Pentium are trademarks or registered trademarks of Intel Corporation or its subsidiaries in the United States and other countries.

Linux is a trademark of Linus Torvalds in the United States, other countries, or both.

Microsoft, Windows, Windows NT, and the Windows logo are trademarks of Microsoft Corporation in the Unites States, other countries, or both.

UNIX is a registered trademark of The Open Group in the United States and other countries.

Java and all Java-based trademarks are trademarks of Sun Microsystems, Inc. in the United States, other countries, or both.

Other company, product, and service names may be trademarks or service marks of others.
Program Number:  5698–A50

Printed in USA