Using IBM Tivoli OMEGAMON XE for CICS on z/OS
Contents

Figures ................................................................. ix

Tables ................................................................. xi

Preface ................................................................. xiii
Who should read this guide ........................................ xiii
Transition from Candle to IBM .................................... xiii
What’s new in this release ........................................... xiv

Publications ............................................................ xvi
Tivoli technical training ............................................. xx
Support information .................................................. xx
Conventions used in this guide ..................................... xx
Terminology ........................................................... xxi

Part 1. Introduction ..................................................... 1

Chapter 1. Introduction ................................................ 3
Title bar ................................................................. 3
Banner ................................................................. 3
Menu bar ............................................................. 4
Tool bar ............................................................... 4
View tool bar ......................................................... 7
Navigator ............................................................. 8
Workspace ............................................................ 8
Status bar ............................................................ 9

Chapter 2. Managing workspaces ..................................... 11
Customizing workspaces ........................................... 12
Predefined workspaces ............................................ 15
Opening a workspace .............................................. 15
Workspace properties ............................................... 16
Investigating an event .............................................. 16
Filtering, sorting, adding, and deleting workspaces .......... 16
Linking from a workspace ......................................... 17

Chapter 3. Managing system events using situations .......... 19
Situation editor ....................................................... 23
Using the Situation editor ........................................ 24
Creating a situation ................................................ 26
Creating a second situation ...................................... 27
Editing a situation .................................................. 27
Saving a situation .................................................. 28
Displaying a situation ............................................. 28
Starting, stopping, or deleting a situation ....................... 29

Chapter 4. Take action ................................................ 31
Defining a Take Action command ................................ 31
Editing a Take Action command .................................. 32
Executing a saved Take Action command ....................... 33

Chapter 5. Queries .................................................... 35
Query editor ......................................................... 36
Creating a query ..................................................... 38
## Chapter 6. Workflows

**Workflows editor**

## Chapter 7. Collecting historical data

- Collecting historical data
- Start historical reporting
- Stop historical reporting
- Disable historical reporting

## Chapter 8. Creating a new link

**Link expression editor**

## Chapter 9. Properties Editor

- View properties
- Filters
- Thresholds
- Configuration
- Style

## Chapter 10. Common User Scenarios

- Application setup
- Monitoring short-on-storage problems
  - Modifying a threshold for short on storage
  - Creating a link for short-on-storage
  - Resolving the problem - using the Take Action command
- Monitoring communication problems
  - Creating a threshold to monitor connections
  - Creating a situation to monitor broken links
  - Testing the connection scenario

## Chapter 11. Troubleshooting

- Collecting logs
- Client tracing
- Server tracing

## Part 2. References

### Chapter 12. Attributes

- Automatic Initiate Descriptor
- Bottleneck Analysis
- Connection Analysis
- DB2 Summary
- DB2 Task Activity
- DBCTL Summary
- Dispatcher Summary
- Dispatcher TCB Modes
- Dispatcher TCB Pools
- Dump Analysis
- Dump Details
- Dynamic Storage Detail
- Enqueue Analysis
<table>
<thead>
<tr>
<th>Topic</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transaction Storage Violations</td>
<td>220</td>
</tr>
<tr>
<td>Transaction Timings</td>
<td>221</td>
</tr>
<tr>
<td>Transaction TSQueue Details</td>
<td>223</td>
</tr>
<tr>
<td>Transaction Umbrella Analysis</td>
<td>224</td>
</tr>
<tr>
<td>Transaction Other Waits Analysis</td>
<td>225</td>
</tr>
<tr>
<td>Transient Data Queues</td>
<td>226</td>
</tr>
<tr>
<td>Transient Data Summary</td>
<td>227</td>
</tr>
<tr>
<td>Units of Work</td>
<td>228</td>
</tr>
<tr>
<td>UOW Analysis</td>
<td>232</td>
</tr>
<tr>
<td>UOW Enqueue Analysis</td>
<td>233</td>
</tr>
<tr>
<td>VSAM Analysis</td>
<td>234</td>
</tr>
</tbody>
</table>

**Chapter 13. Situations**

- Connection Analysis Situations          | 239  |
- Database Analysis Situations             | 240  |
- Dump Analysis Situations                 | 242  |
- Enqueue Analysis Situations              | 245  |
- Journal Analysis Situations              | 248  |
- LSR Pool Analysis Situations             | 249  |
- MQ Connection Situation                  | 250  |
- Region Overview Situations               | 265  |
- RLS Lock Analysis Situation              | 266  |
- Response Time Analysis Situation         | 277  |
- Service Analysis Situations              | 278  |
- Storage Analysis Situations              | 285  |
- Task Class Analysis Situations           | 290  |
- TCP/IP Analysis Situations               | 291  |
- Temporary Storage Analysis Situations    | 293  |
- Transaction Analysis Situations          | 296  |
- Transient Data Analysis Situations       | 297  |
- UOW Analysis Situations                  | 302  |
- VSAM Analysis Situations                 | 304  |

**Chapter 14. Workspaces**

- Organization of the predefined workspaces| 311  |
- Automatic Aid Descriptors workspace      | 311  |
- Bottleneck Analysis workspace            | 315  |
- CICS region name workspace               | 315  |
- Connections Analysis workspace           | 316  |
- Databases workspace                      | 317  |
- DB2 Summary workspace                    | 317  |
- DB2 Task Activity workspace              | 317  |
- DBCTL Summary workspace                  | 318  |
- Dispatcher Summary workspace             | 318  |
- Dispatcher TCB Mode workspace             | 319  |
- Dispatcher TCB Pool workspace             | 319  |
- Dump Analysis workspace                   | 319  |
- Dump Details workspace                    | 319  |
- Dynamic Storage Details workspace        | 320  |
- Enqueue Analysis workspace               | 320  |
- File Control Analysis workspace          | 321  |
- File Control Data Tables Statistics workspace | 321  |
- File Control Details workspace           | 322  |
- File Control Journal and Logging workspace | 322  |
- File Control Statistics workspace        | 323  |
- File Control Summary                      | 323  |
Intercommunication Summary workspace ................................................. 323
Internet Status workspace ................................................................. 324
Interval Control Element workspace .................................................. 324
Java Program Analysis workspace ...................................................... 324
Journal Analysis workspace .............................................................. 325
JVM Analysis workspace ................................................................. 325
JVM Classcache workspace .............................................................. 326
JVM Pool Statistics workspace ......................................................... 326
JVM Profile Analysis workspace ....................................................... 326
LSR Pool Status workspace .............................................................. 327
Link Summary workspace ................................................................. 327
Log Stream Analysis workspace ......................................................... 327
Message Queuing Analysis workspace ................................................. 329
MVS TCB Details workspace ............................................................. 330
MVS TCB Summary workspace .......................................................... 330
Online Data Viewing workspace ........................................................ 330
Pagepool Details workspace .............................................................. 331
Pagepool Summary workspace .......................................................... 331
Region Data Sets workspace .............................................................. 332
Region Overview workspace .............................................................. 332
Response Time Analysis workspace .................................................... 333
Response Time Details workspace ...................................................... 333
Service Level Analysis workspace ...................................................... 334
Service Class Analysis by Region workspace ...................................... 335
Service Class Analysis workspace ...................................................... 335
Service Task Details workspace ......................................................... 336
Storage Analysis workspace .............................................................. 336
Subpool Details workspace ............................................................... 336
System Initialization workspace ........................................................ 337
Task Class Analysis workspace .......................................................... 337
TCPIP Service Statistics workspace .................................................... 338
TCPIP Statistics workspace .............................................................. 338
Temporary Storage Queues workspace ................................................. 339
Temporary Storage Summary workspace .......................................... 340
Auxiliary Temporary Storage workspace .......................................... 341
Temporary Storage Details workspace ................................................. 341
Terminal Storage Violations workspace ............................................... 342
Transaction Analysis workspace ........................................................ 342
Transaction and Program Definitions workspace ................................. 345
Transaction Details workspace .......................................................... 346
Transaction EIB Details workspace ...................................................... 346
Transaction File Details workspace ...................................................... 347
Transaction I/O Waits Details workspace ............................................. 347
Transaction Manager workspace ........................................................ 348
Transaction Remote Summary workspace ......................................... 348
Transaction Statistics workspace ....................................................... 349
Transaction Storage Analysis workspace .............................................. 350
Transaction Storage Violations workspace .......................................... 350
Transaction Timings workspace .......................................................... 351
Transaction TSQueue Details workspace .............................................. 351
Transaction Umbrella Data workspace ............................................... 352
Transient Data Queues workspace ...................................................... 352
Transient Data Summary workspace ................................................... 353
UOW Analysis workspace ................................................................. 353
UOW Enqueue Analysis workspace .................................................... 354
Unit of Work by Region workspace .................................................... 354
Figures

1. CandleNet Portal desktop client, Enterprise workspace ........................................... 3
2. JVM analysis workspace ........................................................................................... 11
3. Properties editor, header window ............................................................................. 13
4. Situation editor, opening window .............................................................................. 20
5. Event flyover dialog .................................................................................................. 21
6. Event workspace ....................................................................................................... 23
7. Properties editor with the query tab selected ......................................................... 35
8. Query editor ............................................................................................................. 37
9. Query editor ............................................................................................................. 38
10. Create a query window ............................................................................................ 40
11. Query editor 2 .......................................................................................................... 41
12. Select attributes pane ............................................................................................. 43
13. Link wizard - define new link ................................................................................ 63
14. Link expression editor ............................................................................................. 64
15. Properties editor opened from the toolbar ............................................................ 71
16. Properties Editor when opened from a table view .................................................. 72
17. Properties editor ..................................................................................................... 74
18. Properties editor ..................................................................................................... 76
19. Properties editor with the style panel ..................................................................... 78
20. Properties editor with the style panel ..................................................................... 79
21. Navigator window ................................................................................................... 82
22. Save Workspace As... ............................................................................................. 83
23. Properties editor from the Scenario 1 workspace .................................................... 84
24. Link wizard showing the target and workspace views ............................................. 85
25. Transaction Analysis workspace ............................................................................ 86
26. Create new action dialog ......................................................................................... 87
27. Take Action command dialog ................................................................................ 88
28. Action status dialog ............................................................................................... 88
29. Navigator window showing the Connection Analysis workspace ......................... 89
30. Save Workspace as... dialog .................................................................................. 90
31. Extract from the Communications analysis workspace showing the Connections Analysis table ................................. 90
32. Properties editor, Thresholds view ......................................................................... 91
33. Create Situation dialog ........................................................................................... 92
34. Select Attribute dialog ............................................................................................ 92
35. Situation editor - condition view ............................................................................. 93
36. Situation editor - Expert Advice ............................................................................ 94
37. Situation editor - Action view ................................................................................ 94
38. Situation editor - Action view ................................................................................ 95
39. Situation editor ....................................................................................................... 96
40. Selecting a server trace ........................................................................................... 98
41. Trace parameters dialog ........................................................................................ 99
Tables

1. Message prefixes .................................................. 359
2. Standard messages and abend codes .................................. 360
3. Collecting dumps ..................................................... 361
4. Trademarks ............................................................ 488
IBM® Tivoli® OMEGAMON® Extended Edition (XE) for CICS® on z/OS is a remote monitoring agent that resides on z/OS® managed systems. It assists you in anticipating trouble and warns you when critical events take place on your systems. With IBM Tivoli OMEGAMON XE for CICS on z/OS, you can set threshold levels and flags as desired to alert you when the system reaches these thresholds.

This book provides an overview of the CandleNet Portal®, a description of a number of user scenarios, and a complete reference section. The reference section includes all the attributes, situations, workspaces, and messages for this product.

Who should read this guide

The primary audience for this book is the z/OS systems programmer or analyst who is responsible for ensuring CICS availability. This person’s responsibilities include:

- Planning for and overseeing product installation
- Troubleshooting system and performance problems
- Analyzing performance data for problem determination
- Providing historical performance data for trend analysis

Users of this book should be familiar with the following topics:

- The z/OS operating system and its associated concepts
- CICS Transaction Server
- Database administration concepts
- Performance monitoring concepts

IBM Tivoli OMEGAMON XE for CICS on z/OS

Transition from Candle to IBM

IBM recently acquired Candle® Corporation. The transition of Candle ordering and service processes is complete. As you will see in this publication, this release is part of a transition phase of this acquisition. Many changes have been made to this product and its publications to deliver it as an IBM product.

You will notice that much of the Candle terminology and component names used to describe the OMEGAMON products remain unchanged. However, in some cases, the product release number has been modified. For example, the version of CandleNet Portal required by this release is version 196. Publications that have been modified, such as IBM Tivoli OMEGAMON Platform: Installing and Setting up OMEGAMON Platform and CandleNet Portal on Windows and UNIX include the new version 196 release number on the cover. Publications that have not been modified, such as IBM Tivoli OMEGAMON Platform: Administering OMEGAMON Products: CandleNet Portal Version 195 and IBM Tivoli OMEGAMON Platform: Using OMEGAMON Products: CandleNet Portal Version 195 continue to carry the previous version 195 release number. Note that the information provided in these books is still valid for version 195. For a definitive list of the OMEGAMON platform books used with this product release, see OMEGAMON XE platform publications on page xviii.
Candle products have new IBM names, and during this transition period, some publications use the old names while others use the new names. For example, CandleNet Portal might be referred to by the new name Tivoli Management Portal. For a mapping of previous Candle names and new IBM names, refer to [http://www-306.ibm.com/software/tivoli/products/product-matrix.html#candle](http://www-306.ibm.com/software/tivoli/products/product-matrix.html#candle).

If you are an IBM customer new to Candle products, you should know that OMEGAMON is an established name in the systems management environment with a long and respected history. In discussions of OMEGAMON, you might see or hear these terms:

- OMEGAMON Classic refers to the original 3270-based products that have evolved since the 1970s. This is also known as the "Menu system" and the "Common Interface".
- OMEGAMON II is an implementation of the IBM Common User Access® (CUA®) interface of the late 1980s. This generation of OMEGAMON products collects information from one or more monitored systems and displays it on a single 3270-based, CUA-compliant mainframe screen.
- OMEGAMON XE, the Extended Edition, is the current OMEGAMON family of products, used for monitoring most operating systems, subsystems, applications, storage, and networks, through the use of a Java-based graphical interface. This interface also gives you workflow policies to define and run complex automation scenarios and lets you combine data from different agents in a single workspace.
- IBM Tivoli OMEGAMON Desktop Edition (DE) on z/OS is a package of components that provide an integrated view of your mainframe enterprise and the power to take corrective action when problems threaten system and application availability. The components in the package include OMEGAVIEW and OMEGAVIEW II® for the Enterprise.

This book is an introduction to the OMEGAMON XE zSeries products in general, and to the IBM Tivoli OMEGAMON XE for CICS on z/OS product in particular.

### What’s new in this release

With this release, IBM Tivoli OMEGAMON XE for CICS on z/OS acquires a lot of the new data using the EXEC CICS INQUIRE or CEMT INQUIRE commands. This applies to the following workspaces:

- Dispatcher Summary, Dispatcher Task Control Block (TCB) Mode, and Dispatcher TCB Pool.
- Dump Details.
- Java™ Program Analysis.
- JVM Analysis, JVM Classcache Analysis, JVM Pool Statistics, and JVM Profile Statistics.
- MVS™ TCB Summary and MVS TCB Details.
- Pagepool Summary and Pagepool Details.
- TCP/IP Service Statistics and TCP/IP Statistics.

This release supersedes OMEGAMON XE for CICSplex version 220.

**Detailed task and transaction information now provided.**

A wide range of statistics are now accessible from the Transaction Analysis workspace. This allows you to examine in detail, each task that is running in your CICS regions. For example, you can now select a task and find how its elapsed time is distributed between CPU use and waiting for resources.
You can also examine the details of transaction and program definitions and determine those areas that need modification.

**Dispatcher and Transaction manager.**
With the increase in the number of Task Control Blocks (TCB) that CICS is using. These statistics enable you to determine the level of activity within those blocks.

**Comprehensive file statistics.**
From the File Control Analysis workspace, you can now access information about the various file types, for example, Journals, Logs, and Data Tables. New workspaces have been included to show further details and statistics related to file control.

**Dump details**
Dump details have been grouped to separate system and transaction dumps.

**Pagepool and subpool details.**
The Pagepool details and summary workspaces describe the use that CICS is making of virtual storage. This information includes details of each DSA usage, free storage, high-water marks, largest free area, the number of storage violations, and SOS occurrences. Many of these figures are provided in bytes, kilobytes (KB) and megabytes (MB). As with all the table views, you can customize the tables to move and remove columns to provide a unique table view.

**Java Programs.**
This supplies all the data available about the Java programs in use in your CICS regions. The JVM analysis workspace includes data about the age since the JVM was initialized, the reusability and the phasing out status of the JVM. There are three other workspaces that give details of the classcache, the JVM pool and profiles for each of your CICS regions.

**TCP/IP reporting.**
Both TCP/IP Service Statistics and TCP/IP have been added for you to monitor those connections. These have become more critical for businesses with their increasing reliance on web sites.

**Service Task details**
Although this does not provide any information about CICS, it supplies useful diagnostics to understand why those workspaces that collect their data through the EXEC CICS and CEMT INQUIRE commands may have failed. From this workspace you can determine whether the OMEG INIT transaction has started not. If it has not started those attribute groups will not collect any data.

**Expanded Temporary Storage data**
From the navigation tree you can access details about main, auxiliary and shared Temporary Storage.

**AID and ICE workspaces**
Both the Automatic Initiate Descriptor (AID) and the Interval Control Element (ICE) workspaces have been added to the XE version. From the Take Action panel it is possible to purge an AID or an ICE.

**On-line data viewing.**
This collects task historical data and can be used to analyze the transaction response time.
CEKL FORCE/FORCEPURGE
From the Take Action interface you can use CEKL FORCE/FORCEPURGE to remove a task.

Information delivery
The information for Tivoli OMEGAMON XE for CICS on z/OS is provided in two formats: HTML and PDF. It is delivered as an information center that contains links to both the HTML and the PDFs through a navigation tree. The information center uses the IBM Eclipse Help System. This allows you to add your unique groups of product documentation as they become available in this format.

The latest documentation is available at the following web site:


With this product you will receive a publications CD that you can use directly or copy the files to your hard drive.

All publications for this and all other Tivoli products are updated on the Tivoli software information center Web site. Access the Tivoli software information center by first going to the Tivoli software library at the following Web address:

http://publib.boulder.ibm.com/tividd/tddprodlist.html

Scroll down and click the Product manuals link to access the Tivoli software information center.

Publications
This section lists publications in the IBM Tivoli OMEGAMON XE for CICS on z/OS product, the Tivoli OMEGAMON II for CICS on z/OS component, and the OMEGAMON XE platform libraries. It also describes how to access Tivoli publications online and how to order publications.

IBM Tivoli OMEGAMON XE for CICS on z/OS library
The following publications are included in the IBM Tivoli OMEGAMON XE for CICS on z/OS library:

- IBM Tivoli OMEGAMON XE for CICS on z/OS: Getting Started, GC32-9422-00
  Provides planning information for installing IBM Tivoli OMEGAMON XE for CICS on z/OS and information about the OMEGAMON XE zSeries products.

- Configuring IBM Tivoli OMEGAMON XE for CICS on z/OS, SC32-9423-00
  Documents the installation and configuration tasks necessary for the implementation of IBM Tivoli OMEGAMON XE for CICS on z/OS. This document is written for system administrators and others who are responsible for installing and configuring IBM Tivoli OMEGAMON XE for CICS on z/OS.

- Using IBM Tivoli OMEGAMON XE for CICS on z/OS, SC32-9424-00 (this book)
  Introduces the features, workspaces, attributes, and predefined situations for the IBM Tivoli OMEGAMON XE for CICS on z/OS product and supplements the user assistance provided with this product. This document is written for system operators.

- IBM Tivoli OMEGAMON XE for CICS on z/OS: Release Notes, GI11-4086-00
  Contains information about the Tivoli OMEGAMON XE for CICS on z/OS platform version 360 as well as information about the IBM Tivoli OMEGAMON XE for CICS on z/OS product’s issues, limitation and workarounds. There is also an
information map between new and old locations for information from previous versions of the product library and between old product names and new product names.

- **IBM Tivoli OMEGAMON XE Platform: Candle Messages Manual Volume 1 (AOP-ETX), SC32-9216**
- **IBM Tivoli OMEGAMON XE Platform: Candle Messages Manual Volume 2 (EU-KLVMG), SC32-9217**
- **IBM Tivoli OMEGAMON XE Platform: Candle Messages Manual Volume 3 (KLVHS-KONCT), SC32-9218**
- **IBM Tivoli OMEGAMON XE Platform: Candle Messages Manual Volume 4 (ODC-VEB and Appendixes), SC32-9220**

These books contain the messages for most IBM Tivoli Candle products organized alphabetically by prefix.

**Tivoli OMEGAMON II for CICS on z/OS library**

The following publications are in the Tivoli OMEGAMON II for CICS on z/OS library:

- **IBM Tivoli OMEGAMON II for CICS Configuration and Customization Guide, GC32-9242**
  Documents the configuration and customization tasks necessary for the implementation of the Tivoli OMEGAMON II for CICS on z/OS product. This document is written for system administrators and others who are responsible for installing and configuring Tivoli OMEGAMON II for CICS on z/OS.

- **IBM Tivoli OMEGAMON II for CICS User’s Guide, GC32-9249-00**
  Provides information about using the Tivoli OMEGAMON II for CICS on z/OS Common User Access CUA interface to monitor your CICS system. The document is written for personnel who are responsible for monitoring CICS performance, system programmers, and performance analysts, and application programmers who wish to monitor their programs.

- **IBM Tivoli OMEGAMON II for CICS Reference Vol 1, GC32-9246**
  You should use this book in conjunction with volume 2 if you need to understand how to use the CUA interface and menu system of Tivoli OMEGAMON II for CICS on z/OS to access the data you need to analyze CICS performance problems, create profiles, and define groups for monitoring purpose. Volume 1 provides information about the CUA interface.

- **IBM Tivoli OMEGAMON II for CICS Reference Vol 2, GC32-9247**
  You should use this book if you need to understand how to use the CUA interface and menu system of Tivoli OMEGAMON II for CICS on z/OS to access the data you need to analyze CICS performance problems, create profiles, and define groups for monitoring purpose. Volume 2 provides information about the menu system interface.

- **IBM Tivoli OMEGAMON II for CICS History Reporting Guide, GC32-9243**
  This book discusses the Tivoli OMEGAMON II for CICS on z/OS historical reporting feature and describes the numerous reports that you can obtain. It explains how to produce reports and provides examples, such as Response time reports, transaction reports, terminal reports, User ID reports, file reports, database reports, program reports, and system reports. It covers the use of SAS historical reporting, user-defined exits, an internal macros and programs.

Provides a description of ETE™, an explanation of how to start ETE after installation and customization have been completed, and a description of each ETE command argument.

**OMEGAMON XE platform publications**

To use the information for the IBM Tivoli OMEGAMON XE for CICS on z/OS product effectively, you must have some prerequisite knowledge about the OMEGAMON XE platform and the CandleNet Portal interface, which you can obtain from the following guides:

- **IBM Tivoli OMEGAMON Platform: Installing and Setting up OMEGAMON Platform and CandleNet Portal on Windows and UNIX**, SC32-1768
  Provides information on installing and setting up the component products of the OMEGAMON Platform: Candle Management Server, CandleNet Portal, Candle Management Workstation®, Warehouse Proxy, Candle Data Warehouse, Alert Adapter for AF/REMOTE®, Alert Adapter for Tivoli Enterprise Console®, and Alert Emitter for Tivoli Enterprise Console on Windows® and UNIX®.

- **IBM Tivoli OMEGAMON Platform: Configuring Candle Management Server on z/OS**, GC32-9414
  Describes how to configure and customize the Candle Management Server on z/OS. The book also contains platform planning information and information about setting up security on your Candle Management Server.

- **IBM Tivoli OMEGAMON Platform: Historical Data Collection Guide for OMEGAMON XE Products, Versions 360 and 195**, GC32-9182
  Describes the process of collecting historical data and either warehousing it or converting it to delimited flat files for reporting purposes. It also describes how to configure historical data collection and warehousing intervals using the CandleNet Portal.

  Describes how to perform administrative tasks associated with the CandleNet Portal.

  Describes how to use the CandleNet Portal interface. It includes a tutorial about monitoring that covers workspaces, navigation, views, and responding to alerts. Different types of views and situations for event-based monitoring are also included, as well as information on automation policies.

**CICS publications**

The following books from the CICS Transaction Server library have been used extensively in the preparation of this documentation:

- **IBM CICS Transaction Server: Problem Determination Guide**
- **IBM CICS Transaction Server: Performance Guide**
- **IBM CICS Transaction Server: System Programming Reference**
- **IBM CICS Transaction Server: CICS-Supplied Transactions**
- **IBM CICS Transaction Server: System Definition Guide**

Use the books from the above list that relate to the release of CICS that you are planning to monitor.

The CICS TS 3.1 Information Center is accessible from [http://publib.boulder.ibm.com/infocenter/cicsts31/index.jsp](http://publib.boulder.ibm.com/infocenter/cicsts31/index.jsp)
Related publications
The Tivoli Software Glossary includes definitions for many of the technical terms related to Tivoli software. The Tivoli Software Glossary is available at the following Tivoli software library Web site:

http://publib.boulder.ibm.com/tividd/td/tdprodlist.html

Access the glossary by clicking the Glossary link on the left pane of the Tivoli software library window.

Accessing publications online
The documentation CD contains the publications that are in the product library. The format of the publications is PDF or PDF and HTML. Refer to the readme file on the CD for instructions on how to access the documentation.

IBM posts publications for this and all other Tivoli products, as they become available and whenever they are updated, to the Tivoli software information center Web site at the following Web address:

http://publib.boulder.ibm.com/tividd/td/tdprodlist.html

Note: If you print PDF documents on other than letter-sized paper, set the option in the File > Print window that allows Adobe Reader to print letter-sized pages on your local paper.

Accessing publications online
The documentation CD contains the publications that are in the product library. The format of the publications is PDF and HTML.

IBM posts publications for this and all other Tivoli products, as they become available and whenever they are updated, to the Tivoli software information center Web site. Access the Tivoli software information center at the following Web address:

http://publib.boulder.ibm.com/tividd/td/tdprodlist.html

Note: If you print PDF documents on other than letter-sized paper, set the option in the File > Print window that allows Adobe Reader to print letter-sized pages on your local paper.

Ordering publications
You can order many Tivoli publications online. If publications have been made available for hardcopy, they can be ordered through the IBM Publications Center at the following Web site:


You can also order by telephone by calling one of these numbers:
- In the United States: 800-879-2755
- In Canada: 800-426-4968

In other countries, contact your software account representative to order Tivoli publications.
Tivoli technical training

For Tivoli technical training information, refer to the following IBM Tivoli Education Web site:

http://www.ibm.com/software/tivoli/education

Support information

If you have a problem with your IBM software, you want to resolve it quickly. IBM provides the following ways for you to obtain the support you need:

- Searching knowledge bases: You can search across a large collection of known problems and workarounds, Technotes, and other information.
- Obtaining fixes: You can locate the latest fixes that are already available for your product.
- Contacting IBM Software Support: If you still cannot solve your problem, and you need to work with someone from IBM, you can use a variety of ways to contact IBM Software Support.

Conventions used in this guide

This guide uses several conventions for special terms and actions and for operating system-dependent commands and paths.

Typeface conventions

This guide uses the following typeface conventions:

**Bold**

- Lowercase commands and mixed case commands that are otherwise difficult to distinguish from surrounding text
- Interface controls (check boxes, push buttons, radio buttons, spin buttons, fields, folders, icons, list boxes, items inside list boxes, multicolumn lists, containers, menu choices, menu names, tabs, property sheets), labels (such as Tip:, and Operating system considerations:)
- Keywords and parameters in text

*Italic*

- Words defined in text
- Emphasis of words (words as words)
- New terms in text (except in a definition list)
- Variables and values you must provide

Monospace

- Examples and code examples
- File names, programming keywords, and other elements that are difficult to distinguish from surrounding text
- Message text and prompts addressed to the user
- Text that the user must type
- Values for arguments or command options

Operating system-dependent variables and paths

This guide uses the UNIX convention for specifying environment variables and for directory notation.
When using the Windows command line, replace $\textit{variable}$ with \%\textit{variable}\% for environment variables and replace each forward slash (/) with a backslash (\) in directory paths. The names of environment variables are not always the same in Windows and UNIX. For example, \%TEMP\% in Windows is equivalent to $\textit{tmp}$ in UNIX.

**Note:** If you are using the bash shell on a Windows system, you can use the UNIX conventions.

### Terminology

For a list of terms and definitions for Tivoli and other IBM products, refer to the IBM terminology Web site:

Part 1. Introduction

This Part provides the following information:

• Overview of CandleNet Portal
  – Managing workspaces
  – Managing system events using Situation editor
  – Take Action
  – Queries
  – Workflows
  – Collecting history data
  – Creating links
  – Properties Editor

• Common User Scenarios
  – Short-on-storage
  – Connection problems
Chapter 1. Introduction

The CandleNet Portal window displays information about monitored resources in your enterprise. On the left is the Navigator, which shows the arrangement of your monitored network and allows you to access information collected by different agents on your monitored systems. On the right is a workspace. The workspace can be divided into many smaller frames, or panes, as you can reasonably fit inside the window. When you select an item in the Navigator, a new workspace opens with a set of views for that item.

Title bar

In desktop mode the title bar shows the name of the workspace, the hostname of the CandleNet Portal Server, and the user name. For example, in Figure 1 it shows Enterprise Status: localhost - SYSADMIN. It tells us that the Enterprise workspace is open and the user sysadmin is connected to the CandleNet Portal Server named localhost. There may be a port number as well.

In browser mode the title bar shows the name of the workspace.

Banner

The banner (© Copyright IBM Corp. 2005) appears when you run CandleNet Portal in browser mode. You can replace it with your own .GIF graphic, such as your company logo. To do this:

1. Edit bannerimage.html in c:\candle\cnb.
2. Copy the logo graphic named in step 4 to the same directory as bannerimage.html (candle\cnb)
For best results, we recommend you use a company logo image 22 pixels high. A shorter or taller image may not look as expected.


Menu bar

CandleNet Portal has a menu bar with four menus:

<table>
<thead>
<tr>
<th>Menu</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>File</td>
<td>The File menu has options for opening a new window, closing the window, working with workspaces, and exiting CandleNet Portal. The Trace Options are used only as instructed by an IBM Software Support representative.</td>
</tr>
<tr>
<td>Edit</td>
<td>The Edit menu has editing options for workspace properties, history configuration, workflow (DE only), situations, users, queries, and managed system lists.</td>
</tr>
<tr>
<td>View</td>
<td>The View menu has options for opening other workspaces, hiding or showing the navigator pane, toolbars, and status bar, refreshing the data in this workspace, and for turning off sound for events.</td>
</tr>
<tr>
<td>Help</td>
<td>The Help menu opens the CandleNet Portal Help, a product tour to give you some hands-on experience, and information about Candle Management Workstation (This is being replaced with CandleNet Portal). It also has a link to the Tivoli web site.</td>
</tr>
</tbody>
</table>

Also available are pop-up menus that open when you right-click an item in the Navigator or a view in the workspace.

In browser mode you also get the browser menu bar, which appears just below the title bar.

Note: If your user ID does not have View or Modify permission for a function or does not have Workspace Author Mode permission, you cannot see certain items in the menus, including the pop-up menus. For example, if you have no Workspace Author Mode permission, the Properties menu item does not appear.

Tool bar

Note: Workspace Author Mode permission. Your user ID requires Workspace Author Mode permission to create and maintain workspaces, including links. If the main toolbar is disabled (except Refresh, Back, Forward and Stop), as well as the split and remove tools on the view toolbar, you do not have this permission.

The toolbar has four tool groupings:

Moving around the workspace

Back to the previous workspace. Click the list button to see and select from a history of workspaces as they were opened. The selected workspace refreshes with the most recent sampling data from the agent.
Not available in browser mode. Use the Back tool in your browser instead.

Forward to the next workspace. Click the list button to see and select from a history of workspaces that were opened after this one. The selected workspace refreshes with the most recent sampling data from the agent.

Not available in browser mode. Use the Forward tool in your browser instead.

Opening and saving CNP windows

Open a new CandleNet Portal window.
Keyboard shortcut: Ctrl + N

Save the current workspace properties, including any changes to views and links.
Keyboard shortcut: Ctrl + S

Open the Properties editor for this workspace.
Keyboard shortcut: Ctrl + R

Open the History Collection Configuration dialog to define and start historical collection for the specified Monitoring Agents and attribute groups.
Keyboard shortcut: Ctrl + H

(OMEGAMON DE only.) Open the Workflow editor to customize policies for automation.
Keyboard shortcut: Ctrl + W

Open the Situation editor for viewing, editing, and creating situations that alert you when the conditions they describe have been met. When you use this method to open the Situation editor instead of through the Navigator item pop-up menu, the situation is not associated with any Navigator item.

A situation must be associated with a Navigator item before an alert can show there. Association is automatic for predefined situations in the Navigator physical view and for situations edited when the Situation editor was accessed through the Navigator item pop-up menu.

Open the Administer Users dialog for adding user IDs, removing them, and changing their permissions.
Keyboard shortcut: Ctrl + U

Open the Query editor. When you use this method to open the
Query editor, instead of through the Properties editor, you can see and customize queries but you cannot assign them to table and chart views.

Keyboard shortcut: Ctrl + Q

**Refreshing and reloading workspace views**

- Refresh the workspace views with the latest data from your Monitoring Agents.
  
  Keyboard shortcut: F5

- Pause or resume automatic refresh of the data in the workspace views. The tool is disabled if no refresh interval has been set for the workspace (View > Refresh Every).

- Reload the saved workspace and refresh the data in the workspace views.

- Stop loading the workspace. If the workspace is set to refresh at intervals (View > Refresh Every), the refresh will stop until the next interval.
  
  Keyboard shortcut: Shift + Esc

- Turn sound off or on for open events. Enabling or disabling sound for an event is controlled through the Situation editor.

**Changing the view associated with a workspace**

**Note:** In all these charts:

- The X-axis category label is assigned automatically.
- The scale is set automatically.

- **Table view** replaces the view you next click with a table, whose properties you can customize for the data you want to report. Click this tool, then click inside the view you want to adopt the table.

- **Pie chart view** replaces the view you next click with a pie, whose properties you can customize for the data you want to include.

- **Bar chart view** replaces the view you next click with a bar chart, whose properties you can customize for the data you want to plot.

- **Plot chart view** replaces the view you next click with a plot chart, which you can then customize for the data you want to include.

- **Circular gauge view** replaces the view you next click with a circular gauge, which you can then customize for the data you want to show.
**Note:** The scale starts at 3:00 rather than 12:00 or 6:00 as you might expect.

**Linear gauge view** replaces the view you next click with a linear gauge, which you can then customize for the data you want to show.

The **notepad view** replaces the view you next click with a text editor so you can write notes about the workspace.

**Message log view** shows the status of the situations and events that have been opened for the managed systems in your enterprise.

*(OMEGAMON DE only.)* **Event console view** displays a row of information for every situation status change on this branch of the Navigator, such as the state and how long the event has been open.

*(OMEGAMON DE only.)* **Graphic view** lets you choose a background picture or map and overlay it with icons representing Navigator items. Alerts show on these icons just as they do in the Navigator.

**Take action view** is used to send a command to the system. Click this tool, then the workspace view to adopt the Take action function.

**Terminal view** starts a 3270 or 5250 work session in the workspace view you next click, replacing what was there before.

**Browser view** replaces the view you next click with the CandleNet Portal internal browser so you can view Web content in both your intranet and the Internet.

You can turn off the display of the toolbar through the Toolbar item in the View menu.

---

**View toolbar**

Each view in the workspace also has a toolbar:

- [ ] Split the view horizontally into two separate views.
- [ ] Split the view vertically into two separate views.
- [ ] Maximize the view. The button becomes a Restore button so you can restore the view to its original size.
Remove the view from the workspace.

Some views have additional tools, such as the Time Span tool for table views and some chart views.

You can turn off the display of the view toolbar through the Split Pane Toolbar item in the View menu.

**Navigator**

The Navigator physical view shows the hierarchy of your monitored enterprise, from the top level (Enterprise) down to individual groupings of information collected by Monitoring Agents.

Every item in the Navigator has at least one workspace associated with it. When you click an item in the Navigator its default workspace displays in the application window.

The Navigator provides a physical view of your monitored network, organized by operating system platform, system type, Monitoring Agents, and the attribute groups from which the agents can collect information.

Sometimes a small colored icon overlays a Navigator icon. This is an event indicator, which appears when a situation (a test of certain conditions) becomes true. As you move up the Navigator hierarchy, multiple events are consolidated to show only the indicator with the highest severity: critical, followed by warning, then informational.

You may sometimes see More... indicators in the Navigator. These indicators keep the tree compact so you can see more alerts in the viewable area without having to scroll. Click More... to open that branch of the tree.

The Navigator toolbar has an Update tool that is enabled when Monitoring Agents have been added or removed from the managed network and the tree needs to be updated to show them.

In OMEGAMON® DE, CandleNet Portal also comes with a Navigator business view that initially shows one Navigator item or, if you have a Candle Management Workstation installation, a hierarchy of your managed objects. To change to the business view, select it from the Navigator view list. You can also edit the business view and define new Navigator views for any logical hierarchy. For example, you could have a Navigator view for Manufacturing and another for Marketing.

**Workspace**

The workspace is the working area of the application window, and is made up of one or more views.
A view is a pane in the workspace, typically a chart or table showing data collected from a Monitoring Agent such as the process detail running on the UNIX operating system. A view can be split either vertically or horizontally into two separate, independent views.

Every item in the Navigator has a default workspace associated with it. Some items may have multiple workspaces, which are accessible when you select the Navigator item and right-click to open the pop-up menu and select from the list of workspaces.

A workspace may be linked to other workspaces. A link may be context-sensitive, whereby you right-click a row in a table or a data series in a chart to link to more detailed information about one of the attributes in the row or data series.

**Workspace properties**

To edit the general properties of the workspace, click the workspace name or its icon at the top of the Properties tree.

**Workspace Identity**

- **Name** is the title of the workspace. The workspace name appears in the title bar or browser mode banner, in the View > Workspace list, or in the pop-up menu Link To list, depending on how you have set the workspace options (see below).

- **Description** (optional). This can be a full text description of the workspace.

**Workspace Options**

- **Assign as default for this Navigator Item** makes this workspace the default (the one that opens when you click the Navigator item).

- **Assign as Home Workspace** specifies this as the workspace that opens whenever you start CandleNet Portal, much like your browser home page.

- **Do not allow modifications** protects the workspace from permanent changes and is recommended when you are editing in workspace administration mode. Users who have access to this workspace can change it temporarily, but if they attempt to save it, the Save Workspace As dialog opens so it will be saved as a new workspace with a different name.

- **Only selectable as the target of a Workspace Link** marks the workspace as hidden except when it is a possible Link To destination.

**Status bar**

The status bar has several sections showing, starting from the left:

- Data retrieval status of the active workspace
- Local time at the Candle Management Server
  - A central host system that collects the status of situations running on your systems.
  - The hub Candle Management Server acts as the focal point to which all Candle Management Servers connect. A remote Candle Management Server passes its collected data to the hub to be made available to clients, creating an enterprise-wide view.
- Status of the connection to the CandleNet Portal Server
• CandleNet Portal Server name and port number, and the user name. If the user ID is in workspace administration mode, *ADMIN MODE* appears. This enables customization of workspaces, links, and terminal session scripts that will be available to all users connected to the CandleNet Portal Server.

You can turn off the display of the status bar through the View menu.
Chapter 2. Managing workspaces

A workspace is the working area of the CandleNet Portal window, divided into panes to show different types of views.

You can start monitoring activity and system status immediately with the predefined workspaces. With just a few clicks of the mouse, you can customize your own workspaces to give you summary overviews or to look at specific conditions.

![JVM analysis workspace](image)

Each item in the Navigator has its own default workspace which opens when the item is selected, and may have others you can access through the pop-up menu (and the View menu) or links. As you select items, the workspace changes to the default workspace for that item, which comprises views relevant to that level of the Navigator.

**Views**

A view is a windowpane, or frame, in the workspace containing a chart or table showing data from a Tivoli agent. Non-data views, such as the browser view and terminal view, are also available. You can increase the number of views in a workspace by splitting a view into two separate views.

The data for a table or chart view is chosen by the query it uses. The query specifies the attributes to include in the view. Although each view uses one query, you can add more views to the workspace, and each can use a different query. The queries must be for the same type of Tivoli agent unless you have OMEGAMON®.
DE, which enables you to use queries for different Monitoring Agents. You can also include queries of global attributes, such as the Managed System attributes, and, if you have written custom SQL queries, ODBC data sources.

**Properties**

Every workspace has a set of properties associated with it: general properties that apply to the entire workspace and properties for each view in the workspace. Use the Properties editor to customize the workspace characteristics and to change the style and content of each view.

You can also keep the original workspace intact and create another workspace for the same item in the Navigator, customizing it for the types of views you want and the information reported in charts and tables.

Changes you make to a workspace are available only to your user ID. System administrators can work in administration mode to create and edit workspaces that can be available to all users on the managed network.

**Links**

The link feature enables you to define a link from one workspace to another. Then you can quickly jump to a related or more detailed workspace to investigate system conditions.

The simplest type of a link originates from the Navigator item: When you right-click that Navigator item, the pop-up menu shows the defined links for the item. Select one to open the linked workspace.

A more specific link originates from a table or from a pie or bar chart data point to another workspace. Information from one of the attributes in the selected row, bar, or pie segment is used to determine the content of the target workspace.

You can also define more complex links and use the predefined links that come with Tivoli OMEGAMON XE for CICS on z/OS.

---

**Customizing workspaces**

When using CandleNet Portal, information is displayed in workspaces.

Within a given workspace, information is displayed in tabular form. CandleNet Portal refers to this tabular format for information as a table view. Information may also be displayed in the workspace as a chart, graph, or other format you can specify, see "Formats for Information" on page 14.

A workspace is the working area of the CandleNet Portal application window. At the left of the workspace is a Navigator that permits you to select the workspace you want to display. As part of the application window, the right side of the status bar shows the CandleNet Portal Server name and port number to which the displayed information applies, as well as the ID of the current user.

As you select items in the Navigator, the workspace presents views pertinent to your selection. Each workspace has at least one view.
Every workspace has a set of properties associated with it. You can customize the workspace by working in the Properties editor to change the style and content of each view.

Another way to customize the workspace is to change the type of view or to add views to the workspace.

Be aware that the changes you make to the workspace are lost when you switch to another workspace unless you save them first.

To create a new workspace do this.

1. Open a workspace. Click **File > Save as..** and give the new workspace a name. You can now modifying the workspace.

2. Select one of the panes in the workspace that you want to change from, for example, a bar chart to a pie chart.

3. Click (Pie chart) in the toolbar. The result is that a pie chart replaces the bar chart in the pane that you have selected.

4. Right-click on the new chart, click **Properties**. This shows the **Properties editor** where you can add a query, filters or change the style. For this example, click **Style**.

5. From the Style pane, you can change the name of the header, footer, values, legends and categories. For the header, for example, you can choose to display or hide the header, change the text, font and its font size. When you have completed the modifications, click **Apply**.

---

**Figure 3. Properties editor, header window**
6. You can view the effects of your changes through the **Preview** pane at the top of the Properties editor.

7. When you have finished, click **OK** to save your changes.

**Note:** If you enter a symbol in the header it can cause unpredictable results.

**Formats for Information**

CandleNet Portal information can be presented to you in any of the views below:

- Table view
- Pie chart view
- Bar chart view
- Plot chart view
- Linear gauge view
- Circular gauge view
- Notepad view
- Event console view, that shows the status of the situations associated with the system.
- Take Action view, that is used to send a command to the system.
- Terminal view, that enables you to start a 3270 or 5250 work session.
- Browser view, that permits you to open a browser to see HTML pages and Web sites.

**Relationship between attributes and workspaces**

There is a direct relationship between attributes and workspaces. An attribute group typically corresponds to a table view within a named workspace and attribute items correspond to columns in the table view.

Each CandleNet Portal workspace displays real-time information for many of the attributes. The information is available to you, independent of whether you are using Tivoli OMEGAMON XE for CICS on z/OS to monitor situations.

**Accessing workspaces**

You can access a workspace in several ways:

- By selecting its name from the list provided in the CandleNet Portal Navigator
- By right-clicking an item in the Navigator and selecting a workspace from the pop-up menu that is displayed
- By right-clicking in a column of a table view and selecting a workspace from the pop-up menu that is displayed

**Multiple workspaces**

Tivoli OMEGAMON XE for CICS on z/OS has other workspaces for a Navigator item besides the default. For example, to find out, right-click the any of the attribute groups from the navigation tree, and point to Workspace in the pop-up menu. If there are multiple workspaces defined they appear as a list. Alternatively use the link icon from the table view.
Note: When you click Cancel in the Select Attribute dialog, it does not always cancel the request. Selecting a new workspace, does cancel the previous view.

Predefined workspaces

Each workspace provided by Tivoli OMEGAMON XE for CICS on z/OS contains a table view that provides information about the state of the underlying MVS resources. (A table view is analogous to a Candle Management Workstation report.) In addition, the workspace contains other charts or graphs that expand upon the information provided in one or more of the table view's columns.

For the full list see “Attribute Groups Used by the Predefined Workspaces” on page 313.

Opening a workspace

Every item in the Navigator has a workspace associated with it, called the pre-defined workspace. Some items have multiple workspaces you can open, although only one workspace can be open in the CandleNet Portal window at one time.

In OMEGAMON DE, there are two views available:

Physical view

[Images of icons]

Business view

[Images of icons]

If you have a Candle Management Workstation installation, the following icon are available: [Images of icons]

Candle Management Workstation is being replaced by CandleNet Portal.

In OMEGAMON XE the physical view is the only view available.

Note: If the workspace shows no data for a chart or table view, it means there was no data to display. This can happen with monitoring data that is not constantly being generated.

To open an additional workspace:

Click [Images of icons] from the tool bar. This opens a new CandleNet Portal window.

Note: You can open and close branches in the Navigator without selecting a workspace. Use the vertical scroll bars, and click [Images of icons] to expand a list or [Images of icons] to collapse it.

The default behavior of workspaces is to retrieve data samples only when you open them. You can establish a specific refresh interval for the workspace to get up-to-the-moment data. Use View > Refresh Every to see and select from 30-second up to 60-minute intervals.
If a workspace is taking too long to open or is in the middle of an automatic refresh, you can stop the data retrieval.

**Workspace properties**

Every workspace has a set of properties associated with it. You can customize the workspace by working in the Properties editor to change the style and content of each view. Changes you make to workspace properties, such as adding or editing a view are only temporary. They will be lost when you exit CandleNet Portal unless you save the workspace.

The properties of a workspace may be some or all of the following:

- **Query.** Specify what data should go in the chart or table.
- **Filters.** Refine the view by filtering out unwanted data from the chart or table.
- **Thresholds.** Establish threshold values and color indicators for a table view.
- **Configuration.** Specify the script to run or the connection to make whenever you open the terminal view.
- **Style.** Change the behavior and appearance of the view.

**Investigating an event**

When the conditions of a situation have been met, the situation evaluates True, causing an event indicator to appear in the Navigator. You can investigate the event by opening its workspace.

The event workspace shows two table views, one with the values of the attributes when the situation evaluated True, and the other with the attribute’s current values.

The event workspace can also display a text view with any expert advice written by the situation’s author, and the Take Action view so you can send a command to the application started on that system.

**Filtering, sorting, adding, and deleting workspaces**

- **Filtering**
  To manually set up filtering for a given table view, place the cursor on the table view, press the right mouse button, and click **Properties**. From the displayed dialog, click the **Filters** tab. Here you can select the columns to display, as well as set up the criteria for which rows to display. To save your filtering specifications, you must save the workspace before exiting.

- **Sorting**
  Sorting is handled by simply clicking on a column heading. Click once and the report will be sorted in ascending order. Click a second time to re-sort the report into descending order. A third click returns you to the report’s default sort.

- **Adding to your favorites list**
  When using CandleNet Portal in browser mode, you can start it from any workstation by entering the URL for the web server where the browser
mode client is installed. Each CandleNet Portal workspace also has a URL so that you can save the workspace to your Favorites list or specify it as your home page.

**Deleting your workspace**

From the CandleNet Portal, click anywhere within the workspace. From the File menu, click **Delete workspace**. This removes any workspace that you have defined. You are not allowed to delete one of the predefined workspaces.

**Linking from a workspace**

The link feature enables you to define a link from one workspace to another. You can then quickly jump to a related workspace to investigate system conditions.

A link that originates from a Navigator item is often a simple link to the target workspace. Once a link has been defined, you can link to the target workspace by selecting the link from the source workspace.

You can define a link from one workspace to another, then access the link from the Navigator pop-up menu. OMEGAMON DE users can also use this feature to link from one Navigator view to another.

1. Open the source workspace (where you want to originate the link).
2. Right-click its highlighted Navigator item and click **Link Wizard** from the pop-up menu. If you are linking from a workspace that is not the default for that Navigator item, its name will show in the title bar, but not the Navigator. CandleNet Portal will record the link source correctly, however, so the Link To list will be available when the workspace is open.
3. Select **Define New Link**, then click **Next**.
4. Type a Name and Description for the Link Identity, then click **Next**.
5. In the Target area, select the Navigator item whose workspace you want to open. The workspaces available for that Navigator item appear in the Workspaces area. Unless you have OMEGAMON DE, the workspaces available are limited to those at the same or lower level from where you originated. OMEGAMON DE users also can link to workspaces in a different Navigator view.
6. If the Workspace area shows multiple workspaces, select the one to open.
7. If you want to change the target method, click **Relative**. The default method is absolute and is recommended for links between Navigator views. An absolute link remembers the system name of the chosen target and goes only there, whereas a relative link will be available from the same item type at the same level of the Navigator. With a relative link, you may be prompted to select the target if more than one workspace fits the link definition.
8. Click **Finish**. You can now invoke the link from the workspace where you started the Link Wizard.

If you had clicked Next instead, the Link Wizard would have opened the Link expression editor for customizing the target workspace results based on one or more values from the launch point.
9. Save the workspace if you want to retain the link definition.

**Note:** Occasionally the Link to dialog is not cleared. This can be cleared by selecting another workspace from the Navigator pane.
Chapter 3. Managing system events using situations

Situations notify you when an event occurs on a managed system. Tivoli OMEGAMON XE for CICS on z/OS provides a set of predefined situations for your immediate use.

A situation is a logical expression involving one or more system conditions. Situations are used to monitor the condition of systems in your network. You manage situations from CandleNet Portal using the situation editor.

A situation describes a condition you want to test. When you start a situation, CandleNet Portal compares the situation with the values collected by the CandleNet Portal and registers an event if the condition is met. You are alerted to events by indicator icons that appear in the Navigator.

For the most current information about situations, refer to the IBM Tivoli OMEGAMON Platform: Administering OMEGAMON Products: CandleNet Portal Version 195 or the online Help provided with CandleNet Portal.

Tivoli OMEGAMON XE for CICS on z/OS is shipped with a set of predefined situations that you can use as-is or modify to meet your requirements.

Predefined situations are precoded to check for system conditions common to many enterprises. Using predefined situations can improve the speed with which you can begin using the Tivoli OMEGAMON XE for CICS on z/OS. You can examine and, if necessary, change the conditions or values being monitored by a predefined situation to those best suited to your enterprise.

Note: If you choose to modify a predefined situation, first make a copy to ensure backout is possible, if necessary.

Here is an example of a situation definition as it appears in the Situation editor:

<table>
<thead>
<tr>
<th>% Used</th>
<th>Server Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>GE 90</td>
</tr>
<tr>
<td></td>
<td>EQ 'myserver'</td>
</tr>
</tbody>
</table>

It can be read as, "If the server name is myserver and the disk space used is at least 90%, the situation is true".

The column names are the names of the attributes being tested by the situation. You can build a situation with attributes from different groups so long as the attributes are from single-row attribute groups; one multi-row attribute group can be included.
The Situation editor has tabs for:

- Composing the condition that will trigger the situation, along with the interval between tests and the severity of the alert indicator (critical, warning, informational).
- Selecting the systems to test with the situation.
- Writing expert advice to appear in the event workspace.
- Entering a take action command to be executed on the system when the situation fires.
- Adding an Until modifier to control when an open event closes: after a period of time or when another situation is true.

Situation definitions, both predefined and custom, are stored on the Candle Management Server. This is the host data management component in an OMEGAMON XE environment. This means that any changes to situations made by any user are shared with all users on the same managed network.

**Candle Management Workstation**

Some situation settings in the Candle Management Workstation are not supported in this version of CandleNet Portal. If a field is dimmed, you are not able to edit it.

---

*Figure 4. Situation editor, opening window*
If the situation was written in the Candle Management Workstation with a syntax not currently supported by CandleNet Portal, the formula will not be viewable and you will see a message in the Status bar.

When a situation created in the Candle Management Workstation becomes true, its alert indicator may not show up in the Navigator physical view. If this is the case, you need to associate the situation with the Navigator item.

**Event indicators**

When a situation is associated with a managed system, it also has a state setting that determines which “light”, or *event indicator*, appears on the Navigator item when the situation becomes true. Event indicators can be critical, warning, or informational. As you move up the Navigator hierarchy, multiple events are consolidated to show only one indicator, critical being the highest priority, followed by warning, then informational. Go to the lowest level of the hierarchy in the Navigator physical view, for example, and you see the event indicator over the attribute grouping for which it was written.

**Event list**

Move the mouse pointer over the indicator to open the list of open events. Figure 5 shows the Display Item and acknowledgement indicators. It is an example with the CICS Region Name selected using the Display Item, after the situation has been “acknowledged”.

![Figure 5. Event flyover dialog](image)

- Event state: critical followed by warning, then informational.
- Situation name.
- Name of the system on which the event occurred.
- Event timestamp.
- An attribute you designate to further qualify a situation. You can see the value of the display item in the event workspace and in the message log and event console views, if one was specified.
• Situation status icon if: ✓ the event has been acknowledged; 🕒 the acknowledgement has expired; ✔ the acknowledgement was removed before it had expired and the situation is still true; ✗ the situation is not functioning properly and you will not be able to open its event workspace; or 🗞️ the situation has been stopped and you will not be able to open its event workspace.

Right-click an item in the event list to open a pop-up menu for that situation and its event to:

- Edit Situation
- Start Situation
- Stop Situation
- Acknowledge
- Close Event

Click an item in the flyover list to open the event workspace for the true situation.

Event workspace

The event workspace shows the values of the attributes when the situation is triggered and their current values. It shows any expert advice the situation author may have written and any hypertext links you can go to for more information.

When multiple users are monitoring the network for events, one of them can acknowledge an event to indicate it has been seen and the problem is being worked on.

The event workspace seen in Figure 6 on page 23 was accessed from the link shown in Figure 5 on page 21.
You manage situations from CandleNet Portal using the Situation editor. This unit describes the Situation editor and its functions:

- Creating a situation
- Saving a situation
- Displaying a situation
- Editing a situation
- Starting, stopping, or deleting a situation
- Investigating the event workspace for a situation

**Note:** The Situation editor is not a re-sizable window.

In the CandleNet Portal Navigator, right-click either the name or the icon of a system, agent, or attribute group. Select situations from the pop-up menu that is displayed.

The Situation editor opens. The left frame of the Situation editor initially lists the situations associated with the Navigator item you selected. When you click a situation name or create a new situation, the right frame opens with the following tabs:

**Condition**

Add to, and edit the condition being tested

**Distribution**

The systems to which the situation is assigned and assign the situation to systems
Expert advice
Write comments or instructions to be read in the event workspace

Action
Specify a command to be sent to the system.
You can also enter take action commands by adding a take action view to a
workspace, selecting Take Action from the pop-up menu for an item in the
Navigator’s physical view, or creating take action commands and saving
them for later use.

Until
Reset a true situation when another situation becomes true or a specified
time interval elapses

The Situation editor buttons let you **Apply** your changes by saving and starting the
situation, and click **OK** to exit saving your changes or **Cancel** to exit without saving
your changes. If you plan to edit multiple situations while in the Situation editor,
click **Apply** to save your changes before selecting the next situation to edit or
creating a new one.

You can view these situations and create others in the Situation editor.
• To display a situation, click its name in the tree on the left; or if you do not see
  the situation and you opened the Situation editor from the Navigator pop-up
  menu, click **(Situation Filter)** to identify a broader range.

• To create a new situation, click **(New Situation)**.

• To create a new situation by copying another, select the original and click **(Create Another)**.

• To delete a situation, select it and click **Delete Situation**.

Using the Situation editor

CandleNet Portal offers several access points to the Situation editor. Do one of the
following:

• Right-click a Navigator item and select **(Situations)**.
The Situations tree shows the situations associated with the Navigator item, if
any.
The **(critical)**, **(warning)**, and **(informational)** icons appear when the
situation becomes true. You can give the same situation a different state for
different Navigator item associations.

**(Situations)** appears only in the pop-up menus of Navigator items with
managed systems assigned: In the Navigator physical view, managed systems
are preassigned to every item except those at the operating platform level (for
example, Windows XP) and cannot be changed.

• Click **(Situations)** from the toolbar.
When opened through the toolbar, the Situation editor has no connection to the Navigator. You can see all the situations available in your monitored network, you can edit or delete any of them, create new situations, and distribute them to managed systems. You cannot associate situations with Navigator items or change their state.

- Right-click a situation in the event list and select (Edit Situation).
  The situation opens in the Situation editor so you can read the definition and edit it. You cannot associate (or disassociate) the situation with a Navigator item, or change its state.

- Right-click the event item in the Navigator and select (Edit Situation).
  The situation opens in the Situation editor so you can read the definition and edit it. You cannot associate (or disassociate) the situation with a Navigator item, or change its state.

The Situation tree lists the situations for the level chosen:
- At the system level, you see all situations applied to that system
- At the agent level, you see all situations written with attributes from that agent
- At the attribute level, you see all situations written with attributes from the associated group or groups.

1. Click a situation to open it; or if you do not see the situation in the tree and you opened the editor from the Navigator pop-up menu, click (Situation Filter) and check (Eligible for Association).

   Note: The hypertext links in steps 3 through 6 take you to the Situation editor Help, which you can also access by clicking Help in that dialog.

2. In the Condition tab edit the condition, interval or status.
3. Click the Distribution tab to see and assign the systems to monitor.
4. Click the Expert Advice tab to enter text viewable from the Event workspace.
5. Click the Action tab to enter a command to be invoked when the situation fires.
6. Click the Until tab to have the event close after a period of time or when another situation is true.
7. When you are finished editing the situation, click Apply to save your changes and start the situation; or click OK to save your changes, start the situation, and exit the Situation editor. The Situation editor performs syntax checking on each expression you enter. If you enter an improper value for an attribute, such as "30000" for % User Time, the cell turns red and the situation is not saved until you correct the error.

   Note: If you need to add or remove rows or clear cell contents, right-click and select one of the pop-up menu options.

   Note: If you plan to modify a predefined situation, we recommend you first copy the situation with "Creating a second situation" on page 27. This ensures that you can start again with the original should you need to.
Creating a situation

This procedure describes how to open the Situation editor and to create a new situation. You can create and customize your own situations to monitor specific conditions in your enterprise.

Tivoli OMEGAMON XE for CICS on z/OS has a set of predefined situations ready to use. You can also create and customize your own situations to monitor specific conditions in your enterprise. If a situation already exists that is similar to one you want, you can copy the original and edit the copy.

**Note:** (View and Modify Situations permissions). Your user ID must have View and Modify Situation and Workspace Author Mode permissions to open the Situation editor for creating and maintaining situations.

1. In the Situation editor click (New Situation). The Enter New Situation Name dialog opens.
2. Type a name for the situation and click OK. The name must begin with a letter, can be up to 32 letters and numbers, and can include underscores. No spaces are allowed in the name. The Select Attribute dialog opens with a list of attribute groups available for the Navigator item.
3. Click a name in the Group list to see its attributes in the Item list.
4. Click an attribute name in the Item list, then click OK. The hypertext links in steps 5 through 8 below take you to the Situation editor Help, which you can also access by clicking Help in that dialog.
5. In the Condition tab, edit the condition and interval. If you opened the Situation editor from the toolbar, you cannot edit the state or sound. Open the situation editor from the Navigator item pop-up menu to change the state or sound.
6. Click the Distribution tab to see and assign the systems to monitor.
7. Click the Expert Advice tab to enter text or hypertext links viewable from the event workspace.
8. Click the Action tab to enter a command to be invoked when the situation is triggered.
9. Click the Until tab to have the event close after a period of time or when another situation is true.
10. When you finish creating the situation, click Apply to save your changes and start the situation; or click OK to save your changes, start the situation, and exit the Situation editor.

The Situation editor performs syntax checking on each expression you enter. If you enter an improper value for an attribute, such as “abc” for Disk Size, the cell turns red and the situation will not be saved until you correct the error. If you opened the Situation editor from the toolbar, the situation you just created will not be associated with any Navigator items and no event indicator will appear when the situation becomes true. You must associate situations with a Navigator items or change their state.

**Note:**
1. Situations are stored at the Candle Management Server hub. In the unlikely event that two users attempt to save a situation with the same name simultaneously, an error occurs, ensuring that one situation does not overwrite another.

2. There is a limit 10 conditions that can be specified for each situation.

Creating a second situation

1. In the Situation editor, select the situation from which you want to create a new one.

2. If you opened the editor from the pop-up menu for a Navigator item and do not see the situation you want to copy, click (Situation Filter) to open the Show Situations dialog, then check Eligible for Association.

3. Click (Create Another).

4. Type a name for the situation and click OK. The name must begin with a letter, can be up to 32 letters and numbers, and can include underscores.

5. If you want to add any attributes to the condition, click Add Attributes and select one or more.

**Note:** The hypertext links in steps 6 through 9 take you to the Situation editor Help, which you can also access by clicking Help in that dialog.

6. Click the Distribution tab to see and assign the systems to monitor.

7. In the Condition tab edit the condition, interval or status. If you opened the Situation editor from the toolbar, you cannot edit the state. You must open the situation editor from the pop-up menu for a Navigator item to change the state.

8. Click the Expert Advice tab to enter text viewable from the event workspace.

9. Click the Action tab to enter a command to be invoked when the situation fires.

10. When you finish creating the situation, click Apply to save your changes and start the situation; or click OK to save your changes, start the situation, and exit the Situation editor.

**Note:** If you are no longer using the original situation, make sure it is not auto-started or distributed.

**Editing a situation**

The Situation tree lists the situations for the level chosen: at the system level, you can see all situations applied to that system:

• At the agent level, you can see all situations written with attributes from that agent

• At the attribute level, you can see all situations written with attributes from the associated group or groups.

1. Click a situation to open it; or if you do not see the situation in the tree and you opened the editor from the Navigator pop-up menu, click (Situation Filter) and check Eligible for Association.

2. In the Condition tab edit the condition, interval or status.

3. Click the Distribution tab to see and assign the systems to monitor.
4. Click the **Expert Advice** tab to enter text viewable from the Event workspace.
5. Click the **Action** tab to enter a command to be invoked when the situation fires.
6. Click the **Until** tab to have the event close after a period of time or when another situation is true.
7. When you are finished editing the situation, click **Apply** to save your changes and start the situation; or click **OK** to save your changes, start the situation, and exit the Situation editor.

The Situation editor performs syntax checking on each expression you enter. If you type an incorrect value for an attribute, such as "30000" for % User Time, the cell turns red and the situation is not saved until you correct the error.

**Note:** If you need to add or remove rows or clear cell contents, right-click and select one of the pop-up menu options.

If you plan to modify a predefined situation, we recommend you first copy the situation with (Create Another). This ensures that you can start again with the original should you need to.

### Saving a situation

When you save a situation, it is stored on the Candle Management Server hub and is viewable at any CandleNet Portal console whose CandleNet Portal Server is connected to the same Candle Management Server hub. The CandleNet Portal Server and CandleNet Portal clients must be recycled (restarted) before the situation can be observed from other clients.

In the unlikely event that two users attempt to save a situation with the same name, an error occurs, ensuring that one situation does not overwrite another.

To save the situation:
1. In the Situation editor, click **Apply** to save and start the situation.
2. Exit by clicking **OK**.

If you decide not to save your new situation or the changes you have made to an existing situation, click **Cancel** to exit the Situation editor.

### Displaying a situation

To examine the condition written for a situation, open it in the Situation editor. For a given situation, the editor opens showing five tabs: Condition, Distribution, Expert Advice, Action, and Until.

1. In the Navigator, right-click a system or any level below. You can right-click either the name or icon of a system, any of the agents, or attribute groups. If you have already selected an event and opened its workspace, you can right-click the situation name.
2. Select **Situations** from the popup menu; or, if you right-clicked a situation name, click **Edit Situation** and skip step 3. The Situation editor opens. The Situation tree lists the situations for the object level chosen.
3. Click the situation to see its properties or, if you don’t see the situation in the tree, click the **Situations Filter** to see more.
Note:
1. If you still don’t see the situation you are looking for, click Cancel and locate the system to which the situation has been distributed. Then repeat these steps.
2. If you defined several situations and they all respond at the same time, the color of the indicator will be unpredictable.
3. If you define a situation, associate it with a workspace, start it and stop it before an event is generated; the event indicator is greyed out.

Starting, stopping, or deleting a situation

Whenever you create or edit a situation, it starts running as soon as you click Apply or OK to close the Situation editor. You can stop and restart a situation at any time. Use Delete to permanently remove a situation.

1. Point to an event indicator in the Navigator to open the event list. Move the mouse so that it hovers over the event indicator.
2. Right-click the situation, then select one of the following:
   a. Start the situation. This has no effect if the situation is already started.
   b. Stop the situation running. The situation remains stopped until you start it again manually or, if it is set to Run at startup (Situation editor - Condition), when you next start CandleNet Portal or edit the situation.

From the Situation editor:
1. Open the Situation editor using one of the methods described above.
2. If you do not see the situation, click (Situation Filter) and check all boxes.
3. Right-click the situation, then select one of the following:
   • (Start the situation). This has no effect if the situation is already started.
   • (Stop the situation running). The situation will remain stopped until you start it again manually or, if it is set to Run at startup (Situation editor - Condition), when you next restart the agent or the Candle Management Server, or edit the situation.
   • Delete to permanently remove the situation.

Note: Candle Management Workstation Users: You can delete a situation that was created in the Candle Management Workstation, but this may cause problems if the situation has dependencies in the Candle Management Workstation (such as templates and policies). We recommend that you do not delete Candle Management Workstation-created situations in CandleNet Portal.
Chapter 4. Take action

You can interact directly with your applications and operating system through the Take Action feature.

Take Action has a text box for entering your own system command, or you can choose from a list of predefined commands. It also has a list of systems on which to effect the command.

You can invoke the Take Action feature from several places:

<table>
<thead>
<tr>
<th>Navigator</th>
<th>Send a Take Action command to a system associated with the current Navigator item.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Table row</td>
<td>Send a Take Action command to a system associated with the selected row or data series.</td>
</tr>
<tr>
<td>Pie chart slice</td>
<td></td>
</tr>
<tr>
<td>Bar chart bar</td>
<td></td>
</tr>
<tr>
<td>Take Action view</td>
<td>Add a Take Action view to a workspace so you can access the feature from that workspace at any time.</td>
</tr>
<tr>
<td>Situation</td>
<td>Add a command that is sent to a system or add a message that is sent to the Candle Management Workstation Universal Message Console that executes when the situation becomes true.</td>
</tr>
<tr>
<td>Policy</td>
<td>OMEGAMON DE only: Add a Take action or Write message activity to a policy that issues a command to a system or generates a message that displays on a Universal Message Console.</td>
</tr>
</tbody>
</table>

You have the choice to select a predefined command or enter a command yourself. You can also create and save commands so you can select them from the list of defined commands.

Example: This is an action command for a situation that detects when a certain process is not running. When the system is down, the situation becomes true and this text message is sent to the technician's phone:

```
!echo "Process &NT_Process.Process_Name on Server &NT_Process.Server_Name is Down,
Please investigate!!"
|sendmail -subject="Process &NT_Process.Process_Name on &NT_Process.Server_Name is not running" myname@nc4.us.
```

And this how the message looks to the receiver:

"Process nhttp on Server Primary:MYSERVER2:NT is Down, Please investigate!!".

**Note:** When you issue a take action command, your user ID must be authorized on the relevant system for the requested command. For example, to issue a TSO command, your user ID must be a valid TSO ID and it must also be defined as a valid logon ID for CandleNet Portal.

Defining a Take Action command

You can create custom take action commands and invoke them as needed on the system you choose.
As well, your user ID must be authorized on the relevant system for the requested command. For example, to issue a TSO command, your user ID must be a valid TSO ID and it must also be defined as a valid logon ID for CandleNet Portal. When entering the user ID, be sure to type it exactly as typed when logging on to CandleNet Portal (with the same casing).

Note:
1. If you use values outside the specified range, the action may fail.

Note: Your user ID must have Modify permission for the Action feature.

1. Right-click a row in a table view, slice in a pie chart, or bar of a bar chart. You can also select the Navigator item associated with the application or system on which you want to execute the command and right-click the Navigator item.

Note: The Take Action attribute group may not be associated with the requested action if you start from the Navigator.

2. Select (Edit Action) from the pop-up menu. The Edit Action and Select Action dialogs open.

3. Select <Create new Action> and click OK.

4. In the Create New Action dialog, enter a name and any description for the command.

5. Select the type of command. System Command is for issuing a command on the operating system associated with this Navigator item. For example, if you selected a Navigator item on the UNIX Systems branch, you could enter a UNIX shell command.

The other types that appear are for the monitoring agents associated with this Navigator item. For example, at the Enterprise level, you see all agent types on your managed enterprise, whereas at the system level, you see those for the types of agents running on that system.

6. In the text box, type the command just as you would from the command line.

7. If you want to insert an attribute, which is replaced by its value at run time, click Insert Attribute, then select one from the Select Attribute dialog. Example: echo System: &NT_Logical_Disk.Server_Name, Disk: &NT_Logical_Disk.Disk_Name, Space Available: &NT_Logical_Disk.%_Free%|mail userID. This command sends an email that reads, "System: MyServer, Disk: D:, Space Available: 15%.”

8. When you are finished creating the action, click OK to save it. Your user-defined action is now selectable from the list of actions available for this agent or operating platform. The action is saved at the Candle Management Server, so it is available to all users whose IDs have View Action permission and the application the command was written for as one of their Allowed Applications.

---

**Editing a Take Action command**

To edit a take action command, do this:

1. Select a Navigator item associated with the application or system on which the command can be executed.

2. Right-click the Navigator item. You can also right-click a row in a table view, slice in a pie chart, or bar of a bar chart.
3. Select (Edit Action) from the pop-up menu. The Edit Action and Select Action dialogs open.

4. Select a name from the list and click OK.

5. In the Edit Action dialog, edit the command name, description, type, or text.

6. If you want to insert an attribute name that will be replaced by the attribute’s current value when the command is invoked, click Insert Attribute and select from the list.

7. When you are finished editing the command, click OK to save your changes.

---

## Executing a saved Take Action command

The Take Action feature lets you issue a command to any system in your network where Tivoli OMEGAMON XE for CICS on z/OS is installed.

You can implement Take Action commands from a workspace, from a situation, in an ad hoc mode, or by recalling a saved Take Action command.

1. Right-click an item in the Navigator.
2. From the popup menu, select Take Action to display the Take Action dialog.
3. In the Take Action dialog’s Action area, select a saved Take Action command. To edit the command’s argument values, select the Arguments button. When you’re done, click OK.
4. In the Take Action dialog’s Destination System(s) area, select the target system or systems to which you want to send the Take Action command and click OK.

This causes the command to be sent to the system or systems where it is executed.
Chapter 5. Queries

A query is the means by which tables and charts request data from attributes or from an ODBC-compliant database.

Once the data is retrieved, you can filter out any unwanted data from the view. Multiple views in the same workspace can use the same data retrieved by the query, and use their style to format the data, and filters to control what is shown. Using the same query for multiple views in a workspace conserves resources at the CandleNet Portal Server and the Candle Management Server. As well, using a query that includes only the attributes you want to see in a view also saves resources.

There are two ways to start the Query editor:

- Click (Query editor) from the toolbar.
  This opens the Query editor so you can select an existing query or create a new one. The queries available depend on where the workspace is in relation to the Navigator hierarchy. The disadvantage of this is that it changes all the charts and tables in the workspace.

- If you want to change the columns of either a table or a chart to a workspace and nothing else, open a workspace and select a chart or table in that workspace. Right-click and select Properties. The Properties editor opens and shows the details for the table that you selected.

![Query editor with the query tab selected](image)

**Description**

Enter the name and description of the query.
Formula
Shows the formula for the query.

Note: Any column function added to the query does not appear here. Predefined queries show Tivoli as the author.

View-level Page Size
This setting controls the page-break size of the table, message log, pie chart or bar chart view. For example, a pie chart gives you one pie for each row of data returned, so 50 rows will give you 50 pies in the view. By limiting the page size to, say, three rows, you can have three pies on a page, using PageDown to turn to the next page. The smaller page size speeds up data retrieval to the workspace because only one page is retrieved at a time rather than the entire row set.

- **Use default** retrieves 100 rows of data per page.
- **Return all rows** retrieves the entire row set to the view at one time. If there are many rows, the view may take some time to display.
- **Number of rows to return** This enables you to specify the exact number of rows to apply to a page. Keep the number to a size than can be retrieved in a reasonable period of time.

### Query editor

When you click (Query editor) in the CandleNet Portal window, the Query editor window opens. Here you can view, create, and edit queries.

You can also open the Query editor through the Properties editor and select a query to apply to the current table or chart view.

The tree on the left side of the editor lists the OMEGAMON agents, attribute groups, and queries, see Figure 8 on page 37. The queries available are those applicable to the current Navigator item.

**Note:** If the Query tools are disabled, your user ID does not have Modify Query permission.

1. Click (Query editor) from the toolbar.
2. Expand **CICSp lex** from the left hand pane. This lists all the attribute groups for the currently selected CICS region, as shown in Figure 8 on page 37. Scroll down until you reach the resource, for example, CICSp lex_Storage_Analysis. This opens the Query editor so you can select an existing query or create a new one.
The queries available depend on where the workspace is in relation to the Navigator hierarchy. The disadvantage of this is that it changes all the charts and tables in the workspace.

3. To select a query for the current view (if you opened Queries from the Properties editor) or to edit a query, click to expand each folder, then select the (Query title), for example, Storage Analysis.
4. From the specification tab in Figure 9, deselect those columns that you do not want to view in this workspace.

5. Click **Apply**. This applies the chosen query to the view or to save the new or edited query, or click **OK** to exit saving your changes or **Cancel** without saving your changes. If you plan to edit multiple queries while in the Queries editor, click **Apply** after editing one query to save your changes before selecting the next query to edit or before creating a new one.

6. In CandleNet Portal, press **F5** to refresh the table. The changes take effect immediately.

After editing one query, save your changes before selecting the next query to edit or before creating a new one.

**Note:** If you are using more than one OMEGAMON agent, the queries available for that workspace are limited to those for that agent and the common attributes and ODBC data sources. OMEGAMON DE has no limitation.

---

**Creating a query**

When you click **(Query editor)** in the CandleNet Portal window, it opens a dialog. Here you can view, create, and edit queries.

You can also open the Query editor from the Properties editor and select a query to apply to the current table or chart view.

The tree on the left side of the editor lists the OMEGAMON agents, attribute groups, and queries. The queries available are those applicable to the current Navigator item.
Note: If the Query tools are disabled, your user ID does not have Modify Query permission.

- To create a new query, click Create Query if this is for an ODBC-compliant database; or click Create Another if this is for the Candle Management Server.

- To copy a query, select its name in the tree and click Create Another.

- To delete a query, select its name in the tree and click Delete Query.

The Query editor buttons let you apply your changes, either to apply the chosen query to the view or to save the new or edited query, or exit with (OK) or without (Cancel) saving your changes. If you plan to edit multiple queries while in the Queries editor, click Apply after editing one query to save your changes before selecting the next query to edit or before creating a new one.

Note: If you are using more than one OMEGAMON agent, the queries available for that workspace are limited to those for that agent and the common attributes and ODBC data sources. OMEGAMON DE has no limitation.

Description
Is the description of the query, up to 256 characters.

Data source
Is the source of the data: either Candle Management Server, its name, TCP/IP address and port number (in parentheses); or ODBC(Open DataBase Connectivity). The Query editor enables you to write custom SQL queries for creating views that retrieve data from ODBC-compliant databases. and the database name and description.

Last modified
Shows the date and time when the query was last saved and who changed it. Predefined queries show Tivoli as the author.

1. Click (Query editor) from the toolbar. This opens the Query editor.

2. To create a new query, click (Create Query). This icon is at the top left hand side of the Query Editor pane. This displays Figure 10 on page 40.
3. Enter a name and description.
4. Select **CICSplex** as the category. You can create a new category if you want to keep your queries.
5. Select **CMS** as your data source. Tables and charts can show views of any ODBC-compliant database. You can select an SQL query that you or your OMEGAMON administrator has written. Using this function, you can combine relevant data from both OMEGAMON monitored resources and an external database in one CandleNet Portal window.
6. Click **OK**. This shows the second query editor panel with the values that you have entered.
Figure 11. Query editor 2

Description
Is the description of the query, up to 256 characters.

Data source
Is the source of the data:
- Candle Management Server, its name, TCP/IP address and port number (in parentheses)
- ODBC (Open DataBase Connectivity). The Queries editor enables you to write custom SQL queries for creating views that retrieve data from ODBC-compliant databases and the database name and description.

Last modified
Shows the date and time when the query was last saved and who changed it. Predefined queries show Tivoli as the author.

The Specification tab shows and is where you can edit the query formula. When you edit the specification for a query, be aware that your changes affect all views that use this query.

The Specification area displays differently for Candle Management Server and ODBC data sources:
- **CMS query** - The query specification shows a column for every attribute in the group. A checked box means the attribute is part of the query; an unchecked box means it is not included. You can add filter criteria to the query.

**Note:** You may see a filter already in place for a query. If the filter is EQ $NODE$ or any name enclosed in dollar signs, which signifies a symbol it is a required filter and you must not delete it. Additionally, this filter must be repeated on every row added to the query.
Show Formula gives a graphical view of the filter criteria. Any column functions in the query do not show in the formula.

Column Function displays the group functions you can apply to the column: Minimum, Maximum, Count, Average, and Sum. Use the Advanced button to specify the column by which the rows should be grouped.

You can uncheck the box below the column heading for any attribute you want to remove from the query or for any attribute you want to write a filter against but do not want to display in views. If you uncheck a box and do not write a filter for the attribute, the column will not show in the editor the next time you open the query.

Add attributes

Opens the Select Attribute dialog so you can add attributes to the query. The attributes available are those associated with or that can be associated with the query.

Advanced

Opens the Advanced Options dialog for specifying a sort order or grouping order.

<table>
<thead>
<tr>
<th>Sort By</th>
<th>Enables you to specify on which column to sort and whether the order should be ascending or descending.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group By</td>
<td>Enables you to group the results by the value of the specified attribute value. When using the COUNT function, the attribute you select here is the one being counted.</td>
</tr>
<tr>
<td>First/Last</td>
<td>Restricts the rows (data series) appearing in the table or bar chart to a specific number: the first or last rows retrieved from the agent.</td>
</tr>
<tr>
<td>Other</td>
<td>(Administration mode only) Lists any constraints in the query for the Candle agent or Candle Management Server and lets you add or edit them. These are the PARMA items. A global parameter that can be set only for user IDs with administrator authority. It enables customization of workspaces and links that will be available to all users connected to the same CandleNet Portal Server.</td>
</tr>
</tbody>
</table>

- **ODBC query** - Custom SQL shows the SQL SELECT statement written for the query.

7. Click **OK**. This displays the **Select attributes** pane (Figure 12 on page 43).
8. Click **OK**. To select the attributes that you want to include in your table.
9. Click **OK**. To finish and save the new query.

**Query results source**

The Query Results Source tab enables you to control from which managed systems you want the query to retrieve data.

You will not see this tab when:

- You open the query editor from the toolbar. The query results source settings are applied to the view and saved with the workspace, not with the query specification.
- The query is for the Candle Management Server (Managed_System and Situation_Status). The results cannot be directed to a managed system, but go automatically to the Candle Management Server hub (*HUB*).

**Let system assign automatically** selects all managed systems with the same affinity as the query. The managed systems that show in the Assigned list come from the managed system assignments for the current Navigator item (shown in the Navigator item Properties).
Let user assign explicitly enables the Assigned and Available lists so you can selectively remove managed systems to be included in the query with <button> </button> and add them with <button> </button>.

**Assigned**
Shows the managed systems to which the query will be applied.

**Note:** If a managed system in the Assigned list does not show in the table, bar chart, or pie chart, it means it is offline.

Regardless of the managed systems assigned to a query, a plot chart or gauge chart can show data from only one managed system. If you are using the query in a workspace where multiple systems are applicable (at the platform level of the Navigator physical view), the data shown will be from the first managed system in the Assigned list.

**Available Managed Systems**
Shows the managed systems to which the query can be applied.

This list will be empty if Let system assign automatically is selected, because CandleNet Portal is selecting the managed systems for you. Select Let user assign explicitly if you want to see and select the managed systems for the query source.

**Available Managed System Lists**
Your OMEGAMON XE product comes with one managed system list (A named list of managed systems of the same type, such as a list of Linux® managed systems for a specific geographic region named LINUX_LONDON.) named for the product, such as *ALL_UNIX for OMEGAMON XE for UNIX managed systems and *TUXEDO for OMEGAMON XE for Tuxedo. To add a managed system list to the distribution, click the name, then <button> </button> to move it to the Assigned list.

This list will be empty if Let system assign automatically is selected, because CandleNet Portal is selecting the managed systems for you. Select Let user assign explicitly if you want to see and select the managed systems for the query source.

**Edit Managed System List**
Click this button if you want to see the managed systems comprising a managed system list or to create a managed system list.

---

**Select a query**

If a newly created chart or table shows no data, you need to choose a query for it. If the view shows data, but you would like to show different attributes, change the query.

**Note:** (Query permissions) If you do not see the Queries tool, your user ID does not have View or Modify Query permissions. If you can see the tool but it is disabled, your user ID does not have Workspace Author Mode permission.
1. Right-click the view to which you want to apply the query and select Properties from the pop-up menu; or click (Properties) and select the view from the Properties tree.

2. In the Query tab, click . The Query editor shows a tree on the left organized by Candle product and then by attribute group.

3. Click to expand the agents and click (attribute group folders) to see the queries.

4. Select (Query title) to see its description. The query description, edit date, and specification show in the right frame. The checked boxes indicate which attributes from the group are included in the query. The cells in the numbered rows show any filter criteria for the query.

5. Optional for product queries: To apply the query to specific managed systems rather than all managed systems of this type, click the Query Results Source tab, select , and remove from the Assigned list those systems you do not want in the view.

6. Click OK to select the query and return to the Properties editor. If you select a custom SQL query that includes a variable in the statement, you will be prompted to enter a value when you click Apply or OK. The value filters the data that appears in the view, but is temporary and cannot be saved with the workspace.

Note: Once you have selected one of the queries for a view, the queries available for that workspace are limited to those for that agent, the common attributes, and, if you have written custom SQL queries, ODBC data sources. OMEGAMON DE has no limitation, so you can have views from other types of Tivoli agents.

Regardless of the managed systems assigned to a query, a plot chart, circular gauge chart, or linear gauge chart can show data from only one managed system. If you are using the query in a workspace where multiple systems are applicable (at the platform level of the Navigator physical view), the data shown will be from the first managed system in the Assigned list.

Example of the Query editor tree:

(Queries)

(Candle Management Server)

(Managed System)

(Situation Status Current)

(Current Active Situation Status)

(Pure Event Occurrences by Situation)
Edit a query

Note: (Query permissions). If you do not see the Queries tool, your user ID does not have View or Modify Query permissions.

If you can see the tool but it is disabled, your user ID does not have Workspace Author Mode permission.

If you can open the Query editor but the tools are disabled, your user ID does not have Modify Query permission.

Do one of the following to open the Query editor:

• Click (Queries).

• Right-click the view whose query you want to edit, and select (Properties) from the pop-up menu.

• Click (Properties), select the view from the tree on the left, and click .

1. Click to expand the (agents) and (attribute group folders) to see the queries.

2. Select the (Query) that you want to edit from the tree. The query specification appears in the right frame.

3. Edit the specification for any changes you want to make. If you cannot edit the query, your user ID does not have Modify Query permission.

For Candle Management Server queries, you can:

• **Add an attribute** to the query, click Add Attributes and select the attributes you want to include. The attributes available are from the group used in the original query.

• **Remove** an attribute, right-click the column heading and select (Delete). You can also right-click a row and delete it.

• **Include an attribute** in the filter, but not retrieve it, uncheck that column.

• **Clear the filter criteria.** Right-click the cell, column or row and selecting Clear Contents.

• **Insert a row** by right-click the row and select Insert.

• **Cut, copy or paste** by right-click the cell or row and selectingCut, (Copy) or Paste. When you paste, the contents of the clipboard overwrites the cell or row.

• **Add filter criteria**, click in a cell and enter the expression.

• **Add a column function**, click in the column heading and select a function from the list; then click Advanced , and select the column to Group By.

• **Specify a sort order**, click Advanced, and select the column to Sort By.
Note: If you selected a Group By column, you cannot also specify a sort order.

- **Adjust column order** by dragging a column heading and dropping at the insertion point.
- **Specify the exact number of rows to show** in the view click **Advanced**, and select the First/Last number to retrieve.

**For ODBC queries, you can:**

**Edit** the SELECT statement.

Optional: If you opened the Query editor from the view Properties, you can change the list of managed systems from which the query extracts data:

Select the Query Results Source tab, select **(Let user assign explicitly)**.

Remove managed systems from the Assigned list with **and add them with**.

**Note:** Regardless of the managed systems assigned to a query, a plot chart, circular gauge chart, or linear gauge chart can show data from only one managed system. If you are using the query in a workspace where multiple systems are applicable (at the platform level of the Navigator physical view), the data shown is from the first managed system in the Assigned list.

4. When you are finished, click **Apply** to save the query and keep the dialog open; or click **OK** to save the query and close the dialog.

**Delete a query**

When you no longer need a query for any purpose, you can clean up the Query editor tree by deleting it.

**Note:** **(Query permissions).** If you do not see the Queries tool, your user ID does not have View or Modify Query permissions.

If you can see the tool but it is disabled, your user ID does not have Workspace Author Mode permission.

If you can open the Query editor but the tools are disabled, your user ID does not have Modify Query permission.

Do one of the following to open the Query editor:

- Click **(Queries).**

- Right-click the view whose query you want to edit, and select **(Properties)** from the pop-up menu.

- Click **(Properties),** select the view from the Properties tree, and click **.**

1. Select the **(Query) name in the tree.** The query specification appears in the right frame.
2. Click (Delete Query). If the Delete Query tool is disabled, your user ID does not have Modify Query permission. If a Navigator item is associated with a query, you will not be able to delete the query.

3. Click OK to confirm the deletion.

**Note:** If you delete a query that is being used by a view, the view will be no longer associated with a query and will have no data when you next open its workspace.
Chapter 6. Workflows

(OMEGAMON DE only) Workflows opens a two-part window for creating and editing policies and their activities.

The Policy Details lists the policies stored on the Hub Candle Management Server and any remote Candle Management Servers. It has a toolbar for creating and maintaining policies.

**Toolbar**

![Start Policy](image)

Start Policy

Starts the selected policy (or policies) on the managed systems to which it is distributed.

![Stop Policy](image)

Stop Policy

Stops running the selected policy (or policies). If the workflow activities are currently executing, processing stops after the current activity is completed.

![New Policy](image)

New Policy

Adds a new row to the Policy list, partially collapses the Policy Details area to show only the new policy, and expands the Workflow Editor area so you can build the workflow. You can restore the policy list with and collapse it with , or drag the border up or down. Initially, the policy is named and described as New_Policy. Click inside the field to change the name. Use the Delete or Backspace key to erase to the right or left of the cursor.

If you prefer to keep the Policies Details area open when you create a new policy, use Alt+ .

![Copy Policy](image)

Copy Policy

Copies the selected policy. A new row is added to the list, the Policy Details area collapses, and the Workflow Editor area expands to the full window so you can build the workflow. You can manually restore the policy list with and collapse it with . Initially, the policy is given the same name as the original, but prefixed with “Copy_of_”. In the Policy Details area, click inside the Name field to change the name; use Delete or Backspace to erase to the right or left of the cursor.

To keep the Policies Details area open when you copy the policy, use Alt+ .

![Delete Policy](image)

Delete Policy

Deletes the selected policy.

![Refresh List](image)

Refresh List

If any policies have been added, edited, or deleted by other users in your Candle managed network, you can refresh the Policies list to show the changes.

**Note:**
If none of the tools is available, your user ID does not have Modify Policy permission; if, after you select a policy, the Start and Stop tools both remain dimmed, your user ID does not have Start/Stop Policy permission.

**Policy list**

**Undo**

Click this tool to undo your changes to the policy in this row.

**Edit Workflow**

Click this tool to open the policy in the Workflow editor for viewing and editing the workflow components. When you do, the Policies Details area partially collapses to show only the policy you selected and the Workflow Editor area expands. If you prefer to keep the Policies Details area open, use Alt+ when you open the Workflow editor.

Note that you can manually restore the policy list with and collapse it with , or drag the border up or down.

**Policy name**

The name of the policy, up to 32 letters and numbers, with no spaces or special characters other than the underscore (_). Click inside this field and edit the text as needed, using Backspace and Delete to erase text to the left or right.

You cannot rename the policy once it has been saved with Apply or OK. Instead, copy the policy and change the name and any other settings for the new policy in the Policy Details area.

**Distributed**

Specifies where the policy is to be distributed and run. When you check this box, the Change Policy Distribution dialog opens with a list of the available managed systems to which you can assign the policy.

If Correlate by is set to Business Application, no individual managed systems are shown; only managed system lists. You must select one from the Available Managed System Lists and click .

**Auto start**

When checked, starts the policy automatically when it is saved and when the Candle Management Server starts up. Uncheck if you prefer to start the policy manually (see Start Policy).

**Save Results**

When checked, saves the results data internally. You can save results data only to policies that contain a user choice activity. The results display in the Candle Management Workstation.

**Correlate by**

Specifies how the policy is processed: by host name, which is the default; host address; business application; or with no correlation at all.

**Host Name**, the default mode, maintains separate paths of execution for each host where one or more different managed systems are running. If the host name for two different managed systems is the same, both managed
systems will take the same path through the policy. For each distinct path, the policy waits for data from, or executes programs on, the same host that started that path of execution.

**Host Address** works identically to Host Name except it identifies the managed systems by their host address instead of host name. It is typically used only if the Policy cannot execute when it references the Host Name.

**Business Application** identifies the managed systems for processing by their managed system list name. This mode is used to combine disparate agent types. The policy maintains separate paths of execution for each managed system list to which the policy is distributed.

**Uncorrelated**, which is not normally used, takes one path through the policy for all managed systems to which the policy is distributed. No attempt is made to correlate data from different managed systems as one activity terminates and subsequent activities are started.

**Limit restarts**

- Left unchecked, specifies no limitation on the number of times the policy can begin running again. When checked, stops the policy after it has executed five times in a 24-hour period.

  This field is available only when Restart is checked.

**Restart**

- Starts the policy again after the last activity finishes executing. When unchecked, stops the policy after the last activity finishes executing until it is started again manually (see Start Policy) or, if you have Auto Start enabled, the next time the policy is saved or the CMS on which it is running recycled.

**Description**

- Shows the description for the policy. Click inside this field and edit the text as needed, using Backspace and Delete to erase text to the left or right.

**Version**

- This is the version of the Hub Candle Management Server.

**Modified by**

- Shows the user ID of the person who most recently edited the policy.

**Modified date**

- Shows the time and date the policy was last edited.

**Compatibility Levels**

This area of the window shows , which you can click to list the Workflow Editor software components and their current version numbers:

- Workflow Editor
- CandleNet Portal Automation Server
- Candle Management Server Automation Server
Workflows editor

Workflows opens a two-part window for creating and editing policies and their activities.

Workflows Editor

When you select a policy from the Policy Details list and click Edit Workflow, a Grapher view pane opens in the Workflow editor so you can see and edit the policy activities. You can open multiple policies in the Workflow editor, each in its own pane. This area of the Policy editor has a

- Toolbar
- Tabs for General activities, Extensions and Emitter activities in the Workflow components frame on the left
- Work area on the right where you add and connect activities in a Grapher view

The border between the Workflow Editor and Policy Details has to expand the Workflow Editor area to the top of the window, and to restore the policy list and return the editor to its former size. The border between the Workflow components and the work Grapher view has to expand the work area to the width of the window, and to restore the Workflow components and return the work area to its previous width.

Toolbar

Enable Validate
Tests the workflow to ensure it was composed logically. Any errors are reported in a Workflow Definition Error message and you will not be able to save the policy until they are fixed and the workflow passes validation.

The message supplies the activity ID in brackets, which appears in a flyover description when you move the mouse pointer over an activity; followed by the name and the error message.

Cut
Remove the selected activity or activities and place on the clipboard.

Copy
Copy the selected activity.

Paste
Paste the contents of the clipboard into the editor.

Clear
Remove the selected activities from the workflow.

Undo
Undo the last action (or actions if you continue to click).
Redo
Redo the last action.

Select
Selection mode. This is a toggle tool: click it again to turn off selection. Use the Select tool to drag an activity into position or to select it for removal. You can click and drag from one point to the opposite corner to select a group of activities, or use Shift+click to select multiple activities individually.

Perform node layout
Rearranges, as needed, the activities and their connectors to best fit in the view.

Actual size
Returns the view to normal sizing. Used after zooming.

Fit to Contents
Re-scales the view so all activities are visible. This is useful when you have added or removed activities.

Zoom in
Zoom in on the view to see an enlarged version.

Zoom out
Zoom the view out.

Zoom Box
Select an area to zoom into and the view will expand or contract to fit.

Pan
Pan the view, which selects the entire policy and lets you move it around the Grapher view.

General activities
The general activities appear in the first tab of the Workflow Components area.

Wait until a situation is True
Opens a list of the situations distributed on your managed network. When you select the situation and click OK, a representative object appears in the grapher view with the name of the situation. When the policy encounters this object in the workflow, it suspends execution until the situation is true. You then need to add an activity to perform when the situation fires.

End code choices for starting the next activity: Situation is true; Error.

Evaluate a situation now
Examine the status of an existing situation. Select a situation from the scroll box that displays after you drop the activity into the Graphic view. Click OK to confirm your selection. Note that the evaluation interval is based on the monitoring interval of the selected situation. There are some special
considerations related to the evaluate situation activity described in *IBM Tivoli OMEGAMON Platform: Using OMEGAMON Products: CandleNet Portal Version 195*. End code choices for starting the next activity: Situation is true; Situation is false; Error.

**Make a choice**

Opens the User Choice Settings dialog for you to write a message and assign it to a work group to notify operators that manual intervention is required. When the activity executes, the users in the work group see the message and are prompted make a choice. Escalate or timeout after 5 minutes is the default wait period before timeout occurs.

*Every group* is the default work group, which means all users connected to the Candle Management Server will receive the message. In this release of CandleNet Portal there is no facility for creating other work groups, but the User Choice Settings dialog lists any work groups that were created in the Candle Management Workstation.

End code choices for starting the next activity: Timeout; Choice.

**Start/Stop a policy**

Use this activity in a policy to stop another policy from running while the current policy is executing. You can also use to start another policy while the current policy is executing.

End code choices for starting the next activity: Policy started; Error.

**Start/Stop a situation**

Use this activity in a policy to stop a situation from running while the current policy is executing. You can also use to start another situation while the current policy is executing.

End code choices for starting the next activity: Situation started; Error.

**Suspend execution**

Specify a unit of time, expressed in seconds, that you want a policy to wait prior to running. This is a useful feature if, for example, you issued a command, and you want to give the system administrator time to resolve the problem prior to continuing to run the policy.

**Take action or Write message**

You can issue a system command from a policy or generate a universal message that can be viewed at the Universal Message Console in the Candle Management Workstation. See the Candle Management Workstation online help for the Universal Message console.

End code choices for starting the next activity: Error; Action succeeded.
Connector

Use the Connector tool to add connecting lines from one activity to the next to control the workflow of the policy.

You can have a single connector from an activity, and you can have multiple connectors from an activity so long as each connector links to a separate activity. Multiple connectors from an activity are processed using AND logic.

When you join activities using the Connector tool, you assign an endcode to each connection. As you click and drag from one activity to the next one in succession, a dialog opens from which you select a link condition. Listed are the possible conditions (end codes) resulting from the source activity that will invoke the target activity. For example, if you are connecting a Wait until a situation is True activity, and choose Situation is true as the link condition, the target activity will begin executing when the situation becomes true.

**Note:** In a policy workflow you assign an endcode as you connect one activity to another. The encode indicates the result of activity processing, which triggers the next activity.

**Action succeeded.** The action completed without errors.

**Error.** The activity failed to complete successfully. The reason could be that a referenced object does not exist or a command returned an error status from the operating system.

**Resume.** The *Suspend execution* activity waits a specified period of time, then resumes executing the policy.

**Situation is false.** The *Evaluate situation now* and *Wait until a situation is False* activities return this endcode if the situation is not currently true.

**Situation is true.** The *Wait until a situation is True* and *Evaluate situation now* activities return this endcode if the situation is currently true.

**Choice.** The *Make a choice* activity uses this endcode to indicate that the linked activity is a potential choice offered to the user when a work item is opened.

**Timeout.** The *Make a choice* activity uses this endcode to indicate the next activity is to run if the user choice times out before a user selects an option.

**Action Succeeded.** The *Take action or Write message* activity uses this endcode to indicate the action completed without errors.

**Extensions**

Not available in the current release of CandleNet Portal.

**Wait until a situation is False**

This activity waits for the specified situation’s state to change from true back to false, which causes the open event to close. The event closes automatically when the agent is next sampled (determined by the situation’s sampling interval) and the condition is no longer true.
Wait until a situation is False is useful for policies you want to repeat but only when the state returns to false. An example would be a repeating policy that uses an emitter activity to generate a trouble ticket when CPU activity is high. If this condition continues beyond the 30-minute sampling interval, a new trouble ticket would be generated every 30 minutes. To prevent this from happening, the user adds a Wait until a situation is False activity to the end of the workflow, so the policy will not restart until the situation has gone to false, then true again.

End code choices for starting the next activity: Situation is false; Error.

Note: This activity does not apply to manual event closures (Close an Event).

Emitter activities

Emitter activities show in the second tab of the Workflow Components area. Emitter activities emit alerts to third-party management products and are available for the OMEGAMON Alert Manager products (formerly called Alert Adapters) you have installed. Alert managers provide interfaces between CandleNet Portal and other applications, so you can integrate information from Candle management products with data from third-party management applications.

Note: Although all emitter activity tools appear in the list, only those you have installed are available. An emitter activity tool with a solid border signifies the alert manager is installed and you can add the activity to the policy; a broken border means the alert manager product is not installed.

OpenView_Event
OMEGAMON Alert Manager for HP Openview NNM, Alert Adapter™ for HP OpenView IT/Operations.

Peregrine_Ticket
Alert Adapter for Peregrine ServiceCenter

ITO_Event
OMEGAMON Alert Manager™ for HP OpenView IT/Operations

Run_OnDemand_Update
A configuration emitter.

TEC_Event
OMEGAMON Alert Manager for Tivoli/Enterprise Console, Alert Adapter for TME 10™ Enterprise Console

NetView_Event
Alert Adapter™ for TME 10 Enterprise Console

SNMP_Event
OMEGAMON Alert Manager™ for CA Unicenter (and other IBM products). This activity is for the Candle SNMP Gateway on Windows NT®. It enables you to send any SNMP event to an SNMP manager.

Remedy_Ticket
Alert Adapter™ for Remedy ARS

Connector
Use the Connector tool to add connecting lines between the activity icons to control the workflow of the policy.
You can have a single connector from an activity, and you can have multiple connectors from an activity so long as each connector links to a separate activity. Multiple connectors from an activity are processed using AND logic.

When you join activities using the Connector tool, you assign an endcode to each connection. Emitter activities can generate the following endcodes:

**Error** The emitter activity failed to complete successfully. The reason could be that a referenced object does not exist or a command returned an error status from the operating system.

**Data emitted** Means that the data generated by the activity was emitted successfully to the third-party application.

**Note:** You assign endcodes in a policy as you connect one activity to another. The encode indicates the result of this activity that triggers the next activity.

**Emitter activity error messages**

- **Activity Definition Error:** No emitter targets found for emitter type *Emitter_Name*. This message appears if there are no emitters running on your managed network.

- **An *Emitter_Name* emitter activity requires situation attributes.** Please first add one or more situation activities to the workflow. This message appears when no situation activities have been added. Add a *Wait until a situation is True* or *Evaluate situation now* activity to the view.

**Work area and grapher view**

The work area is empty until you click Edit Workflow for a policy in the list. The selected policy opens in a window, called a grapher view, inside the work area. You can have multiple policies open at the same time in the work area. Each policy appears in a separate grapher view, with standard Windows tools for minimizing, maximizing, and closing the view.

Activities are selected from the General activities and Emitter activities tabs of the Workflow components frame, then dropped into the grapher view. Click the icon, then click inside the view to drop the activity into place.

When you select the Connector tool, you click inside one activity to the next one in succession to create the link. The dialog, Select a link condition, opens. Listed are the possible conditions resulting from the source activity that will invoke the target activity. For example, if you are connecting a *Wait until a situation is True* activity, and choose *Situation is true* as the link condition, the target activity will begin executing when the situation becomes true.
Chapter 7. Collecting historical data

You can have CandleNet Portal data logged into history files for display in a table or chart. Such history-enabled views have a tool for setting a range of previous data samples to be reported.

**Note:** If the Time Span tool is disabled (dimmed), your user ID does not have Workspace Author Mode permission.

To set a time span:

1. Open the workspace containing the table or chart where you would like to see historical data.
2. Click (Time Span). If the tool is unavailable, no historical reporting is possible for this view. Historical data is available in the table, bar chart, pie chart, and plot chart views when historical collection has been configured and started for the agent or agents associated with the view.
3. Select a radio button in the Set Time Span area.
4. If you selected Custom, select the Custom Start Time and Custom End Time:
   a. Click the list box to open the date editor.
   b. HH:MM:SS AM/PM is set to the current time. To change it, click next to the element to change (hour, minute, second or AM/PM) to adjust up or down.
   c. Month shows the current month. To change it, click to go to the next or previous month.
   d. Year shows the current year. To change it, click to go to the next or previous year.
   e. Day is set to the current day. Click another day in the calendar to change it, which also closes the editor.
   f. If you did not change the Day, click the current day of the month to close the editor.
5. If you want to change the Time Column, which appears as the first column in the historical view, click and select from the list.
6. If you want to apply the time span to all views associated with this view’s query (set of attributes), select the checkbox. When **Apply to all views associated with this view’s query** is enabled, the query will be modified to include the time span set here, so any other views using this query will report the same time range. Click OK.
7. The view shows data from earlier samplings for the period specified. If the view is a table, a timestamp appears as the first column and is accurate to the nearest minute; seconds appear as 00.
8. To keep the time span settings for this view, click (Save).

**Note:** If you close the editor without clicking the day of the month, your Month, Year and time of day changes will not take effect.
With the exception of historical attribute groups (see next note), you must start historical data collection for Tivoli OMEGAMON XE for CICS on z/OS before you can use the history feature. See the Configure History Data Collection topic and the IBM Tivoli OMEGAMON Platform: Historical Data Collection Guide for OMEGAMON XE Products, Versions 360 and 195 for details.

Some attributes groups, such as Situation Status and NT Event Log, are historical in nature and show all their entries without you having to specify a time span. For these types of attribute groups, you do not need to configure history collection unless you want to roll off to a data warehouse for long-term storage or limit the amount of data displayed. The Time Span feature, rather than showing more data, limits the data reported to the time period indicated.

Even if data collection has been started, you will not be able use the time span feature if the query for the chart or table includes any column functions. If this is the case, you can select or create another query to enable (Time Span).

The sort function is incompatible with the historical reporting feature. If you are using (Time Span) to retrieve historical data, the chart or table will not be sorted even if you have specified a sort order in the query. Nonetheless, you can still sort a table by clicking a column heading.

### Collecting historical data

Configuring historical data collection involves specifying the attribute groups to save data samplings from, the collection interval, the roll off interval, if any, and where to store the collected data (at the agent or CMS).

Use the Configuration tab of the History Collection dialog to specify:
- The interval at which data for a particular attribute group is collected
- The location at which the data is stored (at agent or at the CMS)
- The interval at which data is warehoused, if any.

**Note:** Your user ID must have Configure History permission to open the History Collection Configuration dialog and set up history files and data roll off. If you do not have this permission, you will not see the menu item or tool for historical configuration.

1. Click (History Configuration) to open the History Collection Configuration dialog.
2. On the Configuration tab, select the product (agent type) for which you want to collect data. The attribute groups for which you can collect historical data appear in a list box. Note that when you select a product type, you are configuring collection for all agents of that type that report to the selected CMS.
3. Select one or more attribute groups, then use the radio buttons to select the interval for data collection, the location of data collection, and the interval for warehousing, if any.
4. Click **Configure Group(s)** to apply the configuration selections to the attribute group or groups.
Note: You cannot configure data collection for individual attributes from CandleNet Portal. If you want to exclude or include specific attributes in a group, you must configure collection from the Candle Management Workstation. The attribute groups that are historical in nature, such as those for log files, need not have historical data collection configured unless you want them to roll off to a data warehouse.

When sorting historical data, the Table View column applies to all the data on the page, not just the data in the column. Note the properties for the table view let you specify whether to return a specific number of rows or all the data. To focus a sort operation on just the rows in a specified table, click Properties > View-level Page size and specify Return all rows.

Start historical reporting

1. Click (History Configuration) to open the History Collection Configuration dialog.
2. On the Status tab, select a Candle Management Server as the host data management component for the OMEGAMON Platform from the list.
3. Select a product.
4. Select the attribute group or groups for which you want to start data collection. Shift-click to select a contiguous group, or Ctrl-click to select noncontiguous groups.
5. Click Start Collection. At this point, two files are created for every attribute group selected: a configuration file with a .hdr extension; and a binary history file with no extension.

Note: If this is the first time you started historical data collection for an attribute group and the workspace includes views from that group, click (Refresh) after closing this dialog so you can see the (Timespan) tool for the view.

If, after you configure history data for a table and start history collection, you still do not see history data for that table, there is a problem either with the agent collection of that data or with the history mechanism.

Stop historical reporting

1. Click (History Configuration) to open the History Collection Configuration dialog.
2. Select a product.
3. Select the attribute group or groups for which you want to stop data collection. Shift-click to select contiguous groups, or Ctrl-click to select noncontiguous groups.
4. Click Stop Collection.

Disable historical reporting

To reset the view to showing only current data samplings, do the following:
1. Open the workspace with the view from which you want to remove historical reporting, click (Time Span).

2. Select None.

3. Click OK.

If this is a table view, the leftmost timestamp column no longer appears. The view now shows data from the current sampling only. The exception is views of attribute groups that are normally historical, such as the Situation Status and the NT Event Log. By selecting None, you enable these attribute groups to show all data they have collected, up to 2000 of the most recent entries.

To keep the time span settings for this view, click (Save).
Chapter 8. Creating a new link

To create a link from this workspace one workspace to another do this:

1. Open the CandleNet Portal. Expand the navigation tree to show the list of resources in one of your CICS regions.
2. Right-mouse click one of the resources from the Navigator. From the dialog, click the **Link Wizard**.
3. From the popup menu, select **Define a new link** and click **Next**.
4. Enter a name and description for your new link. Click **Next**. This displays the link wizard - define new link panel (Figure 13). Expand the Enterprise navigation tree and click **Transaction analysis** for the same CICS region as your source.

![Link wizard - define new link](image)

**Figure 13. Link wizard - define new link**

5. From the Workspace panel select **Transaction Analysis** and click **Next**. This opens the Link expression editor. This supplies a dynamic header, footer, or data filter for any of the views in the target workspace.
The left-hand side of the editor is a properties tree listing the possible link symbols and target workspace properties.

The right frame shows this Help topic until it is replaced by the Expression and Allowable Terms areas when you select a symbol from the Target Workspace branch.

**Symbols**

shows the symbols representing values passed to the target workspace. When you select a symbol, the right frame shows its expression in the Expression box and the possible terms to use in the Allowable Terms tree.

- **contextAvailable**
  
is the expression used to confirm that the context at link launch time is comparable to the one that was in place when the link was defined. The expression for a link originating from a Navigator item is different from the expression for a link starting from a table row.

- **linkIsEnabled**
  
is the expression that tests the value of attributes of the selected row to determine whether or not to offer the link on that row. The value can be any expression that yields a true or false value.

**New...**

enables you to add a new link symbol to the definition. For example, you could add a footer symbol ($footer$). Then the information for the footer would be taken from the source workspace and displayed in the table view footer of the target workspace. Normally, you would not add a new symbol to the link definition.
**Target Workspace**

lists the queries applied to the views in the target workspace and any available symbols. Typically, these symbols are used to receive attribute values from the source. The values are then used to filter the results of the query in the target workspace. An example would be a link built from the *Processes* table to the *Process Details* workspace. The details shown would be for the selected process.

**Query - <Name>**

is the name of the query applied to the view. For example, the *Windows Print Queue* workspace uses the *Print Queue* query for the *Print Queue* table and for the *Job Activity* and *Errors* bar charts. The query will show as *<Unnamed>* if it is for a non-data view.

**Symbols**

lists the *<name>* symbols available for receiving a value from a link expression to filter the target view. If no symbols are available from a query, you need to create a query symbol for the target.

- Table - *Name*
- Pie
- Bar
- Plot
- Circular Gauge
- Linear Gauge
- Take Action
- Notepad
- Message Log
- Event Console
- Graphic
- Terminal
Browser lists the \( \mathbb{P} \) (Header) and \( \mathbb{F} \) (Footer) symbols you select and build an expression for. The result of the link expression becomes the title of the view when the target workspace opens.

### Footer

#### Properties

**Symbols**

Shows the symbols representing values passed to the target workspace. When you select a symbol, the right frame shows its expression in the Expression box and the possible terms to use in the Allowable Terms tree.

\( \mathbb{P} \) contextIsAvailable

Is the expression used to confirm that the context at link launch time is comparable to the one that was in place when the link was defined. The expression for a link originating from a Navigator item is different from the expression for a link starting from a table row.

\( \mathbb{P} \) linkIsEnabled

Is the expression that tests the value of attributes of the selected row to determine whether or not to offer the link on that row. The value can be any expression that yields a true or false value.

**New...**

Enables you to add a new link symbol to the definition. For example, you could add a footer symbol \( ($footer$) \). Then the information for the footer would be taken from the source workspace and displayed in the table view footer of the target workspace. Normally, you would not add a new symbol to the link definition.

#### Target Workspace

Lists the queries applied to the views in the target workspace and any available symbols. Typically, these symbols are used to receive attribute values from the source. The values are then used to filter the results of the query in the target workspace. An example would be a link built from the Processes table to the Process Details workspace. The details shown would be for the selected process.

**Query - <Name>**

Is the name of the query applied to the view. For example, the Windows Print Queue workspace uses the Print Queue query for the Print Queue table and for the Job Activity and Errors bar charts. The query will show as <Unnamed> if it is for a non-data view.

**Symbols**

Lists the \( \mathbb{P} \) <name> symbols available for receiving a value from a link expression to filter the target view. If no symbols are available from a query, you need to create a query symbol for the target.
Qlue lists the (Header) and (Footer) symbols you select and build an expression for. The result of the link expression becomes the title of the view when the target workspace opens.

Expression

The Expression area is for composing an expression to provide the value for a target symbol.

An expression can be a combination of text, references to values available from the source context, operators, and functions applied to values. You can write expression clauses directly in the box or you can choose values, functions, and operators from the Allowable Terms area. The language syntax is similar to that of programming languages like Java, JavaScript™, and C++ although not as powerful. The expression box supports the standard methods for selecting, cutting, and pasting text.

For example, if you want to set the value of the symbol to the value of an attribute from the selected row in the source context, select an item marked with the \( p \) icon from the Attributes section of Allowable Terms to display its internal identifier here. If you want to replace a word within the expression, you can select the word by double-clicking it and entering a different value. This technique is useful for replacing formal function parameters with the actual values you want to use.

Clear to erase the contents of the Expression text box.
Test to insert the expression for the selected term. As soon as you click this button, the operators folder opens in the Allowable Terms list so you can select one if you want to continue building the expression.

- Enclose any constant or string values in quotes ("),
- Enclose symbol identifiers (variables) in dollar signs ($),
- Press Enter to start a new line in an expression.

**Values**

The content of the Values branch is based on the point where you originated the link. Some or all of the following branches are listed in Values:

It is built from the Navigator root item, which shows at the bottom of the list, up to the point where you started the Link Wizard. It includes all context branches of the Navigator, although you will likely use only the Selected Row symbols.

**Link**

The Link branch contains the link symbols added to the source context as the user followed links to reach the source workspace. You will see one Link branch for each link traversed on the way to the originating workspace.

**Symbols**

- **contextIsAvailable**
  References the expression that the link processor uses to decide whether the information available from the source context is sufficient to provide the values necessary for the target workspace to function correctly. The link processor uses the expression to decide if the link launch point is similar enough to the Link Wizard launch point that the link will perform correctly. The expression result is either True or False.

- **linkIsEnabled**
  References the expression the link processor uses to decide if the link is valid for the selected row or object in the source workspace. The expression result is either True or False.

**Source Context**

This branch references values captured from the Link Wizard source context where the link originates. Normally, you would not use any symbols within this branch to build a link expression. They are used by the link processor to build the contextIsAvailable expression.

Some or all of the following symbol groupings appear in the Source Context branch for the link source, and in the Values branch for the link target. Which symbol groupings appear depends on the Navigator level you were at when you started the Link Wizard. Each source context branch contains symbols that can be added to an expression to determine whether a Link source context item is similar to the corresponding Link target context item.

For most links, you will confine your selections to the Attributes symbols in the Selected Row branch.

**Note:** You can check the current value of any symbol by selecting it and clicking Test.
Selected Row
This branch appears if you started the Link Wizard from a table row or chart point. Within this branch are the Attributes you can select to filter the data view or, if you are adding a header or footer, to appear in the title.

Table - <title>
A Table - <title> branch appears if you started the Link Wizard from any part of a table: row, header, footer, or table background.

Selected Point Bar Chart
A Selected Point and <Type> Chart branch appear if you started the Link Wizard from a data point on a chart.

Tree
This branch appears if you started the Link Wizard from a Navigator item. It has symbols that describe the position in the Navigator tree: Id, Name, and Type.

Query
This branch represents the query associated with the source view.

Workspace
This branch has symbols for workspace Id (not in Source Context), Name, and Type.

Report
This represents the attribute level of the Navigator physical view. The Report branch appears if you originate the link from a workspace or item at the attribute level of the Navigator.

Sub Agent
If the Link Wizard source context includes a subagent and you originate the link from a workspace or Navigator item at or below this level, this branch appears.

Agent
This represents the agent level of the Navigator physical view. This branch appears if you originate the link from a workspace or Navigator item at or below the agent level.

Node
This represents the system level of the Navigator physical view. Node appears if you originate the link from a workspace or item at the system level of the Navigator or below.

System
This represents the operating platform level of the Navigator physical view, with symbols for Id, Name, and Type. This item appears if you originate the link at or below the Navigator platform level.
Root
Has symbols for the Enterprise level of the Navigator: Id, Name and Type.

Global Symbols
Contains references to the value available to all links regardless of originating level of the Navigator: Logged-on User Id (Encrypted).

Functions
A function can be added to an expression as an evaluator.

The syntax is as follows:

<table>
<thead>
<tr>
<th></th>
<th>Optional arguments</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>A choice of values</td>
</tr>
</tbody>
</table>

Str  Prefix indicating that a string value (text) is expected
Num  Prefix indicating that a numeric value is expected
Obj  Prefix indicating that any kind of value is acceptable
Time Prefix indicating that a timestamp value is expected
Ary  Prefix indicating that an array of values is expected

The parameters are listed in the online help.

Operators
Use the operators to build an expression with multiple values or functions.

- Assign Value
- Statement Separator
- Conditional (ternary)
- Add or Concatenate
- Subtract
- Multiply
- Divide
- Parentheses
- Comma
- Modulo
- Raise to Power
- Right Shift
- Left Shift
- Exclusive Or
- Bitwise Or
- Bitwise And
- Not
- In
- Logical And
- Logical Or
- Less Than
- Greater Than
- Equal
- Greater Than or Equal
- Less Than or Equal
- Not Equal
Chapter 9. Properties Editor

Every workspace has general properties and an additional set of properties for each view it contains.

The Properties editor has options for changing the properties for the current workspace and for the views within the workspace.

The Properties tree shows the name of the workspace at the top of the hierarchy, followed by a (Views) folder, then folders for every type of view in the workspace. Appearing to the right of the tree are the workspace properties or view properties, depending on which is selected in the tree.

There are two ways to open the properties editor:

**Workspace properties**

When you select (Properties) from the toolbar, the Properties editor opens the general properties for the workspace. In Figure 15, the left hand pane shows you the three options, table, pie chart, and Circular gauge views that are shown in the default storage analysis workspace.

![Figure 15. Properties editor opened from the toolbar](image)

**View properties**

When you select (Properties editor) from a view’s pop-up menu, the Properties editor opens the properties for that view, in Figure 16 on page 72 this shows the query view for a table in the storage analysis workspace.
To edit the properties of a view, click the view name or its icon in the Properties tree. The view properties open in the right frame with one or more of the following tabs:

- **Query**
  Specify what data should go in the chart or table.

- **Filters**
  Refine the view by filtering out unwanted data from the chart or table.

- **Thresholds**
  Establish threshold values and color indicators for the table view.

- **Configuration**
  Specify the script to run or the connection to make whenever you open the terminal view.

- **Style**
  Change the appearance of the view.

The top right-hand pane (see Figure 16) is a copy of the table view before you selected it in the Properties editor. It gives you a preview of how the view looks when you save the changes made in the editor. Whenever you change the query, define a filter or threshold, or modify the style, click **Test** to view the results.
**Actions**

From the Properties editor you can:

- **Test**  Changes in the Preview area to see how they look, click **Apply**
- **Apply**  Changes to the view, save them, and exit, click **OK** saving your changes.
- **Cancel**  Changes to the view, save them, and exit, click **Cancel** without saving your changes.
- **Help**  To view the online help for this product.

**Note:** Be aware that if you plan to edit more than one view while in the Properties editor, you must click **Apply** to save your changes to the first view before editing the next.

**Filters**

Chart, table, message log and event console views have a Filters tab so you can select which attributes and what data to show.

**Note:** Note that you can also use a query to filter the data. The difference is that the query filters the data before it is retrieved and the view filters the data after it has been retrieved.

When you open the properties editor from the dynamic storage analysis table in the storage analysis workspace, select the **Filters tab** as shown in Figure 17 on page 74. All attributes associated with the query appear as column headings. Use the checkboxes at the head of each column to add or remove attributes in the view, and use the editor to add filters. Check the box beneath a column heading to include the attribute in the view; or uncheck the box to remove it. The tabular editor shows any filters on the attributes (column headings). Even if a cell is unchecked, meaning it won’t show in the view, you can still add a filter for that attribute.
Chart views can filter on numeric attributes only; the checkbox for text and timestamp attributes is disabled.

Click a cell under a column to activate the editor and formula bar. The active cell has three fields:

**Function**
Shows the function chosen for the attribute, which is set to **Value of expression** by default. Click the button to open and select from a list of possible functions, which vary depending on the type of attribute. For example, the available functions for text are **Scan for string within a string**, **Return a subset of the string**, and **Value of expression**. Numeric attributes have **See if a value is within a range**, which checks if the value falls within the range you specify.

**Operator**
Shows the comparison operator, which is set to **Equal** by default. Click the operator button to open and select from a list of operators: Equal, Not equal, Greater than, Greater than or equal, Less than, and Less than or equal.

**Text box**
Shows the value of the attribute to be compared with the values arriving from the agent. Click inside the cell to edit the value. For enumerated attribute values, such as "online" or "offline", you will see a list box to click for the possible choices.

**Examples:**
Expressions in the same row have an AND relationship. In the example below, a row will be written to the chart or table only if the process name includes “java” -AND- user time exceeds 5%. (Scan for string within a string EQuals 'java' for Process Name AND % User Time GT 5.)

<table>
<thead>
<tr>
<th>Process Name</th>
<th>% User Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>2</td>
<td>EQ 'java'</td>
</tr>
</tbody>
</table>

Expressions in different rows have an OR relationship. In the example below, a row is written to the chart or table if the value of the Process Name is either “System” or “Services”.

<table>
<thead>
<tr>
<th>Process Name</th>
<th>% User Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>2</td>
<td>EQ 'System'</td>
</tr>
<tr>
<td>3</td>
<td>EQ 'Services'</td>
</tr>
</tbody>
</table>

(Show Formula) opens a graphical view of the filter.

Data Snapshot

This shows the attributes returned from the query and a sampling of their values.

Note: When filtering is established through the Filters tab, the filtering occurs after the data is retrieved from the Monitoring Agent. If many rows are returned, it may take some time to retrieve all of them and complete the filtering task. If you create a query that filters the data, then assign that query to the view, the filtering is done at the CandleNet Portal Server, which speeds up performance time.

Thresholds

The properties for table views include the Threshold tab for defining acceptable values for attributes.

Whenever the table is refreshed with new values, those that fall outside the threshold limits appear with a colored background: red for critical; yellow for warning; and pink for information. In addition, the column heading shows a , , or to indicate it has threshold cells, the scroll bar arrows are tinted if any threshold cells are outside the viewable area, and the threshold expression appears as hoverhelp when you move the mouse pointer over a threshold cell.

The threshold editor shows the attributes for the query as column headings. The cells in the first column are for selecting a severity indicator: Critical, Warning or Information. From the default sample in Figure 18 on page 76, you can see that a
warning is issued if the Area is either DSA or EDSA and the percent used is either less than 35% or greater than 70%. From the data in the Dynamic Storage Analysis pane you can see that the DSA is underutilized at 25% and is therefore showing a warning. A Critical response occurs if the CICS system goes short-on-storage. You can move the columns in a table from left to right by dragging and dropping them so that you can bring the field that you are monitoring into view.

Click a cell under the column for which you want to define a threshold to activate the editor and see the formula bar. The active cell has three fields for completing the threshold expression:

- **Function**
  Shows the function chosen for the attribute, which is set to **Value of expression** by default. Click the button to open and select from a list of possible functions, which vary depending on the type of attribute. Numeric attributes have **See if a value is within a range**, which checks if the value falls within the range you specify. When you select it, a small dialog opens for you to specify the start and end values in the range.

- **Operator**
  Shows the comparison operator, which is set to **Equal** by default. Click the operator button to open and select from a list of operators: Equal, Not equal, Greater than, Greater than or equal, Less than, and Less than or equal.

- **Text box**
  Shows the value of the attribute to be compared with the values arriving from the agent. Click inside the cell to edit the value. For enumerated attribute values, such as “online” or “offline”, you will see a list box to click for the possible choices.

Figure 18. Properties editor
Note: For complex expressions, such as when you need to repeat an attribute name, you can double-click in the value text box to see and select an available attribute from the Select Value dialog. Clear the box before double-clicking or the value will be inserted between existing text and the formula syntax will be incorrect.

You can specify multiple threshold expressions to form a filter:

- The threshold expressions you enter in the same row have an AND relationship. When a retrieved value satisfies all the expressions in a row, the cell background will be colored.
- The threshold expressions in each row are independent. If a retrieved value satisfies the conditions in more than one row, the cell background will show the color for the highest severity, the lowest being Informational and highest being Critical.

For example:

<table>
<thead>
<tr>
<th></th>
<th>Process Name</th>
<th>ID Process</th>
<th>% User Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Critical</td>
<td></td>
<td>GT 40</td>
</tr>
<tr>
<td>2</td>
<td>Warning</td>
<td></td>
<td>GT 20</td>
</tr>
<tr>
<td>3</td>
<td>Information</td>
<td>java</td>
<td>GT 5</td>
</tr>
</tbody>
</table>

And how the thresholds appear in the table view (notice the colored scroll buttons indicating where there are more critical and informational threshold cells):

<table>
<thead>
<tr>
<th>Process Name</th>
<th>ID Process</th>
<th>% User Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>super</td>
<td>291</td>
<td>44</td>
</tr>
<tr>
<td>taskman</td>
<td>236</td>
<td>23</td>
</tr>
<tr>
<td>notepad</td>
<td>192</td>
<td>10</td>
</tr>
<tr>
<td>java</td>
<td>66</td>
<td>8</td>
</tr>
</tbody>
</table>

Show Formula opens a graphical view of the thresholds.

Data Snapshot

This shows the attributes returned from the query and a sampling of their values.

Configuration

. The properties for the terminal view have a Configuration tab so you can edit scripts, specify a script to run whenever you start a terminal session, and specify the host to connect to.
Whenever you open the workspace, the script you specify runs automatically, and the host you specify is connected automatically.

These options are the same as those given in the Emulator Scripts dialog that opens when you click the Manage Scripts tool in the terminal view.

From the emulator view of the Java Program Analysis workspace, select properties and this shows Figure 19. It is from here that you can create and edit scripts.

![Properties editor with the style panel](image)

**Figure 19. Properties editor with the style panel**

**Connection**
This is the same as the Terminal Emulator Configuration dialog that opens when you click the Connection tool in the terminal view, or add a terminal view.

**Disconnect options**

- **Do not disconnect when leaving workspace**
  Keeps the session open as long as you are logged on to CandleNet Portal, so you can return to this workspace and the session will be where you left it last.

- **Disconnect after this many minutes:**
  Disconnects the working session the number of minutes entered here after you close the workspace.

**Style**

- All types of views have a Style tab. It has a thumbnail graphic with the style elements as hot spots.
Clicking a hot spot, such as **Header**, changes the style settings.

![Dynamic Storage Analysis](image.png)

**Figure 20. Properties editor with the style panel**

**Options**

These vary for the type of view. In Figure 20 it allows you to include or exclude a border.

**Title**

Is the title that appears at the top of the table, chart, or specified element therein (such as the header). If this is a chart or table, you can also add an attribute symbol to the title that is replaced by the value of that attribute when the view is displayed.

**Note:** When CandleNet Portal displays the workspace, the header and footer are evaluated for any expressions. If you happen to have a relational operator (EQ, NE, GT, GE, LT, LE and the java operators ==, !==, >, >=, <, <=) in the text, the operator is replaced by TRUE or FALSE unless you enclose it in quotes.

**Text Style**

- **Font** Is the font for the title.
- **Size** Is font size in points.
- **Style** The choices vary depending on the font, but are usually Bold, Plain and Italic.
- **Text** Enter the text for your title.
Chapter 10. Common User Scenarios

These are a number of common CICS situations where you could use Tivoli OMEGAMON XE for CICS on z/OS.

These scenarios assume that you have worked through the CandleNet Portal tutorial that accompanies these topics. In these scenarios we have started from the point where you need to monitor a number of common situations that might occur in a CICS system.

Each scenario follows basically the same pattern:

- Define a situation to trigger an alert.
- Create a link from the workspace where the alert has been triggered
- Take appropriate action in the targeted workspace.
- Return to the original workspace to ensure that the alert has stopped.

For example, the first scenario is based on a CICS region going short-on-storage. The alert is recorded in a the storage analysis workspace. A link is created to the transaction analysis workspace where the transaction that is causing the problem is identified. Using the Take Action function to create a system command to purge the transaction that has caused the CICS region to go short on storage.

Application setup

This is an outline of the applications that have been used to demonstrate a number of user scenarios.

The environment that we have described throughout the Using IBM Tivoli OMEGAMON XE for CICS on z/OS is based on a simple system involving three CICS regions.

One of the applications that we are using has been installed and the transactions associated with them can be run from any of the three regions. The transaction, DT01, allows you to view and update data from a VSAM file. However, the VSAM file is defined only to the region CICSHTC1 so it is local for that region and remote to the other two regions.

Scenario 1

The scenario used in "Monitoring short-on-storage problems" on page 82 is to run the transaction DT01 from region CICSHAC1 so that it accesses the VSAM file remotely. A second user starts a transaction in the file owning region (CICSHTC1) that causes the region EDSA to go short-on-storage (SOS). This means that the first user can no longer access their data. In this example, the system administrator also cannot access the region and uses the CEKL transaction to purge the transaction that is using all the storage.

Scenario 2

The second scenario used in "Monitoring communication problems" on page 89 assumes that one of your links, in this case, a MRO IRC link has gone out of service. Using the situation demonstrates how to use Tivoli OMEGAMON XE for CICS on z/OS to reinstate your link automatically.
Monitoring short-on-storage problems

This user scenario shows how you can monitor your regions when they go short on storage and how you can rectify the problem.

For this scenario the assumption is that you are running CandleNet Portal from your workstation.

In this case a transaction, that is well known for using up storage, is running in one of your regions. Using CandleNet Portal, you can first identify the region with a problem and then you can locate the task that is using the storage and finally you can use the CEKL transaction to purge, forcepurge or kill the transaction from the system.

There are three stages involved in this procedure:

- Modify the thresholds
- Create a link from one workspace to another
- Create and use an action.

Before you start you should save a workspace where you can customize the view.

1. Open CandleNet Portal and expand the navigator window (Figure 21), so that you can view the regions. In this case there are three regions of a simple CICSpex.

2. Save a new workspace File > Save Workspace As and in the dialog panel (Figure 22 on page 83), enter a name and description for your new workspace.
Click OK. Also check the Assign as default for this Navigator item box so that you do not have to continually have to check that you are using the correct workspace at each step.

This example uses the threshold definitions that are provided and modifies them. It creates a link between the Storage analysis workspace and the Transaction analysis workspace. Finally it creates an Action that can be used to remove transactions that may be causing a problem.

Now continue with Modifying a threshold for short on storage.

Modifying a threshold for short on storage

Before starting this procedure, first define a workspace as described in “Monitoring short-on-storage problems” on page 82. This procedure describes how to change a threshold definition using the properties editor.

1. Open the navigation tree from the CICS region that you want to monitor. Expand the navigation tree and click Storage Analysis. This opens the Storage analysis workspace. For this example, we use the Dynamic Storage table to modify the properties of the attributes in that table. This procedure modifies the settings so that the screen only shows a red alert when the EDSA goes above 70%.

2. Check that you are using the workspace that you defined earlier, right-click Storage Analysis. Right-click Workspaces and select your workspace.
3. In the Table view of Dynamic Storage Analysis, highlight any row in the Dynamic Storage Area table, right-click and from the dialog, click **Properties**. This shows the Properties editor.

4. Click **Thresholds** tab. This shows the Properties editor as shown in [Figure 23](#). The Percent Used column is red because the threshold is set to critical if the values falls below 15% or exceeds 70%.

5. Delete the entry LT 35. To do this select the line in the Thresholds table and with the cursor over the beginning of the row (in this case over the number 7), right-click and click **Clear contents**. Now click **Apply**. You can preview the effect of this change in the Dynamic storage analysis table as the red column changes from red to yellow. While the critical threshold is no longer triggered, another threshold has been started that is triggered is the use of a DSA falls below 35%. To see this threshold scroll down the Threshold pane.

6. Click **OK** to exit the **Properties Editor** screen. You are prompted to save the changes to your workspace. Click **Yes**.

   ![Figure 23. Properties editor from the Scenario 1 workspace](image)

Now continue with "Creating a link for short-on-storage."

### Creating a link for short-on-storage

The purpose of this procedure is to create a link from the storage analysis workspace to the Transaction analysis workspace. The assumption is that a possible reason for going short-on-storage is a rogue transaction. Having a link between to two workspaces helps you focus on the potential problem more quickly in the future.
At this point, you notice that one of your EDSAs has gone short-on-storage. This is indicated by the red critical icon against the region and the storage analysis workspace in the navigator window.

Opening the Storage analysis workspace and the EDSA is highlighted in red and also the circular gauge in the bottom left of the workspace is recording 100%.

However before you start to create a new link, hover over Storage Analysis in the navigation window. A pop-up window appears with some advice. Click the link within the advice, and a window appears showing the condition, some expert advice and the situation that it relates to.

Here we will create the link to the Transaction analysis workspace. To do this:
1. Right mouse click Storage Analysis in the Navigator. Click Link Wizard.
2. From the popup menu, select Define a new link and click Next.
3. Enter a name and description for your new link. Click Next. Expand the Enterprise navigation tree and click Transaction analysis from the same CICS region as the source.
4. From the Workspace panel, Figure 24, select Transaction Analysis and click Finish. You will notice that there are a number of workspaces associated with transaction analysis, so you can select any one of these workspaces as your target. For this exercise we selected the main Transaction workspace. You can use the other workspaces if it becomes necessary to examine the transaction in more detail.
5. From the Navigation window, right-click Storage Analysis and click Link To followed by Transaction Analysis. You may be prompted to save your workspace, click Yes.
6. From the Transaction Analysis workspace sort your transactions in the Wait Type column, click at the head of the column. The wait type column is on the
The end result is that you are shown a transaction that is waiting for more storage. The next step is to remove this transaction using the Take Action feature.

Continue with "Resolving the problem - using the Take Action command."

Resolving the problem - using the Take Action command

This describes the process of setting up Take Action to issue a command to remove a transaction. This assumes that you have followed the previous two steps and can identify a transaction that may be using the storage.

It is possible that you cannot access the region because of the short-on-storage condition. For the purpose of this exercise, we will use the CEKL transaction to purge the offending transaction rather than CEMT.

To create a Take Action function, do the following:
1. Highlight the transaction in the Transaction analysis table, right-mouse click and click Edit Action. The Create new Action dialog appears.

![Create New Action](image)

**Figure 26. Create new action dialog**

2. Enter a name and description for your Take Action. See Figure 26.

3. Enter the command `f cicshtc1,cekl set task()` forcepurge For this you enter a command just as you would at a console. In CandleNet Portal, do this:
   a. Enter `F` and click Insert Attribute. Inserting an attribute means that you can use this Take Action in the future and the attribute will be resolved to the name of the CICS region you are monitoring.
   b. From the list of attributes, click CICS Region name.

   **Note:** When you do this the cursor moves forward one space. You have to edit the line to remove this space.
   c. Enter `,CEKL SET TASK`
   d. Click Insert Attribute.
   e. From the list of attributes, click Task Number and close the bracket. Don’t forget to remove the space.
   f. Finally enter FORCEPURGE. You happen to know that this transaction is purge protected and hence you omit the step if issuing the PURGE option.

Now you have created your Take Action command.

4. To use this Take Action, Right click the problem transaction from the Transaction analysis table, click Take Action and select the new command that you have just created. When it opens the Take Action dialog, as shown in Figure 27 on page 88 it shows that the new command has resolved the region name and task number correctly.
5. Now select the CICS region from the Destination systems pane, and click **OK**. An action status dialog is shown showing a return code of zero.

6. Refresh your screen (F5) and the transaction has been removed from table.

7. Return to the Storage Analysis workspace and if you identified the correct transaction the Percent Used field should have returned to normal.

This is a simple scenario explaining how to:
- Create a new workspace
- Modify an existing threshold
- Create a link between two workspaces
- Create and use a Take Action command
Monitoring communication problems

The purpose of this procedure is to show how you can have Tivoli OMEGAMON XE for CICS on z/OS monitor your CICS regions and issue a command to correct a problem automatically. This procedure describes how to monitor the links between CICS regions. For this scenario the assumption is that you are running CandleNet Portal from your workstation.

This scenario is based on a simple banking transaction that is invoked in one region (CICSHAC1) and accesses a VSAM file in another region (CICSHTC1). The connection name is HTC1 and for some reason the link has broken. To monitor this we need to create a threshold that triggers any occurrence of a broken connection between CICS regions being either released or going out of service. Having identified the link, we can then create a situation where Tivoli OMEGAMON XE for CICS on z/OS attempts to reinstate the link automatically.

There are two stages involved in this procedure:

- Modify the thresholds
- Create a situation to correct the broken link.

Before you start you should save a workspace where you can customize the view.

1. Open CandleNet Portal and expand the navigator window so that you can view the Connection Analysis workspace.

![Figure 29. Navigator window showing the Connection Analysis workspace](image)

2. Save a new workspace File > Save Workspace As and enter a name and description for your new workspace. Click OK. Check the Assign as default for this Navigator item box so that you do not have to continually have to check that you are using the correct workspace at each step.
Creating a threshold to monitor connections

This procedure describes how to create a threshold definition using the properties editor.

1. Open the navigation tree from the CICS region that you want to monitor. Expand the navigation tree and click Connections Analysis. This opens the your newly created Connections Analysis workspace and shows a very simple situation of the Connections analysis table.

---

**Figure 30. Save Workspace as.. dialog**

Continue with “Creating a threshold to monitor connections.”

**Creating a threshold to monitor connections**

This procedure describes how to create a threshold definition using the properties editor.

1. Open the navigation tree from the CICS region that you want to monitor. Expand the navigation tree and click Connections Analysis. This opens the your newly created Connections Analysis workspace and shows a very simple situation of the Connections analysis table.

---

**Figure 31. Extract from the Communications analysis workspace showing the Connections Analysis table**
2. Select any row of the table that corresponds to the connection name that you want to monitor (in this example the first row of the table), right click and click Properties. This opens the Properties editor.

3. Click Thresholds. Move the Thresholds window to show the Connection status field, click the cell. Change the operator to EQ and the value to REL_OUT.

4. Change the warning level, click the red square in the row and select the colour that you want to show when the threshold is triggered.

5. Click Apply. There should be no changes at this point in the Connections analysis table at the top of the Properties editor window unless, of course, one of your links is released and out of service.

6. Click OK to exit the Properties Editor screen.

7. Save your workspace.

To test this you need to put the connection out of service, for example, issue a CEMT SET CONN(connectionName) outservice.

Continue with "Creating a situation to monitor broken links."

Creating a situation to monitor broken links

This procedure demonstrates how to monitor connections and then to attempt to remedy the problem by, in this case, putting the link back into service.

There are various ways to start the Situation editor. This example follows only one of them.

1. From the Navigation window expand the CICS region and right click Connections analysis from the pop-up menu, click Situations. This opens the Situation editor.
2. To create a new situation, click (New Situation) at the top left of the Situation editor.

3. In the **Create Situation** dialog, enter a name, description. Select CICSplex for the Monitored application. Click **OK**. You cannot have spaces in the name. The other restrictions are listed on the panel.

![Create Situation dialog](image)

**Figure 33. Create Situation dialog**

4. From the Select Attributes Group pane, click **CICSplex_Connection_Analysis**, click **OK**.

5. From the Select Attributes Item pane, click the condition that you want in this case **Connection Status**, click **OK**. See **Figure 34**

![Select Attribute dialog](image)

**Figure 34. Select Attribute dialog**

6. From the **Situation editor** window, click **Condition** tab. This is probably already open. See **Figure 35 on page 93**
7. In Figure 35, click **Connection status**, and click the operator **EQ** and click the value **REL_OUT** from the drop-down menu.

8. Click **Apply** and click the **Expert Advice** tab. Here you can enter the information that you want to appear when a user uses this situation. There may be several ways of approaching this problem. In this case you can tell the user what you expect to happen. What you enter here depends on the approach taken at your location. To make this easier to read you can use some basic HTML tags to provide headings. Click **Preview** to see the effect of your changes.

*Figure 35. Situation editor - condition view*
9. Click Apply and click the Action tab. This displays Figure 37.

10. In the Action view, click System command form the Action Selection section. This enables to enter the same command that you would use at a console. For this example the command to enter is:
F CICS Region_Name,CEMT SET CONNECTION(CONNECTION STATUS) INSERVICE

To do this
a. Enter F and click Insert Attribute. This allows you to enter a variable so that you can use this with other CICS regions.
b. From the list of attributes, click CICS Region name.

   Note: When you do this the cursor moves forward one space. You have to edit the line to remove this space.
c. Enter ,CEMT SET CONNECTION( Just as you would at a console.
d. Click Insert Attribute.
e. From the list of attributes, click Connection Status and close the bracket. Don't forget to remove the space.
f. Finally enter INSERVICE.

Now you have created the command, you have to set the time interval. Enter the remainder of the fields as shown in Figure 37 on page 94.

11. Click Apply and click the Until tab. This allows two options
   • Another Situation is TRUE
   • Interval Expires

   In this panel, click Interval Expires and set the time interval to the minimum allowed (30 seconds). This is just for purposes of this exercise.

   Figure 38. Situation editor - Action view

12. From the Situation editor window, click Distribution To do this:
   a. Click the system and the left arrow. This adds the CICS region to the Assigned managed systems.

13. Click Apply and click OK.
The end result of this situation is that once your link goes out of service the link is restored 30 seconds later, that is, unless there is some other issue involved, for example, hardware failure.

Now go to "Testing the connection scenario."

Testing the connection scenario

When you open CandleNet Portal and expand the navigation tree you will notice and additional entry of the situation that you created in the last step. To test the connections scenario do the following:

1. Click Scenario 2. This opens the Situation editor that you defined earlier.
2. Logon to your CICS region and put the connection out of service. In CandleNet Portal the connection status is red (critical), just as you defined it.

3. Refresh CandleNet Portal (F5) looking at the connection analysis. At the end of 30 seconds, the link is restored.

This scenario demonstrates the:
- Creation of a workspace
- Creating a Threshold
- Creating and using a situation to monitor and correct a problem.
Chapter 11. Troubleshooting

In a client-server architecture, the main problem is identifying the component that is the cause. In most cases, the problem is reported as a CandleNet Portal client problem because this is what the user sees. The client is a display-only client, it displays only what it is given by the CandleNet Portal Server. It is important to understand that in any problem scenario all documentation should be gathered at the time of the error. What appears to be a client problem could very well be a server problem, especially in the scenario where data is not showing up at the client. Below are guidelines for collecting the correct documentation for any problems reported.

If the problem is reproducible, get the client log. The location of the log depends on the client type and operating system the client is running on. You may be asked to set a trace in the client and then collect the log. This is a very likely scenario in the case where a problem is reproducible.

Collecting logs

Client logs

If the CandleNet Portal desktop client is being used then collect the following logs:

- C:\candle\cnplogs\kcjras1.log where all of the ras1 tracing for the CandleNet Portal Server client goes
- C:\candle\cnplogs\kcj.log contains any errors that caused Java libraries used in the CandleNet Portal client.
- If the CandleNet Portal browser client is being used then collect the following log:
  C:\documents and settings\"current user"\plugin131_0x.trace contains all of the RAS1 tracing for the CandleNet Portal browser client and any of the Java exceptions that might have occurred

Server logs

If the problem is reported as a CandleNet Portal Server problem. Get the server logs. The CandleNet Portal Server is comprised of two processes, so there is a ras1 log for each process. If this is a reproducible problem, you might be asked to set unit traces for the CandleNet Portal Server Server and then asked to gather the logs. The CandleNet Portal Server Server logs are located at:

- kfwservices.exe C:\candle\cnps\logs\kfwras1.log kfwcmwserver.exe.
- C:\candle\cnps\logs\cmwras1.log

Both logs contain the ras1 tracing.

Also, collect the client log at the time of the error if it is available.

Client tracing

The CandleNet Portal clients have the ability to set ras1 tracing dynamically. This is done by in the CandleNet Portal client by selecting Trace Options from the File menu.

The trace parameters can then be set in the Trace Options dialog. The current trace selection field shows the current level of tracing. The Trace components field has a
list box with other trace options you can set. You can overtype the ERROR text in
the current trace selection field with the needed unit trace. For example, you may
be instructed to trace one of the CandleNet Portal client functions such as a table
view, so the error trace would be changed to something like the following:
(UNIT:TableAdapter ALL).

The tracing for the CandleNet Portal desktop client can be set through Manage
Candle Services. But this requires the client be restarted with the trace parameter
having been set before restarting. The dynamic tracing is the preferred method as it
allows for the trace to be set prior to the error and then the trace removed right
after the error takes place. This limits the amount of trace data that you send to
IBM Software Support.

Server tracing

CandleNet Portal Server tracing is very similar to the client tracing, but is a little
more complicated due to the fact that there are two CandleNet Portal Server
processes. Each process has its own tracing parameters, and setting trace in one
process has no effect on the trace settings of the other process. To successfully set
tracing parameters on the CandleNet Portal Server processes, you must have the
answers to the following questions:
1. What CandleNet Portal Server process am I setting trace for?
2. What is the trace string?
3. Is this trace to be set at startup, or after startup?

If you have been asked to obtain CandleNet Portal Server trace, but do not have
the answers to the above questions, contact the person requesting the trace, or
IBM Software Support. The procedure to set the CandleNet Portal Server trace is
determined by whether the trace is being set at startup, or after the server has
started.

To do this:
1. Open Manage Candle Services.
2. Right-click the CandleNet Portal Server entry and selecting Advanced > Edit
   TraceParms... This opens the dialog in Figure 40.

Figure 40. Selecting a server trace

By selecting one of the items in this dialog, you indicate which CandleNet Portal
Server process you intend to modify tracing parameters for:
KFWENV CandleNet Portal Server
CMWENV CandleNet Portal Server Situation Handler

KFWENV and CMWENV are the environment variable files read by their
respective process at startup.

3. Select the process you are setting trace for and click OK. This dialog is for
   KFWENV; the one for CMWENV is identical. Only the trace log file name is
different.
Enter the provided trace string into the **Enter RAS1 Filters** text box. If you are instructed to enter a value for KDC_DEBUG Setting, it can also be done from this dialog. Although you can modify the trace log file name, we recommend not doing so unless instructed by IBM Software Support.

4. Once the trace parameters have been set, click **OK**. The CandleNet Portal Server is restarted with the specified trace set. This trace option provides a high level of detail on arguments passed from client to server. In KFWenv, add this trace parameter: (UNIT:ctdatabus INPUT). All properties are decoded and traced. The data type is also noted as part of the traced values.
Part 2. References

This section provides reference information for Tivoli OMEGAMON XE for CICS on z/OS.

The following areas are included:

- Attributes
- Situations
- Workspaces
- Chapter 16, “Messages,” on page 359
Chapter 12. Attributes

CandleNet Portal gathers data from remote agents residing on systems within your CICS network. It stores this data for Tivoli OMEGAMON XE for CICS on z/OS in elements that we call attributes. Each attribute is a characteristic of an object. For example, CICS Region Name is an attribute for a specific CICS region.

**Attribute groups**

Tivoli OMEGAMON XE for CICS on z/OS attributes are grouped into numerous attribute groups of related items. For example, the attributes in the CICS Service Class Analysis group gather information about response time, transactions, and performance data. These attributes correspond to the column names in the table views and the items in the various graphic displays for bar charts and so forth.

**Attributes and workspaces**

You can view the data reported for the attributes in the tables and charts displayed in the Tivoli OMEGAMON XE for CICS on z/OS workspaces. This data enables you to

- Manage all CICS regions from a single point to identify problems at any time
- Balance workloads across various regions
- Track performance against goals

For an understanding of how individual attribute groups relate to workspaces, see Attribute Groups Used by Predefined Workspaces.

**Attributes and situations**

Various attributes are used in the predefined situations for the product. You can also use the CICS attributes in your own situations to monitor the performance of a single CICS region or multiple regions. These situations can monitor one aspect of your enterprise or analyze multiple conditions to alert you to problems and their causes.

- "Automatic Initiate Descriptor" on page 105
- "Bottleneck Analysis" on page 106
- "Connection Analysis" on page 108
- "DB2 Summary" on page 111
- "DB2 Task Activity" on page 111
- "DBCTL Summary" on page 112
- "Dispatcher Summary" on page 114
- "Dispatcher TCB Modes" on page 115
- "Dispatcher TCB Pools" on page 117
- "Dump Analysis" on page 119
- "Dump Details" on page 119
- "Dynamic Storage Detail" on page 121
- "Enqueue Analysis" on page 123
- "Enqueue Analysis Tasks" on page 124
- "File Control Analysis" on page 125
- "File Control Data Table Statistics" on page 126
- "File Control Details" on page 127
- "File Control Journal and Logging" on page 132
- "File Control Statistics" on page 133
- "File Control Summary" on page 136
- "Intercommunication Summary" on page 138
Automatic Initiate Descriptor

The Automatic Initiate Descriptor (AID) attributes report the characteristics of all of the AIDs in your CICS regions. Use this data to monitor the expiry time and date of an AID, the transaction to be initiated, any terminal related to the AID as well as the current type and status of this AID.

**AID Address**
- Is the address, in CICS storage, of this AID.

**CICS Region Name**
- Indicates the job name or modify ID of the CICS region being monitored. Each CICS region in an MVS image has a unique name. This name is an alphanumeric string, with a maximum of 8 characters, and case-sensitive. CICS region names are always in uppercase characters.

**Origin Node**
- Is the combination of MVS System ID (SMFID) and CICS region name. The value format is an alphanumeric string, maximum 32 bytes, and case-sensitive.

When a situation is true, the system compares the origin node name in the attribute to the names of managed systems assigned to the item. If the origin node name matches the name of a managed system, the status of the item changes accordingly. If the names of the origin node and the managed systems do not match, the status of the item remains unchanged.

**Request ID**
- Is a value associated with this AID at the time it was created. You can supply a request identifier in the REQID field of a START request. If a request identifier is not specified the field is blank.

**Owning System ID**
- Is the CICS region identifier of the region where this AID was created.

**Reuse Status**
- Is the name of the transaction to be executed when this AID expires.

**Status**
- Is the current status of the AID. Values can be:
  - Awaiting Init.
  - Wait for remote terminal.
  - Wait for remote transaction.
  - Shipped to remote system.
  - Wait for remote schedule.
  - Wait for target terminal.
  - Wait for unresolved TCTTE.

**System ID**
- Indicates the four-character name that uniquely identifies an active MVS operating system within a given CICSplex. The value format is an alphanumeric string, maximum 4 characters, and case-sensitive. MVS System IDs are always in uppercase characters.
Terminal ID
Is the name of the terminal specified on a START command. If a terminal was not specified the field is blank.

Transaction ID
Is the name of the transaction to be executed on completion of this AID.

Type
Displays the kind of AID that is displayed. Values can be:
- TDP Scheduled.
- ICP Initiated.
- ICP Put/Data.
- BMS Scheduled.
- ISC Scheduled.
- Remote Delete.
- Unknown Type.

User ID
Is the name of the user who executed the transaction.

Bottleneck Analysis

The Bottleneck Analysis attributes report on the various wait reasons encountered by CICSplex tasks over a fixed time interval. Use the Bottleneck Analysis attributes in situations to determine where bottlenecks are occurring. These attributes provide data for the Bottleneck Analysis table view.

CICS Region Name
Indicates the job name or modify ID of the CICS region being monitored. Each CICS region in an MVS image has a unique name. This name is an alphanumeric string, with a maximum of 8 characters, and case-sensitive. CICS region names are always in uppercase characters.

Detailed Long Term Percentage
Indicates the percent of time transactions spent waiting on specific resources during the long-term collection interval. Valid format is 0 - 100.

Detailed Short Term Percentage
Indicates the percent of time transactions spent waiting on specific resources during the short-term collection interval. Valid format is 0 - 100.

Dispatcher Call
Indicates the specific type of wait performed by the dispatcher on behalf of a wait request. Valid format is an alphanumeric string with a maximum of 9 characters.

Display Threshold
Indicates the filter used to screen out resources that have a low wait percentage. Valid format is an integer, in the range 0-100.

Group Number
Indicates the numeric identifier of the selected OMEGAMON group. If all groups are requested, this value is zero. Valid format is an integer, with a maximum of two digits, in the range 1-30.

Issuing Module
Indicates the name of the CICS module that issues the wait, or MULTIPLE, if more than one CICS module can issue the wait. Valid format is an alphanumeric string with a maximum of 8 characters.
Long Term Elapsed Time
Indicates the amount of time that has passed during the short-term collection interval. Valid format is either seconds, or hh:mm:ss.

Long Term Interval
Indicates the time span over which long-term bottleneck samples are collected. Valid format is either seconds, or hh:mm:ss.

Long Term Sample Count
Indicates the number of transactions that have participated in the long-term collection interval sample. Valid format is an integer.

Origin Node
Indicates the combination of MVS System ID (SMFID) and CICS region name. The value format is an alphanumeric string, maximum 32 bytes, and case-sensitive.

When a situation is true, the system compares the origin node name in the attribute to the names of managed systems assigned to the item. If the origin node name matches the name of a managed system, the status of the item changes accordingly. If the names of the origin node and the managed systems do not match, the status of the item remains unchanged.

Resource Name
Indicates the name of the resource on which transactions are waiting. Valid format is an alphanumeric string with a maximum of 8 characters.

Resource Subtype
Indicates the CICS designation for the variable resource type on which transactions are waiting. Valid format is an alphanumeric string with a maximum of 8 characters.

Resource Type
Indicates the CICS designation for the type of resource on which transactions are waiting. Valid format is an alphanumeric string with a maximum of 8 characters.

Resource Type/Name
Indicates the concatenation of the resource type and resource name values. Valid format is an alphanumeric string with a maximum of 17 characters.

Short Term Elapsed Time
Indicates the amount of time that has passed during the short-term collection interval. Valid format is either seconds, or hh:mm:ss.

Short Term Interval
Indicates the time span over which long-term bottleneck samples are collected. Valid format is either seconds, or hh:mm:ss.

Short Term Sample Count
Indicates the number of transactions that have participated in the short-term collection interval sample. Valid format is an integer.

Summary Short Term Percentage
Indicates the percent of time transactions spent waiting on generic resources during the short-term collection interval. Valid format is 0 - 100.

Summary Long Term Percentage
Indicates the percent of time transactions spent waiting on generic resources during the long-term collection interval. Valid format is 0 - 100.

System ID
Indicates the 4-character name that uniquely identifies an active MVS operating
system within a given CICSplex. The value format is an alphanumeric string, maximum 4 characters, and case-sensitive. MVS System IDs are always in uppercase characters.

**Task Type**
Indicates the category of tasks that can appear in this type of wait. Enumerated values are:
- **U** = User
- **S** = System
- **B** = Both

**Wait Reason Description**
A brief outline of the value found in the resource type. Valid format is an alphanumeric string with a maximum of 20 characters.

**Wait Type**
Indicates the descriptive rendition of the CICS resource type. Valid format is an alphanumeric string with a maximum of 8 characters.

---

**Connection Analysis**

The Connection Analysis attributes help you determine the efficiency of multiregion operation (MRO) and intersystem communication (ISC) links between regions within a selected CICSplex.

Use the Connection Analysis attributes in situations to analyze the balance of work across connected Application Owning Regions (AORs) and the routing of transactions from any Terminal Owning Region (TOR) to connected regions. These attributes provide data for the Connections Analysis table views.

**AIDs Queued to this Connected System**
Indicates the number of automatic initiate descriptors (AIDs) that are queued on this connection. The queuing of AIDs against the connection indicates that the connection is running at full capacity or can be out of service. If the connection is running at full capacity, you can need to redefine or increase the connection capacity. The value format is an integer, maximum 2 bytes, and in the range 0-32767.

**CICS Region Jobname**
Indicates the job name or modify ID of the CICS region being monitored. Each CICS region in an MVS image has a unique job name. This job name is used for operations initiated from the MVS system console. The value format is an alphanumeric string, maximum eight characters, and case-sensitive. CICS region names are always in uppercase characters.

**CICS Region Name**
Indicates the job name or modify ID of the CICS region being monitored. Each CICS region in an MVS image has a unique name. This name is an alphanumeric string, with a maximum of 8 characters, and case-sensitive. CICS region names are always in uppercase characters.

**CICS Region VTAM® Applid**
Indicates the eight-character name that specifies the VTAM applid of the CICS region. Each CICS region has a unique VTAM applid. The value format is an alphanumeric string, a maximum of eight characters, and is case-sensitive. VTAM applids are always in uppercase characters.

**CICS Region VTAM Generic Applid**
Indicates the eight-character name that specifies the generic VTAM applid of
the CICS region. Each CICS region has a specific and a generic VTAM applid. The value format is an alphanumeric string, a maximum of eight characters, and is case-sensitive. Generic VTAM applids are always in uppercase characters.

**Connected System Name**
Indicates the eight-character name of the system connected to this CICS region. The value format is an alphanumeric string, a maximum of eight characters, and is case-sensitive.

**Connected System VTAM Applid**
Indicates the eight-character name that specifies the VTAM applid of the system connected to this CICS region. The value format is an alphanumeric string, a maximum of eight characters, and is case-sensitive.

**Connection Name**
Indicates the name that is specified for the connection in the Terminal Control Table (TCT). The value format is an alphanumeric string, a maximum of four characters, and is case-sensitive.

**Connection Status**
Indicates the status of the connection specified in the Terminal Control Table (TCT). Values are:

<table>
<thead>
<tr>
<th>Status</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACQ INS</td>
<td>is acquired, in service with sessions bound.</td>
</tr>
<tr>
<td>AVA INS</td>
<td>is acquired, in service with no sessions bound</td>
</tr>
<tr>
<td>FRE INS</td>
<td>Freeing, in service</td>
</tr>
<tr>
<td>OBT INS</td>
<td>Obtaining, in service</td>
</tr>
<tr>
<td>PENDING</td>
<td>Named connection is not yet available. The remote scheduler has not yet completed processing.</td>
</tr>
<tr>
<td>REL INS</td>
<td>Released, in service</td>
</tr>
<tr>
<td>REL OUT</td>
<td>Released, out of service</td>
</tr>
<tr>
<td>SIMLOGON</td>
<td>CICS issues a VTAM logon request to start a session with a device, and the request has not completed</td>
</tr>
<tr>
<td>Unknown</td>
<td>Unable to determine connection status</td>
</tr>
</tbody>
</table>

**Connection Type**
Indicates the type of connection between the selected region and this region. The valid connection types are ISC, MRO, and cross-system coupling facility (XCF). Values are:

- IRC EXCI
- IRC XCF
- IRC XM
- IRC SRB
- ISC LU61
- ISC LU62
- Unknown

<table>
<thead>
<tr>
<th>Region</th>
<th>Requests</th>
</tr>
</thead>
<tbody>
<tr>
<td>CONA</td>
<td>80 requests</td>
</tr>
<tr>
<td>CONB</td>
<td>20 requests</td>
</tr>
<tr>
<td>CONC</td>
<td>100 requests</td>
</tr>
<tr>
<td>COND</td>
<td>0 requests</td>
</tr>
</tbody>
</table>

**Link Allocation Rate**
Indicates the rate (per minute) at which link allocations are occurring. This is a
guide to the level of activity across the connection. The value format is a positive integer and a maximum of four characters.

**Number of Links Defined**
Indicates the total number of links defined for this connection type. The value format is a positive integer and a maximum of four characters.

**Number of Links in Use**
Indicates the number of links in use for this connection type. The value format is a positive integer and a maximum of four characters.

**Number of Primary Links Defined**
Indicates the number of receive links that are defined for the connection. The value format is a positive integer and a maximum of four characters.

**Number of Primary Links in Use**
Indicates the number of primary links that are currently in use. The value format is a positive integer and a maximum of four characters.

**Number of Secondary Links Defined**
Indicates the number of secondary sessions defined for this connection. The value format is a positive integer and a maximum of four characters.

**Number of Secondary Links in Use**
Indicates the number of secondary links in use. The value format is a positive integer and a maximum of four characters.

**Origin Node**
Is the combination of MVS System ID (SMFID) and CICS region name. The value format is an alphanumeric string, maximum 32 bytes, and case-sensitive.

When a situation is true, the system compares the origin node name in the attribute to the names of managed systems assigned to the item. If the origin node name matches the name of a managed system, the status of the item changes accordingly. If the names of the origin node and the managed systems do not match, the status of the item remains unchanged.

**Percent of Links in Use**
Indicates the percent of defined links for this connection type that are in use. The value format is a percentage in the range 0-100. Example: If 10 links for this connection type are defined and three are in use, then the value for this item is 30%.

**Percent of Primary Links in Use**
Indicates the percentage of primary links in use. The value format is a percentage in the range 0-100. Example: If 10 links for this connection type are defined and 3 are in use, then the value for this item is 30%.

**Percent of Secondary Links in Use**
Indicates the percentage of secondary links in use. This percentage is determined by dividing the total number of links in use by the total number of links defined and multiplying that number by 100. The value format is a percentage in the range 0-100.

**System ID**
Indicates the four-character name that uniquely identifies an active MVS operating system within a given CICSpex. The value format is an alphanumeric string, maximum 4 characters, and case-sensitive. MVS System IDs are always in uppercase characters.
DB2 Summary

The DB2® Summary attributes report on the DB2 status for each monitored CICS region.

Use the DB2 Summary attributes in situations to determine if a monitored CICS region is attached to DB2. These attributes provide data for the DB2 Summary table view.

Attached to DB2
Indicates whether the CICS region is attached to DB2.

Attached to DB2 at Shutdown
Indicates whether the CICS region is attached to DB2 at shutdown. This data only applies to CICS TS 1.1 and earlier releases.

CICS Region Name
Indicates the job name or modify ID of the CICS region being monitored. Each CICS region in an MVS image has a unique name. This name is an alphanumeric string, with a maximum of 8 characters, and case-sensitive. CICS region names are always in uppercase characters.

Origin Node
Is the combination of MVS System ID (SMFID) and CICS region name. The value format is an alphanumeric string, maximum 32 bytes, and case-sensitive.

When a situation is true, the system compares the origin node name in the attribute to the names of managed systems assigned to the item. If the origin node name matches the name of a managed system, the status of the item changes accordingly. If the names of the origin node and the managed systems do not match, the status of the item remains unchanged.

DB2 Subsystem Name
Is the subsystem identifier associated with DB2. The value is an alphanumeric string, with a maximum of 4 bytes.

System ID
Indicates the four-character name that uniquely identifies an active MVS operating system within a given CICSplex. The value format is an alphanumeric string, a maximum of four characters, and is case-sensitive. MVS System IDs are always in uppercase characters.

DB2 Task Activity

The DB2 Task Activity attributes report on the task activity for each monitored CICS region.

Use the DB2 Task Activity attributes in situations to determine if the percentage of waits per DB2 resource control table (RCT) entry is high. These attributes provide data for the DB2 Task Activity table view.

Abort Percent
Indicates the percentage of abending DB2 transactions. The value format is a percentage in the range 0-100.

CICS Region Name
Indicates the job name or modify ID of the CICS region being monitored. Each CICS region in an MVS image has a unique name. This name is an
alphanumeric string, with a maximum of 8 characters, and is case-sensitive. CICS region names are always in uppercase characters.

**Maximum Active Threads**
Indicates the maximum active threads per DB2 resource control table (RCT) entry. This attribute does not report values in releases of CICS Transaction Server 1.2 and later. The value format is an integer, a maximum of two bytes, and in the range of 0-32767.

**Origin Node**
Is the combination of MVS System ID (SMFID) and CICS region name. The value format is an alphanumeric string, maximum 32 bytes, and case-sensitive. When a situation is true, the system compares the origin node name in the attribute to the names of managed systems assigned to the item. If the origin node name matches the name of a managed system, the status of the item changes accordingly. If the names of the origin node and the managed systems do not match, the status of the item remains unchanged.

**System ID**
Indicates the four-character name that uniquely identifies an active MVS operating system within a given CICSplex. The value format is an alphanumeric string, a maximum of four characters, and is case-sensitive. MVS System IDs are always in uppercase characters.

**Threads in Use Percent**
Indicates the percentage of DB2 threads in use per DB2 resource control table (RCT) entry. The value format is a percentage in the range 0-100.

**Threads in Use Percent HWM**
Indicates the percentage of the peak number (high-water-mark) of active threads for the DB2 entry. The value format is a percentage in the range 0-100.

**Transaction ID**
Indicates the ID of the transaction that is using the CICS-DB2 attachment facility. The value format is an alphanumeric string, a maximum of four characters, and is case-sensitive.

**Wait Percent**
Indicates the percentage of waits per DB2 resource control table (RCT) entry. The value format is a percentage in the range 0-100.

---

**DBCTL Summary**

The DBCTL Summary attributes report on the status of the CICS database control (DBCTL) interface for each monitored CICS region.

Use the DBCTL Summary attributes in situations to determine if DBCTL is active. These attributes provide data for the DBCTL Summary table view.

**CICS Region Name**
Indicates the job name or modify ID of the CICS region being monitored. Each CICS region in an MVS image has a unique name. This name is an alphanumeric string, with a maximum of 8 characters, and case-sensitive. CICS region names are always in uppercase characters.

**DBCTL Active**
Indicates whether the CICS Database Control facility for IMS™ (DBCTL) is active.
DBCTL Subsystem Name
Is the subsystem identifier associated with DBCTL. The value format is an alphanumeric string, maximum 4 bytes.

DLI DB Monitor Active
Indicates whether or not the DL/I Database Monitor is active. The DB Monitor has high overhead and can potentially impact both DL/I and CICS performance. This field only applies to CICS Version 4.1. Enumerated values are:
- Yes
- No

DLI Percent DMB Pool Use
Indicates the percent utilization of the Data Management Block (DMB) storage pool. The DMB pool is acquired from the CICS dynamic storage area and should be set large enough to accommodate all DMBs used in CICS, including shared databases. If the pool is not large enough, operating system close/open of databases can become necessary to service new database requests. The value format is a percentage in the range 0 - 100. This field only applies to CICS Version 4.1.

DLI Percent ENQ Pool Use
Indicates the DL/I enqueue pool utilization expressed as a percentage. The maximum amount of storage that can be used is set by the ENQPL parameter of the SIT. PI enqueue pool storage is GETMAINed out of OSCOR, and a transaction that cannot be serviced because of an OSCOR shortage, or because the ENQPL maximum has been reached, is abended with a U0775. The value format is a percentage in the range 0 - 100. This field only applies to CICS Version 4.1.

DLI Percent PSB Pool Use
Indicates the percent utilization of the Program Specification Block (PSB) storage pool. The PSB pool is acquired from the CICS dynamic storage area and should be set large enough to accommodate all PSBs used in CICS, including shared databases. If the pool is not large enough, operating system close/open of databases can become necessary to service new database requests. The value format is a percentage in the range 0 - 100. This field only applies to CICS Version 4.1.

DLI Percent Thread Use
Indicates the percentage of IMS DL/I threads in use. When this value reaches 100%, tasks are placed in a wait condition until threads become available. The value format is a percentage in the range 0 - 100. This field only applies to CICS Version 4.1.

Origin Node
Is the combination of MVS System ID (SMFID) and CICS region name. The value format is an alphanumeric string, maximum 32 bytes, and case-sensitive.

When a situation is true, the system compares the origin node name in the attribute to the names of managed systems assigned to the item. If the origin node name matches the name of a managed system, the status of the item changes accordingly. If the names of the origin node and the managed systems do not match, the status of the item remains unchanged.

System ID
Indicates the four-character name that uniquely identifies an active MVS operating system within a given CICSp lex. The value format is an alphanumeric string, a maximum of four characters, and is case-sensitive. MVS System IDs are always in uppercase characters.
Dispatcher Summary

The Dispatcher Summary attributes report TCB activity. This includes the number of TCB modes and pools associated with each CICS region, the current and peak number of tasks attached to the CICS region, the current exit interval, the runaway task time, and the terminals scan delay time.

**Average TCBs Detached**
- Is the average number of MVS TCBs that have been detached by each scan of the CICS dispatcher’s excess MVS TCB management processing.

**CICS Region Name**
- Indicates the job name or modify ID of the CICS region being monitored. Each CICS region in an MVS image has a unique name. This name is an alphanumeric string, with a maximum of 8 characters, and case-sensitive. CICS region names are always in uppercase characters.

**Concurrent Subtasks**
- Is the current number of subtasks. It is the current value of the CICS SUBTSKS parameter.

**CPU Time since reset**
- Is the accumulated CPU time since statistics were last reset.

**Current® Attached TCBs**
- Is the current number of CICS TCBs attached in this region. TCBs attached in all CICS TCB Modes contribute to this count.

**Current ICV Time**
- Is the current region exit interval (ICV) in milliseconds. The region exit interval is the amount of time (in milliseconds), for which CICS releases control to the operating system if no transactions are ready to resume processing. It is the current value of the CICS ICV parameter as specified in the SIT. It can be changed dynamically using CEMT SET SYSTEM TIME(value) or EXEC CICS SET SYSTEM TIME(fullword binary data-value) commands.

**Current ICVR Time**
- Is the runaway task time interval (ICVR) in milliseconds. It is the current value of the CICS ICVR parameter as specified in the SIT. It can be changed dynamically using CEMT SET SYSTEM TIME(value) or EXEC CICS SET SYSTEM TIME(fullword binary data-value) commands.

**Current ICVTSD Time**
- Is the terminal scan delay time (ICVTSD) in milliseconds. It is the current value of the CICS ICVTSD parameter as specified in the SIT. It can be changed dynamically using CEMT SET SYSTEM TIME(value) or EXEC CICS SET SYSTEM TIME(fullword binary data-value) commands.

**Current Number of Tasks**
- Is the current number of tasks attached in this CICS region.

**Current PRTYAGING Time**
- Is the priority aging value (PRTYAGE) in milliseconds. It is the current value of the CICS PRTYAGING parameter.

**Current Used TCBs**
- Is the current number of CICS TCBs attached in this region which are in use. TCBs attached and in use in all CICS TCB Modes contribute to this count.

**Excess TCB Scans**
- Is the number of Excess TCB scans performed by the dispatcher.
MRO (QR) Batching value
Is the MRO batching value (MROBATCH). It is the current value of the CICS MROBATCH parameter.

Number of TCB Modes
Is the number of TCB Modes defined to this CICS region.

Number of TCB Pools
Is the number of TCB pools defined to this CICS region.

Origin Node
Is the combination of MVS System ID (SMFID) and CICS region name. The value format is an alphanumeric string, maximum 32 bytes, and case-sensitive.

When a situation is true, the system compares the origin node name in the attribute to the names of managed systems assigned to the item. If the origin node name matches the name of a managed system, the status of the item changes accordingly. If the names of the origin node and the managed systems do not match, the status of the item remains unchanged.

Peak Number of Tasks
Is the peak number of tasks attached in this CICS region.

SRB Time since reset
Is the accumulated SRB time since statistics were last reset.

Start Time
Is the time at which the dispatcher subtask was initialized.

System ID
Indicates the four-character name that uniquely identifies an active MVS operating system within a given CICSPlex. The value format is an alphanumeric string, maximum 4 characters, and case-sensitive. MVS System IDs are always in uppercase characters.

TCB Scans with a Detach
Is the number of excess TCB scans performed by the CICS dispatcher in which a TCB was detached.

TCB Scans with no Detach
Is the number of excess TCB scans performed by the CICS dispatcher in which no TCBs were detached.

Dispatcher TCB Modes

The Dispatcher TCB Mode attributes report CICS dispatcher TCB mode information in an active system that is being managed by CICSPlex® SM.

Accumulated time spent in MVS Waits
Is the accumulated real time that the CICS region was in an MVS wait, that is, the total time used between an MVS wait issued by the dispatcher and the return from the MVS wait. It is measured in milliseconds.

CICS Region Name
Indicates the job name or modify ID of the CICS region being monitored. Each CICS region in an MVS image has a unique name. This name is an alphanumeric string, with a maximum of 8 characters, and case-sensitive. CICS region names are always in uppercase characters.
**CPU Time for dispatcher task**
Is the accumulated CPU time taken for this DS task, that is, the processor time used by this TCB while executing the default dispatcher task (DSTCB). It is measured in milliseconds.

**Current TCBs Attached**
Is the current number of MVS TCBs attached in this CICS dispatcher TCB mode.

**Current TCBs in Use**
Is the current number of MVS TCBs in use in this CICS dispatcher TCB mode.

**Mode Name**
Is the name of the CICS Dispatcher TCB mode, either QR, RO, CO, SZ, RP, FO, SL, SO, S8, D2, JM, L8, J8 or J9.

**Mode Pool**
Is the name of the CICS TCB pool, either OPEN, JVM, or HP.

**Number of excess detaches**
Is the number of MVS TCBs that have been, or are in the process of being, detached from this CICS dispatcher TCB mode because of the dispatcher excess TCB management processing.

**Number of other detaches**
Is the number of MVS TCBs that have been, or are in the process of being, detached from this CICS dispatcher TCB mode. This might be because, for example, the limit for the number of TCBs allowed in the TCB pool has been lowered, or there are too many TCBs attached in relation to the number of TCBs in use.

**Number of stolen detaches**
Is the number of MVS TCBs that have been, or are in the process of being, stolen from this CICS dispatcher TCB mode because it is required by another TCB mode.

**Number of unclean detaches**
Is the number of MVS TCBs that have been, or are in the process of being, detached from this CICS dispatcher TCB mode because the CICS transaction that was associated with the TCB has abended.

**Number of partition exits**
Is the number of partition exits that have occurred for this TCB mode.

**Number of TCB mismatches**
Is the number of MVS TCB mismatches that have occurred for this TCB mode.

**Number of TCB steals**
Is the number of MVS TCBs that have been stolen from other TCB modes.

**Open**
Indicates whether the CICS dispatcher TCB mode is open, not open or unknown. A CICS dispatcher TCB mode of type 'unknown' indicates that this TCB mode has not been activated.

**Origin Node**
Is the combination of MVS System ID (SMFID) and CICS region name. The value format is an alphanumeric string, maximum 32 bytes, and case-sensitive.

When a situation is true, the system compares the origin node name in the attribute to the names of managed systems assigned to the item. If the origin node name matches the name of a managed system, the status of the item
changes accordingly. If the names of the origin node and the managed systems
do not match, the status of the item remains unchanged.

**Peak TCB Attached**
Is the peak number of MVS TCBs attached in this CICS dispatcher TCB mode.

**Peak TCBs in use**
Is the peak number of MVS TCBs in use in this CICS dispatcher TCB mode.

**System ID**
Indicates the four-character name that uniquely identifies an active MVS
operating system within a given CICSPlex. The value format is an alphanumeric
string, maximum 4 characters, and case-sensitive. MVS System IDs are always
in uppercase characters.

**TCBs Allocated**
Is the number of times that a TCB was allocated to a task.

**TCB Attaches**
Is the number of MVS TCBs that have been attached in this CICS dispatcher
TCB mode.

**TCB Attach Failures**
Is the number of MVS TCB attach failures that have occurred in this CICS
dispatcher TCB mode.

**Total time TCB has been dispatched by MVS**
Is the accumulated real time that this TCB has been dispatched by MVS, that
is, the total time used between an MVS wait issued by the dispatcher and the
subsequent wait issued by the dispatcher. It is measured in milliseconds.

**Total CPU time used by this TCB**
Is the accumulated CPU time taken for this TCB, that is, the total time that this
TCB has been in execution. It is measured in milliseconds.

---

**Dispatcher TCB Pools**

The Dispatcher TCB Pools attributes report extends CICS dispatcher TCB pool
information in an active system managed by CICSPlex SM.

**CICS Region Name**
Indicates the job name or modify ID of the CICS region being monitored. Each
CICS region in an MVS image has a unique name. This name is an
alphanumeric string, with a maximum of 8 characters, and case-sensitive. CICS
region names are always in uppercase characters.

**Current tasks waiting**
Is the current number of tasks waiting for this TCB.

**Current TCBs Attached**
Is the current number of TCBs attached in the CICS dispatcher TCB modes that
reside in this TCB pool.

**Current TCB in Use**
Is the current number of CICS TCBs attached in this TCB pool and being used.

**Current TCB Mismatch Waits**
Is the current number of TCB mismatch waits by TCB requests using this pool.

**Current TCB Mismatch Wait Time**
Is the current wait time for current TCB mismatch waits by TCB requests using
this pool. The time is measured in milliseconds.
Current Waiting Time
Is the current delay time for the TCB requests that are currently delayed because the system has reached the limit for the number of TCBs allowed in this pool.

Maximum TCBs
Is the value for the maximum number of TCBs allowed in this pool. The value is specified in the system initialization parameter MAXOPENTCBS (for the open TCBs pool) or MAXJVMTCBS (for the JVM TCBs pool). It can be changed by an override, or changed dynamically using CEMT SET SYSTEM MAXxxxxTCBS(value) or EXEC CICS SET SYSTEM MAXxxxxTCBS (fullword binary data-value) commands.

Origin Node
Is the combination of MVS System ID (SMFID) and CICS region name. The value format is an alphanumeric string, maximum 32 bytes, and case-sensitive.

When a situation is true, the system compares the origin node name in the attribute to the names of managed systems assigned to the item. If the origin node name matches the name of a managed system, the status of the item changes accordingly. If the names of the origin node and the managed systems do not match, the status of the item remains unchanged.

Peak Tasks Waiting
Is the peak number of TCB requests that were delayed because the system had reached the limit for the number of TCBs allowed in this pool.

Peak TCBs Attached
Is the peak number of TCBs attached in the CICS dispatcher TCB mode that reside in this TCB pool.

Peak TCB in Use
Is the peak number of CICS TCBs used that were attached in this TCB pool.

Peak TCB Mismatch Waits
Is the peak number of TCB mismatch waits by TCB requests using this pool.

System ID
Indicates the four-character name that uniquely identifies an active MVS operating system within a given CICSpix. The value format is an alphanumeric string, maximum 4 characters, and case-sensitive. MVS System IDs are always in uppercase characters.

TCB Mismatch Waits
Is the total number of TCB mismatch waits, that is, TCB requests that waited because there was no TCB available matching the request, but there was at least one non-matching free TCB. For J8 and J9 mode TCBs in the JVM pool, this shows the requests that waited for a TCB of the correct mode (J8 or J9) and JVM profile.

TCB Mismatch Wait Time
Is the total time spent in TCB mismatch waits by TCB requests using this pool.

TCB Pool Name
Is the name of the TCB pool in which this CICS dispatcher TCB mode is defined, either N/A, OPEN, JVM, or HP.

TCB Requests Delayed for MVS Storage
Is the total number of MVS storage requests that have waited because no TCB was available, and none could be created because of MVS storage constraints.
**Times at Limit**
Is the number of times the system reached the limit for the number of TCBs allowed in this pool (MAXOPENTCBS or MAXJVMTCBS).

**Total Number of Waits**
Is the total number of MVS storage waits by TCB requests using this pool.

**Total Time waiting for MVS storage**
Is the total time spent in MVS storage waits by TCB requests using this pool.

**Total Wait Times at TCB limit**
Is the total wait time of TCBs that have reached the pool limit. The time is measured in milliseconds.

---

### Dump Analysis

The Dump Analysis attribute group provides information on current dump activity and statistics on any dumps.

**CICS Region Name**
Indicates the job name or modify ID of the CICS region being monitored. Each CICS region in an MVS image has a unique name. This name is an alphanumeric string, with a maximum of 8 characters, and case-sensitive. CICS region names are always in uppercase characters.

**Origin Node**
Is the combination of MVS System ID (SMFID) and CICS region name. The value format is an alphanumeric string, maximum 32 bytes, and case-sensitive.

When a situation is true, the system compares the origin node name in the attribute to the names of managed systems assigned to the item. If the origin node name matches the name of a managed system, the status of the item changes accordingly. If the names of the origin node and the managed systems do not match, the status of the item remains unchanged.

**System ID**
Indicates the four-character name that uniquely identifies an active MVS operating system within a given CICSplex. The value format is an alphanumeric string, maximum 4 characters, and case-sensitive. MVS System IDs are always in uppercase characters.

**System Dumps**
Indicates the number of system dumps that have been generated. The value format is an integer of maximum four bytes.

**System Dumps in Last Hour**
Indicates the number of system dumps that have occurred within the last 60 minutes. Comprehensive systems dumps are initiated by users or can occur in the event of a major error. These dumps are written to the system dump data set, SYS1.DUMPnn. The value format is an integer of a maximum of four bytes.

**Taking SDUMP**
Indicates a CICS request for a system dump. Valid values are: Yes

---

### Dump Details

The dump statistics attributes report the status of both system and transaction dumps related to each CICS region.
CICS Region Name
Indicates the job name or modify ID of the CICS region being monitored. Each CICS region in an MVS image has a unique name. This name is an alphanumeric string, with a maximum of 8 characters, and case-sensitive. CICS region names are always in uppercase characters.

CICS Shutdown Option
Indicates whether the current CICS region will shut down after taking a dump of the current type. Values are Yes or No.

Maximum number of dumps allowed
Shows the maximum number of dumps allowed by the current CICS regions. The value format is an integer of maximum four bytes.

MVS DAE Option
Is the MVS system dump analysis and elimination indicator. This indicates whether these system dump requests are to be sent to the CICS regions or performed locally. This indicates whether these system dump codes are eligible for suppression by the MVS dump analysis and elimination (DAE) component. Values are Yes, No, or N/A.

Origin Node
Is the combination of MVS System ID (SMFID) and CICS region name. The value format is an alphanumeric string, maximum 32 bytes, and case-sensitive.

When a situation is true, the system compares the origin node name in the attribute to the names of managed systems assigned to the item. If the origin node name matches the name of a managed system, the status of the item changes accordingly. If the names of the origin node and the managed systems do not match, the status of the item remains unchanged.

System Dump Code
Is the system dump code identifier. This is the identifier of the system dump that occurred in the current CICS region. It is an alphanumeric string, with a maximum of 8 characters.

System Dump Option
Indicates whether system dump requests for the current code are to be executed or suppressed. Values are Yes or No.

Dump Scope
Indicates whether the system or transaction dump requests are to be sent to the CICS regions or performed locally. This is an alphanumeric string, with a maximum of 12 characters.

System Dumps Suppressed
Is the number of system dumps that have been suppressed within the current recording period. The count of system dumps suppressed by the current CICS region within the current statistics recording period. The value format is an integer of maximum four bytes.

System Dumps Taken
Is the number of system dumps that have been taken within the current recording period. The count of system dumps taken by the current CICS region within the current statistics recording period. The value format is an integer of maximum four bytes.

System Dump Total
Is the number of system dumps taken since CICS was started. The count of system dumps taken by the current CICS region since startup. The value format is an integer of maximum four bytes.
System ID
Indicates the four-character name that uniquely identifies an active MVS operating system within a given CICSpex. The value format is an alphanumeric string, maximum 4 characters, and case-sensitive. MVS System IDs are always in uppercase characters.

Transaction Dump Code
Is the transaction dump code identifier. This is the identifier of the transaction dump that occurred in the current CICS region. This name is an alphanumeric string, with a maximum of 8 characters.

Transaction Dump Option
Indicates whether transaction dump requests for the current code are to be executed or suppressed. Values are Yes, No, or N/A.

Transaction Dumps Suppressed
Is the number of transaction dumps that have been suppressed within the current recording interval. The count of transaction dumps suppressed by the current CICS region within the current statistics recording period. The value format is an integer of maximum four bytes.

Transaction Dumps Taken
Is the number of transaction dumps that have been taken within the current recording period. The count of transaction dumps taken by the current CICS region within the current statistics recording period. The value format is an integer of maximum four bytes.

Transaction Dump Total
Is the number of transaction dumps taken since CICS was started. The count of transaction dumps taken by the current CICS region since startup. The value format is an integer of maximum four bytes.

Dynamic Storage Detail
The Dynamic Storage Detail attribute group reports the size, free space, number of GETMAINs and FREEMAINs, and the number of time Short-On-Storage occurred for the selected Dynamic Storage Area (DSA).

ADD Subpool Requests
Is the number of ADD_SUBPOOL requests. They are used to create a subpool (domain or task) from the CDSA, UDSA, SDSA, RDSA, ECDSA, EUDSA, ESDSA, or ERDSA.

Area
Is the name of a specific Dynamic or Extended Dynamic Storage Area. Values can be 'CDSA', 'UDSA', 'SDSA', 'RDSA', 'ECDSA', 'EUDSA', 'ESDSA', and 'ERDSA'.

CICS Region Name
Indicates the job name or modify ID of the CICS region being monitored. Each CICS region in an MVS image has a unique name. This name is an alphanumeric string, with a maximum of 8 characters, and case-sensitive. CICS region names are always in uppercase characters.

Current Tasks Suspended
Is the number of tasks currently suspended for storage.

Cushion Released
Is the number of times a GETMAIN request caused the storage cushion to be released. The cushion is said to be released when the number of free pages
drops below the number of pages in the cushion and there are no more free
extents available to increase the size of this DSA.

Cushion Size
Is the size of the cushion, expressed in kilobytes. The cushion forms part of the
CDSA, UDSA, SDSA, RDSA, ECDSA, EUDSA, ESDSA, or ERDSA, and is the
amount of storage below which CICS goes SOS.

DEL Subpool Requests
Is the number of DELETE_SUBPOOL requests (domain or task) from the
CDSA, UDSA, SDSA, RDSA, ECDSA, EUDSA, ESDSA, or ERDSA.

Extents Allocated
Is the number of extents currently allocated to this dynamic storage area.

Extents in Use
Is the number of extents currently in use for this dynamic storage area.

Freemain Requests
Is the number of FREEMAIN requests from the CDSA, UDSA, SDSA, RDSA,
ECDSA, EUDSA, ESDSA, or ERDSA.

GETMAIN Failures
Is the number of GETMAIN requests that have failed because of insufficient
storage. The GETMAIN request is either purged or suspended depending on its
definitions (SUSPEND(NO) or SUSPEND(YES)).

GETMAIN Requests
Is the number of GETMAIN requests from the CDSA, UDSA, SDSA, RDSA,
ECDSA, EUDSA, ESDSA, or ERDSA.

HWM Free Space
Is the peak size of the CDSA, UDSA, SDSA, RDSA, ECDSA, EUDSA, ESDSA,
or ERDSA, expressed in bytes since that last time that statistics were recorded.

HWM Tasks Suspended
Is the high-water mark of tasks suspended.

Largest Free Area
Is the length of the largest contiguous free area in the CDSA, UDSA, SDSA,
RDSA, ECDSA, EUDSA, ESDSA, or ERDSA, expressed in bytes. To get an
indication of the storage fragmentation in this DSA, compare this value with
"Storage Available" in the DSA. If the ratio is large, this DSA is fragmented.

LWM Free Space
Is the low-water mark of available storage area.

Origin Node
Is the combination of MVS System ID (SMFID) and CICS region name. The
value format is an alphanumeric string, maximum 32 bytes, and case-sensitive.
When a situation is true, the system compares the origin node name in the
attribute to the names of managed systems assigned to the item. If the origin
node name matches the name of a managed system, the status of the item
changes accordingly. If the names of the origin node and the managed systems
do not match, the status of the item remains unchanged.

Page Size
Is the size of one page of storage in kilobytes.

Percent Used
Is the percentage of storage area used.
**Requests Purged**
Is the number of requests which were purged while suspended for storage.

**SOS**
Is the number of times CICS went SOS. Where SOS means either that the cushion is currently in use and/or there is at least one task suspended for storage.

**Statistics Last Reset**
Is the last time that CICS statistics were reset.

**Storage Allocated**
Is the amount of storage currently allocated in kilobytes.

**Storage Available**
Is the amount of free storage in this DSA, that is the number of free pages multiplied by the page size (4K), expressed in kilobytes.

**Storage in Use**
Is the amount of storage currently in use in kilobytes.

**Storage Violations**
Is the number of storage violations recorded in the CDSA, UDSA, SDSA, or the RDSA.

**System ID**
Indicates the four-character name that uniquely identifies an active MVS operating system within given CICS regions. The value format is an alphanumeric string, maximum 4 characters, and case-sensitive. MVS System IDs are always in uppercase characters.

**Time Last Went SOS**
Is the last time Short-On-Storage occurred.

**Total Tasks Suspended**
Is the total number of times a GETMAIN request with SUSPEND(YES) was suspended because of insufficient storage to satisfy the request.

**Total Times SOS**
Is the total number of times Short-On-Storage occurred

---

**Enqueue Analysis**

The CICSplex Enqueue Analysis attribute group displays the number of tasks waiting for an enqueue and each enqueue name or address.

**CICS Region Name**
Indicates the job name or modify ID of the CICS region being monitored. Each CICS region in an MVS image has a unique name. This name is an alphanumeric string, with a maximum of 8 characters, and case-sensitive. CICS region names are always in uppercase characters.

**Enqueue Resource Hex**
Indicates the serially reusable resource name in hexadecimal format. The value format is an alphanumeric string of a maximum of 510 characters.

**Enqueue Resource**
Indicates the name of the enqueued resource. The value format is an alphanumeric string of a maximum of 255 characters.

**Enqueue Scope**
Indicates the scope of the resource enqueue. Values are: Local or Sysplex
Owning Region Name
Indicates the job name or modify ID of the CICS region that owns the resource. The value format is an alphanumeric string of a maximum of eight characters.

Owning System ID
Indicates the SMF ID of the MVS operating system which runs the CICS region that owns the resource. The value format is an alphanumeric string of a maximum of four characters.

Queue Element
Indicates the address of the resource queue element. The value format is an integer of a maximum of four bytes.

Resource Length
Indicates the length of the resource name. The value format is an integer of a maximum of four bytes.

Resource Type
Indicates the format of the serially reusable resource name. The valid values are: Address or Variable.

Scope Name
Indicates the name assigned in the ENQSCOPE resource definition of CICS that is appended to the characters "DFHE" for the QNAME. The value format is an alphanumeric string a maximum of four characters.

Sysplex Name
Indicates the name assigned to the SYSPLEX configuration that owns the serially reusable resource. The value format is an alphanumeric string a maximum of eight characters.

System ID
Indicates the four-character name that uniquely identifies an active MVS operating system within a given CICSplex. The value format is an alphanumeric string, maximum 4 characters, and case-sensitive. MVS System IDs are always in uppercase characters.

Wait Count
Indicates the number of enqueue conflicts, which are tasks waiting for an available resource. The value format is an integer of a maximum of four bytes.

Enqueue Analysis Tasks

The Enqueue Analysis Task attribute group displays the transactions that are either holding or waiting for a particular resource.

CICS Region Name
Indicates the job name or modify ID of the CICS region being monitored. Each CICS region in an MVS image has a unique name. This name is an alphanumeric string, with a maximum of 8 characters, and case-sensitive. CICS region names are always in uppercase characters.

Enqueue Resource Hex
Indicates the serially resusable resource name in hexadecimal format. The value format is an alphanumeric string a maximum of 510 characters.

Enqueue Scope
Indicates the scope of the resource enqueue. The valid values are: Local Variable
Scope Name
Indicates the name assigned in the ENQSCOPE resource definition of CICS that is appended to the characters “DFHE” for the QNAME. The value format is an alphanumeric string of a maximum of four characters.

Sysplex Name
Indicates the name assigned to the SYSPLEX configuration that owns the serially reusable resource. The value format is an alphanumeric string of a maximum of eight characters.

System ID
Indicates the four-character name that uniquely identifies an active MVS operating system within a given CICSpex. This value is a concatenation MVS System ID (SMFID) and the CICS region name. The value format is an alphanumeric string, a maximum of four characters, that is case-sensitive. MVS System IDs are always in uppercase characters. Therefore, the valid values for this item should always be in uppercase characters.

Task Number
Indicates the number that was sequentially assigned by CICS to uniquely identify the task. The value format is an integer of a maximum of four bytes.

Task Status
Indicates whether the task is holding or waiting for the serially reusable resource. The valid values include: Owning

File Control Analysis

The File Control Analysis Task attribute group provides status information about the VSAM data sets allocated to the CICS region. You can use this to determine the number of tasks that are waiting to access VSAM data sets because of a shortage of either buffers or strings.

CICS Region Name
Indicates the job name or modify ID of the CICS region being monitored. Each CICS region in an MVS image has a unique name. This name is an alphanumeric string, with a maximum of 8 characters, and case-sensitive. CICS region names are always in uppercase characters.

Origin Node
Is the combination of MVS System ID (SMFID) and CICS region name. The value format is an alphanumeric string, maximum 32 bytes, and case-sensitive.

When a situation is true, the system compares the origin node name in the attribute to the names of managed systems assigned to the item. If the origin node name matches the name of a managed system, the status of the item changes accordingly. If the names of the origin node and the managed systems do not match, the status of the item remains unchanged.

Number of Tasks with Buffer Waits
Indicates the number of tasks that are waiting on buffers for VSAM files. If there are multiple buffer waits, you can allocate more buffers. The value format is a positive integer of maximum four bytes.

Number of Tasks with String Waits
Indicates the number of tasks that are waiting on strings for VSAM files. If there are multiple string waits, you can allocate more strings. The value format is a positive integer of maximum four bytes.
RLS Enabled
Indicates whether CICS is registered with the SMS VSAM control ACB. Values are: Yes or No

System ID
Indicates the four-character name that uniquely identifies an active MVS operating system within a given CICSpex. This value is a concatenation MVS System ID (SMFID) and the CICS region name. The value format is an alphanumeric string, a maximum of four characters, that is case-sensitive. MVS System IDs are always in uppercase characters. Therefore, the values for this item should always be in uppercase characters.

File Control Data Table Statistics
The File Control Data Table Statistics attribute group provides data for those files that are data tables.

Adds Failed for full
Is the number of records CICS attempted to add to the table but was unable to do so because the table already contained the maximum number of records specified.

Adds Loads Rejected
Is the number of records CICS attempted to add to the table which were rejected by the global user exit.

CICS Region Name
Indicates the job name or modify ID of the CICS region being monitored. Each CICS region in an MVS image has a unique name. This name is an alphanumeric string, with a maximum of 8 characters, and case-sensitive. CICS region names are always in uppercase characters.

Current Entries in Use
Is the current number of data table entries in use.

Current Number of Entries
Is the current number of data table entries.

Data table Available
Identifies whether a data table is recoverable.

Data table Loaded
Identifies whether a data table is loaded.

Data table Recoverable
Identifies whether a data table is recoverable.

Data table Size
Is the size of a data table.

Data table Status
Is the Open/Close status of a data table.

Data table Type
Is the type of a data table.

Failing Reads
Is the number of failing reads.

File Name
Is the name of the file.
Highest Number of Entries
Is the high-water-mark of data table entries.

Loads Failed for full
Is the number of loads failed for full.

Lost Records
Indicates if records were lost or data table incomplete.

Max Entries Allowed in Use
Is the maximum number of data table entries allowed in use.

Maximum Number of Entries
Is the maximum number of data table entries.

Origin Node
Is the combination of MVS System ID (SMFID) and CICS region name. The value format is an alphanumeric string, maximum 32 bytes, and case-sensitive.

When a situation is true, the system compares the origin node name in the attribute to the names of managed systems assigned to the item. If the origin node name matches the name of a managed system, the status of the item changes accordingly. If the names of the origin node and the managed systems do not match, the status of the item remains unchanged.

Records Added
Is the number of data table records added.

Records Loaded
Is the number of data table records loaded.

Successful Deletes
Is the number of successful deletes.

Successful Reads
Is the number of successful reads.

Successful Updates
Is the number of successful updates.

System ID
Indicates the four-character name that uniquely identifies an active MVS operating system within a given CICSplex. This value is a concatenation MVS System ID (SMFID) and the CICS region name. The value format is an alphanumeric string, a maximum of four characters, that is case-sensitive. MVS System IDs are always in uppercase characters. Therefore, the valid values for this item should always be in uppercase characters.

---

File Control Details

The File Control Details attribute group provides status information about the VSAM data sets allocated to the CICS region. It includes the number of adds, browses, updates and deletes for each file.

Active Strings
Is the current number of updates against the file.

Add Request Allowed
Indicates whether a file add request allowed. Values are:

- Yes  New records can be added to the file.
- No   New records cannot be added to the file.
Browse Request Allowed
Indicates whether a file browse request allowed. Values are:
Yes You can browse the records in this file.
No You cannot browse the records in this file.

CICS Region Name
Indicates the job name or modify ID of the CICS region being monitored. Each
CICS region in an MVS image has a unique name. This name is an
alphanumeric string, with a maximum of 8 characters, and case-sensitive. CICS
region names are always in uppercase characters.

Dataset Available
Indicates whether a BDAM data set or VSAM object is associated with the FILE
definition. Values are Yes or No.

Dataset Name
Is the 44-character name defining the physical data set to the system.
You can have specified this in:
- The DSNAMES operand specified in the DEFINE FILE command of resource
definition online
- The operand specified in the DD DSN= operand of the CICS JCL
- By dynamic allocation of a data set to a file through the use of CEMT SET
FILE DSNAME or EXEC CICS SET FILE DSNAME commands.

If no data set is currently allocated to the file, this field is blank.
If the file is remote, no data set name is printed but the word "remote" is
substituted for the data set name.

Delete Request Allowed
Indicates whether a file delete request allowed Values are:
Yes You can delete the records from this file.
No You cannot delete the records from this file.

Enable Status
Specifies whether application programs can access the file. The values are:
DISABLED
The file is not available for use by transactions except for those that are
currently using it. If there are any such users, 'BEING DISABLED' is
also displayed. The file can be reenabled by a SET FILE ENABLED
command. It is not possible to disable a remote file.

ENABLED
The file is available for use by transactions and, if closed, it is opened
on the first request.

UNENABLED
The file is not available for use by transactions except for those that are
currently using it. If there are any such users, 'BEING CLOSED' is also
displayed. This status is the same as DISABLED except that it occurs
implicitly when a SET FILE CLOSE is requested. The file is enabled
implicitly by a SET FILE OPEN command.
- DISABLED: The file is unavailable for access by application programs.
- DISABLING A request to disable the file has been received, but tasks are
executing
- ENABLED: The file is available for access by application programs.
- UNENABLED The file is unavailable for access by application programs
because it is closed.
- UNENABLELING A request to close the file has been received, but tasks are
executing that had previously accessed the file.
Exclusive Control Allowed
Returns a value identifying whether records on this file are to be placed under exclusive control when a read for update is issued. Values are:
Yes A record on this file is placed under exclusive control of the reading task when it is read for update.
No A record on this file is not placed under exclusive control when it is read for update.

File Access Method
Returns a value identifying the access method used with this data set. Values are:
BDAM The access method is BDAM.
NOTAPPLIC The data set has not been opened by the CICS region in which the command is issued.
VSAM The access method is VSAM. Access to a data table (except while it is being loaded or, for a CICS-maintained data table, when the source data set is being updated or searched for a record that is not in the table), is through CICS data table services. Because this access is still based on VSAM keys, CICS returns VSAM as the access method for any kind of data table.
Remote The file is defined as remote, and therefore the access method is not known to the local CICS system.

Data Table
The file represents a data table.

File Attributes
Specifies whether the file is to be accessed in RLS mode. The file must be closed, and either disabled or unenabled, to change the access mode to RLS access or to non-RLS access. The non-RLS mode becomes either LSR or NSR, depending on the value specified for LSRPOOLID in the file resource definition.

File Block Size
Indicates the length in bytes of a block. If the blocks are of variable length or are undefined, the value returned is the maximum.

File Disposition
Indicates the value of the DISPOSITION option for the file. It is defined in the DISPOSITION option in the FILE definition. Values are:
• OLD Disposition is OLD.
• SHARE Disposition is SHARE.

File Format
Returns a value identifying the type of data set that corresponds to this file. The data set must be open to return the type of data set. Values are:
ESDS The data set is an entry-sequenced data set.
Keyed The data set is addressed by physical keys.
KSDS The data set is a key-sequenced data set or the file refers to a data table.
RRDS The data set is a relative record data set.

File Logical Record Length
Indicates the actual size of fixed-length records, or the maximum size of variable-length records.

File Name
Is the name of the file.
File Record Format
Is the format of the records on the file. Values are:

FB   The records are of fixed length.
U   The format of records on the file is undefined. The Undefined value is possible for BDAM data sets only.
VB   The records are of variable length. If the file is associated with a user-maintained data table, the record format is always variable length, even if the source data set contains fixed-length records.

File Relative Key Position
Indicates the starting position of the key field in each record relative to the beginning of the record. The start is made at position 0. If there is no key, or if the file is not open, CICS returns a value of zero for the key position.

Key Request Allowed
Indicates whether a file key request is allowed. Values are:
Yes   A file key request is allowed.
No   A file key request is not allowed.

Local File Key Length
Indicates the length of the record key for a file associated with a VSAM KSDS or a file associated with a coupling facility data table. If the file is associated with a BDAM data set, the value is the length of the logical key used for deblocking.

If the file is closed and the key length is not defined in the file definition, the value returned is 0 (zero).

If the file is closed and a key length is defined on the file definition, CICS returns the value from the file definition.

If the file is open, most files get their key length from the associated data set, in which case CICS returns the value from the data set. However, files that refer to coupling facility data tables defined with LOAD(NO) must get their key length from the file definition, in which case CICS returns the value from the file definitions for such files. This value must also match that of the coupling facility data table if it has already been created.

Number of Data Buffers
Is the number of buffers to be used for data. For RLS, BUFND is ignored and the value specified in the ACB is returned. This parameter has no effect for hierarchical file systems (HFS) files.

Number of Index Buffers
Is the number of buffers to be used for index. For RLS, BUFNI is ignored and the value specified in the ACB is returned. This parameter has no effect for hierarchical file systems (HFS) files.

Number of Strings
Is the maximum permissible number of concurrent updates. For RLS, the value specified in the ACB macro is ignored. After OPEN a value of 1024 is returned, indicating the maximum number of strings allowed.

Open Status
Returns a value identifying whether the file is open, closed, or in a transitional state. Values are:
Close in progress   The file is in the process of being closed. Closing a file can require dynamic deallocation of data sets and deletion of shared resources, in which case close processing can last a significant length of time.
Closed
The file is closed.

Notapplic
The OPENSTATUS value does not apply to this type of file. For example, it does not apply to a remote file.

Open in progress
The file is in the process of being opened.

Open
The file is open.

Origin Node
Is the combination of MVS System ID (SMFID) and CICS region name. The value format is an alphanumeric string, maximum 32 bytes, and case-sensitive.

When a situation is true, the system compares the origin node name in the attribute to the names of managed systems assigned to the item. If the origin node name matches the name of a managed system, the status of the item changes accordingly. If the names of the origin node and the managed systems do not match, the status of the item remains unchanged.

Read Request Allowed
Indicates whether a file read request allowed. Values are:
Yes You can read the records in this file.
No You cannot read the records in this file.

Read Update Request Allowed
Indicates whether a file read or update request allowed. Values are:
Yes You can update the records in this file.
No You cannot update the records in this file.

Remote File Key Length
Indicates the length of the record key for a remote file associated with a VSAM KSDS or a file associated with a coupling facility data table. For more details, see Local File Key length.

Remote File Name
Is the name by which the file is known in the CICS region named in the REMOTESYSTEM option of its FILE definition. Blanks are returned if the file is not remote.

Remote File Record Length
Is the record length of the remote file.

Remote System Name
Is the name of the CICS region in which the file is defined (from the REMOTESYSTEM value in the FILE definition). Blanks are returned if the file is not remote.

Resource Security Level
Indicates whether the file is defined to be opened in RLS mode. Values are:
na The file is not eligible to be accessed in RLS mode because it is a remote file, or it refers to a BDAM data set.
Public The file refers to a data set defined to be accessed in non-RLS mode.
RLS The file refers to a data set defined to be accessed in RLS mode.

System ID
Indicates the four-character name that uniquely identifies an active MVS operating system within a given CICSplex. This value is a concatenation MVS System ID (SMFID) and the CICS region name. The value format is an alphanumeric string, a maximum of four characters, that is case-sensitive. MVS System IDs are always in uppercase characters. Therefore, the valid values for this item should always be in uppercase characters.
Time File Opened
Is the time of day file opened.

Update Request Allowed
Indicates whether a file update request allowed. Values are:
Yes You can update the records in this file.
No You cannot update the records in this file.

---

File Control Journal and Logging

The File Control Journal and Logging attribute group reports the journaling and logging options of a given VSAM file as it is defined in the File Control Table.

CICS Region Name
Indicates the job name or modify ID of the CICS region being monitored. Each CICS region in an MVS image has a unique name. This name is an alphanumeric string, with a maximum of 8 characters, and case-sensitive. CICS region names are always in uppercase characters.

File Name
Is the name of the file. It is an 8-character alphanumeric string.

Journal Forward Recovery
Indicates the journal that corresponds to the MVS system logger log stream that is to be used for forward recovery. This attribute is ignored for coupling facility data tables and, if there are any recovery attributes defined in the ICF catalog for a source data set associated with the table, these also are ignored. A CFDT is not forward recoverable.

Journal ID
Is the number that identifies the journal that CICS can use for the forward recovery log. CICS journal names are of the form DFHJnn where nn is in the range 1 through 99. The after images for forward recovery are written to the MVS log stream that corresponds to journal name DFHJnn.

Journal Logging
Indicates if journal logging in effect. Values are Yes, No, or Not Applicable (n/a).

Journal Request Types
Indicates the type of operations you want recorded on the journal nominated by the JOURNAL attribute. Values are:
All Journal all file activity with READ asynchronous and WRITE synchronous.
Read Only (RO)
Journal READ ONLY operations.
Read Update (RU)
Journal READ UPDATE operations.
Write New (WN)
Indicates WRITE ADD options.
Write Update (WU)
Indicates WRITE UPDATE options.
Synch Read (SYN)
Specifies synchronous journal operation for READ operations. The default is No.
Async Write (ASY)
Specifies Asynchronous journal operation for WRITE operations. The default is Yes.
LOG BWO
Is the type of “backup while open” option for this file. CICS VSAM files can be defined as eligible for backup while open for update. You must specify the backup type on the data set definition in the ICF catalog. Values are:
- **CICS**  CICS type.
- **IMS**  IMS type.
- **Null**  Undefined or not specified.

LOG Options
Indicates the type of logging for this data set. Values are:
- **None**  No logs are created for this data set.
- **Undo**  Allows forward recovery.
- **All**  All files are logged
- **Null**  Undefined or not specified.
- **N/A**

LOG Recovery Required
Indicates that automatic log recovery has been defined. Values are Yes or No.

MVS Logstream Name
Is the name of the MVS Logstream associated with this file.

Origin Node
Is the combination of MVS System ID (SMFID) and CICS region name. The value format is an alphanumeric string, maximum 32 bytes, and case-sensitive.

When a situation is true, the system compares the origin node name in the attribute to the names of managed systems assigned to the item. If the origin node name matches the name of a managed system, the status of the item changes accordingly. If the names of the origin node and the managed systems do not match, the status of the item remains unchanged.

RLS in SIT
Indicates whether RLS parameter was specified in the SIT or not. Values are Yes or No.

System ID
Indicates the 4-character name that uniquely identifies an active MVS operating system within a given CICSpex. The value format is an alphanumeric string, maximum 4 characters, and case-sensitive. MVS System IDs are always in uppercase characters.

---

**File Control Statistics**

The File Control Statistics attribute group collects data about the number of application requests against your data sets. They indicate the number of requests for each type of service that are processed against each file. If the number of requests is totalled daily or for every CICS execution, the activity for each file can be monitored for any changes that occur. Note that these file statistics can have been reset during the day; to obtain a figure of total activity against a particular file during the day. Other data pertaining to file statistics and special processing conditions are also collected. In addition to the details that you find in the File Control Details workspace, this workspace shows the number of adds, browses, deletes and updates to a file, current files waits, and the time the file was opened.
Active Strings
Is the current number of updates against the file.

CICS Region Name
Indicates the job name or modify ID of the CICS region being monitored. Each CICS region in an MVS image has a unique name. This name is an alphanumeric string, with a maximum of 8 characters, and case-sensitive. CICS region names are always in uppercase characters.

Current Buffer Waits
Is the number of attempts made to append to this file while the buffers were logically full.

Current String Waits
Is the number of attempts made to append to this file while there were no available strings.

Dataset Name
Is the 44-character name defining the physical data set to the system. You can have specified this in:
• The DSNAME operand specified in the DEFINE FILE command of resource definition online
• The operand specified in the DD DSN= operand of the CICS JCL
• By dynamic allocation of a data set to a file through the use of CEMT SET FILE DSNAME or EXEC CICS SET FILE DSNAME commands.

If no data set is currently allocated to the file, this field is blank.
If the file is remote, no data set name is printed but the word “remote” is substituted for the data set name.

Enable Status
Specifies whether application programs can access the file. The values are:
• DISABLED: The file is unavailable for access by application programs.
• DISABLING A request to disable the file has been received, but tasks are executing
• ENABLED: The file is available for access by application programs.
• UNENABLED The file is unavailable for access by application programs because it is closed.
• UNENABLING A request to close the file has been received, but tasks are executing that had previously accessed the file.

File Access Method
Returns a value identifying the access method used with this data set. Values are:
• BDAM: The access method is BDAM.
• NOTAPPLIC: The data set has not been opened by the CICS region in which the command is issued.
• VSAM: The access method is VSAM.

File Attributes
Specifies whether the file is to be accessed in RLS mode. The file must be closed, and either disabled or unenabled, to change the access mode to RLS access or to non-RLS access. The non-RLS mode becomes either LSR or NSR, depending on the value specified for LSRPOOLID in the file resource definition.

File Name
Is the name of the file.
File Format
Is the file format for this file.

Highest Buffer Waits
Is the number of times a request was queued because all buffers were allocated to other tasks. A buffer wait also occurs if the required control interval is already in a locked buffer, and therefore unavailable, even if there are other buffers available.

Highest Tasks Waited on String
Is the highest number of tasks waited on string for this file.

Number of Adds
Is the number of PUT requests attempted against this file.

Number of Browses
Is the number of GETNEXT and GETPREV requests attempted against this file.

Number of Data Buffers
Is the number of VSAM data buffers defined for this file.

Number of Deletes
Is the number of DELETE requests attempted against this file.

Number of Index Buffers
Is the number of VSAM index buffers defined for this file.

Number of Read for Updates
Is the number of browse READNEXT UPDATE and READPREV UPDATE requests issued against this file. Note that this field is only applicable to RLS accessed files.

Number of Reads
Is the number of Read requests for this file.

Number of Strings
Is the number of VSAM strings defined for this file.

Number of Updates
Is the number of PUT UPDATE requests attempted against this file.

Open Status
Returns a value identifying whether the file is open, closed, or in a transitional state.

• CLOSED: The file is closed.
• CLOSING: The file is in the process of being closed. Closing a file can require dynamic deallocation of data sets and deletion of shared resources, in which case close processing can last a significant length of time.
• CLOSEREQUEST: The file is open and in use by one or more application tasks, but closing is not complete (the ENABLESTATUS of the file is DISABLING).
• NOTAPPLIC: The OPENSTATUS value does not apply to this type of file. For example, it does not apply to a remote file.
• OPEN: The file is open.
• OPENING: The file is in the process of being opened.

Origin Node
Is the combination of MVS System ID (SMFID) and CICS region name. The value format is an alphanumeric string, maximum 32 bytes, and case-sensitive.

When a situation is true, the system compares the origin node name in the attribute to the names of managed systems assigned to the item. If the origin node name matches the name of a managed system, the status of the item
changes accordingly. If the names of the origin node and the managed systems
do not match, the status of the item remains unchanged.

Remote File Name
Is the name by which the file is known in the CICS region named in the
REMOTESYSTEM option of its FILE definition. Blanks are returned if the file is
not remote.

Remote System
Returns the name of the CICS region in which the file is defined (from the
REMOTESYSTEM value in the FILE definition). Blanks are returned if the file is
not remote.

Time File Opened
Is the time when this file was opened. If this field is not set, if the field is set, it
contains a time expressed as a store clock (STCK) value in local time. This field
contains a valid time if:
• The file was open at the time the statistics were taken.
• This is an unsolicited statistics request due to the file being closed.

Total Buffer Waits
Is the total number of buffer waits for this file.

Total RLS Timeouts
Is the number of RLS requests made to this file that were not serviced in the
specified time limit, and therefore the requests were terminated.

Total String Waits
Is the total number of string waits.

File Control Summary

The File Control Analysis Task attribute group provides status information about the
VSAM data sets allocated to the CICS region.

Active Strings
Is the current number of updates against the file.

CICS Region Name
Indicates the job name or modify ID of the CICS region being monitored. Each
CICS region in an MVS image has a unique name. This name is an
alphanumeric string, with a maximum of 8 characters, and case-sensitive. CICS
region names are always in uppercase characters.

Enable Status
Specifies whether application programs can access the file. The values are:
DISABLED
The file is not available for use by transactions except for those that are
currently using it. If there are any such users, 'BEING DISABLED' is
also displayed. The file can be reenabled by a SET FILE ENABLED
command. It is not possible to disable a remote file.

ENABLED
The file is available for use by transactions and, if closed, it is opened
on the first request.

UNENABLED
The file is not available for use by transactions except for those that are
currently using it. If there are any such users, 'BEING CLOSED' is also
displayed. This status is the same as DISABLED except that it occurs
implicitly when a SET FILE CLOSE is requested. The file is enabled
implicitly by a SET FILE OPEN command.
File Access Method
Returns a value identifying the access method used with this data set. Values are:
- **BDAM** The access method is BDAM.
- **NOTAPPLIC** The data set has not been opened by the CICS region in which the command is issued.
- **VSAM** The access method is VSAM. Access to a data table (except while it is being loaded or, for a CICS-maintained data table, when the source data set is being updated or searched for a record that is not in the table), is through CICS data table services. Because this access is still based on VSAM keys, CICS returns VSAM as the access method for any kind of data table.
- **Remote** The file is defined as remote, and therefore the access method is not known to the local CICS system.
- **Data Table** The file represents a data table.

File Attributes
Specifies whether the file is to be accessed in RLS mode. The file must be closed, and either disabled or unenabled, to change the access mode to RLS access or to non-RLS access. The non-RLS mode becomes either LSR or NSR, depending on the value specified for LSRPOOLID in the file resource definition.

File Name
Is the name of the file.

File Record Format
Is the format of the records on the file. Values are:
- **FB** The records are of fixed length.
- **U** The format of records on the file is undefined. The Undefined value is possible for BDAM data sets only.
- **VB** The records are of variable length. If the file is associated with a user-maintained data table, the record format is always variable length, even if the source data set contains fixed-length records.

Number of String Waits
Is the total number of ‘waits’ for strings against the file.

Number of Strings
Indicates the number of strings (concurrent operations) specified for the file in its FILE definition.

Open Status
Returns a value identifying whether the file is open, closed, or in a transitional state. Values are:
- **Close in progress** The file is in the process of being closed. Closing a file can require dynamic deallocation of data sets and deletion of shared resources, in which case close processing can last a significant length of time.
- **Closed** The file is closed.
- **Notapplic** The OPENSTATUS value does not apply to this type of file. For example, it does not apply to a remote file.
- **Open in progress** The file is in the process of being opened.
Open
The file is open.

Origin Node
Is the combination of MVS System ID (SMFID) and CICS region name. The value format is an alphanumeric string, maximum 32 bytes, and case-sensitive.

When a situation is true, the system compares the origin node name in the attribute to the names of managed systems assigned to the item. If the origin node name matches the name of a managed system, the status of the item changes accordingly. If the names of the origin node and the managed systems do not match, the status of the item remains unchanged.

Remote System
Returns the name of the CICS region in which the file is defined (from the REMOTESYSTEM value in the FILE definition). Blanks are returned if the file is not remote.

System ID
Indicates the four-character name that uniquely identifies an active MVS operating system within a given CICSplex. This value is a concatenation MVS System ID (SMFID) and the CICS region name. The value format is an alphanumeric string, a maximum of four characters, that is case-sensitive. MVS System IDs are always in uppercase characters. Therefore, the valid values for this item should always be in uppercase characters.

Intercommunication Summary

The Intercommunication Summary attribute group provides information about the connection status of the CICS regions.

CICS Region Name
Indicates the job name or modify ID of the CICS region being monitored. Each CICS region in an MVS image has a unique name. This name is an alphanumeric string, with a maximum of 8 characters, and case-sensitive. CICS region names are always in uppercase characters.

CICS SYSIDNT
Indicates four-character CICS system ID assigned to the CICS region. The value format is an alphanumeric string, a maximum of four characters, and is case-sensitive.

CICS system IDs are always in uppercase characters. Therefore, valid values for this item should always be in uppercase characters.

Connection Count
Indicates the number of connections among this region and others. This value includes MRO and ISC connections. The value format is an integer of a maximum of four bytes.

CPU Utilization
Indicates the percentage of CPU time for the CICS address space. The value format is a percentage in the range of 0-100.

The accumulated CPU time for the CICS address space is noted at the beginning and end of a short elapsed time interval. The difference between these two values is the amount of CPU consumed in the CICS address space during that elapsed time interval. This difference is then represented as a percentage of the elapsed time interval.
Example: If the Accumulated CPU time at the start of the time interval equals 2 seconds Accumulated CPU time at the end of the time interval equals 5 seconds

Internet Status

The Internet Status attribute group provides information about the status of the Web interface and status of the CICS TCP/IP connection.

CICS Region Name
Indicates the job name or modify ID of the CICS region being monitored. Each CICS region in an MVS image has a unique name. This name is an alphanumeric string, with a maximum of 8 characters, and case-sensitive. CICS region names are always in uppercase characters.

Origin Node
Is the combination of MVS System ID (SMFID) and CICS region name. The value format is an alphanumeric string, maximum 32 bytes, and case-sensitive.

When a situation is true, the system compares the origin node name in the attribute to the names of managed systems assigned to the item. If the origin node name matches the name of a managed system, the status of the item changes accordingly. If the names of the origin node and the managed systems do not match, the status of the item remains unchanged.

System ID
Indicates the four-character name that uniquely identifies an active MVS operating system within a given CICSplex. The value format is an alphanumeric string, maximum 4 characters, and case-sensitive. MVS System IDs are always in uppercase characters.

TCP/IP Application Waiting
Indicates whether or not the TCP/IP application is waiting. Values are: Yes and No.

TCP/IP Exit Not Enabled
Indicates whether or not the TCP/IP user exit is enabled. Values are: Yes and No.

TCP/IP Listener Failed
Indicates whether or not the TCP/IP listener failed. Values are: Yes.

Interval Control Elements

The Interval Control Elements (ICE) attributes allows you to identify scheduled work in the system. You can analyze ICE problems, display a summary list of all ICEs in the system, display detailed information about a specific ICE, or request that an ICE be removed from the system.

Interval control elements (ICEs) represent tasks that CICS is scheduled to start after a specified time interval or at a certain time of day. Upon expiration of this interval, CICS starts the task or creates an AID, pending the availability of some resource.

CICS Region Name
Indicates the job name or modify ID of the CICS region being monitored. Each CICS region in an MVS image has a unique name. This name is an alphanumeric string, with a maximum of 8 characters, and case-sensitive. CICS region names are always in uppercase characters.
Destination ID
Is the name of the system at which the specified transaction will be executed upon expiry of this ICE.

Expiry Date and Time
Is the date and time at which this ICE will expire.

ICE Address
Is the address, in CICS storage, of this ICE.

Origin Node
Is the combination of MVS System ID (SMFID) and CICS region name. The value format is an alphanumeric string, maximum 32 bytes, and case-sensitive.

When a situation is true, the system compares the origin node name in the attribute to the names of managed systems assigned to the item. If the origin node name matches the name of a managed system, the status of the item changes accordingly. If the names of the origin node and the managed systems do not match, the status of the item remains unchanged.

Request ID
Is a value associated with this ICE at the time it was created. You can supply a request identifier in the REQID field of a START request. If a request identifier is not specified the field is blank.

Status
Is the current status of the ICE. Values can be:
- Awaiting Init.
- Wait for remote terminal.
- Wait for remote transaction.
- Shipped to remote system.
- Wait for remote schedule.
- Wait for target terminal.
- Wait for unresolved TCTTE.

System ID
Indicates the four-character name that uniquely identifies an active MVS operating system within a given CICSpex. The value format is an alphanumeric string, maximum 4 characters, and case-sensitive. MVS System IDs are always in uppercase characters.

Terminal ID
Is the name of the name of the terminal specified on a START command. If a terminal was not specified the field is blank.

Transaction ID
Is the name of the transaction to be executed on completion of this ICE.

Type
Displays the kind of ICE that is displayed. Values can be:
- TDP Scheduled.
- ICP Initiated.
- ICP Put/Data.
- BMS Scheduled.
- ISC Scheduled.
- Remote Delete.
- Unknown Type.

User ID
Is the user identifier under which the specified transaction will be executed. If a user identifier is not supplied the field is blank.
Waiting Task Number
Is the task number of the task which is waiting for this ICE to expire. If no task is waiting this will display as blanks.

See also [Interval Control Elements Workspace]

### Java Program Analysis

The JVM program resource attributes report data about Java programs installed in your CICS systems. Use this data to determine the characteristics that have been defined for a particular Java program.

**CEDFstatus**
Indicates the action taken by the execution diagnostic facility (EDF) transaction. It returns a value indicating the action taken by the execution diagnostic facility (EDF) transaction if this module is executed under EDF. Values are:
- **CEDF**: EDF diagnostic screens are displayed. If the program was translated with the EDF option, all EDF screens are displayed; if it was translated with NOEDF, only the program initiation and termination screens appear.
- **NOCEDF**: No EDF screens are displayed.
- **NOTAPPLIC**: EDF is not applicable because the module is a remote program, a map set, or a partition set.

**CICS Region Name**
Is the job name or modify ID of the CICS region being monitored. Each CICS region in an MVS image has a unique name. This name is an alphanumeric string, with a maximum of 8 characters, and case-sensitive. CICS region names are always in uppercase characters.

**Datalocation**
Indicates whether this module can accept data addresses higher than 16 MB. Values are:
- **ANY**: The program can accept an address above 16 MB.
- **BELOW**: The program requires any data address returned to it from CICS to be less than 16 MB.
- **NOTAPPLIC**: The option is not applicable because the module is a remote program, a map set, or a partition set.

**Dynamic Status**
Indicates whether the program can be dynamically routed or not. It returns a value indicating whether, if the program is the subject of a program-link request, the request can be dynamically routed. Values are:
- **DYNAMIC**: If the program is the subject of a program-link request, the CICS dynamic routing program is invoked. Providing that a remote server region is not named explicitly on the SYSSID option of the LINK command, the routing program can route the request to the region on which the program is to execute.
- **NOTDYNAMIC**: If the program is the subject of a program-link request, the dynamic routing program is not invoked. For a distributed program link (DPL) request, the server region on which the program is to execute must be specified explicitly on the REMOTESYSTEM option of the PROGRAM definition or on the SYSSID option of the LINK command; otherwise it defaults to the local region.

**Execution Key**
Is the execution key of the program. It returns a value indicating the storage key
of the module, if it is an executable program. The storage key can limit the areas of storage that the program can access, depending on other variables. Values are:
- CICSEXECKEY: The program executes in CICS key.
- NOTAPPLIC: The module is a remote program, a map set, or a partition set.
- USEREXECKEY: The program executes in user key.

Execution Set
Is the set of CICS API commands the program can execute. It returns a value indicating whether the module is restricted to the distributed program link subset of the CICS API. EXECUTIONSET applies only to executable programs, and governs the API only when a program is invoked locally. (When it is invoked remotely—that is, executing at or below the level of a program invoked by a distributed program link—a program is always restricted to this subset.) Values are:
- DPLSUBSET: The program is always restricted.
- FULLAPI: The program is not restricted unless invoked remotely.
- NOTAPPLIC: EXECUTIONSET does not apply because the module is a remote program, a map set, or a partition set.

JVM Class
Is the name, up to 255 characters, of any class specified in the program definition.

JVM Profile
Is the name of the JVM profile associated with the program. It is the 8-character name of the JVM profile, as used in a program definition. When you use the name of a JVM profile anywhere in CICS, you must enter it using the same combination of upper and lower case characters that is present in the HFS file name.

Program
Is the name of the JVM program. It is an alphanumeric string, with a maximum of 8-characters.

Remote Program Name
Is the name by which the program is known in the remote system. It is an 8-character name by which the module is known in the CICS region named in the REMOTESYSTEM option of its PROGRAM definition. REMOTENAME applies only to programs, and only to those defined to be remote; for local programs, the value returned is blanks.

Remote System
Is the name of the CICS region in which the module is defined. It is the 4-character name of the CICS region in which the module is defined (from the REMOTESYSTEM value in the PROGRAM definition). It applies only to programs, and only to those defined to be remote; for local programs, the value returned is blanks.

Status
Is the program status. It returns a value indicating whether the module is available for use. Values are:
- DISABLED: The module is not available for use.
- ENABLED: The module is available for use.

System ID
Indicates the four-character name that uniquely identifies an active MVS operating system within a given CICSpex. The value format is an alphanumeric string, maximum 4 characters, and case-sensitive. MVS System IDs are always in uppercase characters.
**Times Used**
Is the number of times the program has been executed. It returns a fullword binary field giving the total number of times the module has been used since the start of the current CICS session. A value of -1 is returned if the program is remote, or a JVM program.

**Transaction ID**
Is the name of the transaction under which this program executes remotely. It is the 4-character name of the transaction under which this module, which must be a program. It executes remotely (that is, the transaction identifier the remote region assigns to the task created there to execute it when a task in the local region LINKs to it). This value comes from the TRANSID option value in the PROGRAM definition and applies only to programs defined as remote; for local programs, and when no TRANSID is specified for a remote program, the value returned is blanks.

---

**Journal Analysis**

The Journal Analysis attribute group provides information about the system log and the general logs. It includes all of the statistics and failure codes currently offered by the classic OMEGAMON for CICS monitor.

**Average Bytes Written**
Indicates the average number of bytes written to this journal per request. If the journal is a System Log, this field will contain the value ‘n/a’, as statistics for System Logs are kept with their associated Log Stream.

**Buffer Flushes**
Indicates the number of buffer flush requests issued for this journal. If the journal is a System Log, this field will contain the value ‘n/a’, as statistics for System Logs are kept with their associated Log Stream.

**Bytes Written**
Indicates the number of bytes written to this journal. If the journal is a System Log, this field will contain the value ‘n/a’, as statistics for System Logs are kept with their associated Log Stream.

**CICS Region Name**
Indicates the job name or modify ID of the CICS region being monitored. Each CICS region in an MVS image has a unique name. This name is an alphanumeric string, with a maximum of 8 characters, and case-sensitive. CICS region names are always in uppercase characters.

**Failure Reason**
Provides the reason behind a log stream error when the Journal Status column indicates the journal has failed. Enumerated values are:
- C = System_log_conflict
- F = Journal_has_failed
- N = n/a
- O = Error_opening_log
- U = Unable_to_create

**Journal Name**
Indicates the 8-character name of the CICS journal. The value format is an alphanumeric string of maximum 8 characters.

**Journal Status**
Indicates the connection status of the journal. The valid values are:
• Ena_Conn (Journal is enabled and connected. It is mapped onto an MVS log stream. Only user journals can have this status.)
• Ena_Disc (Journal is enabled but disconnected. It is no longer mapped onto an MVS log stream. DFHLOG, DFHSHUNT, file control forward recovery logs, and autojournals normally display with the Enabled Disconnected status, even if the stream name is in use.)
• Failed (Journal has experienced a log stream failure. It cannot be used until it is re-enabled).
• Unknown (The status of the journal cannot be determined).
• Disabled (Journal has been disabled. It cannot be used until it is re-enabled).

Journal Type
Indicates the type of journal. The valid values are:
• D=Dummy (No log records are written to an MVS log stream).
• M=MVS (Journal records are written to an MVS log stream).
• S=SMF (Journal records are written in SMF format to the MVS SMF log. Note that the SMF type is not used for the CICS system log or for forward recovery logs.)
• U=Unknown (The type of journal cannot be determined).

MVS Log Stream Name
Displays the name of the MVS log stream to which the journal is mapped. This field only applies to CICS Transaction Server 1.1 and above. The value format is an alphanumeric string of maximum 26 characters.

Origin Node
Indicates the combination of MVS System ID (SMFID) and CICS region name. The value format is an alphanumeric string, maximum 32 bytes, and case-sensitive.

When a situation is true, the system compares the origin node name in the attribute to the names of managed systems assigned to the item. If the origin node name matches the name of a managed system, the status of the item changes accordingly. If the names of the origin node and the managed systems do not match, the status of the item remains unchanged.

Statistics Last Reset
Indicates the last time that journal statistics were reset, possibly due to interval statistics collection. If the journal is a System Log, this field will contain the value 'n/a', as statistics for System Logs are kept with their associated Log Stream.

System ID
Indicates the 4-character name that uniquely identifies an active MVS operating system within a given CICSPlex. The value format is an alphanumeric string, maximum 4 characters, and case-sensitive. MVS System IDs are always in uppercase characters.

System Log
Indicates whether the journal is a system log. There can be only one system log in each CICS region. The valid values are: Yes No

Write Requests
Indicates the number of write requests for this journal. If the journal is a System Log, this field will contain the value 'n/a', as statistics for System Logs are kept with their associated Log Stream.
JVM Analysis

The JVM resource attributes report the characteristics of all the JVMs in your CICS regions. Use this data to monitor the age of a JVM, classcache, phasingout, and reuse status of your JVMs.

**Age**
Is the number of seconds since the JVM was initialized.

**Allocated Age**
Is the number of seconds the JVM has been allocated to a task. It returns a fullword binary value giving the number of seconds for which the JVM has been allocated to its task, or zero if the JVM is not currently allocated to a task.

**CICS Region Name**
Indicates the job name or modify ID of the CICS region being monitored. Each CICS region in an MVS image has a unique name. This name is an alphanumeric string, with a maximum of 8 characters, and case-sensitive. CICS region names are always in uppercase characters.

**Classcache status**
Indicates whether the JVM is a worker JVM or not. It returns a value indicating whether the JVM is a worker JVM dependent on the shared class cache.
Values are:
- **CLASSCACHE**: The JVM profile for this JVM specified the use of the shared class cache.
- **NOCLASSCACHE**: The JVM profile for this JVM did not specify the use of the shared class cache.

**Execution Key**
Is the execution key that the JVM is running in. It returns a value indicating the EXECKEY of the JVM. Values are:
- **CICSEXECKEY**: The program executes in CICS key.
- **USEREXECKEY**: The program executes in user key.

**Token**
Returns the JVM token, a fullword binary value that identifies the JVM.

**Phasingout status**
Indicates if the JVM is being phased out. It returns a value indicating whether the JVM is being phased out as a result of an EXEC CICS SET JVMPOOL TERMINATE or EXEC CICS PERFORM CLASSCACHE TERMINATE command (or the equivalent CEMT commands). Values are:
- **PHASEOUT**: The JVM is being phased out.
- **NOPHASEOUT**: The JVM is not being phased out. It is available for allocation, or will be available for allocation when the current allocation is ended.

**PROFILE**
Is the 8-character name of the JVM profile used to initialize this JVM.

**Reuse Status**
Is the level of reusability of this JVM. It returns a value indicating the level of reusability for this JVM. Values are:
- **RESET**: The JVM profile for this JVM specified that it is resettable (or in the case of a worker JVM, the JVM profile for the master JVM specified that the master and worker JVMs are resettable).
- **REUSE**: The JVM profile for this JVM specified that it is continuous (or in the case of a worker JVM, the JVM profile for the master JVM specified that the master and worker JVMs are continuous).
• NOREUSE: The JVM profile for this JVM specified that it is single-use.

**System ID**
Indicates the four-character name that uniquely identifies an active MVS operating system within a given CICSpelix. The value format is an alphanumeric string, maximum 4 characters, and case-sensitive. MVS System IDs are always in uppercase characters.

**Task**
Is the task associated with the JVM. It returns a 4-byte packed decimal value giving the task to which the JVM is allocated, or zero if the JVM is not currently allocated to a task.

---

**JVM Classcache Analysis**

JVM Classcache attributes report information about the size, amount of free space, date and time when it was started, and related profile name for the given classcache.

**Autostart status**
Indicates the current status of autostart for the shared class cache. Values are:

- **ENABLED**
  The shared class cache is started as soon as CICS receives a request to run a Java application in a JVM whose profile requires the use of the shared class cache.

- **DISABLED**
  An explicit EXEC CICS PERFORM CLASSCACHE INITIALIZE(START) command (or the equivalent CEMT command) is required to start the shared class cache. If the status of the shared class cache is STOPPED and autostart is disabled, and CICS receives a request to run a Java application in a JVM whose profile requires the use of the shared class cache, the request fails.

**Cache Free**
Indicates the free space in the shared class cache, in kilobytes.

**Cache Size**
Indicates the size of the shared class cache, in kilobytes. If the status of the shared class cache is STOPPED, this option returns the size that will be used by default when the shared class cache is started. If the status of the shared class cache is STARTING or STARTED, this option returns the size of the current shared class cache. If the status of the shared class cache is RELOADING, this option returns the size of the new shared class cache that is being loaded.

**CICS Region Name**
Indicates the job name or modify ID of the CICS region being monitored. Each CICS region in an MVS image has a unique name. This name is an alphanumeric string, with a maximum of 8 characters, and case-sensitive. CICS region names are always in uppercase characters.

**Number of old caches**
Indicates the number of old caches that are still present in the region because they are waiting for worker JVMs that are dependent on them to be phased out. If the status of the current shared class cache is STOPPED, and worker JVMs are still dependent on it, then that shared class cache is included in the number of old shared class caches.
Origin Node
Is the combination of MVS System ID (SMFID) and CICS region name. The value format is an alphanumeric string, maximum 32 bytes, and case-sensitive.

When a situation is true, the system compares the origin node name in the attribute to the names of managed systems assigned to the item. If the origin node name matches the name of a managed system, the status of the item changes accordingly. If the names of the origin node and the managed systems do not match, the status of the item remains unchanged.

Phasing Out
Indicates the number of JVMs that are phasing out. This is the number of working JVMs that are dependent on an old shared class cache and are being phased out. The value format is an integer of maximum four bytes.

Profile
Indicates the name of the JVM profile used for the master JVM. The name of the JVM profile that is to be used to start the master JVM. If the master JVM is in use, this is the name of the JVM profile for that master JVM. This name is an alphanumeric string, with a maximum of 8 characters.

Reuse Status
Indicates the reuse status of master JVM. Values are RESET, REUSE, or UNKNOWN. RESET indicates that the JVMs can be reused after they have been reset. REUSE indicates that the JVMs can be reused without being reset. UNKNOWN indicates that the class cache has not been started.

Start Date
Indicates the date when the current class cache was started. This name is an alphanumeric string, with a maximum of 10 characters.

Start Time
Indicates the time when the current class cache was started. This name is an alphanumeric string, with a maximum of 8 characters.

Status
Indicates the current status of the shared class cache. Values are:

STARTING
The shared class cache is being initialized. If autostart is enabled, the shared class cache is starting either because CICS received a request to run a Java application in a JVM whose profile requires the use of the shared class cache, or because an explicit EXEC CICS PERFORM CLASSCACHE INITIALIZE(START) command (or the equivalent CEMT command) was issued. If autostart is disabled, the shared class cache is starting because an explicit EXEC CICS PERFORM CLASSCACHE INITIALIZE(START) command (or the equivalent CEMT command) was issued. Worker JVMs that require the use of the shared class cache must wait until the startup process is complete and the shared class cache is ready. If initialization of the shared class cache is unsuccessful, any waiting requests for worker JVMs fail.

STARTED
The shared class cache is ready, and it can be used by worker JVMs.

RELOADING
An EXEC CICS PERFORM CLASSCACHE INITIALIZE(RELOAD) command (or the equivalent CEMT command) has been issued, and a new shared class cache is being loaded to replace the existing shared class cache. Worker JVMs, both those that were already allocated to
tasks and those that were allocated to tasks after the command was issued, continue to use the existing shared class cache until the new shared class cache is ready.

**STOPPED**
The shared class cache has either not been initialized on this CICS execution, or it has been stopped by an EXEC CICS PERFORM CLASSCACHE TERMINATE command or an EXEC CICS SET JVMPOOL TERMINATE command (or the equivalent CEMT commands). If autostart is disabled, requests to run a Java application in a JVM whose profile requires the use of the shared class cache (that is, requests for worker JVMs) will fail. If autostart is enabled, a new shared class cache will be initialized as soon as CICS receives a request to run a Java application in a JVM whose profile requires the use of the shared class cache.

**System ID**
Indicates the four-character name that uniquely identifies an active MVS operating system within a given CICSplex. The value format is an alphanumeric string, maximum 4 characters, and case-sensitive. MVS System IDs are always in uppercase characters.

**Total JVMs**
Indicates the number of working JVMs in the CICS region that are dependent on the shared class cache.

---

### JVM Pool Statistics

Returns statistics for the JVM pool, if one exists. (There is no identifier on JVMPOOL: a CICS region can have only one JVM pool.) CICS returns the address of the area of storage that contains the requested statistics. These statistics can be accessed online using the EXEC CICS COLLECT STATISTICS JVMPOOL command, and are mapped by the DFHSJGDS DSECT.

**CICS Region Name**
Indicates the job name or modify ID of the CICS region being monitored. Each CICS region in an MVS image has a unique name. This name is an alphanumeric string, with a maximum of 8 characters, and case-sensitive. CICS region names are always in uppercase characters.

**Current Classcache JVMs**
Is the number of JVMs currently in the pool that use the shared class cache, so are worker JVMs. JVMs use the shared class cache if they were created using JVM profiles that specify CLASSCACHE=YES. This count includes both worker JVMs that are in use by a Java program, and worker JVMs that are awaiting reuse.

**Current JVM Count**
Is the current number of JVMs.

**JVM Requests for Class Cache JVMs**
Is the total number of Java programs that requested a JVM that uses the shared class cache.

**JVMs Requests with JVM Initialized**
Is the number of JVM program requests where the JVM was initialized.
JVMs Requests with JVM Mismatch
Is the number of JVM program requests that required a resettable or continuous JVM, but for which there was no JVM already initialized with the same JVM profile.

JVMs Requests with JVM Reset
Is the number of requests to run a program in a resettable JVM.

JVMs Requests with JVM Reuse
Is the number of requests to run a program in a continuous JVM.

JVMs Requests with JVM Terminated
Is the number of JVMs that have been terminated.

Origin Node
Is the combination of MVS System ID (SMFID) and CICS region name. The value format is an alphanumeric string, maximum 32 bytes, and case-sensitive.

When a situation is true, the system compares the origin node name in the attribute to the names of managed systems assigned to the item. If the origin node name matches the name of a managed system, the status of the item changes accordingly. If the names of the origin node and the managed systems do not match, the status of the item remains unchanged.

Peak Classcache JVMs
Is the peak number of JVMs in the JVM pool that used the shared class cache.

Peak JVM Count
Is the peak number of JVMs.

System ID
Is the four-character name that uniquely identifies an active MVS operating system within a given CICSpIex. The value format is an alphanumeric string, maximum 4 characters, and case-sensitive. MVS System IDs are always in uppercase characters.

Total JVM Requests
Is the total number of JVM program requests.

JVM Profile Analysis

The JVM profile resource attributes report the full path name of the HFS file for a JVM profile, and tells you whether or not a JVM with this profile uses the shared class cache.

It only returns JVM profiles that have been used during the lifetime of this CICS region, for JVMs that can run applications. It does not find JVM profiles that have not been used, or JVM profiles that have only been used for the master JVM that initializes the shared class cache.

CICS Region Name
Indicates the job name or modify ID of the CICS region being monitored. Each CICS region in an MVS image has a unique name. This name is an alphanumeric string, with a maximum of 8 characters, and case-sensitive. CICS region names are always in uppercase characters.

Classcache Status
Indicates whether JVMs that use this JVM profile are worker JVMs dependent on the shared class cache. Values are:
• CLASSCACHE: Indicates that the JVM profile specifies the use of the shared class cache.
• NOCLASSCACHE: Indicates that the JVM profile does not specify the use of the shared class cache.

**HFS file**
Is the full path name of the HFS file for the JVM profile.

**JVMProfile**
Is the 8-character name of the JVM profile, as used in a program definition. When you use the name of a JVM profile anywhere in CICS, you must enter it using the same combination of upper and lower case characters that is present in the HFS file name.

**Reuse Status**
Is the level of reusability for JVMs that are created using this JVM profile. It returns a value indicating the level of reusability for JVMs that are created using this JVM profile. Values are:
• RESET: JVMs with this JVM profile are resettable.
• REUSE: JVMs with this JVM profile are continuous.
• NOREUSE: JVMs with this JVM profile are single-use

**System ID**
Is the four-character name that uniquely identifies an active MVS operating system within a given CICSplex. The value format is an alphanumeric string, maximum 4 characters, and case-sensitive. MVS System IDs are always in uppercase characters.

### LSR Pool Status

The LSR Pool Status attribute group provides information about the Local Shared Resource (LSR) pools that have been built in CICS for VSAM files.

**CICS Region Name**
Indicates the job name or modify ID of the CICS region being monitored. Each CICS region in an MVS image has a unique name. This name is an alphanumeric string, with a maximum of 8 characters, and case-sensitive. CICS region names are always in uppercase characters.

**Lookaside Ratio**
Indicates the percentage of VSAM read requests that were satisfied without initiating I/O because the Control Interval (CI) was already resident in the buffer pool. The valid format is a percentage in the range of 0-100.

**Origin Node**
Is the combination of MVS System ID (SMFID) and CICS region name. The value format is an alphanumeric string, maximum 32 bytes, and case-sensitive.

When a situation is true, the system compares the origin node name in the attribute to the names of managed systems assigned to the item. If the origin node name matches the name of a managed system, the status of the item changes accordingly. If the names of the origin node and the managed systems do not match, the status of the item remains unchanged.

**Percent of Active Strings**
Indicates the percentage of strings that are currently active. The valid format is a percentage in the range of 0-100.

This value is computed by dividing the number of active strings by the total number of strings.

**Pool ID**
Identifies the LSR pool. The valid format is an integer of maximum two bytes.
Pool Status
Indicates the status of the LSR pool. The valid values are:
• Created
• Deleted
• Not built

Pool Type
Indicates the type of subsystem using the LSR pool. The valid value is CICS.

System ID
Indicates the four-character name that uniquely identifies an active MVS operating system within a given CICSpex. The value format is an alphanumeric string, maximum 4 characters, and case-sensitive. MVS System IDs are always in uppercase characters.

Tasks Waiting
Indicates the number of current string waits. The value format is an integer of a maximum of four bytes.

Total String Waits
Indicates the total number of string waits. The valid format is an integer of a maximum of four bytes.

Link Analysis
The Link Analysis attributes provide details on one or more links in a selected intersystem communication (ISC) or multiregion operation (MRO) connection. Use the Link Analysis attributes to monitor:
• The condition and numbers of transactions and transmissions
• Link storage violations

Note: These attributes are not available for situations. They provide data only for the Link Summary table view.

Count of Link Inputs
Indicates the number of input requests on this link. The value format is a positive integer, a maximum of four bytes.

Count of Link Outputs
Indicates the number of output requests on this link. The value format is a positive integer, a maximum of four bytes.

Count of Link Storage Violations
Indicates the number of storage violations associated with this link. The value format is a positive integer, a maximum of four bytes.

Count of Link Transaction Errors
Indicates the number of transaction errors on this link. The value format is a positive integer, a maximum of two bytes.

Count of Link Transactions
Indicates the number of transactions run on this link. The value format is a positive integer, a maximum of four bytes.

Count of Link Transmission Errors
Indicates the number of transmission errors on this link. The value format is a positive integer, a maximum of two bytes.

Current Transaction Number
Indicates the number of the transaction currently executing on this link. The value format is an alphanumeric string, a maximum of five characters.
Link Connection Name
Indicates the name of the connection that owns this link session. The value format is an alphanumeric string, a maximum of four characters.

Link Current Tranid
Indicates the name of the currently executing transaction. The value format is an alphanumeric string, a maximum of four characters.

Link Netname
Indicates the name of the VTAM applid to which this link is or will be connected. The value format is an alphanumeric string, a maximum of eight characters.

Link Next Tranid
Indicates the name of the next scheduled transaction on this link. The value format is an alphanumeric string, a maximum of four characters.

Link Region
Indicates the job name or modify ID of the CICS region being monitored. Each CICS region in an MVS image has a unique name. This name is an alphanumeric string, with a maximum of 8 characters, and case-sensitive. CICS region names are always in uppercase characters.

Link Session Status
Indicates the status of the link. Valid values are

Link System ID
Indicates the SMF identifier that uniquely identifies an active MVS operating system. Valid format is an alphanumeric string, with a maximum of 4 characters.

Link Termid
Indicates the name, from the TCTTE, of this link. The value format is an alphanumeric string, a maximum of four characters.

Origin Node
Is the combination of MVS System ID (SMFID) and CICS region name. The value format is an alphanumeric string, maximum 32 bytes, and case-sensitive.

When a situation is true, the system compares the origin node name in the attribute to the names of managed systems assigned to the item. If the origin node name matches the name of a managed system, the status of the item changes accordingly. If the names of the origin node and the managed systems do not match, the status of the item remains unchanged.

Log Stream Analysis
The Log Stream Analysis attributes report on the configuration and performance data for every MVS log stream that is connected to CICS. Use the Log Stream Analysis attributes in situations to quickly analyze the performance of any connected log stream. These attributes provide data for the Log Stream Analysis table view.

Auto Delete
Is the log auto delete indicator. If set to

Yes, the MVS Logger automatically deletes the data as it matures beyond the retention period, irrespective of any log stream delete calls. If set to

No, the data is only deleted when a log stream delete call is issued and the data has matured beyond the retention period. Enumerated values are:
• Y=Yes
• N=No.
Average Bytes Written
   Is the average number of bytes written to this log stream per request. The value format is an integer.

Browse Reads
   Is the number of browse read requests issued for this log stream. If the log stream is not part of the System Log, this field will contain the value n/a, as it cannot be browsed. The value format is an integer.

Browse Starts
   Indicates the number of browse start requests issued for this log stream. If the log stream is not part of the System Log, this field will contain the value n/a, as it cannot be browsed. The value format is an integer.

Buffer Appends
   Indicates the number of occasions on which a journal record was successfully appended to the current log stream buffer. The value format is an integer.

Buffer Full Waits
   Indicates the number of times buffer full has occurred for this log stream. The value format is an integer.

Bytes Written
   Indicates the number of bytes written to this log stream. The value format is an integer.

CICS Region Name
   Indicates the job name or modify ID of the CICS region being monitored. Each CICS region in an MVS image has a unique name. This name is an alphanumeric string, with a maximum of 8 characters, and case-sensitive. CICS region names are always in uppercase characters.

Current Waiters
   Indicates the current number of force waiters for this log stream. The value format is an integer.

DASD Only
   Indicates the type of log stream. If set to Yes, the log stream is of type DASDONLY.
   If set to No, the log stream is of type coupling facility (CF). The value format is an integer.

Force Waits
   Indicates the total number of force waits for this log stream. The value format is an integer.

MVS Log Stream Name
   Indicates the name of the log stream. The value format is an alphanumeric string, with a maximum of 26 characters.

Origin Node
   Indicates the combination of MVS System ID (SMFID) and CICS region name. The value format is an alphanumeric string, maximum 32 bytes, and case-sensitive.
   When a situation is true, the system compares the origin node name in the attribute to the names of managed systems assigned to the item. If the origin node name matches the name of a managed system, the status of the item changes accordingly. If the names of the origin node and the managed systems do not match, the status of the item remains unchanged.
Max Block Length
Indicates the maximum block size allowed by the MVS Logger for the log stream. The value format is an integer.

Peak Waiters
Indicates the peak number of force waiters for this log stream. The value format is an integer.

Retention Period
Indicates the log stream retention period (in days) for which data must be kept before it can be physically deleted by the MVS Logger. The value format is an integer.

Retry Errors
Indicates the number of occasions on which MVS system logger retryable errors occurred when a block of data was being written to the log stream. The value format is an integer.

Statistics Last Reset
Indicates the last time that log stream statistics were reset, possibly due to interval statistics collection. The value format is an integer.

Stream Deletes
Indicates the number of delete (IXGDELET) requests issued for this log stream. If the log stream is not part of the System Log, this field will contain the value 'n/a', as it cannot be deleted. The value format is an integer.

Stream Status
Indicates the current status of the log stream. Enumerated values are:
- F=Failed
- O=OK
- Y=Yes
- N=No

Structure Name
Indicates the coupling facility (CF) structure name for the log stream. The structure name is only applicable to coupling facility type log streams. The value format is an alphanumeric string, with a maximum of 16 characters.

System ID
Indicates the 4-character name that uniquely identifies an active MVS operating system within a given CICSplex. The value format is an alphanumeric string, maximum 4 characters, and case-sensitive. MVS System IDs are always in uppercase characters.

System Log
Indicates whether the log stream forms part of the System Log. Enumerated values are:

Use Count
Indicates the current use count of the log stream. The value format is an integer.

Write Requests
Indicates the number of IXGWRITE requests issued to this log stream. The value format is an integer.

Message Queueing Analysis
The Message Queueing Analysis attributes help identify problems across CICS regions and MVS images that the CICSplex spans.
Use the Message Queueing Analysis attributes in situations to monitor message queuing (MQ) services. These attributes provide data for the Message Queueing Analysis table view.

**Adapter Status**
Indicates the status of the CICS MQ adapter. The valid values include:
- Active
- Inactive
- Unknown
- Not installed

The CICS MQ adapter provides access to MQSeries® for CICS applications, and also provides control functions that initiate and manage connections. Control functions can be accessed through the CKQC transaction, or from application programs using EXEC CICS LINK.

**API Calls**
Indicates the number of API calls logged for this MQ connection. The value format is a positive integer, a maximum of four characters.

**Backout Requests**
Indicates the number of MQ calls that resulted in a backout. An application issues a backout request if it encounters an error during a series of puts or gets. The value format is a positive integer, a maximum of four characters.

**Busy TCBs**
Indicates the number of busy CICS-MQ task control blocks (TCBs) that are in use for this MQ connection. The value format is an integer, a maximum of four characters, and in the range 0-50.

**CICS Name**
Indicates the name that identifies a CICS region. Each CICS region in an MVS image has a unique name. This name is an alphanumeric string, with a maximum of 8 characters, and case-sensitive. CICS region names are always in uppercase characters.

**Commit Requests**
Indicates the number of calls issued to commit operations for MQ resources. The value format is a positive integer, a maximum of four characters.

**Connection status**
Indicates the status of the connection for MQ Services. Valid values are:
- Connected
- Connecting
- Force
- Inactive
- Invalid*
- Not Installed*
- Pending
- Quiescing
- Shutdown
- Unsupported*

---

**MVS TCB Details**

The MVS TCB global attributes report addresses, storage, tasks, and transactions running on a CICS TCB.

**CICS Region Name**
Indicates the job name or modify ID of the CICS region being monitored. Each
CICS region in an MVS image has a unique name. This name is an alphanumeric string, with a maximum of 8 characters, and case-sensitive. CICS region names are always in uppercase characters.

**CICS Task Number**
Is the CICS task number (1-99999) of the current task running on this TCB, if any.

**CICS TCB**
Specifies whether this is a CICS-owned TCB or not. CICS-owned TCBs are the CICS jobstep TCB and those that were attached by CICS system code. Non-CICS TCBs are those that were attached by other products in the CICS address space.

**CPU Time**
Is the accumulated CPU time for this TCB, taken from TCB field TCBTTIME.

**CPU per cent**
Is the percentage of the CPU time for all current TCBs of this type (CICS or non-CICS) that this TCB has taken. Note that only currently attached TCBs are listed. There may have been others that have now terminated.

**Daughter TCB**
Is the address of this TCB's daughter TCB, that is, one that it attached.

**Mother TCB**
Is the address of this TCB's mother TCB, that is, the one that attached it.

**Origin Node**
Is the combination of MVS System ID (SMFID) and CICS region name. The value format is an alphanumeric string, maximum 32 bytes, and case-sensitive.

When a situation is true, the system compares the origin node name in the attribute to the names of managed systems assigned to the item. If the origin node name matches the name of a managed system, the status of the item changes accordingly. If the names of the origin node and the managed systems do not match, the status of the item remains unchanged.

**Private Storage Below 16M**
Is the amount of private storage below the 16M line currently allocated to this TCB. This consists of whole pages allocated to the TCB by MVS. Each page will typically contain bytes that are not in-use (have not been returned in response to a GETMAIN) and are only available to GETMAINs from this TCB.

**Private Storage Above 16M**
Is the amount of private storage above the 16M line currently allocated to this TCB. This consists of whole pages allocated to the TCB by MVS. Each page typically contains bytes that are not in-use (have not been returned in response to a GETMAIN) and are only available to GETMAINs from this TCB.

**Sister TCB**
Is the address of this TCB's sister TCB, that is, the next one attached by its mother.

**System ID**
Indicates the four-character name that uniquely identifies an active MVS operating system within a given CICSplex. The value format is an alphanumeric string, maximum 4 characters, and case-sensitive. MVS System IDs are always in uppercase characters.
Task Status
Is the run status of the CICS task on this TCB. Possible values are: DISPATCHABLE, RUNNING or SUSPENDED.

TCB Address
Is the address of the MVS Task Control Block (TCB).

TCB Name
Is the name of TCB such as QR, RO, DFHTRTCB for CICS-owned TCBs otherwise the value 'non-cics' is used for TCBs running in the CICS address space but not owned by CICS.

Transaction Identifier
Is the transaction ID of the CICS task currently running on this TCB.

MVS TCB Global

The MVS TCB global attributes report data related to start time, storage usage, and CPU time of the CICS TCBs. This can be retrieved using the COLLECT STATISTICS DISPATCHER command.

CICS Region Name
Indicates the job name or modify ID of the CICS region being monitored. Each CICS region in an MVS image has a unique name. This name is an alphanumeric string, with a maximum of 8 characters, and case-sensitive. CICS region names are always in uppercase characters.

CICS Start Time
Is the time at which the CICS dispatcher started. This value can be used as an approximate time at which CICS started. The DFHSTUP report expresses this time as hours:minutes:seconds.decimals; however, the DSECT field contains the time as a store clock (STCK) value in GMT. This information is obtained from the DISPATCHER statistics record DFHDGDS field DSGSTART.

CICS TCB Count
Is the number of TCBs currently present in the CICS address space that are part of CICS, that is controlled by the CICS Dispatcher. This information is obtained from the MVSTCB statistics record DFHDSTDS field DSTDS_CICSTCB_COUNT.

CICS TCB CPU Time
Is the amount of CPU time that has been used by the TCBs currently present in the CICS address space that are part of CICS, that is controlled by the CICS Dispatcher. This information is obtained from the MVSTCB statistics record DFHDSTDS field DSTDS_CICSTCB_CPUTIME.

CICS TCB Storage Above
Is the amount of private storage above the 16M line currently allocated to TCBs currently present in the CICS address space that are part of CICS, that is controlled by the CICS Dispatcher. This information is obtained from the MVSTCB statistics record DFHDSTDS field DSTDS_CICSTCB_STG_ABOVE.

CICS TCB Storage Below
Is the amount of private storage below the 16M line currently allocated to TCBs currently present in the CICS address space that are part of CICS, that is, controlled by the CICS Dispatcher. This information is obtained from the MVSTCB statistics record DFHDSTDS field DSTDS_CICSTCB_STG_BELOW.
CPU Time
Is the total CPU time accumulated by this CICS address space so far. This is obtained from the MVS Address Space Control Block field ASCBEJST.

CPU Time since reset
Is the CPU time accumulated by this CICS address space since the last statistics reset. This information is obtained from the DISPATCHER statistics record DFHDSGDS field DSGEJST.

Non-CICS TCB Count
Is the number of TCBs currently present in the CICS address space that are NOT part of CICS, that is not controlled by the CICS Dispatcher. This information is obtained from the MVSTCB statistics record DFHDSTDS field DSTDS_NONCICSTCB_COUNT.

Non-CICS TCB CPU Time
Is the amount of CPU time that has been used by the TCBs currently present in the CICS address space that are NOT part of CICS i.e. not controlled by the CICS Dispatcher. This information is obtained from the MVSTCB statistics record DFHDSTDS field DSTDS_NONCICSTCB_CPUTIME.

Non-CICS TCB Storage Above
Is the amount of private storage above the 16M line currently allocated to TCBs currently present in the CICS address space that are NOT part of CICS, that is not controlled by the CICS Dispatcher. This information is obtained from the MVSTCB statistics record DFHDSTDS field DSTDS_NONCICSTCB_STG_ABOVE.

Non-CICS TCB Storage Below
Is the amount of private storage below the 16M line currently allocated to TCBs currently present in the CICS address space that are NOT part of CICS, that is not controlled by the CICS Dispatcher. This information is obtained from the MVSTCB statistics record DFHDSTDS field DSTDS_NONCICSTCB_STG_BELOW.

Origin Node
Is the combination of MVS System ID (SMFID) and CICS region name. The value format is an alphanumeric string, maximum 32 bytes, and case-sensitive.

When a situation is true, the system compares the origin node name in the attribute to the names of managed systems assigned to the item. If the origin node name matches the name of a managed system, the status of the item changes accordingly. If the names of the origin node and the managed systems do not match, the status of the item remains unchanged.

SRB Time
Is the total SRB time accumulated by this CICS address space so far. This is obtained from the MVS Address Space Control Block field ASCBSRBT.

SRB Time since reset
Is the SRB time accumulated by this CICS address space since the last statistics reset. This information is obtained from the DISPATCHER statistics record DFHDSGDS field DSGSRBT.

System ID
Indicates the four-character name that uniquely identifies an active MVS operating system within a given CICSpex. The value format is an alphanumeric string, maximum 4 characters, and case-sensitive. MVS System IDs are always in uppercase characters.
Online Data Viewing

This report displays response time data for all completed transactions based on the criteria you specify. This information is derived from the CICS Monitoring Facility (CMF) and OMEGAMON II® for CICS data. You can use this report to analyze transaction response time and to isolate transactions with poor response time. You can also use this report to determine the impact of various resources on transaction response time.

**Abend Code**
Indicates the transaction abnormal termination code, if applicable.

**CICS Region Name**
Indicates the job name or modify ID of the CICS region being monitored. Each CICS region in an MVS image has a unique name. This name is an alphanumeric string, with a maximum of 8 characters, and case-sensitive. CICS region names are always in uppercase characters.

**CICS Version**
Indicates the version of CICS running in the address space.

**CPU Time**
Indicates the amount of accumulated CPU time, in hundredths of a second, for the task.

**End Time**
Indicates the time of day when the transaction completed.

**File Requests**
Indicates the total number of all file control, DB2, DL/I, and third-party database requests.

**Origin Node**
Is the combination of MVS System ID (SMFID) and CICS region name. The value format is an alphanumeric string, maximum 32 bytes, and case-sensitive.

When a situation is true, the system compares the origin node name in the attribute to the names of managed systems assigned to the item. If the origin node name matches the name of a managed system, the status of the item changes accordingly. If the names of the origin node and the managed systems do not match, the status of the item remains unchanged.

**Program ID**
Indicates the CICS program name or the umbrella name.

**Response Time**
Indicates the task response time in milliseconds.

**Storage HWM**
Indicates the high-water-mark for all user storage above and below the 16 megabyte line.

**System ID**
Indicates the four-character name that uniquely identifies an active MVS operating system within a given CICSPlex. The value format is an alphanumeric string, maximum 4 characters, and case-sensitive. MVS System IDs are always in uppercase characters.

**Terminal ID**
Indicates the four-character ID of the terminal where the transaction originated.
Terminal I/O
Indicates the character count of all input and output messages.

Task Number
Indicates the number sequentially assigned by CICS to uniquely identify each task.

Transaction ID
Indicates the four-character name of the transaction.

Transaction Type
Indicates how the transaction was started.

User ID
Indicates the user’s eight-character CICS logon ID

Unit of Work ID
Indicates unit-of-work descriptor assigned to the task.

Pagepool Details

The storage report provides information on the use of MVS and CICS virtual storage. It contains the information you need to understand your current use of virtual storage above and below the 16 MB line, and helps you to verify the size values and limits used for the various standard and extended Dynamic Storage Areas.

Access Type
Is the type of access of the subpool. It is either CICS, USER, or READONLY. If storage protection is not active, all storage areas revert to CICS except those in the ERDSA.

CICS Region Name
Indicates the job name or modify ID of the CICS region being monitored. Each CICS region in an MVS image has a unique name. This name is an alphanumeric string, with a maximum of 8 characters, and case-sensitive. CICS region names are always in uppercase characters.

Current Subpools
Is the current number of subpools (domain and task) in this DSA.

Current Suspensions
Is the number of GETMAIN requests currently suspended for storage.

Cushion Releases
Is the number of times a GETMAIN request caused the storage cushion to be released. The cushion is said to be released when the amount of free storage drops below the cushion size.

Cushion Size
Is the size of the cushion, expressed in bytes. The cushion forms part of the associated DSA, and is the amount of storage that CICS holds in reserve, it is only be freed to try and alleviate an ongoing SOS condition.

Cushion Size (KB)
Is the current DSA storage cushion size in kilobytes. The current cushion size of the DSA size in the current CICS Region, rounded up to kilobytes.

Cushion Size (MB)
Is the current DSA storage cushion size in megabytes. The current cushion size of the DSA size in the current CICS Region, rounded up to megabytes.
DSA Index
Is the numeric representation of the DSA name. Values are:
- 1 = CDSA.
- 2 = UDSA.
- 3 = SDSA.
- 4 = RDSA.
- 5 = ECDSA.
- 6 = EUDSA.
- 7 = ESDSA.
- 8 = ERDSA.

DSA Name

DSA Size
Is the size of the current DSA expressed in bytes.

DSA Size (KB)
Is the current size of DSA in kilobytes. The size of the DSA in the current CICS Region at the time of this query, rounded up to kilobytes.

DSA Size (MB)
Is the current size of DSA in megabytes. The size of the DSA in the current CICS Region at the time of this query, rounded up to megabytes.

DSA Usage
Is the current portion of DSA being used. The current storage use of the Dynamic Storage Area in the current CICS Region at the time of this query.

DSA Usage (KB)
Is the current portion of DSA being used in kilobytes. The current storage use of the Dynamic Storage Area in the current CICS Region at the time of this query, rounded up to kilobytes.

DSA Usage (MB)
Is the current portion of DSA being used in megabytes. The current storage use of the Dynamic Storage Area in the current CICS Region at the time of this query, rounded up to megabytes.

DSA Use Percentage of DSA Size
Is the current usage percentage of the subpool in its parent dynamic storage area in the current CICS region.

Extents
Is the current number of extents allocated to this DSA.

Extents added
Is the number of extents added to this DSA.

Extents removed
Is the number of extents released from this DSA.

FREEMAIN
Is the number of FREEMAIN requests from the current DSA.

Free Storage
Is the current amount of free storage in the current Subpool expressed in bytes.
Free Storage (KB)
Is the total amount of free storage in kilobytes. The current amount of free storage (including the cushion) within the current DSA in this CICS Region, rounded up to kilobytes.

Free Storage (MB)
Is the total amount of free storage in megabytes. The current amount of free storage (including the cushion) within the current DSA in this CICS Region, rounded up to megabytes.

GETMAIN
Is the number of GETMAIN requests from the current DSA.

High-Water Mark
Is the peak size of the current DSA, expressed in bytes.

High-Water Mark (KB)
Is the high-water mark storage size in kilobytes. The highest value of the DSA size that has occurred since the current CICS Region was started, rounded up to kilobytes.

High-Water Mark (MB)
Is the high-water mark storage size in megabytes. The highest value of the DSA size that has occurred since the current CICS Region was started, rounded up to megabytes.

HWM Free Storage (KB)
Is the total amount of HWM free storage in kilobytes. The current amount of high-water mark free storage (including the cushion) within the current DSA in this CICS Region, rounded up to kilobytes.

HWM Free Storage (MB)
Is the total amount of HWM free storage in megabytes. The current amount of high-water mark free storage (including the cushion) within the current DSA in this CICS Region, rounded up to megabytes.

HWM Suspensions
Is the peak number of GETMAIN requests suspended for storage.

HWM Free Storage
Is total amount of HWM free storage. The current amount of high-water mark free storage (including the cushion) within the current DSA in this CICS Region.

Insufficient storage
Is the number of times a GETMAIN request with SUSPEND(NO) returned the condition INSUFFICIENT_STORAGE.

Largest Free Area
Is the length of the largest contiguous free area in this DSA, expressed in bytes.

Largest Free Area (KB)
Is the largest contiguous free storage size in kilobytes. The size of the largest continuous area of free storage within the current DSA in this CICS Region, rounded up to kilobytes.

Largest Free Area(MB)
Is the largest contiguous free storage size in megabytes. The size of the largest continuous area of free storage within the current DSA in this CICS Region, rounded up to megabytes.
LWM Free Storage
is total amount of LWM free storage. The current amount of low-water mark free
storage (including the cushion) within the current DSA in this CICS Region.

LWM Free Storage (KB)
is total amount of LWM free storage in kilobytes. The current amount of
low-water mark free storage (including the cushion) within the current DSA in
this CICS Region, rounded up to kilobytes.

LWM Free Storage (MB)
is total amount of LWM free storage in megabytes. The current amount of
low-water mark free storage (including the cushion) within the current DSA in
this CICS Region, rounded up to megabytes.

Origin Node
Is the combination of MVS System ID (SMFID) and CICS region name. The
value format is an alphanumeric string, maximum 32 bytes, and case-sensitive.

When a situation is true, the system compares the origin node name in the
attribute to the names of managed systems assigned to the item. If the origin
node name matches the name of a managed system, the status of the item
changes accordingly. If the names of the origin node and the managed systems
do not match, the status of the item remains unchanged.

SOS Occurrences
Is the number of times CICS went SOS in the associated DSA, where SOS
means either that the cushion is currently in use or there is at least one task
suspended for storage.

Storage Violations
Is the number of storage violations recorded in the associated DSA.

Subpool Additions
Is the number of ADD_SUBPOOL requests to create a subpool (domain or task)
for the associated DSA.

Subpool Deletions
Is the number of DELETE_SUBPOOL requests (domain or task) from the
associated DSA.

Subpool Location
Is the storage location of this domain subpool, either ABOVE or BELOW the 16
MB addressability line.

System ID
Indicates the four-character name that uniquely identifies an active MVS
operating system within a given CICSplex. The value format is an alphanumeric
string, maximum 4 characters, and case-sensitive. MVS System IDs are always
in uppercase characters.

Total SOS Time
Is the accumulated time that CICS has been SOS in this DSA.

Total Suspensions
Is the number of times a GETMAIN request with SUSPEND(YES) was
suspended because of insufficient storage to satisfy the request at the moment.

Unconditional Suspensions
Is the number of requests which were purged while suspended for storage.
Pagepool Summary

The storage pagepool summary attributes report all aspects of storage management.

CICS Region
Indicates the job name or modify ID of the CICS region being monitored. Each CICS region in an MVS image has a unique name. This name is an alphanumeric string with a maximum of 8 characters and case-sensitive. CICS region names are always in uppercase characters.

Current Common Subspace Users
Is the current number of common subspace users. The count of common subspace users in the current CICS Region. The value format is an integer of maximum four bytes.

Current DSA Limit
Is the current DSA limit. The current limit for the Dynamic Storage Area in the current CICS Region. The value format is an integer of maximum four bytes.

Current DSA Limit (KB)
Is the current DSA limit in kilobytes. The current limit for the Dynamic Storage Area in the current CICS Region in kilobytes. The value format is an integer of maximum four bytes.

Current DSA Limit (MB)
Is the current DSA limit in megabytes. The current limit for the Dynamic Storage Area in the current CICS Region in megabytes. The value format is an integer of maximum four bytes.

Current DSA Total
Is the total amount of storage currently allocated to the DSAs below the line.

Current DSA Total (KB)
Is the total amount of storage currently allocated to the DSAs below the line in kilobytes.

Current DSA Total (MB)
Is the total amount of storage currently allocated to the DSAs below the line in megabytes.

Current DSA Usage
Is the total amount DSA current in use.

Current DSA Usage (KB)
Is the total amount DSA current in use in kilobytes.

Current DSA Usage (MB)
Is the total amount DSA current in use in megabytes.

Current EDSA Limit
Is the current EDSA limit. The current limit for the Extended Dynamic Storage Area in the current CICS Region. The value format is an integer of maximum four bytes.

Current EDSA Limit (KB)
Is the current EDSA limit in kilobytes. The current limit for the Extended Dynamic Storage Area in the current CICS Region in kilobytes. The value format is an integer of maximum four bytes.

Current EDSA Limit (MB)
Is the current EDSA limit in megabytes. The current limit for the Extended Dynamic Storage Area in the current CICS Region in megabytes. The value format is an integer of maximum four bytes.
Dynamic Storage Area in the current CICS Region in megabytes. The value format is an integer of maximum four bytes.

**Current EDSA Total**
Is the total amount of storage currently allocated to the EDSAs above the line.

**Current EDSA Total (KB)**
Is the total amount of storage currently allocated to the DSAs above the line in kilobytes.

**Current EDSA Total (MB)**
Is the total amount of storage currently allocated to the DSAs above the line in megabytes.

**Current EDSA Usage**
Is the total amount EDSA current in use.

**Current EDSA Usage (KB)**
Is the total amount EDSA current in use in kilobytes.

**Current EDSA Usage (MB)**
Is the total amount EDSA current in use in megabytes.

**Current Unique Subspace Users**
Is the current number of unique subspace users. The count of unique subspace users in the current CICS Region. The value format is an integer of maximum four bytes.

**DSA Use Percentage**
Is the current DSA usage as a percentage of the total.

**EDSA Use Percentage**
Is the current EDSA usage as a percentage of the total.

**HWM Common Subspace Users**
Is the high-water mark of common subspace users. The high-water mark value for the number of common subspace users in the current CICS Region. The value format is an integer of maximum four bytes.

**HWM DSA Total**
Is the high-water mark DSA total. The current high-water mark total for the Dynamic Storage Area in the current CICS Region. The value format is an integer of maximum four bytes.

**HWM DSA Total (KB)**
Is the high-water mark DSA total in kilobytes. The current high-water mark total for the Dynamic Storage Area in the current CICS Region. The value format is an integer of maximum four bytes.

**HWM DSA Total (MB)**
Is the high-water mark DSA total in megabytes. The current high-water mark total for the Dynamic Storage Area in the current CICS Region. The value format is an integer of maximum four bytes.

**HWM EDSA Total**
Is the high-water mark extended DSA total. The current high-water mark total for the Extended Dynamic Storage Area in the current CICS Region. The value format is an integer of maximum four bytes.

**HWM EDSA Total (KB)**
Is the high-water mark extended DSA total in kilobytes. The current high-water mark total for the Extended Dynamic Storage Area in the current CICS Region. The value format is an integer of maximum four bytes.
HWM EDSA Total (MB)
Is the high-water mark extended DSA total in megabytes. The current high-water mark total for the Extended Dynamic Storage Area in the current CICS Region. The value format is an integer of maximum four bytes.

HWM Unique Subspace Users
Is the high-water mark of unique subspace users. The high-water mark value for the number of unique subspace users in the current CICS Region. The value format is an integer of maximum four bytes.

MVS Wait Count
Is the MVS storage wait count total. The current total number of waits for MVS storage in the current CICS Region. The value format is an integer of maximum four bytes.

MVS Wait Time
Is the total time spent in MVS storage waits.

Pagepool Count
Is the total number of pagepools in the current CICS Region. The value format is an integer of maximum four bytes.

Program Re-entrancy
Is the status of the re-entrant programs in the current CICS Region. Values are: ACTIVE or INACTIVE.

Storage Protection
Is the status of the storage protection in the current CICS Region. Storage protection protects CICS code and control blocks from being accidentally overwritten by user applications. Values are: PROTECT or NOPROTECT.

System ID
Indicates the four-character name that uniquely identifies an active MVS operating system within a given CICSplex. The value format is an alphanumeric string, maximum 4 characters, and case-sensitive. MVS System IDs are always in uppercase characters.

Total Common Subspace Users
Is the cumulative number of common subspace users. The total number of common subspace users in the current CICS Region. The value format is an integer of maximum four bytes.

Total Unique Subspace Users
Is the cumulative number of unique subspace users. The total number of unique subspace users in the current CICS Region. The value format is an integer of maximum four bytes.

Transaction Isolation
Is the status of the transaction isolation in the current CICS Region. Transaction isolation offers protection against transaction data being accidentally overwritten by other user transactions. Values are: ACTIVE or INACTIVE.

Program Definitions

The Program Definition Information attributes report how a program is defined to CICS.

Amode
Indicates whether this program executes in AMODE 24 or 31.
CEDF Allowed
Indicates whether or not the execution diagnostic facility (EDF) initiation and termination screens will be displayed.

CICS Region Name
Indicates the job name or modify ID of the CICS region being monitored. Each CICS region in an MVS image has a unique name. This name is an alphanumeric string, with a maximum of 8 characters, and case-sensitive. CICS region names are always in uppercase characters.

COBOL Offset to First BLL Cell
For a COBOL program, the offset to the first BLL cell.

COBOL TGT Address
For a COBOL program, the address in hex of the TGT.

COBOL TGT and Working Storage Size
Is the sum, in hex, of the sizes of the TGT and Working Storage for a COBOL program.

COBOL TGT Size
Is the size, in hex, of the TGT for a COBOL program.

Concurrency
Whether the program is quasi-reentrant or threadsafe.

Current Copies
Indicates the number of copies of the program currently in storage.

Current Use Count
Is the sum of the number of tasks currently using this program and the number of current copies that are loaded.

Data Location
Indicates the location of initially allocated storage for this program.

Deduced Language
Indicates the actual language of this program as determined by CICS.

Defined Language
Indicates the language for this program, as defined using the CICS Resource Definition facility.

Definition Type
Is the method by which the program definition was installed on this system.

Entry Point
Indicates the address of the first instruction to be executed following a LOAD/CALL or LINK or XCTL command.

Execution Key
Is the execution key for this program.

EXECUTIONSET
Whether this program uses the full API or the DPL subset.

Hotpool Required
Indicates whether the program should run in a preinitialized Language Environment®.

Java Class Name
Is the name of the Java Class this program will use.

Java Machine Specified
Whether this program runs under the control of a Java machine.
JVM Debug
Indicates whether JVM=DEBUG was specified.

JVM Profile
Is the profile required to start the Java Virtual Machine under which this program will run.

Length
Is the length of the program.

Load Point
Is the address of the program.

Load Status
Indicates whether this program is loaded or not.

Loaded From
Indicates where from was the program loaded.

Multithread JVM
Indicates whether this program requires a multithreaded JVM.

Origin Node
Is the combination of MVS System ID (SMFID) and CICS region name. The value format is an alphanumeric string, maximum 32 bytes, and case-sensitive.

When a situation is true, the system compares the origin node name in the attribute to the names of managed systems assigned to the item. If the origin node name matches the name of a managed system, the status of the item changes accordingly. If the names of the origin node and the managed systems do not match, the status of the item remains unchanged.

Program Attribute
Indicates whether this program will reside in storage when it is not being used.

Program Location
Which area of the CICS address space the program resides in.

Program Name
Is the eight-character name that uniquely identifies this program to CICS.

Program Status
Indicates the status of the program.

Remote Program ID
Is the name of this program in the remote system.

Remote System ID
Is the Connection name of the remote system where this program is defined to execute.

Remote Transaction ID
Is the transaction name that will be attached in the remote system and under which the program will be run.

Rmode
Indicates whether the RMODE of this program is 24 or ANY.

RPL Dataset Name
Is the name of the RPL data set the program was loaded from.

Statistics Deletes by Compression
Indicates the number of times the program has been deleted from virtual storage as a result of storage notify requests.
Statistics Last Reset
Is the last time Interval Statistics were reset.

Statistics Refreshes
Indicates the number of times a CEMT NEWCOPY has been performed for this program.

Statistics Use Count
Is the use count at the time statistics were updated.

System ID
Indicates the four-character name that uniquely identifies an active MVS operating system within a given CICSplex. The value format is an alphanumeric string, maximum 4 characters, and case-sensitive. MVS System IDs are always in uppercase characters.

Total Load Count
Indicates the total number of times a new copy of the program has been loaded since CICS was started.

Total Use Count
Indicates the total number of times the program has been used since CICS was started.

Region Datasets

The Region Overview attributes report on the internal resources of CICS regions. These resources include storage, files, queues, and enqueues.

Active Strings
Is the number of VSAM active strings.

CICS Region Name
Indicates the job name or modify ID of the CICS region being monitored. Each CICS region in an MVS image has a unique name. This name is an alphanumeric string, with a maximum of 8 characters, and case-sensitive. CICS region names are always in uppercase characters.

Concatenation Number
Is the data set concatenation number as specified in the Job JCL.

Data Set Disposition
Indicates the value of the DISPOSITION option for the data set.

Data Set Name
Is the name of data set allocated to the CICS region.

Data Set Type
Identifies the type of data set.

DDNAME
Is the DDNAME as specified in region JCL.

File Access
Is the file access types.

File Attributes
Specifies whether the file is to be accessed in RLS mode. The file must be closed, and either disabled or unenabled, to change the access mode to RLS access or to non-RLS access. The non-RLS mode becomes either LSR or NSR, depending on the value specified for LSRPOOLID in the file resource definition.
Number of Strings
Is the number of VSAM strings allocated.

Origin Node
Is the combination of MVS System ID (SMFID) and CICS region name. The value format is an alphanumeric string, maximum 32 bytes, and case-sensitive.

When a situation is true, the system compares the origin node name in the attribute to the names of managed systems assigned to the item. If the origin node name matches the name of a managed system, the status of the item changes accordingly. If the names of the origin node and the managed systems do not match, the status of the item remains unchanged.

System ID
Indicates the four-character name that uniquely identifies an active MVS operating system within a given CICSpelix. The value format is an alphanumeric string, a maximum of four characters, and is case-sensitive. MVS System IDs are always in uppercase characters.

Volser
Is the volume serial number of the data set.

VSAM Enable Status
Is the enable status of a VSAM file.

VSAM Open Status
Is the Open/Close status of a VSAM file.

Region Overview

The Region Overview attributes report on the internal resources of CICS regions. These resources include storage, files, queues, and enqueues.

AIDs
Indicates the number of automatic initiate descriptors (AIDs) found on the AID chain within a given CICS region. The value format is a positive integer, maximum 4 characters. An AID is created when CICS is unable to start a task because a resource is not available. An accumulation of AIDs can adversely affect CICS storage and CPU availability. An AID remains in CICS until the resource is available, CICS is shut down, or the AID is killed.

CICS Region Name
Indicates the job name or modify ID of the CICS region being monitored. Each CICS region in an MVS image has a unique name. This name is an alphanumeric string, with a maximum of 8 characters, and case-sensitive. CICS region names are always in uppercase characters.

CICS SYSIDNT
Indicates the four-character CICS system ID assigned to this CICS region. The value format is an alphanumeric string, a maximum of four characters, and is case-sensitive. CICS system IDs are always in uppercase characters.

CICS TOD Clock
Indicates the time of day clock setting in the CICS Common System Area (CSA). The time is expressed in 0.01 seconds units. The value format is a maximum of four bytes.

Note: If fractional values are desired, you must include decimal points and up to two decimal places. For example, if you want 5.2 seconds, add the decimal point.
CICS TOD Updated
Indicates whether the CICS time of day clock is being updated. When a task goes into a loop and the CICS task dispatcher is unable to regain control, the CICS time of day clock field in the Common System Area is not updated by task control. The valid values are:
Yes, c5= ‘Courier New’”>30%
A low-to-zero value indicates the absence of a work load or non-dispatch by MVS. A high-to-100% value indicates a heavy work load or a potential loop in either application or CICS logic.

Enqueue Waits
Indicates the number of CICS enqueues exclusively controlling a resource that tasks are also waiting for. The value format is a positive integer, a maximum of four characters. A large number signifies that too many tasks are competing for exclusive access to the same resources at the same time, which can indicate a looping task, a deadlock situation, or poor response time from a task that holds an enqueued resource.

ICEs
Indicates the number of interval control elements (ICEs) found on the ICE chain within a given CICS region. The value format is a positive integer, a maximum of four characters. An ICE is created whenever a time-dependent request for a CICS service is made. When the expiration time for the ICE is reached, the CICS service requested is initiated if the resources required for the service are available. If the requested service is task initiation, CICS creates an automatic initiate descriptor (AID) on ICE expiration. The AID either initiates the task or waits until required resources become available.

I/O Rate
Indicates the rate at which I/O operations are being performed in a specified CICS region per second of elapsed time. It includes both application- and CICS-initiated I/O operations. The value format is a maximum of four characters.

Note: If fractional values are desired, you must include decimal points and up to two decimal places. For example, if you want 5.2 seconds, add the decimal point.

Largest Contiguous Available LSQA
Indicates the largest amount of contiguous local system queue area (LSQA) that is available. If LSQA accumulates to reach the top of the allocated private region, address space termination can occur. The value format is a positive integer with a maximum of four characters.

Largest Contiguous Available OSCOR
Indicates the largest amount of contiguous free operating system core (OSCOR) that is available. If OSCOR is consumed to meet the IEALIMIT or expands to the bottom of the local system queue area (LSQA) address space termination can occur. The value format is a positive integer with a maximum of four characters.

Maximum Tasks Percent
Indicates the total number of tasks within a CICS region, expressed as a percentage of the MAXTASK limit. Attaching of new tasks within the CICS region stops when the maximum task limit reaches 100%. The value format is a percentage in the range 0-100.
Origin Node
Is the combination of MVS System ID (SMFID) and CICS region name. The value format is an alphanumeric string, maximum 32 bytes, and case-sensitive.

When a situation is true, the system compares the origin node name in the attribute to the names of managed systems assigned to the item. If the origin node name matches the name of a managed system, the status of the item changes accordingly. If the names of the origin node and the managed systems do not match, the status of the item remains unchanged.

Page Rate
Indicates the number of page-in operations in the CICS region per CPU second. The paging rate is important because CICS transactions wait until a page-in resolves. The value format is a maximum of four characters.

Note: If fractional values are desired, you must include decimal points and up to two decimal places. For example, if you want 5.2 seconds, add the decimal point.

Region Status
Indicates CICS address space position. The valid values are

<table>
<thead>
<tr>
<th>In</th>
<th>Indicates that the region is swapped in</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inactive*</td>
<td>Indicates that the CICS region is inactive</td>
</tr>
<tr>
<td>N/S</td>
<td>Indicates that the CICS region is non-swappable</td>
</tr>
<tr>
<td>Out</td>
<td>Indicates that the region was swapped out during data collection, perhaps for the entire sample period, and that the sample is incomplete</td>
</tr>
</tbody>
</table>

*The Inactive status is not displayed in CandleNet Portal for CICS reports. Use this value only for creating situations.

Storage Violations
Indicates the number of storage violations that have occurred within the last hour. A storage violation occurs when CICS detects storage corruption for a task. The value format is a positive integer with a maximum of four characters.

System ID
Indicates the four-character name that uniquely identifies an active MVS operating system within a given CICSplex. The value format is an alphanumeric string, a maximum of four characters, and is case-sensitive. MVS System IDs are always in uppercase characters.

Transaction Rate
Indicates the average number of transactions executed in one minute of elapsed time. For example, if the statistics are collected every 10 minutes, and the total number of transactions during the last 10 minutes is 300, the average number of transactions per minute is 30. The value format is a positive integer of a with a maximum of two bytes.

VTAM ACB Open
Indicates whether the VTAM Access Method Control Block (ACB) is open or closed. The VTAM ACB defines the interface between the application code (CICS) and VTAM routines so that CICS can use VTAM facilities. The valid values are Yes and No.

VTAM Applid
Indicates the eight-character name that specifies the VTAM applid of the CICS region. Each CICS region has a unique VTAM applid. VTAM applids are always in uppercase characters. Therefore, valid values for this item should always be
in uppercase characters. The value format is an alphanumeric string, a maximum of eight characters, and is case-sensitive.

**VTAM Generic Applid**
Indicates the eight-character name that specifies the generic VTAM applid of the CICS region. Each CICS region has a specific and a generic VTAM applid. Generic VTAM applids are always in uppercase characters. Therefore, valid values for this item should always be in uppercase characters. The value format is an alphanumeric string, a maximum of eight characters, and is case-sensitive.

**Working Set Size**
Indicates the amount of central (both real and expanded) storage owned by the address space, including both address space and other storage, such as dataspace, expressed as kilobytes. If the working set size value is high and central storage is constrained, considerable paging activity can occur, which degrades response time. The value format is a positive integer with a maximum of four characters.

---

**Response Time Analysis**

The Response Time Analysis attributes help you determine response times for active groups defined with OMEGAMON. Data displays for only those groups that have registered activity within the last nine minutes.

Use the Response Time Analysis attributes in situations to customize the display of critical and warning lights based on specified response time thresholds. These attributes provide data for the Response Time Analysis table views.

**CICS Region Name**
Indicates the job name or modify ID of the CICS region being monitored. Each CICS region in an MVS image has a unique name. This name is an alphanumeric string, with a maximum of 8 characters, and case-sensitive. CICS region names are always in uppercase characters.

**Exceeds RTA Threshold**
Indicates whether or not the response time threshold stored in the OMEGAMON group definition has been exceeded. Enumerated values are:
- Yes
- No

**Group Name**
Is the descriptive name assigned to the OMEGAMON group. Valid format is an alphanumeric string, with a maximum of 12 characters.

**Group Number**
Is the numeric identifier of the OMEGAMON group. Valid format is an integer, with a maximum of two digits.

**Group Type**
Is the element types belonging to the OMEGAMON group. Enumerated values are:
- Terminal
- Logical Unit
- Program
- Transaction
**Origin Node**
Is the combination of MVS System ID (SMFID) and CICS region name. The value format is an alphanumeric string, maximum 32 bytes, and case-sensitive.

When a situation is true, the system compares the origin node name in the attribute to the names of managed systems assigned to the item. If the origin node name matches the name of a managed system, the status of the item changes accordingly. If the names of the origin node and the managed systems do not match, the status of the item remains unchanged.

**Response Time**
Is the average group response time for the current one-minute interval. Values are expressed in the format hh:mm:ss.th: where: hh = hours mm = minutes th = hundredths of a second. For example, 00:00:02.25.

**Response Time 1 Minute Ago**
Is the average group response time for the previous one-minute interval. Values are expressed in the format hh:mm:ss.th. where: hh = hours mm = minutes th = hundredths of a second. For example, 00:00:02.25.

**Response Time 2 Minutes Ago**
Is the average group response time for the one-minute interval that expired two minutes ago. Values are expressed in the format hh:mm:ss.th where: hh = hours mm = minutes th = hundredths of a second. For example, 00:00:02.25.

**Response Time 3 Minutes Ago**
Is the average group response time for the one-minute interval that expired three minutes ago. Values are expressed in the format hh:mm:ss.th where: hh = hours mm = minutes th = hundredths of a second. For example, 00:00:02.25.

**Response Time 4 Minutes Ago**
Is the average group response time for the one-minute interval that expired four minutes ago. Values are expressed in the format hh:mm:ss.th where: hh = hours mm = minutes th = hundredths of a second. For example, 00:00:02.25.

**Response Time 5 Minutes Ago**
Is the average group response time for the one-minute interval that expired five minutes ago. Values are expressed in the format hh:mm:ss.th where: hh = hours mm = minutes th = hundredths of a second. For example, 00:00:02.25.

**Response Time 6 Minutes Ago**
Is the average group response time for the one-minute interval that expired six minutes ago. Values are expressed in the format hh:mm:ss.th where: hh = hours mm = minutes th = hundredths of a second. For example, 00:00:02.25.

**Response Time 7 Minutes Ago**
Is the average group response time for the one-minute interval that expired seven minutes ago. Values are expressed in the format hh:mm:ss.th where: hh = hours mm = minutes th = hundredths of a second. For example, 00:00:02.25.

**Response Time 8 Minutes Ago**
Is the average group response time for the one-minute interval that expired eight minutes ago. Values are expressed in the format hh:mm:ss.th where: hh = hours mm = minutes th = hundredths of a second. For example, 00:00:02.25.

**Response Time 9 Minutes Ago**
Is the average group response time for the one-minute interval that expired nine minutes ago. Values are expressed in the format hh:mm:ss.th where: hh = hours mm = minutes th = hundredths of a second. For example, 00:00:02.25.
System ID
Indicates the SMF identifier that uniquely identifies an active MVS operating system. Valid format is an alphanumeric string, with a maximum of 4 characters.

Response Time Elements

The Response Time Elements attributes help you determine response times for all members of either a single OMEGAMON group, or for all defined groups. Data displays for only those groups that have registered activity within the last nine minutes.

Use the Response Time Elements attributes in situations to customize the display of critical and warning lights based on specified response time thresholds. These attributes provide data for the Response Time Elements table views.

CICS Region Name
Indicates the job name or modify ID of the CICS region being monitored. Each CICS region in an MVS image has a unique name. This name is an alphanumeric string, with a maximum of 8 characters, and case-sensitive. CICS region names are always in uppercase characters.

Element Identifier
Is the name assigned to a terminal, to a program, to a transaction, or to a logical unit. Valid format is an alphanumeric string, with a maximum of 8 characters.

Element Type
Is the resource associated with the element. Enumerated values are:
- Terminal
- Logical Unit
- Program
- Transaction

Exceeds RTA Threshold
Indicates whether or not the response time threshold stored in the OMEGAMON group definition has been exceeded. Enumerated values are:
- Yes
- No

Group Number
Is the numeric identifier of the OMEGAMON group. Valid format is an integer, with a maximum of two digits.

Origin Node
Is the combination of MVS System ID (SMFID) and CICS region name. The value format is an alphanumeric string, maximum 32 bytes, and case-sensitive.

When a situation is true, the system compares the origin node name in the attribute to the names of managed systems assigned to the item. If the origin node name matches the name of a managed system, the status of the item changes accordingly. If the names of the origin node and the managed systems do not match, the status of the item remains unchanged.

Response Component
Is the type of response time measurement used for the element. Transactions, programs, and terminals display the internal CICS response time, while logical units, broken down into host and network figures, present the end-to-end response time. Enumerated values are:
- CICS
Response Time
Is the average element response time for the current one-minute interval. Values are expressed in the format hh:mm:ss.th
where: hh = hours, mm = minutes th = hundredths of a second. For example, 00:00:02.25.

Response Time 1 Minute Ago
Is the average element response time for the previous one-minute interval. Values are expressed in the format hh:mm:ss.th
where: hh = hours, mm = minutes th = hundredths of a second. For example, 00:00:02.25.

Response Time 3 Minutes Ago
Is the average element response time for the one-minute interval that expired three minutes ago. Values are expressed in the format hh:mm:ss.th
where: hh = hours, mm = minutes th = hundredths of a second. For example, 00:00:02.25.

Response Time 5 Minutes Ago
Is the average element response time for the one-minute interval that expired five minutes ago. Values are expressed in the format hh:mm:ss.th
where: hh = hours, mm = minutes th = hundredths of a second. For example, 00:00:02.25.

Response Time 7 Minutes Ago
Is the average element response time for the one-minute interval that expired seven minutes ago. Values are expressed in the format hh:mm:ss.th
where: hh = hours, mm = minutes th = hundredths of a second. For example, 00:00:02.25.

Response Time 9 Minutes Ago
Is the average element response time for the one-minute interval that expired nine minutes ago. Values are expressed in the format hh:mm:ss.th
where: hh = hours, mm = minutes th = hundredths of a second. For example, 00:00:02.25.

RLS Lock Analysis
The RLS Lock Analysis attributes report on tasks waiting for an RLS resource and tasks holding the records. At a minimum, RLS requires Transaction Server Version 1.1 under MVS.

Use the RLS Lock Analysis attributes in situations to help identify applications that are making poor use of serially reusable resources and degrading system performance. These attributes provide data for the VSAM RLS Lock Analysis table view.

CICS Region Jobname
Indicates the job name or modify ID of the CICS region being monitored. Each CICS region in an MVS image has a unique job name. This job name is used for operations initiated from the MVS system console. The value format is an
alphanumeric string, maximum 8 characters, and is case-sensitive. CICS region names are always in uppercase characters.

**Dataset Type**
Indicates the name of the type of VSAM data set. The valid values are:
- Entry sequence data set (ESDS)
- Keyed sequence data set (KSDS)
- Relative record data set (RRDS)
- VSAM relative record data set (VRRDS)
- Unknown

**MVS System ID**
Indicates the four-character name that uniquely identifies an active MVS operating system within a given CICSplex. MVS System IDs are always in uppercase characters. Therefore, the valid values for this item should always be in uppercase characters. The value format is an alphanumeric string, a maximum of four characters, and is case-sensitive.

**Task State**
Indicates whether the task is waiting for a record or holding one. The valid values are Holder, Retained, and Waiter.

**Time in Suspend Minutes**
Indicates the minutes portion of the length of time the task has been in a waiting or holding state. The valid values are 0-59.

**Time in Suspend Seconds**
Indicates the seconds portion of the length of time the task has been in a waiting or holding state. The valid values are 0-59.

**Transaction ID**
Indicates the ID of the transaction that either holds or is waiting for the specified VSAM record. The value format is an alphanumeric string with a maximum of four characters, and is case-sensitive.

## Service Class Analysis

The Service Class Analysis attributes report on statistical information for a service class for an interval.

Use the Service Class Analysis attributes in situations to monitor performance items such as the response time goal for the service class, the number of completed transactions for an interval, average response time, and percent-of-goal information for the service class during the interval. These attributes provide data for the Service Class Analysis table view.

**50 Percent of Goal Transaction Count**
Indicates the number of transactions whose response time was 50% (or less) of the response time goal. The value format is a positive integer with a maximum of four characters.

**60 Percent of Goal Transaction Count**
Indicates the number of transactions whose response time was more than 50% and less than 60% of the response time goal. The value format is a positive integer.
70 Percent of Goal Transaction Count
  Indicates the number of transactions whose response time was more than 60% and less than 70% of the response time goal. The value format is a positive integer.

80 Percent of Goal Transaction Count
  Indicates the number of transactions whose response time was more than 70% and less than 80% of the response time goal. The value format is a positive integer.

90 Percent of Goal Transaction Count
  Indicates the number of transactions whose response time was more than 80% and less than 90% of the response time goal. The value format is a positive integer.

100 Percent of Goal Transaction Count
  Indicates the number of transactions whose response time was more than 90% and less than 100% of the response time goal. The value format is a positive integer.

110 Percent of Goal Transaction Count
  Indicates the number of transactions whose response time was more than 100% and less than 110% of the response time goal. The value format is a positive integer.

120 Percent of Goal Transaction Count
  Indicates the number of transactions whose response time was more than 110% and less than 120% of the response time goal. The value format is a positive integer.

130 Percent of Goal Transaction Count
  Indicates the number of transactions whose response time was more than 120% and less than 130% of the response time goal. The value format is a positive integer.

140 Percent of Goal Transaction Count
  Indicates the number of transactions whose response time was more than 130% and less than 140% of the response time goal. The value format is a positive integer.

150 Percent of Goal Transaction Count
  Indicates the number of transactions whose response time was more than 140% and less than 150% of the response time goal. The value format is a positive integer.

200 Percent of Goal Transaction Count
  Indicates the number of transactions whose response time was more than 150% and less than 200% of the response time goal. The value format is a positive integer.

400® Percent of Goal Transaction Count
  Indicates the number of transactions whose response time was more than 200% and less than 400% of the response time goal. The value format is a positive integer.

Average Response Time
  Indicates the average time in milliseconds taken to complete all tasks during the collection interval. This average is calculated by adding the response time of each task within a service class and dividing the sum by the total number of completed tasks during the collection interval. The value format is a maximum of four bytes.
Note: If fractional values are desired, you must include decimal points and up to two decimal places. For example, if you want 5.2 seconds, add the decimal point.

Goal Response Time
Indicates the time in milliseconds that has been set as a goal for a service class. The value format is a maximum of four bytes.

Note: If fractional values are desired, you must include decimal points and up to two decimal places. For example, if you want 5.2 seconds, add the decimal point.

Goal Type
Indicates the performance objective that your site defines for a service class. This objective can be expressed as an average response time (A) or a percentage of transactions meeting a specified response time goal (P). The valid values are Average and Percent.

The format for an average response time goal is a response time goal specified as an average response time is formatted in Service Level Analysis reports as HH:MM:SS:TTT-hours, minutes, seconds, and thousands of seconds.

Example: An average response time goal of five and one-half seconds would appear as 00:00:01:000-90% specifies that at least 90 percent of the transactions in the service class should finish within one second.

Greater than 400 Percent of Goal Transaction Count
Indicates the number of transactions whose response time was greater than 400% of the response time goal. The value format is a positive integer.

Interval End Timestamp
Indicates the time when the CICS Service Level Analysis collector finished accumulating service class data for the interval. Once the data is accumulated, CandleNet Portal displays it in the CICS Service Level Analysis report or writes it to the persistent data store (PDS). The value format is CYYMMDDHHMMSSmmm, where:

- C Century (0 for 20th, 1 for 21st, and so forth)
- YY Year
- MM Month
- DD Day
- HH Hour
- MM Minutes
- SS Seconds
- mmm Milliseconds

Example: 101.

Service Task Details
The Service task details attributes do not contain any CICS data. Instead it reports the state of the OMEG INIT transaction. This transaction should be running if you want to collect dumps. If you are unable to obtain a dump, you should check this table to see if the Service task execution result is successful.

CICS Region Name
Indicates the job name or modify ID of the CICS region being monitored. Each CICS region in an MVS image has a unique name. This name is an alphanumeric string, with a maximum of 8 characters, and case-sensitive. CICS region names are always in uppercase characters.
Common Interface STC name
   Supplies the modify ID of the OMEGAMON/CICS Common Interface (OCCI) job that is monitoring the target CICS region.

OMEGAMON Global Name
   Is the name of the OMEGAMON Global Data Area module being used to monitor the target CICS region.

OMEGAMON Initialization Status
   Indicates whether OMEGAMON code has been successfully installed in the CICS address space, using PLTP1 or an OMEG INIT transaction.

OMEGAMON XMIT DD name
   Shows the optional RKC2XMnn statement used to associate CICS with a specific Common Interface address space.

Service task execution result
   Displays the response received after an attempt is made by OCCI to communicate with the OMEGAMON service task in CICS.

System ID
   Indicates the four-character name that uniquely identifies an active MVS operating system within a given CICSplex. The value format is an alphanumeric string, a maximum of four characters, and is case-sensitive. MVS System IDs are always in uppercase characters.

Storage Analysis

   The Storage Analysis attributes report on usage of the Dynamic Storage Area (DSA) for a CICS region.

   Use the Storage Analysis attributes in situations to determine if there are any storage-related problems, such as a short on storage (SOS) condition. These attributes provide data for the Storage Analysis table view.

   Area
      Indicates the name of the Dynamic Storage Area (DSA) or Extended Dynamic Storage Area (EDSA).

   CICS Region Name
      Indicates the job name or modify ID of the CICS region being monitored. Each CICS region in an MVS image has a unique name. This name is an alphanumeric string, with a maximum of 8 characters, and case-sensitive. CICS region names are always in uppercase characters.

   Origin Node
      Is the combination of MVS System ID (SMFID) and CICS region name. The value format is an alphanumeric string, maximum 32 bytes, and case-sensitive.

      When a situation is true, the system compares the origin node name in the attribute to the names of managed systems assigned to the item. If the origin node name matches the name of a managed system, the status of the item changes accordingly. If the names of the origin node and the managed systems do not match, the status of the item remains unchanged.

   Percent Used
      Indicates the percentage of storage in use for the specified dynamic storage area. The value format is a percentage in the range 0-100.
SOS
Indicates whether a short-on-storage (SOS) condition exists for a given dynamic storage area. The valid values are Yes and No.

Storage Allocated
Indicates the amount of storage (in kilobytes) allocated for the specified dynamic storage area. The value format is a positive integer, a maximum of four bytes.

Storage Available
Indicates the amount of storage (in kilobytes) currently available within the specified dynamic storage area. This value represents storage within one or more extents that has not been allocated to a subpool. It is calculated by subtracting the storage in use from the amount of storage allocated. The value format is a positive integer with a maximum of four bytes.

Storage Limit
Indicates the total amount of storage (in kilobytes) that you are allowed to request from CICS for the specified dynamic storage area. The value format is a positive integer, with a maximum of four bytes.

Storage in Use
Indicates the amount of storage (in kilobytes) that has been CICS GETMAINed from the dynamic storage area. The value format is a positive integer, with a maximum of four bytes.

System ID
Indicates the four-character name that uniquely identifies an active MVS operating system within a given CICSplex. The value format is an alphanumeric string, a maximum of four characters, and is case-sensitive. MVS System IDs are always in uppercase characters.

Subpool Details

The storage subpools attributes report statistics about CICS storage subpool allocations and use. This data can be retrieved using the EXEC CICS INQUIRE SUBPOOL and EXEC CICS COLLECT STATISTICS SUBPOOL commands.

Access Type
Is the storage key of the subpool. This can be either CICS (key 8) or USER (key 9).

Accumulated Element Length
Is the total size of all element lengths in the current subpool in the current CICS Region. The value format is an integer of maximum four bytes.

Accumulated Element Length (KB)
Is the sum of all element lengths in kilobytes. The total size of all element lengths for the current subpool of the current CICS Region rounded up to the nearest kilobyte. The value format is an integer of maximum four bytes.

Accumulated Element Length (MB)
Is the sum of all element lengths in megabytes. The total size of all element lengths for the current subpool of the current CICS Region rounded up to the nearest megabyte. The value format is an integer of maximum four bytes.

Boundary
Is the value of the storage boundary for the current subpool in the current CICS Region. The value format is an integer of maximum four bytes.
CICS Region Name
Indicates the job name or modify ID of the CICS region being monitored. Each CICS region in an MVS image has a unique name. This name is an alphanumeric string, with a maximum of 8 characters, and case-sensitive. CICS region names are always in uppercase characters.

Current Element Length
Is the count of elements associated with the current subpool in the current CICS Region. The value format is an integer of maximum four bytes.

Current Page Storage
Is the size of the current page allocation for the current subpool in the current CICS Region. The value format is an integer of maximum four bytes.

Current Page Storage (KB)
Is the size of the current page storage allocation in kilobytes. The size of the current page allocation for the current subpool in the current CICS Region rounded up to the nearest kilobyte. The value format is an integer of maximum four bytes.

Current Page Storage (MB)
Is the size of the current page storage allocation in megabytes. The size of the current page allocation for the current subpool in the current CICS Region rounded up to the nearest megabyte. The value format is an integer of maximum four bytes.

DSA Index
Is the numeric representation of the DSA name. Values are:
• 1 = CDSA.
• 2 = UDSA.
• 3 = SDSA.
• 4 = RDSA.
• 5 = ECDSA.
• 6 = EUDSA.
• 7 = ESDSA.
• 8 = ERDSA.

DSA Name

DSA Use Percentage
Is the current usage percentage of the subpool in its parent dynamic storage area in the current CICS region.

Fixed Size Length
Is the length of the current subpool in the current CICS Region. The value format is an integer of maximum four bytes.

FREEMAIN
Is the number storage of FREEMAIN requests issued in this subpool in the current CICS Region. The value format is an integer of maximum four bytes.

GETMAIN
Is the number of storage GETMAIN requests issued in this subpool in the current CICS Region. The value format is an integer of maximum four bytes.
**High Water Mark**
Is the highest value of the subpool size that has occurred since the current CICS Region was started. The value format is an integer of maximum four bytes.

**High Water Mark (KB)**
Is the high water mark storage size in kilobytes. The highest value of the subpool size that has occurred since the current CICS Region was started rounded up to the nearest kilobyte. The value format is an integer of maximum four bytes.

**High Water Mark (MB)**
Is the high water mark storage size in megabytes. The highest value of the subpool size that has occurred since the current CICS Region was started rounded up to the nearest megabyte. The value format is an integer of maximum four bytes.

**Initial Free Space**
Is the total number of bytes of the elements that are initially allocated when the domain subpool is pre-allocated. The value format is an integer of maximum four bytes.

**Initial Free Space (KB)**
Is the total number of kilobytes of the elements that are initially allocated when the domain subpool is pre-allocated. The value format is an integer of maximum four bytes.

**Initial Free Space (MB)**
Is the total number of megabytes of the elements that are initially allocated when the domain subpool is pre-allocated. The value format is an integer of maximum four bytes.

**Origin Node**
Is the combination of MVS System ID (SMFID) and CICS region name. The value format is an alphanumeric string, maximum 32 bytes, and case-sensitive.

When a situation is true, the system compares the origin node name in the attribute to the names of managed systems assigned to the item. If the origin node name matches the name of a managed system, the status of the item changes accordingly. If the names of the origin node and the managed systems do not match, the status of the item remains unchanged.

**System ID**
Indicates the four-character name that uniquely identifies an active MVS operating system within a given CICSpex. The value format is an alphanumeric string, maximum 4 characters, and case-sensitive. MVS System IDs are always in uppercase characters.

**Subpool Location**
Is an indicator that designates whether the Subpool exists above or below the 24M line in the current CICS Region. Values are BELOW or ABOVE.

**Subpool Name**
Is the name of the current Subpool in the current CICS Region. This name is an alphanumeric string, with a maximum of 8 characters.
System Initialization

The System Initialization attributes report on keyword settings that are used to control the operation of CICSpex. SIT keywords, their descriptions, and associated values are displayed.

Use the System Initialization attributes in situations to quickly verify that all of your SIT definitions are properly set. These attributes provide data for the System Initialization table view.

CICS Region Name
Indicates the job name or modify ID of the CICS region being monitored. Each CICS region in an MVS image has a unique name. This name is an alphanumeric string, with a maximum of 8 characters, and case-sensitive. CICS region names are always in uppercase characters.

Description
Thumbnail sketch of the function performed by the associated keyword. The value format is an alphanumeric string, with a maximum of 47 characters.

Keyword
System Initialization control supported by the current version of CICS. The value format is an alphanumeric string, with a maximum of 12 characters.

Origin Node
Is the combination of MVS System ID (SMFID) and CICS region name. The value format is an alphanumeric string, maximum 32 bytes, and case-sensitive.

When a situation is true, the system compares the origin node name in the attribute to the names of managed systems assigned to the item. If the origin node name matches the name of a managed system, the status of the item changes accordingly. If the names of the origin node and the managed systems do not match, the status of the item remains unchanged.

System ID
Indicates the 4-character name that uniquely identifies an active MVS operating system. The value format is an alphanumeric string, maximum 4 characters, and case-sensitive. MVS System IDs are always in uppercase characters.

Value
A setting that has been assigned to the associated keyword of the SIT loaded during CICS initialization. The value format is an alphanumeric string, with a maximum of 16 characters.

Task Class Analysis

The Task Class Analysis attributes provide details about the transaction classes defined to CICS. They enable you to see how close your CICS systems are to the limits set for the number of tasks in a given class.

Use the Task Class Analysis attributes in situations to monitor activity for a specific transaction class. If the percentage for a class consistently runs at 100%, it can indicate that tasks defined in a class are not initiated because the maximum number of tasks in a class has been reached. If CICS is under-utilizing processor resources, it can be worth considering an increase in the class limits to allow more work to flow through the system.

These attributes provide data for the Task Class Analysis table view.
CICS Region Name
Indicates the job name or modify ID of the CICS region being monitored. Each CICS region in an MVS image has a unique name. This name is an alphanumeric string, with a maximum of 8 characters, and case-sensitive. CICS region names are always in uppercase characters.

Class Limit
Indicates the maximum number of tasks allowed to run in the transaction class. The value format is a positive integer with a maximum of four bytes.

Class Name
Indicates the transaction class name. The value format is an alphanumeric string with a maximum of eight characters.

Current Tasks
Indicates the current task count in the transaction class. The value format is a positive integer with a maximum of four bytes.

Number Queued
Indicates the number of transactions that are queued. The value format is a positive integer with a maximum of four bytes.

Origin Node
Is the combination of MVS System ID (SMFID) and CICS region name. The value format is an alphanumeric string, maximum 32 bytes, and case-sensitive.

When a situation is true, the system compares the origin node name in the attribute to the names of managed systems assigned to the item. If the origin node name matches the name of a managed system, the status of the item changes accordingly. If the names of the origin node and the managed systems do not match, the status of the item remains unchanged.

Peak Tasks
Indicates the highest number of active and queued transactions. The value format is a positive integer with a maximum of four bytes.

Percent of Limit
Indicates the number of active tasks in a class divided by the class limit. The value format is a percentage in the range 0-100.

Percent of Queue Limit
Indicates the number of queued tasks in a class divided by the queue limit. The value format is a percentage in the range 0-100.

Queue Limit
Indicates the maximum number of tasks that can be queued. The value format is a positive integer with a maximum of four bytes.

System ID
Indicates the four-character name that uniquely identifies an active MVS operating system. The value format is an alphanumeric string with a maximum of four characters, and is case-sensitive. MVS System IDs are always in uppercase characters.

Times at Limit
Indicates the number of times the transaction class limit has been reached. The value format is a positive integer with a maximum of four bytes.
TCP/IP Service Statistics

This data provides information about the TCP/IP services including the port number, protocol and the activity of each TCP/IP service. This data can be accessed online using the EXEC CICS COLLECT STATISTICS TCPIPSERVICE and the EXEC CICS INQUIRE TCPIPSERVICE command.

Attach-time Security
Indicates, for ECI over TCP/IP services, the level of attach-time security used by connections to CICS clients. Values are LOCAL and VERIFY.

Backlog
Is the port backlog for this TCP/IP service. It shows the number of requests that TCP/IP queues for this port before it starts to reject incoming requests. The value format is an integer of maximum four bytes.

CICS Region Name
Indicates the job name or modify ID of the CICS region being monitored. Each CICS region in an MVS image has a unique name. This name is an alphanumeric string, with a maximum of 8 characters, and case-sensitive. CICS region names are always in uppercase characters.

Client Authentication
Is the scheme used to authenticate clients. Values are:
- **Asserted:** Asserted identity authentication is used. This value is returned only when PROTOCOL has a value of IIOP.
- **Automatic:** If the client does not send a certificate, then HTTP basic authentication is used to obtain a user ID and password from the client.
- **Basic:** HTTP basic authentication is used to obtain a user ID and password from the client.
- **Certificate:** SSL client certificate authentication is used to authenticate and identify the client.
- **Noauthenticate:** The client is not required to send authentication or identification information.
- **Register:** SSL client certificate authentication is used to authenticate the client. If the client’s certificate is not associated with a user ID, then HTTP basic authentication is used to obtain the client’s user ID. The value is returned only when PROTOCOL has a value of HTTP.

Current number of connections
Is the current number of connections for the TCP/IP service. The value format is an integer of maximum four bytes.

DNS Status
Is the current state of WLM/DNS registration of this TCPIPSERVICE. The parameter DNSSTATUS returns the current state of WLM/DNS registration of this TCPIPSERVICE. Values are:
- **NOTAPPLIC** This service is not using DNS connection optimization. No DNSGROUP attribute was specified when the resource was installed.
- **UNAVAILABLE** Registration is not supported by z/OS.
UNREGISTERED
Registration has not yet occurred (this is the initial state of any service).
REGISTERED
Registration has completed successfully.
REGERROR
Registration has failed with an error.
DEREGISTERED
De-registration has completed successfully.
DEREGERROR
De-registration has failed with an error.

Group Critical
Specifies whether or not this TCPIPSERVICE is a critical member of the DNS group. Values are:

CRITICAL
If this TCPIPSERVICE is closed, or abnormally stops listening for any reason, the group name specified in the DNSGROUP attribute is de-registered from WLM.

NONCRITICAL
If this TCPIPSERVICE is closed, or abnormally stops listening for any reason, the group name specified in the DNSGROUP attribute is not de-registered from WLM, unless this is the last service in a set with the same group name.

Number of Bytes Sent
Is the number of bytes sent for the TCP/IP service.

Number of Bytes Received
Is the number of bytes received for the TCP/IP service.

Number of Receives
Is the number of receive requests issued for the TCP/IP Service. The value format is an integer of maximum four bytes.

Number of Sends
Is the number of send requests issued for the TCP/IP Service. The value format is an integer of maximum four bytes.

Number of Transactions attached
Is the number of transactions attached by this TCP/IP Service. The value format is an integer of maximum four bytes.

Open Status
Indicates the status of the TCP/IP service. Values are OPEN, CLOSED, CLOSING, and IMMCLOSING.

Origin Node
Is the combination of MVS System ID (SMFID) and CICS region name. The value format is an alphanumeric string, maximum 32 bytes, and case-sensitive.

When a situation is true, the system compares the origin node name in the attribute to the names of managed systems assigned to the item. If the origin node name matches the name of a managed system, the status of the item changes accordingly. If the names of the origin node and the managed systems do not match, the status of the item remains unchanged.

Peak Number of Connections
Is the peak number of connections for the TCP/IP service. The value format is an integer of maximum four bytes.
Port Number
Is the port number being used for this TCP/IP service.

Protocol
Specifies the application level protocol used on the TCP/IP port. The values are:
ECI CICS ECI protocol is used.
HTTP HTTP protocol is used.
IIOP IIOP protocol is used.
USER The user-defined protocol is used. Messages are processed as non-HTTP messages.

Service Open Time (GMT)
Is the time at which this TCP/IP service was opened. The field is blank if the TCP/IP service is closed.

Service Open Time (Local)
Is the time at which this TCP/IP service was opened. The field is blank if the TCP/IP service is closed.

System ID
Indicates the four-character name that uniquely identifies an active MVS operating system within a given CICSp lex. The value format is an alphanumeric string, maximum 4 characters, and case-sensitive. MVS System IDs are always in uppercase characters.

TCP/IP Service Name
Is the name of the TCP/IP service. This name is an alphanumeric string, with a maximum of 8 characters.

TCP/IP Server SSL Support
Is the level of SSL support defined for this TCP/IP service. The value format is an integer of maximum four bytes.

Transaction ID
Is the transaction ID used to process a new request. The value format is an integer of maximum four bytes.

TCP/IP Service Address
Is the IP address defined for the TCP/IP stack used for this TCP/IP service.

TCP/IP Service Max Data Length
Is the maximum data length for a TCP/IP service. The value format is an integer of maximum four bytes.

TCP/IP Service Privacy
Is the level of TCP/IP service privacy. Values can be NOT_SUPPORTED, SUPPORTED, REQUIRED.

TCP/IP Service TSQ Prefix
Is the name of the temporary storage queue prefix used to store inbound data and Web documents created by applications.

TCP/IP Service WLM DNS Group
Is the DNS group name that this TCPIPSERVICE registers with the z/OS Workload Manager (WLM).

URM
Is the name of the service user-replaceable module (URM) to be invoked by the attached task. This name is an alphanumeric string, with a maximum of 8 characters.
TCP/IP Statistics

The data returned monitors the activity of your TCP/IP services. It includes the current and peak numbers for individual sockets and indicates when the limit set by MAXSOCKETS has been reached. Most of this data can be accessed online using the EXEC CICS COLLECT STATISTICS TCPIP command.

Average MAXSOCKETS delay time
Is the average delay time for current create requests delayed.

CICS Region Name
Indicates the job name or modify ID of the CICS region being monitored. Each CICS region in an MVS image has a unique name. This name is an alphanumeric string, with a maximum of 8 characters, and case-sensitive. CICS region names are always in uppercase characters.

Current Active IP SOCKETS
Is the current number of inbound sockets. The value format is an integer of maximum four bytes.

Current Active SSL SOCKETS
Is the current number of SSL sockets. The value format is an integer of maximum four bytes.

Current Delayed at MAXSOCKETS
Is the current number of create socket requests delayed because the system has reached the MAXSOCKETS limit. The value format is an integer of maximum four bytes.

Current Delay Time at MAXSOCKETS
Is the current length of time that the requests have been waiting so far because the system has reached the MAXSOCKETS limit.

Current Inbound Sockets
Is the current number of inbound sockets. The value format is an integer of maximum four bytes.

Current MAXSOCKETS delay time
Is the current delay time for current create requests delayed.

Current Outbound Sockets
Is the current number of outbound sockets. The value format is an integer of maximum four bytes.

Current Persistent Sockets Outbound
Is the current number of persistent outbound sockets. The value format is an integer of maximum four bytes.

Maximum Sockets Limit
Is the maximum number of TCP/IP sockets. The maximum number of IP sockets that can be managed by the CICS sockets domain. The value format is an integer of maximum four bytes.

Maximum SSL TCBs
Is the maximum number of TCP/IP SSL sockets. The maximum number of SSL sockets that can be managed by the CICS sockets domain. The value format is an integer of maximum four bytes.

Number Inbound Sockets Created
Is the total number of inbound sockets created. The value format is an integer of maximum four bytes.
Number Outbound Sockets Created
Is the total number of outbound sockets created. The value format is an integer of maximum four bytes.

Number Outbound Sockets Closed
Is the total number of outbound sockets closed. The value format is an integer of maximum four bytes.

Number Times at MAXSOCKETS
Is the number of times the maximum number of IP sockets limit (MAXSOCKETS) was reached. The value format is an integer of maximum four bytes.

Open Status
Indicates the status of the TCP/IP service. Values are Open, Closed, Closing, ImmClosing.

Origin Node
Is the combination of MVS System ID (SMFID) and CICS region name. The value format is an alphanumeric string, maximum 32 bytes, and case-sensitive.

When a situation is true, the system compares the origin node name in the attribute to the names of managed systems assigned to the item. If the origin node name matches the name of a managed system, the status of the item changes accordingly. If the names of the origin node and the managed systems do not match, the status of the item remains unchanged.

Peak Delayed at MAXSOCKETS
Is the peak number of create socket requests delayed because the system has reached the MAXSOCKETS limit. The value format is an integer of maximum four bytes.

Peak Inbound Sockets
Is the peak number of inbound sockets. The value format is an integer of maximum four bytes.

Peak Outbound Sockets
Is the peak number of inbound sockets. The value format is an integer of maximum four bytes.

Peak Persistent Sockets Outbound
Is the peak number of persistent outbound sockets. The value format is an integer of maximum four bytes.

System ID
Indicates the four-character name that uniquely identifies an active MVS operating system within a given CICSplex. The value format is an alphanumeric string, maximum 4 characters, and case-sensitive. MVS System IDs are always in uppercase characters.

Timeouts while at MAXSOCKETS
Is the number of create socket requests that were timed out whilst delayed because the system had reached the MAXSOCKETS limit. The value format is an integer of maximum four bytes.

Total Delayed at MAXSOCKETS
Is the number of create socket requests that were delayed because the system had reached the MAXSOCKETS limit. The value format is an integer of maximum four bytes.
Total Delay Time at MAXSOCKETS
Is the total delay time for the create socket requests that are currently delayed because the system is at the MAXSOCKETS limit. The value format is an integer of maximum four bytes.

Total Sockets Created
Is the total number of inbound and outbound sockets created. The value format is an integer of maximum four bytes.

SSLcache setting
Specifies whether SSL is to use the local or sysplex caching of session ids. Sysplex caching is only allowed if multiple CICS socket-owning regions accept SSL connections at the same IP address. Values are: CICS or SYSPLEX. The default is CICS.

Temporary Storage Detail

The Temporary Storage Detail attributes report on the list of temporary storage pools and queues that exist in the monitored CICS system.

Use the Temporary Storage Detail attributes in situations to monitor temporary pools and queues and provide data in regards to the number and size of items in a queue. These attributes provide data for the Temporary Storage Queues table view.

CICS Region Name
Indicates the job name or modify ID of the CICS region being monitored. Each CICS region in an MVS image has a unique name. This name is an alphanumeric string, with a maximum of 8 characters, and case-sensitive. CICS region names are always in uppercase characters.

Hex Queue ID
Indicates the name of the temporary storage queue in hexadecimal format. The value format is an alphanumeric string with a maximum of 16 characters.

Items in Queue
Indicates the number of items in the temporary storage queue. The value format is an integer with a maximum of two bytes, and in the range 0-32767.

Last Used Interval
Indicates the length of the interval in binary seconds since the temporary storage queue was last referenced. The value format is a positive integer with a maximum of four bytes.

Maximum Length
Indicates the length in bytes of the largest item in a temporary storage queue. The value format is an integer with a maximum of two bytes, and in the range 0-32767.

Minimum Length
Indicates the length in bytes of the smallest item in a temporary storage queue. The value format is an integer with a maximum of two bytes, and in the range 0-32767.

Origin Node
Is the combination of MVS System ID (SMFID) and CICS region name. The value format is an alphanumeric string, maximum 32 bytes, and case-sensitive.

When a situation is true, the system compares the origin node name in the attribute to the names of managed systems assigned to the item. If the origin node name matches the name of a managed system, the status of the item
changes accordingly. If the names of the origin node and the managed systems
do not match, the status of the item remains unchanged.

**Queue ID**
Indicates the name of the temporary storage queue. The value format is an
alphanumeric string with a maximum of 8 characters, and is case-sensitive.

**Queue Type**
Indicates whether the temporary storage queue is kept in main storage,
auxiliary storage, or temporary storage harbored in a coupling facility structure.
Enumerated values are:
- A=Auxiliary
- M=Main
- S=Shared

**Shared Pool Name**
Indicates the name of the temporary storage pool in the coupling facility that
contains the queues. The value format is an alphanumeric string with a
maximum of eight characters, and is case-sensitive.

**Structure Name**
Is the coupling facility (CF) structure name for the temporary storage queue.
The structure name is only applicable to shared TS queues. The value format is
an alphanumeric string with a maximum of 16 characters.

**System ID**
Indicates the four-character name that uniquely identifies an active MVS
operating system within a given CICSpelix. The value format is an alphanumeric
string with a maximum of four characters, and is case-sensitive. MVS System
IDs are always in uppercase characters.

**Tasks Waiting**
Indicates the number of tasks that are suspended pending access to the
temporary storage queue. This field only applies to CICS TS 1.3 and above.
The value format is a positive integer with a maximum of four bytes.

**Total Length**
Indicates the length in bytes of all the items in the temporary storage queue.
The value format is a positive integer with a maximum of four bytes.

**Transaction ID**
Indicates the ID of the transaction that created the temporary storage queue.
The value format is an alphanumeric string with a maximum of four characters,
and is case-sensitive.

---

**Auxiliary Temporary Storage Detail**

The Auxiliary Temporary Storage Detail attributes report on the list of the auxiliary
temporary storage pools and queues that exist in the monitored CICS system.

**Available Bytes per CI**
Is the number of bytes available for use in the TS data set control interval.

**Buffers Allocated**
Is the number of temporary storage buffers specified in the TS= system
initialization parameter or in the overrides. The number of buffers allocated can
exceed the number requested.

**Buffers in Use**
Is the current number of buffers containing active data.
**CI Size**
Is the size of VSAM’s unit of transmission between DASD and main storage. It is specified in the CONTROLINTERVALSIZE parameter in the VSAM CLUSTER definition for the temporary storage data set (for guidance information about this. In general, using large CIs permits more data to be transferred at one time, resulting in less system overhead.

**CI Writes from Recovery**
Is the number of writes to control interval from recovery.

**CICS Region Name**
Indicates the job NAME or modify ID of the CICS region being monitored. Each CICS region in an MVS image has a unique NAME. This NAME is an alphanumeric string, with a maximum of 8 characters, and case-sensitive. CICS region names are always in uppercase characters.

**CIs in Use**
Is the current number of control intervals containing active data.

**Current Buffer Waits**
Is the number of times a request was queued because all buffers were allocated to other tasks. A buffer wait also occurs if the required control interval is already in a locked buffer, and therefore unavailable, even if there are other buffers available.

**Current String Waits**
Is the current number of I/O requests that are queued because all strings are in use.

**Current Write Buffers**
Is the number of WRITEs to the auxiliary temporary storage data set. This includes both WRITEs necessitated by recovery requirements (see next item) and WRITEs forced by the buffer being needed to accommodate another CI.

**Formatted CI Writes**
Is the number of times a new CI was successfully written at the end of the data set to increase the amount of available space in the data set. A formatted write is attempted only if the current number of CIs available in the auxiliary data set have all been used.

**HWM Buffer Waits**
Is the peak number of requests queued because no buffers were available.

**HWM CIs in Use**
Is the peak number of CIs containing active data.

**HWM of String Waits**
Is the HWM of Auxiliary Temporary Storage string waits.

**HWM of Strings in Use**
Is the HWM of Auxiliary Temporary Storage strings in use.

**Longest Aux Record Length**
Is the longest Auxiliary Temporary Storage record length.

**Max Write Buffers**
Is the peak number of WRITEs to the temporary storage data set. This includes both WRITEs necessitated by recovery requirements (see next item) and WRITEs forced by the buffer being needed to accommodate another CI.

**Origin Node**
Is the combination of MVS System ID (SMFID) and CICS region NAME. The value format is an alphanumeric string, maximum 32 bytes, and case-sensitive.
When a situation is true, the system compares the origin node NAME in the attribute to the names of managed systems assigned to the item. If the origin node NAME matches the NAME of a managed system, the status of the item changes accordingly. If the names of the origin node and the managed systems do not match, the status of the item remains unchanged.

**Percent Buffers in Use**
Is the percentage of auxiliary temporary storage buffers in use.

**Percent CIs in Use**
Is the percentage of auxiliary temporary storage control intervals in use.

**Percent Segments in Use**
Is the percentage of auxiliary temporary storage segments in use.

**Percent Strings in Use**
Is the percentage of active auxiliary temporary storage strings.

**PUTs larger than CI size**
Is the total number of writes of records whose length was greater than the control interval (CI) size. If the reported value is large, increase the CI size. If the value is zero, consider reducing the CI size until a small value is reported.

**Segment Size**
Is the number of bytes per segment.

**Segments in Use**
Is the number of segments in use.

**Segments per CI**
Is the number of segments in each TS data set control interval.

**Strings Allocated**
Is the number of temporary storage strings specified in the TS= system initialization parameter or in the overrides. The number of strings allocated can exceed the number requested.

**Strings in Use**
Is the number of auxiliary temporary storage strings containing active data.

**System ID**
Indicates the four-character NAME that uniquely identifies an active MVS operating system within a given CICSpex. The value format is an alphanumeric string, a maximum of four characters, and is case-sensitive. MVS System IDs are always in uppercase characters.

**Total Buffer Waits**
Is the total number of times a request was queued because all buffers were allocated to other tasks. A buffer wait also occurs if the required control interval is already in a locked buffer, and therefore unavailable, even if there are other buffers available.

**Total CI Reads**
Is the total number of control interval Reads.

**Total CI Writes**
Is the total number of control interval Writes.

**Total CIs**
Is the total number of Control Intervals.

**Total I/O Error**
Is the total number of I/O errors.
Total Segments
Is the total number of segments.

Total String Waits
Is the HWM of Auxiliary Temporary Storage string waits.

Temporary Storage Detail

CICS Region Name
Indicates the job name or modify ID of the CICS region being monitored. Each CICS region in an MVS image has a unique name. This name is an alphanumeric string, with a maximum of 8 characters, and case-sensitive. CICS region names are always in uppercase characters.

Current Queues
Is the current number of temporary storage queues created.

HWM Main Storage Used
Is the HWM of virtual storage used.

HWM Queues
Is the HWM of temporary storage queues created.

Items In Largest Queue
Is the number of items in largest queue.

Main Storage Used
Is the amount of virtual storage used.

Origin Node
Is the combination of MVS System ID (SMFID) and CICS region name. The value format is an alphanumeric string, maximum 32 bytes, and case-sensitive.

When a situation is true, the system compares the origin node name in the attribute to the names of managed systems assigned to the item. If the origin node name matches the name of a managed system, the status of the item changes accordingly. If the names of the origin node and the managed systems do not match, the status of the item remains unchanged.

Records GET From Aux
Is the number of records GET from Auxiliary Temporary Storage.

Records GET From Main
Is the number of records GET from Main Temporary Storage.

Records PUTQ To Aux
Is the number of records PUTQ to Auxiliary Temporary Storage.

Records PUTQ To Main
Is the number of records PUTQ to Main Temporary Storage.

Request Suspended
Is the request suspended indicator.

System ID
Indicates the four-character name that uniquely identifies an active MVS operating system within a given CICSplex. The value format is an alphanumeric string, a maximum of four characters, and is case-sensitive. MVS System IDs are always in uppercase characters.

Total Queues
Is the total number of temporary storage queues created.
Total Records PUT
Is the total number of records PUT to Main and Auxiliary Temporary Storage.

Total Records PUTQ
Is the total number of records PUTQ to Main and Auxiliary Temporary Storage.

Total Requests Suspended
Is the total number of requests suspended.

Unit Table-Compression
Is the number of Unit Table compressions.

Temporary Storage Summary

The Temporary Storage Summary attributes provide status information about the current use of Temporary Storage for each monitored CICS region.

Use the Temporary Storage Summary attributes in situations to monitor pool connections and read and write requests for all managed regions. These attributes provide data for the Temporary Storage Summary table view.

Aux Buffer Waits
Indicates the number of requests that are currently suspended pending the availability of an auxiliary temporary storage buffer. The value format is an integer of maximum 4 bytes.

Aux Current String Waits
Indicates the current number of queued requests for an available string against DFHTEMP. The value format is an integer of maximum 4 bytes.

Aux Total String Waits
Indicates the total number of queued requests for an available string against DFHTEMP. The value format is an integer of maximum 4 bytes.

CICS Region Name
Indicates the job name or modify ID of the CICS region being monitored. Each CICS region in an MVS image has a unique name. This name is an alphanumeric string, with a maximum of 8 characters, and case-sensitive. CICS region names are always in uppercase characters.

Main Storage
The number of bytes of main storage currently in use by temporary storage queues. The value format is an integer.

Origin Node
The combination of MVS System ID (SMFID) and CICS region name. The value format is an alphanumeric string, maximum 32 bytes, and case-sensitive.

When a situation is true, the system compares the origin node name in the attribute to the names of managed systems assigned to the item. If the origin node name matches the name of a managed system, the status of the item changes accordingly. If the names of the origin node and the managed systems do not match, the status of the item remains unchanged.

Percent Aux Active Strings
Indicates the percentage of VSAM strings currently being used by auxiliary temporary storage. This value is calculated by dividing the current string count by the total number of strings. The value format is a percentage in the range of 0-100.
Percent Aux Buffers in Use
Indicates the percentage of auxiliary temporary storage buffers in use. This value is calculated by dividing the current buffers in use by the total number of buffers. The value format is a percentage in the range of 0-100.

Percent Aux CIs in Use
Indicates the percent utilization of the auxiliary temporary storage VSAM data set Control Intervals (CI). If auxiliary storage is exhausted, severe degradation of CICS performance occurs. The value format is a percentage in the range of 0-100.

Pools Connected
Indicates the number of shared temporary storage pools that are connected. The value format is an integer, maximum 4 bytes.

Pools Defined
Indicates the number of shared temporary storage pools that are defined. The value format is an integer, maximum 4 bytes.

Read Requests
Indicates the number of read requests for shared temporary storage. The value format is an integer, maximum 4 bytes.

System ID
Indicates the 4-character name that uniquely identifies an active MVS operating system within a given CICSplex. The value format is an alphanumeric string, maximum 4 characters, and case-sensitive. MVS System IDs are always in uppercase characters.

Total Tasks Suspended
The Maximum number of tasks that have been suspended due to waits for temporary storage resources. The value format is an integer.

Write Requests
Indicates the number of write requests for shared temporary storage. The value format is an integer, maximum 4 bytes.

Terminal Storage Violations
The Terminal Storage Violations attribute group reports on the total number of violations for each terminal that has experienced a storage violation in CICS.

Note: Once a storage violation has occurred, collection for this attribute group involves scanning the Terminal Control Table (TCT), which can carry considerable overhead. Exercise caution when using this table for either reports or situations.

CICS Region Name
Indicates the job name or modify ID of the CICS region being monitored. Each CICS region in an MVS image has a unique name. This name is an alphanumeric string, with a maximum of 8 characters, and case-sensitive. CICS region names are always in uppercase characters.

Origin Node
Is the combination of MVS System ID (SMFID) and CICS region name. The value format is an alphanumeric string, maximum 32 bytes, and case-sensitive.

When a situation is true, the system compares the origin node name in the attribute to the names of managed systems assigned to the item. If the origin node name matches the name of a managed system, the status of the item
changes accordingly. If the names of the origin node and the managed systems do not match, the status of the item remains unchanged.

**Storage Violations**
Indicates the number of storage violations associated with the terminal. The value format is an integer with a maximum of four bytes.

**System ID**
Indicates the four-character name that uniquely identifies an active MVS operating system within a given CICSpex. The value format is an alphanumeric string, maximum 4 characters, and case-sensitive. MVS System IDs are always in uppercase characters.

**Terminal ID**
Indicates the four-character terminal identifier from the Terminal Control Table (TCT). The value format is an alphanumeric string with a maximum of four characters.

---

**Transaction Analysis**

The Transaction Analysis attributes to supply data about transaction IDs, the amount of time a transaction has been running, and the type of wait for the transaction.

Use the Transaction Analysis attributes in situations to help identify applications that are making poor use of serially reusable resources and degrading system performance. These attributes provide data for the Transaction Analysis table view.

**CICS Name**
Indicates the name that identifies a CICS region. Each CICS region in an MVS image has a unique name. This name is an alphanumeric string, with a maximum of 8 characters, and case-sensitive. CICS region names are always in uppercase characters.

**CICS SYSIDNT**
Indicates the 4-character CICS system ID assigned to this CICS region. CICS system IDs are always in uppercase characters. Therefore, valid values for this item should always be in uppercase characters. The value format is an alphanumeric string, maximum 4 characters, and case-sensitive.

**CPU Time**
Indicates the amount of accumulated CPU time (in seconds) for this task. The value format is a maximum of 4 bytes.

**Note:** If fractional values are desired, you must include decimal points and up to two decimal places. For example, if you want 5.2 seconds, add the decimal point.

**DB2 Correlation Identifier**
Using OMEGAMON DE, you can construct a link to the DB2 Thread Exceptions workspace supplied with OMEGAMON XE for DB2. For instructions on linking to the DB2 Thread Exceptions workspace, see [Linking to the DB2 Thread Exceptions Workspace]. The value format is an alphanumeric string, maximum 12 characters. Value format is: eeeetttttnnnn where:

- eeee: COMD - command POOL pool ENTR
- tttt: DB2ENTRY thread
- nnnn: CICS transaction identifier
Elapsed Time
Indicates the amount of time (in seconds) the transaction had been executing at the time this information was collected (current time minus transaction start time). The value format is a maximum of 4 bytes.

Note: If fractional values are desired, you must include decimal points. For example, if you want 5.2 seconds, add the decimal point.

Exceeds MAXR Threshold
Indicates whether the task is over the global resource threshold for CPU consumption. The valid values are: Yes and No.

Origin Node
Is the combination of MVS System ID (SMFID) and CICS region name. The value format is a positive integer.

When a situation is true, CandleNet Portal compares the origin node name in the attribute to the names of managed systems assigned to the item. If the origin node name matches the name of a managed system, CandleNet Portal changes the status of the item accordingly. If the names of the origin node and the managed systems do not match, the status of the item remains unchanged.

PSB Name
The Program Specification Block identifier scheduled to access an IMS database. The value format is an alphanumeric string, maximum 8 characters.

Program ID
This item indicates the CICS program name or the umbrella name. The value format is an alphanumeric string, maximum 8 characters.

Recovery Token
The unique hexadecimal identifier used to correlate work done between CICS and DBCTL. The value format is an alphanumeric string, maximum 16 characters.

Resource Type
Is the category of resource for which the transaction is waiting.

Resource Name
Indicates the name of the resource the transaction is waiting to access.

Status
Indicates whether the transaction is active or inactive. The status is not displayed in CICS reports. Use this value only for creating situations. Values are:
- Active
- Inactive

System ID
Indicates the 4-character name that uniquely identifies an active MVS operating system within a given CICSpelix. The value format is an alphanumeric string, maximum 4 characters, and case-sensitive. MVS System IDs are always in uppercase characters.

Task Number
Is the number sequentially assigned by CICS to uniquely identify each task. The value format is an alphanumeric string, maximum 5 characters, and case-sensitive.
**Task State**
Indicates whether the transaction is currently running or not. Values are:
- Non-Exe
- Dispatabl
- New
- Running
- R_Early
- Purged
- Resumed
- Suspend
- Unused
- Reset
- OK
- Unknown

**Termid**
Indicates the 4-character ID of the terminal where the transaction originated. The value format is an alphanumeric string, maximum 4 characters, and case-sensitive.

**Transaction ID**
Indicates the 4-character name of the transaction. The value format is an alphanumeric string, with a maximum of 4 characters, and case-sensitive.

**Unit of Work**
Used internally to provide information in unit of work reports. The value format is an alphanumeric string, maximum 52 characters.

**User ID**
Indicates the user's 8-character CICS logon ID. The value format is an alphanumeric string, maximum 8 characters, and case-sensitive.

**Wait Type**
Indicates the type of wait for the transaction. The valid values are:

<table>
<thead>
<tr>
<th></th>
<th>CPU</th>
<th>Database</th>
<th>DatXface</th>
<th>DBCntl</th>
<th>DL/I</th>
<th>Dump</th>
<th>Enqueue</th>
<th>Events</th>
<th>FEPI</th>
<th>File</th>
<th>Interval</th>
<th>JES</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Journal</td>
<td>Loader</td>
<td>Lock</td>
<td>LogMgr</td>
<td>MQSeries</td>
<td>MRO</td>
<td>MRO/ISC</td>
<td>MVS</td>
<td>Other</td>
<td>Recovery</td>
<td>Security</td>
<td>Storage</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Transaction Application Programs**

The Transaction Application Program attributes report detailed information about the application program that issued the current or last EXEC CICS command request.
Use the Transaction Application Programs attributes help identify a looping transaction, to see the attributes of the currently running program, such as its length, or to find the location of items in storage pertinent to the program such as its save area or return address.

**Addressing Mode**
Is the AMODE of the application program at the time the CICS EXEC interface program was invoked.

**CEDF Allowed**
Whether or not the execution diagnostic facility (EDF) initiation and termination screens will be displayed.

**CICS Region Name**
Indicates the job name or modify ID of the CICS region being monitored. Each CICS region in an MVS image has a unique name. This name is an alphanumeric string, with a maximum of 8 characters, and case-sensitive. CICS region names are always in uppercase characters.

**Commarea Address**
Is the address of the communication area (Commarea) associated with this transaction.

**El Structure Address**
Is the address of the EXEC Interface system Structure (EIS) created by CICS.

**El User Structure Address**
Is the address of the EXEC Interface User Structure (EIUS) created by CICS.

**EIB Address**
Is the address of the EXEC Interface Block (EIB).

**Execution Key**
Indicates the execution key of the application program at the time the CICS EXEC interface program was invoked.

**Origin Node**
Is the combination of MVS System ID (SMFID) and CICS region name. The value format is an alphanumeric string, maximum 32 bytes, and case-sensitive.

When a situation is true, the system compares the origin node name in the attribute to the names of managed systems assigned to the item. If the origin node name matches the name of a managed system, the status of the item changes accordingly. If the names of the origin node and the managed systems do not match, the status of the item remains unchanged.

**Program Length**
Is the length of the application program that issued the EXEC CICS command.

**Program Mask**
Is the application program's mask at the time the CICS EXEC interface program was invoked.

**Program Name**
Is the name of the application program that issued the EXEC CICS command.

**Program Offset**
Indicates the hexadecimal offset within the program whence the EXEC CICS command was issued.

**Program Return Address**
Is the application program's return address or register 14 based on the program's savearea address.
Program Savearea Address
Is the application program’s register savearea address at the time the EXEC CICS command was issued.

Resource Manager ID
Is the resource manager ID (EIDRMID).

System ID
Indicates the four-character name that uniquely identifies an active MVS operating system within a given CICSplex. The value format is an alphanumeric string, maximum 4 characters, and case-sensitive. MVS System IDs are always in uppercase characters.

Task Number
Is the number sequentially assigned by CICS to uniquely identify each task.

Transaction ID
Is the four-character name of the transaction.

Transaction Definitions

The Transaction Definition Information report attributes show the attributes used to define the transaction to CICS.

Use the Transaction Definition Information attributes to confirm the definition of a transaction if you are experiencing incorrect output or abnormal task termination. If the storage violation field is not zero, you may want to disable this transaction through CEMT until the cause can be determined.

Bridge Exit
Is the default bridge exit associated with this transaction.

CICS Region Name
Indicates the job name or modify ID of the CICS region being monitored. Each CICS region in an MVS image has a unique name. This name is an alphanumeric string, with a maximum of 8 characters, and case-sensitive. CICS region names are always in uppercase characters.

Class Name
Is the name of the transaction class associated with this transaction.

Data Key
Is the storage key of the storage allocated during initialization for this transaction.

Data Location
Indicates the key of the storage allocated for this transaction.

Deadlock timeout
Is the length of time, in seconds, after which this transaction is considered deadlocked and abended by CICS.

Dump
Indicates whether a dump should be produced should this transaction abend.

Dynamic Routing
Indicates whether this transaction is eligible for dynamic routing.

Facilitylike
Is the name of a real terminal that is used as a template for the bridge facility.
Isolate
Indicates whether the user-key storage allocated for this transaction is protected from other transactions using user-key storage.

Local Dynamic Route Count
Is the number of times the dynamic routing program was invoked and a local transaction subsequently attached.

Origin Node
Is the combination of MVS System ID (SMFID) and CICS region name. The value format is an alphanumeric string, maximum 32 bytes, and case-sensitive.

When a situation is true, the system compares the origin node name in the attribute to the names of managed systems assigned to the item. If the origin node name matches the name of a managed system, the status of the item changes accordingly. If the names of the origin node and the managed systems do not match, the status of the item remains unchanged.

Partitionset Name
Is the name of the PARTITIONSET this transaction will use.

Priority
Indicates the priority of the transaction, used to affect the dispatching order of tasks.

Profile Name
Indicates the name of the profile with processing options for this transaction.

Program Name
Is the name of the program that is executed when this transaction is first attached.

Read Timeout
Is the time interval, in seconds, after which the transaction will be terminated if no input is received from the terminal.

Remote Dynamic Route Count
Is the number of times the dynamic routing program was invoked and a remote transaction subsequently attached.

Remote Name
Is the identifier of this transaction in the remote system.

Remote System
Is the four-character identifier of the CICS system where the attach request for this transaction is sent.

Restart Count
Is the number of times this transaction was restarted after terminating abnormally and being backed out.

Restart
Indicates whether this transaction will be automatically restarted, after an abend and subsequent back out.

Runaway Limit
Is the amount of time, in milliseconds, that this transaction can have control of the processor before it is assumed to be in a loop and abended by CICS.

Screen Selection
Indicates whether the PRIMARY (DEFAULT) or ALTERNATE buffer size for a 3270 screen or printer is used whenever a terminal output request is issued with the ERASE option.
Stall Purge
Indicates whether this transaction can be purged by CICS during a system stall.

Storage Clear
Indicates whether storage released by this transaction should be cleared by CICS.

Storage Violations
Is the total number of storage violations that CICS has detected in storage areas owned by this transaction. The corruption cannot have been caused by this transaction.

System ID
Indicates the four-character name that uniquely identifies an active MVS operating system within a given CICSplex. The value format is an alphanumeric string, maximum 4 characters, and case-sensitive. MVS System IDs are always in uppercase characters.

Terminal Purge
Indicates whether this transaction, if it is associated with a non-VTAM terminal, can or cannot be purged because of a terminal error.

Trace
Indicates whether the activity of this transaction should be traced.

Transaction ID
Is the four-character name of the transaction.

Transaction Status
Indicates whether this transaction is enabled or disabled.

TWA Size
Is the size, in bytes, of the work area required by this transaction at initialization time.

Use Count
Is the total number of times this transaction has been invoked since CICS was initialized.

---

Transaction Details

The Transaction Details report attributes provide detailed information about a running transaction.

Use the Transaction Details attributes to see how much CPU and storage the task is using, and to determine its current state. High CPU and storage consumption are indicators of a looping task which can seriously degrade performance. A looping task can lock up the entire CICS region, or exhaust available CICS storage causing a short-on-storage condition.

If you want to view how the task has spent its time so far, select the Transaction Timings Workspace link in Transaction Analysis.

If you want to see details about the amount of storage a task is currently using or statistics about the storage it has used throughout its life, select the Transaction Storage Analysis Workspace link in Transaction Analysis.

Attach Time
Indicates the date and time when the transaction was attached.
CICS Region Name
Indicates the job name or modify ID of the CICS region being monitored. Each CICS region in an MVS image has a unique name. This name is an alphanumeric string, with a maximum of 8 characters, and case-sensitive. CICS region names are always in uppercase characters.

CPU Time
Indicates the amount of CPU time (in thousandths of a second) used by the transaction.

Current Program ID
Indicates the program currently being executed by this transaction.

Dispatcher Queue
Indicates in which of the dispatcher queues this transaction is found.

Elapsed Time
Indicates the time elapsed (in thousandths of a second) since the transaction was attached.

EXEC CICS Command
Indicates the function code of the current or last EXEC CICS command issued by the running application program.

Facility ID
Indicates the unique identifier of the facility to which the transaction is attached.

Facility Type
Indicates the type of facility to which the transaction is attached.

First Program ID
Indicates the program first invoked when the transaction started.

Origin Node
Is the combination of MVS System ID (SMFID) and CICS region name. The value format is an alphanumeric string, maximum 32 bytes, and case-sensitive.

When a situation is true, the system compares the origin node name in the attribute to the names of managed systems assigned to the item. If the origin node name matches the name of a managed system, the status of the item changes accordingly. If the names of the origin node and the managed systems do not match, the status of the item remains unchanged.

Originating Transaction ID
Is the transaction ID used to originate this transaction.

Purge Status
Indicates whether the transaction has been purged.

Purgeable Suspend
Indicates whether or not the suspended transaction can be purged.

Resource Name
Indicates the name of the resource the transaction is waiting to access.

Resource Type
Is the category of resource for which the transaction is waiting.

Storage Used Above 16 MB
Indicates the amount of storage (in kilobytes) above the 16 megabyte line used by the transaction.
Storage Used Below 16 MB
Indicates the amount of storage (in kilobytes) below the 16 megabyte line used by the transaction.

Suspend Timeout Due
Indicates the time and date this transaction is due to be purged if the suspend does not end.

Suspend Type
Indicates the type of request that is causing this transaction to wait.

System ID
Indicates the four-character name that uniquely identifies an active MVS operating system within a given CICSpex. The value format is an alphanumeric string, maximum 4 characters, and case-sensitive. MVS System IDs are always in uppercase characters.

Task Number
Is the number sequentially assigned by CICS to uniquely identify each task.

Task State
Indicates whether the transaction is currently running and if not, why.

Time in Suspend
Indicates the amount of time (in thousandths of a second) the transaction has spent waiting.

Time of Suspend
Is the time at which this transaction started the current wait.

Transaction ID
Is the four-character name of the transaction.

Umbrella Transaction ID
Indicates the transaction ID assigned to this transaction by the application calling OMEGAMON’s Umbrella transaction services.

UOW State
Is the state of the unit-of-work.

User ID
Indicates the one to eight character identifier of the CICS user.

Transaction File Details

The Transaction File Details report attributes provide detailed resource information about the files a transaction has accessed.

Use the Transaction File Details attributes to determine whether the transaction is issuing too many file requests, which might indicate an error in the transaction, or waiting too long to get the requests serviced.

Access Method Count
Is the file access method request count.

Add Requests
Is the number of file ADD requests.

Add Total Time
Is the total time of file ADD requests.

Browse Requests
Is the number of file BROWSE requests.
Browse Total Time
Is the total time of file BROWSE requests.

CFDT I/O Wait Time
Is the Coupling Facility data table (CFDT) I/O wait time.

CFDT I/O Waits
Is the Coupling Facility data table (CFDT) I/O wait counts.

CICS Region Name
Indicates the job name or modify ID of the CICS region being monitored. Each CICS region in an MVS image has a unique name. This name is an alphanumeric string, with a maximum of 8 characters, and case-sensitive. CICS region names are always in uppercase characters.

Delete Requests
Is the number of file DELETE requests.

Delete Total Time
Is the total time of file DELETE requests.

File Name
Is the file name or ddname.

Get Requests
Is the number of file GET requests.

Get Total Time
Is the total time of file GET requests.

Origin Node
Is the combination of MVS System ID (SMFID) and CICS region name. The value format is an alphanumeric string, maximum 32 bytes, and case-sensitive.

When a situation is true, the system compares the origin node name in the attribute to the names of managed systems assigned to the item. If the origin node name matches the name of a managed system, the status of the item changes accordingly. If the names of the origin node and the managed systems do not match, the status of the item remains unchanged.

Put Requests
Is the number of file PUT requests.

Put Total Time
Is the total time of file PUT requests.

RLS-Mode Wait Time
Is the RLS-Mode file I/O wait time.

RLS-Mode Waits
Is the RLS-Mode file I/O wait counts.

System ID
Indicates the four-character name that uniquely identifies an active MVS operating system within a given CICSpexit. The value format is an alphanumeric string, maximum 4 characters, and case-sensitive. MVS System IDs are always in uppercase characters.

Task Number
Is the task number.

Total File I/O Wait Count
Is the file I/O wait count.
**Total File I/O Wait Time**
Is the file I/O wait time.

**Total File Requests**
Is the total number of ALL requests against the file.

**Total Request Time**
Is the total time of ALL requests against the file.

**Transaction ID**
Is the transaction ID.

---

### Transaction EIB Details

The attributes of the Transaction EIB Detail report the contents of the EXEC Interface Block (EIB) fields, created by CICS to satisfy the application program’s EXEC CICS command request.

Further information about the EIB fields can be found in the *Application Programming Reference* for the release of CICS Transaction Server that you are using.

**CICS Region Name**
Indicates the job name or modify ID of the CICS region being monitored. Each CICS region in an MVS image has a unique name. This name is an alphanumeric string, with a maximum of 8 characters, and case-sensitive. CICS region names are always in uppercase characters.

**EIBAID**
Is the attention identifier associated with the last terminal control or BMS input operation from a display device.

**EIBATT**
When set to X’FF’, EIBATT indicates that the RU contains attach header data.

**EIBCALEN**
Indicates the length of the communication area that was passed to the application program from the previous program, using the COMMAREA and LENGTH options.

**EIBCOMPL**
When set to X’FF’, EIBCOMPL indicates that the data is complete on a terminal control RECEIVE command.

**EIBCONF**
Request has been received for an APPC conversation.

**EIBCPOSN**
Indicates the cursor position associated with the last terminal control or BMS input operation from a display device.

**EIBDATE_and_EIBTIME**
Indicates the date and time on which the current or last EXEC CICS command was issued from the application program.

**EIBDS**
Is the identifier of the last data set referred to in a file control request.

**EIBEOC**
When set to X’FF’, EIBEOC indicates that an end-of-chain indicator appears in the RU just received.
EIBERRCD
When EIBERR is set, EIBERRCD contains the error code that has been received.

EIBERR
When set to X'FF', EIBERR indicates that an error has been received on an APPC conversation.

EIBFMH
When set to X'FF', EIBFMH indicates that the user data just received contained an FMH.

EIBFN
Is the function code of the current or last EXEC CICS command issued by the transaction.

EIBFREE
EIBFREE indicates that the application program cannot continue using the facility.

EIBNODAT
When set to X'FF', EIBNODAT indicates that no data has been sent by the remote application (restricted to application programs holding conversations across APPC links).

EIBRCODE
Is the CICS response code returned by the last EXEC CICS command executed by the task.

EIBRECV
EIBRECV indicates that the application program is to continue to receive data from the facility by executing RECEIVE commands.

EIBREQID
Is the request identifier assigned to an interval control request. It is not used when the application program specifies the REQID option.

EIBRESP2
Indicates, together with EIBRESP, the resulting condition of the last executed command by the transaction.

EIBRESP
Indicates, together with EIBRESP2, the resulting condition of the last executed command by the transaction.

EIBRLDBK
When set to X'FF', EIBRLDBK indicates rollback.

EIBRSRCE
Is the symbolic identifier of the resource being accessed by the current or last EXEC CICS command.

EIBSIG
When set to X'FF', EIBSIG indicates that SIGNAL has been received.

EIBSYNC
EIBSYNC indicates that the application program must take a syncpoint or terminate.

EIBSYNRB
When set to X'FF', EIBSYNRB indicates that an application program should issue a SYNCPOINT ROLLBACK command (set only in application programs holding a conversation on an APPC or MRO link).
EIBTASKN
Is the number sequentially assigned by CICS to uniquely identify each task.

EIBTRMID
Is the terminal ID of the principal facility (terminal or logical unit) associated with the transaction.

EIBTRNID
Is the four-character name of the transaction.

Origin Node
Is the combination of MVS System ID (SMFID) and CICS region name. The value format is an alphanumeric string, maximum 32 bytes, and case-sensitive.

When a situation is true, the system compares the origin node name in the attribute to the names of managed systems assigned to the item. If the origin node name matches the name of a managed system, the status of the item changes accordingly. If the names of the origin node and the managed systems do not match, the status of the item remains unchanged.

System ID
Indicates the four-character name that uniquely identifies an active MVS operating system within a given CICSplex. The value format is an alphanumeric string, maximum 4 characters, and case-sensitive. MVS System IDs are always in uppercase characters.

Task Number
Is the number sequentially assigned by CICS to uniquely identify each task.

Transaction ID
Is the four-character name of the transaction.

---

### Transaction EIB Summary

The Transaction EIB Summary attributes report on the information stored in the EXEC Interface Block created by CICS to satisfy the application program's EXEC CICS command.

Use the Transaction EIB Summary attributes to help identify a looping transaction. For the same EXEC CICS command once the program name and offset remain constant it may signify a looping transaction.

CICS Region Name
Indicates the job name or modify ID of the CICS region being monitored. Each CICS region in an MVS image has a unique name. This name is an alphanumeric string, with a maximum of 8 characters, and case-sensitive. CICS region names are always in uppercase characters.

EIB Date and Time
Indicates the date and time at which the current or last EXEC CICS command was issued from the application program.

EIBRESP Description
Indicates the meaning of the value in EIBRESP.

EIBRESP Value
Indicates, together with EIBRESP2, the resulting condition of the last executed command by the transaction.
EIBRESP2 Value
Indicates, together with EIBRESP, the resulting condition of the last executed command by the transaction.

EXEC CICS Command
Is the EXEC CICS command currently in use.

Function Code
Is the function code of the current or last EXEC CICS command issued by the transaction.

Origin Node
Is the combination of MVS System ID (SMFID) and CICS region name. The value format is an alphanumeric string, maximum 32 bytes, and case-sensitive.

When a situation is true, the system compares the origin node name in the attribute to the names of managed systems assigned to the item. If the origin node name matches the name of a managed system, the status of the item changes accordingly. If the names of the origin node and the managed systems do not match, the status of the item remains unchanged.

Program Name
Is the name of the application program from which the EXEC CICS command was issued.

Program Offset
Indicates the hexadecimal offset within the program where the EXEC CICS command was issued.

Resource Name
Is the symbolic identifier of the resource being accessed by the current or last EXEC CICS command.

System ID
Indicates the four-character name that uniquely identifies an active MVS operating system within a given CICSplex. The value format is an alphanumeric string, maximum 4 characters, and case-sensitive. MVS System IDs are always in uppercase characters.

Task Number
Is the number sequentially assigned by CICS to uniquely identify each task.

Terminal ID
Indicates the terminal ID of the principal facility (terminal or logical unit) associated with the transaction.

Transaction ID
Is the four-character name of the transaction.

Transaction I/O Waits Details

The Transaction I/O Waits details attributes report a breakdown of the time the transaction waited as a result of I/O operations.

Use the Transaction I/O Waits details attributes to determine which activity is contributing to excessively to the transactions suspend time or overall elapsed time.

CICS Region Name
Indicates the job name or modify ID of the CICS region being monitored. Each CICS region in an MVS image has a unique name. This name is an
alphanumeric string, with a maximum of 8 characters, and case-sensitive. CICS region names are always in uppercase characters.

**FEPI I/O Wait**
Indicates the amount of time, in thousandths of a second, that the transaction waited for all FEPI I/O services.

**File I/O Wait**
Indicates the amount of time, in thousandths of a second, that the transaction waited for file I/O to complete.

**Inter -Region(MRO)**
Indicates the amount of time, in thousandths of a second, that the transaction waited for MRO requests to another CICS region to complete.

**Journal(MVS Logger)**
Indicates the amount of time, in thousandths of a second, that the transaction waited for journal or MVS logger I/O requests to complete.

**LU 6.1 Terminal I/O Wait**
Indicates the amount of time, in thousandths of a second, that the transaction waited for control at this end of an LU 6.1 link.

**LU 6.2 Terminal I/O Wait**
Indicates the amount of time, in thousandths of a second, that the transaction waited for control at this end of an LU 6.1 link.

**Origin Node**
Is the combination of MVS System ID (SMFID) and CICS region name. The value format is an alphanumeric string, maximum 32 bytes, and case-sensitive.

When a situation is true, the system compares the origin node name in the attribute to the names of managed systems assigned to the item. If the origin node name matches the name of a managed system, the status of the item changes accordingly. If the names of the origin node and the managed systems do not match, the status of the item remains unchanged.

**RLS File I/O Wait**
Indicates the amount of time, in thousandths of a second, that the transaction waited for RLS file I/O to complete.

**Shared TS I/O Wait**
Indicates the amount of time, in thousandths of a second, that the transaction waited for asynchronous shared temporary storage requests to complete.

**Socket I/O Wait**
Indicates the amount of time, in thousandths of a second, that the transaction waited for socket I/O activities to complete.

**System ID**
Indicates the four-character name that uniquely identifies an active MVS operating system within a given CICSpex. The value format is an alphanumeric string, maximum 4 characters, and case-sensitive. MVS System IDs are always in uppercase characters.

**Task Number**
Is the number sequentially assigned by CICS to uniquely identify each task.

**Temporary Storage I/O Wait**
Indicates the amount of time, in thousandths of a second, that the transaction waited for VSAM temporary storage I/O activities to complete.
Terminal I/O Wait
Indicates the amount of time, in thousandths of a second, that the transaction waited for user input from the terminal.

Transaction ID
Is the four-character name of the transaction.

Transient Data I/O Wait
Indicates the amount of time, in thousandths of a second, that the transaction waited for VSAM transient data I/O activities to complete.

Transaction Manager

The Transaction Manager attributes report returns information about the transaction activity in your CICS system (such as the total number of transactions attached), or you can specify a single transaction that you are interested in (such as CEMT).

Active User Transactions
Is the current number of active user transactions. The value format is an integer of maximum four bytes.

Average Current queueing time
Is the average time spent waiting by those currently queued transactions and the time that they have been waiting for MAXTASK reasons.

Average MAXTASK queueing time
Is the average time spent waiting by those user transactions that had to wait for MAXTASK reasons. It is the total time spent at MAXTASK divided by the total number of transactions that have been delayed because of MAXTASK.

CICS Region Name
Indicates the job name or modify ID of the CICS region being monitored. Each CICS region in an MVS image has a unique name. This name is an alphanumeric string, with a maximum of 8 characters, and case-sensitive. CICS region names are always in uppercase characters.

Current Maxtask Time
Is the current queued transaction interval. The total time spent waiting by those user transactions currently queued for MAXTASK reasons. Note: This does not include the time spent waiting by those transactions that have finished queueing. The value format is an integer of maximum four bytes.

Current Maxtasks
Is the current MAXTASK value. The specified maximum number of user transactions as specified in the SIT, or as an override, or changed dynamically using CEMT SET SYSTEM MAXTASKS(value) or EXEC CICS SET SYSTEM MAXTASKS(fullword binary data-value) commands.

Dispatchable Transaction Count
Is the current number of dispatchable transactions. The value format is an integer of maximum four bytes.

Maxtask Count
Is the MAXTASK occurrence count. The number of times that the number of active user transactions equalled the specified maximum number of user transactions (MAXTASK). The value format is an integer of maximum four bytes.

Origin Node
Is the combination of MVS System ID (SMFID) and CICS region name. The value format is an alphanumeric string, maximum 32 bytes, and case-sensitive.
When a situation is true, the system compares the origin node name in the attribute to the names of managed systems assigned to the item. If the origin node name matches the name of a managed system, the status of the item changes accordingly. If the names of the origin node and the managed systems do not match, the status of the item remains unchanged.

**Peak Active User Transactions**
Is the peak number of active user transactions reached. The value format is an integer of maximum four bytes.

**Peak Queued User Transactions**
Is the peak number of user transactions queuing for MAXTASK reasons. Note: This does not include transactions queued for Transaction Class. The value format is an integer of maximum four bytes.

**Queued User Transactions**
Is the current number of user transactions currently queuing for MAXTASK reasons. Note: This does not include transactions currently queued for Transaction Class. The value format is an integer of maximum four bytes.

**Running Transaction Count**
Is the current number of running transactions. The value format is an integer of maximum four bytes.

**Suspended Transaction Count**
Is the current number of suspended transactions. The value format is an integer of maximum four bytes.

**System ID**
Indicates the four-character name that uniquely identifies an active MVS operating system within a given CICSpex. The value format is an alphanumeric string, maximum 4 characters, and case-sensitive. MVS System IDs are always in uppercase characters.

**System Transaction Count**
Is the current number of system transactions. The value format is an integer of maximum four bytes.

**Total Active User Transactions**
Is the total number of user transactions that have become active. The value format is an integer of maximum four bytes.

**Total Attached Transactions**
Is the total number of attached CICS transactions. The total number of tasks that have accumulated so far.

**Total MAXTASK Time**
Is the accumulated queued transaction interval. The total time spent waiting by those user transactions that had to wait for MAXTASK reasons. It is an integer of maximum four bytes.

**Note:** This does not include those transactions still waiting.

**Total Queued User Transactions**
Is the total Queued User Transaction Count. The number of user transactions that had to queue for MAXTASK reasons before becoming active, excluding those still waiting.

**Total Transactions so far**
Is the total number of tasks that have accumulated so far.
**Transaction rate**
Is the number of transactions per second.

**Transactions since reset**
Is the number of tasks that have accumulated since the last statistics reset.

---

**Transaction Remote Summary**

The Transaction Remote Summary attributes report information relevant to a transaction's interaction with other CICS systems.

Use the Transaction Remote Summary attributes to find out the remote CICS systems the transaction is interacting with. Performance problems in the remote CICS system might contribute to the overall elapsed time of the local transaction.

**CICS Region Name**
Indicates the job name or modify ID of the CICS region being monitored. Each CICS region in an MVS image has a unique name. This name is an alphanumeric string, with a maximum of 8 characters, and case-sensitive. CICS region names are always in uppercase characters.

**CICS SYSIDNT**
Is the four-character ID assigned to the local CICS region.

**Origin Node**
Is the combination of MVS System ID (SMFID) and CICS region name. The value format is an alphanumeric string, maximum 32 bytes, and case-sensitive.

When a situation is true, the system compares the origin node name in the attribute to the names of managed systems assigned to the item. If the origin node name matches the name of a managed system, the status of the item changes accordingly. If the names of the origin node and the managed systems do not match, the status of the item remains unchanged.

**Remote Facility ID**
Is the identifier of the facility used by the local transaction to communicate with the remote CICS.

**Remote Facility Type**
Indicates the type of facility used by the local transaction to communicate with the remote CICS.

**Remote Session I/O**
Indicates whether a task is in RECEIVE mode (waiting for a session to respond) or SEND mode (initiating the next request).

**Remote Session ID**
Indicates the actual terminal ID for this session.

**Remote Session Side**
Indicates whether a task is in the Frontend or Backend of a conversation. Session side displays n/a for DTP sessions.

**Remote System**
Is the four-character ID assigned to the remote CICS region in the Terminal Control Table (TCT).

**Remote Transaction**
Is the four-character name of the transaction in the remote CICS.

**System ID**
Indicates the four-character name that uniquely identifies an active MVS
operating system within a given CICSplex. The value format is an alphanumeric
string, maximum 4 characters, and case-sensitive. MVS System IDs are always
in uppercase characters.

**Task Number**
Is the number sequentially assigned by CICS to uniquely identify each task.

**Transaction ID**
Is the four-character name of the transaction defined to CICS.

---

**Transaction Statistics**

The Transaction Statistics attributes report the number of requests by a transaction
for CICS services such as program control, journal control, temporary storage,
transient data and non-3270 requests.

Use the Transaction Statistics attributes to determine whether requests that imply
I/O activity such as journal control, transient data or temporary storage, are a major
factor in response time degradation.

**CICS Logger Writes**
Is the number of CICS logger write requests issued by this transaction.

**CICS Region Name**
Indicates the job name or modify ID of the CICS region being monitored. Each
CICS region in an MVS image has a unique name. This name is an
alphanumeric string, with a maximum of 8 characters, and case-sensitive. CICS
region names are always in uppercase characters.

**CICS TCBs Attached**
Is the number of CICS TCBs attached by or on behalf of this transaction.

**Client IP Address**
Is the IP address of the WEB client which this transaction was attached for.

**DB2 Requests**
Is the number of DB2 (EXEC SQL and IFI) requests issued by this transaction.

**DPL Requests**
Is the number of DPL (Distributed Program Link) requests issued by this
transaction.

**IC Requests**
Is the sum of interval control START, CANCEL, DELAY and RETRIEVE
requests issued by this transaction.

**IC Starts**
Is the number of interval control START requests issued by this transaction.

**IMS/DBCTL Requests**
Is the number of IMS (DBCTL) requests issued by this transaction.

**Journal Writes**
Is the number of journal output requests issued by this transaction.

**Number of TCB Mode Switches**
Is the number of CICS TCB Mode Switches performed on behalf of this
transaction.

**OO Class Requests**
Is the number of CICS Object Oriented foundation class requests, including the
Java API for CICS (JCICS) classes, issued by this transaction.
**Origin Node**
Is the combination of MVS System ID (SMFID) and CICS region name. The value format is an alphanumeric string, maximum 32 bytes, and case-sensitive.

When a situation is true, the system compares the origin node name in the attribute to the names of managed systems assigned to the item. If the origin node name matches the name of a managed system, the status of the item changes accordingly. If the names of the origin node and the managed systems do not match, the status of the item remains unchanged.

**Program Link URMs**
Is the number of program LINK URM (User-Replaceable Modules) requests issued by, or on behalf of, this transaction.

**Program Links**
Is the number of program LINK requests issued by this transaction.

**Program Loads**
KCP7738 The number of program LOAD requests issued by this transaction.

**Program XCTLs**
Is the number of program XCTL requests issued by this transaction.

**SSL Bytes Decrypted**
Is the number of bytes decrypted by the secure sockets layer for this transaction.

**SSL Bytes Encrypted**
Is the number of bytes encrypted by the secure sockets layer for this transaction.

**Syncpoints**
Is the number of SYNCPOINT requests issued by this transaction.

**System ID**
Indicates the four-character name that uniquely identifies an active MVS operating system within a given CICSplex. The value format is an alphanumeric string, maximum 4 characters, and case-sensitive. MVS System IDs are always in uppercase characters.

**Task Number**
Is the number sequentially assigned by CICS to uniquely identify each task.

**TD GETs**
Is the number of Transient Data GET requests issued by this transaction.

**TD Purges**
Is the number of Transient Data PURGE requests issued by this transaction.

**TD PUTs**
Is the number of Transient Data PUT requests issued by this transaction.

**Transaction Group ID hex**
Is the hex representation of the identifier CICS creates to correlate transactions attached to service the same incoming work request originated through the CICS Web, IIOP, or 3270 Bridge interface.

**Transaction Group ID**
Is the identifier CICS creates to correlate transactions attached to service the same incoming work request originated through the CICS Web, IIOP, or 3270 Bridge interface.

**Transaction ID**
Is the four-character name of the transaction.
TS GETs
Is the number of temporary storage GET requests issued by this transaction.

TS PUTs to Aux
Is the number of PUT to auxiliary temporary storage requests issued by this transaction.

TS PUTs to Main
Is the number of PUT to main temporary storage requests issued by this transaction.

TS Total Requests
Is the sum of all temporary storage requests (GET, PUT to main, PUT to auxiliary and TS DELETE) issued by this transaction.

WEB Chars Received
Is the number of characters received by the CICS Web interface RECEIVE requests issued by this transaction.

WEB Chars Sent
Is the number of characters sent by the CICS Web interface SEND requests issued by this transaction.

WEB Receive Requests
Is the number of CICS Web interface RECEIVE requests issued by this transaction.

WEB Repository Reads
Is the number of reads from the repository in shared temporary storage issued by this transaction.

WEB Repository Writes
Is the number of writes to the repository in shared temporary storage issued by this transaction.

WEB Send Requests
Is the number of CICS Web interface SEND requests issued by this transaction.

WEB Total Requests
Is the sum of all CICS Web interface requests issued by this transaction.

Transaction Storage Analysis

The Transaction Storage Analysis report attributes consist of statistics for a transaction collected by the Storage Manager and the CICS monitoring facility.

Use the Transaction Storage Analysis attributes to examine whether the transaction might be issuing an excessive number of storage requests.

CICS Region Name
Indicates the job name or modify ID of the CICS region being monitored. Each CICS region in an MVS image has a unique name. This name is an alphanumeric string, with a maximum of 8 characters, and case-sensitive. CICS region names are always in uppercase characters.

GETMAIN Above 16 MB
Indicates the number of GETMAIN requests for storage above the 16 megabyte line issued by the transaction.

GETMAIN Below 16 MB
Indicates the number of GETMAIN requests for storage below the 16 megabyte line issued by the transaction.
HWM of Total Program Storage
Indicates, in kilobytes, the maximum amount of program storage in use by the transaction.

Origin Node
Is the combination of MVS System ID (SMFID) and CICS region name. The value format is an alphanumeric string, maximum 32 bytes, and case-sensitive.

When a situation is true, the system compares the origin node name in the attribute to the names of managed systems assigned to the item. If the origin node name matches the name of a managed system, the status of the item changes accordingly. If the names of the origin node and the managed systems do not match, the status of the item remains unchanged.

Program Storage HWM Above 16 MB
Indicates, in kilobytes, the maximum amount (high-water mark) of program storage in use by the transaction above the 16 MB line.

Program Storage HWM Below 16 MB
Indicates, in kilobytes, the maximum amount (high-water mark) of program storage in use by the transaction below the 16 MB line.

Program Storage HWM in CDSA
Is the maximum amount (high-water mark) of program storage in the CDSA, in kilobytes, for the transaction.

Program Storage HWM in ECDSA
Is the maximum amount (high-water mark) of program storage in the ECDSA, in kilobytes, for the transaction.

Program Storage HWM in ERDSA
Is the maximum amount (high-water mark) of program storage in the ERDSA, in kilobytes, for the transaction.

Program Storage HWM in ESDSA
Is the maximum amount (high-water mark) of program storage in the ESDSA, in kilobytes, for the transaction.

Program Storage HWM in RDSA
Is the maximum amount (high-water mark) of program storage in the RDSA, in kilobytes, for the transaction.

Program Storage HWM in SDSA
Is the maximum amount (high-water mark) of program storage in the SDSA, in kilobytes, for the transaction.

Storage Allocated Above 16 MB
Indicates the number of kilobytes of storage currently allocated to the transaction above the 16 megabyte line.

Storage Allocated Below 16 MB
Indicates the number of kilobytes of storage currently allocated to the transaction below the 16 megabyte line.

Storage Elements Above 16 MB
Is the number of pieces of storage above the 16 megabyte line currently allocated to the transaction.

Storage Elements Below 16 MB
Is the number of pieces of storage below the 16 megabyte line currently allocated to the transaction.
Storage HWM Above 16 MB
Is the maximum onumber (high-water mark) of kilobytes allocated to the transaction above the 16 megabyte line.

Storage HWM Below 16 MB
Is the maximum number (high-water mark) of kilobytes allocated to the transaction below the 16 megabyte line.

Storage Occupancy Above 16 MB
Indicates the storage occupancy above the 16 megabyte line, in kilobytes, for the transaction.

Storage Occupancy Below 16 MB
Indicates the storage occupancy below the 16 megabyte line, in kilobytes, for the transaction.

Storage Used Above 16 MB
Is the number of kilobytes of storage above the 16 megabyte line currently in use by the transaction.

Storage Used Below 16 MB
Is the number of kilobytes of storage below the 16 megabyte line currently in use by the transaction.

System ID
Indicates the four-character name that uniquely identifies an active MVS operating system within a given CICSplex. The value format is an alphanumeric string, maximum 4 characters, and case-sensitive. MVS System IDs are always in uppercase characters.

Task Number
Is the number sequentially assigned by CICS to uniquely identify each task.

Transaction ID
Is the four-character name of the transaction.

Transaction Storage Violations
The Transaction Storage Violations attribute group reports on the total number of violations for each transaction that has experienced a storage violation in CICS.

Note that once a storage violation has occurred, collection for this attribute group involves scanning the Program Control Table (PCT), which can carry considerable overhead. Caution should be exercised when using this table for either reports or situations.

CICS Region Name
Indicates the job name or modify ID of the CICS region being monitored. Each CICS region in an MVS image has a unique name. This name is an alphanumeric string, with a maximum of 8 characters, and case-sensitive. CICS region names are always in uppercase characters.

Origin Node
Is the combination of MVS System ID (SMFID) and CICS region name. The value format is an alphanumeric string, maximum 32 bytes, and case-sensitive.

When a situation is true, the system compares the origin node name in the attribute to the names of managed systems assigned to the item. If the origin node name matches the name of a managed system, the status of the item changes accordingly. If the names of the origin node and the managed systems do not match, the status of the item remains unchanged.
Storage Violations
Indicates the number of storage violations associated with the transaction. The value format is an integer of a maximum of four bytes.

System ID
Indicates the four-character name that uniquely identifies an active MVS operating system within a given CICSpex. The value format is an alphanumeric string, maximum 4 characters, and case-sensitive. MVS System IDs are always in uppercase characters.

Transaction ID
Indicates the four-character transaction identifier from the Program Control Table (PCT). The value format is an alphanumeric string with a maximum of four characters.

Transaction Timings
The Transaction Timings attributes report where the time was spent during the life of this transaction, based on data collected by the CICS Monitoring Facility.

Use the Transaction Timings attributes to find which timing is a large percent of the transaction response time, then determine which conditions might cause the timing to be excessive.

1st Dispatch Delay
Is the total time (in thousandths of a second) that this transaction waited prior to first dispatch.

CICS Region Name
Indicates the job name or modify ID of the CICS region being monitored. Each CICS region in an MVS image has a unique name. This name is an alphanumeric string, with a maximum of 8 characters, and case-sensitive. CICS region names are always in uppercase characters.

CPU Time
Indicates the amount of CPU time (in thousandths of a second) used by the transaction.

Dispatch Time
Indicates the amount of time (in thousandths of a second) that this transaction spent dispatched on a CICS TCB. It includes QR TCB Elapsed Time and Other TCBs Elapsed Time.

Elapsed Time
Indicates the time elapsed (in thousandths of a second) since the transaction was attached.

Exception Wait Time
Is the accumulated time (in thousandths of a second) that this transaction waited on exception conditions.

JVM Elapsed Time
Is the amount of time (in thousandths of a second) that the transaction spent in a Java Virtual Machine.

Origin Node
Is the combination of MVS System ID (SMFID) and CICS region name. The value format is an alphanumeric string, maximum 32 bytes, and case-sensitive.

When a situation is true, the system compares the origin node name in the attribute to the names of managed systems assigned to the item. If the origin
node name matches the name of a managed system, the status of the item changes accordingly. If the names of the origin node and the managed systems do not match, the status of the item remains unchanged.

**Other TCBs Elapsed Time**
Is the amount of time (in thousandths of a second) that this transaction spent dispatched on CICS TCBs other than the QR TCB.

**Program Load Elapsed Time**
Indicates the time (in thousandths of a second) that this transaction waited for program library fetches from DFHRPL.

**QR TCB Elapsed Time**
Is the elapsed time (in thousandths of a second) that this transaction spent dispatched on the CICS QR TCB.

**Re-Dispatch Wait**
Is the amount of time (in thousandths of a second) that this transaction waited between the completion of a request and being redispached by CICS.

**RLS CPU Time**
Is the amount of SRB CPU time (in thousandths of a second) that this transaction spent processing VSAM Record Level Sharing file requests.

**RMI Elapsed Time**
Is the total amount of time (in thousandths of a second) that this transaction spent in all task related user exits (TRUEs) invoked by the transaction using the Resource Manager Interface (RMI).

**Syncpoint Elapsed Time**
Indicates the amount of time (in thousandths of a second) that this transaction spent processing syncpoint requests.

**System ID**
Indicates the four-character name that uniquely identifies an active MVS operating system within a given CICSpex. The value format is an alphanumeric string, maximum 4 characters, and case-sensitive. MVS System IDs are always in uppercase characters.

**Task Number**
Is the number sequentially assigned by CICS to uniquely identify each task.

**Time in Suspend**
Is the total amount of time (in thousandths of a second) that this transaction spent waiting (suspended).

It includes the times reported in the attributes: 1st Dispatch Delay, Re-Dispatch Wait, Total I/O Wait Times, and Total Other Wait Times

**Total I/O Wait Times**
Is the total amount of time (in thousandths of a second) this transaction waited as a result of I/O operations.

**Total Other Wait Times**
Is the total amount of time (in thousandths of a second) that this transaction waited other than what is reported in the attributes Total I/O Wait Times and Exception Wait Time.

**Transaction ID**
Is the four-character name of the transaction.
Transaction TSQueue Details

The Transaction TSQueue Details attributes provide detailed resource information about the Temporary Storage queues accessed by the transaction.

Use the Transaction TSQueue Details attributes to determine whether the transaction is issuing too many Temporary Storage requests, which might indicate an error in the transaction, or waiting too long to get the requests serviced.

CICS Region Name
Indicates the job name or modify ID of the CICS region being monitored. Each CICS region in an MVS image has a unique name. This name is an alphanumeric string, with a maximum of 8 characters, and case-sensitive. CICS region names are always in uppercase characters.

Get Requests
Is the number of temporary storage queue GET requests.

Get Total Time
Is the total time of temporary storage queue GET requests.

Hex TSQueue ID
Is the Temporary Storage Queue ID in hexadecimal format.

Origin Node
Is the combination of MVS System ID (SMFID) and CICS region name. The value format is an alphanumeric string, maximum 32 bytes, and case-sensitive.

When a situation is true, the system compares the origin node name in the attribute to the names of managed systems assigned to the item. If the origin node name matches the name of a managed system, the status of the item changes accordingly. If the names of the origin node and the managed systems do not match, the status of the item remains unchanged.

Put To AUX Requests
Is the number of temporary storage queue PUT requests to auxiliary temporary storage.

Put To Aux Total Time
Is the total time of temporary storage queue PUT requests to auxiliary temporary storage.

Put To Main Requests
Is the number of temporary storage queue PUT requests to main temporary storage.

Put To Main Total Time
Is the total time of temporary storage queue PUT requests to main temporary storage.

Shared TSQ IO Wait Count
Is the shared temporary storage I/O wait count.

Shared TSQ IO Wait Time
Is the shared temporary storage I/O wait time.

System ID
Indicates the four-character name that uniquely identifies an active MVS operating system within a given CICSplex. The value format is an alphanumeric string, maximum 4 characters, and case-sensitive. MVS System IDs are always in uppercase characters.
Task Number
Is the number sequentially assigned by CICS to uniquely identify each task.

Total Length Of Items Obtained
Is the total length of ALL the items obtained from temporary storage.

Total Length Of Items Written To Aux
Is the total length of ALL the items written to auxiliary temporary storage.

Total Length Of Items Written To Main
Is the total length of ALL the items written to main temporary storage.

Total TSQ IO Wait Count
Is the temporary storage I/O wait count.

Total TSQ IO Wait Time
Is the temporary storage I/O wait time.

Total TSQ Request Time
Is the total time of ALL requests against the temporary storage queue.

Total TSQ Requests
Is the total number of ALL requests against the temporary storage queue.

Transaction ID
Is the transaction ID.

TSQueue Name
Is the temporary storage queue name.

Transaction Umbrella Analysis

The Transaction Umbrella Data attributes report the contents of the three OMEGAMON Umbrella fields that can be updated from within an application.

Use the Transaction Umbrella Data attributes to view the contents of the OMEGAMON Umbrella fields.

CICS Region Name
Indicates the job name or modify ID of the CICS region being monitored. Each CICS region in an MVS image has a unique name. This name is an alphanumeric string, with a maximum of 8 characters, and case-sensitive. CICS region names are always in uppercase characters.

Origin Node
Is the combination of MVS System ID (SMFID) and CICS region name. The value format is an alphanumeric string, maximum 32 bytes, and case-sensitive.

When a situation is true, the system compares the origin node name in the attribute to the names of managed systems assigned to the item. If the origin node name matches the name of a managed system, the status of the item changes accordingly. If the names of the origin node and the managed systems do not match, the status of the item remains unchanged.

System ID
Indicates the four-character name that uniquely identifies an active MVS operating system within a given CICSplex. The value format is an alphanumeric string, maximum 4 characters, and case-sensitive. MVS System IDs are always in uppercase characters.

Task Number
Is the number sequentially assigned by CICS to uniquely identify each task.
Transaction ID
Is the four-character name of the transaction

Umbrella Program ID
Indicates the program ID assigned to this transaction by the application calling OMEGAMON’s Umbrella transaction services

Umbrella Transaction ID
Indicates the transaction ID assigned to this transaction by the application calling OMEGAMON’s Umbrella transaction services

User Work Area (Hex)
Is the contents of the 32-byte Umbrella user data work area in hexadecimal format, which might be used by the application for general storage purposes; the contents are not used by OMEGAMON

User Work Area
Is the contents of the 32-byte Umbrella user data work area, which might be used by the application for general storage purposes; the contents are not used by OMEGAMON

Transaction Other Waits Analysis

The Transaction Other Waits Analysis attributes report a breakdown of the total amount of time the transaction waited as a result of other wait types.

Use the Transaction Other Waits attributes to find which timing is a large percent of the transaction response time, then determine which conditions might cause the timing to be excessive.

1st Dispatch Delay
Indicates the amount of time, in thousandths of a second, that the transaction waited prior to first dispatch.

CICS MAXOPENTCBS Delay
Indicates the amount of time, in thousandths of a second, that the transaction waited to obtain a CICS TCB, because the region had reached the limit set by the system parameter MAXOPENTCBS.

CICS Region Name
Indicates the job name or modify ID of the CICS region being monitored. Each CICS region in an MVS image has a unique name. This name is an alphanumeric string, with a maximum of 8 characters, and case-sensitive. CICS region names are always in uppercase characters.

Dispatchable Wait Time
Indicates the amount of time, in thousandths of a second, that the transaction waited as a result of giving up control to another task.

Global ENQ Delay
Indicates the amount of time, in thousandths of a second, that the transaction waited for a CICS Task Control global ENQ.

Interval Control Delay
Indicates the amount of time, in thousandths of a second, that the transaction waited as a result of using the EXEC CICS DELAY command (for a time interval or a specific time of day) or the EXEC CICS RETRIEVE command with the WAIT option.
**JVM Suspend Time**
Indicates the amount of time, in thousandths of a second, that the transaction was suspended by the CICS dispatcher while running in the CICS Java Virtual Machine.

**Local ENQ Delay**
Indicates the amount of time, in thousandths of a second, that the transaction waited for a CICS Task Control ENQ.

**Lock Manager Delay**
Indicates the amount of time, in thousandths of a second, that the transaction waited to acquire a lock on a resource.

**Origin Node**
Is the combination of MVS System ID (SMFID) and CICS region name. The value format is an alphanumeric string, maximum 32 bytes, and case-sensitive.

When a situation is true, the system compares the origin node name in the attribute to the names of managed systems assigned to the item. If the origin node name matches the name of a managed system, the status of the item changes accordingly. If the names of the origin node and the managed systems do not match, the status of the item remains unchanged.

**Re-Dispatch Wait**
Indicates the amount of time, in thousandths of a second, that the transaction waited to be re-dispatched by CICS after completing a request.

**RRMS/MVS Wait Time**
Indicates the amount of time, in thousandths of a second, that the transaction waited indoubt using resource recovery services for EXCI.

**System ID**
Indicates the four-character name that uniquely identifies an active MVS operating system within a given CICSplex. The value format is an alphanumeric string, maximum 4 characters, and case-sensitive. MVS System IDs are always in uppercase characters.

**Task Number**
Is the number sequentially assigned by CICS to uniquely identify each task.

**Transaction ID**
Is the four-character name of the transaction.

**Wait ExternalWait Time**
Indicates the amount of time, in thousandths of a second, that the transaction waited for one or more ECBs as a result of using the EXEC CICS WAIT EXTERNAL ECBLIST command.

**WAITCICS and WAIT EVENT wait**
Indicates the amount of time, in thousandths of a second, that the transaction waited for one or more ECBs (as a result of using the EXEC CICS WAITCICS ECBLIST command) or for the completion of an event by the same or another task (usually as a result of using the EXEC CICS WAIT EVENT command).

---

**Transient Data Queues**

The Transient Data Queues attributes report on the status of transient data queues for each monitored CICS region.
Use the Transient Data Queues attributes in situations to determine if the length of a transient data queue or number of data records in a transient data queue exceed a threshold. These attributes provide data for the Transient Data Queues table view.

**CICS Region Name**
Indicates the job name or modify ID of the CICS region being monitored. Each CICS region in an MVS image has a unique name. This name is an alphanumeric string, with a maximum of 8 characters, and case-sensitive. CICS region names are always in uppercase characters.

**Dest ID**
Indicates the intrapartition identifier. The value format is alphanumeric with a maximum of four characters, and is case-sensitive.

**Origin Node**
Is the combination of MVS System ID (SMFID) and CICS region name. The value format is an alphanumeric string, maximum 32 bytes, and case-sensitive.

When a situation is true, the system compares the origin node name in the attribute to the names of managed systems assigned to the item. If the origin node name matches the name of a managed system, the status of the item changes accordingly. If the names of the origin node and the managed systems do not match, the status of the item remains unchanged.

**Queue Length**
Indicates the queue length of the intrapartition destination. The value format is a positive integer with a maximum of four bytes.

**Queue Over Trigger**
Indicates the number of records by which the queue length exceeds the trigger level. The value format is a positive integer with a maximum of four bytes.

**System ID**
Indicates the four-character name that uniquely identifies an active MVS operating system within a given CICSplex. The value format is an alphanumeric string, maximum 4 characters, and case-sensitive. MVS System IDs are always in uppercase characters.

**Trigger Level**
Indicates the intrapartition trigger level. The value format is an integer with a maximum of two bytes, and in the range 0-32767.

---

**Transient Data Summary**

The Transient Data Summary attribute group provides statistics on the current use of intrapartition resources.

Use the Transient Data Summary attributes to review data about the number of buffer waits, string waits, and the percentage of buffers and control intervals in use.

**Buffer Waits**
Indicates the number of requests that are currently suspended pending the availability of a transient data buffer. The value format is an integer with a maximum of four bytes.

**CICS Region Name**
Indicates the job name or modify ID of the CICS region being monitored. Each CICS region in an MVS image has a unique name. This name is an alphanumeric string, with a maximum of 8 characters, and case-sensitive. CICS region names are always in uppercase characters.
Current String Waits
Indicates the current number of tasks that require the physical reading or writing of a CI and are suspended due to the lack of an available string. The value format is an integer with a maximum of four bytes.

Origin Node
Is the combination of MVS System ID (SMFID) and CICS region name. The value format is an alphanumeric string, maximum 32 bytes, and case-sensitive.

When a situation is true, the system compares the origin node name in the attribute to the names of managed systems assigned to the item. If the origin node name matches the name of a managed system, the status of the item changes accordingly. If the names of the origin node and the managed systems do not match, the status of the item remains unchanged.

Percent Active Strings
Indicates the percentage of available strings currently being used for I/O to the intrapartition data set. This value is calculated by dividing the current string count by the total number of strings. The value format is a percentage in the range of 0-100.

Percent Buffers in Use
Indicates the percentage of transient data buffers in use. This value is calculated by dividing the current buffers in use by the total number of buffers. The value format is a percentage in the range of 0-100.

Percent CIs in Use
Indicates the percent utilization of the transient data VSAM data set Control Intervals (CI). When this value reaches 100%, if additional extents cannot be taken, due to lack of space on eligible volumes or because secondaries have not been defined, tasks issuing transient data write requests will be terminated abnormally for NOSPACE reasons unless the NOSPACE condition is explicitly handled by the application. The value format is a percentage in the range of 0-100.

System ID
Indicates the four-character name that uniquely identifies an active MVS operating system within a given CICSplex. The value format is an alphanumeric string, maximum 4 characters, and case-sensitive. MVS System IDs are always in uppercase characters.

Total String Waits
Indicates the total number of tasks that have been suspended due to the lack of an available string since CICS initialization. The value format is an integer with a maximum of four bytes.

Units of Work

The Units of Work (UOW) attributes report on transaction activity.
- UOW attributes for a region report on active or completed transactions in a given CICS region for a particular unit-of-work (UOW). They report on the total amount of time transactions spend in various processing states for each region,
- UOW attributes for transactions report on transactions that executed in a particular CICS region.

Note: These attributes are not available for situations. They provide data only for the Unit of Work by Region and Unit of Work by Transaction table views, accessed using the Transaction Analysis workspace.
CICS Region Name
Indicates the job name or modify ID of the CICS region being monitored. Each CICS region in an MVS image has a unique name. This name is an alphanumeric string, with a maximum of 8 characters, and case-sensitive. CICS region names are always in uppercase characters.

CICS Version
Indicates the version of CICS running in the address space. CCC for CICS supports the following IBM software releases of CICS: 4.1.0, 5.1.0 (CICS Transaction Server 1.1); 5.2.0 (CICS Transaction Server 1.2); and 5.3.0 (CICS Transaction Server 1.3). The valid values are 4.1.0, 5.1.0, 5.2.0, and 5.3.0.

CPU Time
Indicates the amount of accumulated CPU time (in milliseconds) for this task. The value format is a positive integer, maximum 4 bytes.

Dispatch Time
Indicates the amount of time (in milliseconds) that the tasks in the unit-of-work spent dispatched. The value format is a positive integer, maximum 4 bytes.

Exception Wait
Indicates the amount of elapsed time (in milliseconds) that the task spent waiting for exceptions. The value format is a positive integer with a maximum of four bytes.

FEPI Suspend
Indicates the amount of elapsed time (in milliseconds) that the task waited for all FEPI (front end programming interface) services. The value format is a positive integer with a maximum of four bytes. This data is available in CICS Version 4 and above.

File Wait
Indicates the amount of time (in milliseconds) that the task waited for file I/O to complete. The value format is a positive integer with a maximum of four bytes.

A high percentage of elapsed time spent waiting for file control requests can indicate inefficient local shared resource (LSR) specifications, too few strings, or lockout conditions.

First Dispatch Delay-Delay
Indicates the amount of time (in milliseconds) that the task spent waiting for the first dispatch. The value format is a positive integer with a maximum of four bytes.

First Dispatch Delay-MXT
Indicates the amount of elapsed time (in milliseconds) that the task waited for the first dispatch because the number of executing tasks reached the MAXTASK limit. The value format is a positive integer with a maximum of four bytes.

First Dispatch Delay-Other
Indicates the amount of elapsed time (in milliseconds) that the task was delayed before the first dispatch due to conditions other than MAXTASK or CMXT. For example, this item can indicate a delay due to CPU contention. The value format is a positive integer with a maximum of four bytes.

First Dispatch Delay-TCLASS
Indicates the amount of elapsed time (in milliseconds) that the task was delayed before the first dispatch because the TCLASS limit was exceeded. The value format is a positive integer with a maximum of four bytes.
Journal Wait
Indicates the amount of time (in milliseconds) the task waited for journal requests to complete. Journal waits occur as a task waits for Journal I/O to complete. The value format is a percentage in the range 0-100.

Explicit journal I/O includes any journal switching, buffering, and intervention that occurs between the time the journal requests were issued and the time they completed. Implicit journaling occurs when you define a file to CICS with the logging option. Updates to the file will trigger journal operations, the elapsed time percentage for which is included under File Control Percentage.

A high percentage of elapsed time spent waiting for journal I/O can indicate DASD contention or reserves, elongated journal switching times, excessive journal buffer sizes, or inappropriate journal options.

KC ENQ Delay
Indicates the amount of elapsed time (in milliseconds) that the task waited for a CICS task control enqueue. The value format is a positive integer with a maximum of four bytes.

LU6.1 I/O Wait
Indicates the amount of elapsed time (in milliseconds) that the task waited for control at this end of an LU6.1 link. The value format is a positive integer with a maximum of four bytes.

LU6.2 I/O Wait
Indicates the amount of elapsed time (in milliseconds) that the task waited for control at this end of an LU6.2 link. The value format is a positive integer with a maximum of four bytes.

MRO Wait
Indicates the amount of time (in milliseconds) that the task waited for an MRO request to another region to complete. The value format is a positive integer with a maximum of four bytes.

A high percentage of time spent waiting for MRO operations can indicate problems in a connected CICS region that caused the originating transaction to wait for an extended period of time.

Number of Transactions
Indicates the total number of tasks that executed in a CICS region on behalf of the unit-of-work. The value format is a positive integer with a maximum of four bytes.

Origin Node
Is the combination of MVS System ID (SMFID) and CICS region name. The value format is an alphanumeric string, maximum 32 bytes, and case-sensitive.

When a situation is true, the system compares the origin node name in the attribute to the names of managed systems assigned to the item. If the origin node name matches the name of a managed system, the status of the item changes accordingly. If the names of the origin node and the managed systems do not match, the status of the item remains unchanged.

Overall Elapsed Time
Indicates the total elapsed time (in milliseconds) between a task being attached and the current time for every transaction that makes up the unit-of-work. The value format is a positive integer with a maximum of four bytes.
Long-running transactions can produce performance records at regular intervals if you have specified the MNFREQ parameter with the SIT. If you have specified this parameter, this item can indicate the elapsed time from the start of the interval.

**Redispatch Wait**
Indicates the amount of time (in milliseconds) that the task waited between a request completing and the task being redispached by CICS. The value format is a positive integer with a maximum of four bytes.

This is the aggregate of the wait times between each event completion and user-task redispach, but it does not include the time spent waiting for first dispatch. A high percentage of elapsed time spent waiting for redispach indicates that you can have looping transactions or that you can have reached the CMXT limit.

**System ID**
Indicates the four-character name that uniquely identifies an active MVS operating system within a given CICSpex. The value format is an alphanumeric string with a maximum of four characters, and is case-sensitive. MVS System IDs are always in uppercase characters.

**Task Number**
Indicates the number sequentially assigned by CICS to uniquely identify each task. The value format is an alphanumeric string with a maximum of four characters, and case-sensitive.

**Task Status**
Indicates whether the task is running or complete. Values are:
- **ACTIVE** The task is currently running
- **DONE** The task is complete

**Temporary Storage Wait**
Indicates the amount of time (in milliseconds) that the task waited for VSAM temporary storage I/O. The value format is a positive integer, maximum 4 bytes.

A high percentage of elapsed time spent waiting for this type of I/O indicates inadequacies in the configuration of the temporary storage data set DFHTEMP. Typical causes are:
- insufficient strings
- incorrectly defined VSAM control interval size (CISZ)
- inefficient or conflicting DASD allocation

**Terminal I/O Wait**
Indicates the amount of elapsed time (in milliseconds) that the task waited for user input from the terminal. The value format is a positive integer, maximum 4 bytes.

This item indicates the amount of elapsed time (in milliseconds) that the task spent waiting for various operations to complete. This time does not include the first dispatch wait time.

**Total RMI Elapsed**
Indicates the amount of elapsed time (in milliseconds) that the task spent in task-related user exits (TRUEs). The value format is a positive integer, maximum 4 bytes. This includes the RMI (resource manager interface) calls to DBCTL and DB2.

**Total RMI Suspend**
Indicates the amount of elapsed time (in milliseconds) that the task was
suspended while within the task-related user exits (TRUEs). The value format is a positive integer, maximum 4 bytes. This includes the RMI (resource manager interface) calls to DBCTL and DB2.

**Total Wait Time**
Indicates the amount of elapsed time (in milliseconds) the tasks in the unit-of-work spent waiting for various operations to complete. The time does not include the first dispatch wait time. The value format is a positive integer with a maximum of four bytes.

**Transaction ID**
Indicates the four-character identifier for the task. The value format is an alphanumeric string with a maximum four characters, and is case-sensitive. If OMEGAMON II for CICS umbrella transaction IDs are defined, the umbrella transaction ID is shown here.

**Transient Data Wait**
Indicates the amount of time (in milliseconds) that the task waited for VSAM transient data I/O. The value format is a percentage in the range 0-100. A high percentage of elapsed time spent waiting for this type of I/O indicates inadequacies in the configuration of the transient data data set DFHINTRA. This can be caused by
- Insufficient strings
- Bad VSAM control interval size (CISZ)
- Inefficient or conflicting DASD allocation

**Unit of Work Identifier**
Indicates the CICS logical unit of work identifier. The value format is an alphanumeric string, maximum 52 characters.

---

**UOW Analysis**

The UOW Analysis attribute group provides a summary of the recovery manager domain.

Note that these attributes are only available for CICS Transaction Server 1.1 and above.

**CICS Region Name**
Indicates the job name or modify ID of the CICS region being monitored. Each CICS region in an MVS image has a unique name. This name is an alphanumeric string, with a maximum of 8 characters, and case-sensitive. CICS region names are always in uppercase characters.

**Forced Decisions**
Indicates the number of forced heuristic decisions. A forced decision can occur after an in-doubt UOW remains unresolved for a user-defined time period. CICS will unconditionally backout or commit the changes made by the UOW in order to release the resources held by the in-doubt UOW. The value format is an integer with a maximum of four bytes.

**Origin Node**
Is the combination of MVS System ID (SMFID) and CICS region name. The value format is an alphanumeric string, maximum 32 bytes, and case-sensitive.

When a situation is true, the system compares the origin node name in the attribute to the names of managed systems assigned to the item. If the origin node name matches the name of a managed system, the status of the item
changes accordingly. If the names of the origin node and the managed systems
do not match, the status of the item remains unchanged.

**Shunted UOWs**
Indicates the number of shunted UOWs that currently exist in the CICS region.
The value format is an integer with a maximum of four bytes.

**System ID**
Indicates the four-character name that uniquely identifies an active MVS
operating system within a given CICSplex. The value format is an alphanumeric
string, maximum 4 characters, and case-sensitive. MVS System IDs are always
in uppercase characters.

**Total Time Shunted**
Indicates the accumulated time, expressed in minutes, that all shunted UOWs
have been shunted. The value format is an integer of a maximum of four bytes.

---

**UOW Enqueue Analysis**

The UOW Enqueue Analysis attribute group provides a summary of the current
UOWs in a CICS region.

Note that these attributes are only available for CICS Transaction Server 1.1 and
above.

**CICS Region Name**
Indicates the job name or modify ID of the CICS region being monitored. Each
CICS region in an MVS image has a unique name. This name is an
alphanumeric string, with a maximum of 8 characters, and case-sensitive. CICS
region names are always in uppercase characters.

**Enqueue Failures**
Indicates the total number of enqueue failures that have occurred against this
UOW. The value format is an integer of maximum 4 bytes.

**Origin Node**
Is the combination of MVS System ID (SMFID) and CICS region name. The
value format is an alphanumeric string, maximum 32 bytes, and case-sensitive.

When a situation is true, the system compares the origin node name in the
attribute to the names of managed systems assigned to the item. If the origin
node name matches the name of a managed system, the status of the item
changes accordingly. If the names of the origin node and the managed systems
do not match, the status of the item remains unchanged.

**System ID**
Indicates the four-character name that uniquely identifies an active MVS
operating system within a given CICSplex. The value format is an alphanumeric
string, maximum 4 characters, and case-sensitive. MVS System IDs are always
in uppercase characters.

**Time Shunted**
Indicates the total time, expressed in seconds, that each UOW has been
shunted, pending resolution. The value format is an integer of maximum 4
bytes.

**Transaction ID**
Indicates the Transaction ID that started this unit-of-work. The value format is
an alphanumeric string of maximum 4 characters.
UOW ID
Indicates the unit-of-work identifier. The value format is an alphanumeric string of maximum 16 characters.

UOW State
Indicates the state of the unit-of-work. The valid values are:
- Forward - indicates a decision to commit the UOW has been made, but the UOW is waiting or has been shunted. Look at the wait state of the UOW
- Backward - indicates that the UOW is being backed out, or has failed to back out one or more recoverable resources involved in the UOW
- Indoubt - indicates UOW is in the indoubt phase of 2-phase commit processing
- Inflight (indicates UOW is running normally
- Heur_Fwd - indicates the UOW has been forcibly committed
- Heur_Bwd - indicates the UOW has been forcibly backed out
- Unknown - indicates the UOW state is unrecognized

Wait State
Indicates the wait state of the unit-of-work. The valid values are:
- Active - indicates the UOW is running normally
- Shunted - indicates syncpoint processing for the UOW has been deferred and the UOW has been shunted. The task and related storage have been freed but the locks associated with the UOW have been retained.
- Unknown (indicates the UOW wait state is unrecognized
- Waiting - indicates that syncpoint processing has completed on this local CICS system, but not on all systems involved in the distributed UOW

---

VSAM Analysis

The VSAM Analysis attributes report on VSAM data sets allocated to CICS regions.

Use the VSAM Analysis attributes to review data about data files for VSAM applications and CICS dumps, traces, transient data, and auxiliary temporary storage. This data resides in VSAM data sets. VSAM data sets experiencing string waits or excessive control interval (CI) or control area (CA) splits can adversely affect CICS performance. These attributes provide data for in the VSAM Analysis table view.

CICS Region Name
Indicates the job name or modify ID of the CICS region being monitored. Each CICS region in an MVS image has a unique name. This name is an alphanumeric string, with a maximum of 8 characters, and case-sensitive. CICS region names are always in uppercase characters.

Data CA Split Total
Indicates the total number of data control area (CA) splits for this data set. Excessive CA splits adversely affect CICS performance. The value format is a positive integer with a maximum of four bytes.

Data CA Splits in Last Hour
Indicates the number of Control Area (CA) splits incurred by the data component of the file over the past hour. The value format is a positive integer with a maximum of four bytes.

Data CI Split Total
Indicates the total number of control interval (CI) splits for this data set. Excessive CI splits adversely affect CICS performance. The value format is a positive integer with a maximum of four bytes.
Data CI Splits in Last Hour
Indicates the number of Control Interval (CI) splits incurred by the data component of the file over the past hour. The value format is a positive integer with a maximum of four bytes.

Data Extents in Last Hour
Indicates the number of additional extents allocated for the data component of the file over the past hour. The value format is a positive integer with a maximum of four bytes.

Data Extents Total
Indicates the total number of new data extents taken by this VSAM file. The value format is a positive integer with a maximum of four bytes.

Dataset Name
Indicates the name of the VSAM data set allocated to the selected CICS region. The value format is an alphanumeric string with a maximum of 44 characters, and is case-sensitive.

DDNAME
Indicates the data definition name associated with this VSAM file. The value format is an alphanumeric string with a maximum of eight characters, and is case-sensitive.

File Access
Indicates the mode of access that CICS uses to open this VSAM data set. CICS can access a VSAM file in three different modes: non-shared resources (NSR) mode, local shared resources (LSR) mode, and record-level sharing (RLS) mode. The valid values are LSR, NSR, and RLS.

Note: CICS does not support VSAM global shared resources (GSR) mode.

File Type
Indicates the type of VSAM file. Values are:
- ESDS Entry-sequenced data set
- IAM Indexed access method
- KSDS Key-sequenced data set
- LDS Linear data set
- RRDS Relative record data set

Index CA Split Total
Indicates the total number of index control area (CA) splits for this data set. Excessive CA splits adversely affect CICS performance. The value format is a positive integer with a maximum of four bytes.

Index CA Splits in Last Hour
Indicates the number of Control Area (CA) splits incurred by the index component of the KSDS file over the past hour. The value format is a positive integer with a maximum of four bytes.

Index CI Split Total
Indicates the total number of index control interval (CI) splits for this data set. Excessive CI splits adversely affect CICS performance. The value format is a positive integer with a maximum of four bytes.

Index CI Splits in Last Hour
Indicates the number of Control Interval (CI) splits incurred by the index component of the KSDS file over the past hour. The value format is a positive integer with a maximum of four bytes.
Index Extents in Last Hour
Indicates the number of additional extents allocated for the index component of the KSDS file over the past hour. The value format is a positive integer with a maximum of four bytes.

Index Extents Total
Indicates the total number of new index extents taken by this VSAM file. The value format is a positive integer with a maximum of four bytes.

Origin Node
Is the combination of MVS System ID (SMFID) and CICS region name. The value format is an alphanumeric string, maximum 32 bytes, and case-sensitive.

When a situation is true, the system compares the origin node name in the attribute to the names of managed systems assigned to the item. If the origin node name matches the name of a managed system, the status of the item changes accordingly. If the names of the origin node and the managed systems do not match, the status of the item remains unchanged.

Percent Waits Versus I/O
Indicates the percentage of I/O requests issued for a file that is waiting for strings to be available. This value is calculated by dividing the number of tasks that have waited for a string by the total number of I/O operations on the file. The value format is a percentage in the range of 0 - 100.

RLS Timeouts in Last Hour
Indicates the number of Record Level Sharing (RLS) timeouts that have occurred over the past hour. The value format is a positive integer with a maximum of four bytes.

This field only applies to CICS TS 1.1 and above.

RLS Timeout Total
Indicates the total number of time-outs from VSAM files in record-level sharing (RLS) mode. An RLS time-out occurs when a task issues a request for a record that is being held by another task. You can specify the RLS time-out interval in the DTIMEOUT task or the system FTIMEOUT parameters of CICS. The value format is a positive integer with a maximum of four bytes.

System ID
Indicates the four-character name that uniquely identifies an active MVS operating system within a given CICSplex. The value format is an alphanumeric string with a maximum of four characters, and is case-sensitive. MVS System IDs are always in uppercase characters.

Total String Waits
Indicates the total number of string waits for the file. When all strings for a file are in use, new requests against it are queued until a string is released. String waits by many concurrent tasks can eventually lead to new tasks being forced to wait on the active max task limit. Some string waits for a file can be inevitable, but they should be monitored so as not to cause extreme situations in CICS. The value format is a positive integer with a maximum of four bytes.

VSAM Enable Status
Indicates whether this VSAM file is enabled or disabled. The valid values are Disabled, Enabled, and Unenable.

VSAM High Water Strings in Use
Indicates the highest number of strings in use concurrently to process I/O requests to this VSAM file since the file was opened. The value format is an integer with a maximum of two bytes, and in the range 0-32767.

This field only applies to CICS TS 1.1 and above.

Using IBM Tivoli OMEGAMON XE for CICS on z/OS
VSAM Open Status
Indicates the status of this VSAM file. The valid values are Closed, Open, and No_FCT.

VSAM String Waits
Indicates the number of string waits for each VSAM file. When all strings in a file are in use, new requests against it are queued until a string is released. String waits by many concurrent tasks can eventually lead to new tasks being forced to wait on the active max task limit. Too many string waits can degrade response time. The value format is an integer with a maximum of two bytes, and in the range 0-32767.

VSAM Strings Defined
Indicates the number of strings defined to process I/O requests to this VSAM file. The value format is an integer with a maximum of two bytes, and in the range 0-32767.

VSAM Strings in Use
Indicates the number of strings that are being used to process I/O requested to this VSAM file. The value format is an integer with a maximum of two bytes, and in the range 0-32767.

VSAM Strings Percent in Use
Indicates the percentage of strings that are being used to process I/O requests to this VSAM file. The value format is a percentage in the range 0-100.
Chapter 13. Situations

Tivoli OMEGAMON XE for CICS on z/OS provides numerous predefined situations to issue alerts that help you monitor activity and identify problems in your CICS regions. A few of these situations are described here. To obtain information about each predefined situation, see the CandleNet Portal expert advice given for each situation.

Each predefined situation addresses a specific problem. You can use these situations:

- To monitor immediately your CICS regions
- As models for creating your own situations
- To monitor and manage, through localized automation, widely dispersed resources

Most of the predefined situations have an alert status of either Critical or Warning. You can view which managed objects in Candle Management Workstation have triggered alerts by selecting the Business tab of CandleNet Portal. However, you cannot modify the situations provided in Candle Management Workstation by using CandleNet Portal. Should you want to do so, use the Candle Management Workstation.

Using the Candle Management Workstation, you can change conditions, relational operators, and compare values in these predefined situations to ones more appropriate to your environment. You can also modify the predefined situations provided for use with CandleNet Portal. If you choose to make changes to a predefined situation, we recommend you change a copy and preserve the original situation in the form in which it was shipped.

For more information about creating and using situations, see either the Candle Management Workstation online help or the CandleNet Portal online help. For information about the various attributes used in predefined situations, see Attributes.

How the predefined situations work

Situations are expressions of system conditions you want to monitor embedded in IF-TRUE statements. This means that if the specified condition exists, then this situation is true. Most of the predefined situations are set to issue an alert whenever a threshold reaches either critical or warning limit.

You can use these situations to monitor particular conditions for your CICS regions. For example, you might want to monitor for less than 25% of total disk space available, an excessive number of unsuccessful logon attempts, or a printer out of paper.

See also:

- “Connection Analysis Situations” on page 240
- “Database Analysis Situations” on page 242
- “Dump Analysis Situations” on page 245
- “Enqueue Analysis Situations” on page 248
- “Journal Analysis Situations” on page 249
- “LSR Pool Analysis Situations” on page 250

© Copyright IBM Corp. 2005
Connection Analysis Situations

The predefined situations in this category monitor the efficiency of MRO and ISC links between regions of a CICSplex and resources of CICS regions. These resources include storage, files, queues, and enqueues. A description and formula for each of these situations follow.

CICSplex_Sympathy_Sickness

Sympathy sickness occurs when the performance of one CICS region is affected as a result of problems in an adjoining CICS region.

Use the Connections analysis workspace to examine the status of the connection between CICS and its remote regions. Check that the remote systems are available with connections that are in service.

Formula

If
- the value of the attribute Transaction_Rate is less than 10
- and the value of the attribute Worst_ISC_Connection_Percent_of_Links_in_Use equals 100
- and the value of the attribute Worst_ISC_Connection_Number_of_AIDs is greater than 0
  or
- the value of the attribute Worst_MRO_Connection_Percent_of_Links_in_Use is greater than 99
  and
- the value of the attribute Worst_MRO_Connection_Number_of_AIDs is greater than 0

then CICSplex_Sympathy_Sickness is true.

CICSplex_MROPctLink_Warning

This is a warning threshold that as been exceeded for MRO connection percent.

If the link usage regularly reaches 100% and there are one or more tasks waiting, the configuration for that connection can need to be altered, with an increase in the number of links defined. Effectively, there is an MRO bottleneck due to the lack of paths available for work to be scheduled cross-system.
**Formula**

If

the value of the attribute \( \text{Worst_MRO\_Connection\_Percent\_of\_Links\_in\_Use} \) is greater than 80

and

the value of the attribute \( \text{Worst_MRO\_Connection\_Percent\_of\_Links\_in\_Use} \) is less than or equal to 90

then

\( \text{CICSplex\_MROPctLink\_Warning} \) is true.

**CICSplex\_MROPctLink\_Critical**

If the link usage is regularly reaches 100% and there are one or more tasks waiting, the configuration for that connection can need to be altered, with an increase in the number of links defined. Effectively, there is an MRO bottleneck due to the lack of paths available for work to be scheduled cross-system.

**Formula**

If

the value of the attribute \( \text{Worst_MRO\_Connection\_Percent\_of\_Links\_in\_Use} \) is greater than 90

then

\( \text{CICSplex\_MROPctLink\_Critical} \).

**CICSplex\_MROAIDs\_Warning**

This is a warning threshold exceeded for MRO AID count.

If the link usage is regularly reaches 100% and there are one or more tasks waiting, the configuration for that connection can need to be altered, with an increase in the number of links defined. Effectively, there is an MRO bottleneck due to the lack of paths available for work to be scheduled cross-system. Check that the remote system is available and that the connections are in service.

**Formula**

If

the value of the attribute \( \text{Worst_MRO\_Connection\_Number\_of\_AIDs} \) is greater than 5

and

the value of the attribute \( \text{Worst_MRO\_Connection\_Number\_of\_AIDs} \) is less than or equal to 10

then

\( \text{CICSplex\_MROAIDs\_Warning} \) is true.

**CICSplex\_MROAIDs\_Critical**

This is a critical threshold exceeded for MRO AID count.

If the link usage is regularly hitting 100% and there are one or more tasks waiting, the configuration for that connection can need to be altered, with an increase in the number of links defined. Effectively, there is an MRO bottleneck due to the lack of paths available for work to be scheduled cross-system. Check that the remote system is available and that the connections are in service.

**Formula**

If

the value of the attribute \( \text{Worst_MRO\_Connection\_Number\_of\_AIDs} \) is greater than 10

**Related information**

[Connection Analysis attribute group]
Database Analysis Situations

The predefined situations in this category monitor DB2 task activity.

**Note:** All the attribute names in this group are prefixed with CICSp lex_DB2_Task_Activity except where stated.

**CICSp lex_DB2MaxThreads_Warning**

This is the warning threshold exceeded for DB2 maximum threads.

It is not detrimental to reach a high percentage of the maximum active thread limit. However, when the ratio frequently nears 100%, you should increase the value specified in the THRDA parameter of the DSNCRCT for the transaction. You can also increase it dynamically using the MODIFY option of the DSNC transaction. Increasing the number of threads increases the overhead of the MVS dispatcher scanning the TCB chain.

**Formula**

If

- the value of the attribute Maximum_Active_Threads is greater than 20
- and
  - the value of the attribute Maximum_Active_Threads is less than or equal to 54

**CICSp lex_DB2MaxThreads_Critical**

This is the critical threshold exceeded for DB2 maximum threads.

It is not detrimental to reach a high percentage of the maximum active thread limit. However, when the ratio frequently nears 100%, you should increase the value specified in the THRDA parameter of the DSNCRCT for the transaction. You can also increase it dynamically using the MODIFY option of the DSNC transaction. Increasing the number of threads increases the overhead of the MVS dispatcher scanning the TCB chain.

**Formula**

If

- the value of the attribute Maximum_Active_Threads is greater than 54

**CICSp lex_DB2Abort_Warning**

Warning threshold exceeded for DB2 abort percent

Consider changing the TWAIT parameter in the DSNCRCT table to specify WAIT=YES or WAIT=POOL for this transaction. WAIT=YES allows a task to be queued when no threads are available; WAIT=POOL allows a task to use a pool thread. Increase the value specified in the THRDA parameter of the DSNCRCT for the transaction, or increase it dynamically using the MODIFY option of the DSNC transaction. Increasing the number of threads will increase the overhead of the MVS dispatcher scanning the TCB chain.

**Formula**

If

- the value of the attribute Abort_Percent is greater than 40
- and
  - the value of the attribute Abort_Percent is less than or equal to 65
CICSplex_DB2Abort_Critical

Critical threshold exceeded for DB2 abort percent

Consider changing the TWAIT parameter in the DSNCRCT table to specify WAIT=YES or WAIT=POOL for this transaction. WAIT=YES allows a task to be queued when no threads are available; WAIT=POOL allows a task to use a pool thread. Increase the value specified in the THRDA parameter of the DSNCRCT for the transaction, or increase it dynamically using the MODIFY option of the DSNC transaction. Increasing the number of threads will increase the overhead of the MVS dispatcher scanning the TCB chain.

Formula
If
  the value of the attribute Abort_Percent is greater than 65

CICSplex_DB2Wait_Warning

This is the warning threshold exceeded for DB2 wait percent.

To reduce the percentage of waits, you can increase the maximum number of active threads for this transaction temporarily using either the MODIFY option of the DSNC transaction, or permanently by changing the THRDA parameter in the DSNCRCT. Increasing the number of threads, however, increases the overhead of the MVS dispatcher scanning the TCB chain.

Formula
If
  the value of the attribute Wait_Percent is greater than 40
  and
  the value of the attribute Wait_Percent is less than or equal to 65

CICSplex_DB2Wait_Critical

This is the critical threshold exceeded for DB2 wait percent.

To reduce the percentage of waits, you can increase the maximum number of active threads for this transaction temporarily using either the MODIFY option of the DSNC transaction, or permanently by changing the THRDA parameter in the DSNCRCT. Increasing the number of threads, however, increases the overhead of the MVS dispatcher scanning the TCB chain.

Formula
If
  the value of the attribute Wait_Percent is greater than 65

CICSplex_DB2ThreadHWM_Warning

This is the warning threshold exceeded for DB2 thread HWM.

If the problem is intermittent, you can increase the maximum number of active tasks for this transaction temporarily with the MODIFY option of the DSNC transaction. If the threshold is exceeded frequently, consider raising the maximum number of active threads by changing the THRDA parameter in the DSNCRCT. Increasing the number of threads, however, increases the overhead of the MVS dispatcher scanning the TCB chain.
Formula
If the value of the attribute Threads_in_Use_Percent_HWM is greater than 70 and the value of the attribute Threads_in_Use_Percent_HWM is less than or equal to 90

**CICSpex_DB2ThreadHWM_Critical**

This is the critical threshold exceeded for DB2 thread HWM.

If the problem is intermittent, you can increase the maximum number of active tasks for this transaction temporarily with the MODIFY option of the DSNC transaction. If the threshold is exceeded frequently, consider raising the maximum number of active threads by changing the THRDA parameter in the DSNRCRT. Increasing the number of threads, however, increases the overhead of the MVS dispatcher scanning the TCB chain.

Formula
If the value of the attribute Threads_in_Use_Percent_HWM is greater than 90

**CICSpex_DB2ThreadUse_Warning**

This is the warning threshold exceeded for DB2 thread use.

If the problem is intermittent, you can increase the maximum number of active tasks for this transaction temporarily with the MODIFY option of the DSNC transaction. If the threshold is exceeded frequently, consider raising the maximum number of active threads by changing the THRDA parameter in the DSNRCRT. Increasing the number of threads, however, increases the overhead of the MVS dispatcher scanning the TCB chain.

Formula
If the value of the attribute Threads_in_Use_Percent_HWM is greater than 90

**CICSpex_DB2ThreadUse_Critical**

This is the critical threshold exceeded for DB2 thread Use.

If the problem is intermittent, you can increase the maximum number of active tasks for this transaction temporarily with the MODIFY option of the DSNC transaction. If the threshold is exceeded frequently, consider raising the maximum number of active threads by changing the THRDA parameter in the DSNRCRT. Increasing the number of threads, however, increases the overhead of the MVS dispatcher scanning the TCB chain.

Formula
If the value of the attribute Threads_in_Use_Percent is greater than 70 and the value of the attribute Threads_in_Use_Percent is less than or equal to 90

**CICSpex_DB2ThreadUse_Critical**

This is the critical threshold exceeded for DB2 thread Use.

If the problem is intermittent, you can increase the maximum number of active tasks for this transaction temporarily with the MODIFY option of the DSNC transaction. If the threshold is exceeded frequently, consider raising the maximum number of active threads by changing the THRDA parameter in the DSNRCRT. Increasing the number of threads, however, increases the overhead of the MVS dispatcher scanning the TCB chain.

Formula
If the value of the attribute Threads_in_Use_Percent is greater than 90

**CICSpex_DB2Attached_Warning**

This is the warning threshold exceeded for DB2 attach status.
Verify that DB2 is required for this CICS region. If DB2 is needed, attach DB2 for this region using DSNC STRT c, where c is the appropriate RCT suffix. Include the DB2 startup program in the CICS startup PLT.

**Formula**

If
the value of the attribute CICSpix_DB2_Summary.Attached_to_DB2 equals No

**CICSpix_DB2Attached_Critical**

This is the critical threshold exceeded for DB2 attach status.

Verify that DB2 is required for this CICS region. If DB2 is needed, attach DB2 for this region using DSNC STRT c, where c is the appropriate RCT suffix. Include the DB2 startup program in the CICS startup PLT.

**Formula**

If
the value of the attribute CICSpix_DB2_Summary.Attached_to_DB2 equals No

**CICSpix_DBCTLAct_Warning**

This is the warning threshold exceeded for DBCTL active status.

Use the CICS transaction CDBC to connect CICS to DBCTL.

**Formula**

If
the value of the attribute CICSpix_DBCTL_Summary.DBCTL_Active equals No

**CICSpix_DBCTLAct_Critical**

This is the critical threshold exceeded for DBCTL active status.

Use the CICS transaction CDBC to connect CICS to DBCTL.

**Formula**

If
the value of the attribute CICSpix_DBCTL_Summary.DBCTL_Active equals No

---

### Dump Analysis Situations

The predefined situations in this category monitor dumps.

**Note:** All the attribute names in this group are prefixed with CICSpix_Dump_Analysis except where stated.

**CICSpix_TranDumps_Warning**

This is the warning threshold exceeded for transaction dumps

Use the transaction history component of Tivoli OMEGAMON XE for CICS on z/OS to determine which transactions have abnormally terminated. To check for storage violations, select the Region Overview report from the navigation tree.
If
the value of the attribute Transaction_Dumps is greater than 1
and
the value of the attribute Transaction_Dumps is less than or equal to 2

CICSplex_TranDumps_Critical

This is the critical threshold exceeded for transaction dumps.

Use the transaction history component of Tivoli OMEGAMON XE for CICS on z/OS to determine which transactions have abnormally terminated. To check for storage violations, select the Region Overview report from the navigation tree.

If
the value of the attribute Transaction_Dumps is greater than 2

CICSplex_SysDumps_Warning

This is the warning threshold exceeded for system dumps.

Inspect the operator's console for error messages which can indicate the cause of the problem. Format the dump data set to determine what caused the abnormal termination. Ensure the predicate in this situation specifies a value lower than the number of SYS1.DUMPnn data sets to ensure that dumps are not lost.

If
the value of the attribute System_Dumps is greater than 0
and
the value of the attribute System_Dumps is less than or equal to 1

CICSplex_SysDumps_Critical

This is the critical threshold exceeded for system dumps.

Inspect the operator's console for error messages which can indicate the cause of the problem. Format the dump data set to determine what caused the abnormal termination. Ensure the predicate in this situation specifies a value lower than the number of SYS1.DUMPnn data sets to ensure that dumps are not lost.

If
the value of the attribute System_Dumps is greater than 1

CICSplex_TakingSDUMP_Warning

This is the warning threshold exceeded for taking system dump.

Inspect the operator's console for error messages which can indicate the cause of the problem. Format the contents of the dump data set to diagnose the CICS abnormal termination.

If
the value of the attribute Taking_SDUMP equals Yes
**CICSplex_TakingSDUMP_Critical**

This is the critical threshold exceeded for taking system dump.

Inspect the operator’s console for error messages which can indicate the cause of the problem. Format the contents of the dump data set to diagnose the CICS abnormal termination.

**Formula**

If the value of the attribute Taking_SDUMP equals Yes

**CICSplex_TranDumpsHr_Warning**

This is the warning threshold exceeded for transaction dumps per hour.

Use the transaction history component of Tivoli OMEGAMON XE for CICS on z/OS to determine which transactions have abnormally terminated. To check for storage violations, select the Region Overview report from the navigation tree.

**Formula**

If the value of the attribute Transaction_Dumps_in_Last_Hour is greater than 0 and the value of the attribute Transaction_Dumps_in_Last_Hour is less than or equal to 1

**CICSplex_TranDumpsHr_Critical**

This is the critical threshold exceeded for transaction dumps per hour.

Use the transaction history component of Tivoli OMEGAMON XE for CICS on z/OS to determine which transactions have abnormally terminated. To check for storage violations, select the Region Overview report from the navigation tree.

**Formula**

If the value of the attribute Transaction_Dumps_in_Last_Hour is greater than 1

**CICSplex_SysDumpsHr_Warning**

This is the warning threshold exceeded for system dumps per hour.

Inspect the operator’s console for error messages which can indicate the cause of the problem. Format the dump data set to determine what caused the abnormal termination. Ensure the predicate in this situation specifies a value lower than the number of SYS1.DUMP nn data sets to ensure that dumps are not lost.

**Formula**

If the value of the attribute System_Dumps_in_Last_Hour is greater than 0 and the value of the attribute System_Dumps_in_Last_Hour is less than or equal to 1

**CICSplex_SysDumpsHr_Critical**

This is the critical threshold exceeded for system dumps per hour.
Inspect the operator's console for error messages which can indicate the cause of
the problem. Format the dump data set to determine what caused the abnormal
termination. Ensure the predicate in this situation specifies a value lower than the
number of SYS1.DUMPnn data sets to ensure that dumps are not lost.

**Formula**

\[
\text{If} \\
\text{the value of the attribute System Dumps in Last Hour is greater than 1}
\]

---

**Enqueue Analysis Situations**

The predefined situations in this category monitor enqueues.

**Note:** All the attribute names in this group are prefixed with
CICSplex_Enqueue_Analysis except where stated.

**CICSplex_TotENQWaits_Warning**

Warning threshold exceeded for CICS enqueue waits

Select the Enqueue Analysis report to find all tasks waiting on enqueues and the
owners of the serially reusable resources. If an enqueue is not being released,
examine the owning task's resource type to determine whether it is looping, waiting
on a resource, or deadlocked with another task. You can use the KILL command of
Tivoli OMEGAMON XE for CICS on z/OS to free the enqueue and allow the waiting
tasks to continue. To limit the number of tasks suspended due to enqueue conflicts,
consider transaction classes.

**Formula**

\[
\text{If} \\
\text{the value of the attribute CICSplex Region Overview.Enqueue Waits is greater}
\text{than 5} \\
\text{and} \\
\text{the value of the attribute CICSplex Region Overview.Enqueue Waits is less than}
\text{or equal to 10}
\]

**CICSplex_TotENQWaits_Critical**

Critical threshold exceeded for CICS enqueue waits

Select the Enqueue Analysis report to find all tasks waiting on enqueues and the
owners of the serially reusable resources. If an enqueue is not being released,
examine the owning task's resource type to determine whether it is looping, waiting
on a resource, or deadlocked with another task. You can use the KILL command of
Tivoli OMEGAMON XE for CICS on z/OS to free the enqueue and allow the waiting
tasks to continue. To limit the number of tasks suspended due to enqueue conflicts,
consider transaction classes.

**Formula**

\[
\text{If} \\
\text{the value of the attribute CICSplex Region Overview.Enqueue Waits is greater than 10}
\]

**CICSplex_ENQWaitCount_Warning**

Warning threshold exceeded for enqueue task waits
Select the Enqueue Analysis report to find all tasks waiting on enqueues and the owners of the serially reusable resources. If an enqueue is not being released, examine the owning task’s resource type to determine whether it is looping, waiting on a resource, or deadlocked with another task. You can use the KILL command of Tivoli OMEGAMON XE for CICS on z/OS to free the enqueue and allow the waiting tasks to continue. To limit the number of tasks suspended due to enqueue conflicts, consider transaction classes.

**Formula**

If

- the value of the attribute Wait_Count is greater than 1
- and
- the value of the attribute Wait_Count is less than or equal to 5

**CICsplex_ENQWaitCount_Critical**

Critical threshold exceeded for enqueue task waits

Select the Enqueue Analysis report to find all tasks waiting on enqueues and the owners of the serially reusable resources. If an enqueue is not being released, examine the owning task’s resource type to determine whether it is looping, waiting on a resource, or deadlocked with another task. You can use the KILL command of Tivoli OMEGAMON XE for CICS on z/OS to free the enqueue and allow the waiting tasks to continue. To limit the number of tasks suspended due to enqueue conflicts, consider transaction classes.

**Formula**

If

- the value of the attribute Wait_Count is greater than 5

---

**Journal Analysis Situations**

The predefined situations in this category monitor journals.

**Note:** All the attribute names in this group are prefixed with CICsplex_Journal_Analysis except where stated.

**CICsplex_JournalDis_Warning**

Warning threshold exceeded for disabled journal

A disabled journal cannot be used until it is re-enabled. Either Tivoli OMEGAMON XE for CICS on z/OS or the CICS CEMT transaction can be used to enable a disabled journal.

**Formula**

If

- the value of the attribute Journal_Status equals Disabled

**CICsplex_JournalDis_Critical**

Critical threshold exceeded for disabled journal

A disabled journal cannot be used until it is re-enabled. Either Tivoli OMEGAMON XE for CICS on z/OS or the CICS CEMT transaction can be used to enable a disabled journal.
If the value of the attribute Journal_Status equals Disabled

**CICSplex_JournalFail_Warning**

Warning threshold exceeded for journal failure

A journal that has experienced a log stream failure cannot be used until it is re-enabled, or until CICS is restarted. The cause of the failure can be determined using the journal reports available in Tivoli OMEGAMON XE for CICS on z/OS. Either Tivoli OMEGAMON XE for CICS on z/OS or the CICS CEMT transaction can be used to enable a journal that has a status of 'failed'.

If the value of the attribute Journal_Status equals Failed

**CICSplex_JournalFail_Critical**

Critical threshold exceeded for journal failure

A journal that has experienced a log stream failure cannot be used until it is re-enabled, or until CICS is restarted. The cause of the failure can be determined using the journal reports available in Tivoli OMEGAMON XE for CICS on z/OS. Either Tivoli OMEGAMON XE for CICS on z/OS or the CICS CEMT transaction can be used to enable a journal that has a status of 'failed'.

If the value of the attribute Journal_Status equals Failed

---

**LSR Pool Analysis Situations**

The predefined situations in this category monitor the LSR Pool status.

**Note:** All the attribute names in this group are prefixed with CICSplex_LSR_Pool_Status except where stated.

**CICSplex_LSRPool1Str_Warning**

Warning threshold exceeded for LSR pool 1 string usage

If all strings are in use, response time is degraded. Use the LSR Pool Status report to analyze string and LSR pool use. Additionally, Bottleneck Analysis in Tivoli OMEGAMON XE for CICS on z/OS can be used to determine the amount of degradation caused by waiting for strings. If there is no evident problem, increase the number of strings in the SHRCTL macro.

**Formula**

If

1. the value of the attribute Percent_of_Active_Strings is greater than 80
2. the value of the attribute Percent_of_Active_Strings is less than or equal to 90
3. the value of the attribute Pool_ID equals 1
CICSplex_LSRPool1Str_Critical

Critical threshold exceeded for LSR pool 1 string usage

If all strings are in use, response time is degraded. Use the LSR Pool Status report to analyze string and LSR pool use. Additionally, Bottleneck Analysis in Tivoli OMEGAMON XE for CICS on z/OS can be used to determine the amount of degradation caused by waiting for strings. If there is no evident problem, increase the number of strings in the SHRCTL macro.

Formula
If
  the value of the attribute Percent_of_Active_Strings is greater than 90
and
  the value of the attribute Pool_ID equals 1

CICSplex_LSRPool1Wait_Warning

Warning threshold exceeded for LSR pool 1 task waits

File activity is being delayed. Use the LSR Pool Status report to analyze string and LSR pool use. Additionally, Bottleneck Analysis and Impact Analysis in Tivoli OMEGAMON XE for CICS on z/OS can be used to determine if either string waits are a problem, or if CICS is competing with other tasks for the same resources. If there is no evident problem, increase the number of strings in the SHRCTL macro.

Formula
If
  the value of the attribute Tasks_Waiting is greater than 1
and
  the value of the attribute Tasks_Waiting is less than or equal to 5
and
  the value of the attribute Pool_ID equals 1

CICSplex_LSRPool1Wait_Critical

Critical threshold exceeded for LSR pool 1 task waits

File activity is being delayed. Use the LSR Pool Status report to analyze string and LSR pool use. Additionally, Bottleneck Analysis and Impact Analysis in Tivoli OMEGAMON XE for CICS on z/OS can be used to determine if either string waits are a problem, or if CICS is competing with other tasks for the same resources. If there is no evident problem, increase the number of strings in the SHRCTL macro.

Formula
If
  the value of the attribute Tasks_Waiting is greater than 5
and
  the value of the attribute Pool_ID equals 1

CICSplex_LSRPool1Look_Warning

Warning threshold exceeded for LSR pool 1 lookaside

A successful lookaside is a VSAM read request that was satisfied from a CI currently in an LSR buffer, without incurring the overhead of a physical I/O to a DASD device. You can achieve a greater success ratio by increasing the number of
buffers defined for the LSR pool. Increasing the number of buffers, however, increases the virtual storage requirement of your CICS region.

**Formula**

If

- the value of the attribute Lookaside_Ratio is less than 30
- and
  - the value of the attribute Lookaside_Ratio is greater than or equal to 10
- and
  - the value of the attribute Pool_ID equals 1

**CICSplex_LSRPool1Look_Critical**

Critical threshold exceeded for LSR pool 1 lookaside

A successful lookaside is a VSAM read request that was satisfied from a CI currently in an LSR buffer, without incurring the overhead of a physical I/O to a DASD device. You can achieve a greater success ratio by increasing the number of buffers defined for the LSR pool. Increasing the number of buffers, however, increases the virtual storage requirement of your CICS region.

**Formula**

If

- the value of the attribute Lookaside_Ratio is less than 10
- and
  - the value of the attribute Pool_ID equals 1

**CICSplex_LSRPool2Str_Warning**

Warning threshold exceeded for LSR pool 2 string usage

If all strings are in use, response time is degraded. Use the LSR Pool Status report to analyze string and LSR pool use. Additionally, Bottleneck Analysis in Tivoli OMEGAMON XE for CICS on z/OS can be used to determine the amount of degradation caused by waiting for strings. If there is no evident problem, increase the number of strings in the SHRCTL macro.

**Formula**

If

- the value of the attribute Percent_of_Active_Strings is greater than 80
- and
  - the value of the attribute Percent_of_Active_Strings is less than or equal to 90
- and
  - the value of the attribute Pool_ID equals 2

**CICSplex_LSRPool2Str_Critical**

Critical threshold exceeded for LSR pool 2 string usage

If all strings are in use, response time is degraded. Use the LSR Pool Status report to analyze string and LSR pool use. Additionally, Bottleneck Analysis in Tivoli OMEGAMON XE for CICS on z/OS can be used to determine the amount of degradation caused by waiting for strings. If there is no evident problem, increase the number of strings in the SHRCTL macro.

**Formula**
If
   the value of the attribute Percent_of_Active_Strings is greater than 90
   and
   the value of the attribute Pool_ID equals 2

**CICSplex_LSRPool2Wait_Warning**

Warning threshold exceeded for LSR pool 2 task waits

File activity is being delayed. Use the LSR Pool Status report to analyze string and LSR pool use. Additionally, Bottleneck Analysis and Impact Analysis in Tivoli OMEGAMON XE for CICS on z/OS can be used to determine if either string waits are a problem, or if CICS is competing with other tasks for the same resources. If there is no evident problem, increase the number of strings in the SHRCTL macro.

**Formula**

If
   the value of the attribute Tasks_Waiting is greater than 1
   and
   the value of the attribute Tasks_Waiting is less than or equal to 5
   and
   the value of the attribute Pool_ID equals 2

**CICSplex_LSRPool2Wait_Critical**

Critical threshold exceeded for LSR pool 2 task waits

File activity is being delayed. Use the LSR Pool Status report to analyze string and LSR pool use. Additionally, Bottleneck Analysis and Impact Analysis in Tivoli OMEGAMON XE for CICS on z/OS can be used to determine if either string waits are a problem, or if CICS is competing with other tasks for the same resources. If there is no evident problem, increase the number of strings in the SHRCTL macro.

**Formula**

If
   the value of the attribute Tasks_Waiting is greater than 5
   and
   the value of the attribute Pool_ID equals 2

**CICSplex_LSRPool2Look_Warning**

Warning threshold exceeded for LSR pool 2 lookaside

A successful lookaside is a VSAM read request that was satisfied from a CI currently in an LSR buffer, without incurring the overhead of a physical I/O to a DASD device. You can achieve a greater success ratio by increasing the number of buffers defined for the LSR pool. Increasing the number of buffers, however, increases the virtual storage requirement of your CICS region.

**Formula**

If
   the value of the attribute Lookaside_Ratio is less than 30
   and
   the value of the attribute Lookaside_Ratio is greater than or equal to 10
   and
   the value of the attribute Pool_ID equals 2
CICSplex_LSRPool2Look_Critical

Critical threshold exceeded for LSR pool 2 lookaside

A successful lookaside is a VSAM read request that was satisfied from a CI currently in an LSR buffer, without incurring the overhead of a physical I/O to a DASD device. You can achieve a greater success ratio by increasing the number of buffers defined for the LSR pool. Increasing the number of buffers, however, increases the virtual storage requirement of your CICS region.

Formula

If

- the value of the attribute Lookaside_Ratio is less than 10
- the value of the attribute Pool_ID equals 2

CICSplex_LSRPool3Str_Warning

Warning threshold exceeded for LSR pool 3 string usage

If all strings are in use, response time is degraded. Use the LSR Pool Status report to analyze string and LSR pool use. Additionally, Bottleneck Analysis in Tivoli OMEGAMON XE for CICS can be used to determine the amount of degradation caused by waiting for strings. If there is no evident problem, increase the number of strings in the SHRCTL macro.

Formula

If

- the value of the attribute Percent_of_Active_Strings is greater than 80
- the value of the attribute Percent_of_Active_Strings is less than or equal to 90
- the value of the attribute Pool_ID equals 3

CICSplex_LSRPool3Str_Critical

Critical threshold exceeded for LSR pool 3 string usage

If all strings are in use, response time is degraded. Use the LSR Pool Status report to analyze string and LSR pool use. Additionally, Bottleneck Analysis in Tivoli OMEGAMON XE for CICS on z/OS can be used to determine the amount of degradation caused by waiting for strings. If there is no evident problem, increase the number of strings in the SHRCTL macro.

Formula

If

- the value of the attribute Percent_of_Active_Strings is greater than 90
- the value of the attribute Pool_ID equals 3

CICSplex_LSRPool3Wait_Warning

Warning threshold exceeded for LSR pool 3 task waits

File activity is being delayed. Use the LSR Pool Status report to analyze string and LSR pool use. Additionally, Bottleneck Analysis and Impact Analysis in Tivoli OMEGAMON XE for CICS on z/OS can be used to determine if either string waits...
are a problem, or if CICS is competing with other tasks for the same resources. If there is no evident problem, increase the number of strings in the SHRCTL macro.

**Formula**

If

- the value of the attribute Tasks_Waiting is greater than 1
- the value of the attribute Tasks_Waiting is less than or equal to 5
- the value of the attribute Pool_ID equals 3

**CICSplex_LSRPool3Wait_Critical**

Critical threshold exceeded for LSR pool 3 task waits

File activity is being delayed. Use the LSR Pool Status report to analyze string and LSR pool use. Additionally, Bottleneck Analysis and Impact Analysis in Tivoli OMEGAMON XE for CICS on z/OS can be used to determine if either string waits are a problem, or if CICS is competing with other tasks for the same resources. If there is no evident problem, increase the number of strings in the SHRCTL macro.

**Formula**

If

- the value of the attribute Tasks_Waiting is greater than 5
- the value of the attribute Pool_ID equals 3

**CICSplex_LSRPool3Look_Warning**

Warning threshold exceeded for LSR pool 3 lookaside

A successful lookaside is a VSAM read request that was satisfied from a CI currently in an LSR buffer, without incurring the overhead of a physical I/O to a DASD device. You can achieve a greater success ratio by increasing the number of buffers defined for the LSR pool. Increasing the number of buffers, however, increases the virtual storage requirement of your CICS region.

**Formula**

If

- the value of the attribute Lookaside_Ratio is less than 30
- the value of the attribute Lookaside_Ratio is greater than or equal to 10
- the value of the attribute Pool_ID equals 3

**CICSplex_LSRPool3Look_Critical**

Critical threshold exceeded for LSR pool 3 lookaside

A successful lookaside is a VSAM read request that was satisfied from a CI currently in an LSR buffer, without incurring the overhead of a physical I/O to a DASD device. You can achieve a greater success ratio by increasing the number of buffers defined for the LSR pool. Increasing the number of buffers, however, increases the virtual storage requirement of your CICS region.

**Formula**
If
the value of the attribute Lookaside_Ratio is less than 10
and
the value of the attribute Pool_ID equals 3

**CICSplex_LSRPool4Str_Warning**

Warning threshold exceeded for LSR pool 4 string usage

If all strings are in use, response time is degraded. Use the LSR Pool Status report to analyze string and LSR pool use. Additionally, Bottleneck Analysis in Tivoli OMEGAMON XE for CICS can be used to determine the amount of degradation caused by waiting for strings. If there is no evident problem, increase the number of strings in the SHRCTL macro.

**Formula**

If
the value of the attribute Percent_of_Active_Strings is greater
than 80
and
the value of the attribute Percent_of_Active_Strings is less than
or equal to 90
and
the value of the attribute Pool_ID equals 4

**CICSplex_LSRPool4Str_Critical**

Critical threshold exceeded for LSR pool 4 string usage

If all strings are in use, response time is degraded. Use the LSR Pool Status report to analyze string and LSR pool use. Additionally, Bottleneck Analysis in Tivoli OMEGAMON XE for CICS on z/OS can be used to determine the amount of degradation caused by waiting for strings. If there is no evident problem, increase the number of strings in the SHRCTL macro.

**Formula**

If
the value of the attribute Percent_of_Active_Strings is greater
than 90
and
the value of the attribute Pool_ID equals 4

**CICSplex_LSRPool4Wait_Warning**

Warning threshold exceeded for LSR pool 4 task waits

File activity is being delayed. Use the LSR Pool Status report to analyze string and LSR pool use. Additionally, Bottleneck Analysis and Impact Analysis in Tivoli OMEGAMON XE for CICS on z/OS can be used to determine if either string waits are a problem, or if CICS is competing with other tasks for the same resources. If there is no evident problem, increase the number of strings in the SHRCTL macro.

**Formula**

If
the value of the attribute Tasks_Waiting is greater than 1
and
the value of the attribute Tasks_Waiting is less than or equal to 5
and
the value of the attribute Pool_ID equals 4
CICSplex_LSRPool4Wait_Critical

Critical threshold exceeded for LSR pool 4 task waits

File activity is being delayed. Use the LSR Pool Status report to analyze string and LSR pool use. Additionally, Bottleneck Analysis and Impact Analysis in Tivoli OMEGAMON XE for CICS on z/OS can be used to determine if either string waits are a problem, or if CICS is competing with other tasks for the same resources. If there is no evident problem, increase the number of strings in the SHRCTL macro.

Formula

If
  the value of the attribute Tasks_Waiting is greater than 5
and
  the value of the attribute Pool_ID equals 4

CICSplex_LSRPool4Look_Warning

Warning threshold exceeded for LSR pool 4 lookaside

A successful lookaside is a VSAM read request that was satisfied from a CI currently in an LSR buffer, without incurring the overhead of a physical I/O to a DASD device. You can achieve a greater success ratio by increasing the number of buffers defined for the LSR pool. Increasing the number of buffers, however, increases the virtual storage requirement of your CICS region.

Formula

If
  the value of the attribute Lookaside_Ratio is less than 30
and
  the value of the attribute Lookaside_Ratio is greater than or equal to 10
and
  the value of the attribute Pool_ID equals 4

CICSplex_LSRPool4Look_Critical

Critical threshold exceeded for LSR pool 4 lookaside

A successful lookaside is a VSAM read request that was satisfied from a CI currently in an LSR buffer, without incurring the overhead of a physical I/O to a DASD device. You can achieve a greater success ratio by increasing the number of buffers defined for the LSR pool. Increasing the number of buffers, however, increases the virtual storage requirement of your CICS region.

Formula

If
  the value of the attribute Lookaside_Ratio is less than 10
and
  the value of the attribute Pool_ID equals 4

CICSplex_LSRPool5Str_Warning

Warning threshold exceeded for LSR pool 5 string usage

If all strings are in use, response time is degraded. Use the LSR Pool Status report to analyze string and LSR pool use. Additionally, Bottleneck Analysis in Tivoli OMEGAMON XE for CICS on z/OS can be used to determine the amount of
degradation caused by waiting for strings. If there is no evident problem, increase the number of strings in the SHRCTL macro.

**Formula**

If
- the value of the attribute Percent_of_Active_Strings is greater than 80
- and
- the value of the attribute Percent_of_Active_Strings is less than or equal to 90
- and
- the value of the attribute Pool_ID equals 5

**CICSplex_LSRPool5Str_Critical**

Critical threshold exceeded for LSR pool 5 string usage

If all strings are in use, response time is degraded. Use the LSR Pool Status report to analyze string and LSR pool use. Additionally, Bottleneck Analysis in Tivoli OMEGAMON XE for CICS on z/OS can be used to determine the amount of degradation caused by waiting for strings. If there is no evident problem, increase the number of strings in the SHRCTL macro.

**Formula**

If
- the value of the attribute Percent_of_Active_Strings is greater than 90
- and
- the value of the attribute Pool_ID equals 5

**CICSplex_LSRPool5Wait_Warning**

Warning threshold exceeded for LSR pool 5 task waits

File activity is being delayed. Use the LSR Pool Status report to analyze string and LSR pool use. Additionally, Bottleneck Analysis and Impact Analysis in Tivoli OMEGAMON XE for CICS on z/OS can be used to determine if either string waits are a problem, or if CICS is competing with other tasks for the same resources. If there is no evident problem, increase the number of strings in the SHRCTL macro.

**Formula**

If
- the value of the attribute Tasks_Waiting is greater than 1
- and
- the value of the attribute Tasks_Waiting is less than or equal to 5
- and
- the value of the attribute Pool_ID equals 5

**CICSplex_LSRPool5Wait_Critical**

Critical threshold exceeded for LSR pool 5 task waits

File activity is being delayed. Use the LSR Pool Status report to analyze string and LSR pool use. Additionally, Bottleneck Analysis and Impact Analysis in Tivoli OMEGAMON XE for CICS on z/OS can be used to determine if either string waits are a problem, or if CICS is competing with other tasks for the same resources. If there is no evident problem, increase the number of strings in the SHRCTL macro.

**Formula**
If
   the value of the attribute Tasks_Waiting is greater than 5
and
   the value of the attribute Pool_ID equals 5

**CICSplex_LSRPool5Look_Warning**

Warning threshold exceeded for LSR pool 5 lookaside

A successful lookaside is a VSAM read request that was satisfied from a CI currently in an LSR buffer, without incurring the overhead of a physical I/O to a DASD device. You can achieve a greater success ratio by increasing the number of buffers defined for the LSR pool. Increasing the number of buffers, however, increases the virtual storage requirement of your CICS region.

**Formula**

If
   the value of the attribute Lookaside_Ratio is less than 30
and
   the value of the attribute Lookaside_Ratio is greater than or equal to 10
and
   the value of the attribute Pool_ID equals 5

**CICSplex_LSRPool5Look_Critical**

Critical threshold exceeded for LSR pool 5 lookaside

A successful lookaside is a VSAM read request that was satisfied from a CI currently in an LSR buffer, without incurring the overhead of a physical I/O to a DASD device. You can achieve a greater success ratio by increasing the number of buffers defined for the LSR pool. Increasing the number of buffers, however, increases the virtual storage requirement of your CICS region.

**Formula**

If
   the value of the attribute Lookaside_Ratio is less than 10
and
   the value of the attribute Pool_ID equals 5

**CICSplex_LSRPool6Str_Warning**

Warning threshold exceeded for LSR pool 6 string usage

If all strings are in use, response time is degraded. Use the LSR Pool Status report to analyze string and LSR pool use. Additionally, Bottleneck Analysis in Tivoli OMEGAMON XE for CICS on z/OS can be used to determine the amount of degradation caused by waiting for strings. If there is no evident problem, increase the number of strings in the SHRCTL macro.

**Formula**

If
   the value of the attribute Percent_of_Active_Strings is greater than 80
and
   the value of the attribute Percent_of_Active_Strings is less than or equal to 90
and
   the value of the attribute Pool_ID equals 6
**CICSplex_LSRPool6Str_Critical**

Critical threshold exceeded for LSR pool 6 string usage

If all strings are in use, response time is degraded. Use the LSR Pool Status report to analyze string and LSR pool use. Additionally, Bottleneck Analysis in Tivoli OMEGAMON XE for CICS on z/OS can be used to determine the amount of degradation caused by waiting for strings. If there is no evident problem, increase the number of strings in the SHRCTL macro.

**Formula**

If

the value of the attribute Percent_of_Active_Strings is greater than 90

and

the value of the attribute Pool_ID equals 6

**CICSplex_LSRPool6Wait_Warning**

Warning threshold exceeded for LSR pool 6 task waits

File activity is being delayed. Use the LSR Pool Status report to analyze string and LSR pool use. Additionally, Bottleneck Analysis and Impact Analysis in Tivoli OMEGAMON XE for CICS on z/OS can be used to determine if either string waits are a problem, or if CICS is competing with other tasks for the same resources. If there is no evident problem, increase the number of strings in the SHRCTL macro.

**Formula**

If

the value of the attribute Tasks_Waiting is greater than 1

and

the value of the attribute Tasks_Waiting is less than or equal to 5

and

the value of the attribute Pool_ID equals 6

**CICSplex_LSRPool6Wait_Critical**

Critical threshold exceeded for LSR pool 6 task waits

File activity is being delayed. Use the LSR Pool Status report to analyze string and LSR pool use. Additionally, Bottleneck Analysis and Impact Analysis in Tivoli OMEGAMON XE for CICS on z/OS can be used to determine if either string waits are a problem, or if CICS is competing with other tasks for the same resources. If there is no evident problem, increase the number of strings in the SHRCTL macro.

**Formula**

If

the value of the attribute Tasks_Waiting is greater than 5

and

the value of the attribute Pool_ID equals 6

**CICSplex_LSRPool6Look_Warning**

Warning threshold exceeded for LSR pool 6 lookaside

A successful lookaside is a VSAM read request that was satisfied from a CI currently in an LSR buffer, without incurring the overhead of a physical I/O to a
DASD device. You can achieve a greater success ratio by increasing the number of buffers defined for the LSR pool. Increasing the number of buffers, however, increases the virtual storage requirement of your CICS region.

**Formula**

If
- the value of the attribute Lookaside_Ratio is less than 30
- the value of the attribute Lookaside_Ratio is greater than or equal to 10
- the value of the attribute Pool_ID equals 6

**CICSplex_LSRPool6Look_Critical**

Critical threshold exceeded for LSR pool 6 lookaside

A successful lookaside is a VSAM read request that was satisfied from a CI currently in an LSR buffer, without incurring the overhead of a physical I/O to a DASD device. You can achieve a greater success ratio by increasing the number of buffers defined for the LSR pool. Increasing the number of buffers, however, increases the virtual storage requirement of your CICS region.

**Formula**

If
- the value of the attribute Lookaside_Ratio is less than 10
- the value of the attribute Pool_ID equals 6

**CICSplex_LSRPool7Str_Warning**

Warning threshold exceeded for LSR pool 7 string usage

If all strings are in use, response time is degraded. Use the LSR Pool Status report to analyze string and LSR pool use. Additionally, Bottleneck Analysis in Tivoli OMEGAMON XE for CICS on z/OS can be used to determine the amount of degradation caused by waiting for strings. If there is no evident problem, increase the number of strings in the SHRCTL macro.

**Formula**

If
- the value of the attribute Percent_of_Active_Strings is greater than 80
- the value of the attribute Percent_of_Active_Strings is less than or equal to 90
- the value of the attribute Pool_ID equals 7

**CICSplex_LSRPool7Str_Critical**

Critical threshold exceeded for LSR pool 7 string usage

If all strings are in use, response time is degraded. Use the LSR Pool Status report to analyze string and LSR pool use. Additionally, Bottleneck Analysis in Tivoli OMEGAMON XE for CICS on z/OS can be used to determine the amount of degradation caused by waiting for strings. If there is no evident problem, increase the number of strings in the SHRCTL macro.

**Formula**
If
  the value of the attribute Percent_of_Active_Strings is greater than 90
and
  the value of the attribute Pool_ID equals 7

**CICSplex_LSRPool7Wait_Warning**

Warning threshold exceeded for LSR pool 7 task waits

File activity is being delayed. Use the LSR Pool Status report to analyze string and LSR pool use. Additionally, Bottleneck Analysis and Impact Analysis in Tivoli OMEGAMON XE for CICS on z/OS can be used to determine if either string waits are a problem, or if CICS is competing with other tasks for the same resources. If there is no evident problem, increase the number of strings in the SHRCTL macro.

**Formula**

If
  the value of the attribute Tasks_Waiting is greater than 1
and
  the value of the attribute Tasks_Waiting is less than or equal to 5
and
  the value of the attribute Pool_ID equals 7

**CICSplex_LSRPool7Wait_Critical**

Critical threshold exceeded for LSR pool 7 task waits

File activity is being delayed. Use the LSR Pool Status report to analyze string and LSR pool use. Additionally, Bottleneck Analysis and Impact Analysis in Tivoli OMEGAMON XE for CICS on z/OS can be used to determine if either string waits are a problem, or if CICS is competing with other tasks for the same resources. If there is no evident problem, increase the number of strings in the SHRCTL macro.

**Formula**

If
  the value of the attribute Tasks_Waiting is greater than 5
and
  the value of the attribute Pool_ID equals 7

**CICSplex_LSRPool7Look_Warning**

Warning threshold exceeded for LSR pool 7 lookaside

A successful lookaside is a VSAM read request that was satisfied from a CI currently in an LSR buffer, without incurring the overhead of a physical I/O to a DASD device. You can achieve a greater success ratio by increasing the number of buffers defined for the LSR pool. Increasing the number of buffers, however, increases the virtual storage requirement of your CICS region.

**Formula**

If
  the value of the attribute Lookaside_Ratio is less than 30
and
  the value of the attribute Lookaside_Ratio is greater than or equal to 10
and
  the value of the attribute Pool_ID equals 7
CICSplex_LSRPool7Look_Critical

Critical threshold exceeded for LSR pool 7 lookaside

A successful lookaside is a VSAM read request that was satisfied from a CI currently in an LSR buffer, without incurring the overhead of a physical I/O to a DASD device. You can achieve a greater success ratio by increasing the number of buffers defined for the LSR pool. Increasing the number of buffers, however, increases the virtual storage requirement of your CICS region.

Formula

If

- the value of the attribute Lookaside_Ratio is less than 10
- and the value of the attribute Pool_ID equals 7

CICSplex_LSRPool8Str_Warning

Warning threshold exceeded for LSR pool 8 string usage

If all strings are in use, response time is degraded. Use the LSR Pool Status report to analyze string and LSR pool use. Additionally, Bottleneck Analysis in Tivoli OMEGAMON XE for CICS on z/OS can be used to determine the amount of degradation caused by waiting for strings. If there is no evident problem, increase the number of strings in the SHRCTL macro.

Formula

If

- the value of the attribute Percent_of_Active_Strings is greater than 80
- and the value of the attribute Percent_of_Active_Strings is less than or equal to 90
- and the value of the attribute Pool_ID equals 8

CICSplex_LSRPool8Str_Critical

Critical threshold exceeded for LSR pool 8 string usage

If all strings are in use, response time is degraded. Use the LSR Pool Status report to analyze string and LSR pool use. Additionally, Bottleneck Analysis in Tivoli OMEGAMON XE for CICS on z/OS can be used to determine the amount of degradation caused by waiting for strings. If there is no evident problem, increase the number of strings in the SHRCTL macro.

Formula

If

- the value of the attribute Percent_of_Active_Strings is greater than 90
- and the value of the attribute Pool_ID equals 8

CICSplex_LSRPool8Wait_Warning

Warning threshold exceeded for LSR pool 8 task waits

File activity is being delayed. Use the LSR Pool Status report to analyze string and LSR pool use. Additionally, Bottleneck Analysis and Impact Analysis in Tivoli OMEGAMON XE for CICS on z/OS can be used to determine if either string waits
are a problem, or if CICS is competing with other tasks for the same resources. If there is no evident problem, increase the number of strings in the SHRCTL macro.

**Formula**

If

- the value of the attribute Tasks_Waiting is greater than 1
- the value of the attribute Tasks_Waiting is less than or equal to 5
- the value of the attribute Pool_ID equals 8

**CICSplex_LSRPool8Wait_Critical**

Critical threshold exceeded for LSR pool 8 task waits

File activity is being delayed. Use the LSR Pool Status report to analyze string and LSR pool use. Additionally, Bottleneck Analysis and Impact Analysis in Tivoli OMEGAMON XE for CICS on z/OS can be used to determine if either string waits are a problem, or if CICS is competing with other tasks for the same resources. If there is no evident problem, increase the number of strings in the SHRCTL macro.

**Formula**

If

- the value of the attribute Tasks_Waiting is greater than 5
- the value of the attribute Pool_ID equals 8

**CICSplex_LSRPool8Look_Warning**

Warning threshold exceeded for LSR pool 8 lookaside

A successful lookaside is a VSAM read request that was satisfied from a CI currently in an LSR buffer, without incurring the overhead of a physical I/O to a DASD device. You can achieve a greater success ratio by increasing the number of buffers defined for the LSR pool. Increasing the number of buffers, however, increases the virtual storage requirement of your CICS region.

**Formula**

If

- the value of the attribute Lookaside_Ratio is less than 30
- the value of the attribute Lookaside_Ratio is greater than or equal to 10
- the value of the attribute Pool_ID equals 8

**CICSplex_LSRPool8Look_Critical**

Critical threshold exceeded for LSR pool 8 lookaside

A successful lookaside is a VSAM read request that was satisfied from a CI currently in an LSR buffer, without incurring the overhead of a physical I/O to a DASD device. You can achieve a greater success ratio by increasing the number of buffers defined for the LSR pool. Increasing the number of buffers, however, increases the virtual storage requirement of your CICS region.

**Formula**
If the value of the attribute Lookaside_Ratio is less than 10 and the value of the attribute Pool_ID equals 8

MQ Connection Situation

The single predefined situation in this category monitors an MQ connection. The description and formula for this situation follow.

Note: All the attribute names in this group are prefixed with CICSplex_MQ_Connection_Details except where stated.

CICSplex_MQInactive_Warning

Warning threshold exceeded for MQ connection status

The CICS adapter can be automatically connected during CICS initialization by adding program CSQCCODF to the PLTP. If CICS has been configured for MQ use, the connection can have failed due to CICS authorization or an incorrect queue manager specification.

Formula

If the value of the attribute Connection_Status equals Inactive

CICSplex_MQInactive_Critical

Critical threshold exceeded for MQ connection status

The CICS adapter can be automatically connected during CICS initialization by adding program CSQCCODF to the PLTP. If CICS has been configured for MQ use, the connection can have failed due to CICS authorization or an incorrect queue manager specification.

Formula

If the value of the attribute Connection_Status equals Inactive

CICSplex_MQBusyTCBs_Warning

Warning threshold exceeded for MQ busy TCB count

There are eight subtask TCBs available for MQM requests. If all TCBs are busy, transactions can have to wait for their message queuing requests to be processed. A high number of busy TCBs does not necessarily result in CICS performance problems. Note that it is not possible to modify the number of TCBs CICS uses for MQM connections.

Formula

If the value of the attribute Busy_TCBs is greater than 6 and the value of the attribute Busy_TCBs is less than or equal to 8
CICSplex_MQBusyTCBs_Critical

Critical threshold exceeded for MQ busy TCB count

There are eight subtask TCBs available for MQM requests. If all TCBs are busy, transactions can have to wait for their message queuing requests to be processed. A high number of busy TCBs does not necessarily result in CICS performance problems. Note that it is not possible to modify the number of TCBs CICS uses for MQM connections.

Formula

If

the value of the attribute Busy_TCBs is greater than 8

Related information

MQ Connection Details attribute group

Region Overview Situations

The predefined situations in this category monitor the internal resources of CICS regions. These resources include storage, files, queues, and enqueues. A description and formula for each of these situations follow.

Note: All the attribute names in this group are prefixed with CICSplex_Region_Overview except where stated.

CICSplex_AIDs_Warning

Warning threshold exceeded for AIDs.

If many AIDs have accumulated, response time can be adversely affected because CICS attempts to start each AID on every dispatch of the Terminal Control Program. If a required terminal is unavailable because a task currently running on the terminal is not completing, you can kill the task with Tivoli OMEGAMON XE for CICS on z/OS and allow the scheduled AID to execute. If the AID is waiting on a remote system, check that the remote system is available and that the connections are in service.

Formula

If

the value of the attribute AIDs is greater than 100
and
the value of the attribute AIDs is less than or equal to 300
then
the situation is true.

CICSplex_AIDs_Critical

Critical threshold exceeded for AIDs.

If many AIDs have accumulated, response time can be adversely affected because CICS attempts to start each AID on every dispatch of the Terminal Control Program. If a required terminal is unavailable because a task currently running on the terminal is not completing, you can kill the task with Tivoli OMEGAMON XE for
CICS on z/OS and allow the scheduled AID to execute. If the AID is waiting on a remote system, check that the remote system is available and that the connections are in service.

Formula
If
the value of the attribute AIDs is greater than 300
then
the situation CICSRegion_AIDSCrit is true.

CICSplex_ICEs_Warning
Warning threshold exceeded for ICEs.

An excessive number of ICEs for the same transaction ID can indicate that the issuing task is looping. When ICEs are scheduled for a task which you do not wish to run or are associated with a terminal that is not available, OMEGAMON XE for CICS allows you to view and kill these ICEs. Check whether the expiry time and date for the ICE has passed. If so, CICS can be in a stress situation such as short-on-storage or at the maximum task limit. Remedying that problem allows the ICEs to be processed.

Formula
If
the value of the attribute ICEs is greater than 50
and
the value of the attribute ICEs is less than or equal to 100
then
the situation is true.

CICSplex_ICEs_Critical
Critical threshold exceeded for ICEs

An excessive number of ICEs for the same transaction ID can indicate that the issuing task is looping. When ICEs are scheduled for a task which you do not wish to run or are associated with a terminal that is not available, OMEGAMON XE for CICS allows you to view and kill these ICEs. Check whether the expiry time and date for the ICE has passed. If so, CICS can be in a stress situation such as short-on-storage or at the maximum task limit. Remedying that problem allows the ICEs to be processed.

Formula
If
the value of the attribute ICEs is greater than 100
then
the situation is true.

CICSplex_MaxTask_Warning
Warning threshold exceeded for Max Task percent

When CICS is at the MXT limit, no new tasks will be dispatched. Use the Transaction Analysis report to determine whether there is a problem that is preventing tasks from completing in a timely manner. For example, tasks can be waiting for an enqueue, or CICS can be short-on-storage. To alleviate a bottleneck,
you can use Tivoli OMEGAMON XE for CICS on z/OS to kill the tasks causing degradation. The initial MXT limit is defined in the SIT and can be changed dynamically using the CEMT transaction.

**Formula**

If
- the value of the attribute `Maximum_Tasks_Percent` is greater than 80
and
- the value of the attribute `Maximum_Tasks_Percent` is less than or equal to 90
then
- the situation is true.

**CICSpelix_MaxTask_Critical**

Critical threshold exceeded for Max Task percent

When CICS is at the MXT limit, no new tasks will be dispatched. Use the Transaction Analysis report to determine whether there is a problem that is preventing tasks from completing in a timely manner. For example, tasks can be waiting for an enqueue, or CICS can be short-on-storage. To alleviate a bottleneck, you can use Tivoli OMEGAMON XE for CICS on z/OS to kill the tasks causing degradation. The initial MXT limit is defined in the SIT and can be changed dynamically using the CEMT transaction.

**Formula**

If
- the value of the attribute `Maximum_Tasks_Percent` is greater than 90
then
- the situation is true.

**CICSpelix_AtMaxTask_Warning**

Warning threshold exceeded for Max Task limit

When CICS is at the MXT limit, no new tasks will be dispatched. Use the Transaction Analysis report to determine whether there is a problem that is preventing tasks from completing in a timely manner. For example, tasks can be waiting for an enqueue, or CICS can be short-on-storage. To alleviate a bottleneck, you can use Tivoli OMEGAMON XE for CICS on z/OS to kill the tasks causing degradation. The initial MXT limit is defined in the SIT and can be changed dynamically using the CEMT transaction.

**Formula**

If
- the value of the attribute `Maximum_Tasks_Percent` is greater than or equal to 100
then
- the situation is true.

**CICSpelix_AtMaxTask_Critical**

Critical threshold exceeded for Max Task limit

When CICS is at the MXT limit, no new tasks will be dispatched. Use the Transaction Analysis report to determine whether there is a problem that is preventing tasks from completing in a timely manner. For example, tasks can be waiting for an enqueue, or CICS can be short-on-storage. To alleviate a bottleneck,
you can use Tivoli OMEGAMON XE for CICS on z/OS to kill the tasks causing degradation. The initial MXT limit is defined in the SIT and can be changed dynamically using the CEMT transaction.

**Formula**

If
- the value of the attribute `Maximum_Tasks_Percent` is greater than or equal to 100
then
  - the situation is true.

**CICSplex_TranRateHigh_Warning**

Warning threshold exceeded for high transaction rate

If the total transaction rate is high and the rate for transactions completing is low, check the navigation tree for situations that can identify other problems preventing tasks from completing.

**Formula**

If
- the value of the attribute `Transaction_Rate` is greater than 100 and
- the value of the attribute `Transaction_Rate` is less than or equal to 200
then
  - the situation is true.

**CICSplex_TranRateHigh_Critical**

Critical threshold exceeded for high transaction rate

If the total transaction rate is high and the rate for transactions completing is low, check the navigation tree for situations that can identify other problems preventing tasks from completing.

**Formula**

If
- the value of the attribute `Transaction_Rate` is greater than 200
then
  - the situation is true.

**CICSplex_TranRateLow_Warning**

Warning threshold exceeded for low transaction rate

If the total transaction rate is low, check the navigation tree for situations that can identify other problems preventing tasks from being attached. For example, CICS can be short-on-storage or in a stall condition.

**Formula**

If
- the value of the attribute `Transaction_Rate` is less than 10 and
- the value of the attribute `Transaction_Rate` is greater than or equal to 5
then
  - the situation is true.
CICSplex_TranRateLow_Critical

Critical threshold exceeded for low transaction rate

If the total transaction rate is low, check the navigation tree for situations that can identify other problems preventing tasks from being attached. For example, CICS can be short-on-storage or in a stall condition.

Formula
If
the value of the attribute Transaction_Rate is less than 5
then
the situation is true.

CICSplex_CICSCPUHigh_Warning

Warning threshold exceeded for CICS high CPU usage

CICS can be using more CPU than normal. Additional diagnostics can be obtained by generating a Region Overview report and checking whether the CICS time-of-day clock is being updated. The Transaction Analysis report can be used to locate looping tasks, or those that have exceeded their Global CPU usage limit (MAXR).

Formula
If
the value of the attribute CPU_Utilization is greater than 70
and
the value of the attribute CPU_Utilization is less than or equal to 90
then
the situation is true.

CICSplex_CICSCPUHigh_Critical

Critical threshold exceeded for CICS high CPU usage

CICS can be using more CPU than normal. Additional diagnostics can be obtained by generating a Region Overview report and checking whether the CICS time-of-day clock is being updated. The Transaction Analysis report can be used to locate looping tasks, or those that have exceeded their Global CPU usage limit (MAXR).

Formula
If
the value of the attribute CPU_Utilization is greater than 90
then
the situation is true.

CICSplex_CICSCPULow_Warning

Warning threshold exceeded for CICS low CPU usage

CICS can be requiring fewer CPU cycles than normal for the expected transaction rate. If response time is unacceptable, check the transaction rate display in the Region Overview report to see if the rate is lower than normal. Next, see if Transaction Analysis is showing active task activity, and if so, use the Impact
Analysis function of Tivoli OMEGAMON XE for CICS on z/OS to determine why CICS is not being dispatched. If there is no contention, check the network to see if terminals are active.

**Formula**

If

- the value of the attribute CPU_Utilization is less than 10
- the value of the attribute CPU_Utilization is greater than or equal to 5

then

the situation is true.

**CICSplex_CICSCPULow_Critical**

Critical threshold exceeded for CICS low CPU usage.

CICS can be requiring fewer CPU cycles than normal for the expected transaction rate. If response time is unacceptable, check the transaction rate display in the Region Overview report to see if the rate is lower than normal. Next, see if Transaction Analysis is showing active task activity, and if so, use the Impact Analysis function of Tivoli OMEGAMON XE for CICS on z/OS to determine why CICS is not being dispatched. If there is no contention, check the network to see if terminals are active.

**Formula**

If

- the value of the attribute CPU_Utilization is less than 5

then

the situation is true.

**CICSplex_PageRate_Warning**

Warning threshold exceeded for CICS paging rate.

A page-in can cause the CICS job to wait for the page fault to resolve. Any delay during this process, regardless of the cause, degrades response time for all CICS tasks. Use the Region Overview report to view the CICS page-in rate and working set size. Consider the use of storage isolation. For multiple CICS regions, use the LPA option for CICS nucleus modules.

**Formula**

If

- the value of the attribute Page_Rate is greater than 3
- the value of the attribute Page_Rate is less than or equal to 5

then

the situation is true.

**CICSplex_PageRate_Critical**

Critical threshold exceeded for CICS paging rate.

A page-in can cause the CICS job to wait for the page fault to resolve. Any delay during this process, regardless of the cause, degrades response time for all CICS tasks. Use the Region Overview report to view the CICS page-in rate and working set size. Consider the use of storage isolation. For multiple CICS regions, use the LPA option for CICS nucleus modules.
Formula
If
  the value of the attribute Page_Rate is greater than 5
then
  the situation is true.

CICSpelix_WorkSetHigh_Warning

Warning threshold exceeded for high CICS working set.

Storage isolation values can be examined with the system summary display provided by Tivoli OMEGAMON XE for CICS on z/OS. If the working set size must be reduced, consider lowering the MXT value for CICS, using shared libraries, LPA residency options, VSAM LSR pools, or Max class limits.

Formula
If
  the value of the attribute Working_Set_Size is greater than 6000
  and
  the value of the attribute Working_Set_Size is less than or equal to 7500
then
  the situation is true.

CICSpelix_WorkSetHigh_Critical

Critical threshold exceeded for high CICS working set

Storage isolation values can be examined with the system summary display provided by Tivoli OMEGAMON XE for CICS on z/OS. If the working set size must be reduced, consider lowering the MXT value for CICS, using shared libraries, LPA residency options, VSAM LSR pools, or class max limits.

Formula
If
  the value of the attribute Working_Set_Size is greater than 7500
then
  the situation is true.

CICSpelix_WorkSetLow_Warning

Warning threshold exceeded for low CICS working set.

Use the Transaction Analysis report to check whether there are any active transactions. If there is task activity, monitor the page-in rate with the Region Overview report. A low working set can be caused by frequent variations in the number of page-ins that CICS is doing. Consider storage isolation (set in the MVS IPS to control the average CICS working set size.

Formula
If
  the value of the attribute Working_Set_Size is less than 256
  and
  the value of the attribute Working_Set_Size is greater than or equal to 128
then
  the situation is true.
CICSplex_WorkSetLow_Critical

Critical threshold exceeded for low CICS working set

Use the Transaction Analysis report to check whether there are any active transactions. If there is task activity, monitor the page-in rate with the Region Overview report. A low working set can be caused by frequent variations in the number of page-ins that CICS is doing. Consider storage isolation (set in the MVS IPS to control the average CICS working set size.

Formula

If
  the value of the attribute Working_Set_Size is less than 128
then
  the situation is true.

CICSplex_OSCORHigh_Warning

Warning threshold exceeded for high contiguous OSCOR

If the OSCOR value remains consistently large, you should consider increasing the size of the CICS Dynamic Storage Area for your expected transaction rate.

Formula

If
  the value of the attribute Largest_Contiguous_Available_OSCOR is greater than 500 and
  the value of the attribute Largest_Contiguous_Available_OSCOR is less than or equal to 1000
then
  the situation is true.

CICSplex_OSCORHigh_Critical

Critical threshold exceeded for high contiguous OSCOR

If the OSCOR value remains consistently large, you should consider increasing the size of the CICS Dynamic Storage Area for your expected transaction rate.

Formula

If
  the value of the attribute Largest_Contiguous_Available_OSCOR is greater than 1000
then
  the situation is true.

CICSplex_OSCORLow_Warning

Warning threshold exceeded for low contiguous OSCOR

Shortages of OSCOR will cause S80A abends. Also, CICS applications should not be executing functions that result in bypassing CICS to make operating system calls. Review the region size of CICS, and consider reducing the size of the DSA to ensure enough OSCOR is available for MVS system functions.

Formula

If
  the value of the attribute Largest_Contiguous_Available_OSCOR is less than 48
and
the value of the attribute Largest_Contiguous_Available_OSCOR is greater than or equal to 24
then
the situation is true.

**CICSplex_OSCORLow_Critical**

Critical threshold exceeded for low contiguous OSCOR.

Shortages of OSCOR will cause S80A abends. Also, CICS applications should not be executing functions that result in bypassing CICS to make operating system calls. Review the region size of CICS, and consider reducing the size of the DSA to ensure enough OSCOR is available for MVS system functions.

**Formula**

If
- the value of the attribute Largest_Contiguous_Available_OSCOR is less than 24
then
- the situation is true.

**CICSplex_LSQA_Warning**

Warning threshold exceeded for low contiguous LSQA

Allocation of private storage within CICS can be viewed with the OMEGamon/CICS CSYS command. If a request for Local System Queue Area (LSQA) is made and cannot be satisfied, a S40D abend might result. Consider lowering the region size of CICS to increase available LSQA.

**Formula**

If
- the value of the attribute Largest_Contiguous_Available_LSQA is less than 48
and
- the value of the attribute Largest_Contiguous_Available_LSQA is greater than or equal to 24
then
- the situation is true.

**CICSplex_LSQA_Critical**

Critical threshold exceeded for low contiguous LSQA

Allocation of private storage within CICS can be viewed with the Tivoli OMEGAMON for CICS CSYS command. If a request for Local System Queue Area (LSQA) is made and cannot be satisfied, a S40D abend might result. Consider lowering the region size of CICS to increase available LSQA.

**Formula**

If
- the value of the attribute Largest_Contiguous_Available_LSQA is less than 24
then
- the situation is true.

**CICSplex_StorViol_Warning**

Warning threshold exceeded for CICS storage violations
Use the Transaction Storage Violations report to determine which tasks are responsible for corrupting memory in CICS. Consider disabling the transactions until the problem is resolved.

**Formula**

If
- the value of the attribute Storage_Violations is greater than 0
- and
- the value of the attribute Storage_Violations is less than or equal to 1
  then
  the situation is true.

**CICSplex_StorViol_Critical**

Critical threshold exceeded for CICS storage violations

Use the Transaction Storage Violations report to determine which tasks are responsible for corrupting memory in CICS. Consider disabling the transactions until the problem is resolved.

**Formula**

If
- the value of the attribute Storage_Violations is greater than 1
  then
  the situation is true.

**CICSplex_TODUpdate_Warning**

Warning threshold exceeded for CICS time-of-day update

Inspect the Transaction Analysis report for any possibility of a looping transaction. The Bottleneck Analysis report can be used to check whether CICS is waiting for CPU cycles or page data set activity.

**Formula**

If
- the value of the attribute CICS_TOD_Updated equals No
  then
  the situation is true.

**CICSplex_TODUpdate_Critical**

Critical threshold exceeded for CICS time-of-day update

Inspect the Transaction Analysis report for any possibility of a looping transaction. The Bottleneck Analysis report can be used to check whether CICS is waiting for CPU cycles or page data set activity.

**Formula**

If
- the value of the attribute CICS_TOD_Updated equals No
  then
  the situation is true.

**CICSplex_IORateHigh_Warning**

Warning threshold exceeded for high CICS I/O rate
Use the CDEV command in OMEGAMON XE for CICS to determine whether a particular volume is causing the high I/O rate. Bottleneck Analysis, VSAM displays, and current and historical transaction displays in OMEGAMON XE for CICS may all be used to decide if there is contention for a particular file, as well as identifying the transaction responsible for the I/O activity.

**Formula**

If  
the value of the attribute I/O_Rate is greater than 90  
and  
the value of the attribute I/O_Rate is less than or equal to 100  
then  
the situation is true.

**CICSplex_IORateHigh_Critical**

Critical threshold exceeded for high CICS I/O rate

Use the CDEV command in OMEGAMON XE for CICS to determine whether a particular volume is causing the high I/O rate. Bottleneck Analysis, VSAM displays, and current and historical transaction displays in OMEGAMON XE for CICS may all be used to decide if there is contention for a particular file, as well as identifying the transaction responsible for the I/O activity.

**Formula**

If  
the value of the attribute I/O_Rate is greater than 100  
then  
the situation is true.

**CICSplex_VTAMOpen_Warning**

Warning threshold exceeded for VTAM ACB open

Check the startup messages in the CICS job log for an explanation of why the VTAM ACB failed to open. Check to make sure that the CICS VTAM ACB is active. If it is not, vary the ACB active with the VTAM vary command and issue the CEMT SET,VTAM,OPEN transaction in CICS to establish VTAM communications. If you are still having difficulty, contact the staff responsible for VTAM at your installation.

**Formula**

If  
the value of the attribute VTAM_ACB_Open equals No  
then  
the situation is true.

**CICSplex_VTAMOpen_Critical**

Critical threshold exceeded for VTAM ACB open

Check the startup messages in the CICS job log for an explanation of why the VTAM ACB failed to open. Check to make sure that the CICS VTAM ACB is active. If it is not, vary the ACB active with the VTAM vary command and issue the CEMT SET,VTAM,OPEN transaction in CICS to establish VTAM communications. If you are still having difficulty, contact the staff responsible for VTAM at your installation.

**Formula**
If
the value of the attribute VTAM_ACB_Open equals No
then
the situation is true.

**Related information**
Region Analysis attribute group

### RLS Lock Analysis Situation

The single predefined situation in this category monitors RLS resources to identify problems that can degrade performance. The description and formula for this situation follow.

**Note:** All the attribute names in this group are prefixed with CICSplex_RLS_Lock_Analysis except where stated.

#### CICSplex_Held_RLS_Locks

Monitors the existence of locks on RLS resources. It issues an alert whenever it detects a task that is holding an RLS resource. This situation uses attributes from the CICSplex RLS Lock Analysis group. This situation is distributed automatically to the *HUB Candle Management Server. You should distribute it to all Candle Management Servers where OMEGAMON XE for CICS is running.

Select the RLS Lock Analysis report to find any tasks that can be waiting for an RLS lock to become available. If a lock is not being released, use the Transaction Analysis report to display the owning task’s wait type to determine whether it is looping, waiting on a resource, or deadlocked with another task. You can use the KILL command of OMEGAMON XE for CICS to free the lock and allow waiting tasks to continue. To limit the number of lock conflicts, consider transaction classes.

**Formula**

If
the value of the attribute Task_State equals H
and
the value of the attribute Time_in_Suspend_Numeric is greater than or equal to 60
then
the situation CICSRegion_Held_RLS_Locks is true.

**Related information**
RLS Lock Analysis attribute group

### Response Time Analysis Situation

The single predefined situation in this category monitors the response time for an active group defined with OMEGAMON. The description and formula for this situation follow.

**Note:** All the attribute names in this group are prefixed with CICSplex_Storage_Analysis except where stated.

#### CICSplex_RTAGroup_Warning

Monitors for whether or not the response time threshold stored in the OMEGAMON XE group definition has been exceeded. It alerts the user whenever the response time threshold has been exceeded. The situation uses an attribute from the
Response Time Analysis group. This situation is distributed automatically to the HUB server. You should distribute it to all servers where an Tivoli OMEGAMON XE for CICS on z/OS is running.

**Formula**

If the response time threshold stored in the OMEGAMON group definition has been exceeded then the situation Exceeds_RTA_Threshold is true.

**CICSplex_RTAGroup_Warning**

Warning threshold exceeded for group response time.

Use the historical transaction display function of Tivoli OMEGAMON XE for CICS on z/OS to locate the transactions that have caused an RTA threshold to be exceeded. The Bottleneck Analysis report can further assist in locating the wait reasons responsible for slow response times. If CPU bound transactions are unable to get the processor resources they need, consider increasing the priority of either the transaction or the CICS region.

**Formula**

If the value of the attribute CICSplex_Response_Time_Analysis.Exceeds_RTA_Threshold equals Yes

**Related information**

Response Time Analysis attribute group

---

**Service Analysis Situations**

The predefined situations in this category monitor performance, response time, and transaction for potential trouble spots. A description and formula for each of these situations follow.

Note: All the attribute names in this group are prefixed with CICSplex_Service_Class_Analysis except where stated.

**CICSplex_delay_in_Database**

Service Level failure with excessive time spent in database.

Use the historical transaction display function of Tivoli OMEGON XE for CICS on z/OS to locate the transactions that are responsible for the service level failure. Determine whether the large amount of time spent waiting on database activity is a consequence of either application changes or alterations in the database configuration. If the transaction behavior is found to be normal, consider updating the service class definitions so that they will accurately reflect anticipated response times.

**Formula**

If the value of the attribute Performance_Index is greater than 1 and the value of the attribute Percent_of_time_waiting_on_Adabas is greater than 90 or the value of the attribute Percent_of_time_waiting_on_Datacom is greater than 90
or the value of the attribute Percent_of_time_waiting_on_DBS is greater than 90
or the value of the attribute Percent_of_time_waiting_on_DLI is greater than 90
or the value of the attribute Percent_of_time_waiting_on_IDMS is greater than 90
or the value of the attribute Percent_of_time_waiting_on_SUPRA is greater than 90

CICSplex_delay_in_MQSeries

Service Level failure with excessive time spent in MQSeries.

Use the historical transaction display function of Tivoli Tivoli OMEGAMON XE for CICS on z/OS to locate the transactions that are responsible for the service level failure. Determine whether the large amount of time spent waiting on MQ activity is a consequence of either application changes or alterations to the Message Queuing system. If the transaction behavior is found to be normal, consider updating the service class definitions so that they will accurately reflect anticipated response times.

Formula
If
   the value of the attribute Performance_Index is greater than 1
and
   the value of the attribute Percent_of_time_waiting_on_MQ is greater than 90

CICSplex_delay_within_CICS

Service Level failure due to internal CICS components.

Use the historical transaction display function of Tivoli Tivoli OMEGAMON XE for CICS on z/OS to locate the transactions that are responsible for the service level failure. The Bottleneck Analysis report can further assist in locating the wait reasons responsible for slow response time. If CPU bound transactions are unable to get the processor resources they need, consider increasing the priority of either the transaction or the CICS region.

Formula
If
   the value of the attribute Performance_Index is greater than 1
and
   the value of the attribute Percent_of_time_waiting_on_Redispatch is greater than 50
or
   the value of the attribute Percent_of_time_waiting_on_unidentifiable is greater than 50
or
   the value of the attribute Percent_of_time_using_CPU is greater than 50

CICSplex_CSMI_delay_in_FCP

Service Level failure (CSMI) with excessive time in File Control

Use the historical transaction display function of Tivoli Tivoli OMEGAMON XE for CICS on z/OS to locate the mirror transactions that are responsible for the service level failure. Determine whether the large amount of time waiting on File Control is a consequence of either application changes or alterations in the CICS file
configuration. If the transaction behavior is found to be normal, consider updating the service class definitions so that they will accurately reflect anticipated response times.

**Formula**

If
- the value of the attribute `Service_Class_Name` equals `CSMI` and
- the value of the attribute `200_% of Goal Transaction Count` is greater than 1 or
- the value of the attribute `Performance_Index` is greater than 1 or
- the value of the attribute `Greater_than_400_% of Goal Transaction Count` is greater than 0 or
- the value of the attribute `400_% of Goal Transaction Count` is greater than 1 and
- the value of the attribute `Percent_of_time_waiting_on_File_Control` is greater than or equal to 50

**CICSplex Function Ship_delays**

Service Level failure (CSM*) in any function shipping request

Use the historical transaction display function of Tivoli Tivoli OMEGAMON XE for CICS on z/OS to locate the mirror transactions that are responsible for the service level failure. The Bottleneck Analysis report can further assist in locating the wait reasons responsible for slow response time. If CPU limitations are found to be the root cause, consider increasing the priority of the region to prevent File Owning Regions from adversely affecting Application Owning Regions that use function shipping.

**Formula**

If
- the substring of attribute `Service_Class_Name` equals `1,CSM` and
- the value of the attribute `Performance_Index` is greater than 1 and
- the value of the attribute `Percent_of_time_using_CPU` is greater than 50 or
- the value of the attribute `Percent_of_time_waiting_on_TS_IO` is greater than 50 or
- the value of the attribute `Percent_of_time_waiting_on_Redispact` is greater than 50 or
- the value of the attribute `Percent_of_time_waiting_on_DLI` is greater than 50 or
- the value of the attribute `Percent_of_time_waiting_on_Journal_Control` is greater than 50

**CICSplex Performance Index**

Service Level failure.

Use the historical transaction display function of Tivoli Tivoli OMEGAMON XE for CICS on z/OS to locate the transactions that are responsible for the service level failure. The breakdown of time statistics in the historical transaction detail can identify the component that is causing the response time to be excessive. If the transaction behavior is found to be normal, consider updating the service class definitions so that they will accurately reflect anticipated response times.
Formula
If
the value of the attribute Performance_Index is greater than 1,

CICSpex_Sympathy_Degradation

Service Level failure with excessive time spent in MRO or ISC.

Use the historical transaction display function of Tivoli Tivoli OMEGAMON XE for
CICS on z/OS to locate the transactions that are responsible for the service level
failure. Determine whether the large amount of time spent waiting on MRO is a
consequence of a poorly performing remote region or a problem with the
connections displayed in the Intercommunication Summary. If the transaction
behavior is found to be normal, consider updating the service class definitions so
that they will accurately reflect expected response times.

Formula
If
the value of the attribute 400_%_of_Goal_Transaction_Count is greater than 1
or
the value of the attribute Performance_Index is greater than 1
or
the value of the attribute 200_%_of_Goal_Transaction_Count is greater than 1
or
the value of the attribute Average_Response_Time is greater than 5
or
the value of the attribute Greater_than_400_%_of_Goal_Transaction_Count is greater than 0
and
the value of the attribute Percent_of_time_waiting_on_MRO is greater than
or equal to 50

CICSpex_Service_Class_Deleted

IBM or OMEGAMON service class definition not available.

Formula
If
the value of the attribute CICSpex_Service_Class.Status equals DELETED
then
situation CICSpex_Service_Class_Deleted is true.

CICSpex_CSM5_delay_in_DLI

Monitors the performance of function-shipped remote DL/I (CSM5) requests. It
distinguishes between DL/I and non-DL/I problems and alerts the user if more than
50% of the transaction response is attributed to DL/I processing.

If service levels for the CSM5 transaction group are not met or response time
spikes are detected, CICSpex_CSM5_delay_in_DLI rolls issues an alert.

This situation is distributed automatically to the HUB server. You should distribute it
to all servers where an Tivoli OMEGAMON XE for CICS on z/OS is running. This
situation uses attributes from the CICSpex Service Class Analysis group.

Formula
If the value of attribute Service_Class_Name equals "CSM5"
and
(the value of attribute Bucket_200 is greater than 1
or the value of attribute Performance_Index is greater than 1
or the value of attribute Bucket_G400 is greater than 0
or the value of attribute Bucket_400 is greater than 1)
and
the value of attribute Percent_of_time_waiting_on_DLI is greater than 50
then
situation CICSpex_CSM5_delay_in_DLI is true.

Note: CICSpex_CSMI_delay_in_FCP addresses a similar condition with CSMI File Control Processing.

CICSpex_CSMI_Delay_in_FCP

Monitors the performance of function-shipped remote FCP, or File Control (CSMI) requests. It distinguishes between FCP and non-FCP problems and alerts the user if more than 50% of the transaction response is attributed to FCP processing.

If service levels for the CSMI transaction group are not met or response time spikes are detected, CICSpex_CSMI_delay_in_FCP issues an alert. This situation uses attributes from the CICSpex Service Class_Analysis group. This situation is distributed automatically to the HUB server. You should distribute it to all servers where an Tivoli OMEGAMON XE for CICS on z/OSplex is running.

Note: CICSpex_CSM5_delay_in_DLI addresses a similar condition with CSM5 DL/I database access.

Formula

If
the value of attribute Service_Class_Name equals "CSMI"
and
(the value of attribute Bucket_G400 is greater than 0
or the value of attribute Bucket_400 is greater than 1
or the value of attribute Performance_Index is greater than 1
or the value of attribute Bucket_200 is greater than 1)
and
(the value of attribute Percent_of_time_waiting_on_File_Control is greater than or equal to 50)
then
situation CICSpex_CSMI_delay_in_FCP is true.

CICSpex_delay_in_Database

Monitors for excessive transaction response time that is attributed to database performance. There are multiple database types (Adabas, DLI, Datacom, and so forth) that can potentially cause CICSpex delays. CICSpex_delay_in_Database monitors all database types. This situation uses attributes from the CICSpex Service Class_Analysis group. This situation is distributed automatically to the HUB server. You should distribute it to all servers where an Tivoli OMEGAMON XE for CICS on z/OS is running.

Formula

If
the value of attribute Performance_Index is greater than 1
and
(the value of attribute Percent_of_time_waiting_on_Adabas is greater than 90
or the value of attribute Percent_of_time_waiting_on_Datacom is greater than 90
or the value of attribute Percent_of_time_waiting_on_DLI is greater than 90
or the value of attribute Percent_of_time_waiting_on_DLI is greater than 50
then
situation CICSpex_delay_in_Database is true.
or the value of attribute Percent_of_time_waiting_on_DB2 is greater than 90
or the value of attribute Percent_of_time_waiting_on_DLI is greater than 90
or the value of attribute Percent_of_time_waiting_on_IDMS is greater than 90
or the value of attribute Percent_of_time_waiting_on_SUPRA is greater than 90)
then
situation CICSpexe_delay_in_Database is true.

Note: This predefined situation monitors response time delays due to database processing. See the CICSpexe_delay_within_CICS predefined situation for delays related to time waiting on CICS resources.

CICSpexe_delay_in_MQSeries

Monitors the effect of an MQ connection on a service class. This situation evaluates the percentage of time spent waiting for an MQ connection in relation to the performance index for a service class. It alerts the user if the performance index for a service class exceeds 1.0 and the percentage of time spent waiting for an MQ connection exceeds 90%. This situation uses attributes from the CICSpexe Service Class_Analysis group. All situations for Service Level Analysis attributes need to be distributed to "HUB. Do not distribute these situations to CICS nodes.

Formula
If
  the value of attribute Performance_Index is greater than 1
and
  the value of attribute Percent_of_time_waiting_on_MQ is greater than 90
then
situation CICSpexe_delay_in_MQSeries is true.

CICSpexe_delay_within_CICS

Monitors service class delays attributed to time waiting for CICSpexe resources. Initially, this situation acknowledges when performance goals have been exceeded. It then looks for time waiting on CICSpexe resources including
• CPU usage
• Redispache
• Unidentifiable resources, such as program loads, interval control, Basic Mapping support, and other ancillary items that contribute to CICSpexe degradation.

This situation uses attributes from the CICSpexe Service Class_Analysis group. This situation is distributed automatically to the HUB server. You should distribute it to all servers where an Tivoli OMEGAMON XE for CICS on z/OS is running.

Formula
If
  the value of attribute Performance_Index is greater than 1
and
  (the value of attribute Percent_of_time_waiting_on_Redispatch is greater than 50
  or the value of attribute Percent_of_time_waiting_on_unidentifiable is greater than 50
  or the value of attribute Percent_of_time_using_CPU is greater than 50)
then
situation CICSpexe_delay_within_CICS is true.

See CICSpexe_CSM5_delay_in_DLI, CICSpexe_CSM1_delay_in_FCP, or CICSpexe_delay_in_Database for predefined situations that monitor response time delays in database processing.
CICSplex Function Ship Delays

Monitors function shipping performance for CSM1, CSM2, CSM3 and CSM5 function shipping types. This situation uses attributes from the CICSplex Service Class_Analysis group.

Note: See CICSplex_CSM5_delay_in_DLI and CICSplex_CSMI_delay_in_FCP for similar predefined situations. This situation is distributed automatically to the HUB server. You should distribute it to all servers where an Tivoli OMEGAMON XE for CICS on z/OS is running.

**Formula**

If
the substring of attribute Service_Class_Name is greater than 1, CSM
and
the value of attribute Performance_Index is greater than 1
and
{the value of attribute Percent_of_time_using_CPU is greater than 50
or the value of attribute Percent_of_time_waiting_on_TS_IO is greater than 50
or the value of attribute Percent_of_time_waiting_on_Redispactch is greater than 50
or the value of attribute Percent_of_time_waiting_on_DLI is greater than 50
or the value of attribute Percent_of_time_waiting_on_Journal_Control is greater than 50}
then situation CICSplex_Function_Ship_delays is true.

CICSplex Performance Index

Monitors a CICSplex to see whether it meets current service levels as measured by the performance index. This situation will evaluate true for monitored CICSplexes that fail to meet their specified service levels. This situation uses attributes from the CICSplex Service Class_Analysis group. This situation is distributed automatically to the HUB server. You should distribute it to all servers where an Tivoli OMEGAMON XE for CICS on z/OS is running.

**Formula**

If
the value of attribute Performance_Index is greater than 1
then
situation CICSplex_Performance_Index is true.

Important: This situation is started automatically as part of CMS start-up. If you do not want this situation to start automatically, open the Settings notebook for this situation to the Properties notebook. Deselect Activate at start-up then click OK.

CICSplex Sympathy Degradation

Alerts you before service class throughput degradation escalates to a more serious problem. However, if degradation continues, then the CICSRegion_Sympathy_Sickness predefined situation alerts you to a CICS failure or reduction in performance because of symptoms in an adjacent region. This situation uses attributes from the CICSplex Service Class_Analysis group. This situation is distributed automatically to the HUB server. You should distribute it to all servers where an Tivoli OMEGAMON XE for CICS on z/OS is running.

**Formula**

If
{the value of attribute Average_Response_Time is greater than 5
or the value of attribute Bucket_G400 is greater than 0
or
    the value of attribute Bucket_200 is greater than 1
or
    the value of attribute Performance_Index is greater than 1
or
    the value of attribute Bucket_400 is greater than 1)
and
    the value of attribute Percent_of_time_waiting_on_MRO is greater than or equal to 50
then
situation CICSpex_Sympathy_Degradation is true.

Related information
Service Class Analysis attribute group

Storage Analysis Situations

The predefined situations in this category monitor storage analysis. The description and formula for this situation follow.

Note: All the attribute names in this group are prefixed with
CICSpex_Storage_Analysis except where stated.

CICSpex_DSAHigh_Warning

Warning threshold exceeded for high DSA usage.

Consider increasing the size of the CICS region and make the DSA larger. Increase the region size only if the Region Overview report shows adequate LSQA to support the change. It is also worth checking the current OSCOR utilization. If the DSA size cannot be increased, consider reducing the CICS MXT value.

Formula
If
    the value of the attribute Percent_Used is greater than 70
and
    the value of the attribute Percent_Used is less than or equal to 90
and
    the value of the attribute Area equals DSA

CICSpex_DSAHigh_Critical

Critical threshold exceeded for high DSA usage.

Consider increasing the size of the CICS region and make the DSA larger. Increase the region size only if the Region Overview report shows adequate LSQA to support the change. It is also worth checking the current OSCOR utilization. If the DSA size cannot be increased, consider reducing the CICS MXT value.

Formula
If
    the value of the attribute Percent_Used is greater than 90
and
    the value of the attribute Area equals DSA

CICSpex_DSALow_Warning

Warning threshold exceeded for low DSA usage.
If this situation fires consistently, it can indicate an excessive DSA size. Decrease the size of the DSA for the CICS region. If there are very few tasks, there might be very little DSA in use. Consider increasing the maximum number of tasks (MXT) CICS can process at one time.

**Formula**

If
- the value of the attribute Percent_Used is less than 35
- the value of the attribute Percent_Used is greater than or equal to 15
- the value of the attribute Area equals DSA

**CICSpex_DSALow_Critical**

Critical threshold exceeded for low DSA usage.

If this situation fires consistently, it can indicate an excessive DSA size. Decrease the size of the DSA for the CICS region. If there are very few tasks, there might be very little DSA in use. Consider increasing the maximum number of tasks (MXT) CICS can process at one time.

**Formula**

If
- the value of the attribute Percent_Used is less than 15
- the value of the attribute Area equals DSA

**CICSpex_DSAAvail_Warning**

Warning threshold exceeded for low DSA availability.

Ensure that the predicates in this situation are set to trip only when available storage before SOS is critically small. DSA extents are allocated in units of 256KB. The exception to this is the user DSA which is 1MB when storage isolation is active. Change the DSALIM parameter for the CICS address space to increase the storage available to CICS.

**Formula**

If
- the value of the attribute Storage_Available is less than 768
- the value of the attribute Storage_Available is greater than or equal to 256
- the value of the attribute Area equals DSA

**CICSpex_DSAAvail_Critical**

Critical threshold exceeded for low DSA availability.

Ensure that the predicates in this situation are set to trip only when available storage before SOS is critically small. DSA extents are allocated in units of 256KB. The exception to this is the user DSA which is 1MB when storage isolation is active. Change the DSALIM parameter for the CICS address space to increase the storage available to CICS.

**Formula**
If the value of the attribute Storage_Available is less than 256 and the value of the attribute Area equals DSA

**CICSplex_EDSAHigh Warning**

Warning threshold exceeded for high EDSA usage.

Increase EDSALIM in the CICS System Initialization Table. The Storage Analysis report will provide an overview of storage availability with in each constituent EDSA. For task and CICS component storage usage, consult the storage displays offered by Tivoli OMEGAMON XE for CICS on z/OS.

**Formula**

If

- the value of the attribute Percent_Used is greater than 70
- the value of the attribute Percent_Used is less than or equal to 90
- the value of the attribute Area equals EDSA

**CICSplex_EDSAHigh Critical**

Critical threshold exceeded for high EDSA usage.

Increase EDSALIM in the CICS System Initialization Table. The Storage Analysis report will provide an overview of storage availability with in each constituent EDSA. For task and CICS component storage usage, consult the storage displays offered by Tivoli OMEGAMON XE for CICS on z/OS.

**Formula**

If

- the value of the attribute Percent_Used is greater than 90
- the value of the attribute Area equals EDSA

**CICSplex_EDSALow Warning**

Warning threshold exceeded for low EDSA usage.

If this situation trips consistently, it can indicate an excessive EDSA size. Decrease EDSALIM in the SIT. For current task storage, use the storage display functions found in Tivoli OMEGAMON XE for CICS on z/OS. If there are very few tasks, as shown in the Transaction Analysis report, there might be little EDSA in use.

**Formula**

If

- the value of the attribute Percent_Used is less than 35
- the value of the attribute Percent_Used is greater than or equal to 15
- the value of the attribute Area equals EDSA

**CICSplex_EDSALow Critical**

Critical threshold exceeded for low EDSA usage.
If this situation trips consistently, it can indicate an excessive EDSA size. Decrease EDSALIM in the SIT. For current task storage, use the storage display functions found in Tivoli OMEGAMON XE for CICS on z/OS. If there are very few tasks, as shown in the Transaction Analysis report, there might be little EDSA in use.

**Formula**

If

- the value of the attribute Percent Used is less than 15
- and
- the value of the attribute Area equals EDSA

**CICSp.lex_DSASOS_Warning**

Warning threshold exceeded for DSA short-on-storage.

Use the storage displays of Tivoli OMEGAMON XE for CICS on z/OS to locate tasks that are using a large amount of DSA. Verify that their storage requests are for a reasonable amount of memory. To determine if a given task is hung in a storage control request, go to the Transaction Analysis report and look at the Wait Type field. Consider using the CICS CEMT transaction or the KILL option of Tivoli OMEGAMON XE for CICS on z/OS to purge the offending task.

**Formula**

If

- the value of the attribute SOS equals Yes
- and
- the value of the attribute Area equals DSA

**CICSp.lex_DSASOS_Critical**

Critical threshold exceeded for DSA short-on-storage.

Use the storage displays of Tivoli OMEGAMON XE for CICS on z/OS to locate tasks that are using a large amount of DSA. Verify that their storage requests are for a reasonable amount of memory. To determine if a given task is hung in a storage control request, go to the Transaction Analysis report and look at the Wait Type field. Consider using the CICS CEMT transaction or the KILL option of Tivoli OMEGAMON XE for CICS on z/OS to purge the offending task.

**Formula**

If

- the value of the attribute SOS equals Yes
- and
- the value of the attribute Area equals DSA

**CICSp lex_EDSASOS_Warning**

Warning threshold exceeded for EDSA short-on-storage.

Use the storage displays of Tivoli OMEGAMON XE for CICS on z/OS to locate tasks that are using a large amount of DSA. Verify that their storage requests are for a reasonable amount of memory. To determine if a given task is hung in a storage control request, go to the Transaction Analysis report and look at the Wait Type field. Consider using the CICS CEMT transaction or the KILL option of Tivoli OMEGAMON XE for CICS on z/OS to purge the offending task.

**Formula**
If
the value of the attribute SOS equals Yes
and
the value of the attribute Area equals EDSA

**CICSplex_EDSASOS_Critical**

Critical threshold exceeded for EDSA short-on-storage.

Use the storage displays of Tivoli OMEGAMON XE for CICS on z/OS to locate tasks that are using a large amount of DSA. Verify that their storage requests are for a reasonable amount of memory. To determine if a given task is hung in a storage control request, go to the Transaction Analysis report and look at the Wait Type field. Consider using the CICS CEMT transaction or the KILL option of Tivoli OMEGAMON XE for CICS on z/OS to purge the offending task.

**Formula**

If
the value of the attribute SOS equals Yes
and
the value of the attribute Area equals EDSA

**CICSplex_EDSAAvail_Warning**

Warning threshold exceeded for low EDSA availability.

Ensure that the predicates in this situation are set to trip only when available storage before SOS is critically small. EDSA extents are allocated in units of 1MB. Change the EDSALIM parameter for the CICS address space to increase the storage available to CICS.

**Formula**

If
the value of the attribute Storage_Available is less than 3072
and
the value of the attribute Storage_Available is greater than or equal to 1024
and
the value of the attribute Area equals EDSA

**CICSplex_EDSAAvail_Critical**

Critical threshold exceeded for low EDSA availability.

Ensure that the predicates in this situation are set to trip only when available storage before SOS is critically small. EDSA extents are allocated in units of 1MB. Change the EDSALIM parameter for the CICS address space to increase the storage available to CICS.

**Formula**

If
the value of the attribute Storage_Available is less than 1024
and
the value of the attribute Area equals EDSA
Task Class Analysis Situations

The predefined situations in this category monitor Task Class Analysis.

**Note:** All the attribute names in this group are prefixed with CICSplex_Task_Class_Analysis except where stated.

**CICSplex_ClassMax_Warning**

Warning threshold exceeded for Class Max Task.

Generally, the recommendation to put transactions in a transaction class is required by the application to restrict access to resources in CICS. If response time is not acceptable, it can be necessary to re-evaluate why the task has been placed in a transaction class. If you determine that the class MAXTASK value is too low, you can change it with either OMEGAMON XE for CICS or the CICS CEMT transaction.

**Formula**

If

- the value of the attribute Percent_of_Limit is greater than 80
- and
- the value of the attribute Percent_of_Limit is less than or equal to 90

**CICSplex_ClassMax_Critical**

Critical threshold exceeded for Class Max Task

Generally, the recommendation to put transactions in a transaction class is required by the application to restrict access to resources in CICS. If response time is not acceptable, it can be necessary to re-evaluate why the task has been placed in a transaction class. If you determine that the class MAXTASK value is too low, you can change it with either Tivoli OMEGAMON XE for CICS on z/OS or the CICS CEMT transaction.

**Formula**

If

- the value of the attribute Percent_of_Limit is greater than 90

**CICSplex_AtClassMax_Warning**

Warning threshold exceeded for Class Max Task limit

When the limit is reached for a class, a new task belonging to the same class cannot be run until an old task has terminated. Use the Transaction Analysis report to determine whether a problem is preventing tasks within the specified class from completing in a timely manner. For example, tasks can be waiting for an enqueue, or CICS itself can be short-on-storage. If you find that the class MAXTASK value is too low, you may change it with either Tivoli OMEGAMON XE for CICS on z/OS or the CICS CEMT transaction.

**Formula**

If

- the value of the attribute Percent_of_Limit is greater than or equal to 100
CICSplex_AtClassMax_Critical

Critical threshold exceeded for Class Max Task limit

When the limit is reached for a class, a new task belonging to the same class cannot be run until an old task has terminated. Use the Transaction Analysis report to determine whether a problem is preventing tasks within the specified class from completing in a timely manner. For example, tasks can be waiting for an enqueue, or CICS itself can be short-on-storage. If you find that the class MAXTASK value is too low, you may change it with either Tivoli OMEGAMON XE for CICS on z/OS or the CICS CEMT transaction.

Formula

If

the value of the attribute Percent_of_Limit is greater than or equal to 100

Related information

Task Class Analysis attribute group

TCP/IP Analysis Situations

Note: The single predefined situation in this category monitors TCP/IP services.

All the attribute names in this group are prefixed with CICSplex_Internet_Status except where stated.

CICSplex_TCPIPDis_Warning

Warning threshold exceeded for TCP/IP exit not enabled.

Issue the EZAO,START,CICS transaction to start the CICS Sockets Interface and enable the Task Related User Exit. If the interface successfully initializes, consider placing EZACIC20 into the PLT so that the Sockets Interface will automatically initialize when CICS is started. If the interface does not initialize, check the CICS message logs for diagnostic information.

Formula

If

the value of the attribute TCP/IP Exit_Not_Enabled equals Yes

CICSplex_TCPIPDis_Critical

Critical threshold exceeded for TCP/IP exit not enabled.

Issue the EZAO,START,CICS transaction to start the CICS Sockets Interface and enable the Task Related User Exit. If the interface successfully initializes, consider placing EZACIC20 into the PLT so that the Sockets Interface will automatically initialize when CICS is started. If the interface does not initialize, check the CICS message logs for diagnostic information.

Formula

If

the value of the attribute TCP/IP Exit_Not_Enabled equals Yes
CICSp lex_TCPIPFail_Warning

Warning threshold exceeded for TCP/IP listener failure.

Examine the CICS message logs for an explanation of why one or more listener
tasks have failed. The EZAC transaction of CICS can be used to verify the
configuration of each defined listener. Specific information concerning tasks
associated with failed listeners can be obtained using the TCP/IP display of the
Tivoli OMEGAMON XE for CICS on z/OS product.

Formula
If
the value of the attribute TCP/IP_Listener_Failed equals Yes

CICSp lex_TCPIPFail_Critical

Critical threshold exceeded for TCP/IP listener failure.

Examine the CICS message logs for an explanation of why one or more listener
tasks have failed. The EZAC transaction of CICS can be used to verify the
configuration of each defined listener. Specific information concerning tasks
associated with failed listeners can be obtained using the TCP/IP display of the
Tivoli OMEGAMON XE for CICS on z/OS product.

Formula
If
the value of the attribute TCP/IP_Listener_Failed equals Yes

CICSp lex_TCPIPWait_Warning

Warning threshold exceeded for TCP/IP application wait.

Use the TCP/IP Sockets Activity report of Tivoli OMEGAMON XE for CICS on z/OS
to locate the tasks that are waiting for a socket request. If the application is waiting
for a READ command to complete, consider issuing a SELECT command prior to
the READ request. The SELECT command will indicate whether sockets are ready
to be read. Additional information on application status can be obtained using the
TSO command NETSTAT SOCKET.

Formula
If
the value of the attribute TCP/IP_Application_Waiting equals Yes

CICSp lex_TCPIPWait_Critical

Critical threshold exceeded for TCP/IP application wait.

Use the TCP/IP Sockets Activity report of Tivoli OMEGAMON XE for CICS on z/OS
to locate the tasks that are waiting for a socket request. If the application is waiting
for a READ command to complete, consider issuing a SELECT command prior to
the READ request. The SELECT command will indicate whether sockets are ready
to be read. Additional information on application status can be obtained using the
TSO command NETSTAT SOCKET.

Formula
If the value of the attribute TCP/IP_Application_Waiting equals Yes

**CICSplex_WebEnabled_Critical**

Critical threshold exceeded for Web interface disabled.

For Transaction Server 1.3 and later releases, specify TCPIP=YES in the CICS System Initialization Table to enable CICS Web support.

**Formula**

If the value of the attribute Web_Interface_Status is not equal to Enabled

**CICSplex_WebInstall_Warning**

Warning threshold exceeded for Web interface install.

**Formula**

If the value of the attribute Web_Interface_Status equals Not_installed

**CICSplex_WebInstall_Critical**

Critical threshold exceeded for Web interface install.

**Formula**

If the value of the attribute Web_Interface_Status equals Not_installed

**Related information**

TCP/IP Analysis attribute group

**Temporary Storage Analysis Situations**

These predefined situations in this category monitor Temporary Storage.

**Note:** All the attribute names in this group are prefixed with
CICSplex_Temporary_Storage_Summary except where stated.

**CICSplex_TSAuxBuf_Warning**

Warning threshold exceeded for TS Auxiliary buffer usage.

Consider raising the number of temporary storage buffers to prevent response times from degrading. The Temporary Storage Summary can be used to monitor the status of auxiliary TS strings and buffers.

**Formula**

If the value of the attribute Percent_AuxBuffers_in_Use is greater than 80 and the value of the attribute Percent_AuxBuffers_in_Use is less than or equal to 90
**CICSplex_TSAuxBuf_Critical**

Critical threshold exceeded for TS Auxiliary buffer usage.

Consider raising the number of temporary storage buffers to prevent response times from degrading. The Temporary Storage Summary can be used to monitor the status of auxiliary TS strings and buffers.

**Formula**

\[
\text{If} \quad \text{the value of the attribute } \text{Percent}_\text{AuxBuffers}_\text{in}_\text{Use} \text{ is greater than 90}
\]

**CICSplex_TSAuxCI_Warning**

Warning threshold exceeded for TS Auxiliary CI usage.

Allocate a data set large enough for your temporary storage needs. If 100% utilization is reached, either too little storage was allocated or some (or all) temporary storage records are not being deleted when no longer useful. For temporary storage data set statistics, request a Temporary Storage Summary report. Transactions that can be looping and doing too many TS puts can be located using the transaction history function available with Tivoli OMEGAMON XE for CICS on z/OS.

**Formula**

\[
\text{If} \\
\quad \text{the value of the attribute } \text{Percent}_\text{AuxCIs}_\text{in}_\text{Use} \text{ is greater than 80} \\
\text{and} \\
\quad \text{the value of the attribute } \text{Percent}_\text{AuxCIs}_\text{in}_\text{Use} \text{ is less than or equal to 90}
\]

**CICSplex_TSAuxCI_Critical**

Critical threshold exceeded for TS Aux CI usage

Allocate a data set large enough for your temporary storage needs. If 100% utilization is reached, either too little storage was allocated or some (or all) temporary storage records are not being deleted when no longer useful. For temporary storage data set statistics, request a Temporary Storage Summary report. Transactions that can be looping and doing too many TS puts can be located using the transaction history function available with Tivoli OMEGAMON XE for CICS on z/OS.

**Formula**

\[
\text{If} \\
\quad \text{the value of the attribute } \text{Percent}_\text{AuxCIs}_\text{in}_\text{Use} \text{ is greater than 90}
\]

**CICSplex_TSAuxStr_Warning**

Warning threshold exceeded for TS Auxiliary active strings.

Increase the number of strings as needed. Occasional peaks are not a problem, but should be kept to a minimum. The Temporary Storage Summary can be used to monitor the status of auxiliary TS strings and buffers.

**Formula**
If 
the value of the attribute Percent_Aux_Active_Strings is greater than 80 
and 
the value of the attribute Percent_Aux_Active_Strings is less than or equal to 90

CICSplex_TSAuxStr_Critical

Critical threshold exceeded for TS Auxiliary active strings.

Increase the number of strings as needed. Occasional peaks are not a problem, but should be kept to a minimum. The Temporary Storage Summary can be used to monitor the status of auxiliary TS strings and buffers.

Formula
If
the value of the attribute Percent_AuxSetActive_Strings is greater than 90

CICSplex_TSAuxBufWait_Warning

Warning threshold exceeded for TS Auxiliary buffer waits

The Bottleneck Analysis report can be used to decide whether temporary storage buffer waits are degrading response times. If you determine that a shortage of temporary storage buffers is the primary cause of degradation in your system, consider changing the value in the SIT and recycle your region. Increasing the number of temporary storage buffers will increase your overall virtual storage requirements.

Formula
If
the value of the attribute Aux_Buffer_Waits is greater than 1
and 
the value of the attribute Aux_Buffer_Waits is less than or equal to 2

CICSplex_TSAuxBufWait_Critical

Critical threshold exceeded for TS Aux buffer waits

The Bottleneck Analysis report can be used to decide whether temporary storage buffer waits are degrading response times. If you determine that a shortage of temporary storage buffers is the primary cause of degradation in your system, consider changing the value in the SIT and recycle your region. Increasing the number of temporary storage buffers will increase your overall virtual storage requirements.

Formula
If
the value of the attribute Aux_Buffer_Waits is greater than 2

CICSplex_TSAuxStrWait_Warning

Warning threshold exceeded for TS Auxiliary string waits
Increase the number of strings as needed. Occasional peaks are not a problem, but should be kept to a minimum to avoid response time degradation. The Temporary Storage Summary can be used to monitor the status of auxiliary TS strings and buffers.

**Formula**

If

the value of the attribute Aux_Current_String_Waits is greater than 1

and

the value of the attribute Aux_Current_String_Waits is less than or equal to 2

**CICSpelix TSAuxStrWait_Critical**

Critical threshold exceeded for TS Auxiliary string waits

Increase the number of strings as needed. Occasional peaks are not a problem, but should be kept to a minimum to avoid response time degradation. The Temporary Storage Summary can be used to monitor the status of auxiliary TS strings and buffers.

**Formula**

If

the value of the attribute Aux_Current_String_Waits is greater than 2

**Related information**

Temporary Storage Analysis attribute group

---

**Transaction Analysis Situations**

The predefined situations in this category monitor transactions across CICS regions and the MVS images that the CICSpex spans. A description and formula for each of these situations follow.

**Note:** All the attribute names in this group are prefixed with CICSpelix_Transaction_Analysis except where stated.

**CICSpelix TranCPUTime_Warning**

Warning threshold exceeded for transaction CPU time.

A CICS transaction can be using more CPU than normal. If the Transaction Analysis report indicates that the processor time associated with a transaction is rising rapidly, the task can be in a loop. Looping transactions may be terminated automatically using one of the following: a situation with a CEKL action to terminate a transaction that exceeds a CPU threshold, or the Resource Limiting function of Tivoli OMEGAMON XE for CICS on z/OS or manually using the KILL command.

**Formula**

If

the value of the attribute CPU_Time is greater than 0.500

and

the value of the attribute CPU_Time is less than or equal to 1.000

**CICSpelix TranCPUTime_Critical**

Critical threshold exceeded for transaction CPU time.
A CICS transaction can be using more CPU than normal. If the Transaction Analysis report indicates that the processor time associated with a transaction is rising rapidly, the task can be in a loop. Looping transactions may be terminated automatically using one of the following: a situation with a CEKL action to terminate a transaction that exceeds a CPU threshold, or the Resource Limiting function of Tivoli OMEGAMON XE for CICS on z/OS or manually using the KILL command.

**Formula**

If

the value of the attribute CPU_Time is greater than 1.000

The predefined situations in this category monitor transactions across CICS regions and the MVS images that the CICS spans. A description and formula for each of these situations follow.

**CICSRegion_Tran_DSNC_Inactive**

Tests whether the DSNC interface between CICS and DB2 is still active and rolls up to the Enterprise when the interface is found inactive. This situation uses attributes from the CICS Transaction Analysis group. This situation is distributed automatically to all CICS regions being monitored by Tivoli OMEGAMON XE for CICS on z/OS.

**Formula**

If

the value of attribute Transaction_ID equals DSNC and
the value of attribute Status equals inactive
then
situation CICSRegion_Tran_DSNC_Inactive is true.

**CICSRegion_Tran_Elapsed_CPU**

Tests whether the amount of CPU taken by a given transaction has passed a specified threshold. This situation uses an attribute from the CICS Transaction Analysis group. This situation is distributed automatically to all CICS regions being monitored by OMEGAMON XE for CICS.

**Note:** If fractional values are desired, you must manually modify this product-provided situation to include decimal points and up to two decimal places. For example, if you want 5.2 seconds, add the decimal point.

**Formula**

If

the value of attribute CPU_Time is greater than 1
then
situation CICSRegion_Tran_Elapsed_CPU is true.

**Related information**

Transaction Analysis attribute group

---

**Transient Data Analysis Situations**

These predefined situations in this category monitors Transient Data.

**Note:** All the attribute names in this group are prefixed with CICSplex_Transient_Data_Summary except where stated.
CICSplex_TDBuffer_Warning

Warning threshold exceeded for TD buffer usage.

Select the Transient Data Summary report to determine if transient data buffer waits are a persistent problem. If you find that a shortage of transient data buffers is the primary cause of degradation in your system, consider changing the value in the SIT and recycle your region. Increasing the number of transient data buffers will increase your overall virtual storage requirements.

Formula
If
the value of the attribute Percent_Buffers_in_Use is greater than 80
and
the value of the attribute Percent_Buffers_in_Use is less than or equal to 90

CICSplex_TDBuffer_Critical

Critical threshold exceeded for TD buffer usage.

Select the Transient Data Summary report to determine if transient data buffer waits are a persistent problem. If you find that a shortage of transient data buffers is the primary cause of degradation in your system, consider changing the value in the SIT and recycle your region. Increasing the number of transient data buffers will increase your overall virtual storage requirements.

Formula
If
the value of the attribute Percent_Buffers_in_Use is greater than 90

CICSplex_TDCIs_Warning

Warning threshold exceeded for TD CI usage.

Consider reallocating the DFHINTRA dataset with more space to accommodate your peak transaction rate. Unlike temporary storage, each CI of the intrapartition dataset can only contain records belonging to the same queue. Specifying REUSE for a destination allows a different queue to use the CI when all records in the CI have been read. This can significantly improve performance since tasks will less often have to incur the overhead of handling NOSPACE conditions.

Formula
If
the value of the attribute Percent_CIs_in_Use is greater than 80
and
the value of the attribute Percent_CIs_in_Use is less than or equal to 90

CICSplex_TDCIs_Critical

Critical threshold exceeded for TD CI usage.

Consider reallocating the DFHINTRA dataset with more space to accommodate your peak transaction rate. Unlike temporary storage, each CI of the intrapartition dataset can only contain records belonging to the same queue. Specifying REUSE for a destination allows a different queue to use the CI when all records in the CI have been read. This can significantly improve performance since tasks will less often have to incur the overhead of handling NOSPACE conditions.
have been read. This can significantly improve performance since tasks will less often have to incur the overhead of handling NOSPACE conditions.

**Formula**

If the value of the attribute Percent_CIs_in_Use is greater than 90

**CICSplex_TDAcStr_Warning**

Warning threshold exceeded for TD string usage.

Increase the number of strings as needed. Occasional peaks are not a problem, but should be kept to a minimum to avoid response time degradation. The Transient Data Summary can be used to monitor the status of TD strings and buffers.

**Formula**

If

the value of the attribute Percent_Active_Strings is greater than 80
and
the value of the attribute Percent_Active_Strings is less than or equal to 90

**CICSplex_TDAcStr_Critical**

Critical threshold exceeded for TD active strings.

Increase the number of strings as needed. Occasional peaks are not a problem, but should be kept to a minimum to avoid response time degradation. The Transient Data Summary can be used to monitor the status of TD strings and buffers.

**Formula**

If

the value of the attribute Percent_Active_Strings is greater than 90

**CICSplex_TDBufWait_Warning**

Warning threshold exceeded for TD buffer waits.

Select the Transient Data Summary report to determine if transient data buffer waits are a persistent problem. If you find that a shortage of transient data buffers is the primary cause of degradation in your system, consider changing the value in the SIT and recycle your region. Increasing the number of transient data buffers will increase your overall virtual storage requirements.

**Formula**

If

the value of the attribute Buffer_Waits is greater than 1
and
the value of the attribute Buffer_Waits is less than or equal to 2

**CICSplex_TDBufWait_Critical**

Critical threshold exceeded for TD buffer waits.

Select the Transient Data Summary report to determine if transient data buffer waits are a persistent problem. If you find that a shortage of transient data buffers is the primary cause of degradation in your system, consider changing the value in the
SIT and recycle your region. Increasing the number of transient data buffers will increase your overall virtual storage requirements.

**Formula**

If
the value of the attribute Buffer_Waits is greater than 2

**CICSplex TDStrWait_Warning**

Warning threshold exceeded for TD string waits.

Increase the number of strings as needed. Occasional peaks are not a problem, but should be kept to a minimum to avoid response time degradation. The Transient Data Summary can be used to monitor the status of TD strings and buffers.

**Formula**

If
the value of the attribute Current_String_Waits is greater than 1
and
the value of the attribute Current_String_Waits is less than or equal to 2

**CICSplex TDStrWait_Critical**

Critical threshold exceeded for TD string waits.

Increase the number of strings as needed. Occasional peaks are not a problem, but should be kept to a minimum to avoid response time degradation. The Transient Data Summary can be used to monitor the status of TD strings and buffers.

**Formula**

If
the value of the attribute Current_String_Waits is greater than 2

**CICSplex TDTrigger_Warning**

Warning threshold exceeded for TD queue over trigger.

It can be necessary to raise the priority of the task that removes the transient data records in order to avoid exceeding the trigger level. If the destination is associated with a terminal, check the terminal printer to make sure that it is available.

**Formula**

If
CICSplex_Transient_Data_Queue.Queue_Over_Trigger is greater than 0
and
CICSplex_Transient_Data_Queue.Queue_Over_Trigger is less than or equal to 1

**CICSplex TDTrigger_Critical**

Critical threshold exceeded for TD queue over trigger

It can be necessary to raise the priority of the task that removes the transient data records in order to avoid exceeding the trigger level. If the destination is associated with a terminal, check the terminal printer to make sure that it is available.

**Formula**
If CICSplex_Transient_Data_Queue.Queue_Over_Trigger is greater than 1

**CICSplex_TDQueueLen_Warning**

Warning threshold exceeded for TD queue length.

Ensure that the predicate in this situation specifies the highest trigger level or the number of queues that can fill DFHINTRA. CICS abnormally terminates if the data set overflows. Use the transaction history component of Tivoli OMEGAMON XE for CICS on z/OS to verify that the task which reads and deletes the queue is not abending.

**Formula**

If

the value of the attribute

CICSplex_Transient_Data_Queue.Queue_Length is greater than 100

and

the value of the attribute

CICSplex_Transient_Data_Queue.Queue_Length is less than or equal to 300

**CICSplex_TDQueueLen_Critical**

Critical threshold exceeded for TD queue length.

Ensure that the predicate in this situation specifies the highest trigger level or the number of queues that can fill DFHINTRA. CICS will abnormally terminate if the data set overflows. Use the transaction history component of Tivoli OMEGAMON XE for CICS on z/OS to verify that the task which reads and deletes the queue is not abending.

**Formula**

If

the value of the attribute

CICSplex_Transient_Data_Queue.Queue_Length is greater than 300

**CICSplex_WebEnabled_Warning**

Warning threshold exceeded for Web interface disabled.

For Transaction Server 1.3 and later releases, specify TCPIP=YES in the CICS System Initialization Table to enable CICS Web support. If TS 1.2 is being monitored, use the CWBC transaction of CICS to enable the Web Interface. Releases of CICS prior to TS 1.2 do not support Web services and will always display a status of 'disabled'.

**Formula**

If

the value of the attribute

CICSplex_Internet_Status.Web_Interface_Status is not equal to Enabled

**Related information**

Transient Data Analysis attribute group
UOW Analysis Situations

The predefined situations in this category monitor transactions.

Note: All the attribute names in this group are prefixed with CICSplex_UOW_Analysis except where stated.

CICSplex_ShuntedUOWs_Warning

Warning threshold exceeded for shunted UOWs.

If shunted UOWs are causing problems, such as holding locks that result in enqueue failures, you should consider forcing a decision. The UOW Enqueue Analysis report will provide a list of all UOW IDs, including those that are shunted. Using either Tivoli OMEGAMON XE for CICS on z/OS or the CICS CEMT transaction, you can perform the following actions against a shunted UOW: force backout, force commit, or force defined action.

Formula

If
the value of the attribute Shunted_UOWs is greater than 0
and
the value of the attribute Shunted_UOWs is less than or equal to 1

CICSplex_ShuntedUOWs_Critical

Critical threshold exceeded for shunted UOWs.

If shunted UOWs are causing problems, such as holding locks that result in enqueue failures, you should consider forcing a decision. The UOW Enqueue Analysis report will provide a list of all UOW IDs, including those that are shunted. Using either Tivoli OMEGAMON XE for CICS on z/OS or the CICS CEMT transaction, you can perform the following actions against a shunted UOW: force backout, force commit, or force defined action.

Formula

If
the value of the attribute Shunted_UOWs is greater than 1

CICSplex_UOWShuntTime_Warning

Warning threshold exceeded for total shunt time.

If shunted UOWs are causing problems, such as holding locks that result in enqueue failures, you should consider forcing a decision. The UOW Enqueue Analysis report can be used to obtain a list of all UOW IDs and their associated shunt times. Using either Tivoli OMEGAMON XE for CICS on z/OS or the CICS CEMT transaction, you can perform the following actions against a shunted UOW: force backout, force commit, or force defined action.

Formula

If
the value of the attribute Total_Time_Shunted is greater than 0
and
the value of the attribute Total_Time_Shunted is less than or equal to 1
CICSplex_UOWShuntTime_Critical

Critical threshold exceeded for total shunt time

If shunted UOWs are causing problems, such as holding locks that result in
enqueue failures, you should consider forcing a decision. The UOW Enqueue
Analysis report can be used to obtain a list of all UOW IDs and their associated
shunt times. Using either Tivoli OMEGAMON XE for CICS on z/OS or the CICS
CEMT transaction, you can perform the following actions against a shunted UOW:
force backout, force commit, or force defined action.

Formula
If
the value of the attribute Total_Time_Shunted is greater than 1

CICSplex_UOWForce_Warning

Warning threshold exceeded for UOW forced decisions.

A forced decision can occur after an indoubt UOW remains unresolved for a
user-defined time period. CICS will unconditionally backout or commit the changes
made by the UOW in order to release the resources held by the indoubt UOW.

Formula
If
the value of the attribute Forced_Decisions is greater than 0
and
the value of the attribute Forced_Decisions is less than or equal
to 1

CICSplex_UOWForce_Critical

Critical threshold exceeded for UOW forced decisions.

A forced decision can occur after an indoubt UOW remains unresolved for a
user-defined time period. CICS will unconditionally backout or commit the changes
made by the UOW in order to release the resources held by the indoubt UOW.

Formula
If
the value of the attribute Forced_Decisions is greater than 1

CICSplex_UOWENQFail_Warning

Warning threshold exceeded for UOW enqueue failures.

If shunted UOWs are causing problems, such as holding locks that result in
enqueue failures, you should consider forcing a decision. The UOW Enqueue
Analysis report will provide a list of all UOW IDs, including those that are shunted.
Using either Tivoli OMEGAMON XE for CICS on z/OS or the CICS CEMT
transaction, you can perform the following actions against a shunted UOW: force
backout, force commit, or force defined action.

Formula
If
the value of the attribute CICSplex_UOW_Enqueue_Analysis.Enqueue_Failures is greater than 0
and the value of the attribute
CICSplex_UOW_Enqueue_Analysis.Enqueue_Failures is less than or
equal to 1

**CICSplex_UOWENQFail_Critical**

Critical threshold exceeded for UOW enqueue failures.

If shunted UOWs are causing problems, such as holding locks that result in
enqueue failures, you should consider forcing a decision. The UOW Enqueue
Analysis report will provide a list of all UOW IDs, including those that are shunted.
Using either Tivoli OMEGAMON XE for CICS on z/OS or the CICS CEMT
transaction, you can perform the following actions against a shunted UOW: force
backout, force commit, or force defined action.

**Formula**

If
the value of the attribute
CICSplex_UOW_Enqueue_Analysis.Enqueue_Failures is greater than 1

**Related information**

[Units of Work Analysis attribute group]

---

**VSAM Analysis Situations**

The single predefined situation in this category monitors the status of VSAM data
sets. The description and formula for this situation follow.

**Note:** All the attribute names in this group are prefixed with
CICSplex_VSAM_Analysis except where stated.

**CICSplex_VSAMStrUse_Warning**

Warning threshold exceeded for VSAM string usage.

Use LSR pools so that strings and buffers are shared for all files. LSR can greatly
reduce the total I/O and CPU usage in your system. If there are no evident
problems, consider increasing the number of strings in the FCT.

**Formula**

If
the value of the attribute VSAM_Strings_Percent_in_Use is greater than 85
and
the value of the attribute VSAM_Strings_Percent_in_Use is less than or equal to 100

**CICSplex_VSAMStrUse_Critical**

Critical threshold exceeded for VSAM string usage.

Use LSR pools so that strings and buffers are shared for all files. LSR can greatly
reduce the total I/O and CPU usage in your system. If there are no evident
problems, consider increasing the number of strings in the FCT.

**Formula**

If
the value of the attribute VSAM_Strings_Percent_in_Use is greater than 100
CICSplex_VSAMStrWait_Warning

Warning threshold exceeded for VSAM string waits.

Consider using LSR pools so that strings and buffers are shared by files. LSR can greatly reduce the total I/O and CPU usage in your CICS region. Use the Transaction Analysis report to determine whether there is a problem that is preventing tasks from completing in a timely manner. For example, tasks can be waiting for an enqueue or CICS can be short-on-storage. If you determine that there is no bottleneck and the problem persists, consider increasing the number of VSAM strings.

**Formula**

If
- the value of the attribute VSAM_String_Waits is greater than 3
- and
- the value of the attribute VSAM_String_Waits is less than or equal to 7

CICSplex_VSAMStrWait_Critical

Critical threshold exceeded for VSAM string waits.

Consider using LSR pools so that strings and buffers are shared by files. LSR can greatly reduce the total I/O and CPU usage in your CICS region. Use the Transaction Analysis report to determine whether there is a problem that is preventing tasks from completing in a timely manner. For example, tasks can be waiting for an enqueue or CICS can be short-on-storage. If you determine that there is no bottleneck and the problem persists, consider increasing the number of VSAM strings.

**Formula**

If
- the value of the attribute VSAM_String_Waits is greater than 7

CICSplex_VSAMWaitvIO_Warning

Warning threshold exceeded for VSAM waits versus I/O

If a higher level of activity against the data set has increased string waits, consider increasing the number of strings that are defined for the named data set. Use LSR pools so that files share buffers and strings. LSR can reduce the total I/O and CPU usage in your CICS system. If a data set is defined in an LSR pool, demand for strings can be reduced as a result of successful buffer lookasides.

**Formula**

If
- the value of the attribute Percent_Waits_Versus_I/O is greater than 3
- and
- the value of the attribute Percent_Waits_Versus_I/O is less than or equal to 5

CICSplex_VSAMWaitvIO_Critical

Critical threshold exceeded for VSAM waits versus I/O.
If a higher level of activity against the data set has increased string waits, consider increasing the number of strings that are defined for the named data set. Use LSR pools so that files share buffers and strings. LSR can reduce the total I/O and CPU usage in your CICS system. If a data set is defined in an LSR pool, demand for strings can be reduced as a result of successful buffer lookasides.

**Formula**

If

- the value of the attribute Percent_Waits_Versus_I/O is greater than 5

**CICSplex_VSAMDataCA_Warning**

Warning threshold exceeded for VSAM data CA splits.

Reorganize the file as soon as possible. If splits continue to occur at a frequent rate, consider redefining the FREESPACE options to reduce split activity.

**Formula**

If

- the value of the attribute Data_CA_Splits_in_Last_Hour is greater than 1
- and
- the value of the attribute Data_CA_Splits_in_Last_Hour is less than or equal to 2

**CICSplex_VSAMDataCA_Critical**

Critical threshold exceeded for VSAM data CA splits.

Reorganize the file as soon as possible. If splits continue to occur at a frequent rate, consider redefining the FREESPACE options to reduce split activity.

**Formula**

If

- the value of the attribute Data_CA_Splits_in_Last_Hour is greater than 2

**CICSplex_VSAMDataCI_Warning**

Warning threshold exceeded for VSAM data CI splits.

Continued CI splits indicate that a CA split can occur soon. CA splits can take a long time to complete, so try to reorganize the file before the CA split occurs. Large numbers of CI splits can indicate that FREESPACE can have to be adjusted.

**Formula**

If

- the value of the attribute Data_CI_Splits_in_Last_Hour is greater than 4
- and
- the value of the attribute Data_CI_Splits_in_Last_Hour is less than or equal to 10

**CICSplex_VSAMDataCI_Critical**

Critical threshold exceeded for VSAM data CI splits.
Continued CI splits indicate that a CA split can occur soon. CA splits can take a long time to complete, so try to reorganize the file before the CA split occurs. Large numbers of CI splits can indicate that FREESPACE can have to be adjusted.

**Formula**
If the value of the attribute Data_CI_Splits_in_Last_Hour is greater than 10

**CICSplex_VSAMDataExt_Warning**

Warning threshold exceeded for VSAM data extents.

Consider increasing the primary allocation for the data component of the file.

**Formula**
If the value of the attribute Data_Extents_in_Last_Hour is greater than 1 and the value of the attribute Data_Extents_in_Last_Hour is less than or equal to 2

**CICSplex_VSAMDataExt_Critical**

Critical threshold exceeded for VSAM data extents.

Consider increasing the primary allocation for the data component of the file.

**Formula**
If the value of the attribute Data_Extents_in_Last_Hour is greater than 2

**CICSplex_VSAMNdxCA_Warning**

Warning threshold exceeded for VSAM index CA splits.

Reorganize the file as soon as possible. If splits continue to occur at a frequent rate, consider redefining the FREESPACE options to reduce split activity.

**Formula**
If the value of the attribute Index_CA_Splits_in_Last_Hour is greater than or equal to 1

**CICSplex_VSAMNdxCA_Critical**

Critical threshold exceeded for VSAM index CA splits.

Reorganize the file as soon as possible. If splits continue to occur at a frequent rate, consider redefining the FREESPACE options to reduce split activity.

**Formula**
If the value of the attribute Index_CA_Splits_in_Last_Hour is greater than or equal to 1
CICSplex_VSAMNdxCI_Warning

Warning threshold exceeded for VSAM index CI splits.

Continued CI splits indicate that a CA split can occur soon. CA splits can take a long time to complete, so try to reorganize the file before the CA split occurs. Large numbers of CI splits can indicate that FREESPACE can have to be adjusted.

**Formula**

If

the value of the attribute Index_CI_Splits_in_Last_Hour is greater than or equal to 1

---

CICSplex_VSAMNdxCI_Critical

Critical threshold exceeded for VSAM index CI splits.

Continued CI splits indicate that a CA split can occur soon. CA splits can take a long time to complete, so try to reorganize the file before the CA split occurs. Large numbers of CI splits can indicate that FREESPACE can have to be adjusted.

**Formula**

If

the value of the attribute Index_CI_Splits_in_Last_Hour is greater than or equal to 1

---

CICSplex_VSAMNdxExt_Warning

Warning threshold exceeded for VSAM index extents.

Consider increasing the primary allocation for the index component of the file.

**Formula**

If

the value of the attribute Index_Extents_in_Last_Hour is greater than or equal to 1

---

CICSplex_VSAMNdxExt_Critical

Critical threshold exceeded for VSAM index extents.

Consider increasing the primary allocation for the index component of the file.

**Formula**

If

the value of the attribute Index_Extents_in_Last_Hour is greater than or equal to 1

---

CICSplex_VSAMRLSTimeout_Warning

Warning threshold exceeded for VSAM RLS timeouts.

Investigate tasks that can be holding an RLS lock for an excessive amount of time. The online history component of Tivoli OMEGAMON XE for CICS on z/OS can be used to identify transactions that have been abnormally terminated by CICS due to VSAM timeout conditions (abend code AFCV). If the lock activity is determined to be normal, consider increasing the DTIMOUT value for transactions that use the file, or the FTIMEOUT value defined to CICS.
**Formula**

If

the value of the attribute RLS_Timeouts_in_Last_Hour is greater than 1
and
the value of the attribute RLS_Timeouts_in_Last_Hour is less than or equal to 20

**CICSplex_VSAMRLSTimeout_Critical**

Critical threshold exceeded for VSAM RLS timeouts.

Investigate tasks that can be holding an RLS lock for an excessive amount of time. The online history component of Tivoli OMEGAMON XE for CICS on z/OS can be used to identify transactions that have been abnormally terminated by CICS due to VSAM timeout conditions (abend code AFCV). If the lock activity is determined to be normal, consider increasing the DTIMOUT value for transactions that use the file, or the FTIMEOUT value defined to CICS.

**Formula**

If

the value of the attribute RLS_Timeouts_in_Last_Hour is greater than 20

**Related Information**

[VSAM Analysis attribute group](#)
Chapter 14. Workspaces

Tivoli OMEGAMON XE for CICS provides workspaces for viewing information about each CICS region you are monitoring. The table views, graphs and/or charts within each workspace report attribute information about each CICS region you are monitoring. You can use them to

- investigate attribute information relating to a change in state
- Monitor the performance of each CICS region, helping you to identify system bottlenecks and evaluate tuning decisions
- Select the most effective threshold values for situations you create

The workspaces deliver detailed, current data that enable you to analyze CICS regions, connections, service class performance, transactions, tasks waiting on RLS resources, and temporary storage queues. For an overview of available workspaces, see Organization of Predefined Workspaces.

In addition to table views and graphs, a workspace can contain other views, such as, a 3270 terminal session, a text view, a browser session, an event console, or a take action pane that gives you the ability to send commands to the operator console.

Organization of the predefined workspaces

IBM Tivoli OMEGAMON XE for CICS on z/OS provides predefined workspaces that appear in the Navigator in the Business view. The following is an alphabetical listing of these workspaces.

The illustration shows the organization of the predefined workspaces provided with Tivoli OMEGAMON XE for CICS on z/OS. The indicates that you can link to the workspace. For example, if you right-click on a row in the Connection Analysis table view and choose Link To, you can link to the Link Summary workspace.

- **Automatic Aid Descriptors workspace** on page 315
- **Bottleneck Analysis workspace** on page 315
- **Connections Analysis workspace** on page 316
  - **Link Summary workspace** on page 327
- **DB2 Summary workspace** on page 317
- **DB2 Task Activity workspace** on page 317
- **DBCTL Summary workspace** on page 318
- **Dispatcher Summary workspace** on page 318
- **Dispatcher TCB Mode workspace** on page 319
- **Dispatcher TCB Pool workspace** on page 319
- **Dump Analysis workspace** on page 319
- **Dump Details workspace** on page 320
- **Enqueue Analysis workspace** on page 321
- **File Control Analysis workspace** on page 321
  - **File Control Summary** on page 323
  - **File Control Details workspace** on page 322
  - **File Control Statistics workspace** on page 323
  - **File Control Journal and Logging workspace** on page 322
  - **File Control Data Tables Statistics workspace** on page 321
  - **Region Data Sets workspace** on page 332
- **Intercommunication Summary workspace** on page 323
- **Internet Status workspace** on page 324
- **Interval Control Element workspace** on page 324
• “Java Program Analysis workspace” on page 324
• “Journal Analysis workspace” on page 325
• “JVM Analysis workspace” on page 325
• “JVM Classcache workspace” on page 326
• “JVM Pool Statistics workspace” on page 326
• “JVM Profile Analysis workspace” on page 326
• “LSR Pool Status workspace” on page 327
• “Link Summary workspace” on page 327
• “Log Stream Analysis workspace” on page 327
• “Message Queuing Analysis workspace” on page 329
• “MVS TCB Details workspace” on page 330
• “MVS TCB Summary workspace” on page 330
• “Online Data Viewing workspace” on page 330
• “Pagepool Details workspace” on page 331
• “Pagepool Summary workspace” on page 331
• “Region Overview workspace” on page 332
  – “Region Data Sets workspace” on page 332
• “Response Time Analysis workspace” on page 333
• “Response Time Details workspace” on page 333
• “Service Level Analysis workspace” on page 334
  – “Service Class Analysis by Region workspace” on page 335
  – “Service Class Analysis workspace” on page 335
• “Service Task Details workspace” on page 336
• “Storage Analysis workspace” on page 336
  – “Dynamic Storage Details workspace” on page 320
• “Subpool Details workspace” on page 336
• “System Initialization workspace” on page 337
• “Task Class Analysis workspace” on page 337
• “TCP/IP Service Statistics workspace” on page 338
• “TCP/IP Statistics workspace” on page 338
• “Temporary Storage Queues workspace” on page 339
• “Temporary Storage Summary workspace” on page 340
• “Auxiliary Temporary Storage workspace” on page 341
• “Temporary Storage Details workspace” on page 341
• “Terminal Storage Violations workspace” on page 342
• “Transaction Analysis workspace” on page 342
  – “Units of Work workspace” on page 354
  – “Online Data Viewing workspace” on page 330
  – “Transaction Details workspace” on page 346
  – “Transaction Storage Analysis workspace” on page 350
  – “Transaction Timings workspace” on page 351
  – “Transaction Statistics workspace” on page 349
  – “Transaction and Program Definitions workspace” on page 345
  – “Transaction Umbrella Data workspace” on page 352
  – “Transaction File Details workspace” on page 347
  – “Transaction TSQueue Details workspace” on page 351
• “Transaction Storage Violations workspace” on page 350
• “Transient Data Queues workspace” on page 352
• “Transient Data Summary workspace” on page 353
• “UOW Analysis workspace” on page 353
• “UOW Enqueue Analysis workspace” on page 354
• “Units of Work workspace” on page 354
• “VSAM Analysis workspace” on page 355
• “VSAM RLS Lock Analysis workspace” on page 356
You can reach additional workspaces from the View menu option. Display the CICS workspace named in the parentheses below and choose View > Workspace from the menu to access these additional workspaces.

- **Databases** (accessed from these workspaces: Service Class Analysis by Region, Service Class Analysis by Transaction, and Units of Work)
- **Units of Work** (accessed from the Transaction Analysis workspace)
- **Response Time Details** (accessed from the Response Time Analysis workspace)

### Attribute Groups Used by the Predefined Workspaces

In most cases, a workspace contains data or columns that have similar attributes in an attribute group. The table shows the relationships between the predefined workspaces and the attribute groups. (The workspaces are listed in alphabetical order.)

<table>
<thead>
<tr>
<th>Workspace</th>
<th>Related Attribute Group</th>
</tr>
</thead>
<tbody>
<tr>
<td>Automatic Initiate Descriptor (AID)</td>
<td>Automatic Initiate Descriptor (AID)</td>
</tr>
<tr>
<td>Auxiliary Temporary Storage Details</td>
<td>Auxiliary Temporary Storage Details</td>
</tr>
<tr>
<td>Bottleneck Analysis</td>
<td>Bottleneck Analysis</td>
</tr>
<tr>
<td>Connections Analysis</td>
<td>Connections Analysis</td>
</tr>
<tr>
<td>DB2 Summary</td>
<td>DB2 Summary</td>
</tr>
<tr>
<td>DB2 Task Activity</td>
<td>DB2 Task Activity</td>
</tr>
<tr>
<td>DBCTL Summary</td>
<td>DBCTL Summary</td>
</tr>
<tr>
<td>Dispatcher Summary</td>
<td>Dispatcher Summary</td>
</tr>
<tr>
<td>Dispatcher TCB Modes</td>
<td>Dispatcher TCB Modes</td>
</tr>
<tr>
<td>Dispatcher TCB Pools</td>
<td>Dispatcher TCB Pools</td>
</tr>
<tr>
<td>Dump Analysis</td>
<td>Dump Analysis</td>
</tr>
<tr>
<td>Dump Details</td>
<td>Dump Details</td>
</tr>
<tr>
<td>Dynamic Storage Details</td>
<td>Dynamic Storage Details</td>
</tr>
<tr>
<td>Enqueue Analysis</td>
<td>Enqueue Analysis</td>
</tr>
<tr>
<td>File Control Analysis</td>
<td>File Control Analysis</td>
</tr>
<tr>
<td>File Control Details</td>
<td>File Control Details</td>
</tr>
<tr>
<td>File Control Statistics</td>
<td>File Control Statistics</td>
</tr>
<tr>
<td></td>
<td>not available for situations</td>
</tr>
<tr>
<td>File Control Journal and Logging</td>
<td>File Control Journal and Logging</td>
</tr>
<tr>
<td></td>
<td>not available for situations</td>
</tr>
<tr>
<td>File Control Data Table Statistics</td>
<td>File Control Data Table Statistics</td>
</tr>
<tr>
<td></td>
<td>not available for situations</td>
</tr>
<tr>
<td>Intercommunication Summary</td>
<td>Intercommunication Summary</td>
</tr>
<tr>
<td></td>
<td>not available for situations</td>
</tr>
<tr>
<td>Internet Status</td>
<td>Internet Status</td>
</tr>
<tr>
<td>Java Program Analysis</td>
<td>Java Program Analysis</td>
</tr>
<tr>
<td>Journal Analysis</td>
<td>Journal Analysis</td>
</tr>
<tr>
<td>JVM Analysis</td>
<td>JVM Analysis</td>
</tr>
<tr>
<td>JVM Class Cache Details</td>
<td>JVM Class Cache Details</td>
</tr>
<tr>
<td>JVM Pool Statistics</td>
<td>JVM Pool Statistics</td>
</tr>
<tr>
<td>Workspace</td>
<td>Related Attribute Group</td>
</tr>
<tr>
<td>-----------------------------------</td>
<td>---------------------------------------</td>
</tr>
<tr>
<td>JVM Profile Statistics</td>
<td>JVM Profile Statistics</td>
</tr>
<tr>
<td>LSR Pool Status</td>
<td>LSR Pool Status</td>
</tr>
<tr>
<td>Link Summary</td>
<td>Link Analysis, not available for situations</td>
</tr>
<tr>
<td>Log Stream Analysis</td>
<td>Log Stream Analysis</td>
</tr>
<tr>
<td>Message Queuing Analysis</td>
<td>MQ Connection Details</td>
</tr>
<tr>
<td>MVS TCB Details</td>
<td>MVS TCB Details</td>
</tr>
<tr>
<td>MVS TCB Summary</td>
<td>MVS TCB Summary</td>
</tr>
<tr>
<td>Online Data Viewing</td>
<td>Online Data Viewing</td>
</tr>
<tr>
<td>Pagepool Details</td>
<td>Pagepool Details</td>
</tr>
<tr>
<td>Pagepool Summary</td>
<td>Pagepool Summary</td>
</tr>
<tr>
<td>Region Overview</td>
<td>Region Analysis</td>
</tr>
<tr>
<td>Response Time Analysis</td>
<td>Response Time Analysis</td>
</tr>
<tr>
<td>Response Time Details</td>
<td>Response Time Elements</td>
</tr>
<tr>
<td>Service Class Analysis by Region</td>
<td>Service Class Analysis</td>
</tr>
<tr>
<td>Service Class Analysis by Transaction</td>
<td>Service Class Analysis</td>
</tr>
<tr>
<td>Service Level Analysis</td>
<td>Service Class Analysis</td>
</tr>
<tr>
<td>Service Task Details</td>
<td>Service Task Details</td>
</tr>
<tr>
<td>Storage Analysis</td>
<td>Storage Analysis</td>
</tr>
<tr>
<td>System Initialization</td>
<td>System Initialization</td>
</tr>
<tr>
<td>Task Class Analysis</td>
<td>Task Class Analysis</td>
</tr>
<tr>
<td>TCP/IP Service Statistics</td>
<td>TCP/IP Service Statistics</td>
</tr>
<tr>
<td>TCP/IP Statistics</td>
<td>TCP/IP Statistics</td>
</tr>
<tr>
<td>Temporary Storage Summary</td>
<td>Temporary Storage Summary</td>
</tr>
<tr>
<td>Temporary Storage Details</td>
<td>Temporary Storage Details</td>
</tr>
<tr>
<td>Temporary Storage Queues</td>
<td>Temporary Storage Detail</td>
</tr>
<tr>
<td>Terminal Storage Violations</td>
<td>Terminal Storage Violations</td>
</tr>
<tr>
<td>Transaction Analysis</td>
<td>Transaction Analysis</td>
</tr>
<tr>
<td>Transaction Details</td>
<td>Transaction Details</td>
</tr>
<tr>
<td>EIB Details</td>
<td>EIB Details</td>
</tr>
<tr>
<td>Transaction Storage Use</td>
<td>Transaction Storage Use</td>
</tr>
<tr>
<td>Transaction Timings</td>
<td>Transaction Timings</td>
</tr>
<tr>
<td>I/O and Other Wait Times Details</td>
<td>I/O Wait Times Details, Other Wait Times Details</td>
</tr>
<tr>
<td>Transaction Statistics</td>
<td>Transaction Statistics</td>
</tr>
<tr>
<td>Transaction and Program Definitions</td>
<td>Transaction Definitions, Program Definitions</td>
</tr>
<tr>
<td>Transaction Umbrella</td>
<td>Transaction Umbrella</td>
</tr>
<tr>
<td>Transaction Remote</td>
<td>Transaction Remote</td>
</tr>
<tr>
<td>Transaction File Details</td>
<td>Transaction File Details</td>
</tr>
<tr>
<td>Transaction TSQueue Details</td>
<td>Transaction TSQueue Details</td>
</tr>
<tr>
<td>Transaction Storage Violations</td>
<td>Transaction Storage Violations</td>
</tr>
<tr>
<td>Transient Data Queues</td>
<td>Transient Data Queues</td>
</tr>
<tr>
<td>Transient Data Summary</td>
<td>Transient Data Summary</td>
</tr>
</tbody>
</table>
### Automatic Aid Descriptors workspace

The predefined Automatic Aid Descriptors workspace contains:

- **Take Action view.** This allows you to purge an AID either directly or using the CICS supplied transaction, CEKL. Selecting either of these options prompts you for the AID address. Instead you can select the AID from the table view, right-mouse click, and a pop-up window shows the Take Action options.
- **Table view showing all the attributes.** From the table view you can select one of the definitions, right-click and a pop-up window shows all the options that appear in the Take action window. The information allows you to purge an AID through OMEGAMON and onto CICS.

### Bottleneck Analysis workspace

The predefined Bottleneck Analysis workspace contains the:

- **CICS Wait Reason Distribution** bar chart that shows wait reason descriptions along the y-axis when a display threshold of 10% is reached.
- **Bottleneck Analysis** table view that identifies the various wait reasons encountered by CICSplex tasks over a fixed time interval

The workspace displays are provided by the **Bottleneck Analysis** attributes.

### Bottleneck Analysis table view

By default, the Bottleneck Analysis table view displays information for all eligible CICSplex transactions. You can limit the display to a single group by adding a “GROUPNUM EQ” predicate to the bottleneck query. The CandleNet Portal Properties page lets you add the Group Number attribute, provided only one group is specified in the predicate.

It is not possible to ask for several groups at one time, while omitting others. For instance, if ten groups have been defined to OMEGAMON, a query cannot ask for groups 3, 5, and 9. Thus, if the Bottleneck Analysis query asks for more than one group (using multiple predicates or use of something other than an EQ logical operator), an error message is written to the RKLVLOG and the query is ignored. A display of all transactions is obtained by omitting the Group Number predicate from the Bottleneck Analysis query.
CICS Wait Reason Distribution bar chart

If you would like to replace the wait reason description with a shorthand version of the resource type and name, you can add the Resource Type/Name attribute to your query using the CandleNet® Properties page.

This tactic will, for example, replace “FC:Wait for user” with “FCCFQS/(none)” for those accustomed to the classic monitor. The display threshold is controlled using the Display Threshold attribute supplied in the default query and can be changed to any desired value. Omitting the attribute, or setting its value to zero, will result in the display of all defined wait reason. Users of the classic and XE monitors can set any value they choose.

Related information
- Bottleneck Analysis attribute group
- Attribute Groups Used by Predefined Workspaces
- Organization of the Predefined Workspaces

CICS region name workspace

The predefined CICS_ region_name workspace contains the
- Capacity Tracking plot chart, which plots active tasks as a percentage of the AMXT system initialization parameter and CPU time consumed in the CICS address space during the current interval
- Transaction Activity bar chart, which shows the CPU time consumed by each transaction

This workspace displays data provided by the Region Analysis attributes. This workspace also provides access to the Databases workspace if you choose View > Workspaces from the menu

Related information
- Region Analysis attribute group
- Databases
- Attribute Groups Used by Predefined Workspaces
- Organization of the Predefined Workspaces

Connections Analysis workspace

The CICS Connections Analysis report lets you determine activity and workloads across TORs. It enables you to determine the efficiency of multiregion operation (MRO) and intersystem communication (ISC) links and detect capacity constraints that might cause bottlenecks.

For example, you can readily determine
- The number of connections between this region and others
- The number of transactions per minute
- The number of active LU2
- CPU usage
- Link usage
- The balance of work across Terminal Owning Regions (TORs)
- The number of automatic initiate (AIDs) associated with the worst performing MRO and ISC connections
The predefined Connections Analysis workspace contains the:
- Link Utilization bar chart, which shows the percentages of total, secondary, and primary links in use
- Connections Analysis table view, which shows activity and workloads across terminal owning regions (TORs)

The table view also provides a link to the Link Summary workspace.

**Related information**
- Connections Analysis attribute group
- Link Summary attribute group
- Attribute Groups Used by Predefined Workspaces
- Organization of the Predefined Workspaces

### Databases workspace

The predefined Databases workspace contains the
- Database Control for IMS table view, which shows the status of the CICS database control (DBCTL) interface for the CICS region
- DB2 Summary table view, which reports on the DB2 status for the CICS region
- DB2 Task Activity table view, which reports on task activity or the CICS region

To access the Databases workspace, display the CICS Capacity Tracking workspace by selecting a smfid.cicsname node on the navigation tree and choose **View > Workspace** from the menu.

**Related information**
- DBCTL Summary attribute group
- DB2 Summary attribute group
- DB2 Task Activity attribute group
- Attribute Groups Used by Predefined Workspaces
- Organization of the Predefined Workspaces

### DB2 Summary workspace

The predefined DB2 Summary workspace contains the DB2 Summary table view which shows whether or not a CICS region is attached to DB2. This table view displays data provided by the DB2 Summary attributes.

This workspace also contains a take action view that lets you enter console commands and a 3270 terminal session.

**Related information**
- DB2 Summary attribute group
- Attribute Groups Used by Predefined Workspaces
- Organization of the Predefined Workspaces

### DB2 Task Activity workspace

The predefined DB2 Task Activity workspace contains the
- DB2 Task Activity table view, which shows task activity for each monitored CICS region and provides information on threads, waits, and abending DB2 transactions
- DB2 Thread Activity bar chart, which compares percentages of threads in use, threads in wait, and threads in abort states

**Related information**
- DB2 Task Activity attribute group
- Attribute Groups Used by Predefined Workspaces
- Organization of the Predefined Workspaces

**DBCTL Summary workspace**

The predefined DBCTL Summary workspace contains the Database Control for IMS table view. This table view shows the status of the CICS database control (DBCTL) interface for the monitored CICS region. This table view displays data provided by the **DBCTL Summary** attributes. The bar chart shows the DL/I Control Block status.

**Related information**
- DBCTL Summary attribute group
- Attribute Groups Used by Predefined Workspaces
- Organization of the Predefined Workspaces

**Dispatcher Summary workspace**

This workspace is designed to give you an idea of the level of activity across the TCBs that CICS runs. It shows the start and stop time of given tasks, the peak and current number of tasks, and the current number of TCBs that are in use by the CICS region.

In order to get more detail about specific TCBs, the link connects you to the Dispatcher TCB Mode and the Dispatcher TCB Pool workspaces.

The predefined Dispatcher Summary workspace contains:
- A pie chart of the Address space activity.
- A bar chart of the TCB activity.
- Table view showing the attributes of the task and transaction activity with each TCB runs. It shows the runaway task intervals and number of tasks active

From this workspace you can link to:
- Dispatcher TCB Mode workspace
- Dispatcher TCB Pool workspace.

To use this link you can either click the icon on the table or select a row in the Dispatcher summary table, right-click and select the workspace from the pop-up panel.

**Related information**
- Dispatcher Summary attribute group
- Attribute Groups Used by Predefined Workspaces
- Organization of the Predefined Workspaces
Dispatcher TCB Mode workspace

This allows you to see where all the work is going on within CICS especially now that there are so many TCBs that are used by CICS. Through this workspace you can monitor the TCBs to check to see if there is unusually high activity in any particular TCB. You can want to set an alert (threshold) so that you are warned when a TCB reaches a particular level.

You can link to this from the Dispatcher summary workspace.

The predefined Dispatcher TCB Mode workspace contains:
- A bar chart of the TCB processor utilization to show the Mode name against the CPU time in seconds.
- A Table view showing the all the TCB statistics associated with each of the modes. There are several clocks that give you the amount of real time used by either MVS waits or dispatches and also CPU time used by either a task or a TCB.

Related information
- Dispatcher TCB Mode attribute group
- Attribute Groups Used by Predefined Workspaces
- Organization of the Predefined Workspaces

Dispatcher TCB Pool workspace

This shows the number of TCBs that are allocated to a particular pool (JVM, OPEN, or HP), whether they are attached, in use, both the total and the current waiting time associated with that pool. This groups the TCBs in a logical way. It shows the number of the current tasks that are waiting and the peak number of tasks that have been waiting for each TCB.

Using this data you can set a threshold to ensure that when a given limit is reached you are given a warning.

The predefined Dispatcher TCB Pool workspace contains the:
- TCB pool backlog bar chart. This plots the TCB pool against the Time spent waiting for a TCB in seconds.
- This shows the TCBs that can be allocated to a pool, for example, JVM, OPEN, HP or N/A, waiting times, total, current, and peak number of waits, the total current and peak mismatch times.

Related information
- Dispatcher TCB Pool attribute group
- Attribute Groups Used by Predefined Workspaces
- Organization of the Predefined Workspaces

Dump Analysis workspace

The predefined Dump Analysis workspace contains:
- CICS Dump Analysis table view that shows data on current dump activity and statistics on any dumps
- Recent CICS Dump Activity bar chart that shows the number of dumps for a CICS region and that gives data for
  - System Dumps in Last Hour
– **Transaction Dumps in Last Hour**

• Total CICS Dumps bar chart that shows the total number of dumps for a CICS region and that gives data for:
  – **System Dumps**
  – **Transaction Dumps**

**Related information**
- Dump Analysis attribute group
- Task Class Analysis attribute group
- Attribute Groups Used by Predefined Workspaces
- Organization of the Predefined Workspaces

### Dump Details workspace

This provides a list of the abends that have occurred in a CICS region and divides them into system and transaction abends. This information comes through the service task that runs within CICS (OMEGINIT). If you do not have the service task running then this report will be empty. The service task is activated either through OMEGINIT or through the PLT. See “Service Task Details workspace” on page 336.

The predefined Dump Details workspace contains:
- Table view that records all the abends listed by their abend codes (either system or transaction) for a given CICS region.
- Bar chart to show the number of both system and transaction dumps. It differentiates between the dumps that have been taken and those that have been suppressed.

**Related information**
- Dump Details attribute group
- Attribute Groups Used by Predefined Workspaces
- Organization of the Predefined Workspaces

### Dynamic Storage Details workspace

You access this workspace from the link in the Storage Analysis workspace. This allows you to investigate any of the DSAs that can be heavily loaded.

The predefined Dynamic Storage Details workspace contains:
- Storage Utilization circular gauge that shows the percentages of dynamic storage being used for the DSA that you selected from the Storage analysis workspace.
- Extent allocation bar chart. This shows the Extents in use and compares them with those allocated.
- CICS Key DSA detailed Analysis Table. For the selected DSA this shows:
  – The subpool requests (ADD and DEL) and the number of requests purged.
  – The cushion size and cushions released.
  – The Getmain and Freemain requests and the number of GETMAIN failures.
  – The Extents in use and the Extents allocated.
  – The current, total and HWM tasks suspended.
  – The short on storage state, the total times the DSA went SOS and the last time that the DSA went SOS.
  – Storage violations.
  – The storage available, allocated, and in use.
  – The page use.
  – The last time the statistics were reset.
Enqueue Analysis workspace

The predefined Enqueue Analysis workspace contains the:

- CICS Enqueue Analysis table view that shows such data as the number of tasks waiting for an enqueue, each enqueue name or address, and the ID of the CICS region that owns the resource.
- Resource Wait Counts bar chart that shows the number of tasks waiting for an available resource, by resource name.

This workspace displays data provided by the Enqueue Analysis attributes.

File Control Analysis workspace

The predefined File Control Analysis workspace contains:

- The File Control Analysis table view that displays the number of tasks with string waits and the number of tasks with buffer waits.
- File resource contention bar chart that compares the number of tasks with string waits and the number of tasks with buffer waits.

From this workspace you can link to:

- File Control Summary workspace: This provides links to four workspaces:
  - File Control Details
  - File Control Statistics
  - File Control Journal and Logging
  - File Control Data Table Statistics

These workspaces provide all the information that you need to monitor file control as well as the ability to use the Take Action function to change the properties of the files in your CICS system.

- CICS Region Data sets workspace.

File Control Data Tables Statistics workspace

This workspace shows those files that are data tables, updates and deletes. Complete view of what goes on in data tables.

The predefined File Control Data Tables Statistics workspace contains:
• Data Table Statistics bar chart: This compares the number of Successful reads, Updates, Deletes, Records loaded, Records added, Failing reads, Leads failed for full, adds Loads rejected, and add failed for full for each file.

• Data Tables entries in use bar chart: This compares the current entries in use with the maximum entries allowed in use.

• File control data tables statistics table view: For each file that is a data table, this shows the data table type, status, whether is it loaded, recoverable or available. It shows the number of lost records, the current number of records, the maximum number of records, and the number that are in use. In addition it shows Successful reads, Updates, Deletes, Records loaded, Records added, Failing reads, Leads failed for full, adds Loads rejected, and add failed for full for each file.

Related information
File Control Analysis attribute group
Attribute Groups Used by Predefined Workspaces
Organization of the Predefined Workspaces

---

**File Control Details workspace**

You access this workspace through the File Control Analysis workspace. This adds more detail about each file. You could use this workspace if you had identified a problem file.

The predefined File Control Details workspace contains:

• A File String utilization bar chart. This compares the active strings with the number of strings for each file.

• File Control Details table view displays the access method, status (open and enable) type of file, record file format, remote system (if the file is remote), the number of active strings, the total number of strings defined for each file, the number of string waits per file. It also provides details of remote files.

There is a link to the File Control Statistics workspace.

Related information
File Control Details attribute group
File Control Statistics
Attribute Groups Used by Predefined Workspaces
Organization of the Predefined Workspaces

---

**File Control Journal and Logging workspace**

You access this workspace through the File Control Analysis workspace.

The predefined File Control Journal and Logging workspace contains:

• File Control Journal information table view. For each file it shows the number of journal requests, whether journal, Journal forward recovery and Log Recovery.

• File Control Log Information table view: For each file it shows the MVS Logstream name, the log options, the Log backout option and whther the file is defined as RLS in the SIT.

There is a link to the File Control Details workspace.

Related information
File Control Analysis attribute group
File Control Statistics workspace

You access this workspace through the File Control Analysis workspace. This provides data about the detailed activity of each file.

The predefined File Control Analysis workspace contains the

- File Request bar chart: For each file it shows the Number of adds, browses, deletes, number of reads, number of read updates, and the number of updates,
- Current File Waits bar chart: This compares the number of buffer waits with the number of string waits for each file.
- File Control Statistics table view: For each file it shows the number of adds, browses, deletes and updates to a file, current files waits, and the time the file was opened.

There is a link to the File Control Details workspace.

File Control Summary

Following the link from the File Control Analysis workspace, this workspace adds considerable detail about the files that CICS is using. This workspace contains:

- A File string bar chart that compares active strings with the total number of strings.
- A File Control summary table view that gives details of the file that you selected from the File Analysis workspace. The information that is provides includes: the file access name, the status of the file, remote or local, the number of strings associated with the file, and the number of string waits for that file.

This workspace is the link to four other workspaces:

- File Control Details: this gives the details of the time that the file was opened, file format, record format, disposition, resource security level. It also includes the properties of the file, whether add, browse, update, and delete requests are allowed. If the file is remote and the data set name where the file is located.
- File Control Statistics: This is accessed from this workspace and from the File Control Details workspace. It adds further information to that provided by the File Control Details workspace.
- File Control Journal and Logging:
- File Control Data Table Statistics

Intercommunication Summary workspace

The predefined Intercommunication Summary workspace contains the:
• CICS Intercommunication Summary table view that shows such data as the number of connections among this region and others, the average number of transactions executed in one minute of elapsed time, and the name of the connection with the highest percentage of ISC links in use.
• Connection Utilization bar chart that shows data for the connection status of a specific CICS region and that gives data for:
  – Worst MRO Connection Number of Links Defined
  – Worst MRO Connection Number of AIDs Defined
  – Worst ISC Connection Number of Links Defined
  – Worst ISC Connection Number of AIDs Defined
• Worst MRO Connection Percent of Links in Use circular gauge
• Worst ISC Connection Percent of Links in Use circular gauge

**Related information**

Intercommunication Summary attribute group
Attribute Groups Used by Predefined Workspaces
Organization of the Predefined Workspaces

---

**Internet Status workspace**

The predefined Internet Status workspace contains the
• CICS Internet Status table view that shows such data as the state of the Web interface and whether or not the TCP/IP application is waiting
• Web browser view, showing the URL address of the Web site being viewed

**Related information**

Internet Status
Attribute Groups Used by Predefined Workspaces
Organization of the Predefined Workspaces

---

**Interval Control Element workspace**

The predefined Interval Control Element workspace contains:
• Take Action view. This allows you to purge an ICE either directly or using the CICS supplied transaction, CEKL. Selecting either of these options prompts you for the ICE address. Instead you can select the ICE from the table view, right-mouse click, and a pop-up window shows the Take Action options.
• Table view showing all the attributes. From the table view you can select one of the definitions, right-click and a pop-up window shows all the options that appear in the Take action window.

**Related information**

Interval Control Element
Attribute Groups Used by Predefined Workspaces
Organization of the Predefined Workspaces

---

**Java Program Analysis workspace**

This Java Program Analysis workspace monitors Java programs in your CICS regions. For example, you can notice that a particular program is being very heavily used and need to take action to reduce the dependency on that program.

The predefined Java Program Analysis workspace contains the:
• A 3270 view: This is used to directly access your z/OS system from CandleNet Portal.
• Java Program Analysis table view allows you to monitor the status of each Java program, region by region. It reports the name of the profile that the program belongs to, the status of the program, the number of times that the program is used, the transaction that is invoking the program, the execution state, the remote name if applicable, the execution key, the data location, and the JVM class.

It is also possible to view this data through the JVM Pool and the JVM Profile workspaces.

**Related information**
- JVM Program Analysis attribute group
- Attribute Groups Used by Predefined Workspaces
- Organization of the Predefined Workspaces

**Journal Analysis workspace**

The predefined Journal Analysis workspace contains the
• Journal Analysis table view that shows such data as the connection status of the CICS journal and whether or not the journal has a current status of "Waiting for an Outstanding WTOR" (Write-To-Operator-with-Reply)
• Message Log view. The Message Log gives you an overview of changes in situation status on your monitored network. CandleNet Portal displays a row of data for each status change, placing newly arrived rows at the top. See the CandleNet Portal online help for details on the Message Log view.

**Related information**
- Journal Analysis attribute group
- Attribute Groups Used by Predefined Workspaces
- Organization of the Predefined Workspaces

**JVM Analysis workspace**

The JVM Analysis workspace allows you to monitor the number of JVM tokens that are used in your system. You might set a threshold to indicate when the number of JVM tokens approaches the allocated number. Through this workspace you might then increase the allocated number using the Take action function.

The predefined JVM Analysis workspace contains:
• JVM Activity bar chart: This compares the amount of time that a task has used a JVM token.
• Java Virtual Machine Analysis table view: This shows the JVM token used, the age and the allocated age of that token for each CICS region. The task and the profile that is using the JVM is reported together with the Phasingout status, the execution key, classcache status, and the reuse status.

**Related information**
- JVM Analysis attribute group
- Attribute Groups Used by Predefined Workspaces
- Organization of the Predefined Workspaces
**JVM Classcache workspace**

The JVM Class Cache workspace allows you to monitor the size of the JVM Classcache that is used in your system. You could set a threshold to indicate when the amount of cache that is free approaches the cache size for your CICS region. Through this workspace you might increase the cache size using the Take action function.

The predefined JVM Classcache workspace contains the:
- JVM Cache Availability bar chart compares the cache free with the cache size for your CICS region.
- Java Virtual Machine Classcache Details table view displays the status, the classcache size, the cache free, the start date and time and the total JVMs. Other details include the Reuse status, whether autostart is enabled or not, the associated profile name, the number of old caches, and the phasingout JVMs.

**Related information**
- JVM Classcache
- Attribute Groups Used by Predefined Workspaces
- Organization of the Predefined Workspaces

**JVM Pool Statistics workspace**

The JVM Pool Statistics Workspace allows you to monitor the level of activity in your JVM by reporting the total number of JVM requests, the current, peak and total number of requests. If you think that the number is excessive then you can use the statistics to analyze the type of request that can be causing the heavy load on your system.

The predefined JVM Pool Statistics workspace contains:
- A JVM Request distribution pie chart: this shows the JVM requests for classcache JVMs, JVM requests for JVM initialized, JVM requests for JVM mismatch, JVM requests for JVM reset, JVM requests for JVM terminated, and JVM requests for JVM reuse.
- Java Virtual Machine Pool Statistics table view: This allows you to view the total number of JVM requests, the current JVM request count, and the peak number of JVM requests. It also list the same data that is illustrated in the pie chart. In addition it shows the current, peak, and total class cache requests.

**Related information**
- JVM Pool Statistics
- Attribute Groups Used by Predefined Workspaces
- Organization of the Predefined Workspaces

**JVM Profile Analysis workspace**

The JVM Profile Analysis workspace provides a summary of the JVM profile for each CICS region.

The predefined JVM Profile Analysis workspace contains:
- A 3270 view of a CICS region.
- Java Virtual Machine Profile Analysis table view: This reports the JVM profile name, classcache status, reuse status, and the HFS file name for each CICS region.
LSR Pool Status workspace

The predefined LSR Pool Status workspace contains the
- Local Shared Resource Pools table view that provides information about the Local Shared Resource (LSR) pools that have been built in CICS for VSAM files
- LSR Pool Performance bar chart that provides data for each pool:
  - Percent of Active Strings
  - Lookaside Ratio

The table view provides information such as:
- The percentage of VSAM read requests that were satisfied without initiating I/O because the Control Interval (CI) was already resident in the buffer pool
- The status of the LSR pool
- The number of current string waits

Link Summary workspace

The predefined Link Summary workspace contains the
- Link Utilization bar chart, which shows the number of link transactions for each link terminal identifier
- Link Summary for Connection name table view, which provides detailed information about each link within a selected connection

The Link Summary for Connection name table view enables you to detect system problems before they can have a negative impact on applications. For example, you can obtain statistics on link usage that can alert you to a capacity problem. For each link, you can determine the
- Session status of the link
- Number of inputs and outputs
- Number of transaction and transmission errors
- Number of storage violations
- Various names and IDs associated with the link
- Name of the connection that owns the link session

To access the Link Summary workspace, select a table row in the Connections Analysis workspace. Right-click select Link To > Link Summary from the pop-up menu. The Link Summary workspace displays data provided by the Link Analysis attributes.

Log Stream Analysis workspace

The predefined Log Stream Analysis workspace contains the
• Log Stream Control Settings table view that shows the SIT parameters that affect log stream operation
• Log Stream Analysis table view that shows log stream configuration and performance data

Important: When the DE option of OMEGAMON is enabled, and the OMEGAMON XE for Sysplex product is installed, you can use the Link Wizard to connect the Log Stream Analysis report of CICSpelix to the "Coupling Facility Structures Data for Sysplex" display. In this way, a vast amount of information can be quickly obtained about a log stream and its underlying coupling facility. See Linking to the Coupling Facility Structures Data for Sysplex workspace.

Log Stream Control Settings table view

The Log Stream Control Settings table view helps you analyze the configuration of connected logs.

The workspace displays are provided by the Log Stream Analysis, "Connection Analysis” on page 108 and the System Initialization attributes.

Linking to the Coupling Facility Structures Data for Sysplex workspace

Note: To link to a detailed coupling facility workspace, OMEGAMON XE and OMEGAMON DE both need to be installed.

To link to a detailed coupling facility workspace:
1. Open the target OMEGAMON XE for Sysplex Coupling Facility Structures Data workspace.
2. Right-click a row in a table.
3. Select Properties from the pop-up menu.
4. Select the Coupling Facility Structures Data table from the Properties tree, then click Click here to assign a query.
5. In the Query editor, modify the variable for the Structure Name attribute to read as EQ SCICSLSA.LOGSTRNM. The Link Wizard will substitute the specified variable with the data it finds in the Structure Name column of the Log Stream Analysis workspace.
6. Click OK to save your changes to the query and to close the dialog.

Define and customize the link
1. Open the Log Stream Analysis workspace.
2. Right-click a row in a table.
3. Select Link Wizard from the pop-up menu.
4. Select Define New Link, then click Next.
5. Type a Name and Description in the text boxes, then click Next.
6. From the Navigator, select the Coupling Facility Structures Data for Sysplex workspace.
7. Click Next to open the Customize page and define the link further.
8. Click linkIsEnabled under the Symbols property.
9. Press the clear button to reset the expression box.
10. Select the Structure Name column for the selected row.
11. In the Operators section of Allowable Terms, select Not Equal.
12. Add the value ‘n/a’ including quotes, in the expression box after the Not Equal symbol.

13. Press the Test button to ensure the syntax is correct.

14. Click Finish. You can now invoke the link from where you started the Link Wizard.

15. Right-click a row in the table and select Link Anchor to set any desired properties.

16. If the Sysplex link is marked as the default, and "Link Indicator Always Enabled" is unchecked, the color of the link icon will reflect whether the row contains a valid structure name.

17. Click Save to save the link definition.

18. Test the link by right-clicking the source point and selecting the link from the Link To list in the pop-up menu.

See the CandleNet Portal Help for complete details on the Link Wizard and on creating your own queries.

**Related information**
- Log Stream Analysis attribute group
- "Connection Analysis" on page 108
- System Initialization
- Attribute Groups Used by Predefined Workspaces
- Organization of the Predefined Workspaces

---

**Message Queuing Analysis workspace**

The predefined Message Queuing Analysis workspace contains the:

- Message Queuing Requests bar chart, which shows 10 different types of request activity
- Busy TCBs linear gauge
- Message Queuing Analysis table view which helps you evaluate how the MQ connection for message Queuing can be affecting operations in your CICS environment

The Message Queuing Analysis table view provides information about such items as

- The status of the MQ connection
- Busy task control blocks (TCBs)
- API calls logged for an MQ connection
- The number of MQ calls that resulted in commits and backouts
- The number of MQ calls that were successfully completed
- The counts for specific types of MQ requests, for example, the number of calls applications issued for getting messages from the queue

**Related information**
- MQ Connection Details attribute group
- Attribute Groups Used by Predefined Workspaces
- Organization of the Predefined Workspaces
MVS TCB Details workspace

CICS uses an increasing number of TCBs, the MVS TCB Summary workspace and the MVS TCB Details workspaces can be used to monitor the level of activity in the TCBs.

The predefined MVS TCB Details workspace contains:
- TCB Processor utilization stacked bar chart: shows graphically the level of activity (the number of CPS seconds) in each of the TCBs.
- MVS Task Control Block Details table view: shows the name and the address of each TCB, whether it is a CICS TCB, below or above the 16 MB line, the transactions being run in the TCB, the current task number and the CPU time. In addition it shows the relationships between the TCBs.

Related information
MVS TCB Details attribute group
Attribute Groups Used by Predefined Workspaces
Organization of the Predefined Workspaces

MVS TCB Summary workspace

The MVS TCB Summary workspace compares the CICS and non-CICS utilization of the TCBs in your system. If your z/OS system is running slowly, it can due to the heavy utilization a non-CICS resource.

The predefined MVS TCB Summary workspace contains:
- Address Space Memory Allocation Bar chart: This provides a comparison between the CICS and non-CICS TCB both above and below the 16 MB line.
- Address Space CPU Utilization pie chart: This compares the CPU utilization of CICS TCBs with non-CICS TCBs.
- MVS Task Control Block Summary table view: shows the name, address space CPU time, address space SRB time of each TCB. It includes the amount of CPU time and SRB time since reset. the remainder of the table allows you to compare CICS and non-CICS TCB usage.

Related information
MVS TCB Summary attribute group
Attribute Groups Used by Predefined Workspaces
Organization of the Predefined Workspaces

Online Data Viewing workspace

The Online Data Viewing workspace displays the information collected from the historical data analysis that has been set for each CICS region.

The predefined Online Data Viewing workspace contains the:
- Historical Transaction Processor Utilization bar chart. This compares the amount of CPU (in seconds) used by each task.
- Historical Transaction Overview table. This shows the start and end time that was set for the collection of historical data.

For each task, it shows the transaction, terminal ID, transaction type, userid, program ID, CPU time Response time storage HWM, file requests, terminal I/O and Abend code for that task.
**Using the Query editor**

Using the query editor, you can filter the data that has been collected through historical data collection. More information to come.

**Related Information**

- Online Data Viewing
- Attribute Groups Used by Predefined Workspaces
- Organization of the Predefined Workspaces

---

**Pagepool Details workspace**

The Pagepool details workspace reports the status of storage of all eight DSA/EDSAa in CICS regions. It extends the information collected in the storage analysis workspace. There are a large number of attributes associated with the reports and they all provide good tuning opportunities.

It is through this workspace that you would monitor the number of storage violations and the number of times that your CICS regions went short on storage. You can set up a threshold to sound an alert if either the DSA or EDSA use percentage is reaching a critical level. Alternatively you can want to set up a situation that automatically increases the size of the of a DSA or EDSA while you investigate the cause of the problem.

You can use this workspace, specifically the Pagepool Details table to investigate the causes of the problem as it gives details about the number of suspensions, cushions, extents, GETMAINs, and FREEMAINs for each region.

Due to the large number of attributes in this group you can want to regroup them and in some cases delete them from your view. As with all the table views, you can either de-select the columns and also slide them to the left of the table.

The predefined Pagepool Details workspace contains the:
- DSA Storage Utilization bar chart: This shows the size, usage and HWM of each of the CDSA, UDSA, SDSA and the RDSA.
- EDSA Storage Utilization bar chart: This shows the size, usage and HWM of each of the ECDSA and ESDSA.
- Pagepool Details table view: This shows a large number of attributes relating to storage in each DSA and EDSA of your CICS regions. Using this table you monitor the number of SOS occurrences, and the total SOS time. The DSA Use percentage, DSA usage, HWM, LWM, amount of free space, cushion size. the number of GETMAINs and FREEMAINs for each region.

**Related Information**

- Pagepool Details attribute group
- Attribute Groups Used by Predefined Workspaces
- Organization of the Predefined Workspaces

---

**Pagepool Summary workspace**

The Pagepool summary workspace reports the status of storage of both DSA and EDSA in your CICS regions. There are a large number of attributes associated with the reports and they all provide good tuning opportunities. If you need more details about specific details use the Pagepool details workspace.
The predefined Pagepool Summary workspace contains the:

- **DSA Storage Utilization bar chart**: This shows the current usage, current limit, current total and the current high water mark.
- **EDSA Storage Utilization bar chart**: This shows the current usage, current limit, current total and the current high water mark.
- **Pagepool Summary table view**: This provides an overview of the Unique and Common subspace users (current, total, HWM) for each CICS region. It also includes current DSA/EDSA Usage, Limit and Total size in both KB and MB. The attributes have been provided in both KB and MB, you can want to regroup them and in some cases delete them from your view. As with all the table views, you can either deselect (right-mouse click) the columns and also slide them to the left or right of the table.

**Related information**

- Pagepool Summary attribute group
- Attribute Groups Used by Predefined Workspaces
- Organization of the Predefined Workspaces

---

**Region Data Sets workspace**

The Region Data sets workspace is accessed from the Region Overview Data workspace. These tables show all the information about your CICS Data sets. The more important RPL data sets are shown in their own table.

The predefined Region Data Sets workspace contains two tables:

- **CICS RPL Datasets table view**: This includes the DDNAME (for example, DFHRPL), The concatenation number, the data set name, the data set type (in this case, RPL), the file access, and the file attributes.
- **CICS Region Data sets**: This includes the DDNAME (for example, STEPLIB), The concatenation number, the data set name, the data set type, the file access, the file attributes, data set disposition, and the VSAM open status.

**Related information**

- Region Datasets
- Attribute Groups Used by Predefined Workspaces
- Organization of the Predefined Workspaces

---

**Region Overview workspace**

The Region Overview workspace lets you review operations for every region of a CICSplex. You can analyze this data to detect system problems before they have a negative impact on operations.

The predefined Region Overview workspace contains the

- **Transaction Rate plot chart**
- **Minimum Tasks Percent circular gauge**
- **CICS CPU Utilization circular gauge**
- **CICS Region Overview table view**: This provides data on more than 30 items for you to evaluate. For example, it provides information about:
  - Short-on-storage (SOS) conditions for the DSA and EDSA
  - The number of tasks that are waiting for buffers and strings
  - The number of enqueues for a resource that also has tasks waiting for it
  - The numbers of active tasks and total tasks within a region expressed as a percentage of their defined limits
The percentages of CPU, dynamic storage area (DSA), and extended dynamic storage area (EDSA) being used
- The number of connections, AIDs, and ICEs
- The maximum contiguous free space in the local system queue area (LSQA) and operating system core (OSCOR)
- The number of control intervals (CIs), transient data strings, and temporary storage strings being used by the transient (DFHINTRA) and the auxiliary temporary storage (DFHTEMP) datasets
- Status of information for the Web interface and MQ adapter
- The occurrence of system and transaction dumps
- Storage violations
- I/O rate and page rate per second
- Transactions and program compressions per minute
- VTAM action control block (ACB)

You can view either a current CICS Region Analysis report for the current interval or an historical version for a time span that you specify.

This report group also provides access to the CICS Region Summary chart.

**Response Time Analysis workspace**

The predefined Response Time Analysis workspace contains the

- Response Time Analysis table view that provides response times for active groups defined with OMEGAMON. Data displays for only those groups that have registered activity within the last nine minutes.
- Current Response bar chart that shows response time data for the active groups that have registered activity within the current minute.

Right-click on a row of data to view information concerning the elements of an active group. The Response Time Details workspace displays up to nine minutes of previous response time data for the selected active OMEGAMON group.

**Response Time Details workspace**

The predefined Response Time Details workspace contains the

- Response Time Details table view that provides the previous nine minutes of response time data for the active group selected from the Response Time Analysis workspace
- Current Response bar chart that shows response time data for the selected active group that has registered activity within the current minute.
Transactions, programs, and terminals all present a single row of response time information for each group element. However, when the elements for a logical unit are displayed, three rows of data are provided for each logical unit that show the end-to-end, network, and host times.

The end-to-end value represents the overall response time of the logical unit and is the sum of the network and host times. The bar chart delivered shows only the end-to-end value. This can easily be changed, using the CandleNet Portal Properties page, to track the network and host components that comprise the end-to-end response time. For example, a stacking bar chart might be used to present network and host time in a way that quickly shows where a logical unit is encountering problems.

If you want to view all active elements in a single display, you can do so by removing the GROUPNUM attribute from the default query shown in the CandleNet Portal Properties page. The query can ask for elements in a single group, or for all groups. When the GROUPNUM attribute is removed, it signals the agent to collect and return data for every active response time element.

### Related information

- Response Time Elements
- Attribute Groups Used by Predefined Workspaces
- Organization of the Predefined Workspaces

### Service Level Analysis workspace

The predefined Service Level Analysis workspace contains:

- The Service Level Analysis table view that displays the overall performance of each service class defined within a workload. A high percentage of time spent for different types of waits can indicate potential problem areas.
- The CICS Service Class Response Time bar chart that shows the response times for each service class

Each table row in the Service Level Analysis table view contains summary information about a service class for the collection interval that falls within the reported time span. If the reported time span includes multiple collection intervals for a service class, each interval is reported separately. For each service class entry, the default analysis includes the

- Service class name
- Collection interval end date and time
- Response time goal, including the percent of goal, where appropriate
- The number of completed transactions
- Performance data, such as average response time, performance index, and percent-of-goal information

### Related information

- Service Class Analysis attribute group
- Service Class Analysis by Region
- Service Class Analysis by Transaction
- Attribute Groups Used by Predefined Workspaces
- Organization of the Predefined Workspaces
Service Class Analysis by Region workspace

The predefined Service Class Analysis by Region workspace contains the Service Class Analysis by Region table view. This table view identifies the CICS regions in which tasks within a service class completed in the reported time span. The default analysis includes the:

- Collection interval end date and time
- CICS region name
- Response time goal
- Number of completed transactions
- Performance data, such as the average transaction response time and corresponding performance indexes, and percent-of-goal information

This workspace also contains a bar chart.

This workspace displays data provided by the Service Class Analysis attributes. This workspace also provides access to the Databases workspace if you choose View > Workspaces from the menu.

**Related information**

- Service Class Analysis attribute group
- Databases
- Attribute Groups Used by Predefined Workspaces
- Organization of the Predefined Workspaces

Service Class Analysis workspace

The Service Class Analysis by Region report identifies the CICS regions in which tasks within a service class completed in the reported time span.

The predefined Service Class Analysis workspace contains the

- Service Class Analysis by Transaction query. This query summarizes performance data for tasks within a service class that completed in the reported time span. Each table row contains CICS Service Level Analysis data for one service class. The default analysis includes the:
  - Collection interval end date and time
  - Transaction ID
  - Response time goal
  - Number of completed transactions (by ID)
  - Performance data, such as average response time, performance index, and percent-of-goal information

This workspace also provides access to the Databases workspace if you choose View > Workspaces from the menu.

**Related information**

- Service Class Analysis attribute group
- Attribute Groups Used by Predefined Workspaces
- Organization of the Predefined Workspaces
Service Task Details workspace

The Service Task Details workspace does not return any data to do with CICS. It monitors the service task of OMEGAMON that must be running if you want to take dumps. If you are unable to take a dump, check with this workspace to see if the service task is running.

The predefined Service Task Details workspace contains the:

• Message Log Table view: This shows the status, the name, the display item, Origin node, Global Time stamp and the Local times for each message.
• OMEGAMON Service Task Diagnostics: This returns data relating to the status of OMEGAMON. It displays the initialization status OMEGAMON global status area, XMIT DD name and common interface STC name. The service task execution result tells you if the request have been completed successfully. If you are unable to obtain a dump then this message tells you that the request is not running and that you need to check your OMEGAMON installation and configuration.

Related information
Service Task Details attribute group
Attribute Groups Used by Predefined Workspaces
Organization of the Predefined Workspaces

Storage Analysis workspace

The predefined Storage Analysis workspace contains the

• Dynamic Storage Analysis table view that provides an overview of dynamic storage area being used for a single CICS region
• DSA Utilization and EDSA Utilization circular gauges that show the percentages of dynamic storage and the extended dynamic storage areas being used
• CICS Storage Allocation pie charts that compare how much storage is in use for the DSA and the EDSA

The Dynamic Storage Analysis table view helps you determine if there are any storage-related problems, such as a short-on-storage (SOS) condition. The table view reports

• The limit set for storage in kilobytes
• The amount of allocated storage in use in kilobytes
• The amount of storage in use in kilobytes
• The percentage of storage being used
• Short-on-storage conditions for the DSA and EDSA
• The number of tasks waiting for buffers and strings

This workspace displays data provided by the Storage Analysis attributes.

Related information
Storage Analysis attribute group
Attribute Groups Used by Predefined Workspaces
Organization of the Predefined Workspaces

Subpool Details workspace

The predefined Subpool Details workspace contains the:
• Horizontal stacked bar chart comparing the number of calls made in each subpool and distinguishing between the FREEMAIN and GETMAIN calls.
• The table view shows all the attributes of the subpool:
  – DSA name, index, its length, boundary and associated subpool
  – The number of Getmain and Freemain accesses for each subpool
  – DSA use percentage
  – Initial free space (in bytes, KB, and MB)
  – Accumulated element length (in bytes, KB, and MB)
  – Current page storage (in bytes, KB, and MB)
  – Current element count
  – High-water mark (in bytes, KB, and MB)

In this table there is a clear opportunity to customize the table view so that it shows the most appropriate values for your sites for the four fields that are duplicated. Use the query editor to do this.

Related information
Subpool Details attribute group
Attribute Groups Used by Predefined Workspaces
Organization of the Predefined Workspaces

System Initialization workspace

The predefined System Initialization workspace contains SIT keywords, their descriptions, and associated values are displayed.

Use this workspace to quickly verify that all of your SIT definitions are properly set.

This workspace displays data provided by the System Initialization attributes.

Related information
System Initialization
Attribute Groups Used by Predefined Workspaces
Organization of the Predefined Workspaces

Task Class Analysis workspace

The predefined Task Class Analysis workspace contains the
• Task Class Distribution bar chart, which shows what percentages of the class limits are being used by active and queued tasks
• Task Class Analysis table view, which shows activity limits reached within a transaction class or within a queue for a transaction class

The table view lets you view information about peak activity and the
• Number of times a transaction class limit has been reached
• Current task count in each transaction class
• Number of tasks that can be queued

Related information
Task Class Analysis attribute group
Attribute Groups Used by Predefined Workspaces
Organization of the Predefined Workspaces
TCPIP Service Statistics workspace

The TCP/IP Service Statistics workspace is used to monitor the status of those connections that use TCP/IP, for example, your internet connections. It should be used in conjunction with the TCP/IP statistics workspace. These statistics can be accessed online using the EXEC CICS COLLECT STATISTICS TCPIP comma

The predefined TCP/IP Service Statistics workspace contains the:
- Internet Message Traffic bar chart: This compares the number of sends and the number of receives for each TCP/IP service.
- TCP/IP Service Statistics table view. The lists the status, the service open, TCP/IP service IP address, the port number in use, the protocol, the backlog, the attach time security, SSL type, client authentication, TCP/IP Service privacy, TCP/IP Service WLM DNS group, TCP/IP service prefix, transaction ID, URM, number of transactions, current and peak number of transactions, the number of sends and receives, and the number of bytes sent and received for each TCP/IP service.

Related information
- TCP/IP Service Statistics
- Attribute Groups Used by Predefined Workspaces
- Organization of the Predefined Workspaces

TCPIP Statistics workspace

The TCP/IP Statistics workspace is used to activity of your TCP/IP connections. The statistics report the volume of inbound and outbound activity. It should be used in conjunction with the TCP/IP Service statistics workspace. These statistics can be accessed online using the EXEC CICS(R) COLLECT STATISTICS TCPIP command.

You can use this workspace to warn you when the Maxsockets value is being reached by comparing the Maximum sockets limit with the Current inbound and outbound sockets. Alternatively you can set a threshold to warn you when the number of times that Maxsockets has been reached or if any timeouts have occurred while at Maxsockets.

The predefined TCP/IP Statistics workspace contains the:
- Inbound Socket Activity bar chart: This compares the current inbound sockets, the number of inbound sockets created, and the peak number of inbound sockets.
- Outbound Socket Activity bar chart: This compares the current outbound sockets, current persistent sockets outbound, the number of outbound sockets closed, the number of outbound sockets created, the peak number of outbound sockets, and the peak number of persistent sockets outbound.
- TCP/IP Statistics table view: This displays maximum number of sockets available and reports current and peak number of sockets in use for both inbound and outbound activity. It also reports current and peak number of persistent sockets in use for both inbound and outbound activity. To help monitor the performance of your system it reports the number of times at Maxsockets, the total, current and peak number delayed at Maxsockets, and the total and current delay time at Maxsockets. The SLSCache setting, and the current active SSL sockets and the maximum number of SSL TCBs is displayed. The average and current Maxsockets delay time is calculated.
Related information

TCP/IP Statistics
Attribute Groups Used by Predefined Workspaces
Organization of the Predefined Workspaces

Temporary Storage Queues workspace

The predefined Temporary Storage Queues workspace contains:

• A table view that lists the temporary storage pools and queues that exist in the monitored CICS system. The table shows the size of the items in each queue and identifies the transaction that created the queue.

• A bar chart that provides data on the number of items in the temporary storage queue, by queue identifier.

This workspace displays data provided by the Temporary Storage Detail attributes.

Important: When the DE option of OMEGAMON is enabled, and the OMEGAMON XE for Sysplex product is installed, you can use the Link Wizard to connect the Temporary Storage Queues report of CICS to the “Coupling Facility Structures Data for Sysplex” display. In this way, a vast amount of information can be quickly obtained about a TS queue and its underlying coupling facility. See Linking to the Coupling Facility Structures Data for Sysplex workspace.

Linking to the Coupling Facility Structures Data for Sysplex workspace

Note: To link to a detailed coupling facility workspace, OMEGAMON XE and OMEGAMON DE both need to be installed.

To link to a detailed coupling facility workspace:

1. Open the target OMEGAMON XE for Sysplex Coupling Facility Structures Data workspace.
2. Right-click a row in a table.
3. Select Properties from the pop-up menu.
4. Select the Coupling Facility Structures Data table from the Properties tree, then click Click here to assign a query.
5. In the Query editor, modify the variable for the Structure Name attribute to read as EQ $CICSTSD.QUEUESTR$. The Link Wizard will substitute the specified variable with the data it finds in the Structure Name column of the Temporary Storage Queues workspace.
6. Click OK to save your changes to the query and to close the dialog.

Define and customize the link

1. Open the Temporary Storage Queues workspace.
2. Right-click a row in a table.
3. Select Link Wizard from the pop-up menu.
4. Select Define New Link, then click Next.
5. Type a Name and Description in the text boxes, then click Next.
6. From the Navigator, select the Coupling Facility Structures Data for Sysplex workspace.
7. Click Next to open the Customize page and define the link further.
8. Click `linkIsEnabled` under the Symbols property.
9. Press the clear button to reset the expression box.
10. Select the **Structure Name** column for the selected row.
11. In the Operators section of Allowable Terms, select **Not Equal**.
12. Add the value ‘n/a’ including quotes, in the expression box after the Not Equal symbol.
13. Press the Test button to ensure the syntax is correct.
14. Click Finish. You can now invoke the link from where you started the Link Wizard.
15. Right-click a row in the table and select **Link Anchor** to set any desired properties.
16. If the Sysplex link is marked as the default, and “Link Indicator Always Enabled” is unchecked, the color of the link icon will reflect whether the row contains a valid structure name.
17. Click Save to save the link definition.
18. Test the link by right-clicking the source point and selecting the link from the Link To list in the pop-up menu.

See the CandleNet Portal Help for complete details on the Link Wizard and on creating your own queries.

**Related information**
- [Temporary Storage Detail](#)
- [Attribute Groups Used by Predefined Workspaces](#)
- [Organization of the Predefined Workspaces](#)

**Temporary Storage Summary workspace**

The predefined Temporary Storage Summary workspace contains the:

- Shared Pool Status bar chart that compares the number of shared pools that are connected with those that are defined.
- Auxiliary Resource Use bar chart that compares the Percent Auxiliary Control Intervals (CIs) in use, with the Percent Auxiliary Active Strings and the Percent Auxiliary Active Buffers in use.
- Temporary Storage Summary table view that provides information about shared and auxiliary temporary storage queues

The table view of the storage queues that are accessed by multiple CICS jobs:

- Shows you how many shared pools are defined and connected
- Provides information on read and write activity
- Displays the number of control intervals (CIs), transient data strings, and temporary storage strings being used by the transient (DFHINTRA) and the auxiliary temporary storage (DFHTEMP) datasets

This workspace provides links to both the "Temporary Storage Details workspace" on page 341 and the "Auxiliary Temporary Storage workspace" on page 341

**Related information**
- [Temporary Storage Summary attribute group](#)
- [Attribute Groups Used by Predefined Workspaces](#)
- [Organization of the Predefined Workspaces](#)
**Auxiliary Temporary Storage workspace**

The predefined Auxiliary Temporary Storage Summary workspace contains the:
- Auxiliary Resource Utilization bar chart. This compares the percent CIs in use, with the percent strings in use, the percent buffers in use and the percent segments in use.
- Auxiliary Temporary Storage details table view. This displays:
  - The Number of CIs in use, the total number of CIs, their size, the number of HWM CIs in use, the PUTs larger than the CI size, the total CIS Reads and Writes, the formatted writes and the formatted writes from recovery.
  - The number of buffers allocated, buffers in use, the maximum, current and total write buffers, and the HWM of buffer waits.
  - The number of strings in use, strings allocated, HWM of strings in use, the current number of string waits, and the HWM of string waits.
  - The number of segments in use, segment size, segments per CI, and the total number of segments in use since the last restart.
  - The percentages of the CIs, strings, buffers and segments in use is supplied.

There is a link to the Temporary Storage Details workspace.

**Related information**

- Auxiliary Temporary Storage
- Attribute Groups Used by Predefined Workspaces
- Organization of the Predefined Workspaces

**Temporary Storage Details workspace**

The Temporary Storage Details workspace allows you to monitor the number of time that Temporary storage limits have been reached and therefore their potential impact on performance of your CICS regions.

You can set thresholds to alert you when the number of queues rises beyond an acceptable value.

The predefined Temporary Storage Details workspace contains the:
- Main temporary Storage Details table view. The reports the number of records that have been PUTQ and GET to and from main storage. The amount of main storage used and the HWM of main storage used.
- Temporary Storage details table view. This displays:
  - The number of the current, total and HWM queues.
  - The Total requests suspended.
  - The total number of records PUT, PUTQ to main and to Auxiliary temporary storage.
  - The number of records that have been retrieved (GET) from Auxiliary storage.
  - The number of items in the largest queue and the Unit table compression.

There is a link to the Auxiliary Temporary Storage Details workspace.

**Related information**

- Temporary Storage Details attribute group
- Attribute Groups Used by Predefined Workspaces
- Organization of the Predefined Workspaces
Terminal Storage Violations workspace

The predefined Terminal Storage Violations workspace contains the
• Terminal Storage Violations table view that shows data on the total number of storage violations that have occurred for each terminal
• Storage Violations Distribution bar chart, which shows the number of storage violations for specific terminals

Note: Once a storage violation has occurred, collection for this attribute group involves scanning the Terminal Control Table (TCT), which can carry considerable overhead. Exercise caution when using this attribute table for either workspaces or situations.

This workspace displays data provided by the Terminal Storage Violations and “Task Class Analysis” on page 184 attributes.

Related information
Terminal Storage Violations
“Task Class Analysis” on page 184
Attribute Groups Used by Predefined Workspaces
Organization of the Predefined Workspaces

Transaction Analysis workspace

This comprehensive view of transactions enables you to identify problem transactions across CICS regions and z/OS images for your CICS regions.

The predefined Transaction Analysis workspace contains the:
• Transaction Processor Utilization bar chart, which shows the amount of CPU time being used by each task.
• Transaction Analysis table view, which provides a system-wide view of executing transactions.

This comprehensive view of transactions enables you to identify problem transactions across CICS regions and MVS images for the CICSpex. This workspace displays data provided by the Transaction Analysis attributes.

The table view also provides links to the following workspaces:
• Units of Work workspace.
• Online Data Viewing workspace.
• Transaction Details workspace.
  – EIB Details
• Storage Use workspace.
• Timings workspace.
  – I/O and Others Waits Details
• Statistics workspace.
• Transaction and Program Definition workspace.
• Umbrella Information workspace.
• Remote Information workspace.
• Transaction File Details workspace.
• Transaction TSQueue Details workspace.

To access any of these workspaces, select a table row in the Transaction Analysis workspace. Right-click and select Link To > workspace from the pop-up menu.
With OMEGAMON DE installed, you can use the **DB2 Correlation Identifier** column available with the Transaction Analysis workspace to define a link to the DB2 Thread Exceptions workspace supplied with OMEGAMON XE for DB2. You use CandleNet Portal’s Link Wizard to connect the Transaction Analysis workspace with the DB2 Thread Exceptions workspace. This enables you to track transaction activity as it moves between CICS and DB2. See Linking to the DB2 Thread Exceptions workspace.

Additionally, you can use the Link Wizard to connect OMEGAMON XE for CICS and OMEGAMON XE for IMS queries. You do this using the **PSB Name** column and the **Recovery Token** column. See Linking CICS and IMS Queries.

### Linking to the DB2 Thread Exceptions workspace

To link to the DB2 Thread Exceptions workspace provided with OMEGAMON XE for DB2:

**Note:** To successfully link to this workspace, you must have both OMEGAMON XE and OMEGAMON DE installed.

1. Open the target OMEGAMON XE for DB2 Thread Exceptions workspace.
2. Right-click a row in a table.
3. Select **Properties** from the pop-up menu.
4. Select the DB2 Thread Exceptions table from the Properties tree, then click **Click here to assign a query**.
5. In the Query editor, modify the variable for the **DB2 Correlation Identifier** attribute to read as `EQ STRAN.DBESTRI$`. The Link Wizard will substitute the specified variable with the data it finds in the DB2 Correlation Identifier column of the Transaction Analysis workspace. **Note:** Tasks that do not use DB2 services show `n/a` to indicate that the correlation ID does not apply.
6. Click **OK** to save your changes to the query and to close the dialog.

### Define and customize the link

1. Open the Transaction Analysis workspace.
2. Right-click a row in a table.
3. Select **Link Wizard** from the pop-up menu.
4. Select **Define New Link**, then click **Next**.
5. Type a Name and Description in the text boxes, then click **Next**.
6. From the Navigator, select the **DB2 Thread Exceptions** workspace.
7. Click **Next** to open the Customize page and define the link further.
8. Click **linkIsEnabled** under the Symbols property.
9. Press the clear button to reset the expression box.
10. Select the **DB2 Correlation Identifier** for the selected row.
11. In the Operators section of Allowable Terms, select **Not Equal**.
12. Add the value `'n/a'` including quotes, in the expression box after the Not Equal symbol.
13. Press the **Test** button to ensure the syntax is correct.
14. Click **Finish**. You can now invoke the link from where you started the Link Wizard.
15. Right-click a row in the table and select **Link Anchor** to set any desired properties.
16. If the DB2 link is marked as the default, and “Link Indicator Always Enabled” is unchecked, the color of the link icon will reflect whether the row contains a valid correlation identifier.

17. Click **Save** to save the link definition.

18. Test the link by right-clicking the source point and selecting the link from the Link To list in the pop-up menu.

See the CandleNet Portal Help for complete details on the Link Wizard and on creating your own queries.

### Linking CICS and IMS Queries

You can now associate IMS thread activity with the Program Specification Blocks scheduled by CICS transactions. For IMS, a recovery token is provided that allows you to link a CICS transaction to any planned IMS workspaces that include thread information. You construct a link from the Transaction Analysis workspace to the IMS table using the variable indicated below. Since CICS creates a recovery token for every unit of work, the PSB Name column indicates whether a given transaction has scheduled an IMS request. Tasks that are not using IMS will show **n/a** in the PSB Name column.

1. Open the target OMEGAMON XE for IMS workspace.
2. Right-click a row in a table.
3. Select **Properties** from the pop-up menu.
4. Select the OMEGAMON XE for IMS table from the Properties tree, then click Click here to assign a query.
5. In the Query editor, modify the variable for the recovery token attribute to read as **EQ STRAN.RTOKENS**. The Link Wizard will substitute the specified variable with the data it finds in the Recovery Token column of the OMEGAMON XE for CICS Transaction Analysis workspace.
6. Click **OK** to save your changes to the query and to close the dialog.

### Define and customize the link

1. Open the Transaction Analysis workspace.
2. Right-click a row in a table.
3. Select **Link Wizard** from the pop-up menu.
4. Select **Define New Link**, then click **Next**.
5. Type a Name and Description in the text boxes, then click **Next**.
6. From the Navigator, select the appropriate OMEGAMON XE for IMS workspace.
7. Click **Next** to open the Customize page and define the link further.
8. Click **linkIsEnabled** under the Symbols property.
9. Press the **clear** button to reset the expression box.
10. Select the **PSB Name** for the selected row.
11. In the Operators section of Allowable Terms, select **Not Equal**.
12. Add the value **‘n/a’**, including quotes, in the expression box after the Not Equal symbol.
13. Press the **Test** button to ensure the syntax is correct.
14. Click **Finish**. You can now invoke the link from where you started the Link Wizard.
15. Right-click a row in the table and select **Link Anchor** to set any desired properties.

16. If the IMS link is marked as the default, and "Link Indicator Always Enabled" is unchecked, the color of the link icon will reflect whether the row contains a valid recovery token.

17. Click **Save** to save the link definition.

18. Test the link by right-clicking the source point and selecting the link from the Link To list in the pop-up menu.

See the CandleNet Portal Help for complete details on the Link Wizard and on creating your own queries.

**Related information**
- Transaction Analysis attribute group
- Units of Work
- UOW
- Attribute Groups Used by Predefined Workspaces
- Organization of the Predefined Workspaces

---

**Transaction and Program Definitions workspace**

The Transaction and Program Definitions workspace is accessed from a link in the Transaction Analysis workspace. This shows the transaction and program definitions for the transaction that you have selected.

The predefined Transaction Definitions workspace contains the:

- **Transaction and Program Definition table.** This displays the transaction ID and the program name for the selected transaction. It also shows the transaction status, priority, Data key and location, Runaway limit, TWA size, profile name, class name, read and deadlock timeout, Storage violations, Use and restart count, stall purge, dump, storage clear and isolate status, screen selection, partition set status, restart, terminal purge, trace, dynamic routing, remote system remote name, local dynamic route count, bridge exit, and facilitylike.

- **Program Definition Details table.** This displays the program name associated with the transaction, the defined and deduced language, the DSA location, the current and total use count, the length and the program status, data location (above or below the line), concurrency, execution key, Amode and Rmode, Program attribute, total load count, current copies, load point, entry point, loaded from, RPL data set name, Definition type, execution set, CEDF allowed, COBOL TGT size, working storage size and address, JVM specified, JVM debug, hotpool required, Multithread JVM, JVNM profile, Java class name, Remote program ID, system ID, transaction ID, statistics use count, statistics deletes by compression, statistics refreshes, and statistics last reset.

**Related information**
- Transaction Definitions
- Program Definitions
- Attribute Groups Used by Predefined Workspaces
- Organization of the Predefined Workspaces
Transaction Details workspace

The Transaction details workspace is accessed from the Transaction Analysis workspace. From the Transaction Analysis workspace, select the transaction that you want to investigate further, right-click and select Transaction Details. The EXEC interface block (EIB) summary table accesses all the fields in the EIB by name. The EIB contains information that is useful during the execution of an application program, such as the transaction identifier, the time and date (initially when the task is started, and subsequently, if updated by the application program using ASKTIME), and the cursor position on a display device. The EIB also contains information that is helpful when a dump is used to debug a program.

The predefined Transaction Details workspace contains the:

- Details for Transaction. This provides details of the transaction ID that you selected from the transaction analysis panel. The details included are: the task number resource name and type, the time in suspend and the CPU used by this task.
- EIB Summary. This displays the details of the EXEC interface block (EIB). For each transaction number and task ID they are: The EXEC CICS command, the function code, the EIBRESP description and value, EIBRESP2 value, resource name, EIB date and time. The program name, program offset, and terminal ID.

From the Transaction Details table you can link the EIB Details workspace to further investigate the details related to a transaction. The EIB details workspace also shows the Application Program table.

Related information
- Transaction Details attribute group
- EIB Summary attribute group
- Attribute Groups Used by Predefined Workspaces
- Organization of the Predefined Workspaces

Transaction EIB Details workspace

The Transaction EIB Details workspace is accessed from the EIB summary link found in the Transaction Details workspace. From the EIB Summary table, select the transaction that you want to investigate further, right-click and select Link to EIB Details.

The predefined Transaction EIB Details workspace contains the:

- EIB Details for table. This displays the following fields EIBDATE and EIBTIME, EIBTRNID, EIBTASKN, EIBTRMID, EIBCPOSN, EIBCALEN, EIBAID, EIBFN, EIBRCODE, EIBDS, EIBREQUID, EIBRSRCE, EIBSYNC, EIBFREE, EIBRECV, EIBATT, EIBOC, EIBOC, EIBMH, EIBCOMPL, EIBSIG, EIBCONF, EIBERR, EIBERRCD, EIBSYNRB, EIBBODAT, EIBRESP, EIBRESP2, and EIBRLDBK.
- Application Program Details table. For each transaction and task ID, this table shows the: program name, length, offset, program return address, program Savearea address, EIB Address, EIB structure, EIB Structure address, EIB User Structure address, Commarea address, Execution Key, Program mask, Addressing mode, CEDF allowed, and Resource Manager.

Related information
- Transaction EIB Details attribute group
- Transaction Application Programs
Transaction File Details workspace

The Transaction File Details workspace is accessed from the Transaction Analysis workspace. From the transaction analysis table, select the transaction that you want to investigate further, right-click and select Link to File Details.

The predefined Transaction FileDetails workspace contains the:
- File Request bar chart. This compares the total number of file requests with the total file request time for the transaction that you have selected.
- File I/O Waits. This compares the total file I/O wait time with the RLS-mode wait time and the CFDT wait time for the transaction that you have selected.
- File Details table. This shows the following details for the transaction you selected:
  - The task number and the file name.
  - The total file requests, file request time, file I/O wait time.
  - Shared TSQ I/O wait count and wait time.
  - The GET requests and total GET requests wait time.
  - The PUT requests and PUT total time.
  - The browse requests and browse total time.
  - The add requests and add total time.
  - The delete requests and delete total time.
  - RLS-mode wait time.
  - CFDT I/O wait time.
  - Access method count.
  - The system ID and the Transaction ID.

Related information
- Transaction File Details attribute group
- Attribute Groups Used by Predefined Workspaces
- Organization of the Predefined Workspaces

Transaction I/O Waits Details workspace

The Transaction I/O Waits details workspace is accessed as a link from the Transaction Timings workspace. This information is derived from two attribute groups: The Transaction I/O Waits attribute group and the Transaction I/O Other Waits attribute group. It allows you to examine in more detail the causes for a long wait by a particular task.

The predefined Transaction I/O Waits details workspace contains the following:
- I/O Waits Distribution pie chart. This displays the I/O waits for the following resources: temporary storage, transient data, files, journals, terminals, inter-region (MRO), LU 6.1 and 6.2, FEPI, RLS files, shared temporary storage, and socket I/O.
- Other Waits Distribution pie chart. This displays waits for Re-dispatch, First dispatch, Local ENQ delays, locak manager dispatch, WAIT EXTERNAL, WAIT CICS, Interval Control elements, dispatchable, Global ENQ, RRMS/MVS waits, CICS MAXOPEN, and JVM suspend time.
- I/O Waits Details for tranid table. This displays the I/O wait times for temporary storage, transient data, files, journals, terminals, inter-region (MRO), LU 6.1 and 6.2, FEPI, RLS files, shared temporary storage, and socket I/O.
• Other Waits Details table. This displays the wait times for Re-Dispatch, 1st Dispatch Delay, Local ENQ Delay, Lock Manager Delay, WAIT EXTERNAL Time, WAITCICS and WAIT EVENT, Interval Control Delay, Dispatchable Wait Time, Global ENQ Delay, RRMS/MVS, CICS MAXOPENTCBS Delay and JVM Suspend.

Related information
- Transaction I/O Waits Analysis attribute group
- Transaction I/O Waits Others Analysis attribute group
- Attribute Groups Used by Predefined Workspaces
- Organization of the Predefined Workspaces

Transaction Manager workspace

The Transaction Manager workspace monitors the number of tasks in your CICS regions.

Using this data you can monitor the number of tasks compared with the MAXTASK value. You can:
• Set a Threshold to warn when the MAXTASK value is being reached.
• Define a situation that increases the MAXTASK value when the number of Tasks is close to the MAXTASK limit.

The predefined Transaction Manager workspace contains the:
• CICS Backlog Monitor graph. This shows the Current MAXTASK value, active user transactions, queued transactions and the peak user transactions. Using this graph you can see the relationship between the number of active transactions and when that number approaches the MAXTASK value.
• Transaction Manager Statistics Table. This shows:
  – The current MAXTASK value and the number of active, queued transactions for each region.
  – Peak and total active user transactions
  – Peak and total queued user transactions
  – The suspended transaction and system transaction count.
  – The average MAXTASK queueing time, the average current queueing time, the total MAXTASK time, and the current MAXTASK time.

Related information
- Transaction Manager
- Attribute Groups Used by Predefined Workspaces
- Organization of the Predefined Workspaces

Transaction Remote Summary workspace

The Transaction Remote workspace is accessed as a link from the Transaction Analysis workspace. If the transaction that you selected is communicating with or accessing resources at a remote CICS region, its details will be shown here.

The predefined Transaction Remote Summary workspace contains the:
• Remote Information table for the selected transaction. This displays the following information about the transaction that you have selected if it is a remote transaction:
  – System ID
- CICS Name
- CICS SYSIDNT
- Transaction ID
- Task Number
- Remote System
- Remote Transaction
- Remote Facility Type
- Remote Facility ID
- Remote Session Side
- Remote Session ID
- Remote Session I/O

- Links in use by the transaction table. This displays the following details for the links used by the remote transaction:
  - The current link transaction ID, current transaction ID, the link netname, the link connection name, the link terminal ID, and the link session status.
  - The number of transactions using the link, and the number of link inputs and outputs.
  - The number of storage violations, transmissions errors, and transaction errors.
  - The next Link transaction ID.

Related information
Transaction Remote Summary attribute group
Attribute Groups Used by Predefined Workspaces
Organization of the Predefined Workspaces

---

Transaction Statistics workspace

The Transaction Statistics workspace is accessed from a link in the Transaction Analysis workspace.

The predefined Transaction Statistics workspace contains the:
- Transaction Statistics bar chart.
- Statistics table.

Both the table and the bar chart report the following data:
- Transient data PUTs, GETs and purges.
- Temporary storage PUTs to main and PUTS to Auxiliary, GETs and the total number of TS requests.
- Syncpoints, Journal and CICS logger writes.
- Intercommunication (IC) starts (table only) and requests.
- Requests for the following resources IMS/DBCTL, DPL, DB2, and OO class.
- Web receive, send, and total requests; web chars received; Web repository reads and writes.
- Program links, XCTLs, loads, and link URM.
- SSL bytes encrypted and decrypted.
- TCBs attached and the number of TCB mode switches.
- The client address and the Transaction group ID.

Related information
Transaction Statistics
Attribute Groups Used by Predefined Workspaces
Organization of the Predefined Workspaces
Transaction Storage Analysis workspace

The Transaction Storage Analysis workspace is accessed as a link from the Transaction Analysis workspace.

The predefined Transaction Storage Analysis workspace contains the:

- Storage below the 16 MB line bar chart.
- Storage above the 16 MB line bar chart.
- Storage use by tranid table. This displays the amount of storage used by the transaction that you selected from the Transaction Analysis workspace.
  - Storage Elements below 16 MB
  - Storage Elements above 16 MB
  - Storage Used below 16 MB
  - Storage Used above 16 MB
  - Storage Allocated below 16 MB
  - Storage Allocated above 16 MB
  - GETMAIN request below 16 MB
  - GETMAIN requests above 16 MB
  - Storage HWM below 16 MB
  - Storage HWM above 16 MB
  - Storage Occupancy below 16 MB
  - Storage Occupancy above 16 MB
  - HWM of Total Program Storage
  - Program Storage HWM below 16 MB
  - Program Storage HWM above 16 MB
  - Program Storage HWM in CDSA
  - Program Storage HWM in ECDSA
  - Program Storage HWM in RDSA
  - Program Storage HWM in ERDSA
  - Program Storage HWM in SDSA
  - Program Storage HWM in ESDSA

Related information
- Transaction Storage Analysis attributes
- Attribute Groups Used by Predefined Workspaces
- Organization of the Predefined Workspaces

Transaction Storage Violations workspace

The predefined Transaction Storage Violations workspace contains the following:

- Transaction Storage Violations table view that shows data on the total number of storage violations that have occurred for each transaction
- Storage Violation Distribution bar chart that shows the number of storage violations per transaction

Note that once a storage violation has occurred, collection for this attribute group involves scanning the Program Control Table (PCT), which can carry considerable overhead. Exercise caution when using this attribute table for either workspaces or situations.

Related information
- Transaction Storage Violations attributes
- Task Class Analysis attributes
- Attribute Groups Used by Predefined Workspaces
Transaction Timings workspace

The Transaction Timings workspace is accessed as a link from the Transaction Analysis workspace.

The predefined Transaction Timings workspace contains the:
- CPU against suspend time pie chart. This compares the current CPU time with the time in suspend for your selected CICS region.
- Wait Time Distribution pie chart. This compares the Total I/O wait time, the Total Other wait time, first dispatch delay, Re-dispatch delay, and the Exception Wait time.
- Timings for Transaction \textit{tranid} table. This table shows the time spent by the transaction \textit{tranid} you selected from the Transaction Analysis workspace in the following:
  - Elapsed Time
  - Dispatch Time
  - QR TCB Elapsed Time
  - Other TCBs Elapsed Time
  - CPU Time
  - RLS CPU Time
  - RMI Elapsed Time
  - JVM Elapsed Time
  - Time in Suspend
  - Total I/O Wait Times
  - Total Other Wait Times
  - 1st Dispatch Delay
  - Re-Dispatch Wait
  - Exception Wait Time
  - Program Load Elapsed Time
  - Syncpoint Elapsed Time

From the Transaction Timings table you can link to the I/O and Other Waits Details workspace to investigate the causes of long wait times for a given task.

Related information
- Transaction Timings attributes
- Attribute Groups Used by Predefined Workspaces
- Organization of the Predefined Workspaces

Transaction TSQueue Details workspace

The Transaction TSQueue Details workspace is accessed from the Transaction Analysis workspace. Using this workspace you can determine the tasks that have had significant wait time for Temporary Storage queues.

The predefined Transaction TSQueue Details workspace contains the:
- TSQ Request bar chart. This compares the total number of TSQ requests with the Total TSQ request time for the transaction that you have selected.
- TSQ I/O Waits. This compares the total TSQ I/O wait time with the shared TSQ I/O wait time for the transaction that you have selected.
- TSQueue Details table. This shows the following details for the transaction you selected:
  - The task number and the TSQueue name.
– The total TSQ requests, TSQ request time, TSQ I/O wait time.
– Shared TSQ I/O wait count and wait time.
– The GET requests and wait time.
– The PUT to Auxiliary requests and wait time.
– The PUT to Main requests, wait time and total time.
– The total length of items obtained, written to Auxiliary, and written to main.
– The system ID and the Transaction ID.

Related information
Transaction TSQueue Details attribute group
Attribute Groups Used by Predefined Workspaces
Organization of the Predefined Workspaces

Transaction Umbrella Data workspace

The Transaction Umbrella workspace is accessed as a link from the Transaction Analysis workspace. This workspace allows you to examine the details of an umbrella transaction that is running in your CICS regions. For example, it would allow you to identify the program and specific transaction that can be causing problems.

The predefined Transaction Umbrella Data workspace contains the:
- Umbrella Information for Transaction table. This displays the following information about the transaction that you have selected if it is an umbrella transaction:
  – The transaction ID, umbrella transaction ID, the task number, and the umbrella program ID.
  – User Work Area, and User Work Area (Hex) for the selected transaction.
- Transaction Using Umbrella Services table. This displays the following details for all umbrella transactions in the selected CICS region:
  – The transaction ID, umbrella transaction ID, the task number, and the umbrella program ID.
  – The resource type and name.
  – The suspended time, CPU time, and elapsed time.
  – The storage above and below the 16 MB line.
  – The attach time, Time of the suspend, and the Suspend timeout due.
  – The Facility ID and type.
  – The originating Transaction ID, task state, and dispatcher queue.
  – The first program ID, the current program ID.
  – The user ID.
  – The EXEC CICS command.
  – The purge status, whether it is purgeable.
  – The suspend state and the UOW state.

Related information
Transaction Umbrella Data
Attribute Groups Used by Predefined Workspaces
Organization of the Predefined Workspaces

Transient Data Queues workspace

The predefined Transient Data Queues workspace contains the:
- Transient Data Queues table view, which provides information about trigger level settings for transient data queues and the length of transient data queues.
• Transient Data Pool Utilization bar chart, which indicates the queue level of the intrapartition destination and number of records by which the queue exceeds the trigger level

**Related information**
- Transient Data Queues
- Attribute Groups Used by Predefined Workspaces
- Organization of the Predefined Workspaces

---

**Transient Data Summary workspace**

The predefined Transient Data Summary workspace contains the
- • Transient Data Summary table view that shows data on the current use of intrapartition resources
- • Transient Data VSAM Usage bar chart that shows, for a specific CICS region:
  - Percent Active Strings
  - Percent Buffers in Use
  - Percent CIs in Use
- • Transient Data Waits bar chart that shows wait count data for specific CICS regions:
  - Buffer Waits
  - Current String Waits
  - Total String Waits

The table view provides information such as
- • The number of requests that are currently suspended pending the availability of a transient data buffer
- • The current number of tasks that require the physical reading or writing of a CI and are suspended due to the lack of an available string
- • The percentage of available strings currently being used for I/O to the intrapartition dataset
- • The number of control intervals (CIs), transient data strings, and temporary storage strings being used by the transient (DFHINTRA) and the auxiliary temporary storage (DFHTEMP) datasets

**Related information**
- Transient Data Summary attribute group
- Task Class Analysis attribute group
- Attribute Groups Used by Predefined Workspaces
- Organization of the Predefined Workspaces

---

**UOW Analysis workspace**

The predefined UOW Analysis workspace contains the
- • UOW Analysis table view, which provides data about the forced decisions, the shunted UOWs that currently exist in the CICS region, and the accumulated time that all shunted UOWs have been shunted.
- • Unit-of-Work Disposition bar chart, which indicates the number of forced heuristic decisions. A forced decision can occur after an in-doubt UOW remains unresolved for a user-defined time period. CICS will unconditionally back out or commit the changes made by the UOW in order to release the resources held by the in-doubt UOW. This chart also indicates the number of shunted UOWs that currently exist in the CICS region.
• Minutes Shunted graph that indicates the number of minutes that all shunted UOWs have been shunted.

Related information
- UOW Analysis attribute group
- Attribute Groups Used by Predefined Workspaces
- Organization of the Predefined Workspaces

UOW Enqueue Analysis workspace

The predefined UOW Enqueue Analysis workspace contains the
• Unit-of-Work Enqueue Analysis table view that provides data such as the total number of enqueue failures that have occurred against a UOW, the current state of the UOW, and the total time that each UOW has been shunted.
• Time Shunted bar chart that indicates the total time, in seconds, that a specific UOW has been shunted, pending resolution.
• Enqueue Failures bar chart that indicates the number of enqueue failures that have occurred against a particular UOW.

Related information
- UOW Enqueue Analysis attribute group
- Attribute Groups Used by Predefined Workspaces
- Organization of the Predefined Workspaces

Unit of Work by Region workspace

The Unit of Work by Region table view contains a summary of active or completed transactions in a given CICS region for a particular unit-of-work (UOW). It provides the total amount of time transactions spent in various processing states for each CICS region. You can use this workspace to locate regions responsible for performance degradation and fine-tune business transactions based on overall response time.

You can view information about the
• Amount of accumulated CPU time for a task
• Amount of time the tasks in the unit-of-work spent being dispatched
• Number of transactions executed on behalf of the unit-of-work
• Amount of elapsed time the task spent waiting for various operations to complete
• Version of CICS in use, CICS region job name, and MVS system ID

Related information
- UOW attribute group
- Attribute Groups Used by Predefined Workspaces
- Organization of the Predefined Workspaces

Units of Work workspace

The predefined Units of Work workspace contains the
• Unit of Work by Region table view, which contains a summary of active or completed transactions in a given CICS region for a particular unit-of-work (UOW)
• Unit of Work by Transaction table view, which contains detailed data for individual transactions (active or completed) that executed in a particular CICS region.
You can use this workspace to locate regions responsible for performance
degradation and fine-tune business transactions based on overall response time.
The Units of Work workspace also provides access to the CICS region_name and
Databases workspaces if you choose View > Workspace from the menu bar.

Note: To avoid performance problems caused by delivering a query to every
registered CICS node, the distribution list of the default Units of Work
workspaces specify only the CICS region selected from the CandleNet Portal
navigation tree.

To make the workspaces more useful, you can modify the distribution list associated
with each query using the Properties page of CandleNet Portal. In so doing, it
becomes possible to aggregate units-of-work from every CICS region that can have
participated in a transaction. Although you can use a distribution list of
“*MVS_CICS”, be aware that generic distribution lists can needlessly drive
collection agents used to examine CICS task chains and ONDV files, thereby
increasing CandleNet Portal response time. See the CandleNet Portal online help
for instructions on using the Properties page.

Related information
Attribute Groups Used by Predefined Workspaces
Organization of the Predefined Workspaces

Unit of Work by Transaction workspace

The Unit of Work by Transaction table view contains a list of individual transactions
(active or done) that executed in a particular CICS region. Each table row indicates
the amount of time a transaction spent in various processing states. You can use
this table to locate regions responsible for performance degradation and fine-tune
business transactions based on overall response time.

You can view information about the
• Status of a task
• Accumulated CPU time for a task
• Amount of time the tasks spent being dispatched and redispacheted
• Total amount of elapsed time a task spent waiting for various operations to
  complete
• Amount of time tasks spent waiting for: exceptions, I/O requests, VSAM
temporary storage I/O requests, VSAM transient data I/O requests, journal
requests, MRO operations, and user input from the terminal
• Version of CICS in use, CICS region job name, and MVS system ID

Related information
UOW
Attribute Groups Used by Predefined Workspaces
Organization of the Predefined Workspaces

VSAM Analysis workspace

Because CICS dumps, traces, transient data, and auxiliary temporary storage
reside in VSAM data sets, you can use the VSAM Analysis table view to locate a
VSAM data set experiencing string waits or excessive control interval (CI) or control
area (CA) splits. Such conditions can adversely affect CICS performance. You can
view current data collected on demand for such items as
The predefined VSAM Analysis workspace contains the:

- VSAM String Utilization bar chart, which shows the percentage of strings being used to process I/O requests to this VSAM file.
- VSAM Analysis table view, which provides details about the VSAM data sets allocated to a selected CICS region.
  - The number of data CA and data CI splits for the VSAM data set
  - The number of index CA and index CI splits for the VSAM data set
  - The numbers of new data and index extents taken by the VSAM data set
  - Mode of access CICS uses to open the data set
  - Type of VSAM data set
  - Total time-outs from VSAM data sets in record-level sharing (RLS) mode
  - The status of the VSAM data set
  - Statistics for the number of strings defined, the strings being used, and the strings with requests queued against them

Related information

VSAM Analysis attribute group
Attribute Groups Used by Predefined Workspaces
Organization of the Predefined Workspaces

VSAM RLS Lock Analysis workspace

The predefined VSAM RLS Lock Analysis workspace contains the VSAM Record Level Sharing Lock Analysis table view. It provides information about tasks that are waiting for an RLS resource. This information includes any suspended CICS tasks that are in a waiting state.

This data enables you to identify applications that are making poor use of resources and possibly degrading system performance. This table view displays data provided by the RLS Lock Analysis attributes. This workspace also contains a take action view that lets you enter console commands.

Related information

RLS Lock Analysis attribute group
Attribute Groups Used by Predefined Workspaces
Organization of the Predefined Workspaces
Chapter 15. Accessing a Tivoli OMEGAMON XE Host Session

When researching the cause of an alert, you can want to review conditions raised by an OMEGAMON XE product. To access an OMEGAMON XE host session, use the terminal emulator adapter feature of CandleNet Portal.

The terminal emulator adapter turns a view into a 3270 or 5270 interface so you can connect to any TN3270 or TN5250 host system (such as MVS or OS/400®) using TCP/IP. The terminal emulator adaptor provides for simple terminal emulation. It also provides a scripting language interface that

- Permits you to record (capture) a host session. As you interact with a host session, the session is recorded as a set of script commands that can be saved under a name you specify and played back at a later time. This allows you to automate navigation to a specific set of screens.
- Permits you to author complex scripts containing custom functions for manipulating host sessions.
Chapter 16. Messages

This is a extract from the Tivoli OMEGAMON Messages Manuals. These messages are generated from Tivoli OMEGAMON XE for CICS on z/OS. They are divided into two parts:

- Those that apply to Tivoli OMEGAMON XE for CICS on z/OS; the messages with the prefix KCP.
- Those that apply to Tivoli OMEGAMON II for CICS on z/OS; messages with the prefix BG, OGJ, KC2, KO2, and OCJ.

The remainder of the messages are found in the Tivoli OMEGAMON Messages Manuals that consist of five volumes:

- Volume 1 contains messages with prefixes AOP-ETX.
- Volume 2 contains messages with prefixes EU-KLVGM.
- Volume 3 contains messages with prefixes KLVHS-KONCT.
- Volume 4 contains messages with prefixes KONCV-OC.
- Volume 5 contains messages with prefixes ODC-VEB and the appendixes.

The messages within each of these volumes appear in alphanumeric order by message number. The message number begins with a prefix that identifies the Tivoli OMEGAMON product or component that generated the message. The message text appears on the same line as the message number. Following the message number and message text is one or more of the following:

- an explanation of the message
- a description of the system conditions that generated the message
- a suggested response to the message
- a description of the message type
- a destination for the message
- the severity of the message

Some messages are informational only; others advise you to take an action.

Message prefixes

The following table lists message prefixes for the specified Tivoli OMEGAMON products or components.

<table>
<thead>
<tr>
<th>Product or Component Name</th>
<th>Prefixes</th>
</tr>
</thead>
<tbody>
<tr>
<td>AF/OPERATOR®</td>
<td>AOP, KAO, KAT, KOG, OMG</td>
</tr>
<tr>
<td>Alert Adapter for OG/MVS</td>
<td>KAM</td>
</tr>
<tr>
<td>Classic OMEGAMON</td>
<td>CSAA, IA, IN, LSCX, OM, OM0</td>
</tr>
<tr>
<td>CT/Engine</td>
<td>KBB, KDC, KLE, KLU, KLV, KLX</td>
</tr>
<tr>
<td>End-to-End</td>
<td>ETE</td>
</tr>
<tr>
<td>OMEGAMON Base</td>
<td>CI, CNDL, OB, OBV, OMV</td>
</tr>
<tr>
<td>OMEGAMON for VM</td>
<td>CV, EU, EV, OGN, OV</td>
</tr>
<tr>
<td>Tivoli OMEGAMON II for CICS on z/OS</td>
<td>BG, KC2, KO2, OC</td>
</tr>
<tr>
<td>OMEGAMON II for DB2</td>
<td>H2C, KD2, O2</td>
</tr>
</tbody>
</table>
Table 1. Message prefixes (continued)

<table>
<thead>
<tr>
<th>Product or Component Name</th>
<th>Prefixes</th>
</tr>
</thead>
<tbody>
<tr>
<td>OMEGAMON II for IMS</td>
<td>ATF, DSM, ETX, EVS, ICF, LAT, ML, MRG, OR, OS, OTR, PWA, REG, TRF</td>
</tr>
<tr>
<td>OMEGAMON II for Mainframe Networks</td>
<td>EX, KON</td>
</tr>
<tr>
<td>OMEGAMON II for MVS</td>
<td>EA, KM2, KXDF, OM2, VEB</td>
</tr>
<tr>
<td>OMEGAMON II for SMS</td>
<td>KDF, KRC</td>
</tr>
<tr>
<td>OMEGAMON II for VTAM</td>
<td>EX, KON</td>
</tr>
<tr>
<td>Tivoli OMEGAMON XE for CICS on z/OS</td>
<td>KCP</td>
</tr>
<tr>
<td>OMEGAMON XE for DB2</td>
<td>KDP</td>
</tr>
<tr>
<td>OMEGAMON XE for IBM Cryptographic Coprocessors</td>
<td>KCG</td>
</tr>
<tr>
<td>OMEGAMON XE for IMS and IMSplex</td>
<td>KIP</td>
</tr>
<tr>
<td>OMEGAMON XE for Mainframe Networks</td>
<td>KN3</td>
</tr>
<tr>
<td>OMEGAMON XE for Storage</td>
<td>KS3</td>
</tr>
<tr>
<td>OMEGAMON XE for Sysplex</td>
<td>KOS, KCN</td>
</tr>
<tr>
<td>OMEGAMON XE for WebSphere MQ Configuration</td>
<td>KCF, KMC</td>
</tr>
<tr>
<td>OMEGAMON XE for WebSphere MQ Monitoring</td>
<td>KMQ</td>
</tr>
<tr>
<td>OMEGAMON XE for WebSphere Integration Brokers</td>
<td>KQI</td>
</tr>
<tr>
<td>OMEGAVIEW</td>
<td>KMV, KSD</td>
</tr>
</tbody>
</table>

Standard messages and abend codes

Tivoli OMEGAMON products routinely issue standard messages and displays them on the screen. Messages with the following prefixes are exceptions.

Table 2. Standard messages and abend codes

<table>
<thead>
<tr>
<th>Products</th>
<th>Prefix Exceptions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tivoli OMEGAMON II for CICS on z/OS</td>
<td>EB, EU, and EP messages are written to the file or SYSOUT class specified by the RKM2OUTM dataset. EC messages appear as WTO messages on the system operator console, in the RKM2OUTM or RKM2DUMP dataset output, or as messages to TSO user terminals (if the NOTIFY keyword is specified in rhilev.midlev.RKANPAR(KEPOPTN)).</td>
</tr>
<tr>
<td>OMEGAMON II for DB2</td>
<td></td>
</tr>
<tr>
<td>OMEGAMON II for DBCTL</td>
<td></td>
</tr>
<tr>
<td>OMEGAMON II for IMS</td>
<td></td>
</tr>
<tr>
<td>OMEGAMON II for MVS</td>
<td></td>
</tr>
<tr>
<td>OMEGAMON II for MVS</td>
<td>OM2</td>
</tr>
<tr>
<td>All OMEGAMON II products</td>
<td>KLE, KLU, and KLV messages are written to the RKLVLOG dataset.</td>
</tr>
<tr>
<td>All OMEGAMON II products</td>
<td>Messages displayed by additional features, such as PRO for MVS or OBTAIN, are included in this manual.</td>
</tr>
</tbody>
</table>

OMEGAMON II or OMEGAVIEW issues abend codes when an error occurs.
Note: For OMEGAMON II for MVS and OMEGAMON II for SMS, messages that appear during the operation of OMEGAMON II may be issued from the product, Candle Management Server, or Candle subsystem address spaces.

Reporting problems

Some messages suggest that you generate a system dump and forward it to IBM Software Support for more help.

If your Tivoli OMEGAMON product malfunctions, do the following before you call IBM Software Support:

- Record the error message number and any error codes that the error message displays.
- Record output from the DEBUG screen space, when possible.

To obtain these DEBUG screens, type DEBUG on the INFO-line and press Enter. Your product executes various screen spaces and logs important information to hardcopy.

Note: For Tivoli OMEGAMON II for CICS on z/OS, OMEGAMON II for DB2, OMEGAMON II for DBCTL, OMEGAMON II for IMS, and OMEGAMON II for MVS, fill in the information on the hardcopy of the first debug screen (DEBUG).

- Gather any dumps that the Tivoli OMEGAMON product produces (on cartridge, tape, or hardcopy). You can write product dumps to one or more of the following:

Table 3. Collecting dumps

<table>
<thead>
<tr>
<th>Products</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tivoli OMEGAMON II for CICS on z/OS</td>
<td>The Common Interface SYSABEND DD statement</td>
</tr>
<tr>
<td>OMEGAMON II for DB2</td>
<td></td>
</tr>
<tr>
<td>OMEGAMON II for DBCTL</td>
<td></td>
</tr>
<tr>
<td>OMEGAMON II for IMS</td>
<td></td>
</tr>
<tr>
<td>OMEGAMON II for MVS</td>
<td></td>
</tr>
<tr>
<td>OMEGAMON II for DB2</td>
<td>The O2SNAP dataset</td>
</tr>
<tr>
<td>OMEGAMON II for DBCTL</td>
<td></td>
</tr>
<tr>
<td>OMEGAMON II for IMS</td>
<td></td>
</tr>
<tr>
<td>OMEGAMON II for MVS</td>
<td></td>
</tr>
<tr>
<td>OMEGAMON II for SMS</td>
<td></td>
</tr>
<tr>
<td>OMEGAMON II for VTAM</td>
<td></td>
</tr>
<tr>
<td>OMEGAMON II for OMV</td>
<td></td>
</tr>
<tr>
<td>Tivoli OMEGAMON II for CICS on z/OS</td>
<td>The SNAPFILE dataset</td>
</tr>
<tr>
<td>All products</td>
<td>The RKLVLOG and RKLVSNAP datasets</td>
</tr>
<tr>
<td>All products</td>
<td>MPcc dataset</td>
</tr>
</tbody>
</table>

Be prepared to send them to IBM if a Software Support representative requests you to do so. You can also FTP dumps to IBM.

Note: If you send a cartridge or tape, specify the format, density, and label information.
• Record any error messages that Tivoli OMEGAMON product writes to the system log.

KCP messages

KCP0001 DSI IS UNABLE TO REGISTER PHYSICAL NODE AT® HUB

Explanation: The physical node name used to distribute queries to remote data servers could not be registered at the hub CMS.

System Action: The data server on which the error occurred will not participate in any CICS distributed queries.

User Response: Check the TLVLOG for additional messages that may indicate the reason why node registration failed. If problems persist, contact the IBM Software Support.

KCP0002 function table PLN I/O ERROR ON PDS: TYPE=type, RC=rc

Explanation: The function indicated by function was unable to perform an I/O request to the Persistent Data Store. type denotes the function that failed, and rc is the return code generated by the PDS subroutine.

System Action: The function identified by function terminates.

User Response: Contact the IBM Software Support.

KCP0003 function table PDS AGENT DID NOT SUPPLY COLUMN: col

Explanation: The function indicated by function was unable to locate the column identified by type in the CMS catalog.

System Action: The function identified by function terminates.

User Response: Contact the IBM Software Support.

KCP0004 subtask CANNOT COMMUNICATE WITH XMI

Explanation: The system was unable to locate the address of the XMI communication control block using CT/Engine services.

System Action: The subtask identified by subtask terminates.

User Response: Confirm that XMI successfully started as a subtask of the Candle Management Server address space. Ensure that there is a START command in the Candle Management Server CONFIG file that automatically starts XMI. If problems persist, contact the IBM Software Support.

KCP0005 subtask PROBE module PTF ptno@ address ASSEMBLY time date

Explanation: This informational message is written to the TLVLOG when an agent is first invoked. It lists the agent name, most recently applied PTF, the load point and time and date of assembly.

System Action: None.

User Response: None, the message is informational.

KCP0006 agent MEMORY REQUEST FAILURE FOR ACCESS LIST

Explanation: The specified agent was unable to allocate storage for the distribution list associated with a situation.

System Action: Data is collected for every CICS region.

User Response: Consider increasing either the Candle Management Server region size or the GMMPERCENT value in the Candle Management Server startup configuration file.

KCP0007 XAM PROCESSING FOR THE SPECIFIED CONNECTIONS PARAMETER IS BYPASSED ID=table

Explanation: The connections parameter specified on the start command for the exception analysis manager (XAM) subtask is invalid.

System Action: The exception analysis manager processes all connections in the monitored CICS regions.

User Response: Specify a valid connections parameter. The valid format is CONNECTIONS= parameter where parameter is 1 to 4 characters, including an asterisk. Examples include:

• CONNECTIONS=C*
• CONNECTIONS=C*6

KCP0008 agent ONDV REQUEST TIMED OUT FOR CICS region

Explanation: The agent did not receive a record buffer from the ONDV subtask of the Common Interface address space prior to the expiration of a one minute time interval for the named region.

System Action: The agent bypasses ONDV processing for the named CICS region.

User Response: Ensure that the ONDV subtask is
active in the Common Interface used to monitor the identified CICS region. Also, check that the dispatching priority of the OCCI job is high enough to permit its responding to cross-memory requests in a timely fashion.

KCP0009  function CANNOT ACCESS OC CVT

Explanation: The system was unable to locate the address of the Tivoli OMEGAMON XE for CICS on z/OS CVT control block in the CT/Engine GSA.

System Action: The function identified by function terminates.

User Response: Contact the IBM Software Support.

KCP0010  agent SONDVREQ MACRO FAILURE FOR CICS region; RC=rc

Explanation: The agent was unable to communicate with the ONDV subtask of the Common Interface. The return code denoted by rc indicates the cause of the error.

System Action: The agent bypasses ONDV processing for the named CICS region.

User Response: Ensure that the ONDV subtask is active in the Common Interface used to monitor the identified CICS region. If problems persist, contact the IBM Software Support.

KCP0011  agent UNABLE TO OBTAIN STORAGE IN OCCI LENGTH=length

Explanation: The agent was unable to acquire storage in the Common Interface address space for ONDV record collection.

System Action: The agent bypasses ONDV processing for the named CICS region.

User Response: Consider increasing the OCCI region size. If problems persist, contact the IBM Software Support.

KCP0012  agent UNIT-OF-WORK DESCRIPTOR NOT SUPPLIED VIA PARMA

Explanation: The agent was unable to locate the unit-of-work used to search for related transactions.

System Action: The agent terminates.

User Response: The SQL generated internally to drive the unit-of-work agent is in error. Contact the IBM Software Support.

KCP0014  agent ONDV NOT RUNNING FOR CICS region

Explanation: The agent was unable to locate the ONDV subtask in the Common Interface for the specified CICS region.

System Action: The CICS region is ignored.

User Response: Ensure that the ONDV subtask is active in the Common Interface used to monitor the CICS region.

KCP0016  CICS aaaaaaaa: bbb

Explanation: The agent was unable to extract shared Temporary Storage queue information from the service task operating within the CICS address space denoted by aaaaaaaa.

System Action: Temporary Storage queue data is not collected for the CICS region.

User Response: Based on the text of the message denoted by bbb, attempt to correct the cause of the service task error. If problems persist, contact the IBM Software Support.

KCP0017  UNABLE TO ALLOCATE XCB CONTROL BLOCK

Explanation: The cross-memory interface (XMI) subtask was unable to allocate one of its primary communications control blocks from subpool 251 storage.

System Action: The cross-memory interface task terminates.

User Response: Consider increasing the region size of the CT/Engine address space in which XMI is started.

KCP0018  ERROR WHILE COLLECTING RLS DATA: aaa

Explanation: The agent was unable to extract Record Level Sharing (RLS) information due to the error denoted by aaa.

System Action: RLS data is not collected for the MVS image.

User Response: Based on the text of the message, attempt to correct the cause of the error. If problems persist, contact the IBM Software Support.

KCP0019  SYSTEM FAILURE DURING ATTACH OF subtask RC=rc

Explanation: The ATTACH macro used to create the subtask identified by subtask failed. The return code denoted by rc represents the contents of register fifteen passed back by the ATTACH macro.
System Action: The component being started terminates.
User Response: Consult the IBM Macro Reference for a description of each return code generated by the ATTACH macro and take the necessary corrective action. If problems persist, contact the IBM Software Support.

KCP0020 agent PERSISTENT DATASTORE NOT INITIALIZED
Explanation: The function indicated by agent was unable to perform an I/O request to the Persistent Data Store (PDS).
System Action: The function identified by agent terminates.
User Response: Verify that the PDS has been properly configured. If historical records are not desired, consider stopping the automatic situations that attempt to write records to the PDS. If problems persist, contact IBM Software Support.

KCP0021 XAM UNABLE TO ACQUIRE TABLE STORAGE
Explanation: The VSAM=NO operand was included on the OC START, ID=XAM command.
System Action: The Exception Analysis Manager (XAM) does not collect VSAM file information used to compute split, extension, and RLS timeout rates. Therefore, columns that contain "Last Hour" data in the VSAM Analysis table will always be zero.
User Response: None.

KCP0022 XAM EXCEPTION ANALYSIS MANAGER IS TERMINATING
Explanation: The Exception Analysis Manager (XAM) received a request to terminate.
System Action: None.
User Response: None.

KCP0023 XAM EXCEPTION ANALYSIS MANAGER IS ACTIVE
Explanation: The Exception Analysis Manager (XAM) completed initialization.
System Action: None.
User Response: None.

KCP0024 XAM CONNECTIONS FILTER SETTING = aaaa
Explanation: The generic connections filter used to limit the TCT scan has been accepted.

System Action: None.
User Response: None.

KCP0025 Agent WHERE CLAUSE PREEMTS USE OF PARMA FOR CICS NAMES
Explanation: The agent detected CICS names being passed using both PARMA (keyword CICSNAME) and WHERE clause filters.
System Action: The PARMA values for CICS names are ignored.
User Response: Remove the PARMA filter for CICS job names.

KCP0026 aaa PARAMETER LIST HAS AN INVALID FORMAT
Explanation: The agent denoted by aaa detected either a missing or incorrect set of parameters.
System Action: The query is ignored.
User Response: Contact IBM Software Support.

KCP0027 XAM UNABLE TO ACQUIRE TABLE STORAGE: LENGTH=length, ID=table
Explanation: The exception analysis manager (XAM) subtask was unable to allocate length bytes of private storage for table identified by table.
System Action: If the error occurs during initialization, the exception analysis subtask terminates. Otherwise, XAM continues processing with a decreased ability to compute rates per hour for the storage violation and VSAM control block exceptions.
User Response: Consider increasing either the Candle Management Server region size or the GMMPERCENT value in the Candle Management Server startup configuration file.

KCP0028 XAM PROGRAM CHECK RECOVERY FOR CICS: region
Explanation: The exception analysis manager (XAM) subtask encountered a program check in one of its cross-memory mode collection routines while attempting to monitor the CICS denoted by region.
System Action: XAM continues processing. No dump is produced.
User Response: This may be the result of corrupted storage in the CICS address space. If problems persist, contact the IBM Software Support.
KCP0029  FCJ LOAD OF AAAAAAAA FAILED FOR
         CICS=BBBBBBBB, CODE=CCCCCCCC, 
         REASON=DDDDDDDDD

   Explanation: FCJ failed to LOAD the CSI API routine.
         The CODE=cccccccc and REASON=dddddddd
         indicates the cause of the error.
   System Action: Partial data is collected. The data
displayed on a report may be collected from various
sources. Only the data from a valid return code is
displayed.
   User Response: If problems persist, contact the IBM
Software Support.

KCP0030  FCJ ERROR RECEIVED FROM
         IGGCSI00. CICS=AAAAAAA,
         RC=BBBBBBBB, REASON=CCCC

   Explanation: FCJ Calling MVS module IGGCSI00
         failed with RC=bbbbbbbb and REASON=cccc
   System Action: Partial data is collected. The data
displayed on a report may be collected from various
sources. Only the data from a valid return code is
displayed.
   User Response: If problems persist, contact the IBM
Software Support.

KCP0031  CSD UNABLE TO COLLECT STORAGE
         INFORMATION FOR CICS=AAAAAAA,
         RC=BBBBBBBB

   Explanation: The CSD failed to collect CICS storage
         information.
   System Action: No data is collected.
   User Response: If problems persist, contact the IBM
Software Support.

KCP0032  XMI INTERNAL ERROR – Call IBM
         Software Support

   Explanation: The cross-memory interface (XMI) task
         encountered an event that should not occur.
   System Action: The cross-memory interface (XMI)
task abnormally terminates.
   User Response: Contact the IBM Software Support.

KCP0070  INVALID GROUP SPECIFICATION FOR
         CICS aaaaaaaa

   Explanation: The agent expects a group identifier for
         CICS aaaaaaaa, but found an invalid value. The value
must be in the range 1-MAX_GROUPS (MAX_GROUPS
is the value specified in the Global definition file of the
Tivoli OMEGAMON XE for CICS on z/OS product).
   System Action: The query is ignored.

User Response: Specify a valid group number in the
query predicate and retry the request.

KCP0100  agent GET PARM ERROR:
         PARMNAME=parmname, STATUS=status

   Explanation: The agent was unable to obtain the
         address of the parameter identified by parmname.
         Status code status indicates the cause of the error.
   System Action: No data is collected.
   User Response: Contact the IBM Software Support.

KCP0101  agent GET VIEW STORAGE ERROR:
         LENGTH=length, STATUS=status

   Explanation: The specified agent was unable to
         allocate the specified length of bytes of storage. Status
code status indicates the cause of the error.
   System Action: No data is collected.
   User Response: Consider increasing either the
         Candle Management Server region size or the
         GMMPERCENT value in the Candle Management
         Server startup configuration file.

KCP0102  agent PUT PARM ERROR:
         PARMNAME=parmname, STATUS=status

   Explanation: The specified agent was unable to
         identify the address of the parameter identified by
         parmname. Status code status indicates the cause of the error.
   System Action: No data is collected.
   User Response: Contact the IBM Software Support.

KCP0103  agent UNABLE TO MONITOR CICS
         region: RC=rc

   Explanation: Tivoli OMEGAMON XE for CICS on
         z/OS is unable to monitor CICS region. Return code rc
         indicates the type of error:

00   CICS region is monitored by Tivoli
      OMEGAMON XE for CICS on z/OS.
04   XMI did not register the XCB address.
08   CICS region could not be found.
0C   Specified region does not belong to CICS.
10   CICS release is not supported by Tivoli
      OMEGAMON XE for CICS on z/OS.
14   CICS job is swapped out.
18   ESTAEX macro failed.
1C   Cross memory error occurred during CICS
      validation.
20   CICS initialization is not complete.
24   XMIT DD card suffix used in CICS does not
      match that of Candle Management Server.

Chapter 16. Messages 365
Unable to obtain storage required to build TDA.
Session Accounting Area build error occurred.
Module load error occurred (see console for message OC0760).
OCCI Session Accounting Area not found.

System Action: No data is collected.
User Response: For return code x'04', make sure that XMI (cross memory interface task) is an active subtask of the Candle Management Server address space. If problems persist, contact the IBM Software Support.

KCP0104 exception analysis subtask is not active

Explanation: The Tivoli OMEGAMON XE for CICS on z/OS exception analysis subtask is not running in the Candle Management Server address space.
System Action: No data is collected.
User Response: Confirm that XMI successfully started as a subtask of the Candle Management Server address space. Ensure that there is a START command in the Candle Management Server CONFIG file that automatically starts XAM. If problems persist, contact the IBM Software Support.

KCP0105 agent cross memory error, CICS swapped out: region

Explanation: The system attempted cross memory operations to a CICS region that was swapped out.
System Action: No data is collected.
User Response: None.

KCP0106 agent cross memory abend collecting column for CICS region

Explanation: The agent experienced an abend while attempting to collect data for a specific CICS region.
System Action: The agent continues to attempt data collection for remaining columns.
User Response: None.

KCP0107 agent con getmain for work area failed, RC=rc

Explanation: The agent experienced an abend while attempting to GETMAIN storage for the work area used to build data about the CICS regions in this MVS image.
System Action: The agent does not continue processing.
User Response: Contact the IBM Software Support. Ensure that the TLVLOG is available and that you have the Reason Code issued in the message.

KCP0108 agent produce value error: STATUS=status

Explanation: The agent was unable to obtain extract column values. Status code status indicates the cause of the error.
System Action: No data is collected.
User Response: Contact the IBM Software Support.

KCP0109 copy TMA/SCMNTA error; possible data loss

Explanation: The work area allocated by the agent that extracts transaction data is not large enough to accommodate the information gathered by the task cross-memory collector.
System Action: Data in transaction reports may be incomplete.
User Response: Contact the IBM Software Support.

KCP0110 XXX Data Collector abend collecting data for CICS cccccc, Id=pppppppp

Explanation: Where XXX is the internal program mnemonic, cccccc is the CICS Region name that was being queried when the abend occurred, ppppppp is the OMEGAMON module that suffered the abnormal termination.
System Action: The collector abandons the attempt to collect data from the current CICS region.
User Response: This message should be associated with a set of KCP098x messages. Contact the IBM Software Support.

KCP0111 WSR floating point cccccc, ERROR OCCURRED RESULT SET ZERO RA=xxxxxxxx

Explanation: A floating point calculation generated a value too large to represent. cccccc represents the calculation type (ADDI/SUBTRACTMULTIPLY/DIVIDE) and xxxxxxxx is a hexadecimal address.
System Action: No data is collected.
User Response: Contact IBM Software Support.

KCP0112 WSR FP cccccc, IN1=xxxxxxxxxxxxxxx, IN2=
xxxxx, OUT=xxxxxxxxxxxxxxx, RA=xxxxxxxx

Explanation: A floating point calculation generated a value too large to represent. cccccc represents the calculation type (ADDI/SUBTRACTMULTIPLY/DIVIDE) and xxxxxxxx is a hexadecimal value or address.
System Action: No data is collected.
KCP0113 WSR FLOATING POINT
cccccccccccccccc, DETECTED
RA=xxxxxxxxx

Explanation: This is the diagnostic message previous to Abend U113, indicating the type of function that failed. ccccccccccccccc represents the error type and xhhhhhhhhhhhh is a hexadecimal address.

System Action: WSR collector will ABEND U113.

User Response: Contact IBM Software Support.

KCP0201 BOTTLENECK ANALYSIS COLLECTOR NOT ACTIVE FOR CICS aaaaaaaa

Explanation: The Bottleneck Analysis collector is not active in the Tivoli OMEGAMON XE for CICS on z/OS Common Interface (OCCI) address space used to monitor CICS aaaaaaaa.

System Action: The query is ignored.

User Response: Start the collector and retry the request.

KCP0202 BOTTLENECK ANALYSIS COLLECTOR IS BUSY FOR CICS aaaaaaaa

Explanation: The Bottleneck Analysis collector, running in the Tivoli OMEGAMON XE for CICS on z/OS Common Interface (OCCI) address space, is currently analyzing the environment of CICS aaaaaaaa. The agent cannot access the collection data until the collector finishes.

System Action: The query is ignored.

User Response: Retry the request.

KCP0203 COLLECTOR SUSPENDED, VALUES SHOWN NOT CURRENT FOR CICS aaaaaaaa

Explanation: The Bottleneck Analysis collector, running in the Tivoli OMEGAMON XE for CICS on z/OS Common Interface (OCCI) address space, is suspended and is not sampling data for CICS aaaaaaaa. Only the values accumulated up to the time of suspend are returned by the query.

System Action: The query continues execution.

User Response: Resume the Bottleneck Analysis collector and retry the request.

---

KCP0190 LU GROUP INVALID FOR THIS FUNCTION FOR CICS aaaaaaaa

Explanation: The requested function does not support VTAM Logical Unit (LU) groups for CICS aaaaaaaa.

System Action: The query is ignored.

User Response: Specify one of the other group types and retry the request.

---

KCP0207 COLLECTOR DETACHED DUE TO TOO MANY PROGRAM CHECKS FOR CICS aaaaaaaa

Explanation: The Bottleneck Analysis collector, running in the Tivoli OMEGAMON XE for CICS on z/OS Common Interface (OCCI) address space, was detached for CICS aaaaaaaa due to an excessive number of program checks.

System Action: The query is ignored.

User Response: Contact the IBM Software Support.

---

KCP0210 DSPSERV MACRO FAILURE: CODE=error, REASON=reason

Explanation: The system was unable to create the data space used to hold CICS transaction data. The error code is represented by error, and reason denotes the reason code that is associated with the problem.

System Action: The workload manager subtask terminates.

User Response: Error and reason codes for the DSPSERV macro are described in the IBM System Programming Library: Application Development Macro Reference manual. Correct the cause of the problem and restart the subtask.

---

KCP0211 ALESERV MACRO FAILURE: CODE=rc

Explanation: The system was unable to add an entry in the access list for the data space that harbors CICS transaction data. rc is the return code provided by the ALESERV macro.

System Action: The workload manager subtask terminates.

User Response: Return codes for the ALESERV ADD function are described in the IBM System Programming Library: Application Development Macro Reference manual. Correct the cause of the problem and restart the subtask.

---

KCP0212 WORKLOAD ANALYSIS TASK IS TERMINATING

Explanation: The workload subtask used to summarize CICS data by service class is stopping because of an operator request, or some kind of abnormal termination.

System Action: None.

User Response: If the shutdown is unexpected, check the console log for other messages that might indicate why the workload subtask is stopping. If problems persist, contact the IBM Software Support.

---

Chapter 16. Messages 367
KCP0213  WCR PASSED INVALID LENGTH TO XMCOM

Explanation: The workload subtask improperly formatted the parameter list it uses to extract CICS transaction data.

System Action: The workload manager subtask abnormally terminates.

User Response: Contact the IBM Software Support.

KCP0214  WORKLOAD ANALYSIS IS NOT RECEIVING DATA FROM region

Explanation: The Tivoli OMEGAMON XE for CICS on z/OS data collection exits are not running in the CICS region identified by region.

System Action: Service level data for CICS region is not gathered.

User Response: Ensure that an 'OMEG INIT' transaction has been run in CICS region. If problems persist, contact the IBM Software Support.

KCP0215  UNABLE TO OBTAIN RECORD CELL, DATA LOST

Explanation: The data space used to hold CICS transaction records is full.

System Action: Until the workload summarization subtask processes the records in the data space, service level data for some transactions are lost.

User Response: Ensure that the Candle Management Server is getting sufficient cycles to process all of the CICS transaction data. Consider increasing the size of the data space by coding the BLOCKS= parameter on the WLM START command (OC START ID=WLM, BLOCKS=n,m,n) found in RKANCM(KDSSTART). If the BLOCKS keyword is not coded, the workload subtasks use the installation default when creating the data space.

Setting a higher value gives the WLM subtasks additional time to process transaction information. If problems persist, contact the IBM Software Support.

KCP0216  SUMMARY SUBTASK ABEND, CODE=cc

Explanation: The workload summarization routine abnormally terminated with completion code cc.

System Action: The workload analysis subtask terminates.

User Response: Contact the IBM Software Support.

KCP0217  WCR BLOCKS VALUE EXCEEDS RANGE (10-524288)

Explanation: The BLOCKS value coded on the OC START ID=WLM command is not within the permissible range for the DSPSERV macro.

System Action: The workload analysis subtask terminates.

User Response: Re-enter the command, specifying a valid value.

KCP0218  WCR UNABLE TO CREATE ADEQUATE DATA SPACE, BLOCKS=cc

Explanation: A minimum of ten blocks must be available in the data space created by the WLM subtask. The actual number of blocks allocated by the DSPSERV macro is displayed as cc.

System Action: The workload analysis subtask terminates.

User Response: Modify the IEFUSI exit to permit a data space size of at least ten blocks.

KCP0220  SERVICE LEVEL ANALYSIS SUBTASK IS NOT ACTIVE

Explanation: The service level analysis subtask is not running in the Candle Management Server.

System Action: Service level data cannot be written to the persistent data store.

User Response: Ensure that the WLM subtask was started under the Candle Management Server. If problems persist, contact the IBM Software Support.

KCP0221  function UNABLE TO LOCATE SQL FUNCTION PACKAGE

Explanation: The system is unable to locate the C language function set used to issue SQL statements in the CT/Engine address space.

System Action: The function terminates.

User Response: Contact the IBM Software Support.

KCP0222  function table CREATE PATH FAILURE, RC=rc

Explanation: The function indicated by function was unable to perform an SQL CreatePath for table table. rc is the return code generated by the SQL request.

System Action: The function identified by function terminates.

User Response: Contact the IBM Software Support.
KCP0223  agent INPUT SQLDA ERROR, COLUMNS=columns

Explanation: The number of columns expected by agent does not match the column count returned in the SQLDA. columns shows the number of columns contained in the SQLDA input buffer.

System Action: The agent identified by agent terminates.

User Response: Contact the IBM Software Support.

KCP0224  function table OPEN REQUEST FAILURE, RC=rc

Explanation: Function function was unable to perform an SQL OpenRequest for table table. rc is the return code generated by the SQL request.

System Action: The function identified by function terminates.

User Response: Contact the IBM Software Support.

KCP0225  function table DROP PATH FAILURE, RC=rc

Explanation: Function function was unable to perform an SQL DropPath for table table. rc is the return code generated by the SQL request.

System Action: The function identified by function terminates.

User Response: Contact the IBM Software Support.

KCP0226  function table SERVICE LEVEL ANALYSIS SUBTASK HAS TERMINATED

Explanation: Function function encountered an error when attempting to retrieve data from the data space. The data space is no longer available because the service level analysis subtask has terminated.

System Action: The function identified by function terminates.

User Response: Insure a CICS region is available when CMS starts up.

KCP0227  function table UPDATE FAILURE, RC=rc

Explanation: Function function was unable to perform an SQL Update for table table. rc is the return code generated by the SQL request.

System Action: The function identified by function terminates.

User Response: Contact the IBM Software Support.

KCP0228  function table INSERT FAILURE, RC=rc

Explanation: Function function was unable to perform an SQL Insert for table table. rc is the return code generated by the SQL request.

System Action: The function identified by function terminates.

User Response: Contact the IBM Software Support.

KCP0229  function table Unable to locate AR vector. Transaction ID translation disabled

Explanation: Function function was unable to locate the AR vector where the transaction ID translation module pointer is. The AR vector is stored in the Target Descriptor Area for each monitored CICS region. Processing continues without translating to the internal format the codes that represent PF, PA and special keys.

System Action: Processing continues. Note data that special transaction IDs (#F01 through #F36, #PA1 through #PA3, #LPA, #MAG, #OCD) is not collected by the workload analysis tasks.

User Response: Insure a CICS region is available when CMS starts up.

KCP0241  WSR - WLM COLLECTION USES HH:MM: HRS. AS THE COLLECTION INTERVAL

Explanation: The workloads summarizer subtask (WSR) displays this message at initialization time, or when the workload analysis interval is changed at the workstation. It is an information message only.

System Action: Processing continues.

User Response: None.

KCP0242  IWMPQRY MACRO FAILURE, REASON CODE=reason.

Explanation: The workload summarizer subtask (WSR) received reason code reason while attempting to obtain the current IBM service policy definition. This message applies to MVS release 5.1 and above.

System Action: WSR terminates.

User Response: Contact the IBM Software Support.

KCP0243  WSR WAITING FOR WORKLOAD DEFINITIONS

Explanation: The system displays this message at 5 minute intervals until function WSP initializes the user defined interval, services classes and service policy, in storage. Function WSP is triggered by KCPDSI00, the Candle Management Server initialization function of
Tivoli OMEGAMON XE for CICS on z/OS.

**System Action:** Processing continues.

**User Response:** If the message is displayed repeatedly after Candle Management Server start up:

1. Verify that member KDSCNFG in the TLVPARM dataset contains the start command for KCPDSI00:
   ```
   START KCPDSI00
   ```
2. Verify that message **CP0259 DSI $WLMSP INITIALIZATION COMPLETE** was displayed on the TLVLOG.
3. If message KCP0259 is not found in TLVLOG, search TLVLOG for WSP error messages:
   - KCP0211 and KCP0222
   - KCP0224 and KCP0225
   - KCP0251 to KCP0258
4. Perform the corrective action indicated for these messages.

**KCP0244 WSR - UNABLE TO OBTAIN ACCUMULATION BUFFER, DATA LOST**

**Explanation:** The workload summarizer subtask (WSR) is unable to obtain storage for an accumulation buffer. This condition may occur in busy systems with many CICS address spaces. The situation subsides when the subtask catches up with the transaction volume arriving from the CICS address spaces. The data for the transaction currently being processed does not accumulate.

**System Action:** Processing continues.

**User Response:** None.

**KCP0245 WSR LSEXWPAND MACRO FAILURE, RC=rc**

**Explanation:** The workload summarizer subtask (WSR) was not able to expand the linkage stack.

**System Action:** WSR ends.

**User Response:** Contact the IBM Software Support.

**KCP0246 WSR REQUESTED TERMINATION IN PROGRESS**

**Explanation:** The workload summarizer subtask (WSR) has been posted to terminate.

**System Action:** WSR ends.

**User Response:** None.

**KCP0247 WSR - WLM COLLECTION USES $cccccccc SERVICE POLICY**

**Explanation:** The workload summarizer subtask (WSR) issues this message at initialization, or when a new service policy becomes effective.

$cccccccc represents one of the following service policies:

- OMEGAMON when the service policy is activated at the workstation from the CICS Workload Definitions icon under the Administration folder.
- IBM when the service policy was defined using the IBM WLM ISPF application.

**service_policy** is the service policy name.

**rule** shows one of the following values:

- OMEGAMON Service policies, workloads and service classes defined using the CICS Workload Definitions icon under the Administration folder of the workstation are used exclusively by the workloads subtask under the Candle Management Server.
- IBM Service policies, workloads and service classes defined under the IBM WLM ISPF application are used exclusively by the Candle Management Server.
- BOTH The workloads subtask use IBM's definitions for CICS TS 1.3 and above.
- Candle's definitions for CICS release 4.1 and above running under MVS releases below 5.1

**System Action:** Processing continues.

**User Response:** None.

**KCP0248 WSR ENFREQ ACTION=LISTEN MACRO FAILURE, RC=rc**

**Explanation:** Installation of the user exit that listens for changes in IBM's service policy failed with return code rc.

**System Action:** The summarizer subtask terminates if the choice of rules is IBM. If the choice of rules is BOTH or CANDLE, the summarizer subtask continues processing.

**User Response:** Contact the IBM Software Support.

**KCP0249 WSR ENFREQ ACTION=DELETE MACRO FAILURE, RC=rc**

**Explanation:** During termination processing, an attempt to delete the user exit that listens for IBM's service policy changes failed with return code rc.

**System Action:** Termination processing continues.

**User Response:** Contact the IBM Software Support.

**KCP0250 ENF SUCCESSFUL RECOVERY AFTER ABEND WAS DETECTED. ABEND CODE: abend**

**Explanation:** The ENF user exit recovered after an abend. This may be the result of the WLM subtask in the Candle Management Server not being active.

**System Action:** The ENF user exit remains active.
User Response: Contact the IBM Software Support.

KCP0251  WSP table FETCH REQUEST FAILURE, RC=rc

Explanation: Function WSP was unable to perform an SQL Fetch for the table identified by table. rc is the return code generated by the SQL request. The table identified by table can be either the INTERVAL or SVPOL table. This problem can occur if there is no interval specified for the workload analysis collector, or if there is no service policy specified as active when the Candle workload definitions are being used.

System Action: The function terminates.

User Response: If the table is INTERVAL, use the workstation to verify that an interval is shown in the Interval and Rule Choice panel of the CICS Workload Definitions icon. If the table is SVPOL, select Service Policies in the Interval and Rule Choice panel of the CICS Workload Definitions icon, and activate a service policy. If the problem persists, contact the IBM Software Support.

KCP0252  function table FETCH RESULTED IN NULL DATA

Explanation: An attempt by function function to perform an SQL Fetch for table table unexpectedly resulted in null data being returned.

System Action: The function identified by function terminates.

User Response: Contact the IBM Software Support.

KCP0253  function table CLOSE FAILURE, RC=rc

Explanation: The function identified by function was unable to perform an SQL CloseRequest for table table. rc is the return code generated by the SQL request.

System Action: The function identified by function terminates.

User Response: Contact the IBM Software Support.

KCP0254  function UNABLE TO ACQUIRE STORAGE FOR storage

Explanation: Function function was unable to acquire storage for the storage control block.

System Action: The function identified by function terminates.

User Response: Increase the size of the Tivoli OMEGAMON XE for CICS on z/OS region. If the problem persists, contact the IBM Software Support.

KCP0255  function UNABLE TO ACQUIRE SCLASS WORK STORAGE, RC=rc

Explanation: Function function was unable to acquire work storage for the service class work area. rc is the return code generated by the storage request.

System Action: The function identified by function terminates.

User Response: Increase the size of the Tivoli OMEGAMON XE for CICS on z/OS region. If the problem persists, contact the IBM Software Support.

KCP0256  function UNABLE TO PROCESS TOKEN token FOR SERVICE CLASS sclass

Explanation: The total length of the values specified to classify a service class exceeds allocated storage for the service class.

System Action: The function identified by function terminates.

User Response: Contact the IBM Software Support.

KCP0257  function UNABLE TO ALLOCATE STORAGE FOR SERVICE CLASS sclass

Explanation: Function function was unable to acquire storage for an internal control block.

System Action: The function identified by function terminates.

User Response: Increase the size of the Tivoli OMEGAMON XE for CICS on z/OS region. If the problem persists, contact the IBM Software Support.

KCP0258  function FAILURE PROCESSING sclass

Explanation: Function function encountered an error while processing the classification rules for sclass. A previous message described the error.

System Action: The function identified by function terminates.

User Response: Contact the IBM Software Support.

KCP0259  function SWLMSp INITIALIZATION COMPLETE

Explanation: The function completed initialization of the interval and service policy areas.

System Action: Processing continues.

User Response: None.
KCP0260  WSP MISSING GOAL ROW FOR SERVICE CLASS sclass

Explanation: Function WSP did not find a GOAL table row for service class sclass.

System Action: Processing continues. Note that data collected for service class sclass does not reflect the correct response time goal.

User Response: Enter the goal for service class sclass.

KCP0261  WSP CRITICAL ERROR: TABLE SCLASS RETURNED NO ROWS, SWLMP PROCESSING ABANDONED

Explanation: Function WSP found no rows in the SLCASS table, which should contain the classification rules for service classes. This message may appear:
- at data server initialization time
- when a service policy is activated or reactivated at the workstation
- when the rules choice is changed at the workstation

System Action: WSP processing stops. If the message appears at initialization, workloads data collection does not start. If the message appears due to a service policy activation/reactivation, or a change in the choice of rules at the workstation, workloads data collection continues with the old definitions.

User Response: If the message appears at initialization, issue the following commands at the MVS console:

F jobname,CTDS START KCPDS100,STOP
F jobname,CTDS RUN KCPDS100

Monitor the TLVLOG for the following messages, which indicate normal completion of the initialization process:

KCP9002: DATA SERVER INTERFACE IS ACTIVE
KCP0259: DSI $WLMSP INITIALIZATION COMPLETE

If the message appears because of a service policy activation/reactivation, or because of a change in the choice of rules, retry the action at the workstation.

KCP0262  MOSPR ZERO SERVICE POLICY ADDRESS DETECTED

Explanation: Function MOS found that the current service policy address was zero.

System Action: The function terminates.

User Response: Contact the IBM Software Support.

KCP0268  WSR - LOAD FOR MODULE module FAILED, RC=rc

Explanation: The workloads summarizer subtask received return code rc when attempting to load module module.

System Action: The summarizer subtask terminates if the choice of rules for workload analysis is IBM. It continues processing if the choice of rules is CANDLE. Ensure that module is in the STEPLIB for the Candle Management Server, correct the problem and retry the command

/F stask,OC START ID=WLM

where stask is the name of the started task for the Candle Management Server.

KCP0269  WSR - STORAGE OBTAIN FOR USER EXIT PARAMETER LIST FAILURE, RC=rc

Explanation: The workloads summarizer subtask received return code rc when attempting to obtain common storage for the parameter list of the ENF listener user exit.

System Action: The summarizer subtask terminates if the choice of rules for workload analysis is IBM. It continues processing if the choice of rules is CANDLE.

User Response: Investigate the reason for common storage to be depleted, correct the problem and retry starting WLM.

KCP0270  TRT RETURN CODE rc FROM TARGET DESCRIPTOR AREA BUILD

Explanation: The system received a non-zero return code during TDA build processing. The return code (rc) describes the reason:

04 XMI did not register the XCB address.
08 The system could not locate the specified CICS region.

System Action: The system does not collect routing information.

User Response: For return code x'04', make sure that XMI (cross memory interface task) is an active subtask of the Candle Management Server address space. Ensure that there are active CICS regions on this system. If problems persist, contact the IBM Software Support.

KCP0271  agent HAS LOCATED MORE THAN nn CICS REGIONS IN THIS MVS IMAGE

Explanation: Probe agent has located more than nn active CICS regions in this MVS image.

System Action: The system only collects routing
information for the first $nn$ active CICS regions.

User Response: Contact the IBM Software Support.

**KCP0280 IBM SERVICE CLASS COLLECTOR IS ACTIVE**

Explanation: The IBM service class collector has completed initialization.

System Action: None.

User Response: None.

**KCP0281 IBM SERVICE CLASS COLLECTOR ALREADY ACTIVE**

Explanation: A second IBM service class collector task was started while one was already active.

System Action: The task terminates.

User Response: None.

**KCP0282 IBM SERVICE CLASS COLLECTOR IS NOT ACTIVE**

Explanation: The IBM service class collector is not running.

System Action: None.

User Response: None.

**KCP0283 IBM SERVICE CLASS COLLECTOR IS TERMINATING**

Explanation: The IBM service class collector has received a request to terminate.

System Action: None.

User Response: None.

**KCP0284 IBM SERVICE CLASS COLLECTOR IS NOT RESPONDING**

Explanation: The IBM service class collector failed to terminate within thirty seconds after being notified to stop.

System Action: Once the IBM service class collector detects the shutdown request, it terminates.

User Response: None.

**KCP0285 function INVALID PARMA VALUE DETECTED value**

Explanation: Function $function$ retrieved an invalid parameter value.

System Action: The function identified by $function$ terminates.

User Response: None.

**KCP0286 function MOSTATUS NOTIFICATION COMPLETE**

Explanation: Function $function$ has notified the service class processor function of a change in workload definitions.

System Action: None.

User Response: None.

**KCP0287 function PROCESSING XXXXXX SERVICE CLASSES**

Explanation: Function $function$ is building a list of IBM service classes; XXXXXX indicates which.

System Action: None.

User Response: None.

**KCP0288 function MOSTATUS PROCESSING COMPLETE**

Explanation: Function $function$ has successfully finished building a list of IBM service classes.

System Action: None.

User Response: None.

**KCP0289 function SERVICE CLASSES EXCEED AVAILABLE STORAGE**

Explanation: Function $function$ has encountered an internal error while attempting to build a list of IBM service classes.

System Action: Function $function$ terminates.

User Response: Contact the IBM Software Support.

**KCP0290 function UNABLE TO LOAD MODULE KCPISP0z**

Explanation: Function $function$ attempted to load module KCPISP0z, where $z$ is the MVS release dependent suffix.

System Action: Function $function$ terminates.

User Response: Verify that module KCPISP0z is in the TLVLOAD concatenation.

**KCP0291 function ABEND RETRY IN PROGRESS**

Explanation: Function $function$ has abended and is attempting recovery.

System Action: Function $function$ continues.

User Response: None.
**KCP0330**  RESPONSE TIME ANALYSIS COLLECTOR NOT ACTIVE FOR CICS

**Explanation:** The Response Time Analysis (RTA) collector is not active in the Tivoli OMEGAMON XE for CICS on z/OS Common Interface (OCCI) address space used to monitor CICS.

**System Action:** The query is ignored.

**User Response:** Start the collector and retry the request.

**KCP0760**  LOAD OF module FAILED: CODE=abend, REASON=reason

**Explanation:** Load module module could not be loaded. abend is the abend code, and reason is the reason code associated with the abend.

**System Action:** The session does not initiate.

**User Response:** Locate the abend code in the IBM System Codes manual, correct the cause of the load failure, and restart the session.

**KCP0762**  HOLD COUNT DISPLACEMENT VALIDATION FAILED

**Explanation:** OMEGAMON was unable to verify the location of the hold count field in the OUCB control block.

**System Action:** The cross-memory interface (XMI) task terminates because OMEGAMON components cannot verify a target address space if it is swapped out.

**User Response:** Contact the IBM Software Support.

**KCP0764**  TAI DETECTED AN INCORRECT WORK AREA LENGTH

**Explanation:** The size of the ECSA work area allocated by TAM differs from that expected by module TAI.

**System Action:** The cross memory interface task (XMI) abnormally terminates with a U0764 ABEND.

**User Response:** Contact the IBM Software Support.

**KCP0803**  SSCVT CHAIN IS EMPTY

**Explanation:** The SSCVT chain was scanned, and was found to be empty.

**System Action:** The cross-memory interface (XMI) task abnormally terminates with a U0803 completion code.

**User Response:** Contact the IBM Software Support.

**KCP0804**  INVALID SSCVT FOUND ON CHAIN

**Explanation:** While searching through the Subsystem Communication Vector Table chain for the element belonging to OMEGAMON XE, the cross-memory interface (XMI) task encountered an improperly formatted SSCVT.

**System Action:** The cross-memory interface (XMI) task abnormally terminates with a U0804 completion code.

**User Response:** Indicates that main storage was overlaid. If problems persist, contact the IBM Software Support.

**KCP0808**  XM INTERFACE TASK id ALREADY ACTIVE IN job

**Explanation:** A second cross-memory interface task was started while another one is still active. The CPXMIT number is identified by id and the job running the interface task is identified by job.

**System Action:** The subtask terminates.

**User Response:** Either use a CPXMITnn DD statement to start another cross-memory interface task, or stop the CMS in which the active task is running.

**KCP0809**  XM INTERFACE TASK IS ACTIVE

**Explanation:** The cross-memory interface (XMI) task has completed initialization and is waiting for work.

**System Action:** None.

**User Response:** None.

**KCP0810**  XM INTERFACE TASK IS TERMINATING

**Explanation:** The cross-memory interface (XMI) task received a request to terminate.

**System Action:** None.

**User Response:** None.

**KCP0811**  XM INTERFACE TASK HAS ABENDED

**Explanation:** The cross-memory interface (XMI) task error exit intercepted an abnormal termination.

**System Action:** The cross-memory interface (XMI) task attempts resource cleanup before continuing with termination.

**User Response:** Restart XMI, and contact the IBM Software Support.
KCP0812 XM INTERFACE TASK RESOURCE CLEANUP IS COMPLETE

Explanation: The cross-memory interface (XMI) task successfully completed resource cleanup.

System Action: None.

User Response: None.

KCP0813 subtask ESTAEX MACRO FAILURE.

Explanation: The subtask denoted by subtask received a non zero return code from the ESTAEX macro. This is usually caused by a lack of LSQA.

System Action: The subtask terminates.

User Response: The return code (rc) for the ESTAEX macro is described in the IBM Macro Reference manual. If the error was caused by a shortage of available storage, decrease the Candle Management Server region size and restart the subtask. If problems persist, contact the IBM Software Support.

KCP0815 SUBSYSTEM TABLE BUILD FUNCTION WAS UNABLE TO CREATE ITS TABLES

Explanation: An internal error occurred during the attempt to create the Tivoli OMEGAMON XE for CICS on z/OS SSCVT and related control blocks.

System Action: The cross-memory interface (XMI) task terminates.

User Response: Ensure that no other attempt is being made to start the cross-memory interface task. Then attempt to start the cross-memory interface task again.

KCP0816 ENTRY TABLE CREATE FAILED

Explanation: An error occurred during the attempt to build a program call entry table.

System Action: The cross-memory interface (XMI) task abnormally terminates with a U0816 completion code.

User Response: Contact the IBM Software Support.

KCP0817 LINKAGE INDEX RESERVE FAILED

Explanation: An attempt to reserve a linkage index failed.

System Action: The cross-memory interface (XMI) task abnormally terminates with a U0817 completion code.

User Response: Contact the IBM Software Support.

KCP0818 program IS NOT A VALID PROGRAM NAME

Explanation: A START command requested an invalid program name (program).

System Action: START processing ends.

User Response: Correct and re-enter the START command.

KCP0819 UNABLE TO CONNECT ENTRY TABLE

Explanation: An attempt to connect to the entry table created by the cross-memory interface (XMI) task has failed.

System Action: The cross-memory interface (XMI) task abnormally terminates with a U0819 completion code.

User Response: Contact the IBM Software Support.

KCP0920 agent LOOP DETECTED WHILE COLLECTING column FOR CICS region

Explanation: The agent intercepted a hard loop condition during data collection for a specific CICS region.

System Action: Data for the CICS region is not provided by the agent.

User Response: None.

KCP0946 module1 (Vnnn) AND module2 (Vnnn) INCOMPATIBLE

Explanation: The versions of module module1 and the module it is attempting to load (module2) are incompatible.

System Action: The load and its invoking facility fail.

User Response: Verify that the Tivoli OMEGAMON XE for CICS on z/OS installation process completed successfully, and that module2 is in the Candle Management Server library.

KCP0980 SDWA address

Explanation: An Abend has occurred, and has been trapped by OMEGAMON. The MVS Software Diagnostic Area has been passed to the recovery routine at the location displayed.

System Action: The abend recovery continues.

User Response: If problems persist, contact the IBM Software Support.
KCP0981 Abend Sabendcode Uabendcode has occurred in modname, Section sectname, PSW xxxxxxxxxx 

Explanation: An Abend has occurred, and has been trapped by OMEGAMON. The MVS System and User Completion Codes are displayed, along with the name of the Module and CSECT that the abend occurred in, and the failing PSW.

System Action: The abend recovery continues.
User Response: If problems persist, contact the IBM Software Support.

KCP0982 R0-R7 xxxxxxxxxx xxxxxxxxxx 

Explanation: An Abend has occurred, and has been trapped by OMEGAMON. The contents of General Purpose Registers 0 through 7 at the time of the abend are shown in hexadecimal format.

System Action: The abend recovery continues.
User Response: If problems persist, contact the IBM Software Support.

KCP0983 R8-R15 xxxxxxxxxx xxxxxxxxxx 

Explanation: An Abend has occurred, and has been trapped by OMEGAMON. The contents of General Purpose Registers 8 through 15 at the time of the abend are shown in hexadecimal format.

System Action: The abend recovery continues.
User Response: If problems persist, contact the IBM Software Support.

KCP0984 Abend location address - adjacent storage:

Explanation: An Abend has occurred, and the abend location is shown here. The storage in the immediate vicinity of the abend location follows this message.

System Action: The abend recovery continues.
User Response: If problems persist, contact the IBM Software Support.

KCP0985 aaaaaaaa xxxxxxxxxx xxxxxxxxxx 

Explanation: An Abend has occurred, and has been trapped by OMEGAMON. The contents of the 16 bytes at storage location aaaaaaaa are displayed in hexadecimal and character format.

However, if the storage location is not retrieveable in the local address space, then it displays: 2005.124 14:15:47.29 KCP0985: 76543210 Not displayable (Protected).

If the abend occurred whilst the query is in cross-memory mode to a CICS Region, then the message displays: 2005.124 15:56:22.84 KCP0985: 1C087038 Not displayable (CICS).

System Action: The abend recovery continues.
User Response: If problems persist, contact the IBM Software Support.

KCP0986 Storage addressed by GPR nn 

Explanation: Where: nn is a value between 00 and 15, denoting the General Register being displayed. This message is always followed KCP0985, which attempts to display 16 bytes of main storage addressed by the General Register.

System Action: The abend recovery continues.
User Response: If problems persist, contact the IBM Software Support.

KCP4151 GROUPNUM CANNOT BE USED MULTIPLE TIMES 

Explanation: Either multiple predicates in the same query include the GROUPNUM column, or an arithmetic operator other than EQ is used in the expression.

System Action: The query is ignored.
User Response: Limit the use of GROUPNUM to a single predicate and ensure that the predicate specifies equal (EQ), rather than some other operator.

KCP4153 GROUPNUM FILTER VALUE nn MUST BE BETWEEN 1 AND 30 

Explanation: A query requested a GROUPNUM of nn that is outside the range of permissible group numbers.

System Action: The query is ignored.
User Response: Change the group number to be in the range 1-30 and resubmit the request.

KCP9000 routine INITIALIZATION HAS STARTED 

Explanation: The Tivoli OMEGAMON XE for CICS on z/OS initialization routine routine now has control.

System Action: None.
User Response: None.
KCP9001  STATISTICS COMMUNICATION AREA NOT AVAILABLE

Explanation: The program used to provide performance statistics could not locate the communication area used to collect data.

System Action: The MONITOR subtask terminates.

User Response: None.

KCP9002  DATA SERVER INTERFACE IS ACTIVE

Explanation: The Candle Management Server Interface has completed initialization.

System Action: None.

User Response: None.

KCP9003  DATA SERVER INTERFACE ALREADY ACTIVE

Explanation: A second Candle Management Server Interface task was started while one was already active.

System Action: The task terminates.

User Response: None.

KCP9004  DATA SERVER INTERFACE IS NOT ACTIVE

Explanation: The Candle Management Server Interface is not running.

System Action: None.

User Response: None.

KCP9005  DATA SERVER INTERFACE IS TERMINATING

Explanation: The Candle Management Server Interface has received a request to terminate.

System Action: None.

User Response: None.

KCP9006  DATA SERVER INTERFACE IS NOT RESPONSING

Explanation: The Candle Management Server Interface failed to terminate within thirty seconds after being notified to stop.

System Action: Once the Candle Management Server Interface detects the shutdown request, it terminates.

User Response: None.

KCP9007  MODULE CSECT ADDRESS DATE TIME SYSMOD

Explanation: This message is the header line produced in response to an OC DISPLAY MODULES command.

System Action: None.

User Response: None.

KCP9008  module csect address date time sysmod

Explanation: This message is generated for each CSECT on the MVS load list in response to an OC DISPLAY MODULES command. The six fields displayed in this message include the module, csect, address, date, time, and sysmod associated with each CICS module loaded from STEPLIB.

System Action: None.

User Response: None.

KCP9009  phase initialization has ended

Explanation: The Tivoli OMEGAMON XE for CICS on z/OS initialization phase identified by phase has finished.

System Action: None.

User Response: None.

KCP9010  ATC NO CICS MODULES APPEAR ON LOAD LIST

Explanation: The OC DISPLAY MODULES command found no programs on the MVS load list that contained a prefix of KCP.

System Action: The command terminates.

User Response: None.

KCP9011  ATC UNABLE TO OBTAIN COMMON WORK AREA STORAGE

Explanation: The Tivoli OMEGAMON XE for CICS on z/OS attach controller could not acquire its work area.

System Action: None of the Tivoli OMEGAMON XE for CICS on z/OS collection routines function.

User Response: Increase the amount of memory available to the Candle Management Server. If problems persist, contact the IBM Software Support.

KCP9012  pthread_create() ERROR

Explanation: The thread used to monitor active CICS regions could not be started.

System Action: None of the Tivoli OMEGAMON XE for CICS on z/OS queries function.
User Response: Inspect the logs for a message that might indicate why the thread failed to start. If problems persist, contact IBM Software Support.

KCP9013 ATC UNABLE TO OBTAIN OCCVT STORAGE
Explanation: The system was unable to allocate the OMEGAMON II for CICS communications vector table.
System Action: None of the Tivoli OMEGAMON XE for CICS on z/OS collection routines function.
User Response: Increase the amount of memory available to the Candle Management Server. If problems persist, contact the IBM Software Support.

KCP9014 PTHREAD_DETACH() ERROR
Explanation: Unused resources associated with the subnode monitoring thread could not be freed.
System Action: Resources remain allocated until CT/Engine region termination.
User Response: None.

KCP9015 ATC entry_point ROUTINE ENTRY POINT NOT FOUND
Explanation: The program used by the attach controller to start subtasks contains an invalid entry point. entry_point denotes the entry point that could not be located.
System Action: None of the Tivoli OMEGAMON XE for CICS on z/OS collection routines function.
User Response: Contact the IBM Software Support.

KCP9016 IRA MANAGER COMMAND UNKNOWN: aaaaaaaa
Explanation: The IRAMAN KCPAGENT modify command specified an invalid argument, as denoted by aaaaaaaa.
System Action: The command is ignored.
User Response: Enter the correct IRAMAN KCPAGENT aaaaaaaa modify command.

KCP9017 IRA MANAGER COMMAND OPERAND MISSING
Explanation: The IRAMAN KCPAGENT modify command did not include an argument.
System Action: The command is ignored.
User Response: Enter the correct IRAMAN KCPAGENT aaaaaaaa modify command.

KCP9018 IRA_SUBNODE_REGISTER ERROR: RC=aa, NODE=bbbbbbbb
Explanation: The function used to register CICS bbbbbbbbb as on-line failed with a return code denoted by aa.
System Action: The CICS subnode will not be available for situations and reports.
User Response: Contact IBM Software Support.

KCP9019 ATC INITIALIZATION RTN DIAGNOSTIC DUMP
Explanation: This message provides a heading for work area displays shown in TLVLOG.
System Action: None.
User Response: None.

KCP9021 IRA_SUBNODE_DEREGISTER ERROR: RC=aa, NODE=bbbbbbbb
Explanation: The function used to register CICS bbbbbbbbb as off-line failed with a return code denoted by aa.
System Action: The CICS subnode will continue to reflect an on-line status regardless of its actual state.
User Response: Contact IBM Software Support.

KCP9022 ATC START COMMAND FAILED. SEE PRIOR MESSAGES
Explanation: The attach controller was unable to start an Tivoli OMEGAMON XE for CICS on z/OS function.
System Action: The function does not initiate.
User Response: Consult TLVLOG for additional messages.

KCP9023 ATC COMMAND FORMAT INVALID, SEE PRIOR MESSAGES
Explanation: The attach controller detected a command with invalid syntax.
System Action: The command is not processed.
User Response: Consult TLVLOG for additional messages.

KCP9024 IRA_SUBNODE_SENDREQUEST CALL RETURNED WITH aa
Explanation: The function used to submit CICS subnode status has failed with a return code denoted by aa.
System Action: The CICS subnode does not reflect the true state of the region.
User Response: Examine the RKLVLOG for messages that may indicate a problem with the register/deregister functions. If problems persist, contact IBM Software Support.

KCP9025 aaa UNABLE TO OBTAIN WORK AREA STORAGE
Explanation: The agent identified by aaa was unable to allocate main memory.
System Action: No data is collected.
User Response: Consider increasing the CT/Engine region size.

KCP9030 ATC PROCESSING THE FOLLOWING COMMAND:
Explanation: This message precedes any command received by the attach controller.
System Action: None.
User Response: None.

KCP9038 ATC STOP COMMAND FAILED RC=rc
Explanation: An OC STOP command could not be processed.
System Action: The task is not be stopped.
User Response: Contact the IBM Software Support.

KCP9039 ATC STOP COMMAND FAILED. INTERNAL ERROR
Explanation: An OC STOP command could not be processed.
System Action: The task is not be stopped.
User Response: Contact the IBM Software Support.

KCP9040 ATC STATUS COMMAND BEING PROCESSED
Explanation: A request for status has been received.
System Action: None.
User Response: None.

KCP9060 ATC THREAD START COMPLETED SUCCESSFULLY
Explanation: A CT/Engine thread was initiated.
System Action: None.
User Response: None.

KCP9069 ATC TASK START FAILED ON SDISP ERROR
Explanation: A program could not be initiated due to a dispatch queue problem.
System Action: The task does not start.
User Response: Contact the IBM Software Support.

KCP9070 CICS JOBNAME PARAMETER IS MISSING OR INVALID
Explanation: A START command for a program that requires a CICS jobname did not properly specify the CICS keyword.
System Action: The task does not start.
User Response: Ensure that a valid CICS name is passed on the START command.

KCP9198 ATC INITIALIZATION FAILED TO COMPLETE SUCCESSFULLY
Explanation: The Tivoli OMEGAMON XE for CICS on z/OS attach controller failed to initialize.
System Action: None of the Tivoli OMEGAMON XE for CICS on z/OS collection routines will function.
User Response: Consult the console log for additional messages that would explain why the attach controller could not initialize. If problems persist, contact the IBM Software Support.

KCP9199 ATC OPERATOR INTERFACE DISABLED, RESTART REQUIRED
Explanation: An error caused the attach controller to fail.
System Action: None of the Tivoli OMEGAMON XE for CICS on z/OS operator commands will work under CT/Engine.
User Response: Consult the console log for additional messages that would explain why the attach controller could not initialize. If problems persist, contact the IBM Software Support.

KCP9200 ATO OPERATOR INTERFACE NOT INSTALLED
Explanation: The operator interface was not initialized during CT/Engine initialization.
System Action: The command is ignored.
User Response: Contact the IBM Software Support.
KCP9201  ATO OPERATOR INTERFACE DISPATCH FAILURE
Explanation: The system encountered an internal error when attempting to dispatch the work required to process an operator command.
System Action: The command is ignored.
User Response: Contact the IBM Software Support.

KCP9202  ATO UNABLE TO OBTAIN COMMAND PLIST STORAGE
Explanation: Memory could not be acquired for the operator command parameter list.
System Action: The command is ignored.
User Response: Increase the amount of storage available to the Candle Management Server.

KCP9300  ATC STATUS -- module: entry_point
Explanation: This message displays the entry point of module module in response to a STATUS command with the DEBUG option.
System Action: None.
User Response: None.

KCP9311  ATC STATUS -- ATC OCSATCWK: address
Explanation: This message displays the address of the attach parameter list used by the attach controller in response to a STATUS command.
System Action: None.
User Response: None.

KCP9312  ATC STATUS -- ATC OCSCVT: address
Explanation: This message shows the address of the Tivoli OMEGAMON II for CICS on z/OS CVT when a STATUS command is entered.
System Action: None.
User Response: None.

KCP9313  ATC STATUS -- ATC OCSAPARM: address
Explanation: This message displays the attach controller anchor control block address.
System Action: None.
User Response: None.

KCP9314  ATC STATUS -- TASK ID: task_id
Explanation: This message displays the task ID of the active task started by the attach controller.
System Action: None.
User Response: None.

KCP9315  ATC STATUS -- TASK ID: task_id CICS: region
Explanation: This message displays the task ID for the active task started by the attach controller that is monitoring a specific CICS region.
System Action: None.
User Response: None.

KCP9316  ATC STATUS -- APARM: address TYPE: type
Explanation: This message displays the address and type of attach parameter lists created by the attach controller.
System Action: None.
User Response: None.

KCP9317  ATC STATUS -- MODULE: module ENTRY PT: entry_point
Explanation: This message displays the name and entry point of each module loaded by the attach controller.
System Action: None.
User Response: None.

KCP9318  ATC STATUS -- TCB: address1 EOT ECB: address2
Explanation: This message displays the address of each TCB (address1), and its corresponding end-of-task ECB (address2), created by the attach controller.
System Action: None.
User Response: None.

KCP9398  ATC STATUS -- NO TASKS CURRENTLY ACTIVE
Explanation: The attach controller could not find any active tasks in response to a status request.
System Action: None.
User Response: None.
KCP9399  ATC STATUS -- NO TASKS STARTED YET

Explanation: The attach controller has not processed a START command in response to a status request.

System Action: None.

User Response: None.

KCP9700  ATI SUBTASK INITIALIZATION TDA NOT FOUND

Explanation: The system was unable to locate the target descriptor area used to monitor a CICS region.

System Action: The task does not start.

User Response: Contact the IBM Software Support.

KCP9701  ATI SUBTASK MODULE E.P. MISSING OR INVALID

Explanation: The program entry point of a module to be started is zero.

System Action: The task does not start.

User Response: Contact the IBM Software Support.

KCP9889  ATC SOC4 MESSAGES ARE ALREADY SUPPRESSED

Explanation: The Tivoli OMEGAMON XE for CICS on z/OS attach controller has received a request to suppress SOC4 log messages, but message suppression is already enabled.

System Action: The OC SUPRSOC4 command is ignored.

User Response: None.

KCP9890  ATC SOC4 MESSAGE SUPPRESSION ACTIVATED

Explanation: The Tivoli OMEGAMON XE for CICS on z/OS attach controller has acknowledged a request to suppress SOC4 log messages.

System Action: Messages are not written to the RKLVLOG when a CICS agent abnormally terminates with a SOC4 abend code.

User Response: None.

KCP9891  ATC SOC4 MESSAGE SUPPRESSION NOT ACTIVE

Explanation: The Tivoli OMEGAMON XE for CICS on z/OS attach controller received a request to suppress SOC4 messages, but message suppression was never enabled.

System Action: The OC SUPRSOC4 command is ignored.

User Response: None.

KCP9892  ATC SOC4 MESSAGE SUPPRESSION DEACTIVATED

Explanation: The Tivoli OMEGAMON XE for CICS on z/OS attach controller has acknowledged a request to stop suppressing SOC4 log messages.

System Action: A message is written to the RKLVLOG when CICS agents experience SOC4 ABENDs.

User Response: None.

KCP9893  ATC INVALID SOC4 MESSAGE OPTION SPECIFIED

Explanation: The Tivoli OMEGAMON XE for CICS on z/OS suppression option specified in the OC SUPRSOC4 command.

System Action: The OC SUPRSOC4 command is ignored.

User Response: Reenter the command with an ON or OFF option.

KCP9894  ERROR PROCESSING RKCPDEFW, TABLE = xxxxxxxx, PROCESSING STOPS

Explanation: The Tivoli OMEGAMON XE for CICS on z/OS conversion routine detected an incorrect definition in the RKCPDEFW file for the table denoted by xxxxxxxx.

System Action: Processing stops.

User Response: Contact the IBM Software Support.

KCP9895  INCORRECT GROUP NAME IN RKCPIN = xxxxxxxx, PROCESSING STOPS

Explanation: The Tivoli OMEGAMON XE for CICS on z/OS conversion routine detected the group name xxxxxxxx in the input file to the conversion. The group name should be WLMDEF.

System Action: Processing stops.

User Response: Ensure the file specified for RKCPIN is the WLMDEF archived file, and rerun this step.

KCP9896  TOO MANY TABLES IN RKCPIN, PROCESSING STOPS

Explanation: The Tivoli OMEGAMON XE for CICS on z/OS conversion routine expects a maximum of 7 tables as input in the archive input file, DDname RKCPIN. The number of tables detected indicates the wrong file is being provided as input to KCPCNV00.

System Action: Processing stops.

User Response: Ensure the file specified for RKCPIN
is the WLMDEF archived file, and rerun this step.

**KCP9897**  **DICTIONARY WORK AREA GETMAIN UNSUCCESSFUL, PROCESSING STOPS**

**Explanation:** The Tivoli OMEGAMON XE for CICS on z/OS conversion routine issued a GETMAIN unsuccessfully.

**System Action:** Processing stops.

**User Response:** Increase the REGION size parameter and rerun this step.

**KCP9898**  **INVALID DICTIONARY POINTER, PROCESSING STOPS**

**Explanation:** The Tivoli OMEGAMON XE for CICS on z/OS conversion routine encountered an internal error.

**System Action:** A dump is produced.

**User Response:** Obtain the dump and a printout of the input file and contact the IBM Software Support.

**KCP9899**  **KCPCNV00 PROCESSING COMPLETED WITHOUT ERRORS**

**Explanation:** The Tivoli OMEGAMON XE for CICS on z/OS conversion routine ended successfully.

**System Action:** None.

**User Response:** None.

**KCP9900**  **ATC TERMINATION HAS STARTED**

**Explanation:** The Tivoli OMEGAMON XE for CICS on z/OS termination routine now has control.

**System Action:** None.

**User Response:** None.

**KCP9920**  **ATC START ATTACH ERROR RC=rc**

**Explanation:** The attach controller was unable to start an Tivoli OMEGAMON XE for CICS on z/OS function.

**System Action:** The function does not initiate.

**User Response:** Consult TLVLOG for additional messages.

**KCP9921**  **ATC START REJECTED. TASK ID=task_id CURRENTLY RUNNING. ONLY ONE COPY PERMITTED AT A TIME**

**Explanation:** The Tivoli OMEGAMON XE for CICS on z/OS attach controller found an active copy of task_id running in the Data Server address space.

**System Action:** The START command is ignored.

**User Response:** None.

**KCP9922**  **ATC UNABLE TO OBTAIN ATTACH PARAMETER LIST STORAGE**

**Explanation:** The Tivoli OMEGAMON XE for CICS on z/OS attach controller could not acquire memory for the ATTACH macro.

**System Action:** The task does not start.

**User Response:** Increase the amount of memory available to the Candle Management Server. If problems persist, contact the IBM Software Support.

**KCP9924**  **ATC FREEMAIN FAILURE FOR CT/Engine STORAGE**

**Explanation:** The system was unable to execute a $FMEM request to release CT/Engine managed storage.

**System Action:** None.

**User Response:** Contact the IBM Software Support.

**KCP9925**  **ATC TASK-START RESOURCE ALREADY FREED**

**Explanation:** The system has released resources associated with a task.

**System Action:** None.

**User Response:** None.

**KCP9941**  **function MVS VERSION UNKNOWN**

**Explanation:** The subroutine used to determine the operating system release detected an unsupported release of z/OS when called by function function.

**System Action:** The function identified by function does not start.

**User Response:** Contact the IBM Software Support.

**KCP9942**  **function OCVRSN FAILURE, R1=r1, R15=r15**

**Explanation:** The subroutine used to determine the operating system release failed with return code r1 when called by function function.

**System Action:** The task does not start.

**User Response:** Contact the IBM Software Support.

**KCP9943**  **ATC NO TABLE ENTRY FOR task**

**Explanation:** The attach controller was unable to locate task task.

**System Action:** The task does not start.

**User Response:** Contact the IBM Software Support.
KCP9945  ATC LOAD ERROR FOR MODULE: module
Explanation: The CT/Engine service used to load a program has failed. module is the module that could be found.
System Action: The task is not started.
User Response: Contact the IBM Software Support.

KCP9947  ATC ID= PARM NOT SPECIFIED OR INVALID
Explanation: The ID keyword on the OC command specifies an incorrect value.
System Action: The task does not start.
User Response: Correct the task name on the ID parameter and reenter the command.

KCP9948  ATC ID= PARM LENGTH ERROR
Explanation: The ID keyword on the OC command specifies an incorrect value.
System Action: The task does not start.
User Response: Correct the task name on the ID parameter and reenter the command.

KCP9949  ATC INVALID HEADER FORMAT IN program
Explanation: The internal module header in program program cannot be validated.
System Action: The task does not start.
User Response: Contact the IBM Software Support.

KCP9950  ATC HAS LOADED MODULE: program
Explanation: The attach controller loaded program program.
System Action: None.
User Response: None.

KCP9989  ATC TRACING HAS BEEN ACTIVATED
Explanation: The Tivoli OMEGAMON XE for CICS on z/OS attach controller has acknowledged a request to turn on trace.
System Action: Tracing of Tivoli OMEGAMON XE for CICS on z/OS is initiated.
User Response: None.

KCP9990  ATC INITIALIZATION HAS ISSUED ADDITIONAL ERROR MESSAGES
Explanation: The Tivoli OMEGAMON XE for CICS on z/OS attach controller has failed to initialize.
System Action: None of the Tivoli OMEGAMON XE for CICS on z/OS collection routines function.
User Response: Consult the console log for additional messages that would explain why the attach controller could not initialize. If problems persist, contact IBM Software Support.

KCP9991  ATC TRACING IS NOT CURRENTLY ACTIVE
Explanation: The Tivoli OMEGAMON XE for CICS on z/OS attach controller received a request to turn tracing off but tracing was never turned on originally.
System Action: The OC TRACE command is ignored.
User Response: None.

KCP9992  ATC TRACING HAS BEEN DEACTIVATED
Explanation: The Tivoli OMEGAMON XE for CICS on z/OS attach controller has acknowledged a request to turn off tracing.
System Action: Tracing of Tivoli OMEGAMON XE for CICS on z/OS discontinues.
User Response: None.

KCP9993  ATC INVALID TRACE OPTION SPECIFIED
Explanation: The Tivoli OMEGAMON XE for CICS on z/OS attach controller did not recognize the tracing option specified in the OC TRACE command.
System Action: The OC TRACE command is ignored.
User Response: Reenter the command with an ON or OFF option.

KCP9994  ATC TRACING IS ALREADY ACTIVE
Explanation: The Tivoli OMEGAMON XE for CICS on z/OS attach controller has received a request to activate tracing, but tracing is already active.
System Action: The OC TRACE command is ignored.
User Response: None.

KCP9995  ATC TEST REJECTED, XDC(Y) NOT IN KDSSYSIN
Explanation: The Tivoli OMEGAMON XE for CICS on z/OS attach controller has received a TEST command but found that the XDC environment had not been
established under the Engine.

**System Action:** The OC TEST command is ignored.

**User Response:** Place an XDC(Y) control card in the KDSSYSIN member of TLVPARM and restart the CMS address space.

---

**KCP9996 ATC NOW INOPERATIVE. RESTART REQUIRED.**

**Explanation:** In order for Tivoli OMEGAMON XE for CICS on z/OS to collect data, the error that caused the attach controller to fail must be corrected and the Candle Management Server address space restarted.

**System Action:** None. This message is for informational purposes only.

**User Response:** Consult the console log for additional messages that would explain why the attach controller could not initialize. If problems persist, contact the IBM Software Support.

---

**KCP9997 ATC INITIALIZATION CANNOT BE COMPLETED**

**Explanation:** An error caused the attach controller to fail.

**System Action:** None of the Tivoli OMEGAMON XE for CICS on z/OS collection routines will function.

**User Response:** Consult the console log for additional messages that would explain why the attach controller could not initialize. If problems persist, contact the IBM Software Support.

---

**BG messages**

**BG0001 {BATCH DRIVER|LOGGER|POST PROCESSOR} ACTIVE**

**Explanation:** The message logging facility is active.

**System Action:** Processing continues.

**User Response:** None.

---

**BG0002 {BATCH DRIVER|LOGGER|POST PROCESSOR} FILE ACTIVATED: dataset_name**

**Explanation:** This message identifies the dataset to which the background reporting facility is writing records.

**System Action:** Processing continues.

**User Response:** None.

---

**BG0006 {BATCH DRIVER|LOGGER|POST PROCESSOR} SWITCH ACCEPTED**

**Explanation:** The background reporting facility accepted a request to switch files, and is attempting to switch recording to another file.

**System Action:** If one or more empty log files are available, the background reporting facility switches recording to the file with the lowest ddname. If no empty log files are available, message logging is suspended until one or more files are cleared.

**User Response:** None.

---

**BG0007 {BATCH DRIVER|LOGGER|POST PROCESSOR} SWITCH PENDING**

**Explanation:** The background reporting facility is in the process of switching recording from one log file to another.

**System Action:** The background reporting facility continues switch processing.

**User Response:** None.

---

**BG0008 {BATCH DRIVER|LOGGER|POST PROCESSOR} MESSAGE LOG FILES UNAVAILABLE**

**Explanation:** No log files are available to record messages. Either no valid log files are allocated or all allocated log files contain old records.

**System Action:** Logging is suspended until one or more allocated log files are cleared with the post processor program (OCBGUTIL) in the archive procedure.

**User Response:** Process the filled log files with the
OCBGUTIL procedure. After the logs are cleared, resume recording messages by issuing a RESUME or SWITCH request.

**BG0010 {BATCH DRIVER|LOGGER|POST PROCESSOR} FLUSH TERMINATED**

**Explanation:** The background reporting facility rejected a request to flush buffers because recording was suspended at the time the request was made.

**System Action:** The request is rejected.

**User Response:** Use the RESUME command to resume recording messages.

**BG0011 {BATCH DRIVER|LOGGER|POST PROCESSOR} FLUSH ACCEPTED**

**Explanation:** The background reporting facility received a request to flush buffers.

**System Action:** The current I/O buffers are flushed.

**User Response:** None.

**BG0012 {BATCH DRIVER|LOGGER|POST PROCESSOR} FLUSH PENDING**

**Explanation:** The background reporting facility is in the process of flushing I/O buffers.

**System Action:** Flush processing continues.

**User Response:** None.

**BG0013 {BATCH DRIVER|LOGGER|POST PROCESSOR} INVALID FLUSH INTERVAL IGNORED**

**Explanation:** The background reporting facility received an invalid automatic flush interval parameter. The flush interval should be in the form **hh:mm:ss**.

**System Action:** Automatic flush processing terminates.

**User Response:** Correct the parameter and restart the background reporting facility.

**BG0014 {BATCH DRIVER|LOGGER|POST PROCESSOR} LOG FILE FLUSHED**

**Explanation:** The background reporting facility received a request to flush I/O buffers and it has completed flush processing.

**System Action:** Processing continues.

**User Response:** None.

**BG0019 {BATCH DRIVER|LOGGER|POST PROCESSOR} STARTUP COMPLETE**

**Explanation:** The background reporting facility completed start-up processing and is logging messages.

**System Action:** The background reporting facility begins to log messages.

**User Response:** None.

**BG0021 {BATCH DRIVER|LOGGER|POST PROCESSOR} STOP ACCEPTED**

**Explanation:** The background reporting facility received a request to stop processing and is terminating.

**System Action:** The background reporting facility begins shutdown processing.

**User Response:** None.

**BG0022 {BATCH DRIVER|LOGGER|POST PROCESSOR} STOP PENDING**

**Explanation:** The background reporting facility is in the process of stopping.

**System Action:** The background reporting facility continues shutdown processing.

**User Response:** None.

**BG0024 {BATCH DRIVER|LOGGER|POST PROCESSOR} SHUTDOWN COMPLETE**

**Explanation:** The background reporting facility has completed shutdown processing.

**System Action:** The background reporting facility terminates normally.

**User Response:** None.

**BG0035 {BATCH DRIVER|LOGGER|POST PROCESSOR} ALREADY SUSPENDED**

**Explanation:** The background reporting facility rejected a request to suspend message logging because logging was already suspended.

**System Action:** The background reporting facility rejects the suspend request.

**User Response:** None.

**BG0036 {BATCH DRIVER|LOGGER|POST PROCESSOR} SUSPEND ACCEPTED**

**Explanation:** The background reporting facility received a request to suspend message logging.

**System Action:** The background reporting facility suspends message logging until it receives a request to resume or switch processing. The background reporting facility continues to log messages.
facility accumulates messages until its buffers are depleted.

User Response: None.

BG0037 {BATCH DRIVER|LOGGER|POST PROCESSOR} SUSPEND PENDING

Explanation: The background reporting facility is in the process of suspending message logging.

System Action: The background reporting facility continues suspend processing.

User Response: None.

BG0038 {BATCH DRIVER|LOGGER|POST PROCESSOR} MESSAGE LOGGING ALREADY SUSPENDED

Explanation: The background reporting facility received a request to suspend message logging, but logging was already suspended.

System Action: The background reporting facility rejects the suspend request and issues message BG0035.

User Response: None.

BG0039 {BATCH DRIVER|LOGGER|POST PROCESSOR} MESSAGE LOGGING SUSPENDED

Explanation: The background reporting facility is not logging messages.

System Action: The background reporting facility accumulates records until its buffers are depleted, then records are lost.

User Response: If logging was suspended because the log files are full, process the log files with OCBGUTIL. After one or more log files are clear, issue the RESUME or SWITCH command to begin logging again. If the logging was suspended because a SUSPEND command was issued, issue the RESUME (to use the active file) or SWITCH (to activate a new file) command to begin logging again.

BG0040 {BATCH DRIVER|LOGGER|POST PROCESSOR} RESUME IGNORED

Explanation: The background reporting facility rejected a request to resume message logging (because logging was not suspended).

System Action: The background reporting facility rejects the request to resume.

User Response: None.

BG0041 {BATCH DRIVER|LOGGER|POST PROCESSOR} RESUME ACCEPTED

Explanation: The background reporting facility received a request to resume message logging.

System Action: The background reporting facility attempts to resume message logging. If logging was suspended due to a suspend request, the background reporting facility resumes message logging to the active message log file. If logging was suspended because the active log file was full, the background reporting facility attempts to activate a log file. If it successfully activates a log file, logging resumes with the selected file. If it cannot activate a log file, recording remains suspended.

User Response: None.

BG0042 {BATCH DRIVER|LOGGER|POST PROCESSOR} RESUME PENDING

Explanation: The background reporting facility is in the process of resuming message logging.

System Action: The background reporting facility continues processing.

User Response: None.

BG0043 {BATCH DRIVER|LOGGER|POST PROCESSOR} MESSAGE LOGGING NOT SUSPENDED

Explanation: The background reporting facility received a request to resume message logging, but message logging was not suspended.

System Action: The background reporting facility rejects the resume request and issues message BG0040.

User Response: None.

BG0044 {BATCH DRIVER|LOGGER|POST PROCESSOR} MESSAGE LOGGING RESUMED

Explanation: The background reporting facility resumed message logging after being suspended.

System Action: The background reporting facility resumes message logging.

User Response: None.

BG0059 {BATCH DRIVER|LOGGER|POST PROCESSOR} MESSAGE LOGGING FACILITY FORCED SHUTDOWN COMPLETE

Explanation: The background reporting facility has completed forced shutdown processing. Forced shutdown occurs as a result of a severe error.
**System Action:** The background reporting facility terminates.

**User Response:** None.

---

**BG0070** {BATCH DRIVER|LOGGER|POST PROCESSOR} SHUTDOWN REQUESTED WHILE SUSPENDED

**Explanation:** The user is unable to stop the message logging facility because logging is suspended and messages are queued.

**System Action:** The background reporting facility issues this message in conjunction with message BG0071 to prompt the operator for a decision.

**User Response:** Determine why logging is suspended, and respond to message BG0071.

---

**BG0071** REPLY “WRITE” TO RECOVER RECORDS, OR “QUIT” TO BYPASS

**Explanation:** This message is issued in conjunction with message BG0070.

**System Action:** If the user responds "WRITE," the background reporting facility attempts to recover any queued records prior to shutdown. If the user responds "QUIT," the background reporting facility bypasses attempts to recover queued records, and those records are lost. Any other response causes message BG0072 to be issued.

**User Response:** If logging was suspended due to log file depletion, run the archive utility. After it completes, respond "WRITE." If logging was suspended due to the SUSPEND command, reply "WRITE" to resume recording and shutdown. Only respond with "QUIT" if immediate shutdown is required and the loss of queued records is unimportant.

---

**BG0072** {BATCH DRIVER|LOGGER|POST PROCESSOR} INVALID RESPONSE: nnnn

**Explanation:** The user made an invalid response, nnnn, to an operator request (WTOR).

**System Action:** The background reporting facility reissues the WTOR.

**User Response:** Correct the response.

---

**BG0078** {BATCH DRIVER|LOGGER|POST PROCESSOR} STATUS AS OF yy,ddd hh:mm:ss

**Explanation:** This is the start of the background reporting facility status display.

**System Action:** The background reporting facility produces several additional messages which describe its status.
appear on the DD statement when the log file was allocated.

**System Action:** OCBGUTIL does not initialize the specified file.

**User Response:** Ensure that LABEL=SUL appears on the DD statement when you allocate the log file.

---

**BG0084 LOGGER PHASE: nn**

**Explanation:** This message indicates an internal error in the background reporting facility. This is a diagnostic message.

**System Action:** The background reporting facility terminates.

**User Response:** Contact IBM Software Support.

---

**BG0085 LOGGER LOGICAL LOGGER TASK NOT RESPONDING**

**Explanation:** The background reporting facility accumulation task is not responding. This is a diagnostic message.

**System Action:** Processing continues.

**User Response:** Contact IBM Software Support.

---

**BG0086 LOGGER PHYSICAL LOGGER TASK NOT RESPONDING**

**Explanation:** The background reporting facility recording task is not responding. This may happen in the event of severe DASD problems. This is a diagnostic message.

**System Action:** The background reporting facility switches message logging to another log file. The old log file is disabled.

**User Response:** If this problem persists and is not due to DASD errors or contention problems, contact IBM Software Support.

---

**BG0087 {BATCH DRIVER LOGGER POST PROCESSOR} LOG FILE UNKNOWN ERROR: dataset_name**

**Explanation:** An internal error occurred during the selection processing of the specified file by the background reporting facility and/or the post processor.

**System Action:** Processing of this file terminates. The named file is disabled. Processing continues with the next file.

**User Response:** Contact IBM Software Support.

---

**BG0088 {BATCH DRIVER LOGGER POST PROCESSOR} VARIABLE MESSAGE TEXT**

**Explanation:** This message contains free form diagnostic text.

---

**BG0089 {BATCH DRIVER LOGGER POST PROCESSOR} ABEND: routine1 routine2ABENDcode**

**Explanation:** The background reporting facility or the post processor has encountered severe problems. This is a diagnostic message where "routine1" is the name of the parent task, "routine2" is the name of the subtask, and "ABENDcode" is the abend code in decimal.

**System Action:** The background reporting facility or post processor attempts to recover. If recovery is not successful, processing terminates.

**User Response:** Contact IBM Software Support.

---

**BG0091 {BATCH DRIVER LOGGER POST PROCESSOR} MESSAGE LOG FILE Serialization FAILED: dataset_name**

**Explanation:** When attempting to activate a message log file, the background reporting facility or post processor was unable to obtain an enqueue for the file indicated. This happens when the post processor is processing the log file at the same time the background reporting facility attempts to activate it or when the post processor attempts to process an active message log file. This may also happen if multiple collectors attempt to use the same log file at the same time.

**System Action:** If the background reporting facility tries to activate the file while the post processor is processing it, the background reporting facility disables the file and selects another file. If the post processor tries to process an active message log file, processing for that file terminates.

**User Response:** None.

---

**BG0092 {BATCH DRIVER LOGGER POST PROCESSOR} MESSAGE LOG FILE UNAVAILABLE FOR USE: dataset_name**

**Explanation:** The background reporting facility or post processor attempted an enqueue for the indicated file which failed. This may also happen if multiple collectors are using the same log file.

**System Action:** The background reporting facility disables the indicated file or the post processor terminates processing that file.

**User Response:** Ensure that only one message logger or post processor has the dataset allocated.
**BG0093** {BATCH DRIVER|LOGGER|POST PROCESSOR} MESSAGE LOG FILE ATTRIBUTE ERROR: dataset_name

**Explanation:** During the file selection processing in the background reporting facility and/or the post processor, the message log file indicated was found to have invalid DCB attributes. The log file attributes must be DSORG=PS, RECFM=FB, and BLKSIZE must be a multiple of LRECL.

**System Action:** The background reporting facility disables the indicated file or the post processor terminates processing that file.

**User Response:** Ensure that the DCB characteristics of the dataset are valid.

---

**BG0094** {BATCH DRIVER|LOGGER|POST PROCESSOR} MESSAGE LOG FILE I/O ERROR dataset_name

**Explanation:** An I/O error occurred on the log file indicated.

**System Action:** If the background reporting facility issued the message, the file is disabled and message logging is switched to another file. If the post processor issued the message, processing terminates.

**User Response:** Ensure that the DASD media is usable. Delete and reallocate the dataset if the post processor is unable to process the dataset.

---

**BG0095** {BATCH DRIVER|LOGGER|POST PROCESSOR} LOG FILE VOLUME ERROR: nn

**Explanation:** During the background reporting facility or post processor selection processing, the message log file indicated was found to have multiple volumes assigned to it. The background reporting facility does not support multi-volume datasets.

**System Action:** The background reporting facility disables the indicated file or the post processor terminates post processing of that file.

**User Response:** Ensure that log files are not multi-volume datasets.

---

**BG0096** {BATCH DRIVER|LOGGER|POST PROCESSOR} LOG FILE REQUIRES INITIALIZATION: dataset_name

**Explanation:** During file selection processing in the background reporting facility or post processor, the indicated message log file was not initialized.

**System Action:** The file is disabled by the background reporting facility. The post processor automatically initializes the file.

**User Response:** If this message was issued by the background reporting facility, you must initialize the file.

---

**BG0097** {BATCH DRIVER|LOGGER|POST PROCESSOR} LOG FILE FORMAT ERROR: dataset_name

**Explanation:** During file selection processing in the background reporting facility or post processor, the indicated message log file was not properly initialized by the post processor.

**System Action:** The file is disabled by the background reporting facility or it is initialized by the post processor.

**User Response:** If this message was issued by the background reporting facility, process the file with the post processor to initialize it.

---

**BG0098** {BATCH DRIVER|LOGGER|POST PROCESSOR} ERROR: nn

**Explanation:** The background reporting facility or post processor encountered a severe error. This is a diagnostic message.

**System Action:** The background reporting facility or post processor attempts to recover. If it cannot recover, processing terminates.

**User Response:** Contact IBM Software Support.

---

**BG0099** {BATCH DRIVER|LOGGER|POST PROCESSOR} MESSAGE LOGGING FACILITY TERMINATED. REASON CODE: nnnn

**Explanation:** The background reporting facility is terminating abnormally. This is a diagnostic message.

**System Action:** The background reporting facility terminates.

**User Response:** Contact IBM Software Support.

---

**BG0100** ONLY ONE REPORT TYPE ALLOWED

**Explanation:** REPORT command only supports one report type at a time.

**System Action:** The historical reporter stops processing the current command and starts to scan for the next valid command.

**User Response:** Correct the command and resubmit the job.

---

**BG0101** COMBINE KEYWORD NOT VALID WITH GRAPH

**Explanation:** For the daily graph, the value is combined at hourly intervals. For the weekly graph, the value is combined every 8 hours. For the monthly graph, the value is combined every 24 hours.

**System Action:** The historical reporter stops...
processing the current command and starts to scan for the next valid command.

**User Response:** Correct the command and resubmit the job.

**BG0102**  **GRAPH AND MAXSCALE ARE INVALID FOR THIS REPORT**

**Explanation:** This report type does not support the graph or maxscale options.

**System Action:** The historical reporter stops processing the current command and starts to scan for the next valid command.

**User Response:** Correct the command and resubmit the job.

**BG0103**  **REPORT TYPE MISSING**

**Explanation:** Report type is required for REPORT command.

**System Action:** The historical reporter stops processing the current command and starts to scan for the next valid command.

**User Response:** Correct the command and resubmit the job.

**BG0104**  **xxxxxxxxx INVALID WITH xxxxxxxx REPORT**

**Explanation:** The specified option is invalid with selected report.

**System Action:** The historical reporter stops processing the current command and starts to scan for the next valid command.

**User Response:** Correct the command and resubmit the job.

**BG0105**  **INVALID KEYWORD FOR CONTROL COMMAND**

**Explanation:** An invalid keyword was entered with the CONTROL command.

**System Action:** The historical reporter stops processing the current command and starts to scan for the next valid command.

**User Response:** Correct the keyword and resubmit the job.

**BG0106**  **DAILY, WEEKLY, AND MONTHLY ARE MUTUALLY EXCLUSIVE**

**Explanation:** You can only use one of the daily, weekly, or monthly keywords at a time.

**System Action:** The historical reporter stops processing the current command and starts to scan for the next valid command.

**User Response:** Correct the command and resubmit the job.

**BG0107**  **MERGE AND NOSORT OPTIONS ARE MUTUALLY EXCLUSIVE**

**Explanation:** The combination of the MERGE and NOSORT keywords is not allowed.

**System Action:** The historical reporter bypasses processing this report.

**User Response:** Change MERGE to NOMERGE, or change NOSORT to SORT, and rerun the reporter for the bypassed report.

**BG0200**  **GROUP ID EXCEEDS 8 CHARACTERS IN COLUMN n**

**Explanation:** The name for the group exceeds 8 characters.

**System Action:** Command processing stops.

**User Response:** Correct the command and resubmit the job.

**BG0201**  **GROUP MEMBER NAME OR SUBNAME IS INCORRECT LENGTH IN COLUMN n**

**Explanation:** The string for the member name was too long for this group type.

**System Action:** Command processing stops.

**User Response:** Correct the command and resubmit the job.

**BG0202**  **TERMINAL GROUP MEMBER NAME MISSING REQUIRED SUBNAME**

**Explanation:** A member definition for a terminal group consists of the originating network name, originating VTAM® applid, the VTAM network name, and the CICS terminal ID. One of these was omitted.

**System Action:** The historical reporter stops processing the current command and starts to scan for the next valid command.

**User Response:** Correct the command and resubmit the job.

**BG0210**  **CANNOT REPORT - NO DEFINED GROUPS FOR THE TYPE IN COLUMN n**

**Explanation:** A report was requested for a group type which has no groups defined.

**System Action:** The historical reporter stops
processing the current command and starts to scan for
the next valid command.

**User Response:** Use the SET command to define the
group before reporting on it.

<table>
<thead>
<tr>
<th>Code</th>
<th>Message Description</th>
<th>Explanation</th>
<th>System Action</th>
<th>User Response</th>
</tr>
</thead>
</table>
| BG0211 | CANNOT REPORT - UNDEFINED GROUP IN COLUMN n                                        | A report was requested for a group which was not defined, although there are some groups defined in this group type. | **System Action:** The historical reporter stops processing the current command and starts to scan for the next valid command.  
**User Response:** Use the SET command to define the group before reporting on it or change the name of the group to one that has been defined. | |
| BG0212 | GROUP ID NOT PROVIDED IN COLUMN n                                                   | A report was requested for a group type, but not a specific group. | **System Action:** The background reporting facility ignores the command.  
**User Response:** Correct the command to show the group or groups that should go into the report. | |
| BG0220 | CANNOT CLEAR - NO GROUPS OF THIS TYPE ARE DEFINED                                  | A request was made to clear a group or groups for a group type in which no groups have been defined. | **System Action:** Command processing stops.  
**User Response:** Correct the command to show the group or groups which should be cleared. | |
| BG0221 | CANNOT CLEAR - UNDEFINED GROUP IN COLUMN n                                        | A request was made to clear a group which was not defined for this group type. | **System Action:** Command processing stops.  
**User Response:** Correct the group or the group type to show which group should be cleared. | |
| BG0300 | INTERNAL ERROR - ELB CONTAINS INVALID DATA                                          | A control block relating to exception filtering was overlaid. | **System Action:** Command processing stops.  
**User Response:** Contact IBM Software Support. | |
| BG0301 | STORAGE EXCEPTION LIMIT REQUIRES UNITS IN K IN COLUMN n                             | Storage exception criteria must be defined in megabytes or kilobytes. | **System Action:** Command processing stops.  
**User Response:** Correct the command and resubmit the job. | |
| BG0302 | THIS EXCEPTION LIMIT REQUIRES A UNIT OF TIME IN COLUMN n                            | You must specify the limit for this exception criterion in some unit of time (S - seconds, M - minutes, H - hours.). | **System Action:** Command processing stops.  
**User Response:** Correct the command and resubmit the job. | |
| BG0303 | THIS EXCEPTION LIMIT REQUIRES NO UNITS INDICATION IN COLUMN n                      | This exception criterion should be specified as a pure count. | **System Action:** Command processing stops.  
**User Response:** Correct the command and resubmit the job. | |
| BG0400 | ERROR IN PREPROCESS SORT/COPY - TERMINATING REPORT                                 | An internal error occurred in building the data for the report. | **System Action:** Report processing stops.  
**User Response:** Contact IBM Software Support. | |
| BG0401 | I/O ERROR IN PREPROCESS - TERMINATING REPORT                                       | An I/O error occurred in building the data for the report. | **System Action:** Report processing stops.  
**User Response:** Contact IBM Software Support. | |
| BG0402 | COMPRESSION ERROR IN BGPREP - TERMINATING REPORT                                   | The reporter encountered an internal error while compressing data records. | **System Action:** Report processing is bypassed.  
**User Response:** Contact IBM Software Support. |
BG0403 DECOMPRESSION ERROR IN BGPREP - TERMINATING REPORT
Explanation: The reporter encountered an internal error while decompressing data records.
System Action: Report processing is bypassed.
User Response: Contact IBM Software Support.

BG0500 UNABLE TO OPEN FILE DDNAME cccccccc
Explanation: The file specified could not be opened for processing.
System Action: Report processing stops.
User Response: Contact IBM Software Support.

BG0501 UNABLE TO CLOSE FILE DDNAME cccccccc
Explanation: The file specified could not be closed.
System Action: Report processing stops.
User Response: Contact IBM Software Support.

BG0502 UNABLE TO READ FROM FILE DDNAME cccccccc
Explanation: While reading from the specified file, an error was encountered.
System Action: Report processing stops.
User Response: Contact IBM Software Support.

BG0503 UNABLE TO WRITE TO FILE DDNAME cccccccc
Explanation: While writing to the specified file, an error was encountered.
System Action: Report processing stops.
User Response: Contact IBM Software Support.

BG0504 UNABLE TO READ THE INPUT FILE
Explanation: An I/O error occurred while the reporter was reading the input file.
System Action: The historical reporter closes the file and continues to process any other available input files.
User Response: Contact IBM Software Support.

BG0510 DD STATEMENT MISSING FOR FILE cccccccc
Explanation: A DD statement is missing in the JCL for the specified file.
System Action: Report processing stops.

User Response: Contact IBM Software Support.

BG0599 REPORT CANCELLED DUE TO UNRECOVERABLE ERROR - SEE JOBLG
Explanation: An unrecoverable error occurred during report processing.
System Action: Report processing stops.
User Response: Save the job log, report contents, and any system messages. More explanatory error messages will be written on the job log.

BG0600 UNRECOVERABLE ERROR WHILE PROCESSING REPORT cccccccc
Explanation: An unrecoverable error occurred during report processing.
System Action: Report processing stops.
User Response: Save joblog, report contents, and any system messages. Contact IBM Software Support.

BG0601 INTERNAL ERROR OCCURRED CODE=xxx
Explanation: An unrecoverable error occurred during report processing.
System Action: Report processing stops.
User Response: Save joblog, report contents, and any system messages. Contact IBM Software Support.

BG0700 ERROR IN SORT PROCESS - TERMINATING REPORT
Explanation: An internal error occurred in sorting the data for the report.
System Action: Report processing stops.
User Response: Examine the error log for system messages and contact IBM Software Support.

BG0701 I/O ERROR IN SORT PROCESS - TERMINATING REPORT
Explanation: An I/O error occurred in sorting the data for the report.
System Action: Report processing stops.
User Response: Examine the error log for system messages and contact IBM Software Support.

BG0702 ERROR BGNSORT TERMINATING REPORT
Explanation: This error occurs if you included the NOSORT option on a REPORT command and an
internal error occurred while processing the REPORT command.

**System Action:** Report processing stops. The system generates message BG0600 after this message.

**User Response:** Take the actions suggested by message BG0600.

---

**BG0704**  
**DECOMPRESSION ERROR IN BGNSORT - TERMINATING REPORT**

**Explanation:** The historical reporter encountered an internal error while decompressing data records.

**System Action:** Report processing is bypassed.

**User Response:** Contact IBM Software Support.

---

**BG0705**  
**DECOMPRESSION ERROR IN BGNSORT - TERMINATING REPORT**

**Explanation:** The historical reporter encountered an internal error while decompressing data records.

**System Action:** Report processing is bypassed.

**User Response:** Contact IBM Software Support.

---

**BG0708**  
**FATAL ERROR IN SORT PROCESS - TERMINATING REPORT**

**Explanation:** An internal error occurred in sorting the data for the report.

**System Action:** Report processing stops.

**User Response:** Examine the error log for system messages and contact IBM Software Support.

---

**BG0750**  
**DATA DECOMPRESSION ERROR OCCURRED DURING EXIT 15 PROCESSING**

**Explanation:** One or more errors occurred when the historical reporter attempted to decompress data records.

**System Action:** BGSORT15 continues until all records have been processed, at which time messages BG0751 and BG0752 are written to the log.

**User Response:** A small quantity of error records may be acceptable to you. If not, contact IBM Software Support.

---

**BG0751**  
**RECORDS PROCESSED = nnnnnn**

**Explanation:** Message indicates the total number of records processed by BGSORT15. This message is written when a data compression error occurs. Message BG0752 will also appear.

**System Action:** Processing continues.

**User Response:** A small quantity of error records may be acceptable to you. If not, contact IBM Software Support.

---

**BG0760**  
**DATA COMPRESSION ERROR OCCURRED DURING EXIT 35 PROCESSING**

**Explanation:** One or more errors occurred when the historical reporter attempted to compress data records. BGSORT35 continues until all records have been processed, at which time return code 16 and messages BG0761 and BG0762 are written to the log.

**System Action:** Processing continues.

**User Response:** A small quantity of error records may be acceptable to you. If not, you may want to contact IBM Software Support.

---

**BG0761**  
**RECORDS PROCESSED = nnnnnn**

**Explanation:** nnnnnn is the total number of records processed by BGSORT35. This message is written when a data compression error occurs. Return code 16 and message BG0762 will also appear.

**System Action:** Processing continues.

**User Response:** A small quantity of error records may be acceptable to you. If not, you may want to contact IBM Software Support.

---

**BG0762**  
**RECORDS WITH COMPRESSION ERRORS = nnnnnn**

**Explanation:** The total number of records for which compression errors occurred. Return code 16 and message BG0761 will also appear.

**System Action:** Processing continues.
Contact IBM Software Support.

BG0763  UNRECOVERABLE ERROR OCCURRED IN SORT EXIT 35 PROCESSING

Explanation:  BGSORT35 was unable to continue processing.

System Action:  Processing terminates with abend U3500, and a dump is produced.

User Response:  Contact IBM Software Support.

BG0900  NO TRANSACTION DATA WAS PROCESSED

Explanation:  No data fit the specified report type and data selection criteria.

System Action:  No report is produced and the job output reflects zero records selected.

User Response:  Change the report type and/or data selection criteria.

BG0901  NO SYSTEM DATA WAS PROCESSED

Explanation:  No system records were present in the input file.

System Action:  No system data will be printed on this report.

User Response:  None. System records were not present in the input file.

BG0902  NO MATCHING DATA RECORDS FOUND

Explanation:  There were no records processed in the input stream that match the report request.

System Action:  No records are processed.

User Response:  Verify that data exists for this report or modify the report request.

BG0903  NO MATCHING SYSTEM RECORDS FOUND

Explanation:  No records processed in the input file match the report request.

System Action:  No system reports are processed.

User Response:  None.

BG1100  {BATCH DRIVER|LOGGER|POST PROCESSOR} LOG FILE AVAILABLE: dataset_name

Explanation:  The indicated log file is empty. No further processing is done for this file.

System Action:  The background reporting facility bypasses processing for this file.

User Response:  None.

BG1101  {BATCH DRIVER|LOGGER|POST PROCESSOR} LOG FILE INPUT DSN: dataset_name

Explanation:  The post processor selects the indicated log file for processing.

System Action:  The post processor copies the data to the archive file, clears the file by writing null records, and updates the header label to indicate the file was processed.

User Response:  None.

BG1102  {BATCH DRIVER|LOGGER|POST PROCESSOR} ARCHIVE OUTPUT DSN: dataset_name

Explanation:  The post processor uses the indicated output file to archive (copy) the log file.

System Action:  The post processor selects the indicated file for processing.

User Response:  None.

BG1103  {BATCH DRIVER|LOGGER|POST PROCESSOR} LOG FILE COPY IN PROGRESS

Explanation:  The post processor is starting the process of copying data records from the dataset identified in message BG1101 to the dataset identified in message BG1102.

System Action:  The post processor begins the copying process.

User Response:  None.

BG1105  {BATCH DRIVER|LOGGER|POST PROCESSOR} LOG FILE RESET IN PROGRESS

Explanation:  The post processor is starting the process of clearing the dataset identified in message BG1110.

System Action:  The post processor begins the log file initialization process.

User Response:  None.

BG1107  {BATCH DRIVER|LOGGER|POST PROCESSOR} LOG FILE COPY COMPLETE

Explanation:  The post processor completed the process of copying records from the dataset identified in message BG1101 to the dataset identified in message BG1102.
**System Action:** The post processor initializes the log file.

**User Response:** None.

---

**BG1109** {BATCH DRIVER|LOGGER|POST PROCESSOR} LOG FILE RESET COMPLETE

**Explanation:** The post processor completed the process of clearing records from the dataset identified in message BG1101.

**System Action:** The post processor proceeds to the next file.

**User Response:** None.

---

**BG1110** {BATCH DRIVER|LOGGER|POST PROCESSOR} LOG FILE RESET DSN: dataset_name

**Explanation:** The post processor is about to clear the log file indicated.

**System Action:** The post processor clears the log file.

**User Response:** None.

---

**BG1111** {BATCH DRIVER|LOGGER|POST PROCESSOR} LOG FILE ACTIVE, COPY TERMINATED

**Explanation:** The logging facility is currently using this log file. Therefore, the post processor cannot copy records from it.

**System Action:** The post processor terminates the copying process. This is a normal situation.

**User Response:** None. This is an informational message only.

---

**BG1113** {BATCH DRIVER|LOGGER|POST PROCESSOR} LOG FILE ACTIVE, RESET TERMINATED

**Explanation:** The background reporting facility is currently using this log file. Therefore, the post processor cannot clear it.

**System Action:** The post processor terminates the clearing process.

**User Response:** None.

---

**BG1114** {BATCH DRIVER|LOGGER|POST PROCESSOR} OUTPUT DDNAME ABSENT, PROCESSING TERMINATED

**Explanation:** The post processor is terminating because it cannot find an output (archive) file ddname.

**System Action:** The post processor terminates processing.

**User Response:** Check the post processor JCL to ensure that the ARCHIVE DD statement is present.

---

**BG1120** {BATCH DRIVER|LOGGER|POST PROCESSOR} OUTPUT FILE ACTIVE, PROCESSING TERMINATED

**Explanation:** The post processor is terminating because an enqueue for the output (archive) file failed.

**System Action:** The post processor terminates.

**User Response:** Ensure that only one post processor procedure is active with the archive file dataset name.

---

**BG1121** {BATCH DRIVER|LOGGER|POST PROCESSOR} LOG FILE I/O ERROR, COPY TERMINATED

**Explanation:** The post processor is terminating the process of copying records from the dataset indicated in message BG1101 because of an I/O error on the input log file.

**System Action:** The post processor terminates.

**User Response:** Check the joblog and SYS1.LOGREC for I/O errors. If you find errors, delete, reallocate, and initialize the log file. If you find no error, contact IBM Software Support.

---

**BG1122** {BATCH DRIVER|LOGGER|POST PROCESSOR} OUTPUT FILE I/O ERROR, COPY TERMINATED

**Explanation:** The post processor is terminating the process of copying records to the dataset indicated in message BG1102 because of an I/O error on the output (archive) log file.

**System Action:** The post processor terminates.

**User Response:** Ensure that the output media is valid. A return code of 04 is a warning that a log file was active when the archive job ran. This is a normal situation. If the problem persists, contact IBM Software Support.

---

**BG1124** {BATCH DRIVER|LOGGER|POST PROCESSOR} OUTPUT FILE SPACE EXHAUSTED, COPY TERMINATED

**Explanation:** The post processor is terminating the process of copying records to the dataset indicated in message BG1102 because the output (archive) file is out of space.

**System Action:** The post processor terminates.

**User Response:** Allocate another archive file.
<table>
<thead>
<tr>
<th>Message Code</th>
<th>Message Text</th>
</tr>
</thead>
<tbody>
<tr>
<td>BG1126</td>
<td>{BATCH DRIVER</td>
</tr>
<tr>
<td>Explanation</td>
<td>The process of copying records to the dataset indicated in message BG1101 has failed.</td>
</tr>
<tr>
<td>System Action</td>
<td>The post processor does not initialize the log file.</td>
</tr>
<tr>
<td>User Response</td>
<td>Examine any previous messages to determine why processing terminated. A return code of 04 is a warning that a log file was active when the archive job ran. This is a normal situation. If the problem persists, contact IBM Software Support.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Message Code</th>
<th>Message Text</th>
</tr>
</thead>
<tbody>
<tr>
<td>BG1128</td>
<td>{BATCH DRIVER</td>
</tr>
<tr>
<td>Explanation</td>
<td>The process of clearing the dataset indicated in message BG1101 failed.</td>
</tr>
<tr>
<td>System Action</td>
<td>The post processor terminates.</td>
</tr>
<tr>
<td>User Response</td>
<td>Delete and reallocate the log file. If the problem persists, contact IBM Software Support.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Message Code</th>
<th>Message Text</th>
</tr>
</thead>
<tbody>
<tr>
<td>BG1129</td>
<td>{BATCH DRIVER</td>
</tr>
<tr>
<td>Explanation</td>
<td>The process of clearing the dataset indicated in message BG1101 failed.</td>
</tr>
<tr>
<td>System Action</td>
<td>The post processor terminates.</td>
</tr>
<tr>
<td>User Response</td>
<td>Delete and reallocate the log file. If the problem persists, contact IBM Software Support.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Message Code</th>
<th>Message Text</th>
</tr>
</thead>
<tbody>
<tr>
<td>BG1130</td>
<td>{BATCH DRIVER</td>
</tr>
<tr>
<td>Explanation</td>
<td>The post processor found no data in any of the log files.</td>
</tr>
<tr>
<td>System Action</td>
<td>The post processor terminates.</td>
</tr>
<tr>
<td>User Response</td>
<td>None.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Message Code</th>
<th>Message Text</th>
</tr>
</thead>
<tbody>
<tr>
<td>BG1131</td>
<td>{BATCH DRIVER</td>
</tr>
<tr>
<td>Explanation</td>
<td>The post processor was unable to open the output (archive) file.</td>
</tr>
<tr>
<td>System Action</td>
<td>The post processor terminates.</td>
</tr>
<tr>
<td>User Response</td>
<td>Check the JCL. If it is correct, delete and reallocate the archive file. If the problem persists, contact IBM Software Support.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Message Code</th>
<th>Message Text</th>
</tr>
</thead>
<tbody>
<tr>
<td>BG1132</td>
<td>{BATCH DRIVER</td>
</tr>
<tr>
<td>Explanation</td>
<td>The output (archive) file had invalid DCB attributes. The DCB attributes should be DSORG=PS, RECFM=FB, and BLKSIZE a multiple of LRECL.</td>
</tr>
<tr>
<td>System Action</td>
<td>The post processor terminates.</td>
</tr>
<tr>
<td>User Response</td>
<td>Ensure that the DCB characteristics of the archive file are valid.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Message Code</th>
<th>Message Text</th>
</tr>
</thead>
<tbody>
<tr>
<td>BG1133</td>
<td>{BATCH DRIVER</td>
</tr>
<tr>
<td>Explanation</td>
<td>The output archive file is not a generation data group.</td>
</tr>
<tr>
<td>System Action</td>
<td>Processing continues, and the archive file is used.</td>
</tr>
<tr>
<td>User Response</td>
<td>Use generation data groups for the output archive files.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Message Code</th>
<th>Message Text</th>
</tr>
</thead>
<tbody>
<tr>
<td>BG1201</td>
<td>{BATCH DRIVER</td>
</tr>
<tr>
<td>Explanation</td>
<td>This message indicates the total number of records read from all processed log files by the post processor.</td>
</tr>
<tr>
<td>System Action</td>
<td>Processing continues.</td>
</tr>
<tr>
<td>User Response</td>
<td>None.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Message Code</th>
<th>Message Text</th>
</tr>
</thead>
<tbody>
<tr>
<td>BG1202</td>
<td>{BATCH DRIVER</td>
</tr>
<tr>
<td>Explanation</td>
<td>This message indicates the total number of records written to the output (archive) file by the post processor.</td>
</tr>
<tr>
<td>System Action</td>
<td>Processing continues.</td>
</tr>
<tr>
<td>User Response</td>
<td>Ensure that the number of records written equals the number of records read (see message BG1201). If it does not, examine the previous messages to determine the source of the discrepancy. See also message BG1212 to check if any copies were terminated.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Message Code</th>
<th>Message Text</th>
</tr>
</thead>
<tbody>
<tr>
<td>BG1203</td>
<td>{BATCH DRIVER</td>
</tr>
<tr>
<td>Explanation</td>
<td>This message indicates that data compression was suppressed via parm options; records written to the archive file will not be compressed.</td>
</tr>
<tr>
<td>System Action</td>
<td>Processing continues.</td>
</tr>
</tbody>
</table>
User Response: None.

BG1204 {BATCH DRIVER|LOGGER|POST PROCESSOR} DATA COMPRESSION IS ACTIVE

Explanation: This message indicates that records written to the archive file will be compressed.

System Action: Processing continues.

User Response: None.

BG1205 {BATCH DRIVER|LOGGER|POST PROCESSOR}% DATA COMPRESSED: nn

Explanation: This message indicates the percentage of savings achieved due to data compression on the archive file.

System Action: Processing continues.

User Response: None.

BG1210 {BATCH DRIVER|LOGGER|POST PROCESSOR} COPIES ATTEMPTED: nn

Explanation: This message indicates the total number of log files which were selected for copy to the output (archive) file by the post processor.

System Action: Processing continues.

User Response: Ensure that the number of copies attempted equals the number of copies completed (see message BG1211). If it does not, examine the previous messages to determine the source of the discrepancy. See also message BG1212 to check if any copies were terminated.

BG1211 {BATCH DRIVER|LOGGER|POST PROCESSOR} COPIES COMPLETED: nn

Explanation: This message indicates the total number of log files which were successfully copied to the output (archive) file.

System Action: Processing continues.

User Response: Ensure that the number of copies completed equals the number of copies attempted (see message BG1210). If it does not, examine the previous messages to determine the source of the discrepancy. See also message BG1212 to check if any copies were terminated.

BG1212 {BATCH DRIVER|LOGGER|POST PROCESSOR} COPIES TERMINATED: nn

Explanation: This message indicates the total number of log files for which copies to the output (archive) file were unsuccessfully terminated by the post processor.

System Action: Processing continues.

User Response: If the number of copies terminated is greater than zero, examine the previous messages to determine the reason the copies were terminated.

BG1213 {BATCH DRIVER|LOGGER|POST PROCESSOR} COPIES BYPASSED: nn

Explanation: This message indicates the total number of log files for which copies to the output (archive) file were bypassed by the post processor.

System Action: Processing continues.

User Response: If the number of copies bypassed is greater than zero, examine the previous messages to determine why the copies were bypassed.

BG1220 {BATCH DRIVER|LOGGER|POST PROCESSOR} RESETS ATTEMPTED: nn

Explanation: This message indicates the total number of log files that were selected to be cleared by the post processor.

System Action: Processing continues.

User Response: Ensure that the number of resets attempted equals the number of resets completed (see message BG1221). If it does not, examine the previous messages to determine the source of the discrepancy. See also message BG1222 to check if any resets were terminated.

BG1221 {BATCH DRIVER|LOGGER|POST PROCESSOR} RESETS COMPLETED: nn

Explanation: This message indicates the total number of log files which were reset successfully by the post processor.

System Action: Processing continues.

User Response: Ensure that the number of resets completed equals the number of resets attempted (see message BG1220). If it does not, examine the previous messages to determine the source of the discrepancy. See also message BG1222 to check if any resets were terminated.

BG1222 {BATCH DRIVER|LOGGER|POST PROCESSOR} RESETS TERMINATED: nn

Explanation: This message indicates the total number of log files for which resets to the output (archive) file were unsuccessfully terminated by the post processor.

System Action: Processing continues.

User Response: If the number of resets terminated is greater than zero, examine the previous messages to determine the reason the resets were terminated.
BG1222  (BATCH DRIVERILOGGERIPOST PROCESSOR) RESETS TERMINATED: nn

Explanation: This message indicates the total number of log files for which resets were unsuccessfully terminated by the post processor.

System Action: Processing continues.

User Response: Examine the previous messages to determine why resets were terminated.

BG1223  (BATCH DRIVERILOGGERIPOST PROCESSOR) RESETS BYPASSED: <mv>nn</mv>

Explanation: This message indicates the total number of log files for which resets were bypassed.

System Action: The historical reporter continues to the next record.

User Response: If the number of unusable records is significant, contact IBM support center.

### KC2 messages

**KC2EXP**  Dataset name must not be blank. or KLVTBULD rc=rc reason=reason or Member dsn(member) could not be opened. rc=rc or Member name must not be blank. or Profile name must not be blank. or Profile profile does not exist.

Explanation: A variable message that appears with, and immediately after, message KC2EXPFF. It explains the cause of the failure.

System Action: The export fails.

User Response: Correct the problem indicated by the message and retry.

Severity: This is a critical error message.

**KC2EXPFF**  Export failed for profile profile.

Explanation: See message KC2EXP.

System Action: See message KC2EXP.

User Response: See message KC2EXP.

**KC2EXP00**  Profile profile was exported successfully.

Explanation: The requested profile was exported successfully.

System Action: Profile is exported to the dataset specified in the command parameter list.

User Response: None. This is an informational message only.

**KC2IMP**  KLVTBULD failed with rc=rc reason=reason or Member dsn(member) could not be found. or Member dsn(member) could not be opened. rc=rc or Member dsn(member) is not a valid profile. or Profile name must not be blank

Explanation: A variable message that appears with, and immediately after, message KC2IMPFF. It explains the cause of the failure.

System Action: The import fails.

User Response: Correct the problem indicated by the message and retry.

**KC2IMPFF**  Import failed for profile profile.

Explanation: See message KC2IMP.

System Action: See message KC2IMP.

User Response: See message KC2IMP.

**KC2IMP00**  Profile profile was imported successfully.

Explanation: The requested profile was imported successfully.

System Action: Profile is imported from the dataset specified in the command parameter list.

User Response: None. This is an informational message only.

**KC2LG000 - KC2LG999**

Explanation: Messages prefixed with KC2LG are self-explanatory. If you are unable to resolve the problem, contact IBM Software Support.
OC messages

**OC0001**  ESAA UNABLE TO ACQUIRE SESSION ACCOUNTING AREA

Explanation: The GETMAIN for an Tivoli OMEGAMON II for CICS on z/OS control block in CSA (subpool 241) failed.

System Action: The Tivoli OMEGAMON II for CICS on z/OS subtask in the CICS region terminates. Components that depend on the data provided by the subtask, such as response time collector and ONDV collector, do not function.

User Response: Increase the amount of CSA available to the system and restart the session.

**OC0002**  SUPR UNABLE TO OBTAIN WORK AREA

Explanation: Communication between CICS and the Common Interface could not be established due to a work area GETMAIN failure.

System Action: The Tivoli OMEGAMON II for CICS on z/OS subtask in the CICS region terminates. Components that depend on the data provided by the subtask, such as response time collector and ONDV collector, do not function.

User Response: Increase the region available to the CICS address space.

**OC0003**  SUPR UNABLE TO ESTABLISH RECOVERY

Explanation: The module that sets up communication between CICS and CANSOCnn received a non-zero return code from the ESTAEX macro. This is usually caused by a lack of LSQA.

System Action: The Tivoli OMEGAMON II for CICS on z/OS subtask in the CICS region terminates. Components that depend on the data provided by the subtask, such as response time collector and ONDV collector, do not function.

User Response: Decrease the region available to the CICS address space.

**OC0004**  SUPR UNABLE TO CONNECT TO CANSOCnn

Explanation: An attempt to connect to the Tivoli OMEGAMON II for CICS on z/OS entry table failed.

System Action: Tivoli OMEGAMON II for CICS on z/OS subtask in the CICS region terminates. Components that depend on the data provided by the subtask, such as response time collector and ONDV collector, do not function.

User Response: Ensure that the cross memory interface task (XMIT) is active as a subtask of the Common Interface.

**OC0005**  SUPR XMIT HAS NOT SET SPACE SWITCH PC

Explanation: The cross memory interface task (XMIT) running under the Common Interface did not format the program call necessary for setting up communication between CICS and the CANSOCnn address space.

System Action: The Tivoli OMEGAMON II for CICS on z/OS subtask in the CICS region terminates. Components that depend on the data provided by the subtask, such as response time collector and ONDV collector, do not function.

User Response: Ensure that the cross memory interface task (XMIT) is active as a subtask of the Common Interface.

**OC0006**  SUPR UNABLE TO RESERVE LINKAGE INDEX

Explanation: An attempt to reserve a non-system linkage index with the LXRES macro failed.

System Action: The Tivoli OMEGAMON II for CICS on z/OS subtask in the CICS region terminates. Components that depend on the data provided by the subtask, such as response time collector and ONDV collector, do not function.

User Response: Contact IBM Software Support.

**OC0007**  SUPR UNABLE TO CREATE ENTRY TABLE

Explanation: An error occurred during the attempt to build a program call entry table.

System Action: The Tivoli OMEGAMON II for CICS on z/OS subtask in the CICS region terminates. Components that depend on the data provided by the subtask, such as response time collector and ONDV collector, do not function.

User Response: Contact IBM Software Support.

**OC0008**  SUPR UNABLE TO CONNECT ENTRY TABLE

Explanation: The ETCON macro generated a non-zero return code when trying to connect a program call in the CICS address space.

System Action: The Tivoli OMEGAMON II for CICS on z/OS subtask in the CICS region terminates. Components that depend on the data provided by the subtask, such as response time collector and ONDV collector, do not function.
<table>
<thead>
<tr>
<th>OC0009</th>
<th>SUPR UNABLE TO DISCONNECT FROM CANSOC nn</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Explanation:</strong></td>
<td>An attempt to disconnect from the Tivoli OMEGAMON II for CICS on z/OS entry table failed.</td>
</tr>
<tr>
<td><strong>System Action:</strong></td>
<td>The Tivoli OMEGAMON II for CICS on z/OS subtask in the CICS region terminates. Components that depend on the data provided by the subtask, such as response time collector and ONDV collector, do not function.</td>
</tr>
<tr>
<td><strong>User Response:</strong></td>
<td>Contact IBM Software Support.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>OC0010</th>
<th>SUPR Tivoli OMEGAMON II for CICS on z/OS PC CREATE FAILED</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Explanation:</strong></td>
<td>An abend occurred when Tivoli OMEGAMON II for CICS on z/OS attempted to establish a cross memory environment between the Common Interface and CICS.</td>
</tr>
<tr>
<td><strong>System Action:</strong></td>
<td>The Tivoli OMEGAMON II for CICS on z/OS subtask in the CICS region terminates. Components that depend on the data provided by the subtask, such as response time collector and ONDV collector, do not function.</td>
</tr>
<tr>
<td><strong>User Response:</strong></td>
<td>Contact IBM Software Support.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>OC0011</th>
<th>XMCR UNABLE TO OBTAIN WORK AREA</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Explanation:</strong></td>
<td>Communication between CICS and the Common Interface could not be established due to a work area GETMAIN failure.</td>
</tr>
<tr>
<td><strong>System Action:</strong></td>
<td>The Tivoli OMEGAMON II for CICS on z/OS subtask in the CICS region terminates. Components that depend on the data provided by the subtask, such as response time collector and ONDV collector, do not function.</td>
</tr>
<tr>
<td><strong>User Response:</strong></td>
<td>Increase the region available to the CICS address space, or decrease the DSA size.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>OC0012</th>
<th>XMCR UNABLE TO ESTABLISH RECOVERY</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Explanation:</strong></td>
<td>The module that sets up communication between CICS and CANSOC nn received a non-zero return code from the ESTAEX macro. This is usually caused by a lack of LSQA.</td>
</tr>
<tr>
<td><strong>System Action:</strong></td>
<td>The Tivoli OMEGAMON II for CICS on z/OS subtask in the CICS region terminates. Components that depend on the data provided by the subtask, such as response time collector and ONDV collector, do not function.</td>
</tr>
<tr>
<td><strong>User Response:</strong></td>
<td>Decrease the region available to the CICS address space.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>OC0013</th>
<th>XMCR CROSS MEMORY INTERFACE TASK INACTIVE</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Explanation:</strong></td>
<td>The module that sets up communication between CICS and CANSOC nn found that the cross memory interface task (XMIT) is not active.</td>
</tr>
<tr>
<td><strong>System Action:</strong></td>
<td>The Tivoli OMEGAMON II for CICS on z/OS subtask in the CICS region terminates. Components that depend on the data provided by the subtask, such as response time collector and ONDV collector, do not function.</td>
</tr>
<tr>
<td><strong>User Response:</strong></td>
<td>This message could occur if there is an inconsistency between the common interface and the monitor. For example, the monitor is using a load library with a different version of Tivoli OMEGAMON II for CICS on z/OS than the one used by the common interface. Another reason could be that XMIT (cross memory interface task) is not running as a subtask of the common interface.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>OC0014</th>
<th>XMCR COMMUNICATION BUFFER HAS WRAPPED FOR: aaa</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Explanation:</strong></td>
<td>Insufficient space was available in the communication buffer used to send response time collector and ONDV collector data from the CICS to the Common Interface.</td>
</tr>
<tr>
<td><strong>System Action:</strong></td>
<td>The oldest records in the buffer are overlayed and the information they contain is lost. The component that is losing data is denoted by aaa. The display of this message is limited to a maximum of once every five minutes.</td>
</tr>
<tr>
<td><strong>User Response:</strong></td>
<td>Check that the Common Interface is running at a dispatching priority greater than that of CICS to ensure that records are pulled from the buffer in a timely manner. The size of the buffer can be increased, if necessary, using the XMRCDS= parameter of the KOCGLOB macro in the Global module.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>OC0015</th>
<th>XMCR COMPONENT AUTO START FAILURE</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Explanation:</strong></td>
<td>One or more of the components marked for auto start in the Global module could not be initiated.</td>
</tr>
<tr>
<td><strong>System Action:</strong></td>
<td>The auto start logic is not completed.</td>
</tr>
<tr>
<td><strong>User Response:</strong></td>
<td>Check that the cross memory interface task is active under the Common Interface. Also, examine the console log for any messages that might indicate why the auto starts failed.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>OC0016</th>
<th>XMCR UNABLE TO RETRIEVE DATA FROM KOCGLB</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Explanation:</strong></td>
<td>Data from the Global module could not be moved from the CANSOC nn address space to CICS.</td>
</tr>
</tbody>
</table>
| **System Action:** | The Tivoli OMEGAMON II for CICS on z/OS logic that runs in the CICS region will not honor
the values set in the Global module.

User Response: Check that the cross memory interface task is active under the Common Interface. Also, examine the console log for any messages that might indicate why the data extraction failed.

OC0017 XMCR UNABLE TO CROSS MEMORY POST XMIT
Explanation: The cross memory communication subtask running in the CICS region was unable to POST a task running in the Common Interface.
System Action: The POST failure means that some desired request is not performed by a task running in the Common Interface. Such requests include auto starts, Global data extraction, and notifying either the response time collector or ONDV collector that there is transaction data to process.
User Response: Ensure that XMIT is running as a subtask of the Common Interface address space.

OC0018 XMST CROSS MEMORY SUBTASK ABEND: CODE=aaaaaaaa
Explanation: The subtask used to coordinate communication between CICS and the Common Interface has abnormally terminated with the completion code denoted by aaaaaaaa.
System Action: Components that depend on the data provided by the subtask, such as response time collector and ONDV collector, do not function.
User Response: Inspect the console log for messages that may provide a clue as to why the abend occurred. If problems persist, contact IBM Software Support.

OC0019 XMST ATTACH FAILED: SYSTEM ERROR
Explanation: The ATTACH macro used to create the cross memory communication subtask in the CICS region failed.
System Action: Components that depend on the data provided by the subtask, such as response time collector and ONDV collector, do not function.
User Response: Check for messages on the system console. If problems persist, contact IBM Software Support.

OC0020 XMST UNABLE TO ALLOCATE COMMUNICATION BUFFER
Explanation: The GETMAIN macro used to allocate the cross memory communication buffer above the line in the CICS region returned a non-zero return code.
System Action: The communication buffer is not allocated. Consequently, components that depend on the data sent via the communication buffer, such as response time collector and ONDV collector, do not function.
User Response: Either increase the CICS region size, or decrease the amount of storage required for the communication buffer by changing the number of records the buffer holds using the XMRCDS= operand of the KOCGLOB macro in the Global module.

OC0021 XMST CONNECT TO CANSOCnn aaaaaaaa FAILED
Explanation: An attempt to establish communication between CICS and the Common Interface failed. The jobname of the Common Interface is denoted by aaaaaaaa.
System Action: Components that depend on the communication link between CICS and the Common Interface, such as the response time collector and ONDV collector, do not function.
User Response: Check the console for any messages that may serve to explain why CICS and CANSOCnn are unable to communicate with one another. Ensure that the cross memory interface task (XMIT) is active as a subtask of the common interface job aaaaaaaa, and that PARM=LXRES is coded on the EXEC card of the CANSOCnn PROC.

OC0022 XMST COMMON INTERFACE UNAVAILABLE
Explanation: An attempt to establish communication between CICS and the Common Interface failed and the Common Interface JOBNAME was unavailable.
System Action: Components that depend on the communication link will not function.
User Response: Verify that the Common Interface is active. See User Response for message OC0021.

OC0023 XMCR OMEGAMON-TO-CICS CONNECTION IN PROGRESS, REPLY CANCEL TO SKIP CONNECTION
Explanation: During CICS initialization, OMEGAMON has waited more than 30 seconds for a response from the OMEGAMON XMIT address space.
If a significant number of CICS systems initialize at the same time, it may take the OMEGAMON XMIT address space more than 30 seconds to respond to some of the initialization requests. This may cause message OC0023 to be issued. You can circumvent the contention by staggering the CICS initialization requests so that fewer initializations occur simultaneously.
System Action: OMEGAMON waits for an operator response.
User Response: A reply of cancel will allow CICS
initialization to continue without the cross-memory
collection to OMEGAMON. You can establish this at a
later time by issuing an OMEG INIT from a CICS
terminal.

**OC0024**

**XMST KOCGLBcc PTF aaaaaaa INCOMPATIBLE WITH XMST PTF bbbbbbb**

**Explanation:** During initialization, Tivoli OMEGAMON II for CICS on z/OS detected that the global data area module with the suffix cc was assembled with PTF aaaaaaaa, whereas the cross memory communication code was using PTF bbbbbbbb.

**System Action:** Initialization continues. Results are unpredictable.

**User Response:** Ensure that the global data area module was assembled using the same service level as the Tivoli OMEGAMON II for CICS on z/OS code within the CICS region.

**OC0026**

**OCXMST CICS, CANSOCnn AND GLOBALS MUST BE AT THE SAME SERVICE LEVEL**

**Explanation:** This message follows message OC0024 or message OC0025.

**System Action:** Initialization continues. Results are unpredictable.

**User Response:** See the user response for the preceding OC0024 or OC0025 message.

**OC0030**

**XMCR UNABLE TO PROCESS CICS RKC2XM DD STATEMENT**

**Explanation:** This is an internal error.

**System Action:** Processing stops.

**User Response:** Call IBM Software Support.

**OC0031**

**XMCR WILL USE DEFAULT CICS RKC2XM NUMBER 00**

**Explanation:** The system uses a default DD of RKC2XM00.

**System Action:** None.

**User Response:** None.

**OC0032**

**XMCR CICS RKC2XM NUMBER INVALID**

**Explanation:** An invalid RKC2XM DD card was found in the CICS JCL. The CICS RKC2XM number must be blank or a two-digit number from 00 through 15.

**System Action:** The system uses the default CICS RKC2XM number, 00.

**User Response:** None.

**OC0033**

**XMCR CICS IS USING ‘RKC2XMnn’ DD NAME**

**Explanation:** The OMEG INIT has found an RKC2XMnn DD card defined in the CICS JES JCL deck when it was processing.

**System Action:** The system uses nn as the RKC2XM number.

**User Response:** None.

**OC0061**

**XRFD ERROR ENCOUNTERED DURING ACCESS TO CAVM FILE**

**FUNCTION=aaaaaaaaaaa,**

**REASON=bbbbbbbb,**

**RC=cccccccc**

**Explanation:** An error occurred while Tivoli OMEGAMON II for CICS on z/OS attempted to read the state management record from the CAVM control file. The function being performed when the error occurred is aaaaaaaa; the reason code, if any, is only used for dynamic allocation. It is a combination of the error reason code and the information reason code. These codes are documented in the IBM System Macros Manual. The return code is dependent on the function encountering the error.

**System Action:** The XRF command does not display information contained in the state management record.

**User Response:** Check the console to determine whether or not the dataset is experiencing I/O errors. If problems persist, contact IBM Software Support.

**OC0063**

**INPUT NOT NUMERIC**

**Explanation:** An invalid character was found where a numerical value is expected.

**System Action:** The command terminates.

**User Response:** Re-enter the correct command input.
Chapter 16. Messages

OC0066  INTERNAL ERROR: UCB/DEV POINTERS MISSING
Explanation: The exception analysis routine, which looks for devices that are not responding (DNRS and TNRS), encountered an internal error.
System Action: DNRS and TNRS displays are invalid.
User Response: Contact IBM Software Support.

OC0068  GLOBAL AREA (KOCGLB) NOT ACCESSIBLE
Explanation: The GRPS command requires access to the global module but was unable to locate it.
System Action: The GRPS command fails.
User Response: Contact IBM Software Support.

OC0070  INVALID GROUP SPECIFICATION
Explanation: The affected command expects a group identifier but found an invalid value. The value must be in the range 1-maxgrp (maxgrp is the value specified in the KOCGLOB macro).
System Action: The command terminates.
User Response: Correct the group specification and re-enter the command.

OC0071  INVALID OPTION SPECIFIED, RE-ENTER
Explanation: The option specified with the command was an invalid keyword.
System Action: No output is produced by the command.
User Response: Re-enter the valid command options.

OC0072  NULL INPUT
Explanation: The affected command is expecting input, but none was provided.
System Action: The command terminates.
User Response: Specify the requested parameters.

OC0073  MODIFY TEXT EXCEEDS MAXIMUM ALLOWABLE LENGTH
Explanation: The CICM command will only accept a modify command that is 115 characters or less in length.
System Action: The command terminates.
User Response: Reduce the length of the modify text and re-enter the command.

OC0076  CSWP INVALID OPERAND SPECIFIED
Explanation: The CSWP command encountered an invalid keyword.
System Action: The command terminates.
User Response: Correct the input, and re-issue the command.

OC0083  VALID RANGE FOR THRESH IS 0–99
Explanation: A value for the THRESH operand on the DEX command has been entered that is outside the acceptable range.
System Action: The DEX command ignores the new value.
User Response: Decide what value in the range 0–99 is required for the bottleneck analysis display threshold, and re-enter it.

OC0084  VALID RANGE FOR SHORT IS 0–LONG TERM, OR CLEAR
Explanation: An invalid SET value for the bottleneck analysis short interval was entered.
System Action: The command displays the current values for the bottleneck analysis subtask.
User Response: Correct the value and re-enter.

OC0085  VALID RANGE FOR LONG IS SHORT-TERM-999, OR 0, OR CLEAR
Explanation: An invalid SET value for the bottleneck analysis long interval was entered.
System Action: The command displays the current values for the bottleneck analysis subtask.
User Response: Correct the value and re-enter.

OC0086  CYCLE VALUE MUST BE IN THE RANGE 0.1–9.9 SECONDS
Explanation: An invalid SET value for the bottleneck analysis cycle timer was entered.
System Action: The command displays the current values for the bottleneck analysis subtask.
User Response: Correct the value and re-enter.

OC0099  INVALID VALUE FOR SPECIFIED PARAMETER
Explanation: The value provided for a keyword was incorrect.
System Action: No output is produced by the command.
User Response: Re-enter the valid keyword values.
**OC0104 DL/I NOT IN SYSTEM**

**Explanation:** The DLI or DL1 command was executed and the system was not connected to DL/I. If you are using DBCTL, the region has not attached to DBCTL yet. If you are using local DL/I support, the CICS you are monitoring does not have DLI=YES in the SIT.

**System Action:** The DLI command fails.

**User Response:** Determine if the system you are monitoring should have local DL/I support. Determine if you are connected to DBCTL. If DL/I support does exist, either local or DBCTL, contact IBM Software Support.

---

**OC0112 DL/I REMOTE SUPPORT ONLY**

**Explanation:** The DLI or DL1 command was executed and the DL/I support was remote only. Under these circumstances the DLI command cannot provide any information, since DL/I is not installed in the region being monitored.

**System Action:** The DLI command fails.

**User Response:** You may use the TABL PDIR SEL=REM command to determine the CICS SYSID that owns your PSBs. You can then monitor DL/I activity by monitoring that CICS.

---

**OC0113 DB STATISTICS BLOCK NOT PRESENT**

**Explanation:** The DLI DBD= command was entered and there were no DB statistics blocks found. This usually means DL/I is not local to the CICS you are monitoring.

**System Action:** The DLI DBD= command fails.

**User Response:** Enter the DL/I command by itself. If the output is for DBCTL then no statistics are kept by CICS. If you receive either message OC0104 or OC0112, then DL/I is not local in this CICS, and no statistics are kept by CICS. If DL/I is local, contact IBM Software Support.

---

**OC0114 DB STATISTICS BLOCK SEARCH ERROR**

**Explanation:** An error occurred while trying to find the DB statistics block.

**System Action:** The DLI DBD= command fails.

**User Response:** Determine if any storage violations have occurred in your CICS that might have corrupted you DB statistics blocks. Use the STOR VIOLATION command to determine this. If none have occurred contact IBM Software Support.

---

**OC0115 LOAD FAILED FOR IMS COLLECTOR**

**Explanation:** A load was attempted for module KOCM nxy where nn is the release of IMS you are running (13, 21, 22, or 31), x is a CICS indicator, and y is an MVS indicator. The load failed. Verify that you are running a supported release of IMS. The supported releases are release 1.3, 2.1, 2.2, and 3.1.

**System Action:** The DLI command fails.

**User Response:** Check the system log for messages related to a load failure and determine the release of DL/I you are running. Then contact IBM Software Support.

---

**OC0117 UNKNOWN CALL TYPE PASSED TO DLIC**

**Explanation:** An internal error has occurred in the IMS collector.

**System Action:** The DLI command fails.

**User Response:** Contact IBM Software Support.

---

**OC0118 DB STATISTICS BLOCK ENTRY NOT FOUND**

**Explanation:** The DLI DBD=ccccc command was entered and the DB statistics block you requested was not found.

**System Action:** The DLI DBD= command fails.

**User Response:** Enter the DLI DBD=* command. This will list the DB statistics blocks available. The statistics blocks listed are the only statistics blocks available.

---

**OC0119 LOAD FAILED FOR DB2 COLLECTOR**

**Explanation:** A load was attempted for module KOCB mn 0 y where nn is the release of DB2 you are running (13, 21, or 22) and y is an MVS indicator. The load failed. Please verify that you are running a supported release of DB2. The supported releases are release 1.3, 2.1, and 2.2.

**System Action:** The DB2 command fails.

**User Response:** Check the system log for messages related to a load failure and determine the release of DB2 you are running, then contact IBM Software Support.

---

**OC0132 INVALID KEYWORD SPECIFIED, RE-ENTER**

**Explanation:** An invalid keyword was specified for the affected command.

**System Action:** The command terminates.

**User Response:** Correct the keyword and re-enter.
OC0133  POOL KEYWORD SPECIFIED WITHOUT NUMBER

**Explanation:** The LSR POOL command was entered without specifying a pool number.

**System Action:** The LSR command fails.

**User Response:** If you want a summary display for all LSR pools, or you are not certain which pools are available, enter the LSR command without an argument. If you would like to see details for a specific LSR pool, enter the LSR command in this format: LSR POOL=1.

OC0134  INVALID LSR POOL ID SPECIFIED

**Explanation:** The LSR POOL requested does not exist for your combination of CICS and IMS.

**System Action:** The LSR command fails.

**User Response:** If the available LSR pools are used, or you are not certain which pools are available, enter the LSR command without an argument. If you would like to see details for a specific LSR pool, enter the LSR command in this format: LSR POOL=1.

OC0135  NO VSAM LSR IN THE SYSTEM

**Explanation:** The LSR command could not find any LSR pools allocated to this CICS.

**System Action:** The LSR command fails.

**User Response:** Verify that you have LSR pools allocated for this CICS and that they are open. If both of the above are true, then contact IBM Software Support.

OC0136  IMS REQUESTED BUT NO IMS/DLI IN THE SYSTEM

**Explanation:** The LSR command could not find any IMS LSR pools allocated to this CICS. When the IMS keyword is specified for the LSR command, only IMS pools are shown.

**System Action:** The LSR command fails.

**User Response:** Verify that you have IMS LSR pools allocated for this CICS and that they are open. If both of the above are true, then contact IBM Software Support.

OC0137  KEYWORD SPECIFIED WITHOUT ARGUMENT

**Explanation:** A keyword of the affected command is expecting an argument, but none was provided.

**System Action:** The command terminates.

**User Response:** Supply an argument for the keyword.

OC0138  NO CICS LSR POOLS HAVE BEEN OPENED

**Explanation:** The LSR command could not find any CICS LSR pools allocated to this CICS. When the CICS keyword is specified for the LSR command only CICS pools are shown.

**System Action:** The LSR command fails.

**User Response:** Verify that you have CICS LSR pools allocated for this CICS and that they are open. If both of the above are true, then contact IBM Software Support.

OC0139  NO IMS LSR POOLS HAVE BEEN OPENED

**Explanation:** The LSR command could not find any IMS LSR pools allocated to this CICS. When the IMS keyword is specified for the LSR command only IMS pools are shown.

**System Action:** The LSR command fails.

**User Response:** Verify that you have IMS LSR pools allocated for this CICS and that they are open. If both of the above are true, then contact IBM Software Support.

OC0142  NO INDEX COMPONENT LSR SUBPOOL

**Explanation:** The index component for the LSR pool was requested and there was no index subpool for the LSR pool.

**System Action:** The LSR command fails.

**User Response:** Verify that you have an index pool allocated for the LSR pool. If the LSR pool is allocated with an FCT SHRCNTL macro rather than CEDA, the index pool option is not available. If the LSR pool was created using CEDA, and index buffers were specified, then contact IBM Software Support.

OC0143  ARGUMENT SPECIFIED IS TOO LONG

**Explanation:** The argument supplied with the keyword is too long. For example: the VOLSER is greater than six characters; the DDNAME is greater than eight characters; or TRANID is greater than four characters.

**System Action:** The command fails.

**User Response:** Re-enter argument within the valid length limitations.

OC0144  INVALID SELECTION OPTION SPECIFIED

**Explanation:** The selection criteria specified are invalid. For example: SELECT=ABCXYZ or SELECT=ACQUIRED on the TABL command when the table specified is not the TCT.

**System Action:** The command fails.
User Response: Re-enter a valid (or applicable) criterion.

OC0145  ARGUMENT SUPPLIED IS INVALID
Explanation: The argument supplied with the keyword is invalid. For example, DISP=BAD on the FILE command, since BAD is not a valid disposition.
System Action: The command fails.
User Response: Re-enter a valid argument.

OC0146  SPECIFY LIBRARY NUMBER INSTEAD OF OFFSET
Explanation: The dataset name specified on the FILE command includes a “+” character directly after the ddbname. Library offsets are not supported but relative library numbers are.
System Action: The command fails.
User Response: Re-enter the desired file name, and specify the relative library number after the file name, separated by a comma. If DFHRPL+3 was originally entered, specify DFHRPL,4 instead.

OC0160  TEMPORARY STORAGE COLLECTION ERROR, CODE=nnnn
Explanation: An error occurred while the TMPS command was collecting data about temporary storage.
System Action: The TMPS command fails.
User Response: Contact IBM Software Support.

OC0163  TRANSIENT DATA COLLECTION ERROR, CODE=nnnn
Explanation: An error occurred while the TRND command was collecting data about transient data.
System Action: The TRND command fails.
User Response: Contact IBM Software Support.

OC0164  DBCTL IS NOT VALID FOR CICS 1.7 AND 2.1
Explanation: The DLI command with operand of DBCTL has been issued while monitoring a CICS 1.7 or a CICS 2.1 region. CICS does not support DBCTL in releases prior to CICS 3.1.
System Action: The DLI command fails.
User Response: None.

OC0165  XRF IS NOT VALID FOR CICS 1.7
Explanation: The XRF command has been issued while monitoring a CICS 1.7 region. CICS does not support XRF in releases prior to CICS 2.1.
System Action: The XRF command fails.
User Response: None.

OC0166  PROGRAM CHECK ABEND TRACE TABLE NOT FOUND
Explanation: The TRAC command was entered with an operand of PCATT and the Program Check/Abend Trace Table base address is zero, but neither exists in CICS/ESA®.
System Action: The command fails.
User Response: None.

OC0167  REQUEST IS NOT VALID FOR CICS/ESA
Explanation: The TRAC command was entered with an operand of TRTAB (CICS Trace Table) or PCATT (Program Check/Abend Trace Table), but neither exists in CICS/ESA.
System Action: The command fails.
User Response: None.

OC0168  CICS TRACE TABLE NOT FOUND
Explanation: The TRAC command was entered with an operand of TRTAB, but the CICS internal trace table base address is zero.
System Action: The command fails.
User Response: None.

OC0169  INVALID OPERAND FOR THE DLI COMMAND
Explanation: The keyword specified was not valid for the DLI command.
System Action: The DLI command fails.
User Response: Correct the keyword and re-enter the command.

OC0173  IMS RELEASE NOT SUPPORTED
Explanation: The release of IMS you are executing is not supported by Tivoli OMEGAMON II for CICS on z/OS.
System Action: The DLI command fails.
User Response: None.
### OC0175  CICS CONNECTION TO DBCTL IS NOT READY

**Explanation:** The connection to DBCTL has not yet finished, and for that reason the control blocks associated with DBCTL are not yet fully initialized.

**System Action:** The DLI command fails.

**User Response:** Determine if the connection to DBCTL is waiting for DBCTL, or for some other reason. If so correct the problem. Then re-enter the DLI DBCTL command.

### OC0176  CICS HAS NOT CONNECTED TO DBCTL YET

**Explanation:** This indicates that CICS is not yet connected to DBCTL. Either the DBCTL keyword was entered incorrectly, or CICS is not yet connected to DBCTL.

**System Action:** The DLI command fails.

**User Response:** If you intended to display DBCTL information, use the CDBC transaction to connect to DBCTL. Then re-enter the DLI DBCTL command.

### OC0177  NO EXIT PROGRAM BLOCKS WERE FOUND

**Explanation:** The EXIT EPB command was entered and no exit program blocks (EPBS) were found.

**System Action:** The EXIT command fails.

**User Response:** Verify that EPBs exist in your system. If there are EPBs, and EXIT is not displayed, then contact IBM Software Support.

### OC0178  DB2 RELEASE NOT SUPPORTED

**Explanation:** The release of DB2 you are executing is not supported by Tivoli OMEGAMON II for CICS on z/OS.

**System Action:** The DB2 command fails.

**User Response:** None.

### OC0179  TRANSACT NOT FOUND IN RCT

**Explanation:** The specified transaction was not found in the RCT.

**System Action:** The DB2 command fails.

**User Response:** Verify that the transaction-ID you specified is in the RCT. If it is in the RCT and the DB2 command still produces this error, then contact IBM Software Support.

### OC0180  FILE NOT FOUND OR IS NOT OPEN

**Explanation:** The VSAM command was entered with an operand of a file name, but the file specified could not be located internally with CICS's VSAM control blocks. The file may not be VSAM, may not be allocated to CICS, or may not have been opened by CICS.

**System Action:** The command fails.

**User Response:** None.

### OC0181  INVALID TABLE ENTRY LENGTH

**Explanation:** A table entry (such as FCT, PCT, or PPT) was found with an entry length of over 1,000 bytes. The length of the entry was determined to be invalid.

**System Action:** The command is terminated.

**User Response:** Determine why entry length was invalid, correct, and then retry the command.

### OC0182  XRF IS NOT ACTIVE FOR THIS CICS

**Explanation:** XRF=NO was coded in the SIT.

**System Action:** Tivoli OMEGAMON II for CICS on z/OS ignores the command.

**User Response:** None.
**OC0190  LU GROUP INVALID FOR THIS FUNCTION**

**Explanation:** The requested function does not support VTAM Logical Unit (LU) group.

**System Action:** Tivoli OMEGAMON II for CICS on z/OS ignores the command.

**User Response:** None.

---

**OC0196  GROUP TYPE INVALID. USE TX, TR, PG, LU**

**Explanation:** The RSP command or one of the minor commands (either TIME or CNT) was specified with an invalid group type suffix.

**System Action:** Tivoli OMEGAMON II for CICS on z/OS ignores the command.

**User Response:** Correct the group type suffix, specifying either TX (transactions), TR (terminals), PG (programs) or LU (logical units), and re-enter the command.

---

**OC0201  COLLECTOR NOT ACTIVE, REQUEST IGNORED**

**Explanation:** The bottleneck analysis collector subtask is not active.

**System Action:** The command terminates.

**User Response:** Start the collector and re-issue the command.

---

**OC0202  COLLECTOR IS BUSY, TRY AGAIN**

**Explanation:** The bottleneck analysis collector is currently analyzing the CICS environment. The display command cannot access the collection data until the collector finishes.

**System Action:** The command terminates.

**User Response:** Re-issue the command.

---

**OC0203  COLLECTOR SUSPENDED, VALUES SHOWN NOT CURRENT**

**Explanation:** The bottleneck analysis collector is suspended and is not sampling data. Only the values accumulated up to the time of suspend are displayed by the command.

**System Action:** The command continues execution.

**User Response:** Resume the bottleneck analysis collector and re-issue the command.

---

**OC0204  BOTTLENECK ANALYSIS COLLECTOR HAS ABENDED, CODE=ssuuu**

**Explanation:** The bottleneck analysis subtask abnormally terminated. The abend code is ssuuu.

**System Action:** None.

**User Response:** Contact IBM Software Support.

---

**OC0205  COLLECTOR ESTAE, SDWA NOT AVAILABLE, CODE=aaaaaaaa**

**Explanation:** This message is produced by the DEX DEBUG command. The bottleneck analysis collector subtask has abended, but system recovery did not have enough storage to obtain an SDWA (System Diagnostic Work Area) to save the status at the time of abend. aaaaaaa indicates the cause of the abend.

**System Action:** None.

**User Response:** Contact IBM Software Support.

---

**OC0207  COLLECTOR DETACHED DUE TO TOO MANY PROGRAM CHECKS**

**Explanation:** The bottleneck analysis collector was detached due an excessive number of program checks.

**System Action:** The command terminates.

**User Response:** Contact IBM Software Support.

---

**OC0208  COLLECTOR START ERROR, CODE=nnnnnn**

**Explanation:** The bottleneck analysis collector failed to START successfully. The code indicates the reason for the error.

**System Action:** The bottleneck analysis collector does not initialize.

**User Response:** Contact IBM Software Support.

---

**OC0209  COLLECTOR NOT ACTIVE, STORAGE SHORTAGE, CODE=nnnnnn**

**Explanation:** The bottleneck analysis collector could not obtain storage for the analysis work area. nnnnn indicates how much storage is needed.

**System Action:** The bottleneck analysis collector terminates.

**User Response:** Increase available virtual storage by the amount indicated, by reducing the number of tasks running in the common interface address space or by increasing the region size.
### OC0214  BOTTLENECK ANALYSIS COLLECTOR HAS ABENDED (LOOP)

**Explanation:** The bottleneck analysis collector’s cycle took longer than expected.

**System Action:** The bottleneck analysis collector abnormally terminates.

**User Response:** Contact IBM Software Support.

### OC0215  OCTB INSUFFICIENT DATA

**Explanation:** The IPRO PDEX command determined that an insignificant amount of degradation data was collected for meaningful display.

**System Action:** The command terminates. IPRO PDEX only honors the display request if 25 or more samples are collected and there are wait reasons (other than RUNNING) that exceed the threshold value set by the TPCT command.

**User Response:** Allow Tivoli OMEGAMON II for CICS on z/OS some time for data capture. Use the PDEX command to observe tasks counted thus far.

### OC0217  BUCKET SET ADDRESS DOES NOT CORRESPOND TO BUCKET ID

**Explanation:** An internal error was detected in the bottleneck analysis bucket structure.

**System Action:** The command terminates.

**User Response:** Correct the input, and re-enter.

### OC0219  WAIT REASON ID NOT FOUND IN BUCKET

**Explanation:** The bottleneck analysis buckets were searched but no match was found for the wait reason ID entered with the command.

**System Action:** The command terminates.

**User Response:** Re-enter the command with a valid wait reason ID.

### OC0224  COLLECTOR ATTACHED, REQUEST IGNORED

**Explanation:** This message is in response to a DEX START command. The subtask is already attached.

**System Action:** The command is ignored.

**User Response:** None.

### OC0225  COLLECTOR NOT ATTACHED, REQUEST IGNORED

**Explanation:** This message is in response to a DEX STOP command. The subtask is not attached.

**System Action:** The command is ignored.

**User Response:** None.

### OC0226  INTERVAL SPECIFICATION MUST BE NUMERIC

**Explanation:** This message is in response to a bottleneck analysis sample time interval set request. The value entered is not numeric.

**System Action:** The command terminates.

**User Response:** Correct the input, and re-enter.

### OC0232  COLLECTOR ATTACHED

**Explanation:** This message is in response to a DEX START command. The bottleneck analysis collector was successfully attached.

**System Action:** Bottleneck analysis collection is started.

**User Response:** None.

### OC0233  COLLECTOR DETACHED

**Explanation:** This message is in response to a DEX STOP command. The subtask was terminated and detached.

**System Action:** None.

**User Response:** None.

### OC0234  SHORT TERM BUCKETS WILL BE RESET

**Explanation:** This message is in response to a DEX SET SHORT=CLEAR command. The bottleneck analysis short term counters are set to zero.

**System Action:** None.

**User Response:** None.

### OC0235  LONG TERM BUCKETS WILL BE RESET

**Explanation:** This message is in response to a DEX SET LONG=CLEAR command. The bottleneck analysis long term counters are set to zero.

**System Action:** None.

**User Response:** None.
OC0236  COLLECTOR NOT ATTACHED
Explanation: This is a status message, the collector is not attached.
System Action: None.
User Response: None.

OC0237  COLLECTOR NOT ACTIVE
Explanation: The bottleneck analysis collector was not activated (DEX START command).
System Action: The command does not execute.
User Response: Re-enter the command.

OC0245  BOTTLENECK ANALYSIS INTERFACE IS BUSY, TRY AGAIN
Explanation: A PDEX command was entered while bottleneck analysis was busy performing its analysis.
System Action: The command does not execute.
User Response: Re-enter the command.

OC0252  INVALID BUCKET SET NAME, USE BLST COMMAND FOR LIST
Explanation: An invalid ID was entered with the BLST command.
System Action: The command terminates.
User Response: Use the BLST command without operands to list all IDs.

OC0253  BOTTLENECK ANALYSIS INTERFACE BUSY; TRY AGAIN
Explanation: The bottleneck analysis subtask is updating its collection buckets, so they are temporarily unavailable to the display components.
System Action: The command is ignored.
User Response: Re-enter the command.

OC0257  INTR UNABLE TO OBTAIN WORK AREA. LENGTH=aaa, SP=bbb
Explanation: A GETMAIN request for aaaa bytes from subpool bbb could not be satisfied.
System Action: The interval record collection terminates.
User Response: Increase the region size for the common interface and restart the interval record collector.

OC0258  INTR KOCGLB MODULE DOES NOT CONTAIN KOCINTR MACRO
Explanation: The Global module was not assembled with the KOCINTR macro.
System Action: The interval record collection terminates.
User Response: Reassemble the Global module with the KOCINTR macro. See the Tivoli OMEGAMON II for CICS on z/OS Configuration and Customization Guide for instructions on coding the KOCINTR macro.

OC0260  INTR INVALID VALUE SPECIFIED FOR aa. RANGE=b-c
Explanation: This message is in response to an INTR SET command. The value specified for the keyword denoted by aa is not in the proper range (between the values indicated by b and c inclusive).
System Action: The command is ignored.
User Response: Correct the value and re-enter the command.

OC0261  INTR ERROR RETURN FROM SMFTEST MACRO, CODE=aaaaaa
Explanation: The SMFTEST macro, used by the interval record collector to determine whether records can be written to the SMF dataset, returned a non-zero return code.
System Action: The interval record collection terminates.
User Response: Find the meaning of the return code denoted by aaaaaa in the IBM SMF manual. Correct the cause of the error and restart the interval record collector.

OC0262  INTR PROGRAM CHECKS = aa
Explanation: This message is displayed by the INTR DEBUG command if one or more program checks are encountered by the interval record collector.
System Action: None. The interval record collector continues to process normally.
User Response: A small number of recoverable program checks may be considered normal. They may be the result of chains being altered in CICS while the interval record collector is attempting to collect CICS data. If the number of program checks is large, then something could be wrong with the interval record collector's data collection mechanism. Contact IBM Software Support.
OC0265  INTR INVALID CALL MADE TO OCEP
Explanation: The interval record collection component has received an invalid request, such as a request to record data before it has been initialized.
System Action: The interval record collector terminates.
User Response: Contact IBM Software Support.

OC0266  INTR ERROR COLLECTING BOTTLENECK DATA
Explanation: The bottleneck data collection within interval recording has too much data to fit into one SMF record. This indicates a problem either in the bottleneck analysis buckets or in the interval record collection of the bottleneck data.
System Action: The interval record collector terminates.
User Response: Contact IBM Software Support.

OC0267  INTR ERROR IN RECORDING, THERE ARE LOST RECORDS
Explanation: Interval recording expects to be driven every minute. In this case the recorder detects that it has been more than one minute since the last collection.
System Action: The interval record collector terminates.
User Response: Check to see if there is some reason why the collector is not getting driven at the expected time, such as MVS system hang. If no reason can be found, contact IBM Software Support.

OC0268  INTR TOO MANY IDS FOR RTA SMF RECORD, SOME DATA MAY BE LOST
Explanation: The interval record collector has detected that there is too much response time data to fit in one SMF record. The interval record collector is able to hold the response times for approximately one thousand transactions, programs, terminals, or LUs in one SMF record.
System Action: The interval record collector collects only data for the transactions, programs, terminals, or LUs that it can fit in one SMF record.
User Response: Using the response time analysis displays, determine if there really have been intervals of one minute that contain so many different transactions, programs, terminals, or LUs. If not, contact IBM Software Support.

OC0269  INTR ERROR RETURN FROM SMFWTM MACRO, CODE=aaaaaaaa
Explanation: The SMFWTM macro, used by the interval record collector to write records to SMF, returned a code in register 15 denoted by aaaaaaaa.
System Action: The interval record collector terminates.
User Response: Locate the meaning of the SMFWTM return code in the IBM SMF manual. Correct the cause of the problem and restart the interval record collector.

OC0270  INTR MONITOR ESTAEX SDWA NOT AVAILABLE, CODE=aaaaaaaaa
Explanation: This message is produced by the INTR DEBUG command. The bottleneck analysis collector subtask has abended while it is driving interval record collection, but system recovery did not have enough storage to obtain an SDWA (System Diagnostic Work Area) to save the status at the time of abend. aaaaaaa indicates the cause of the abend.
System Action: None.
User Response: Contact IBM Software Support.

OC0271  INTR MONITOR HAS NOT ABENDED
Explanation: This message is issued in response to an INTR DEBUG command. The collector did not abend, therefore no abend information is available.
System Action: None.
User Response: None.

OC0272  INTR I/O ANALYSIS FAILED, I/O INFORMATION IS NO LONGER BEING RECORDED
Explanation: The interval record collector has failed to load the required RMF™ module KOCRcc0a, where cc is an RMF indicator and a is an MVS indicator.
System Action: The interval record collector no longer collects I/O analysis information.
User Response: Check the system operator console for loader messages to see why the load failed (CSVnnnn). If possible, correct the problem and restart the interval record collector. Otherwise, contact IBM Software Support.

OC0273  INTR INTERVAL RECORDING ALREADY ACTIVE
Explanation: This message is in response to an INTR START command. The collector is already active.
System Action: The command is ignored.
User Response: None.
OC0274  INTR INTERVAL RECORDING IS NOT ACTIVE
Explanation: This message is in response to an INTR STOP command. The collector was already stopped.
System Action: The command is ignored.
User Response: None.

OC0275  INTR INTERVAL RECORDING ACTIVATED
Explanation: This message is in response to an INTR START command. The collector was successfully started.
System Action: None.
User Response: None.

OC0276  INTR INTERVAL RECORDING DE-ACTIVATED
Explanation: This message is in response to an INTR STOP command. The collector was successfully stopped.
System Action: None.
User Response: None.

OC0277  INTR ABEND DIAGNOSTICS ARE UNAVAILABLE
Explanation: This message is in response to an INTR DEBUG command. Diagnostic information for the interval record collector has been overwritten by a subsequent bottleneck analysis collector abend.
System Action: None.
User Response: Contact IBM Software Support.

OC0278  The INTERVAL RECORD COLLECTOR FOR cicsjobn HAS ABENDED
Explanation: Interval record collection is abnormally terminated.
System Action: The interval record collector is terminated.
User Response: Contact IBM Software Support.

OC0279  INTR HAS IDENTIFIED RMF VERSION: nnn
Explanation: This message is in response to an INTR START command. INTR has determined the current RMF level to be nnn.
System Action: None.
User Response: None.

OC0280  INTR LOAD FAILED FOR RMF ANALYSIS MODULE KOCRcc0a, ABEND CODE=nnnnnnnnn, REASON CODE=rrrrrrrrr
Explanation: This message is in response to an INTR START command. INTR has failed to load the required RMF module KOCRcc0a, where cc is an RMF indicator and a is an MVS indicator. Abend code nnnnnnnn and reason code rrrrrrrr make up the MVS Contents Supervisor return code information returned when an MVS LOAD is issued for the module. These values may occur in MVS system console messages issued by the loader (CSVnnnn).
System Action: The interval recorder no longer collects I/O analysis information.
User Response: If possible, ensure that module KOCRcc0a is available and correct the problem. Then attempt to restart the interval recorder. Otherwise, contact IBM Software Support.

OC0282  INTR RMF ANALYSIS INITIALIZATION FAILED. RETURN CODE=nnnnnnnnn
Explanation: This message is in response to an INTR START command. INTR has encountered an unrecoverable initialization error identified by return code nnnnnnnn. Possible return codes (RC) are as follows:

<table>
<thead>
<tr>
<th>RC</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>20</td>
<td>Level of RMF (or equivalent) is not known.</td>
</tr>
<tr>
<td>24</td>
<td>RMF Supervisor Control Table core mark is invalid (for RMF level greater than 4.3.0).</td>
</tr>
<tr>
<td>28</td>
<td>RMF Supervisor Control Table coremark is invalid (for RMF level less than or equal to 4.3.0).</td>
</tr>
<tr>
<td>30</td>
<td>RMF Supervisor Control Table not resident.</td>
</tr>
<tr>
<td>34</td>
<td>Unallocated RMF ASCB.</td>
</tr>
<tr>
<td>38</td>
<td>RMF is inactive.</td>
</tr>
</tbody>
</table>
System Action: The interval recorder no longer collects I/O analysis information.
User Response: Ensure that RMF is available and correct any problem it is experiencing. Restart interval recording. If the problem persists contact IBM Software Support.

OC0283  INTR RMF ANALYSIS MODULE, KOCRcc0a, IS IN ERROR. RETURN CODE=nnnnnnnnn
Explanation: This message is in response to an INTR START command. INTR has encountered an unrecoverable initialization error related to the use of loaded module KOCRcc0 a where cc is an RMF indicator and a is an MVS indicator. Possible return codes (RC) are as follows:
Module length is zero.
Module address is zero.

System Action: The interval recorder no longer collects I/O analysis information.
User Response: Contact IBM Software Support.

Explanation: INTR has encountered a processing error while gathering I/O analysis information identified by return code nnnnnnnn and reason code rrrrrrrr. Possible return codes (RC) are as follows:

<table>
<thead>
<tr>
<th>RC</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>8</td>
<td>Insufficient storage for the RMF API return buffer.</td>
</tr>
<tr>
<td>OC</td>
<td>RMF API (ERBSMFI) not found.</td>
</tr>
<tr>
<td>14</td>
<td>The size calculated for the RMF API return buffer is not large enough. Data collection will continue but data for some devices is lost.</td>
</tr>
<tr>
<td>18</td>
<td>Non-zero return code from the RMF API (ERBSMFI). The reason code contains the RMF API return code. See the appropriate IBM RMF documentation (or the equivalent if you are using an alternative to RMF).</td>
</tr>
</tbody>
</table>

System Action: This message may indicate a recoverable error if it is not followed by message OC0272. In this case, the message is for information only. If message OC0272 does follow, the interval recorder no longer collects I/O analysis information.
User Response: If message OC0272 follows this message, contact IBM Software Support.

Explanation: INTR has been unable to confirm the RMF level in use in your system. A level compatible with the level of MVS in use has been presumed (nnn).
System Action: None.
User Response: This is only a warning message. The likelihood is that the RMF level that has been presumed is indeed the level of RMF in your system. If you are using software that supports the RMF API in place of RMF itself, this message may be displayed whenever INTR START is issued. Otherwise, if the message persists, bring it to the attention of your IBM Software Support representative.

Explanation: This message is in response to an RTA STOP command. It acknowledges the request to deactivate the response time collector.
System Action: The response time collector is stopped.
User Response: None.

Explanation: This message is in response to an RTA STOP command. The response time collector is not currently active.
System Action: The request is ignored, and the response time collector status is displayed.
User Response: None.

Explanation: This message is in response to an RTA STOP command. The response time collector is in the process of initializing.
System Action: The request is ignored, and the response time collector status is displayed.
User Response: Once the response time collector is initialized, re-enter the RTA STOP command.

Explanation: This message is in response to an RTA STOP command. The response time collector is in the process of initializing.
System Action: The request is ignored, and the response time collector status is displayed.
User Response: None.

Explanation: This message is in response to an RTA STOP command. The response time collector is in the process of initializing.
System Action: The request is ignored, and the response time collector status is displayed.
User Response: None.

Explanation: This message is in response to an RTA START command. The response time collector is already active.
System Action: The request is ignored, and the response time collector status is displayed.
User Response: None.
**OC0305**  **RTA COLLECTOR ACTIVATE REQUEST ACCEPTED**

**Explanation:** This message is in response to an RTA START command. It acknowledges the request to activate the response time collector.

**System Action:** The response time collector is started.

**User Response:** None.

**OC0306**  **RTA SCALE= VALUE INVALID, MUST BE 0.1–9.9 SECS**

**Explanation:** This message indicates that the SCALE= parameter of the response time collector command is invalid. The valid range for the SCALE parameter is 0.1–9.9.

**System Action:** The command terminates.

**User Response:** Correct the value, and re-enter the command.

**OC0307**  **RTA NOT ACTIVATED - ALL GROUPS EMPTY**

**Explanation:** A request was made to start the response time collector. The request is not completed because all the defined groups are empty.

**System Action:** The request is ignored.

**User Response:** Use the GRPS command to list the currently defined groups and their entries. Modify the current groups and retry the request.

**OC0308**  **ETE NO LUS MEET SELECTION CRITERIA**

**Explanation:** The ETE command could find no defined Logical Units that satisfy the selection criteria specified on the command.

**System Action:** None.

**User Response:** None.

**OC0309**  **ETE NO LUS ARE BEING MONITORED**

**Explanation:** No VTAM Logical Unit names have been assigned to an LU group.

**System Action:** None.

**User Response:** None.

**OC0310**  **RTA DATA MODULE MISSING**

**Explanation:** A request was made to start the response time collector, or a response time collector command was entered, however the response time collector portion of KOCGLBcc cannot be located.

**System Action:** The command terminates.

**User Response:** Contact IBM Software Support.

**OC0311**  **ETE INTERVAL= PARM INVALID, MUST BE 1–7200 MINS**

**Explanation:** The valid range for the INTERVAL parameter is 1–7200 minutes inclusive (1 minute to 5 days).

**System Action:** The command terminates.

**User Response:** Re-enter the command, specifying a valid value.

**OC0312**  **RTA WINDOW= VALUE INVALID, MUST BE 1–10 MINUTES**

**Explanation:** The valid range for the SCALE parameter is 1–10.

**System Action:** The command terminates.

**User Response:** Correct the value, and re-enter the command.

**OC0313**  **ETE SPECIFIED GROUP IS NOT LU TYPE**

**Explanation:** The GROUP= operand of the ETE command specified a non-LU type group. ETE can only process Logical Unit groups.

**System Action:** The command terminates.

**User Response:** Specify a group that has been defined for LUs.

**OC0314**  **RTA NOT STARTED, OMEGAMON INITIALIZATION WAS NOT DONE FOR THIS CICS REGION**

**Explanation:** A request was made to start the response time collector, however the CICS transaction OMEG INIT was not entered.

**System Action:** The request fails.

**User Response:** Issue the OMEG INIT transaction to initialize Tivoli OMEGAMON II for CICS on z/OS. You can initialize automatically by including the program KOCOME00 in the PLT. Refer to the Tivoli OMEGAMON II for CICS on z/OS Configuration and Customization Guide for more information.

**OC0315**  **RTA NOT STARTED, XMEM RECEIVE NOT AVAILABLE**

**Explanation:** This message occurs when the response time collector is unable to obtain response time information because it cannot locate the Tivoli OMEGAMON II for CICS on z/OS cross memory communication buffer.

**System Action:** The response time collector subtask terminates.
User Response: Check that KOCOME00 successfully ran under CICS either at PLTPI time or via an OMEG INIT transaction. Also, make sure that the XMRCDS= parameter of the KOCGLOB macro does not specify a value of zero in the Global module. If XMRCDS=0, then the communication buffer will never be allocated. This message may appear if CICS is in the process of termination at the time the response time collector tries to extract data.

OC0316 RTA HAS ISSUED A MISMATCHING XMEM RECEIVE FOR DATA
Explanation: The response time collector subtask supplied an area that is too small to accommodate the response time information collected by Tivoli OMEGAMON II for CICS on z/OS code running under CICS.

OC0320 LU RESPONSE TIME FACILITY FAILED DURING cc-cc RC=nnn
Explanation: An error occurred in the response time collector’s LU Response Time Facility. The variable cc-cc is replaced by one of the following response time analysis internal call types: INSTALL, ADD, EXTRACT, or REMOVE.
The variable nn is a hexadecimal return code (for a complete description, see the End-to-End Response Time Feature (ETE) Reference Manual) and is replaced by one of the following decimal return codes:
- 00 request was successful
- 04 not APF authorized
- 08 handle invalid
- 10 ZAPLOG does not match
- 14 request failed
- 18 RTINSTAL module LOAD failed
- OC RSP1 not installed


User Response: Contact IBM Software Support.

OC0322 RTA COLLECTOR START ERROR, RC=nnn
Explanation: This message is in response to an RTA START command. Tivoli OMEGAMON II for CICS on z/OS was unable to start the response time collector subtask.
System Action: The request is ignored, and the response time collector status is displayed. The response time collector does not start.
User Response: Note the return code that accompanies this message and call IBM Software Support.

OC0330 RTA COLLECTOR NOT ACTIVE
Explanation: One of the response time collector commands was entered (CRSP, CSLT, RSP or ETE) but the response time collector was not active.
System Action: The command terminates.
User Response: Use the RTA START command to activate the response time collector.

OC0380 RTA - NO WORKING STORAGE AVAILABLE
Explanation: There is insufficient virtual storage for the RSP command’s work area.
System Action: The RSP command terminates.
User Response: Increase the region for the common interface.

OC0390 RTA DATA AREA BUSY - RETRY
Explanation: A GRPS or RTA command issued by another Tivoli OMEGAMON II for CICS on z/OS session is currently modifying the thresholds, SCALE or WINDOW in the response time collector data area.
System Action: The command terminates.
User Response: Re-enter the command.
OC0400 ONDV COLLECTOR HAS ENDED DUE TO AN ERROR, RC=nn

Explanation: The ONDV collector abnormally terminated.

A return code of 10 may occur if multiple CICS regions are started and OMEGAMON is not given enough cycles to complete the cross memory initialization within 30 seconds.

A return code of 20 may indicate one of the following:

- The ONDV dataset does not exist.
- The ONDV dataset is not initialized.
- The ONDV dataset is corrupted.
- The ONDV dataset must have a secondary extent of 1 cylinder.
- A mismatch in maintenance has occurred.

A return code of 34 indicates that an error occurred during dynamic allocation.

The ONDV collector abnormally terminates.

If you have a return code of 10, stagger the start-up of the CICS regions or issue the command OMESHUT followed by the command OMEG INIT in the CICS region where initialization failed. If you have a return code of 20, make sure that your ONDV dataset has been allocated and initialized properly. If you have recently applied maintenance, make sure OMES REMOVE/OMEG INIT have been issued, or recycle all CICsEs to activate the new maintenance in all regions.

If you receive a return code of 34, look for accompanying OC040x messages containing additional return codes. In these messages, the return and reason codes are the same as those produced by DYNALLOC SVC (SVC99). For a complete description of these return codes, see the IBM documents MVS/XA System Programming Library: System Macros and Facilities Vol I. or MVS/ESA Application Development Guide: Authorized Assembler Language Programs.

OC0402 ONDV ERROR FROM DSPSERV, RC=nn, REASON=00yyyy00

Explanation: The ONDV collector encountered an error from the DSPSERV macro. This is an IBM macro for using data space services.

System Action: The collector terminates.

User Response: Consult the IBM Application Development Macro Reference manual for the cause of the error.

OC0403 ONDV DATA SPACE SIZE EXCEEDS INSTALLATION LIMIT, DEFAULT SIZE USED

Explanation: The size of the data space for the ONDV collector exceeded the limit defined by your installation as set by the SMF user exit IEFUSI or by the IBM default size.

System Action: The collector reduces the size of the data space to the installation default size.

User Response: Check that the size of the data space you specified in the KOCONDV macro in KOCGLB does not exceed any limit defined at your installation.

OC0404 ONDV ERROR FROM ALESERV, RC=nn

Explanation: The ONDV collector encountered an error from the ALESERV macro. This is an IBM macro for using address space control services.

System Action: The collector terminates.

User Response: Consult the IBM Application Development Macro Reference manual for a description of the return codes.

OC0405 ONDV UNABLE TO ALLOCATE HISTORICAL DATA FILE, RC=nn ERROR=eeee I=iii NAME=dataset_name

Explanation: The ONDV collector could not allocate the historical file you specified in the KOCONDV macro in KOCGLB.

System Action: The collector terminates.

User Response: Make sure the dataset you specified exists and is a linear dataset. The return codes in the error message are based on the SVC 99 call. Consult the IBM SPL Application Development Guide for a description of the return codes.
OC0406  UNABLE TO DEALLOCATE
HISTORICAL DATA FILE, RC=nn
ERROR=eeee INFO=iiii

Explanation: The ONDV collector could not deallocate the historical file as it was terminating.

System Action: The collector continues termination, but the dataset may still be allocated to the common interface address space.

User Response: The return codes in the error message are based on the SVC 99 call. Consult the IBM SPL Application Development Guide for a description of the return codes.

OC0407  UNABLE TO MAP HISTORICAL DATA FILE, RC=nn REASON=yyyy

Explanation: The ONDV collector encountered an error from the DIV macro while trying to map the linear data set to a data space. The DIV macro is an IBM macro for using the Data-In-Virtual facility of MVS.

System Action: The collector terminates.

User Response: Consult the IBM Application Development Macro Reference manual for a description of the return codes.

OC0408  HISTORICAL DATA FILE WILL BE CLEARED

Explanation: The ONDV collector detected invalid control information while initializing the historical data file.

System Action: All data in the historical data file is erased.

User Response: Make sure that the collector used the allocated data set. If this occurs again, contact IBM Software Support.

OC0409  NOT STARTED, OMEGAMON INITIALIZATION WAS NOT DONE FOR THIS CICS REGION

Explanation: A request was made to start the ONDV collector, but the CICS transaction OMEG INIT was not entered or the program KOCOME00 was not run in the PLT during CICS initialization.

System Action: The request fails.

User Response: Issue the OMEG INIT transaction to initialize OMEGAMON II in CICS. You can automatically initialize by including the program KOCOME00 in the PLT. Refer to the Tivoli OMEGAMON II for CICS on z/OS Configuration and Customization Guide for more information.

OC0410  HISTORICAL DATA FILE TOO SMALL

Explanation: The size of the historical data file was less than 8K and therefore could not be used.

System Action: The ONDV collector terminates.

User Response: Make sure that historical data file is at least 8K and that the data file is initialized according to the procedure described in the Tivoli OMEGAMON II for CICS on z/OS Configuration and Customization Guide.

OC0411  COMPONENT IS NOT AVAILABLE UNDER MVS/XA™

Explanation: The ONDV subtask cannot be used in an MVS/XA environment.

System Action: The command is ignored.

User Response: None.

OC0412  GENERIC DATASET NAME TOO LONG

Explanation: The name of the VSAM linear dataset used to store task history (which is specified on the KOCONDV macro of the global data area module) contains the asterisk “wildcard” character. When the ONDV subtask was started, the asterisk was replaced by the job name of the CICS region being monitored. (This allows a global data area module to be shared by several CICS regions even though each region requires its own task history dataset.) After the job name was substituted for the asterisk, the resulting dataset name exceeded the maximum of 44 characters.

System Action: The subtask is terminated with a return code of 100, (x’64’).

User Response: Correct the filename field on the KOCONDV macro so that, after CICS job name substitution, it specifies the name you assigned to the task history dataset when it was allocated. Then reassemble the global data area module and recycle the common interface address space.

OC0413  REDEFINE THE VSAM DATASET WITH SHAREOPTIONS(3,3)

Explanation: While attempting to access the linear VSAM task history dataset, it was found that the dataset was not defined with SHAREOPTIONS(3,3). These SHAREOPTIONS are required to enable the ONDV collector to provide its own serialization of the dataset rather than let VSAM control it.

System Action: The collector terminates with a return code of 56 (x’38’). This message will be preceded by messages OC0407 and IEC161I 052-084.

User Response: Use the Installation/Configuration
Assistance Tool (ICAT) to delete and redefine the historical data set. When allocated, restart the ONDV subtask from an Tivoli OMEGAMON II for CICS on z/OS session or through the console Modify command.

**OC0414**  
**ONDV SEVERE LOGIC ERROR IN HISTORICAL DATA FILE INDEX STRUCTURE**

**Explanation:** The ONDV collector detected an invalid index pointer within the historical data file.

**System Action:** The collector issues an ABEND U414 and terminates. This message should be followed by message OC0416.

**User Response:** Keep the dump and make a copy of the historical data file, then contact IBM Software Support. If this message is not followed by message OC0416, reinitialize your historical data file prior to starting ONDV.

**OC0415**  
**ONDV SEVERE LOGIC ERROR IN HISTORICAL DATA FILE DATA STRUCTURE**

**Explanation:** The ONDV collector detected an invalid data pointer within the historical data file.

**System Action:** The collector issues an ABEND U415 and terminates. This message should be followed by message OC0416.

**User Response:** Keep the dump and make a copy of the historical data file, then contact IBM Software Support. If this message is not followed by message OC0416, reinitialize your historical data file prior to starting ONDV.

**OC0416**  
**ONDV HISTORICAL DATA FILE HAS BEEN ERASED DUE TO THE ABOVE ERROR**

**Explanation:** The ONDV collector has erased the data in the historical file due to the error previously reported.

**System Action:** The collector terminates. The next restart causes the file to be reinitialized. Processing then begins again normally.

**User Response:** From the CANSOCnn console log, determine the reason for the collector failure.

**OC0417**  
**INCOMPATIBLE ONDV COLLECTOR/DATASTORE—CICSJOBN. ERASE DATASTORE? REPLY ‘Y’ OR ‘N’**.

**Explanation:** The ONDV collector has been started for the specified CICS region, but on the KOCONDV macro in the global data area module used by that region, one of the following occurred:

- STORE=(FILEONLY,LINEAR.*.DATASET) has been specified and the dataset is formatted for the FILEOCMP version of the collector, or
- STORE=(FILEOCMP,LINEAR.*.DATASET) has been specified and the dataset is formatted for the FILEONLY version of the collector. Suspends collector initialization pending operator response. Enter Y to continue initialization and erase current data or N to terminate collector without affecting current datastore contents.

**OC0418**  
**ONDV COLLECTOR WAITING FOR CONSOLE RESPONSE**

**Explanation:** An attempt has been made to stop or start the collector from an OMEGAMON session while the collector status is REPLY.

**System Action:** The command is ignored.

**User Response:** See accompanying message OC0417 and respond Y or N from the console.

**OC0420**  
**INVALID PARAMETER SPECIFIED**

**Explanation:** An invalid parameter was specified in the ONDV command.

**System Action:** The command is ignored.

**User Response:** Correct the syntax of the command.

**OC0421**  
**COLLECTOR NOT ACTIVE**

**Explanation:** The ONDV collector is not running.

**System Action:** No records are displayed.

**User Response:** You must start the collector in order to view records.

**OC0422**  
**COLLECTOR STOP REQUEST ACCEPTED**

**Explanation:** This is an informational message in response to a STOP request.

**System Action:** None.

**User Response:** None.

**OC0423**  
**COLLECTOR ALREADY ACTIVE**

**Explanation:** A request was made to start the ONDV collector but the collector is already active.

**System Action:** The command is ignored.

**User Response:** None.
OC0424 COLLECTOR START REQUEST ACCEPTED

Explanation: This is an informational message in response to a START request.
System Action: None.
User Response: None.

OC0425 COLLECTOR STOP REQUEST REJECTED

Explanation: A request was made to start the ONDV collector via an MVS command but that command was rejected by MVS.
System Action: The collector is not started.
User Response: Check the SYSLOG common interface job for more information.

OC0426 NO STATUS INFORMATION AVAILABLE

Explanation: Status information on the ONDV collector is not available because the collector is not active.
System Action: The command is ignored.
User Response: Make sure the collector is active.

OC0427 INTERNAL ERROR, RC=yy

Explanation: The ONDV collector detected an internal error in processing the request.
System Action: The request is ignored.
User Response: Contact IBM Software Support.

OC0428 INSUFFICIENT LINES FOR THE DISPLAY

Explanation: The ONDV command did not have enough lines on the terminal to produce a display.
System Action: No display is produced.
User Response: When entering the ONDV command, make sure at least six lines are available at the bottom of the screen to account for titles, headings, and so on. ONDV does not write records past the physical end of the screen.

OC0429 NO RECORDS TO DISPLAY

Explanation: The ONDV collector is active but there are no records to display.
System Action: No display is produced.
User Response: Enter CICS transactions and try the command over. If this condition persists, verify the following:
- Use the CEMT INQ MON transaction in CICS to verify that CICS monitoring is active (for CICS 3.x).
- Verify that the status of the collector is active using the ONDV STATUS command.
- Contact IBM Software Support for additional assistance.

OC0430 INVALID RECORD NUMBER TO DISPLAY

Explanation: An invalid record number was entered with the ONDV command.
System Action: No display is produced.
User Response: The record number corresponds to the entry number of the record that appears on the screen. The first record is 1, the second 2, and so on.

OC0431 ERROR IN RETRIEVING RECORDS, RC=nn

Explanation: The ONDV collector has encountered an internal error in processing the request.
System Action: No display is produced.
User Response: Contact IBM Software Support with the return code.

OC0432 NO DETAILED STATISTICS ARE AVAILABLE

Explanation: A request was made to display detailed file or database statistics for a transaction but no statistics are available.
System Action: No display is produced.
User Response: Verify that collect is active for the file or database using the COLL command and that a KOCDBCOL macro was used in KOCGLB to define the parameters for the file or database. Also verify that the transaction carried out file or database operations from the task level statistics.

OC0434 DETAILED STATISTICS HAVE BEEN DELETED FROM ONDV BUFFER

Explanation: A request was made to display detailed file or database statistics for a transaction but the statistics were deleted from the ONDV collector data store. The statistics are saved in a wraparound table. Statistics on a file level are saved separately from statistics on a task level. Therefore, file-level statistics might be overwritten while task-level statistics are still available.
System Action: No display is produced.
User Response: You can set the size of the buffer area for task- and file-level statistics with the KOCONDV macro in KOCGLB. See the Tivoli OMEGAMON II for...
Explanation: Tivoli OMEGAMON II for CICS on z/OS displays this message on the command line when the first record in the datastore is displayed. When scrolling backwards in Tivoli OMEGAMON II for CICS on z/OS, the task history component needs to determine the first record in the datastore to prevent any further scrolling.

System Action: None.

User Response: None.

Explanation: This is an informational message indicating the name of the ONDV historical dataset in use for this ONDV subtask.

System Action: None.

User Response: None.

Explanation: ONDV has detected that the linear dataset is currently in use by another ONDV subtask.

System Action: The ONDV collector terminates.

User Response: Make sure that multiple ONDV subtasks are not attempting to share the same historical dataset. Refer to the Tivoli OMEGAMON II for CICS on z/OS Configuration and Customization Guide for instructions on how to code the KOCONDV macro in the global data area module.

Explanation: This is an informational message indicating that the previous ONDV subtask to use this historical dataset did not terminate correctly. No status information was recorded and therefore the data contained within this file will be erased.

System Action: This message is followed by OC0408 and initialization continues.

User Response: None.
OC0501 UNABLE TO VALID VALUE IN CICS
Explanation: Tivoli OMEGAMON II for CICS on z/OS was unable to verify that the correct data would be changed in CICS, so the command was not executed.
System Action: The CMT command fails.
User Response: Determine if CICS has had a storage violation. If not, contact IBM Software Support.

OC0502 TIME VALUE MUST BE GREATER THAN SCANDELAY VALUE
Explanation: A request was made to change the TIME to a value less than the current SCANDELAY value.
System Action: The CMT command fails.
User Response: Correct the value and re-enter the CMT command.

OC0503 CMT REQUIRES A KEYWORD PARAMETER
Explanation: The CMT command requires a keyword as an argument.
System Action: The CMT command fails.
User Response: Enter the correct keyword (and optional argument) after the CMT command.

OC0504 VALUE TOO LOW
Explanation: The value for an argument to a CMT keyword was below the minimum value for that keyword.
System Action: The CMT command fails.
User Response: Correct the argument value and re-enter the CMT command.

OC0505 VALUE TOO HIGH
Explanation: The value for an argument to a CMT keyword was above the maximum value for that keyword.
System Action: The CMT command fails.
User Response: Correct the argument value and re-enter the CMT command.

OC0506 CLASS ID MUST BE SPECIFIED
Explanation: When changing the class max tasks, as class ID must be specified.
System Action: The CMT command fails.
User Response: Re-enter the CMT command specifying the class ID for the class that you want to change in the CMXT.

OC0507 CLASS ID MUST BE 1–10
Explanation: The only valid class IDs are the values of 1–10.
System Action: The CMT command fails.
User Response: Re-enter the CMT command specifying the correct class ID for the class that you want to change in the CMXT.

OC0508 ACTIVE MAX TASKS MUST BE <= MAX TASKS
Explanation: An attempt was made to set active max tasks below the current value for max tasks.
System Action: The CMT command fails.
User Response: Re-enter the CMT command specifying a value for active max tasks greater than or equal to max tasks.

OC0509 CLASS MAX TASKS MUST BE < MAX TASKS
Explanation: An attempt was made to set class max tasks above the current value for max tasks.
System Action: The CMT command fails.
User Response: Re-enter the CMT command specifying a value for class max tasks less than max tasks.

OC0510 SCANDELAY VALUE MUST BE <= TIME VALUE
Explanation: An attempt was made to set the SCANDELAY value to a value greater than the time value. The SCANDELAY value must be less than or equal to the TIME value.
System Action: The CMT command fails.
User Response: Re-enter the CMT command specifying a value for SCANDELAY less than or equal to the TIME value.

OC0515 KILL NOT POSSIBLE, OMEG INIT WAS NOT DONE FOR THIS CICS
Explanation: The KILL command was issued, but the Tivoli OMEGAMON II for CICS on z/OS interface is not active in the CICS region or the interface was activated after the task you are attempting to kill was started.
System Action: The KILL command fails.
User Response: Ensure that transaction OMEG and program KOCOME00 are defined to CICS and that transaction OMEG has been successfully executed in CICS.
OC0520  PROGRAM CHECK DURING KILL PROCESSING
Explanation:  The KILL command program checked during processing because of a no longer valid CICS pointer.
System Action:  The KILL command fails.
User Response:  Re-enter the command.

OC0521  SELECTED TASK ALREADY MARKED FOR CANCEL
Explanation:  A task was selected with the KILL command, but the task is already being cancelled.
System Action:  The KILL command fails.
User Response:  None.

OC0522  INVALID CONTROL BLOCKS WERE DETECTED IN THE TASK TO BE KILLED
Explanation:  The task selected with the KILL command did not have a valid TCA or DCA (for CICS/MVS®) or TQE (CICS/ESA). This may indicate the task is already being purged by CICS.
System Action:  The KILL command fails.
User Response:  None.

OC0523  NO KILL PERFORMED, THE TASK IS IN A DL/I REQUEST
Explanation:  The task selected with the KILL command has issued a DL/I request that has not yet finished processing. To avoid data integrity exposures, no KILL is attempted.
System Action:  The KILL command fails.
User Response:  None.

OC0524  NO KILL PERFORMED, DFHKCP IS IN CONTROL, TRY AGAIN
Explanation:  DFHKCP is in control in the CICS address space before a KILL is attempted. To avoid CICS integrity exposure, the KILL command does not complete process.
System Action:  The KILL command fails.
User Response:  None.

OC0525  NO KILL PERFORMED, LIFO STACK ERROR IN TASK TO BE KILLED
Explanation:  When checking the LIFO stack of the task to be killed, an error was found.
System Action:  The KILL command fails.
User Response:  None.

OC0526  NO KILL PERFORMED, SELECTED TASK IS KCP
Explanation:  The task selected with the KILL command represents the CICS Task Control Program (KCP).
System Action:  The KILL command fails.
User Response:  None.

OC0527  NO KILL PERFORMED, SELECTED TASK IS TCP
Explanation:  The task selected with the KILL command represents the CICS Terminal Control Program (TCP).
System Action:  The KILL command fails.
User Response:  None.

OC0528  NO KILL PERFORMED, GETMAIN FAILURE
Explanation:  An SQA getmain issued in behalf of the KILL command was unsuccessful because not enough SQA storage was available in the system.
System Action:  The KILL command fails.
User Response:  Increase the amount of SQA available to the system and restart the session.

OC0529  KILL PROCESSING COMPLETE
Explanation:  The KILL command was successful.
System Action:  This is an informational message.
User Response:  None.

OC0530  NO KILL PERFORMED, SYSEVENT FAILURE -CODE: X 'yy'
Explanation:  A SYSEVENT macro issued in behalf of the KILL command was unsuccessful. CODE: '08' indicates that the DONTSWAP count of the CICS address space has reached its maximum. CODE: '04' indicates that the CICS address space was not the current address space.
System Action:  The KILL command fails.
User Response:  Contact IBM Software Support.
Caution
This caution applies to messages OC0538 through OC0546: The KILL command and the KILL
FORCE command attempt to remove a task from your
CICS region. There are circumstances, however, in
which this is not possible. The integrity of CICS and its
associated data cannot be guaranteed when either of
these commands is used. They should be used only
as a last resort.

Explanation: Tivoli OMEGAMON II for CICS on z/OS
has determined that the selected task exists and is able
to request CICS services to KILL the task.
System Action: CICS will process the KILL request.
User Response: Check the system log for further
messages. These messages will indicate the result of
KILL processing.

Explanation: OMEGAMON has requested CICS
services to KILL the selected task. The task is marked
Cancel Inhibited or Nonpurgeable. A deferred KILL
request is issued to attempt to KILL the task later in its
processing.
System Action: An attempt to KILL the task will be
made at an appropriate time.
User Response: Wait for CICS to process the KILL
request.

Explanation: The selected task is in a file control wait.
It is not possible to KILL a task in this state and
guarantee the integrity of CICS and its associated data.
System Action: The KILL request will not be
processed.
User Response: None. The task is not purged.

Explanation: Tivoli OMEGAMON II for CICS on z/OS
issued a deferred KILL request for a task. CICS rejected
that request.
System Action: None. The selected task will not be
processed.
User Response: Check the system log for other
messages from the KILL process. These messages
indicate what caused the request to be rejected.

Explanation: The selected task either had finished
executing or had been processed by a previous KILL
command.
System Action: None. This is an informational
message only.
User Response: Ensure that the correct task was
selected for KILL processing.

Explanation: The selected task is already marked as
abending. The task will not be processed by subsequent
KILL commands.
System Action: None. This is an informational
message only.
User Response: None. The abending task should
complete abend processing.

Explanation: The selected task is a CICS System
task. Such tasks are not eligible for KILL processing.
System Action: None. This is an informational
message only.
User Response: Ensure that the correct task was
selected for KILL processing.

Explanation: During KILL processing, the control
block structure of the selected task is verified. An error
was detected; therefore, the request cannot be
processed.
System Action: None. The task cannot be processed
by the KILL command.
User Response: Investigate the task in question. You
should attempt to ensure that CICS has not suffered a
storage corruption that has damaged task-related
control block structures.
Requested task(s) not found

**Explanation:** The task requested with the CMQM command could not be found.

**System Action:** The command terminates normally after issuing this error message.

**User Response:** Make sure that the correct task was selected for the CMQM command.

---

**OC0592** INVALID VALUES SPECIFIED FOR THE DUMP KEYWORD

**Explanation:** The DUMP= keyword was specified with the TASK command, but the values after the equal sign were not valid.

**System Action:** The TASK command fails.

**User Response:** Review the command keywords and re-enter.

---

**OC0593** INVALID VALUES SPECIFIED FOR THE DETAIL KEYWORD

**Explanation:** The DETAIL= keyword was specified with the TASK command, but the values after the equal sign were not valid.

**System Action:** The TASK command fails.

**User Response:** Review the command keywords and re-enter.

---

**OC0595** INVALID KEYWORD FOR THIS CICS RELEASE

**Explanation:** A keyword entered for the TASK command is not appropriate for the CICS release being monitored.

**System Action:** The TASK command fails.

**User Response:** Review the command keywords and re-enter.

---

**OC0624** SSCVT CHAIN IS EMPTY

**Explanation:** Tivoli OMEGAMON II for CICS on z/OS was unable to locate an SSCVT chain for scanning.

**System Action:** The command fails.

**User Response:** The SSCVT chain should not be empty; there is a possibility that your MVS has been corrupted. If your system appears to be running properly, contact IBM Software Support.

---

**OC0625** INVALID SSCVT FOUND ON CHAIN

**Explanation:** Tivoli OMEGAMON II for CICS on z/OS found an invalid entry in the SSCVT chain during scanning.

**System Action:** The command fails.

**User Response:** The SSCVT chain should not contain invalid entries, there is a possibility that your MVS has been corrupted. If your system appears to be running properly, contact IBM Software Support.

---

**OC0700** OCRO CICS JOBNAME PARAMETER IS MISSING OR INVALID

**Explanation:** The CICS jobname parameter for a monitoring session is invalid or omitted.

**System Action:** The session is not initiated.

**User Response:** Restart the session using a valid CICS jobname parameter.

---

**OC0701** OCRO SEARCH FAILED: aaaaaaaa

**Explanation:** An address space with a jobname of aaaaaaaa cannot be found in the system.

**System Action:** The session is not initiated.

**User Response:** Restart the session using a valid CICS jobname parameter.

---

**OC0702** OCRO VALIDATION ABORTED; TARGET IS SWAPPED OUT: aaaaaaaa

**Explanation:** CICS validation for the target address space with jobname aaaaaaaa cannot be completed because the address space was swapped out for longer than two minutes.

**System Action:** The session is not initiated.

**User Response:** Restart the session when the target address space is swapped in or ensure that the target it nonswappable.

---

**OC0703** OCRO CICS VALIDATION FAILED: aaaaaaaa

**Explanation:** The Tivoli OMEGAMON II for CICS on z/OS validation routine could not determine that the target address space is CICS.

**System Action:** The session is not initiated.

**User Response:** Restart the session after ensuring that the target address space is CICS and that the CICS step is currently running.

---

**OC0704** OCRO UNSUPPORTED CICS RELEASE RUNNING

**Explanation:** The version of CICS running is not supported by this release of Tivoli OMEGAMON II for CICS on z/OS.

**System Action:** The session is not initiated.

**User Response:** None.
OC0705  OXC CICS HAS TERMINATED: aaaaaaaa
Explanation: The target CICS with jobname aaaaaaaa terminated.
System Action: The session terminates.
User Response: None.

OC0706  OCO CICS SWAPPED OUT: aaaaaaaa
Explanation: The target CICS with jobname aaaaaaaa swapped out at a point in Tivoli OMEGAMON II for CICS on z/OS's processing where the session cannot continue.
System Action: The session terminates.
User Response: None.

OC0707  OCO MODE PARAMETER IS MISSING OR INVALID
Explanation: The mode parameter for a monitoring session is invalid or was omitted.
System Action: The session is not initiated.
User Response: Restart the session using a valid mode parameter.

OC0708  OXI CICS aaaaaaaa HAS ABENDED; CODE:Sbb Ucccc
Explanation: The CICS with job name aaaaaaaa abnormally terminated. The system and user codes are denoted by bbb and cccc, respectively.
System Action: The session terminates.
User Response: None.

OC0709  OXI INSUFFICIENT STORAGE TO START SESSION
Explanation: There is not enough virtual storage available to start a session.
System Action: The session is not initiated.
User Response: Increase the available region.

OC0710  OXI INVALID PARAMETER LIST PASSED TO OMEGAMON
Explanation: The parameter string passed to Tivoli OMEGAMON II for CICS on z/OS is in error.
System Action: The session is not initiated.
User Response: Verify that such entries as the ROWS/COLS parameters are correctly specified.

OC0711  OXI OMEGAMON INIT FAIL - CODE: aaaaaaaa
Explanation: Tivoli OMEGAMON II for CICS on z/OS initialization cannot continue due to an error in the start-up environment.
System Action: The session is not initiated.
User Response: Check the system console log for any other messages. If problems persist, contact IBM Software Support.

OC0712  OXI ERROR LOADING PRODUCT MODULE aaaaaaaa
Explanation: The product module could not be loaded successfully.
System Action: Tivoli OMEGAMON II for CICS on z/OS terminates.
User Response: Check that the named module is in the product library. If it is not in the product library, contact IBM Software Support.

OC0713  OXI TARGET CICS STALLED IN INITIALIZATION
Explanation: While waiting for CICS initialization, an Tivoli OMEGAMON II for CICS on z/OS monitoring session is timed out.
System Action: The session is not initiated.
User Response: Restart the session after CICS is initialized.

OC0714  OXI CROSS MEMORY INTERFACE TASK HAS TERMINATED
Explanation: An Tivoli OMEGAMON II for CICS on z/OS monitoring session detected the termination of the cross memory interface task.
System Action: The session terminates.
User Response: Restart the session after first restarting the cross memory interface task.

OC0716  OCO VALIDATION ABORTED; TARGET HAS TERMINATED: aaaaaaaa
Explanation: The target address space with jobname aaaaaaaa terminated while Tivoli OMEGAMON II for CICS on z/OS was performing CICS validation.
System Action: The session is not initiated.
User Response: None.
OC0718  OCXI CICS TO BE MONITORED IS AN XRF ALTERNATE

Explanation: An attempt was made to start an Tivoli OMEGAMON II for CICS on z/OS session against a standby CICS region in an XRF configuration.

System Action: Tivoli OMEGAMON II for CICS on z/OS terminates the session.

User Response: Start a session against the active CICS region.

OC0719  OCRO CANSOCnn AND CICS RKC2XM NUMBERS INCOMPATIBLE

Explanation: The RKC2XMnn DD statements in the CANSOCnn and CICS JCL procedures do not have the same numeric suffix (denoted by nn). The suffix for the RKC2XMnn DD statement must be a two-digit number from 00–15. The default is 00.

System Action: The session is not initiated.

User Response: Match the RKC2XMnn DD statement in the JCL procedure for CANSOCnn to the one in the JCL for CICS. Restart the session.

OC0720  Tivoli OMEGAMON II for CICS on z/OS LINKAGE STACK ERROR

Explanation: The linkage stack maintained by Tivoli OMEGAMON II for CICS on z/OS either ran out of available entries or an attempt was made to pop the stack when the stack was empty.

System Action: Tivoli OMEGAMON II for CICS on z/OS terminates.

User Response: Contact IBM Software Support.

OC0721  OCRO UNABLE TO OBTAIN MVS/XA LINKAGE STACK

Explanation: An attempt to allocate the Tivoli OMEGAMON II for CICS on z/OS linkage stack in above-the-line private storage has failed.

System Action: Tivoli OMEGAMON II for CICS on z/OS terminates.

User Response: Increase the amount of CSA available to the system and restart the session.

OC0723  OCRO UNABLE TO PROCESS CICS RKC2XM DD STATEMENT

Explanation: This is an internal error.

System Action: Processing stops.

User Response: Call IBM Software Support.

OC0724  OCRO INSUFFICIENT MEMORY TO INITIATE SESSION

Explanation: There is not enough private storage below the line for the data areas and control blocks necessary to operate a monitoring session or subtask.

System Action: The session is not initiated.

User Response: Increase the available region, or use the UMAX parameter to limit the number of users that may log on.

OC0750  PWAI INSUFFICIENT MEMORY FOR Tivoli OMEGAMON II for CICS on z/OS PRODUCT WORK AREA IN CSA

Explanation: The GETMAIN for a monitoring session product work area failed.

System Action: The session is not initiated.

User Response: Increase the amount of CSA available to the system and restart the session.

OC0752  PWAI INSUFFICIENT MEMORY FOR DYNAMIC LOAD AREA

Explanation: Session initialization has failed to allocate a required internal work area due to insufficient storage.

System Action: The session fails to initialize.

User Response: Increase the amount of CSA available to the system and restart the session.

OC0753  PWAI INSUFFICIENT MEMORY FOR Tivoli OMEGAMON II for CICS on z/OS CROSS MEMORY WORK AREA

Explanation: The GETMAIN for an Tivoli OMEGAMON II for CICS on z/OS session cross memory work area failed.

System Action: The session is not initiated.

User Response: Increase the amount of CSA available to the system and restart the session.

OC0755  OCRO OCVRSN VALIDATION FAILURE

Explanation: An attempt was made to start a version of Tivoli OMEGAMON II for CICS on z/OS that does not recognize either the release of the CICS region or the MVS operating system.

System Action: The session is not initiated.

User Response: Ensure that the session is being started for an operating system and CICS release that is supported by Tivoli OMEGAMON II for CICS on z/OS. If problems persist, contact IBM Software Support.
OC0759  OCRO LINK TO aaaaaaaa FAILED;
        CODE=bbbbbbbb

Explanation:  the load module identified by aaaaaaaa could not be loaded.  The ABEND code is represented
        by bbbbbbbb.

System Action:  The session is not initiated.

User Response:  Locate the ABEND code (bbbbbbbb) in the IBM System Codes manual; correct the cause of
        the failure; and restart the session.

OC0760  OCRO LOAD OF aaaaaaaa FAILED:
        CODE=bbbbbbbb, REASON=cccccccc

Explanation:  The load module identified by aaaaaaaa could not be loaded.  The abend code is represented by
        bbbbbbbb, and ccccccccc denotes the reason code that is associated with the abend.

System Action:  The session is not initiated.

User Response:  Locate the abend code (bbbbbbbb) in the IBM System Codes manual; correct the cause of
        the load failure; and restart the session.

OC0761  OCRO ESTAEX PC FAILURE

Explanation:  The Tivoli OMEGAMON II for CICS on z/OS session received a non-zero return code from the
        ESTAEX macro.  This is usually caused by a lack of LSQA.

System Action:  The session is not initiated.

User Response:  Increase the amount of CSA available to the system and restart the session.  If problems persist, contact IBM Software Support.

OC0762  OCPR HOLD COUNT DISPLACEMENT VALIDATION FAILED

Explanation:  Tivoli OMEGAMON II for CICS on z/OS was unable to verify the location of the hold count field
        in the OUCB.

System Action:  XMIT terminates because Tivoli OMEGAMON II for CICS on z/OS components are unable to verify
        target address spaces if the CICS region is swappable.

User Response:  Contact IBM Software Support.

OC0763  OCPR(Vnnn) AND aaaaaaaa(Vyyy) INCOMPATIBLE

Explanation:  Tivoli OMEGAMON II for CICS on z/OS found a discrepancy in the versions of modules OCPR
        (XMIT) and aaaaaaaa.

System Action:  Further processing is stopped.

User Response:  Verify that all Tivoli OMEGAMON II for CICS on z/OS modules are of the same version and
        restart the cross memory interface task.

OC0764  OCPR MAINTENANCE LEVEL MISMATCH BETWEEN CICS AND
        CANSOCnn STEPLIB DATASETS

Explanation:  Tivoli OMEGAMON II for CICS on z/OS found a discrepancy in the lengths of data areas in the
        Global Data Area in CICS and the equivalent area in the CANSOCnn address space.

System Action:  Further processing is stopped.

User Response:  Verify that all Tivoli OMEGAMON II for CICS on z/OS libraries in the STEPLIB concatenations of CICS
        and CANSOCnn are the same version, maintenance level, and order.  Verify that the Global Data Area Module (KOCGLBxx) has been
        assembled at the latest maintenance level.

OC0765  OCPR EXTRACT AREA LENGTHS DIFFERENT -- CICS (xxxx) and
        CANSOCnn (yyyy)

Explanation:  See message OC0764.

System Action:  See message OC0764.

User Response:  See message OC0764. Please quote the two data area lengths if you call IBM Software Support.

OC0766  OCPR KOCGLBcc PTF aaaaaaa INCOMPATIBLE WITH CANSOCnn PTF
        bbbbbbb

Explanation:  During the load of a global data area module, Tivoli OMEGAMON II for CICS on z/OS detected that the module with the suffix cc was
        assembled with PTF aaaaaaa, whereas the CANSOCnn was using PTF bbbbbbb.

System Action:  Initialization continues. Results are unpredictable.

User Response:  Ensure that the global data area module was assembled using the same service level as
        the Tivoli OMEGAMON II for CICS on z/OS code within the CICS region.

OC0767  OCPR CANSOCnn AND GLOBALS MUST BE AT THE SAME SERVICE
        LEVEL

Explanation:  This message follows message OC0766.

System Action:  The load of a global data area module continues. Results are unpredictable.

User Response:  Ensure that the global data area module was assembled using the same service level as
        the Tivoli OMEGAMON II for CICS on z/OS code within the CICS region.
<table>
<thead>
<tr>
<th>Error Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>OC0795</td>
<td>OCRO ERROR DURING CASB INITIALIZATION</td>
</tr>
<tr>
<td><strong>Explanation:</strong></td>
<td>An unexpected error occurred while building the CICS Architecture Summary Block (CASB). The CASB is an internal Tivoli OMEGAMON II for CICS on z/OS control block that is required for session start-up.</td>
</tr>
<tr>
<td><strong>System Action:</strong></td>
<td>The session is not initiated.</td>
</tr>
<tr>
<td><strong>User Response:</strong></td>
<td>Contact IBM Software Support.</td>
</tr>
</tbody>
</table>

| OC0796     | OCRO UNABLE TO OBTAIN STORAGE FOR CASB |
| **Explanation:** | The first session or subtask initialized against a particular CICS obtains a CASB work area that is required for monitoring of that CICS region. |
| **System Action:** | The session or subtask fails to initialize. Further sessions or subtasks initialized against the same CICS region are also likely to fail. |
| **User Response:** | Increase the amount of CSA available to the system and restart the session. |

| OC0799     | OCRO APF AUTHORIZATION CHECK FAILED |
| **Explanation:** | An Tivoli OMEGAMON II for CICS on z/OS session is not running APF authorized. |
| **System Action:** | The session terminates. |
| **User Response:** | Verify that all Tivoli OMEGAMON II for CICS on z/OS modules reside in authorized libraries. The Tivoli OMEGAMON II for CICS on z/OS Configuration and Customization Guide contains additional information about APF authorization. |

| OC0800     | OCPR ENVIRONMENT MISMATCH, SYSTEM MUST BE MVS/ESA™ OR HIGHER |
| **Explanation:** | An attempt was made to execute at an incomplete system level prior to MVS/ESA. |
| **System Action:** | The session does not initiate. |
| **User Response:** | None. |

| OC0801     | OCRO CROSS MEMORY INTERFACE TASK IS NOT ACTIVE |
| **Explanation:** | An initializing Tivoli OMEGAMON II for CICS on z/OS session found that the cross memory interface task (XMIT) is not active. |
| **System Action:** | The session does not initiate. |
| **User Response:** | Ensure that the cross memory interface task is running as a subtask of the Common Interface, then restart the session. |

| OC0802     | OCRO OCSS SSCVT NOT FOUND ON CHAIN |
| **Explanation:** | The monitor was unable to locate the SSCVT control block. |
| **System Action:** | The session does not initiate. |
| **User Response:** | This message could occur if XMIT (cross memory interface task) is not running as a subtask of the common interface. If this is not the case, contact IBM Software Support. |

| OC0803     | OCPR SSCVT CHAIN IS EMPTY |
| **Explanation:** | The SSCVT chain was scanned, and was found to be empty. |
| **System Action:** | The session does not initiate and a user abend U0803 occurs with a dump. |
| **User Response:** | If problems persist, contact IBM Software Support. |

| OC0804     | OCPR INVALID SSCVT FOUND ON CHAIN |
| **Explanation:** | While searching through the Subsystem Communication Vector Table chain for the element belonging to the Common Interface, Tivoli OMEGAMON II for CICS on z/OS encountered an improperly formatted SSCVT. |
| **System Action:** | Tivoli OMEGAMON II for CICS on z/OS abends with a U0804 completion code. |
| **User Response:** | Indicates that main storage was overlaid. If problems persist, contact IBM Software Support. |

| OC0805     | OCRO CROSS MEMORY INTERFACE TASK IS NOT ACTIVE |
| **Explanation:** | An initializing Tivoli OMEGAMON II for CICS on z/OS session found that the cross memory interface task (XMIT) is not active. |
| **System Action:** | The session does not initiate. |
| **User Response:** | Ensure that the cross memory interface task is running as a subtask of the Common Interface, then restart the session. |

| OC0806     | XMCR OCCIREQ SPECIFIED IN STARTUP JCL BUT RKC2XM NOT ACTIVE. REPLY ABEND, IGNORE OR RETRY. |
| **Explanation:** | The /OCCIREQ DD statement was included in the CICS start-up JCL but no entry could be found in the subsystem communication vector table (SSCVT) for the cross memory interface task (XMIT) with the specified suffix. |
| **System Action:** | CICS initialization is suspended until |
the operator responds to the console message.

**User Response:** Enter one of the following replies:

- **ABEND**
  - The CICS address space is abended with a U0806
  - The OCCIREQ requirement is overridden and CICS initialization continues. When Tivoli OMEGAMON II for CICS on z/OS becomes available, support components in the CICS address space must be initialized manually at a terminal through the "OMEG INIT" transaction. Start the XMIT subtask by issuing the modify command:
    
    `/F CIjobname,START XMIT`

    Once the interface task is active, reply to the OC0806 message with:

- **IGNORE**
  - The SSCVT chain will be searched again for the subtask. If active, initialization will proceed. If not, the WTOR message will be reissued.

- **RETRY**
  - The SSCVT chain will be searched again for the subtask. If active, initialization will proceed. If not, the WTOR message will be reissued.

**OC0807** ARINIT UNABLE TO GETMAIN STORAGE FOR ARSWORK

**Explanation:** Tivoli OMEGAMON II for CICS on z/OS attempted to GETMAIN storage for a required control block. The GETMAIN was unsuccessful. Tivoli OMEGAMON II for CICS on z/OS is unable to continue without this storage.

**System Action:** The subtask—either an Tivoli OMEGAMON II for CICS on z/OS session, KOCRTA, KOCDEX, or ONDC—terminates with a U0807 abend code.

**User Response:** Increase the amount of CSA available to the system and restart the session.

**OC0808** OCPR XM INTERFACE TASK ALREADY ACTIVE

**Explanation:** A second cross memory interface task was started while another one is still active.

**System Action:** The task terminates.

**User Response:** None.

**OC0809** OCPR XM INTERFACE TASK IS ACTIVE

**Explanation:** The cross memory interface task completed initialization and is waiting for work.

**System Action:** None.

**User Response:** None.
System Action: The cross memory interface task terminates.

User Response: Ensure that the Common Interface is active in the system and that no other attempt is being made to start the cross memory interface task. Then attempt to start the cross memory interface task again.

OC0816 OCPR ENTRY TABLE CREATE FAILED
Explanation: An error occurred during the attempt to build a program call-entry table.

System Action: The cross memory interface task (XMIT) terminates with a U0816 abend code.
User Response: Contact IBM Software Support.

OC0817 OCPR LINKAGE INDEX RESERVE FAILED
Explanation: An attempt to reserve a linkage index failed.

System Action: The cross memory interface task (XMIT) terminates with a U0817 abend code.
User Response: Contact IBM Software Support.

OC0818 OCRO aaaaaaaa IS NOT A VALID PROGRAM NAME
Explanation: An invalid program name was requested in a START command. For valid program names, see the Tivoli OMEGAMON II for CICS on z/OS Configuration and Customization Guide.

System Action: START processing ends.
User Response: Correct the START command and re-enter.

OC0819 WARNING: CONNECT TO OCCI aaaaaaaa FAILED
Explanation: An attempt to connect to Tivoli OMEGAMON II for CICS on z/OS’s entry table failed. The jobname of the common interface is denoted by aaaaaaaa.

System Action: Processing continues unless the CICS job has the OCCIREQ DD statement in its JCL stream, indicating that the common interface is required. If the OCCIREQ card is present, Tivoli OMEGAMON II for CICS on z/OS gives the user a message to ABEND, IGNORE, or RETRY.

User Response: Verify that the cross memory interface task (XMIT) is active as a subtask of the common interface job aaaaaaaa, that PARM=LXRES is coded on the EXEC card of the OCCIPROC, and that you are using compatible product releases.

System Action: The system uses the default RKC2XM number, 00.
User Response: None.

OC0820 OCPR CANSOCnn RKC2XM NUMBER INVALID
Explanation: An invalid RKC2XM DD card was found in the CANSOCnn JCL. The RKC2XM number must be blank or a two-digit number from 00–15.

System Action: Processing stops.
User Response: Call IBM Software Support.

OC0821 OCPR WILL USE DEFAULT CANSOCnn RKC2XM NUMBER 00
Explanation: The system uses a default DD of RKC2XM00.

System Action: None.
User Response: None.

OC0822 OCPR CANSOCnn IS USING ‘RKC2XMnn’ DD NAME
Explanation: The OCPR CANSOCnn has found an RKC2XMnn DD card defined in the CANSOCnn JES JCL deck when it was initializing.

System Action: The system uses nn as the RKC2XM number.
User Response: None.

OC0823 OCPR ALESERV MACRO FAILURE: CODE=rc
Explanation: An attempt to delete an entry for the monitored CICS region from an access list failed.

System Action: Task continues terminating normally.

OC0824 OCRO TASK STARTUP FAILED -- XMIT RESIDES IN A DIFFERENT ADDRESS SPACE
Explanation: An attempt was made to start an Tivoli OMEGAMON II for CICS on z/OS component in an address space other than the one in which XMIT is running.

System Action: Tivoli OMEGAMON II for CICS on z/OS abends the task.
User Response: Verify that the Common Interface has XMIT running for the CICS region to be monitored. TSO and SPF users must use the VTM1 component, rather than attempting to run Tivoli OMEGAMON II for CICS on z/OS within the TSO address space.

OC0830 OCRO CAUTION - CICS DISPATCHING PRIORITY GREATER THAN 239
Explanation: The dispatching priority of the target CICS is greater than 239. A 'missing data' situation, in which response time collector and historical task display data are lost, may result if the Common Interface runs at a priority lower than CICS.
System Action: Processing continues.
User Response: Determine why the CICS dispatching priority has been set so high, and reset it to a lower priority if possible.

OC0831 DL/I COLLECTOR NOT STARTED; NO DL/I PROCESSING PRESENT
Explanation: Tivoli OMEGAMON II for CICS on z/OS has been started up in a CICS region that does not have DL/I present but is using a global module with the DL/I collector activated.
System Action: The DL/I collector will not collect DL/I clocks and counters.
User Response: Code and assemble a GLOBAL module without DL/I collection. Add an KOCGLBxx DD card to the CICS job and the next restart of the CICS region will not put out this message.

OC0832 DL/I COLLECTOR NOT STARTED; DFHCMP VALIDATION FAILED
Explanation: Tivoli OMEGAMON II for CICS on z/OS has detected an error in its validation of the DFHCMP module that is addressed by the CSA address in field CSATRNAC.
User Response: Ensure that KOCOME00 is the first entry in the PLTPI table.

OC0833 DL/I COLLECTOR NOT STARTED; OMOCMP NOT FOUND
Explanation: The load of the DL/I collector load module has failed.
User Response: Check the associated loader messages in the CICS job log (CSVxxxxx) and fix the indicated problem.

OC0834 DL/I COLLECTOR DISABLE PROCESSING COMPLETE
Explanation: This message is issued by CCDI when the DL/I collector is turned off.
System Action: None.
User Response: None.

OC0835 DL/I COLLECTOR NOT STARTED; CSATRNAC PROCESSING FAILED
Explanation: Tivoli OMEGAMON II for CICS on z/OS has detected that the CSATRNAC field in the CICS CSA has changed while DL/I collection is active.
User Response: Verify that the KOCOME00 is the first entry in the PLTPI table.

OC0836 DL/I COLLECTOR NOT STARTED DUE TO PREVIOUS ERROR TERMINATION
Explanation: Tivoli OMEGAMON II for CICS on z/OS has detected an error that previously caused termination of DL/I collector processing and therefore prevents the restart.
System Action: The DL/I collector does not start.
User Response: Check to see if there were errors the last time that the collector processing terminated; if not, contact IBM Software Support.

OC0837 DL/I COLLECTOR NOT FOUND, DISABLE REQUEST IGNORED
Explanation: An attempt has been made to stop the collector when it was not active.
System Action: None.
User Response: None.

OC0838 OCRO FAILURE TO LINK TO KOCDSG00, BLST BUCKET OVERRIDES HAVE NOT BEEN DONE
Explanation: An attempt to link to the KOCDSG00 modules has failed.
System Action: The bottleneck analysis buckets are not overridden by the settings coded on the KOCBLST macros in the global assembly. If no KOCBLST macros are coded, this has no effect.
User Response: Look on the system log for messages from the MVS loader (CSVxxxxx) to discover why the link failed. The bucket settings can be changed online using the BLST command. These settings remain in effect until the common interface is recycled.
OC0839 DLI COLLECTOR SUCCESSFULLY ENABLED

Explanation: Tivoli OMEGAMON II for CICS on z/OS has enabled the DLI collection mechanism in CICS.

System Action: The DLI collector can now be started in order to collect DLI clocks and counters.

User Response: None.

OC0850 OCPR TARGET CICS FOR KOCGLB DELETE NOT FOUND

Explanation: The XMIT Global module delete command specified a CICS jobname that was not found in the system.

System Action: The modify command is ignored.

User Response: Re-enter the modify command using a valid CICS jobname parameter.

OC0851 OCPR COMMAND FORMAT IS INVALID

Explanation: An unacceptable modify command was sent to the XMIT subtask.

System Action: The modify command is ignored.

User Response: Re-enter the modify command after correcting the syntax.

OC0852 OCPR KOCGLBcc USED BY aaaaaaaa HAS BEEN DELETED

Explanation: The request that XMIT subtask delete an KOCGLB module was successfully processed for the CICS job identified by aaaaaaaa.

System Action: None.

User Response: None.

OC0910 UNABLE TO LOCATE CSECTS IN aaaaaaaa

Explanation: The VALV routine has been called to verify that a load module has the correct version for the product that is running but the load module contains no CSECTS.

System Action: The calling routine fails and then issues a message indicating the results of the failure.

User Response: Check the load module aaaaaaaa to see if it is in error. If you can find no obvious problem, contact IBM Software Support.

OC0940 MVSDRV WORK AREA GETMAIN FAILURE

Explanation: Not enough storage was available for the work area used to load an MVS, CICS, IMS, or DB2 version dependent module.

System Action: The load, and its invoking facility, fail.

User Response: Increase the amount of CSA available to the system and restart the session.

OC0941 MVSDRV MVS VERSION UNKNOWN

Explanation: When attempting to load an MVS, CICS, IMS or DB2 version dependent module, MVSDRV was unable to verify the MVS version in the system.

System Action: The load fails.

User Response: After obtaining a dump of the CVT, contact IBM Software Support.

OC0942 MVSDRV KOCVRS00 FAILURE

Explanation: When attempting to load an MVS, CICS, IMS or DB2 version dependent module, the link to module KOCVRS00 failed.

System Action: The link fails and the invoking facility terminates.

User Response: Verify that the Tivoli OMEGAMON II for CICS on z/OS installation process completed successfully and that KOCVRS00 is in the Tivoli OMEGAMON II for CICS on z/OS common interface library.

OC0943 MVSDRV NO TABLE ENTRY FOR aaaaaaaa

Explanation: MVSDRV was invoked to load an MVS, CICS, IMS or DB2 version dependent module but the module is unknown to MVSDRV.

System Action: The load and its invoking facility fail.

User Response: Contact IBM Software Support.

OC0944 MVSDRV ERROR LOADING aaaaaaaa

Explanation: An error occurred when loading aaaaaaaa, an MVS, CICS, IMS or DB2 version dependent module.

System Action: The load fails.

User Response: Verify that the Tivoli OMEGAMON II for CICS on z/OS installation process completed successfully and that module aaaaaaaa is in the Tivoli OMEGAMON II for CICS on z/OS common interface library.

OC0945 MVSDRV INVALID HEADER FORMAT IN aaaaaaaa

Explanation: An error has been encountered with verifying load module aaaaaaaa for a correct internal header.

System Action: The load of aaaaaaaa.

User Response: Contact IBM Software Support.
OC0946  MVSDRV(Vnnn) AND aaaaaaaaa(Vyyy) INCOMPATIBLE
Explanation: The version of module MVSDRV and the module it is attempting to load are incompatible.
System Action: The load and its invoking facility fail.
User Response: Verify that the Tivoli OMEGAMON II for CICS on z/OS installation process completed successfully and that module aaaaaaaaa is in the Tivoli OMEGAMON II for CICS on z/OS common interface library.

OC0960  OCDB UNABLE TO OBTAIN WORK AREA
Explanation: Insufficient storage was available for the internal work area obtained by the OCDB command.
System Action: The command terminates.
User Response: Increase the region size for the Tivoli OMEGAMON II for CICS on z/OS common interface address space.

OC0961  OCDB PARAMETER SCAN ERROR
Explanation: An internal error occurred while attempting to process the OCDB parameter list.
System Action: The command terminates.
User Response: Check that all operands of OCDB are correct, make any necessary changes and re-enter the command. If problems persist, contact IBM Software Support.

OC0962  OCDB INVALID CONTROL PARAMETER - aaaaaaa
Explanation: The operand aaaaaaa is not recognized by OCDB.
System Action: The command terminates.
User Response: Use a valid control operand in the OCDB command. Obtain a list of available options by entering OCDB without operands.

OC0963  OCDB ERROR LOADING aaaaaaaaa
Explanation: The module identified by aaaaaaaaa could not be brought into virtual storage by OCDB.
System Action: The command terminates.
User Response: Check the console for messages that may explain the cause of the load failure. If problems persist, contact IBM Software Support.

OC0964  OCDBHD MISSING MODULE NAME
Explanation: A request for module header data could not be satisfied because a module name was not supplied.
System Action: The command terminates.
User Response: Provide the name of the module and re-enter the command.

OC0965  OCDBHD UNABLE TO LOCATE aaaaaaaaa
Explanation: The module aaaaaaaaa could not be found on the load list of either CICS or the Common Interface.
System Action: The command terminates.
User Response: Check that the module name is correct. If an error is found, correct the module name and re-enter the command. If the name is correct, use the PEEK command to inspect the load lists of both the CICS and CANSOCnn address spaces. If the module was not loaded into storage, then its header cannot be displayed by OCDB.

OC0966  OCDBHD MODULE aaaaaaaaa NOT VALID FOR SEARCH
Explanation: Module aaaaaaaaa does not conform to the naming convention associated with programs that contain a diagnostic header. The module name must be eight characters long and begin with the letters KOC.
System Action: The command terminates.
User Response: Correct the module name and re-enter the command.

OC0967  OCDBHD MODULE aaaaaaaaa DOES NOT HAVE A HEADER
Explanation: The specified module, aaaaaaaaa, was not link-edited with a diagnostic header.
System Action: None.
User Response: None.

OC0970  MAXR UNABLE TO LOCATE OCEEXEC INTERFACE
Explanation: The CPU limiting function has been unable to locate the required Tivoli OMEGAMON II for CICS on z/OS control blocks in the CICS region.
System Action: The MAXR exception is not available.
User Response: Check the messages on the CICS job log when Tivoli OMEGAMON II for CICS on z/OS is started in the CICS region. If you can find no obvious problem, contact IBM Software Support.
OC0972  OCPR INTERNAL ERROR, CONTACT CANDLE CUSTOMER SUPPORT SERVICES
Explanation: An internal logic error has been detected while processing session initialization.
System Action: The session fails to initialize.
User Response: Contact IBM Software Support.

OC0997  OCRO LOAD OF GLOBAL MODULE KOCGLB FAILED
Explanation: An attempt was made to load the default global module, but that module is not available.
System Action: The requested session with OMEGAMON II for CICS is not started.
User Response: Make sure that the default global module is in the OMEGAMON load library.

OC0998  OCRO LOAD OF GLOBAL MODULE aaaaaaaa FAILED, DEFAULT KOCGLB UNAVAILABLE
Explanation: An attempt was made to load a suffixed global module, but that module is not available. The default (nonsuffixed) module is also unavailable.
System Action: The requested session with OMEGAMON II for CICS is not started.
User Response: Make sure that the user-suffixed module is in the OMEGAMON load library. You should also ensure that the default module is available.

OC0999  INTERNAL ERROR - CALL CANDLE CUSTOMER SUPPORT
Explanation: Tivoli OMEGAMON II for CICS on z/OS detects an internal sequence "that should not occur".
System Action: Tivoli OMEGAMON II for CICS on z/OS executes an ABEND 1, DUMP for the task.
User Response: Contact IBM Software Support.

OC1000  OCOMEG INQUIRE TRANSACTION FAILED with ccccccccccc
Explanation: During OMEGAMON II shutdown processing, a response of ccccccccccc was returned in EIBRESP for an INQUIRE TRANSACTION command issued by KOCOME00.
System Action: KOCOME00 terminates but OMEGAMON II service tasks remain active.
User Response: If INQUIRE TRANSACTION failed with NOTAUTH, make sure the user who initiated the OMEGAMON II or the CICS shutdown process is also authorized to issue an INQUIRE TRANSACTION command against the transaction being entered.

OC1001  OMEG DEFINED WITH TRANSACTION CLASS - PROCESSING STOPPED
Explanation: Transaction OMEG is defined with TCLASS=nn, where nn is 1 through 10. It should be defined with TCLASS=NO.
System Action: Tivoli OMEGAMON II for CICS on z/OS does not supply the response time collector, ONDV collector and interval record collector with data. The service task is not started.
User Response: Define transaction OMEG with TCLASS=NO.

OC1002  KOCOME00 PHASE 2 PLT PROCESSING IGNORED
Explanation: Program KOCOME00 could not execute because it was not entered in the PLT in the correct position for phase 2 processing.
System Action: KOCOME00 does not execute.
User Response: Make sure that the entry for the KOCOME00 program appears in the PLT after DFHDELIM. See the Tivoli OMEGAMON II for CICS on z/OS Configuration and Customers Guide for more information regarding changes to the CICS PLT.

OC1003  LOAD FAILED FOR MODULE aaaaaaaa
System Action: OMEGAMON II could not load a required program from DFHRPL.
User Response: Make sure the dataset containing all the modules from the distribution tape is present in DFHRPL.

OC1004  LINK FAILED FOR MODULE aaaaaaaa
Explanation: OMEGAMON II could not find a required program from DFHRPL.
System Action: OMEGAMON II does not supply the response time collector, ONDV collector, or interval record collector with data.
User Response: Make sure the dataset containing all the modules from the distribution tape is present in DFHRPL.

OC1005  NEW VERSION OF KOCOME00 NEEDED TO SUPPORT RELEASE
Explanation: OMEGAMON II found a back level version of a module.
System Action: OMEGAMON II does not supply the response time collector, ONDV collector, or interval record collector with data.
User Response: Make sure the dataset containing all the modules from the distribution tape is present in STEPLIB. Delete any modules from prior releases of OMEGAMON II.

**OC1006** COMMAND PROCESSING TABLE IS MISSING

Explanation: This is an internal error with OMEGAMON II.

System Action: OMEGAMON II does not supply the response time collector, ONDV collector, or interval record collector with data.

User Response: Contact IBM Software Support.

**OC1007** DEBUG CHAIN ANCHOR IS 0

Explanation: This is an internal error with OMEGAMON II.

System Action: The DEBUG command is ignored.

User Response: Contact IBM Software Support.

**OC1008** cccccccc IS AN INVALID FUNCTION REQUEST

Explanation: The option specified with OMEG is incorrect.

System Action: The OMEG transaction is ignored.

User Response: Make sure the option on the OMEG transaction is valid.

**OC1009** CANNOT FIND MODULE LIST TO LOAD FROM STEPLIB

Explanation: This is an internal error with OMEGAMON II.

System Action: OMEGAMON II does not supply the response time collector, ONDV collector, or interval record collector with data.

User Response: Contact IBM Software Support.

**OC1010** KOCOME00 INCORRECTLY DEFINED AS RELOAD=YES

Explanation: The program KOCOME00 was defined as RELOAD=YES when it must be RELOAD=NO.

System Action: OMEGAMON II does not supply the response time collector, ONDV collector, or interval record collector with data.

User Response: Use CEDA to change the definition for KOCOME00 and retry.

**OC1011** CICS LOAD FAILED FOR KOCOME00

Explanation: The program KOCOME00 could not be loaded from the RPL library.

System Action: OMEGAMON II does not supply the response time collector, ONDV collector, or interval record collector with data.

User Response: Make sure the program KOCOME00 is present in an RPL library.

**OC1012** AUTHORIZATION FAILED WHEN LOADING KOCOME00

Explanation: CICS prevented OMEGAMON II from loading KOCOME00.

System Action: OMEGAMON II does not supply the response time collector, ONDV collector, or interval record collector with data.

User Response: Make sure OMEG and KOCOME00 are defined without security as described in the Tivoli OMEGAMON II for CICS on z/OS Configuration and Customization Guide.

**OC1013** COMMON AREA VERSION cccccccc DETECTED

Explanation: OMEGAMON II found a back level version of a module.

System Action: OMEGAMON II does not supply the response time collector, ONDV collector, or interval record collector with data.

User Response: Make sure the dataset containing all the modules from the distribution tape is present in STEPLIB. Delete any modules from prior releases of OMEGAMON II.

**OC1014** BYPASS IS SET, KOCOME00 PROCESSING TERMINATING

Explanation: This is an internal error.

System Action: OMEGAMON II does not supply the response time collector, ONDV collector, or interval record collector with data.

User Response: Contact IBM Software Support.

**OC1015** COMMAND PROCESSING NOT AVAILABLE, INIT NOT COMPLETE

Explanation: An OMEG INIT was not done.

System Action: The command is ignored.

User Response: Perform an OMEG INIT and re-enter the command.
<table>
<thead>
<tr>
<th>OC1016</th>
<th>The text varies.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Explanation:</strong></td>
<td>This is an informational message in response to a debug request.</td>
</tr>
<tr>
<td><strong>System Action:</strong></td>
<td>Processing continues.</td>
</tr>
<tr>
<td><strong>User Response:</strong></td>
<td>None.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>OC1017</th>
<th>LINK FAILED FOR MODULE cccccccc DURING COMMAND PROCESSING</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Explanation:</strong></td>
<td>This is an internal error.</td>
</tr>
<tr>
<td><strong>System Action:</strong></td>
<td>Processing continues.</td>
</tr>
<tr>
<td><strong>User Response:</strong></td>
<td>Contact IBM Software Support.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>OC1018</th>
<th>INITIALIZATION HAS ALREADY COMPLETED, INIT IGNORED</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Explanation:</strong></td>
<td>OMEG INIT was entered, but initialization was already performed.</td>
</tr>
<tr>
<td><strong>System Action:</strong></td>
<td>The command is ignored.</td>
</tr>
<tr>
<td><strong>User Response:</strong></td>
<td>None.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>OC1019</th>
<th>Tivoli OMEGAMON II for CICS on z/OS INITIALIZATION COMPLETE</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Explanation:</strong></td>
<td>The Tivoli OMEGAMON II for CICS on z/OS initialization is complete.</td>
</tr>
<tr>
<td><strong>System Action:</strong></td>
<td>None.</td>
</tr>
<tr>
<td><strong>User Response:</strong></td>
<td>None.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>OC1020</th>
<th>Tivoli OMEGAMON II for CICS on z/OS TERMINATION IS COMPLETE</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Explanation:</strong></td>
<td>The Tivoli OMEGAMON II for CICS on z/OS termination is complete.</td>
</tr>
<tr>
<td><strong>System Action:</strong></td>
<td>None.</td>
</tr>
<tr>
<td><strong>User Response:</strong></td>
<td>None.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>OC1021</th>
<th>MVS nnn AND CICS yyy: UNSUPPORTED ENVIRONMENT</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Explanation:</strong></td>
<td>The versions of MVS and CICS running are not supported by this release of OMEGAMON II.</td>
</tr>
<tr>
<td><strong>System Action:</strong></td>
<td>OMEGAMON II fails to initiate.</td>
</tr>
<tr>
<td><strong>User Response:</strong></td>
<td>See the Tivoli OMEGAMON II for CICS on z/OS Configuration and Customization Guide.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>OC1022</th>
<th>Tivoli OMEGAMON II for CICS on z/OS SUCCESSFULLY DE-INSTALLED</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Explanation:</strong></td>
<td>Tivoli OMEGAMON II for CICS on z/OS has been deinstalled from the CICS region.</td>
</tr>
<tr>
<td><strong>System Action:</strong></td>
<td>None.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>OC1023</th>
<th>RKANMOD IS IN USE FOR PROGRAM LOADING</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Explanation:</strong></td>
<td>Tivoli OMEGAMON II for CICS on z/OS will load its modules from the RKANMOD dataset.</td>
</tr>
<tr>
<td><strong>System Action:</strong></td>
<td>None.</td>
</tr>
<tr>
<td><strong>User Response:</strong></td>
<td>None.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>OC1024</th>
<th>Tivoli OMEGAMON II for CICS on z/OS TERMINATION IS COMPLETE</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Explanation:</strong></td>
<td>Tivoli OMEGAMON II for CICS on z/OS termination is in progress.</td>
</tr>
<tr>
<td><strong>System Action:</strong></td>
<td>None.</td>
</tr>
<tr>
<td><strong>User Response:</strong></td>
<td>None.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>OC1025</th>
<th>Tivoli OMEGAMON II for CICS on z/OS RESTART IS COMPLETE</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Explanation:</strong></td>
<td>Tivoli OMEGAMON II for CICS on z/OS restart is in progress.</td>
</tr>
<tr>
<td><strong>System Action:</strong></td>
<td>None.</td>
</tr>
<tr>
<td><strong>User Response:</strong></td>
<td>None.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>OC1026</th>
<th>Tivoli OMEGAMON II for CICS on z/OS INITIALIZATION IS COMPLETE</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Explanation:</strong></td>
<td>Tivoli OMEGAMON II for CICS on z/OS initialization is in progress.</td>
</tr>
<tr>
<td><strong>System Action:</strong></td>
<td>None.</td>
</tr>
<tr>
<td><strong>User Response:</strong></td>
<td>None.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>OC1027</th>
<th>ALTERNATIVE TRANSACTION ID tttt WILL BE USED</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Explanation:</strong></td>
<td>During PLTPI processing, a transaction ID of tttt, rather than the default of OMEG, was found.</td>
</tr>
<tr>
<td><strong>System Action:</strong></td>
<td>Processing continues.</td>
</tr>
<tr>
<td><strong>User Response:</strong></td>
<td>None.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>OC1028</th>
<th>INQUIRE TRAN RESP nnnnnnnnn, OMEG DEFAULT USED</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Explanation:</strong></td>
<td>During PLTPI processing, a response of nnnnnnnnn was returned in EIBRESP for an INQUIRE TRANSACTION command issued by KOCOME00. KOCOME00 will use the default transaction ID of OMEG. If transaction OMEG is not defined, OMEGAMON II processing within CICS will not start.</td>
</tr>
<tr>
<td><strong>System Action:</strong></td>
<td>None.</td>
</tr>
<tr>
<td><strong>User Response:</strong></td>
<td>None.</td>
</tr>
</tbody>
</table>
OC1029  PCT ENTRY NOT FOUND FOR MODULE KOCOME00

Explanation: During PLTPI processing, no transaction ID that specified module KOCOME00 was found.

System Action: OMEGAMON does not supply the response time collector, the ONDV collector, or interval record collector with data.

User Response: Define the transaction that initiates the OMEGAMON-to-CICS interface (that is, OMEG or an alternative ID).

OC1030  OMEG REMOVE HAS BEEN DONE, NEWCOPY KOCOME00 AND RETRY

Explanation: For CICS/MVS users only, this message indicates that Tivoli OMEGAMON II for CICS on z/OS was previously deinstalled and that to permit reinstallation the program KOCOME00 must be refreshed.

System Action: The command is rejected.

User Response: Issue the 'CEMT SET PROG(KOCOME00) NEW' command and retry the original command.

OC1031  DE-INSTALL HALTED BECAUSE CROSS-MEMORY CONNECTION NOT ESTABLISHED

Explanation: Tivoli OMEGAMON II for CICS on z/OS de-install processing stopped. Command 'OMEG REMOVE' was rejected because the OMEGAMON cross-memory connection was not established before the command was issued.

System Action: The command is rejected.

User Response: The OMEGAMON cross-memory interface task should be active and connected to the common interface. Make sure the Tivoli OMEGAMON II for CICS on z/OS address space is active and OMEGAMON has been fully initialized in the CICS region before de-install processing can be initiated.

OC1032  DE-INSTALL HAS ALREADY BEEN PERFORMED; NOTHING TO REMOVE

Explanation: Tivoli OMEGAMON II for CICS on z/OS de-install processing has completed on prior execution of command 'OMEG REMOVE.' However, this command was issued again, but there is nothing to de-install or remove.

System Action: The command is rejected.

User Response: None.

OC1033  DE-INSTALL HALTED BECAUSE OMEGAMON INITIALIZATION NOT COMPLETED

Explanation: Tivoli OMEGAMON II for CICS on z/OS de-install processing or command 'OMEG REMOVE' cannot continue because either OMEGAMON has not been fully initialized in the CICS address space or the common interface is not active.

System Action: The command is rejected.

User Response: The command is rejected.

OC1034  EXEN MODULE KOCOME00 WILL RUN IN (THREADSAFE | QUASIREENTRANT) MODE

Explanation: The KOCOME00 module will run in threadsafe or quasireentrant mode. If KOCOME00 is defined to CICS with CONCURRENCY(THREADSAFE), the module will execute in threadsafe mode; otherwise, the module will execute in quasireentrant mode. EXEN refers to the OMEGAMON CICS Exit ENabling code.

System Action: None.

User Response: This is an informational message that only applies to CICS/TS 2.2 with Version 520 of Tivoli OMEGAMON II for CICS on z/OS.

OC1099  DEBUG LIST COMPLETE. SEE CONSOLE LOG FOR OUTPUT

Explanation: The output in response to an OMEG DEBUG command is complete.

System Action: None.

User Response: None.

OC1100  QRYC COULD NOT BE LOCATED OR WAS NOT LOADED

Explanation: OMEGAMON II could not load a program it required for monitoring CICS transactions.

System Action: Support for umbrella services, MAXR processing and file and database statistics is disabled.

User Response: Enter the CICS transaction OMEG DEBUG and send in a copy of the CICS SYSLOG to IBM Software Support.

OC1101  EVENT MONITORING POINT NOT DEFINED IN THE MCT

Explanation: An event monitoring point (EMP) was defined to OMEGAMON II in the KOCEPOPT macro in KOCEGLB, but the EMP was not defined in the CICS Monitor Control Table.
Using IBM Tivoli OMEGAMON XE for CICS on z/OS

System Action: OMEGAMON II does not write umbrella, DL/I or DB2 data to CMF.

User Response: Make sure the MCT contains the EMP definitions. See the Tivoli OMEGAMON II for CICS on z/OS Configuration and Customization Guide for more details.

OC1102 EXEC CICS MONITOR POINT FAILED
Explanation: An error occurred as OMEGAMON II tried to write data to CMF.
System Action: OMEGAMON II does not write umbrella, DL/I or DB2 data to CMF.
User Response: In addition to the usual documentation, send an assembled listing of the MCT and KOCGLB to IBM Software Support.

OC1130 DICTIONARY ENTRY FOR RTYPE IN THE MCT IS MISSING
Explanation: OMEGAMON II could not find the field RTYPE in the CICS monitoring record.
System Action: OMEGAMON II does not write umbrella, DL/I or DB2 data to CMF. In addition, the response time collector and ONDV collector contain only one record per transaction regardless of the number of conversations.
User Response: Modify your MCT to include field 112 (RTYPE). See the CICS Resource Definition (MACRO) for more information.

OC1131 DICTIONARY ENTRY FOR BASIC USER DATA IN THE MCT IS MISSING
Explanation: OMEGAMON II could not find the entry in the CICS monitoring control table for the user event monitoring point that matches the one specified in the KOCEPOPT macro in KOCGLB.
System Action: OMEGAMON II does not write umbrella data to CMF.
User Response: Make sure you have an event monitoring point defined in the MCT and that the entry name and field name for this point match the name in the KOCEPOPT macro. If this problem persists, send an assembled listing of your KOCGLB and a CICS system dump to IBM Software Support.

OC1132 DICTIONARY ENTRY FOR DL/I USER DATA IN THE MCT IS MISSING
Explanation: OMEGAMON II could not find the entry in the CICS monitoring control table for the user event monitoring point that matches the one specified in the KOCEPOPT macro in KOCGLB.
System Action: OMEGAMON II does not write DL/I data to CMF.
User Response: If you want to collect this data, make sure you have an event monitoring point defined in the CICS monitoring control table for the user event monitoring point that matches the one specified in the KOCEPOPT macro in KOCGLB. If this problem persists, send an assembled listing of your KOCGLB and a CICS system dump to IBM Software Support.

OC1133 DICTIONARY ENTRY FOR DB2 USER DATA IN THE MCT IS MISSING
Explanation: OMEGAMON II could not find the entry in the CICS monitoring control table for the user event monitoring point that matches the one specified in the KOCEPOPT macro in KOCGLB.
System Action: OMEGAMON II does not write DB2 data to CMF.
User Response: Make sure you have an event monitoring point defined in the MCT and that the entry name and field name for this point match the name in the KOCEPOPT macro. If this problem persists, send an assembled listing of your KOCGLB and a CICS system dump to IBM Software Support.

OC1134 WORK AREA FOR TRUE IS MISSING
Explanation: OMEGAMON II could not locate the work area for its task related user exit program.
System Action: OMEGAMON II does not write umbrella data, DL/I data, or DB2 data to CMF.
User Response: Contact IBM Software Support.

OC1135 AUTHORIZATION FAILED FOR SMF WRITE, LOGGING STOPPED
Explanation: OMEGAMON II attempted to write an SMF record containing transaction related data for a CICS V 1.7 or 2.1 system, but was not authorized for the SMF request.
System Action: OMEGAMON II does not log any transaction related monitoring data to SMF.
User Response: Contact IBM Software Support.

OC1136 DICTIONARY ENTRY FOR WLM USER DATA IN THE MCT IS MISSING
Explanation: Tivoli OMEGAMON II for CICS on z/OS could not find the entry for the user event monitoring point CANWLMSC in the CICS monitoring control table. (MVS 5.1/CICS 4.1 and above only)
This message only applies if you are using the Candle Command Center® for CICS and want to collect this data. Otherwise, you can ignore this message.
System Action: Tivoli OMEGAMON II for CICS on z/OS does not write WLM data to CMF.
User Response: If you want to collect this data, make sure you have an event monitoring point defined in the
MCT and that the entry name and field name for this point are CANWLMSC.

**OC1137  DUPLICATE DATA FOR CANDLE BASIC SEGMENT WILL BE COLLECTED**

**Explanation:** Both the OMEGBSC EMP and one or more individual fields that make up the segment have been used.

**System Action:** Tivoli OMEGAMON II for CICS on z/OS writes duplicate data to CMF.

**User Response:** Choose either the OMEGBSC or selective method of collecting the data, not both.

**OC1140  OCEXEN INSUFFICIENT WORK AREA FOR EXIT ENABLEMENT**

**Explanation:** OMEGAMON II could not enable CICS global exits due to an insufficient work area.

**System Action:** No data is collected for the response time collector or ONDV collector.

**User Response:** Contact IBM Software Support.

**OC1141  OCEXEN TRUE COULD NOT BE LOCATED OR WAS NOT LOADED**

**Explanation:** OMEGAMON II could not load a program it required for monitoring CICS transactions.

**System Action:** No data is collected for the response time collector or ONDV collector.

**User Response:** Contact IBM Software Support.

**OC1142  OCEXEN GLUE COULD NOT BE LOCATED OR WAS NOT LOADED**

**Explanation:** OMEGAMON II could not load a program it required for monitoring CICS transactions.

**System Action:** No data is collected for the response time collector or ONDV collector.

**User Response:** Contact IBM Software Support.

**OC1143  OCEXEN NOT AUTHORIZED FOR cccccc

**Explanation:** OMEGAMON II could not enable a program it required for monitoring CICS transactions.

**System Action:** No data is collected for the response time collector or ONDV collector.

**User Response:** Make sure the transaction OMEG is defined with no resource security (RESSEC(NO)) or command security (CMDSEC=NO). Also make sure the group DFHEXEC is installed. You should also check the CICS system log for messages from the External Security Manager, which will give additional information. If this condition persists change the resource security number for the program KOCOME00 to PUBLIC (RESSECNUM(PUBLIC)).

**OC1144  OCEXEN PROCESS cccccc

**Explanation:** OMEGAMON II encountered an error issuing an EXEC CICS command.

**System Action:** No data is collected for the response time collector or ONDV collector.

**User Response:** Send the message to IBM Software Support.

**OC1145  OCEXEN PGMIDERR DURING cccccc

**Explanation:** OMEGAMON II encountered an error issuing an EXEC CICS command.

**System Action:** No data is collected for the response time collector or ONDV collector.

**User Response:** Contact IBM Software Support.

**OC1146  OCEXEN QRYC COULD NOT BE LOCATED OR WAS NOT LOADED**

**Explanation:** OMEGAMON II could not load a program it required for monitoring CICS transactions.

**System Action:** No data is collected for the response time collector or ONDV collector.

**User Response:** Contact IBM Software Support.

**OC1147  OCEXEN CICS MONITORING IS BEING TURNED ON**

**Explanation:** OMEGAMON II has detected that CICS monitoring is off. OMEGAMON II is turning CICS monitoring on since it is required for the response time collector and ONDV collector (for CICS 3.x).

**System Action:** CICS monitoring is activated.

**User Response:** None.

**OC1148  OCEXEN PERFORMANCE CLASS IS BEING TURNED ON**

**Explanation:** OMEGAMON II has detected that the performance class of CICS monitoring is off. OMEGAMON II is turning it on since it is required for the response time collector and ONDV collector.

**System Action:** CICS monitoring for the performance class is activated.

**User Response:** None.
OC1149  OCEXEN EXIT INITIALIZATION COMPLETED
Explanation: OMEGAMON II enabled CICS exits for data collection.
System Action: None.
User Response: None.

OC1150  OCEXEN EXIT RESTART COMPLETED
Explanation: OMEGAMON II re-enabled CICS exits for data collection.
System Action: None.
User Response: None.

OC1151  INSUFFICIENT STORAGE FOR THE SMF BUFFER
Explanation: OMEGAMON II was not able to acquire a buffer of approximately 32K from CICS OSCOR below 16M.
System Action: OMEGAMON II does not log any transaction related monitoring data to SMF.
User Response: Increase OSCOR in your CICS region so that at least 32K of contiguous storage is available.

OC1152  UNABLE TO LOCATE OCA RESOURCE MANAGER
Explanation: OMEGAMON II could not find the umbrella services exit module.
System Action: OMEGAMON II for CICS initialization continues in CICS. Transactions that use umbrella services will fail with a return code of 8.
User Response: Contact IBM Software Support.

OC1153  OCA RESOURCE MANAGER ERROR
Explanation: OMEGAMON II for CICS could not initialize the umbrella services exit module.
System Action: OMEGAMON II for CICS initialization continues in CICS. Transactions that use umbrella services will fail with a return code of 8.
User Response: Contact IBM Software Support.

OC1154  EXEN GLUE RESTART COMPLETED
Explanation: This is an informational message indicating that the OMEGAMON II global user exits have been re-enabled.
System Action: None.
User Response: None.

OC1155  EXEN GLUE SHUTDOWN COMPLETED
Explanation: This is an informational message indicating that the OMEGAMON II global user exits have been disabled.
System Action: None.
User Response: None.

OC1156  INVALID RLIM DATA FOUND, RLIM NOT ACTIVATED
Explanation: During OMEGAMON initialization under CICS, it was detected that there was no valid resource limiting data present.
System Action: The RLIM and RLMU commands will not function.
User Response: The most likely cause of this error is that the global data area module is out of step with the runtime code. Reassemble the global data area module and retry. If the problem persists, contact IBM Software Support.

OC1160  OCSETI INSUFFICIENT WORK AREA FOR OCEXEC PROCESSING
Explanation: OMEGAMON II could not process its internal monitoring of CICS OCEXEC level calls due to an insufficient work area.
System Action: Support for database statistics and MAXR is disabled.
User Response: Contact IBM Software Support.

OC1161  OCSETI OCEXEC COULD NOT BE LOCATED OR WAS NOT LOADED
Explanation: OMEGAMON II could not load a program it required for monitoring CICS OCEXEC level calls.
System Action: Support for database statistics and MAXR is disabled.
User Response: Contact IBM Software Support.

OC1162  OCSETI VALIDATION FAILED FOR OCEXEC ENVIRONMENT
Explanation: OMEGAMON II detected that internal addresses in CICS were changed, which prevents OMEGAMON II from monitoring CICS OCEXEC level calls.
System Action: Support for database statistics and MAXR is disabled.
User Response: Contact IBM Software Support.
OC1163  OCSETI OCEXEC MODULE IS NOT IN LOW PRIVATE  
Explanation:  OMEGAMON II detected an error in loading a program required for monitoring CICS OCEXEC level calls.  
System Action:  Support for database statistics and MAXR is disabled.  
User Response:  Contact IBM Software Support.

OC1164  OCSETI OCEXEC INTERFACE IS NOW INSTALLED IN CICS  
Explanation:  OMEGAMON II installed its support for monitoring CICS OCEXEC level calls.  
System Action:  None.  
User Response:  None.

OC1165  OCSETI OCEXEC INTERFACE HAS BEEN DISABLED  
Explanation:  OMEGAMON II removed its support for monitoring CICS OCEXEC level calls.  
System Action:  None.  
User Response:  None.

OC1166  OCSETI OCEXEC INTERFACE HAS BEEN RESTARTED  
Explanation:  OMEGAMON II restarted its support for monitoring CICS OCEXEC level calls.  
System Action:  None.  
User Response:  None.

OC1167  EXEC VALIDATION NOTED ALTERED CICS ENTRY  
Explanation:  OMEGAMON II initialization processing validates certain pointers in CICS. The validation expects certain conditions but allows for some variations. This message indicates such a variation was found at the CICS Command Level entry points. This condition may occur in conjunction with some other vendor product.  
System Action:  Processing continues.  
User Response:  None.

OC1168  OCSETI EXEC MODULE IS NOT IN LOW PRIVATE  
Explanation:  An error has been encountered in the loading of a module required for monitoring EXEC level calls, it must reside in low private storage.  
System Action:  Support for database statistics and MAXR is disabled.  
User Response:  Contact IBM Software Support.
OC1174  OCSETI KOCDBP COULD NOT BE LOCATED OR WAS NOT LOADED
Explanation: An internal error has occurred.
System Action: Tivoli OMEGAMON II for CICS on z/OS will not initialize.
User Response: Contact IBM Software Support.

OC1175  OCSETI KOCDBT COULD NOT BE LOCATED OR WAS NOT LOADED
Explanation: An internal error has occurred.
System Action: Tivoli OMEGAMON II for CICS on z/OS will not initialize.
User Response: Contact IBM Software Support.

OC1176  OCSETI KOCOCM COULD NOT BE LOCATED OR WAS NOT LOADED
Explanation: An internal error has occurred.
System Action: Tivoli OMEGAMON II for CICS on z/OS will not initialize.
User Response: Contact IBM Software Support.

OC1180  OCDBIN cccccccc IS AN UNSUPPORTED PRODUCT
Explanation: File level monitoring was specified for a product in KOCGLB that is not supported by OMEGAMON II.
System Action: OMEGAMON II continues processing other products.
User Response: The invalid product name is specified in the KOCDBC0L macro in KOCGLB. Correct the macro, reassemble KOCGLB and restart CICS in order to prevent occurrence of this message.

OC1182  OCDBIN INVALID GLOBAL EXTRACT AREA, FILE LEVEL MONITORING DISABLED
Explanation: OMEGAMON II detected an internal error in attempting to activate file level monitoring.
System Action: OMEGAMON II does not monitor file usage.
User Response: Contact IBM Software Support.

OC1183  Tivoli OMEGAMON II for CICS on z/OS COLLECTION IS NOT ACTIVE
Explanation: The data collection component of OMEGAMON II that runs in CICS is not active.
System Action: A display of file level collectors is not produced.
User Response: Contact IBM Software Support.

OC1184  NO STORAGE AVAILABLE, FILE LEVEL MONITORING DISABLED
Explanation: Tivoli OMEGAMON II for CICS on z/OS was unable to acquire a 64K buffer in the extended private region of CICS for collecting file clock and counter statistics.
System Action: Tivoli OMEGAMON II for CICS on z/OS does not collect file clock and counter statistics for CICS tasks.
User Response: Make sure 64K of storage is available in the extended private region of CICS.

OC1190  UNABLE TO OBTAIN WORK AREA FOR SYSTEM RECORDS. LENGTH=nnnnnn
Explanation: OMEGAMON II was not able to acquire a work area from OSCOR to send system initialization or system termination records to SMF. The number of bytes requested is given in the message.
System Action: OMEGAMON II does not write system initialization or system termination records to SMF.
User Response: Increase the amount of OSCOR in your region and restart the session.

OC1191  INVALID TCB ADDRESS, SYSTEM RECORDS NOT WRITTEN TO SMF
Explanation: OMEGAMON II attempted to determine the TCB under which it was running in order to write to SMF.
System Action: OMEGAMON II does not write system initialization or system termination records to SMF.
User Response: Contact IBM Software Support.

OC1192  AUTHORIZATION FAILED, NO SYSTEM RECORDS WRITTEN
Explanation: OMEGAMON II attempted to acquire authorization to write a system record to SMF.
System Action: OMEGAMON II does not write system initialization or system termination records to SMF.
User Response: Contact IBM Software Support.
OC1193  OCSYSI INVALID GLOBAL EXTRACT AREA. SYSTEM RECORD NOT WRITTEN.
Explanation: OMEGAMON II has detected an internal error when attempting to write a system record to SMF.
System Action: OMEGAMON II does not write system initialization or system termination records to SMF.
User Response: Contact IBM Software Support.

OC1200  ddname DD MISSING
Explanation: No ddname DD statement was found during execution of job KOCSMFDI.
System Action: Processing stops.
User Response: Correct the ddname DD statement and rerun job KOCSMFDI.

OC1201  MCT PARAMETER IS INVALID AND IS IGNORED
Explanation: An input card contained an MCT parameter, which is invalid for pre-ESA CICS, during execution of job KOCSMFDI.
System Action: Processing continues and the next input card is read.
User Response: None.

OC1201  PRECEDING INPUT IS INVALID, PROCESSING STOPPED
Explanation: An input card was blank or contained no equal sign during execution of job KOCSMFDI.
System Action: Processing stops.
User Response: Correct the input card and rerun job KOCSMFDI.

OC1202  PRECEDING INPUT HAS AN INVALID FIELD NAME, PROCESSING STOPPED
Explanation: An input card contained an invalid field name during execution of job KOCSMFDI.
System Action: Processing stops.
User Response: Correct the input card and rerun job KOCSMFDI. Valid field names are: APPLID, SYSID, DATE, TIME, and SMFID.

OC1203  INVALID VALUE FOR TIME, PROCESSING STOPPED
Explanation: An input card contained an invalid value in the TIME field during execution of job KOCSMFDI.
System Action: Processing stops.
User Response: Correct the input card using a valid time (HHMMSS) and rerun job KOCSMFDI.

OC1204  INVALID VALUE FOR DATE, PROCESSING STOPPED
Explanation: An input card contained an invalid value in the DATE field during execution of job KOCSMFDI.
System Action: Processing stops.
User Response: Correct the input card using a valid date (YYDDD.) and rerun job KOCSMFDI.

OC1208  THE SERVICE TASK IS ALREADY RUNNING, CANNOT START A NEW ONE
Explanation: OMEG SRVINIT was issued but the service task is already running.
System Action: None.
User Response: If you wish to reinitialize the service task, issue OMEG SRVSHUT first, then OMEG SRVINIT.

OC1209  THE SERVICE TASK WAS SUCCESSFULLY SHUTDOWN
Explanation: The service task shutdown process finished.
System Action: None.
User Response: None.

OC1210  UNABLE TO SHUTDOWN THE SERVICE TASK
Explanation: Either at PLTSD or as a result of the OMEG SRVSHUT transaction, exceptional conditions were encountered. These conditions are described by messages KOC1217 and KOC1218.
System Action: None.
User Response: Refer to messages KOC1217 and KOC1218.

OC1211  SERVICE TASK INITIALIZATION GETMAIN FOR nnnnx FAILED
Explanation: The GETMAIN issued for nnnxb (bytes) or nnnnk (kilobytes) failed.
System Action: Service task initialization is not performed.
User Response: Increase the size of the CICS address space by nnnxb or nnnnk.
OC1212  TEMPORARY STORAGE LIMIT (nnn) EXCEEDS AVAILABLE STORAGE
Explanation: This is an internal error.
System Action: Processing stops.
User Response: None. Refer to the CICS/ESA System Programming Reference, command SET TASK.

OC1213  SERVICE TASK INITIALIZATION COMPLETED
Explanation: Initialization of the service task is complete.
System Action: None.
User Response: None.

OC1214  SECONDARY TASK LIMIT (nnn) EXCEEDS AVAILABLE STORAGE
Explanation: This is an internal error.
System Action: Processing stops.
User Response: None.

OC1215  SERVICE TASK START aaaaaaaa FAILURE
Explanation: CICS returned aaaaaaaa when a START command for the service task was issued.
System Action: Processing stops.
User Response: If aaaaaaaa is NOTAUTH, make sure the transaction OMEG is defined with no resource security (RESSEC(NO)) or command security (CMDSEC=NO). Also make sure the group DFHEXEC is installed. If this condition persists, change the resource security number for the program KOCOME00 to PUBLIC (RESSECNUM(PUBLIC)). For any other value of aaaaaaaa, contact IBM Software Support.

OC1216  TSBROWSE ENTRY IN SERVICE LIMITS TABLE COULD NOT BE LOCATED
Explanation: This is an internal error.
System Action: Processing stops.
User Response: Contact IBM Software Support.

OC1217  PURGE OF SECONDARY SERVICE TASK FAILED WITH aaaaaaaa
Explanation: The SET TASK command for one of the secondary tasks failed. aaaaaaaa is the exceptional condition raised for the EXEC CICS SET TASK command. This message is only applicable to CICS/ESA.
System Action: Processing continues.
User Response: None. Refer to the CICS/ESA System Programming Reference, command SET TASK.

OC1218  PURGE OF SERVICE TASK FAILED WITH aaaaaaaa
Explanation: The SET TASK command for the service task failed. aaaaaaaa is the exception condition raised for the EXEC CICS SET TASK command. This message is only applicable to CICS/ESA.
System Action: Processing continues.
User Response: None. Refer to the CICS/ESA System Programming Reference, command SET TASK.

OC1223  SECONDARY SERVICE TASK START aaaaaaaa FAILURE
Explanation: CICS returned aaaaaaaa when the service task attempted to start a secondary task.
System Action: Processing continues.
User Response: If aaaaaaaa is NOTAUTH, make sure the transaction OMEG is defined with no resource security (RESSEC(NO)) or command security (CMDSEC=NO). Also, make sure the group DFHEXEC is installed. If this condition persists, change the resource security number for the program KOCOME00 to PUBLIC (RESSECNUM(PUBLIC)). For any other value of aaaaaaaa, contact IBM Software Support.

OC1224  FIRST SECONDARY SERVICE TASK FAILED TO INITIALIZE
Explanation: The service task started a secondary task which failed to respond.
System Action: Processing continues.
User Response: None.

OC1225  SECONDARY SERVICE TASK NOT STARTED BECAUSE OF MAXTASKS LIMIT
Explanation: Starting a new secondary task would put CICS in a MAXTASKS condition; therefore, the task is not started.
System Action: Processing continues.
User Response: Revise the MXT SIT parameter.

OC1226  SECONDARY SERVICE TASK NOT STARTED BECAUSE OF AMAXTASKS LIMIT
Explanation: Starting a new secondary task would put CICS in an AMAXTASKS condition; therefore, the task is not started.
System Action: Processing continues.
User Response: Revise the AMXT SIT parameter.

OC1227 UNABLE TO SETUP PARAMETERS FOR THE SECONDARY TASK

Explanation: This is an internal error.
System Action: Processing stops.
User Response: Contact IBM Software Support.

OC1228 FIRST SECONDARY SERVICE TASK ABENDED

Explanation: The first secondary task started by the service task abended.
System Action: Processing continues.
User Response: None.

OC1229 RM CALL WAS UNSUCCESSFUL - RETURN CODE = cc

Explanation: The service task or one of the secondary tasks failed with return code cc when trying to establish its umbrella transaction or program ID.
System Action: Processing continues.
User Response: Please refer to the Tivoli OMEGAMON II for CICS on z/OS Configuration and Customization Guide for an explanation of the return code and contact IBM Software Support.

OC1230 ABEND aaaa DETECTED - SERVICE TASK IS TERMINATING

Explanation: The service task abended with abend code aaaa and is terminating.
System Action: The service task is no longer available.
User Response: Issue the transaction OMEG SRVSHUT to terminate any secondary service tasks, then issue OMEG SRVINIT to make the service task available again.

OC1231 OCSR2 SERVICE TASK WAITING FOR WORK

Explanation: The service task has initialized successfully and is waiting for work. This is an informational message only.
System Action: None.
User Response: None.

OC1240 SECONDARY TASK GETMAIN FOR nnnnx FAILED

Explanation: One of the secondary tasks failed when issuing a GETMAIN for nnnnx, where nnnn is a number, b is for bytes or k is for kilobytes.
System Action: The secondary task does not initialize.
User Response: Further requests issued by the AIDK command will cause a new secondary task to initialize. If the situation persists, increase the CICS region size.

OC1241 ABEND aaaa DETECTED - SECONDARY SERVICE TASK IS TERMINATING

Explanation: Abend aaaa was detected by the secondary service task. It is terminating.
System Action: The main service task remains available.
User Response: None.

OC1242 OCSR2 SECONDARY SERVICE TASK WAITING FOR WORK

Explanation: The secondary service task has initialized successfully and is waiting for work. This is an informational message only.
System Action: None.
User Response: None.

OC1243 OCSR2 SMF DATA COLLECTION QUIESCED

Explanation: This is an informational message. For CICS/MVS users it indicates that OMEGAMON II will no longer write SMF records. For CICS/ESA users it indicates that CICS will no longer write SMF records.
System Action: None.
User Response: None.

OC1244 OCSR2 SMF DATA COLLECTION INITIATED

Explanation: This is an informational message. For CICS/MVS users it indicates that OMEGAMON II will start writing SMF records. For CICS/ESA users it indicates that CICS will start writing SMF records.
System Action: None.
User Response: None.
**OC1245**

**OC5R2 CICS MONITORING TURNED OFF**

**Explanation:** This is an informational message indicating that CICS performance monitoring has been turned off.

**System Action:** None.

**User Response:** None.

**OC1246**

**OC5R2 CICS MONITORING TURNED ON**

**Explanation:** This is an informational message indicating that CICS global and performance monitoring have been turned on.

**System Action:** None.

**User Response:** None.

**OC1401**

**SHOULD Tivoli OMEGAMON II for CICS on z/OS PURGE CONVERSATIONS? REPLY YES OR NO.**

**Explanation:** This is the text of a Write To Operator with Reply (WTOR). It is issued when SHUTOPT=OPER has been specified and OMEGAMON II has found a task to purge. This process happens only at CICS termination.

**System Action:** The SHUTOPT process of OCShut waits for a reply.

**User Response:** Only the first character of the reply is checked. If you specify ‘NO,’ SHUTOPT processing terminates immediately. The rest of OMEGAMON II PLTSD processing continues. If you specify ‘YES,’ the processing will operate as though you had specified SHUTOPT=PURGE. All tasks waiting for terminal I/O are purged.

**OC1402**

**Tivoli OMEGAMON II for CICS on z/OS HAS PURGED nnnn TASKS**

**Explanation:** After completing the SHUTOPT=PURGE cycle (or after a user reply of ‘YES’ to OC1401), SHUTOPT processing tells you how many tasks have been purged. For CICS 1.7/2.1, this is the number of tasks canceled, whether or not the cancel was successful. For CICS 3.1.1 and above, this is the number of tasks canceled and CICS return codes indicated success.

**System Action:** SHUTOPT processing ends. OMEGAMON II termination processing continues.

**User Response:** None.

**OC1403**

**PROCESS ccccccddddddd ERROR nnnn**

**Explanation:** SHUTOPT processing has reached an error state. This message is issued from a subroutine, and ccc identifies the process that invoked the error routine. nnnn is the value from an EXEC CICS request (EIBRESP).

**System Action:** SHUTOPT processing ends. OMEGAMON II PLT shutdown processing does not continue.

**User Response:** Contact IBM Software Support.

**OC1404**

**OC5HUT INSUFFICIENT WORK AREA FOR TASK PURGE**

**Explanation:** The OMEGAMON II PLT shutdown program could not purge tasks due to an insufficient work area.

**System Action:** The OMEGAMON II PLT shutdown program terminates without purging all tasks waiting for terminal input.

**User Response:** Contact IBM Software Support.

**OC1405**

**START OF SHUTOPT=PURGE PROCESSING**

**Explanation:** CICS termination has been detected. Your GLOBAL assembly has requested OMEGAMON II to purge all tasks waiting in terminal control.

**System Action:** Task purging immediately follows. OC1402 follows the purge process.

**User Response:** None.

**OC1406**

**START OF SHUTOPT=OPER PROCESSING**

**Explanation:** CICS termination has been detected. Your GLOBAL assembly has requested OMEGAMON II to check for tasks waiting in terminal control. If any are found, confirm permission to cancel the tasks (message OC1401).

**System Action:** OMEGAMON II waits for response to message OC1401.

**User Response:** None.

**OC2001**

**INVALID KEYWORD SPECIFIED, RE-ENTER**

**Explanation:** The ENQ command was entered with an invalid keyword.

**System Action:** The command fails.

**User Response:** Correct the keyword, and re-enter the ENQ command.
OC2002  KEYWORD SPECIFIED WITHOUT ARGUMENT

Explanation: The ENQ RESOURCE command was entered without a resource argument or the ENQ QEA command was entered without a QEA address argument.

System Action: The command fails.

User Response: Use the zoom key to select an enqueue resource from the ENQ display, or specify a resource or a QEA address and re-enter the ENQ command.

OC2003  SPECIFIED ARGUMENT IS NOT HEXADECIMAL

Explanation: The ENQ QEA command argument was not hexadecimal.

System Action: The command fails.

User Response: Use the zoom key to select an enqueue resource from the ENQ display, or specify a valid QEA address and re-enter the ENQ command.

OC2004  SPECIFIED ARGUMENT IS TOO LONG

Explanation: The ENQ RESOURCE command argument was more than 16 characters, or the ENQ QEA command QEA address was more than 8 hexadecimal digits.

System Action: The command fails.

User Response: Use the zoom key to select an enqueue resource from the ENQ display, or specify a valid resource argument or QEA address and re-enter the ENQ command.

OC2005  NO TASKS WAITING ON ENQUEUES

Explanation: The ENQ command has found no tasks waiting on enqueues (for a list of all enqueues in the system, enter ENQ RESOURCE=*).

System Action: The ENQ command terminates.

User Response: None.

OC2051  INVALID KEYWORD SPECIFIED, RE-ENTER

Explanation: The STOR command was entered with an invalid keyword.

System Action: The command fails.

User Response: Correct the keyword, and re-enter the STOR command.

OC2053  INVALID GROUP SPECIFIED, RE-ENTER

Explanation: The STOR GROUP command was entered with an invalid group argument.

System Action: The command fails.

User Response: Use the zoom key to select the required group from the STOR GROUP=ALL display. Correct the group argument, and re-enter the STOR GROUP command.

OC2054  SPECIFIED ARGUMENT IS TOO LONG

Explanation: The STOR PAMDSA or PAMEDSA command page number was greater than 8 digits.

System Action: The command fails.

User Response: Use the zoom key to select the required page from the STOR or PAMEDSA display, or specify a page number with 8 or fewer digits and re-enter the STOR PAMDSA or PAMEDSA command.

OC2055  SPECIFIED ARGUMENT IS NOT AN INTEGER

Explanation: The STOR PAMDSA or PAMEDSA command page number was not a decimal integer.

System Action: The command fails.

User Response: Use the zoom key to select the required page from the STOR or PAMEDSA display, or specify a decimal page number and re-enter the STOR PAMDSA or PAMEDSA command.

OC2060  SPECIFIED PAGE NOT IN DSA/EDSA

Explanation: The STOR PAMDSA or PAMEDSA command page number was not in the current DSA/EDSA.

System Action: The command fails.

User Response: Use the zoom key to select the required page from the STOR or PAMEDSA display, or check the number of pages in the DSA/EDSA and re-enter the STOR PAMDSA or PAMEDSA command.

OC2071  INVALID STOR REQUEST FOR THIS CICS RELEASE

Explanation: A STOR keyword was entered that was unrecognized by the command for the current CICS release.

System Action: The STOR command terminates.

User Response: Verify the input keywords for the current CICS release.
OC2072  PROGRAM COMPRESSION DATA NOT CURRENT
Explanation: The STOR command has detected that the program compression data has not been updated in the last minute. This probably means that CICS is not being dispatched.
System Action: The STOR command terminates.
User Response: Investigate why CICS is not being dispatched. If CICS is being dispatched, contact IBM Software Support.

OC2073  PROGRAM COMPRESSION DATA NOT AVAILABLE, ISSUE OMEG INIT
Explanation: Display of program compressions using the STOR command with the COMPRESSIONS keyword requires that OMEGAMON II be initialized in the CICS region being monitored.
System Action: The command fails.
User Response: Issue an OMEG INIT in the required CICS region.

OC2074  PROGRAM COMPRESSION ACCESS ERROR
Explanation: Display of program compressions using the STOR command with the COMPRESSIONS keyword has failed to locate a required OMEGAMON II control block (SVCOM) in the CICS region.
System Action: The command fails.
User Response: Contact IBM Software Support.

OC2200  INVALID CALL TYPE
Explanation: An invalid call has been generated by the RLMU command processor.
System Action: The call is rejected.
User Response: Contact IBM Software Support.

OC2201  ENTRY NOT FOUND
Explanation: An RLMU DEL command has been issued and the item to be processed cannot be found.
System Action: The call is rejected.
User Response: None.

OC2202  NO SPACE FOR REQUESTED ADDITION
Explanation: An RLMU ADD command has been issued and there is insufficient room to perform the addition.
System Action: The call is rejected.
User Response: Review existing RLIM definitions and free up space through the RLMU DEL command.

OC2203  INITIALIZATION IN PROGRESS
Explanation: An RLMU ADD|DEL command has been issued while another user is initializing the resource limiting environment.
System Action: The call is rejected.
User Response: Retry the command. If this incurs the same response, contact IBM Software Support.

OC2204  RLIMDATA IS IN AN INCONSISTENT STATE
Explanation: The RLMU command processor has detected a problem with the data that it is managing.
System Action: The call is rejected.
User Response: Contact IBM Software Support.

OC2205  EXPANSION AREA GETMAIN FAILURE
Explanation: The first RLMU command issued caused a GETMAIN attempt that has incurred a bad response.
System Action: The RLMU command will be unavailable during this OCCI session.
User Response: Review your OCCI region size.

OC2206  SYSTEM BUSY, PLEASE RETRY
Explanation: An RLMU call has coincided with a call from another OCCI user.
System Action: The call is rejected.
User Response: Retry the command. If this incurs the same response, contact IBM Software Support.

OC2207  RESOURCE LIMITING IS UNAVAILABLE
Explanation: During OMEGAMON initialization under CICS, it was detected that there was no valid resource limiting data present.
System Action: The RLIM and RLMU commands will not function.
User Response: The most likely cause of this error is that the global data area module is out of step with the runtime code. Reassemble the global data area module and retry. If the problem persists, contact IBM Software Support.
<table>
<thead>
<tr>
<th>Code</th>
<th>Message Title</th>
<th>Explanation</th>
<th>System Action</th>
<th>User Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>OC2208</td>
<td>INVALID RLIMDATA FOUND IN GLOBAL DATA AREA MODULE</td>
<td>While attempting to either display or update resource limits, it was detected that the RLIMDATA present in the global data area module was invalid.</td>
<td>The GLOB RLIM command and the RLMU command will not function.</td>
<td>The most likely cause of this error is that the global data area module is out of step with the runtime code. Reassemble the global data area module and retry. If the problem persists, contact IBM Software Support.</td>
</tr>
<tr>
<td>OC2209</td>
<td>LOCKING ERROR</td>
<td>There has been a failure in the serialization of access to OMEGAMON's resource limiting data.</td>
<td>The RLMU command will no longer function.</td>
<td>Contact IBM Software Support.</td>
</tr>
<tr>
<td>OC2210</td>
<td>RESOURCE LIMITS REFRESHED</td>
<td>An RLMU command has successfully executed.</td>
<td>None.</td>
<td>Refer to the documentation for details for the syntax of the RLMU command.</td>
</tr>
<tr>
<td>OC2220</td>
<td>OPERATION ERROR - USE ADD, DEL OR REFRESH</td>
<td>An invalid RLMU call has been generated.</td>
<td>The command will be rejected.</td>
<td>Refer to the documentation for details for the syntax of the RLMU command.</td>
</tr>
<tr>
<td>OC2221</td>
<td>FUNCTION ERROR - USE INC OR EXC</td>
<td>An invalid RLMU call has been generated.</td>
<td>The command will be rejected.</td>
<td>Refer to the documentation for details for the syntax of the RLMU command.</td>
</tr>
<tr>
<td>OC2222</td>
<td>RESOURCE ERROR - SEE KOCRLIM MACRO FOR VALID NAMES</td>
<td>An invalid RLMU call has been generated.</td>
<td>The command will be rejected.</td>
<td>Refer to the documentation for details for the syntax of the RLMU command.</td>
</tr>
</tbody>
</table>
OC3003  SHUTDOWN OPTION ACCESS ERROR, CODE=nn
Explanation: An internal error occurred in the OPT command when accessing the PLT shutdown option.
System Action: The OPT command fails.
User Response: Contact IBM Software Support.

OC3051  UNABLE TO FORMAT SIT, CODE=aaaaa
Explanation: The SIT command was unable to format the SIT. The length of the SIT is denoted by aaaaaa.
The most likely explanation is that the user has applied IBM maintenance to CICS.
System Action: The SIT command fails.
User Response: Contact IBM Software Support.

OC3052  UNABLE TO DUMP SIT, CODE=aaaaaa
Explanation: The SIT command was unable to display the SIT in hexadecimal dump format. The length of the SIT is denoted by aaaaaa.
System Action: The SIT command fails.
User Response: Contact IBM Software Support.

OC3053  INVALID KEYWORD SPECIFIED, RE-ENTER
Explanation: An invalid keyword was specified as an argument to the SIT command.
System Action: The SIT command fails.
User Response: Correct the keyword and re-enter the SIT command.

OC3054  KEYWORD SPECIFIED WITHOUT ARGUMENT
Explanation: A keyword was specified for the SIT command but no argument was specified for the keyword.
System Action: The SIT command fails.
User Response: Enter the appropriate argument for the specified keyword.

OC3042  KEYWORD SPECIFIED WITHOUT ARGUMENT
Explanation: A keyword was specified for the AIDS command but no argument was specified for the keyword.
System Action: The AIDS command fails.
User Response: Enter the appropriate argument for the specified keyword.

OC3043  INVALID AID ADDRESS SPECIFIED
Explanation: The argument for the AIDS keyword must be 4 bytes or less.
System Action: The AIDS command fails.
User Response: Enter an eight character hexadecimal address as an argument to the ADDRESS keyword.

OC3044  INVALID ENTRY LENGTH SPECIFIED
Explanation: The AID address must be eight characters or less and must be hexadecimal.
System Action: The AIDS command fails.
User Response: Enter the appropriate argument for the AIDS keyword.

OC3045  NO AIDS FOUND IN CICS
Explanation: CICS was searched for Automatic Initiate Descriptors and none were found.
System Action: The AIDS does not produce output.
User Response: This is a normal response if no AIDs currently exist in CICS.

OC3046  NO MATCHING AIDS FOUND IN CICS
Explanation: CICS was searched for Automatic Initiate Descriptors and none matched the specified keyword arguments.
System Action: The AIDS command fails.
User Response: Use the AIDS command without keywords to determine if the AID you are looking for.

OC3047  REQUESTED AID NOT FOUND IN CICS
Explanation: CICS was searched for an Automatic Initiate Descriptor and none matched the specified address.
System Action: The AIDS command fails.
User Response: Use the AIDS command without keywords to determine if the AID you are looking for.
exists. If the AID is displayed by the AIDS command, and you have entered the ADDRESS=cccccccc argument correctly, contact IBM Software Support.

---

**OC3411**  INVALID KEYWORD SPECIFIED, RE-ENTER

**Explanation:** An invalid keyword was specified as an argument to the ICE command.

**System Action:** The ICES command fails.

**User Response:** Correct the keyword and re-enter the ICES command.

---

**OC3412**  KEYWORD SPECIFIED WITHOUT ARGUMENT

**Explanation:** A keyword was specified for the ICES command but no argument was specified for the keyword.

**System Action:** The ICES command fails.

**User Response:** Enter the appropriate argument for the specified keyword.

---

**OC3413**  INVALID ICE ADDRESS SPECIFIED

**Explanation:** The ICE address must be eight characters or less and must be hexadecimal.

**System Action:** The ICES command fails.

**User Response:** Enter an eight character hexadecimal address as an argument to the ADDRESS keyword.

---

**OC3414**  INVALID ENTRY LENGTH SPECIFIED

**Explanation:** The argument for this ICES keyword must be 4 bytes or less.

**System Action:** The ICES command fails.

**User Response:** Enter a four byte (or less) argument for the ICES keyword.

---

**OC3415**  NO ICES FOUND IN CICS

**Explanation:** CICS was searched for Interval Control Elements and none were found.

**System Action:** The ICES command does not produce output.

**User Response:** None.

---

**OC3416**  NO MATCHING ICES FOUND IN CICS

**Explanation:** CICS was searched for Interval Control Elements and none matched the specified keyword arguments.

**System Action:** The ICES command fails.

**User Response:** None.

---

**OC3417**  REQUESTED ICE NOT FOUND IN CICS

**Explanation:** CICS was searched for an Interval Control Element and none matched the specified address.

**System Action:** The ICES command fails.

**User Response:** None.

---

**OC3420**  AIDK MUST BE QUALIFIED BY TERM, TRAN OR ADDRESS

**Explanation:** When killing an AID, the AID must be qualified with either a TERM, TRAN, or ADDRESS argument.

**System Action:** The AIDK command fails.

**User Response:** Enter the appropriate keyword with argument and re-enter the command.

---

**OC3422**  KILL PROCESSING WAS BYPASSED FOR THIS AID

**Explanation:** The AID was no longer in the AID chain. It was either already killed, or had completed processing and was dechained by CICS.

**System Action:** The AIDK command fails.

**User Response:** None.

---

**OC3423**  KILL PROCESSING WAS BYPASSED FOR 1 OR MORE AIDS

**Explanation:** The AIDs was no longer in the AID chain. It (they) had already been killed or processed by CICS.

**System Action:** The AIDK command fails.

**User Response:** None.

---

**OC3430**  ICEK MUST BE QUALIFIED BY TERM, TRAN OR ADDRESS

**Explanation:** When killing an ICE, the ICE must be qualified with either a TERM, TRAN, or ADDRESS argument.

**System Action:** The ICEK command fails.

**User Response:** Enter the appropriate keyword with argument and re-enter the command.

---

**OC3432**  KILL PROCESSING WAS BYPASSED FOR THIS ICE

**Explanation:** The ICE is no longer in the ICE chain. It has either already been killed, or has completed processing and has been dechained by CICS. Kill processing is also bypassed if the ICE type is Wait or Post or if the ICE is a DWE.

**System Action:** The ICEK command fails.
User Response: None.

OC3433  KILL PROCESSING WAS BYPASSED FOR 1 OR MORE ICES

Explanation: The ICES was no longer in the ICE chain. It (they) had either already been killed, or had completed processing and was dechained by CICS.

System Action: The ICEK command fails.

User Response: None.

OC3434  KILL BYPASSED, SERVICE TASK RETURNED = cccccccc

Explanation: This message is issued in response to an AIDK command, and indicates that the service task was not able to perform the service. The possible values for cccccccc are:

- 00000001 10 secondary tasks are already started. No more are allowed.
- 00000002 Invalid request (internal error).
- 00000003 The secondary task is not responding.
- 00000004 The secondary task abended.
- 00000005 A new secondary task was started during the last second.
- 00000006 No room is available in the secondary tasks table.
- 0000000b Unable to start a new secondary task.
- 0000000c Unable to start a new secondary task due to MXT or AMXT.
- 00000042 The service task could not find the AID to be killed.
- 00000043 A task was already started for the AID to be killed.
- 00000044 The AID was unchained, but its storage could not be freed.
- 00000045 The AID was located by the service task but its terminal ID was not the same as that recorded by the AIDK command. The aid is not killed.
- 00000046 The AID was located by the service task but its transaction ID was not the same as that recorded by the AIDK command. The aid is not killed.
- 00000047 The AID was located by the service task but its request ID was not the same as that recorded by the AIDK command. The aid is not killed.
- 000000F0 The service task is not responding. The AID is not killed.
- 000000F1 There are no available work elements to use for this request. The AID is not killed.
- 000000F2 The service task is not available. The AID is not killed.
- 000000F3 The service task work area could not be found. The AID is not killed.

000000F4 OMEG INIT was not issued. The AID is not killed.

System Action: None.

User Response: Action:

00000001 Retry the command later.
00000002 Contact IBM Software Support.
00000003 Due to activity in the CICS region, the service task did not complete the request in the allotted time. Check whether the AID still exists and, if so, enter the command again. If the situation persists, shut down and initialize the service task by issuing the OMEG transaction with the SRVSHUT and SRVINIT keywords.
00000004 Issue OMEG SRVSHUT to finish the service task processing. Then, issue OMEG SRVINIT to initialize it and reenter the command.
00000005 Retry the command later.
00000006 Contact IBM Software Support.
0000000b Contact IBM Software Support.
0000000c Increase the MXT and AMXT SIT values.
00000042 Correct the AID address entered with the command and reenter the command.
00000043 None.
00000044 None.
00000045 Due to CICS activity, data for the AID has changed. Verify that the AID still exists for the terminal, and, if so, reenter the command.
00000046 Due to CICS activity, data for the AID has changed. Verify that the AID still exists for the transaction ID, and, if so, reenter the command.
00000047 Due to CICS activity, data for the AID has changed. Verify that the AID with the REQID exists and reenter the command.
000000F0 The service task is taking longer than expected to perform the request, probably due to high activity in CICS. If the marked AIDs were not killed, issue the request again.
000000F1 Issue the OMEG SRVSHUT transaction, then OMEG SRVINIT to reinitialize the service task.
000000F2 Issue the OMEG SRVINIT transaction to initialize the service task.
000000F3 Issue the OMEG SRVSHUT transaction, then OMEG SRVINIT to reinitialize the service task.
000000F4 Ensure that transaction OMEG and program KOCOME00 are defined to CICS and that transaction OMEG has been successfully executed in CICS.
OC3460  INVALID USER TCA ADDRESS SPECIFIED
Explanation:  The address specified for the TCA keyword is invalid. This keyword must contain an existing User TCA address. Either the address was entered incorrectly or the task has already ended.
System Action:  The EIB command terminates.
User Response:  Specify a valid User TCA address for the task you are inquiring about if the transaction has not yet ended.

OC3461  POINTER TO EXEC INTERFACE STRUCTURE NOT AVAILABLE
Explanation:  During EIB command processing, the control block structure of the specified task is verified. An error was detected; therefore, the request cannot be processed.
System Action:  The EIB command terminates.
User Response:  Investigate the task in question. Make sure that the transaction has not ended yet or CICS has not suffered a storage corruption, damaging task-related control block structures.

OC3462  POINTER TO EXEC INTERFACE BLOCK NOT AVAILABLE
Explanation:  During EIB command processing, the control block structure of the specified task is verified. An error was detected; therefore, the request cannot be processed.
System Action:  The EIB command terminated.
User Response:  Investigate the task in question. Make sure that the transaction has not ended yet or CICS has not suffered a storage corruption that has damaged task-related control block structures.

OC3463  PLEASE SPECIFY USER TCA ADDRESS WITH KEYWORD TCA=
Explanation:  The EIB command was entered without the TCA keyword.
System Action:  The EIB command terminated.
User Response:  The User TCA address must be specified with keyword 'TCA=' for the EIB command to furnish the request. To view the format of the EIB command, enter '/' in column one followed by EIB.

OC3464  EIB COMMAND DOES NOT SUPPORT CICS SYSTEM TASKS
Explanation:  The specified User TCA address belongs to a CICS system task. Such tasks are not eligible for the EIB command processing.

System Action:  None, this is only an informational message.
User Response:  Ensure that the correct User TCA address was specified for other than CICS system tasks.

OC3500  TABL Invalided ENTRY SUPPLIED
Explanation:  The entry name/number specified for the table identified by aaa.
System Action:  The command terminates.
User Response:  Correct the table entry name/number and re-enter the command.

OC3501  TABL ENTRY CONFLICTS WITH CICS TABLE SPECIFIED
Explanation:  The table name is incompatible with the entry name specified.
System Action:  The command terminates.
User Response:  Use the proper entry name/number keyword for the desired file, or use the generic ID= keyword operand to specify an entry.

OC3502  TABL INVALID SELECTION OPTION SPECIFIED
Explanation:  The selection criteria specified are unsupported.
System Action:  The command terminates.
User Response:  Correct the arguments of the SELECT= keyword and re-enter the command.

OC3503  TABL SELECTION INVALID FOR CICS TABLE SPECIFIED
Explanation:  The selection criteria specified are not compatible with the table name entered.
System Action:  The command terminates.
User Response:  Correct the arguments of the SELECT= keyword and re-enter the command.

OC3504  TABL SELECTION CRITERIA INVALID WITH SPECIFIC ENTRY
Explanation:  Selection criteria and a specific entry name/number were specified as operands of the TABL command.
System Action:  The command terminates.
User Response:  Change the entry name/number to specify a generic value (using wild card characters) or choose either the selection criteria or an entry name/number (but not both), for the table search.
OC3505  TABL DISPLAY OPTIONS ONLY VALID FOR SINGLE TABLE ENTRY
Explanation: The DUMP option was specified for a generic table search.
System Action: The command terminates.
User Response: Limit the table search to a specific entry or remove the DUMP operand from the TABL command.

OC4001  GRPS INVALID GROUP KEYWORD SPECIFIED, RE-ENTER
Explanation: The command encountered an invalid keyword.
System Action: The command terminates.
User Response: Correct the input, and re-enter the command.

OC4002  GRPS EXCESS KEYWORDS IGNORED
Explanation: Extra keywords were specified in the GRPS command.
System Action: The command ignores the additional keywords.
User Response: None.

OC4003  GRPS KEYWORD SPECIFIED WITHOUT ARGUMENT
Explanation: A parameter is missing for a keyword on the GRPS command.
System Action: The command terminates.
User Response: Correct the input, and re-enter the command.

OC4004  GRPS GROUP MUST BE NUMERIC IN THE RANGE 1–MAXGRPS OR *
Explanation: The GRPS command expects a group identifier but finds an invalid value. The value must be in the range 1–maxgrps inclusive, where maxgrps is the value specified in the KOCGLOB macro, or the wildcard value * representing all groups must be specified.
System Action: The command terminates.
User Response: Correct the input, and re-enter the command.

OC4005  GRPS GROUP NUMBER WAS NOT SUPPLIED
Explanation: The GRPS command expects a group identifier but finds none.
System Action: The command terminates.
User Response: Correct the input, and re-enter the command.

OC4006  GRPS GROUP=* IS INVALID WITHOUT SPECIFYING ELEMENTS
Explanation: The generic group identifier may only be used if specific group elements are included (TERM=, TRAN=, PROG=).
System Action: The command terminates.
User Response: Correct the input, and re-enter the command.

OC4007  GRPS GROUP TYPE NOT SPECIFIED
Explanation: A requested group change could not be made because the group type was not included in the command.
System Action: The command terminates.
User Response: Correct the input, and re-enter the command.

OC4008  GRPS INVALID GROUP TYPE. SPECIFY TRAN, PROG, TERM, OR LU
Explanation: The GRPS command specified an unrecognized group type.
System Action: The command terminates.
User Response: Correct the input, and re-enter the command.

OC4009  GRPS GROUP TYPE AND ELEMENT TYPE CONFLICT
Explanation: The TYPE= keyword parameter of GRPS does not agree with the type of elements specified.
System Action: The command terminates.
User Response: Correct the input, and re-enter the command.

OC4010  GRPS INVALID ELEMENTS SPECIFIED
Explanation: The group elements were improperly formatted or have an invalid length.
System Action: The command terminates.
User Response: Correct the input, and re-enter the command.

OC4011  GRPS NO GROUPS DEFINED
Explanation: There are no groups currently defined to OMEGAMON II.
System Action: None.
User Response: None.

OC4012  GRPS REQUESTED GROUP WAS NOT FOUND
Explanation: The specified group does not exist.
System Action: None.
User Response: None.

OC4013  GRPS REQUESTED GROUP HAS NO ELEMENTS DEFINED
Explanation: The specified group is empty.
System Action: None.
User Response: None.

OC4014  GRPS GROUP IS NOT DEFINED
Explanation: The specified group is not currently defined to OMEGAMON II.
System Action: None.
User Response: None.

OC4015  GRPS GROUP IS ALREADY DEFINED
Explanation: An attempt was made to add a group that already exists.
System Action: The command terminates.
User Response: Specify a group that is not already created.

OC4016  GRPS RTA MONITOR ACTIVE, REQUEST IGNORED
Explanation: Groups cannot be modified while the response time collector is active.
System Action: The request is ignored.
User Response: Use the RTA STOP command to terminate the response time collector, then re-enter the GRPS command, followed by the RTA START command, to reactivate the response time collector.

OC4017  GRPS ELEMENT THRESHOLD REQUIRES AN ELEMENT NAME
Explanation: The GRPS command has been issued with the RESP, HOST, or NET threshold setting keyword, but no element has been specified. These keywords are applicable only to elements.
System Action: The update or add fails.
User Response: Add an element keyword and argument and re-issue the command.

OC4018  GRPS HOST AND NET TIMES VALID ONLY WITH LUs
Explanation: The GRPS command has been issued with the HOST or NET threshold setting keyword for a program, terminal, or transaction. These thresholds are applicable only to LUs.
System Action: The update or add fails.
User Response: Remove the HOST or NET keyword and re-issue the command.

OC4020  GRPS WARNING: GROUP NAME TRUNCATED TO 12 BYTES
Explanation: The group name exceeds the twelve character limit.
System Action: The group’s name includes the first twelve characters specified.
User Response: None.

OC4021  GRPS WARNING: GROUP NAME DEFAULTED TO GROUP NUMBER
Explanation: A group name was not specified when creating a group.
System Action: The group number will be assigned as the name of the group. For example, if group one is defined, it will have the name GROUP 01.
User Response: None.

OC4023  GRPS INVALID CRITICAL THRESHOLD SPECIFIED, RE-ENTER
Explanation: The interval record collector (critical) threshold specified is not valid.
System Action: The command terminates.
User Response: Correct the threshold, and re-enter the command.

OC4024  GRPS INVALID RESPONSE THRESHOLD SPECIFIED, RE-ENTER
Explanation: The response time threshold specified is not valid.
System Action: The command terminates.
User Response: Correct the threshold, and re-enter the command.

OC4026  GRPS WARNING: GROUP CRITICAL THRESHOLD DEFAULT IS 2 SECS
Explanation: No critical threshold was specified on the GRPS command, so a default value of two seconds was assumed.
System Action: None.
User Response: None.

OC4027  GRPS WARNING: RESPONSE THRESHOLD DEFAULT IS 1 SEC
Explanation: No response time threshold was specified on the GRPS command, so a default value of one second was assumed.
System Action: None.
User Response: None.

OC4029  GRPS GENERIC IDS ARE INVALID FOR LU NAMES
Explanation: Generic Logical Unit IDs are not supported. The full LU name must be used.
System Action: The request is ignored.
User Response: Specify only complete VTAM Logical Unit IDs.

OC4030  GRPS INVALID ADD, ELEMENTS ALREADY DEFINED IN GROUP
Explanation: The specified group already contains the element being added.
System Action: The request is ignored.
User Response: None.

OC4031  GRPS NO SPACE REMAINING THE GROUPS ID TABLE
Explanation: An attempt to add an element to the group table failed due to a lack of available space.
System Action: The command terminates.
User Response: None.

OC4032  GRPS INVALID HOST THRESHOLD SPECIFIED, RE-ENTER
Explanation: The specified end-to-end host threshold is not valid.
System Action: The command terminates.
User Response: Correct the threshold, and re-enter the command.

OC4033  GRPS INVALID NETWORK THRESHOLD SPECIFIED, RE-ENTER
Explanation: The specified end-to-end network threshold is not valid.
System Action: The command terminates.
User Response: None.

OC4034  GRPS WARNING: HOST THRESHOLD DEFAULT IS 1 SEC
Explanation: No LU host threshold was specified on the GRPS command, so a default value of one second was assumed.
System Action: None.
User Response: None.

OC4035  GRPS WARNING: NETWORK THRESHOLD DEFAULT IS 1 SEC
Explanation: No LU network time threshold was specified on the GRPS command, so a default value of one second was assumed.
System Action: None.
User Response: None.

OC4036  GRPS WARNING: HOST THRESHOLD > RESPONSE THRESHOLD
Explanation: The end-to-end host threshold exceeds the total response time threshold for the Logical Unit specified. The host response time is a component of the total response time. Specifying a host threshold that is greater than the total response time threshold guarantees that the response threshold will always be exceeded before the host threshold.
System Action: None.
User Response: None.

OC4037  GRPS WARNING: NETWORK THRESHOLD > RESPONSE THRESHOLD
Explanation: The end-to-end network threshold exceeds the total response time threshold for the Logical Unit specified. The network response time is a component of the total response time. Specifying a network threshold that is greater than the total response time threshold guarantees that the response threshold will always be exceeded before the network threshold.
System Action: None.
User Response: None.

OC4040  GRPS GROUP=* IS INVALID ON UPDATE
Explanation: A generic group identifier may not be used when performing an update.
System Action: The command terminates.
<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>OC4041</strong></td>
<td><strong>GRPS GROUP UPDATES INVALID WHEN ELEMENTS SPECIFIED</strong></td>
</tr>
<tr>
<td>Explanation: The UPD operand of GRPS cannot be used with a specific group identifier when elements are specified on the command.</td>
<td></td>
</tr>
<tr>
<td>System Action: The command terminates.</td>
<td></td>
</tr>
<tr>
<td>User Response: Correct the input, and re-enter the command.</td>
<td></td>
</tr>
</tbody>
</table>

| **OC4042** | **GRPS GROUP TYPE CANNOT BE UPDATED UNTIL GROUP IS EMPTY**                 |
| Explanation: Groups containing entries cannot have their type changed until all elements are deleted from the group. |
| System Action: The command terminates. |
| User Response: Correct the input, and re-enter the command. |

| **OC4043** | **GRPS INVALID UPDATE, ELEMENTS NOT DEFINED**                             |
| Explanation: An attempt was made to update a group element which could not be found in the group table. |
| System Action: The command terminates. |
| User Response: Correct the input, and re-enter the command. |

| **OC4044** | **GRPS THRESHOLD MUST BE SUPPLIED WHEN UPDATING ELEMENTS**                |
| Explanation: A request to update one or more group elements did not include a threshold value. |
| System Action: The command terminates. |
| User Response: Correct the input, and re-enter the command. |

| **OC4045** | **GRPS INVALID UPDATE, NO CHANGES SPECIFIED**                             |
| Explanation: The GRPS command has been issued with the UPDATE keyword but other keywords are missing. |
| System Action: The update fails. |
| User Response: Add keywords for the UPDATE request that is required and re-issue the command. |

| **OC4050** | **GRPS INVALID DELETE, NO ELEMENTS SPECIFIED**                            |
| Explanation: The elements to be deleted by GRPS were not specified. |
| System Action: The command terminates. |
| User Response: Correct the input, and re-enter the command. |

| **OC4051** | **GRPS INVALID DELETE, ELEMENTS NOT DEFINED IN GROUP**                    |
| Explanation: The elements to be deleted by GRPS do not belong to the group specified. |
| System Action: The command terminates. |
| User Response: Correct the input, and re-enter the command. |

| **OC4060** | **GRPS GROUP=** IN INVALID ON CLEARANCE**                                |
| Explanation: A generic group identifier may not be used when performing a clear operation. |
| System Action: The command terminates. |
| User Response: Correct the input, and re-enter the command. |

| **OC4061** | **GRPS ELEMENT LIST IS INVALID ON CLEARANCE**                           |
| Explanation: An element list may not be specified when performing a clear. Clear will remove all elements from a given group. Use the DEL operand of GRPS to selectively remove entries from a group. |
| System Action: The command terminates. |
| User Response: Correct the input, and re-enter the command. |

| **OC4101** | **INVALID KEYWORD SPECIFIED, RE-ENTER**                                 |
| Explanation: The TSQ command has been entered with an invalid keyword. |
| System Action: The command fails. |
| User Response: Correct he keyword and re-enter the command. Use the help facility to determine valid keywords. |

| **OC4102** | **KEYWORD SPECIFIED WITHOUT ARGUMENT**                                  |
| Explanation: The TSQ command has been entered without an ID or SEL argument. |
| System Action: The command fails. |
User Response: Add an ID argument or valid select criteria to the requisite keyword and re-enter the command.

OC4103  INVALID SELECT CRITERIA, USE HELP FOR A VALID LIST
Explanation: The TSQ command has been entered with an invalid argument for the SELECT keyword.
System Action: The command fails.
User Response: Use an argument for the SELECT keyword that is valid and re-enter the command.

OC4104  SPECIFIED ARGUMENT IS TOO LONG
Explanation: The TSQ command has been entered with an ID that is longer than eight characters.
System Action: The command fails.
User Response: Change the ID argument to be eight or fewer characters and re-enter the command.

OC4151  INVALID KEYWORD SPECIFIED, RE-ENTER
Explanation: The RESP command has been entered with an invalid keyword.
System Action: The command fails.
User Response: Correct the keyword and re-enter the command. Use the help facility to determine valid keywords.

OC4152  KEYWORD SPECIFIED WITHOUT ARGUMENT
Explanation: The RESP command has been entered without an ID or NUM argument.
System Action: The command fails.
User Response: Add an ID argument or a group number to the requisite keyword and re-enter the command.

OC4153  GROUP NUMBER MUST BE BETWEEN 1 AND 30
Explanation: The TSQ command has been entered with an argument for the NUM keyword that is not in the valid range.
System Action: The command fails.
User Response: Change the group number to be in the range 1–30 and re-enter the command.

OC4154  SPECIFIED ARGUMENT IS TOO LONG
Explanation: The RESP command has been entered with an ID that is longer than 8 characters.
System Action: The command fails.
User Response: Change the ID argument to be 8 or fewer characters and re-enter the command.

OC4200  INTERNAL ERROR, RC=nn
Explanation: Collector of information about the CICS dump component has detected an internal error in processing the request.
System Action: The request is ignored.
User Response: Contact IBM Software Support.

OC4221  Invalid control block structure detected
Explanation: Tivoli OMEGAMON II for CICS on z/OS is unable to process the MQ control blocks detected in CICS.
System Action: The command terminates normally after issuing this error message.
User Response: Contact IBM Software Support for assistance with this problem.

OC4222  Unknown version of MQ detected
Explanation: The version/release of MQ you executing is not supported by OMEGAMON II for CICS.
System Action: The command terminates normally after issuing this error message.
User Response: Contact IBM Software Support for assistance with this problem.

OC4230  Subroutine IGGCSI00 was not loaded at startup
Explanation: Tivoli OMEGAMON II for CICS on z/OS uses the IBM subroutine IGGCSI00 to collect VSAM details. The subroutine is loaded during OMEGAMON startup.
System Action: None.
User Response: Review the OMEGAMON log for any messages which may indicate why the module was not loaded. Contact IBM Software Support for further assistance.

OC4231  FCT error received from IGGCSI00: RC=04, Reason code=xxxx
Explanation: Tivoli OMEGAMON II for CICS on z/OS uses the IBM subroutine IGGCSI00 to collect VSAM details. The subroutine returned a response code 4, with the specified reason code.
OC4232  FCT error received from IGGCSI00:
RC=08, Reason code=xxxx

Explanation: Tivoli OMEGAMON II for CICS on z/OS uses the IBM subroutine IGGCSI00 to collect VSAM details. The subroutine returned a response code 8, with the specified reason code.

System Action: None.

User Response: See the response and reason codes for the IGGCSI00 subroutine, which are listed in the IBM manual Catalog Search Interface User’s Guide in the section "Managing Catalogs". Contact IBM Software Support for further assistance.

OC4233  FCT error received from IGGCSI00:
RC=xx

Explanation: Tivoli OMEGAMON II for CICS on z/OS uses the IBM subroutine IGGCSI00 to collect VSAM details. The subroutine returned a response code 12 or 16.

System Action: None.

User Response: See the response and reason codes for the IGGCSI00 subroutine, which are listed in the IBM manual Catalog Search Interface User’s Guide in the section "Managing Catalogs". Contact IBM Software Support for further assistance.

OC5000  UNABLE TO OBTAIN WORK AREA STORAGE

Explanation: Insufficient storage was available to allocate a work area.


User Response: Increase the region size of the job used to run the Global Maintenance Program.

OC5001  UNABLE TO OPEN DATASET WITH DDNAME= aaaaaaaa

Explanation: A non-zero return code was detected by the OPEN macro when attempting to open the dataset denoted by aaaaaaaa.

System Action: For a read request, the default copy of the global module will be used. All other functions will terminate without further processing.

User Response: Verify that the KOC2GLBL DD name is properly specified in the JCL.

OC5002  WILDCARDS ONLY ALLOWED WITH CONVERT AND VERIFY FUNCTIONS

Explanation: A wildcard character (*) was included in the suffix of either a read, write, or test function.

System Action: For a read request, the default copy of the global module will be used. All other functions will terminate without further processing.

User Response: Remove the wildcard character from the global module suffix.

OC5003  UNABLE TO OBTAIN GLOBAL I/O BUFFERS, LENGTH= aaaaaaaa

Explanation: Insufficient storage was available below the line for the I/O buffers used to process the global source file. The amount of storage that could not be allocated is denoted by aaaaaaaa.

System Action: For a read request, the default copy of the global module will be used. All other functions will terminate without further processing.

User Response: Increase the region size available to the Global Maintenance Program.

OC5004  PARM NOT SPECIFIED AS FUNCTION,SUFFIX=XX

Explanation: When the Global Maintenance Program is run as a batch job, an 11–byte parameter must be passed on the EXEC card that includes a single character function followed by the global suffix.

System Action: The request is ignored.

User Response: Correct the PARM operand on the EXEC card and rerun the job.

OC5005  FUNCTION CODE IS NEITHER C, T, OR V

Explanation: When the Global Maintenance Program is run as a batch job, only three function codes are permitted to either convert, test, or verify global source.

System Action: The request is ignored.

User Response: Correct the function code on the EXEC card and rerun the job.

OC5006  RKC2GLBL DATASET NOT ALLOCATED WITH LRECL=80

Explanation: The DD name RKC2GLBL points to a dataset that has not been allocated with an 80–byte logical record length.

System Action: For a read request, the default copy of the global module will be used. All other functions will terminate without further processing.
User Response: Allocate the RKC2GLBL dataset with an LRECL of 80 bytes.

OC5007 CLOSE MACRO FAILED FOR DDNAME aaaaaaaaa
Explanation: The DD name identified by aaaaaaaaa could not be closed.
System Action: For a read request, the default copy of the global module will be used. All other functions will terminate without further processing.
User Response: Check the operator console for messages that may indicate why the dataset failed to close properly.

OC5008 ESTAE MACRO FAILED WITH RC=aaaaaaaa
Explanation: Recovery could not be established using the ESTAE macro.
System Action: For a read request, the default copy of the global module will be used. All other functions will terminate without further processing.
User Response: Look up the ESTAE return code in the IBM Application Development Macro Reference manual, correct the problem and resubmit the job.

OC5009 DEQ MACRO FAILED WITH RC=aaaaaaaa
Explanation: The ENQ used to serialize access to the global source dataset could not be released with a corresponding DEQ.
System Action: The resource remains enqueued until the job terminates. This may result in an ENQ failure if another global maintenance request is made before the job completes.
User Response: Look up the DEQ return code in the IBM Application Development Macro Reference manual, correct the problem and resubmit the job.

OC5010 PROCESSING SUCCESSFUL FOR GLOBAL aaaaaaaaa
Explanation: The global module identified by aaaaaaaaa was processed without error.
System Action: None.
User Response: None.

OC5011 PROCESSING FAILED FOR GLOBAL aaaaaaaaa
Explanation: The global module identified by aaaaaaaaa encountered problems.
System Action: For a read request, the default copy of the global module will be used. All other functions will not be honored.
User Response: Consult the operator console for previous messages that indicate why the global function failed. Correct the cause of the errors and retry the request.

OC5012 NOT AUTHORIZED, UNABLE TO LOAD DEFAULT GLOBAL
Explanation: The default copy of the global module could not be brought into memory using a directed load because the job does not have APF authorization.
System Action: The global request is not honored.
User Response: The default module is used only when an error is encountered during processing of the global source dataset. Inspect the operator console for previous errors and make any necessary changes. To ensure that the default will be available on a failed read request, change the job to run with APF authorization.

OC5013 ABNORMAL TERMINATION DETECTED DURING I/O OPERATION, CODE=Sxxx
Explanation: Either an x13 or x37 ABEND was encountered while trying to access the global source dataset.
System Action: For a read request, the default copy of the global module will be used. No other global request functions will be honored.
User Response: Refer to the IBM System Codes manual for a description of the ABEND code identified by Sxxx. Correct the cause of the error and retry the request.

OC5014 DEFAULT COPY OF GLOBAL HAS BEEN SELECTED
Explanation: Due to an error during global processing, the Global Maintenance Program has loaded a default copy of the global module.
System Action: The default copy of the global module is returned, rather than the source member requested by the caller.
User Response: Refer to the operator console for errors that might explain why the Global Maintenance Program had to resort to loading a default copy of the global module.

OC5020 CARD:
Explanation: A syntax error has been found in a global control card. This message displays the card in error.
System Action: The control card is not processed. For a read request, a default copy of the global module
will be returned to the caller. All other functions will fail to complete successfully.

**User Response:** Refer to the operator console for an associated error message that details the syntactical problem with the control statement.

**OC5021** **CONVERSE_TIME OPERAND NOT RECOGNIZED**

**Explanation:** The CONVERSE_TIME operand is neither, IRWAIT, IOWAIT, NOIRWAIT, nor NOIOWAIT.

**System Action:** The control card is not processed. For a read request, a default copy of the global module will be returned to the caller. All other functions will fail to complete successfully.

**User Response:** Specify a valid CONVERSE_TIME operand.

**OC5022** **NO DATABASE SUB-COMPONENT SPECIFIED**

**Explanation:** A database control statement was found, however, no sub-component header was active at the time.

**System Action:** The control card is not processed. For a read request, a default copy of the global module will be returned to the caller. All other functions will fail to complete successfully.

**User Response:** Database sub-components are coded within << >> characters. For example, the DLI database must be specified as <<DLI>>. Ensure one of the database sub-components is properly specified for the control card in error.

**OC5023** **UNABLE TO OPEN RKC2GLBL DATASET FOR INPUT**

**Explanation:** The OPEN macro used to gain access to RKC2GLBL has returned a non-zero completion code.

**System Action:** For a read request, a default copy of the global module will be returned to the caller. All other functions will fail to complete successfully.

**User Response:** Check the operator console for messages that may indicate why the RKC2GLBL dataset could not be opened. Correct the cause of the error and retry the request.

**OC5024** **UNABLE TO LOCATE GLOBAL SOURCE MEMBER aaaaaaaa**

**Explanation:** The FIND macro could not locate the global member denoted by aaaaaaaa.

**System Action:** For a read request, a default copy of the global module will be returned to the caller. All other functions will fail to complete successfully.

**User Response:** Verify that the specified global member appears in the partitioned dataset pointed to by the RKC2GLBL DD statement.

**OC5025** **UNABLE TO OBTAIN GLOBAL MODULE STORAGE, LENGTH=aaaaaaa**

**Explanation:** Insufficient memory was available to store the symbol table used to harbor global settings. The value aaaaaaaa indicates the number of bytes requested on the failed GETMAIN attempt.

**System Action:** For a read request, a default copy of the global module will be returned to the caller. All other functions will fail to complete successfully.

**User Response:** Increase the region size available to the job.

**OC5026** **NO COMPONENT HEADING SPECIFIED FOR KEYWORD**

**Explanation:** A control card was encountered for which no component heading could be found.

**System Action:** For a read request, a default copy of the global module will be returned to the caller. All other functions will fail to complete successfully.

**User Response:** Component headings are enclosed in < > characters. They are necessary to indicate which section of a global module a particular control card is intended to effect. Check that a component heading precedes the control card in error and retry the request.

**OC5027** **SYNTAX ERROR DETECTED IN COMPONENT HEADING**

**Explanation:** A control card was encountered whose first non-blank character was a '<' indicating a component heading. However, a trailing '>' character was not found.

**System Action:** For a read request, a default copy of the global module will be returned to the caller. All other functions will fail to complete successfully.

**User Response:** Ensure that the component heading is bracketed by < > characters.

**OC5028** **COMPONENT HEADING NOT RECOGNIZED**

**Explanation:** The component heading does not appear in the Global Maintenance Program validation tables.

**System Action:** For a read request, a default copy of the global module will be returned to the caller. All other functions will fail to complete successfully.

**User Response:** Ensure that the component heading is properly specified.
OC5029  SYNTAX ERROR DETECTED IN CONTROL STATEMENT

**Explanation:** The control card does not have an equals sign (=) separating the keyword from its operand.

**System Action:** For a read request, a default copy of the global module will be returned to the caller. All other functions will fail to complete successfully.

**User Response:** Ensure that an equals sign is used to delimit a control keyword.

OC5030  CONTROL STATEMENT NOT RECOGNIZED FOR COMPONENT

**Explanation:** The control card does not belong to the list of acceptable statements for the active component header.

**System Action:** For a read request, a default copy of the global module will be returned to the caller. All other functions will fail to complete successfully.

**User Response:** Check the previous component header, enclosed in < > characters, to ensure that it accepts the specified control card. If not, place the control card under its proper component heading.

OC5031  SYNTAX ERROR DETECTED IN SUB-COMPONENT STATEMENT

**Explanation:** A sub-component was indicated by the presence of ‘<<’ characters in the first non-blank positions of the control card. No trailing ‘>>’ characters were found for the sub-component.

**System Action:** For a read request, a default copy of the global module will be returned to the caller. All other functions will fail to complete successfully.

**User Response:** Ensure that sub-components are enclosed in << >> characters.

OC5032  SUB-COMPONENT STATEMENT NOT RECOGNIZED

**Explanation:** A sub-component, enclosed in << >> characters, does not appear in the translation tables for the currently active component heading.

**System Action:** For a read request, a default copy of the global module will be returned to the caller. All other functions will fail to complete successfully.

**User Response:** Ensure that the sub-component reflects a valid name, and that it appears under the proper component heading.

OC5033  INVALID CONTROL STATEMENT OPERAND

**Explanation:** Either the control statement operand is too long, or it begins with a left parenthesis character '(' to indicate a sublist, but does not end with a corresponding right parenthesis ')' sublist trailer.

**System Action:** For a read request, a default copy of the global module will be returned to the caller. All other functions will fail to complete successfully.

**User Response:** Ensure that the operand ends with either a blank, or in the case of a sublist, a trailing right parenthesis.

OC5034  UNABLE TO CLOSE RKC2GLBL DATASET

**Explanation:** The CLOSE macro used to release access to the KOC2GLBL dataset returned a non-zero completion code.

**System Action:** For a read request, a default copy of the global module will be returned to the caller. All other functions will fail to complete successfully.

**User Response:** Check the operator console for messages that might explain why the dataset could not be closed. Correct the error and retry the request.

OC5035  NUMERIC OPERAND NOT WITHIN RANGE aa–bb

**Explanation:** The control card operand is not a numeric value that falls within the range denoted by aa–bb.

**System Action:** For a read request, a default copy of the global module will be returned to the caller. All other functions will fail to complete successfully.

**User Response:** Change the operand to a valid numeric setting.

OC5036  SYNTAX ERROR DETECTED IN SUBLIST

**Explanation:** A sublist was specified, enclosed in parentheses, that either contains null values or an extraneous parenthesis.

**System Action:** For a read request, a default copy of the global module will be returned to the caller. All other functions will fail to complete successfully.

**User Response:** Ensure that the sublist is delimited by a single set of parentheses and that no null values are specified.
OC5037  SHUT_OPTIONS MUST BE PURGE/NOPURGE/OPER
Explanation: The SHUT_OPTIONS keyword specifies an invalid operand.
System Action: For a read request, a default copy of the global module will be returned to the caller. All other functions will fail to complete successfully.
User Response: Change the operand to a valid option.

OC5038  OPERAND MUST BE YES/NO
Explanation: The specified keyword does not have an operand of YES or NO.
System Action: For a read request, a default copy of the global module will be returned to the caller. All other functions will fail to complete successfully.
User Response: Change the operand to a valid option.

OC5039  OPERAND MUST BE AUTO/NOAUTO
Explanation: The specified keyword does not have an operand of AUTO or NOAUTO.
System Action: For a read request, a default copy of the global module will be returned to the caller. All other functions will fail to complete successfully.
User Response: Change the operand to a valid option.

OC5040  CPU_THRESHOLDING MUST BE ENABLE/DISABLE/AUTO
Explanation: CPU_THRESHOLDING does not specify a valid operand.
System Action: For a read request, a default copy of the global module will be returned to the caller. All other functions will fail to complete successfully.
User Response: Change the operand to a valid option.

OC5041  DL1_CLOCKS_AND_COUNTERS MUST BE AUTO/NOAUTO/NO
Explanation: The specified keyword does not indicate a valid option.
System Action: For a read request, a default copy of the global module will be returned to the caller. All other functions will fail to complete successfully.
User Response: Change the operand to a valid option.

OC5043  TRANSACTION ID HAS ILLEGAL FORMAT
Explanation: The transaction identifier exceeds four bytes in length.
System Action: For a read request, a default copy of the global module will be returned to the caller. All other functions will fail to complete successfully.
User Response: Specify a valid transaction ID. Note that for the EXCLUDED_TRANS keyword, an asterisk (*) wildcard may only appear at the end of the transaction ID. That is, the EXCLUDED_TRANS control may not include embedded asterisk (*) wildcards.

OC5044  ENTRY NAME EXCEEDS EIGHT CHARACTER LIMIT
Explanation: The name is greater than eight bytes, not including any MCT suffix.
System Action: For a read request, a default copy of the global module will be returned to the caller. All other functions will fail to complete successfully.
User Response: Specify an entry name that is not greater than eight bytes in length.

OC5045  GLOBAL USER EXIT NAME NOT RECOGNIZED
Explanation: The exit name does not appear in the global translation tables.
System Action: For a read request, a default copy of the global module will be returned to the caller. All other functions will fail to complete successfully.
User Response: Specify a valid global user exit name.

OC5046  EXCLUDE LIST EXCEEDS 63 TRANSACTION IDS
Explanation: The sublist contains more entries than can be accommodated in the fixed portion of the global module.
System Action: For a read request, a default copy of the global module will be returned to the caller. All other functions will fail to complete successfully.
User Response: Reduce the number of IDs to 63 or fewer.

OC5047  NO <<GROUP>> SUB-COMPONENT HEADER ACTIVE
Explanation: Control cards that define an OMEGAMON group were found without a corresponding <<GROUP>> sub-component header.
System Action: For a read request, a default copy of the global module will be returned to the caller. All other
functions will fail to complete successfully.

**User Response:** Include a <<GROUP>> sub-component header to properly isolate the different group definitions.

---

**OC5048**

**GROUP NAME EXCEEDS TWELVE CHARACTERS**

**Explanation:** The group name is too long.

**System Action:** For a read request, a default copy of the global module will be returned to the caller. All other functions will fail to complete successfully.

**User Response:** Reduce the length of the group name to 12 bytes or less.

---

**OC5049**

**DUPLICATE GROUP_NAME DETECTED**

**Explanation:** The group name is not unique.

**System Action:** For a read request, a default copy of the global module will be returned to the caller. All other functions will fail to complete successfully.

**User Response:** Select a group name that has not already been defined.

---

**OC5050**

**GROUP NAME CONTAINING LEADING BLANKS IS INVALID**

**Explanation:** The group name starts with a blank.

**System Action:** For a read request, a default copy of the global module will be returned to the caller. All other functions will fail to complete successfully.

**User Response:** Begin the group name with a non-blank character.

---

**OC5051**

**GROUP_NAME=\(\ast\) IS INVALID**

**Explanation:** The group name is set to a single wildcard character.

**System Action:** For a read request, a default copy of the global module will be returned to the caller. All other functions will fail to complete successfully.

**User Response:** Select another group name.

---

**OC5052**

**GROUP TYPE IS NOT TRAN, TERM, PROG, OR LU**

**Explanation:** The group type keyword specifies an invalid operand.

**System Action:** For a read request, a default copy of the global module will be returned to the caller. All other functions will fail to complete successfully.

**User Response:** Choose one of the four valid group types.

---

**OC5053**

**GROUP_NUMBER NOT SPECIFIED FOR GROUP**

**Explanation:** A group number was never assigned to a group definition. Every group must have both a numeric setting and a name.

**System Action:** For a read request, a default copy of the global module will be returned to the caller. All other functions will fail to complete successfully.

**User Response:** Include a GROUP_NUMBER keyword in the group definition.

---

**OC5054**

**GROUP_NAME NOT SPECIFIED FOR GROUP**

**Explanation:** A group name was never assigned to a group definition. Every group must have a unique name.

**System Action:** For a read request, a default copy of the global module will be returned to the caller. All other functions will fail to complete successfully.

**User Response:** Include a GROUP_NAME keyword in the group definition.

---

**OC5055**

**UNABLE TO OBTAIN GROUP TABLE STORAGE**

**Explanation:** Insufficient storage was available to store group definitions.

**System Action:** For a read request, a default copy of the global module will be returned to the caller. All other functions will fail to complete successfully.

**User Response:** Increase the region size available to the job.

---

**OC5056**

**NO <<ID>> SUB-COMPONENT ACTIVE**

**Explanation:** Control cards that define an OMEGAMON group element were found without a corresponding <<ID>> sub-component header.

**System Action:** For a read request, a default copy of the global module will be returned to the caller. All other functions will fail to complete successfully.

**User Response:** Include an <<ID>> sub-component header to properly isolate the different group element definitions.

---

**OC5057**

**OPERAND MUST BE 1–4 CHARACTERS**

**Explanation:** The specified keyword operand is too long.

**System Action:** For a read request, a default copy of the global module will be returned to the caller. All other functions will fail to complete successfully.
User Response: Limit the operand to a maximum length of four characters.

OC5058 OPERAND MUST BE 1–8 CHARACTERS

Explanation: The specified keyword operand is too long.

System Action: For a read request, a default copy of the global module will be returned to the caller. All other functions will fail to complete successfully.

User Response: Limit the operand to a maximum length of eight characters.

OC5059 GENERIC LU IDS ARE NOT SUPPORTED

Explanation: A logical unit group element contains wildcard (*) characters.

System Action: For a read request, a default copy of the global module will be returned to the caller. All other functions will fail to complete successfully.

User Response: Remove the wildcard characters from the logical unit definition.

OC5060 TASKREQ INVALID ID SPECIFIED

Explanation: The TASKREQ operand is not one of the permissible values described in the Configuration and Customization Guide. Valid options include #PAn (n=1–3), #Fnn (nn=01–36), #LPA, #MAG, or #OCD.

System Action: For a read request, a default copy of the global module will be returned to the caller. All other functions will fail to complete successfully.

User Response: Change the operand to specify a valid TASKREQ ID.

OC5061 GROUP ELEMENT NAME IS MISSING

Explanation: A group element definition does not include the name of the corresponding transaction, terminal, program, or logical unit.

System Action: For a read request, a default copy of the global module will be returned to the caller. All other functions will fail to complete successfully.

User Response: Supply one of the four permissible element types.

OC5062 ELIGIBLE_GROUPS NOT SPECIFIED FOR ID

Explanation: A group element was never assigned to one or more groups.

System Action: For a read request, a default copy of the global module will be returned to the caller. All other functions will fail to complete successfully.

User Response: Include a resource header, enclosed in << >> characters, that indicates the name of the resource to be monitored.

OC5064 NUMBER OF IDS EXCEEDS LIMIT OF 2000

Explanation: More than 2000 groups elements have been defined.

System Action: For a read request, a default copy of the global module will be returned to the caller. All other functions will fail to complete successfully.

User Response: Reduce the number of group elements to a maximum of 2000.

OC5065 DATA_STORE_TYPE MUST BE EITHER DSPACE OR FILEOCMP

Explanation: An invalid operand was specified for the Online Data Viewing storage medium.

System Action: For a read request, a default copy of the global module will be returned to the caller. All other functions will fail to complete successfully.

User Response: Select a valid operand for the DATA_STORE_TYPE.

OC5066 FILE NAME EXCEEDS 44 CHARACTERS IN LENGTH

Explanation: The DATA_STORE_FILE_NAME operand is longer than the maximum length permitted for IBM datasets.

System Action: For a read request, a default copy of the global module will be returned to the caller. All other functions will fail to complete successfully.

User Response: Choose a valid dataset name for the Online Data Viewing facility.

OC5067 NO RESOURCE SUB-COMPONENT SPECIFIED

Explanation: Control cards that define resource limiting were found without a corresponding resource sub-component header.

System Action: For a read request, a default copy of the global module will be returned to the caller. All other functions will fail to complete successfully.

User Response: Include a resource header, enclosed in << >> characters, that indicates the name of the resource to be monitored.

OC5068 TRANSACTION COUNT FOR RESOURCE EXCEEDS LIMIT OF 999 ENTRIES

Explanation: The number of either included or excluded transactions for a given resource is too large.
System Action: For a read request, a default copy of the global module will be returned to the caller. All other functions will fail to complete successfully.

User Response: Limit the size of the transaction lists to 999 or less.

OC5069   RTA INTERVAL NOT OF FORM (X,Y,Z)
Explanation: The TIME_INTERVALS operand does not contain three sublist values.

System Action: For a read request, a default copy of the global module will be returned to the caller. All other functions will fail to complete successfully.

User Response: Supply three intervals as described in the Configuration and Customization Guide.

OC5070   RTA INTERVALS ARE NOT PROPER MULTIPLES
Explanation: The TIME_INTERVALS operand does not specify either a second value that is a multiple of the first, or a third value that is a multiple of the second.

System Action: For a read request, a default copy of the global module will be returned to the caller. All other functions will fail to complete successfully.

User Response: Supply an operand in the form (x,y,z), where y is a multiple of x, and z is a multiple of y.

OC5071   TIME_SLOT END TIME BEFORE START TIME
Explanation: The second TIME_SLOT sublist element is less than or equal to the first sublist element.

System Action: For a read request, a default copy of the global module will be returned to the caller. All other functions will fail to complete successfully.

User Response: Select an ending time that is greater than the start time.

OC5072   MORE THAN 48 TIME SLOT DEFINITIONS USED
Explanation: Too many time slots have been defined.

System Action: For a read request, a default copy of the global module will be returned to the caller. All other functions will fail to complete successfully.

User Response: Limit the number of time slot definitions to a maximum of 48.

OC5073   RTA TIME_SLOT NOT OF FORM (HHMM,HHMM)
Explanation: The TIME_SLOT operand has not been specified as a sublist with two entries.

System Action: For a read request, a default copy of the global module will be returned to the caller. All other functions will fail to complete successfully.

User Response: Specify an operand that includes both the start and end times.

OC5074   UNIT_ADDRESS IS MISSING
Explanation: A dedicated session definition does not specify the requisite unit address.

System Action: For a read request, a default copy of the global module will be returned to the caller. All other functions will fail to complete successfully.

User Response: Include a UNIT_ADDRESS keyword for each dedicated session.

OC5075   UNIT_ADDRESS MUST BE 3 OR 4 CHARACTERS
Explanation: The dedicated session unit address has an invalid length.

System Action: For a read request, a default copy of the global module will be returned to the caller. All other functions will fail to complete successfully.

User Response: Specify a proper three- or four-character unit address.

OC5076   USER_PROFILE MUST BE TWO CHARACTERS
Explanation: The user profile suffix has an invalid length.

System Action: For a read request, a default copy of the global module will be returned to the caller. All other functions will fail to complete successfully.

User Response: Select a suffix that is two characters long.

OC5077   NO <<UNIT>> SUB-COMPONENT HEADER ACTIVE
Explanation: Control cards that define a dedicated session were found without a corresponding <<UNIT>> sub-component header.

System Action: For a read request, a default copy of the global module will be returned to the caller. All other functions will fail to complete successfully.

User Response: Include a <<UNIT>> sub-component header to properly isolate the different session definitions.
OC5078 UNABLE TO OBTAIN STORAGE FOR SYMBOL TABLE

Explanation: Insufficient memory was available to build the variable lists that are contained within the global control block definition.

System Action: For a read request, a default copy of the global module will be returned to the caller. All other functions will fail to complete successfully.

User Response: Increase the region size of the job.

OC5079 TOO MANY SUBLIST ENTRIES SPECIFIED, LIMIT=aa

Explanation: The operand, enclosed in parenthesis, contains more than the maximum number of sublist elements allowed, as denoted by aa.

System Action: For a read request, a default copy of the global module will be returned to the caller. All other functions will fail to complete successfully.

User Response: Ensure that the count of sublist entries does not exceed the limit.

OC5080 INCLUDED AND EXCLUDED TRANSACTIONS ARE MUTUALLY EXCLUSIVE

Explanation: A resource limiting definition contains both included and excluded transaction names.

System Action: For a read request, a default copy of the global module will be returned to the caller. All other functions will fail to complete successfully.

User Response: Separate the included and excluded transactions for a given resource by placing them under their own resource sub-component ID.

OC5100 I/O ERROR DETECTED - SYNAD MESSAGE:

Explanation: During a READ or WRITE operation, a permanent I/O error was detected on the global source dataset. Data from the SYNAD message buffer is sent to the operator console.

System Action: For a read request, a default copy of the global module will be returned to the caller. All other functions will fail to complete successfully.

User Response: The SYNAD message buffer describes the source of the problem. Take appropriate action to ensure the success of I/O operations on the global source dataset.

OC5101 UNABLE TO OBTAIN GLOBAL MODULE STORAGE, LENGTH=aaaaaaaa

Explanation: Insufficient memory was available to build the global data area in private storage above the 16MB line.

System Action: For a read request, a default copy of the global module will be returned to the caller. All other functions will fail to complete successfully.

User Response: Increase the region size of the job.

OC5102 INTERVAL_RECORDING=AUTO REQUIRES BOTTLENECK_ANALYSIS=AUTO

Explanation: Two keywords in the global source file are inconsistent.

System Action: For a read request, a default copy of the global module will be returned to the caller. All other functions will fail to complete successfully.

User Response: Change one of the keyword operands to resolve the conflict.

OC5103 WARNING, DLI_CLOCKS_AND_COUNTERS=NO SPECIFIED, NO DLI STATISTICS WILL BE PRODUCED

Explanation: Database collection was defined for DLI. However, no clocks and counters have been requested.

System Action: No DLI statistics will be produced.

User Response: This message serves only as a warning and will not interfere with the creation of the global data area.

OC5104 CLEAR_INTERVAL_LONG MUST BE GREATER THAN CLEAR_INTERVAL_SHORT

Explanation: The bottleneck analysis clear intervals are improperly set.

System Action: For a read request, a default copy of the global module will be returned to the caller. All other functions will fail to complete successfully.

User Response: Alter the bottleneck analysis intervals.

OC5105 GROUP DEFINITION EXCEEDS MAX_GROUPS LIMIT

Explanation: A GROUP_NUMBER keyword specifies an operand that is higher than the MAX_GROUPS setting.

System Action: For a read request, a default copy of the global module will be returned to the caller. All other
functions will fail to complete successfully.

**User Response:** Either increase the MAX_GROUPS limit, or eliminate the group definitions that are beyond the acceptable range.

---

**OC5106**  IMPROPER GROUP ASSIGNMENT FOR ID=aaaaaaaa

**Explanation:** A group element of a particular type has been assigned to a group with a different type. For example, a transaction element includes an eligible group that is defined as containing programs.

**System Action:** For a read request, a default copy of the global module will be returned to the caller. All other functions will fail to complete successfully.

**User Response:** Ensure that group elements defined under the <<ID>> sub-component all specify eligible groups with matching types.

---

**OC5107**  FILE_NAME NOT SPECIFIED FOR DATA_STORE_TYPE=FILEOCMP

**Explanation:** The DATA_STORE_FILE_NAME keyword was not included for an Online Data Viewing type of FILEOCMP.

**System Action:** For a read request, a default copy of the global module will be returned to the caller. All other functions will fail to complete successfully.

**User Response:** Provide a file name for use by the Online Data Viewing facility.

---

**OC5108**  RTA_TIME_SLOT_OVERLAP HAS BEEN DETECTED

**Explanation:** Two or more time slots share a common period.

**System Action:** For a read request, a default copy of the global module will be returned to the caller. All other functions will fail to complete successfully.

**User Response:** Revise the slot definitions to ensure they do not overlap.

---

**OC5109**  LIMIT NOT SPECIFIED FOR RESOURCE aaaaaaaa

**Explanation:** The resource denoted by aaaaaaaa does not include either a KILL or WARN limit.

**System Action:** For a read request, a default copy of the global module will be returned to the caller. All other functions will fail to complete successfully.

**User Response:** Specify a limit that will act as a resource threshold.

---

**OC5110**  LIMITS MAY NOT BE USED WITH EXCLUDED TRANSACTIONS FOR RESOURCE aaaa

**Explanation:** The resource denoted by aaaa contains an EXCLUDED_TRANSACTION keyword in addition to either KILL or WARN limits.

**System Action:** For a read request, a default copy of the global module will be returned to the caller. All other functions will fail to complete successfully.

**User Response:** Remove the KILL_LIMIT and WARN_LIMIT keywords from resource definitions that exclude transactions.

---

**OC5111**  WARN_LIMIT NOT LESS THAN KILL_LIMIT FOR RESOURCE aaaaaaaa

**Explanation:** The limiting thresholds are not properly synchronized.

**System Action:** For a read request, a default copy of the global module will be returned to the caller. All other functions will fail to complete successfully.

**User Response:** Alter the limits to ensure a warning happens prior to a kill.

---

**OC5112**  NUMBER OF IDS EXCEEDS MAX_IDS LIMIT

**Explanation:** Too many group elements have been defined.

**System Action:** For a read request, a default copy of the global module will be returned to the caller. All other functions will fail to complete successfully.

**User Response:** Either increase the MAX_IDS limit, or eliminate enough group elements to satisfy the ID constraints.

---

**OC8900**  RESOURCE LIMIT EXCEEDED: tttt RLaa - xxxxxxxxxxxxxxxx

**Explanation:** The CICS transaction tttt has exceeded the xxxxxxxxxxxxxxxx resource threshold. The ACTION specified in the KOCRLIM macro was WARN or the transaction is executing under CEDF. (To terminate a transaction with abend code RLaa specify ACTION=KILL in the KOCRLIM macro.) xxxxxxxxxxxxxxxx is a text string explaining the reason for the abend code. The abend codes and their associated texts are listed below.

**RLAD**  ADABAS requests  
**RLCP**  CPU time usage  
**RLDB**  DB2 requests  
**RLDC**  DATACOM requests  
**RLDL**  DL/I requests
System Action: Prior to issuing the message, RLIM disables the exceeded threshold to prevent the reissuing of identical messages. All remaining thresholds are kept intact and active. The transaction reverts to normal execution.

User Response: Correct the application or increase the limit value in the KOCRLIM macro, if appropriate.

---

**OC8902**

| HH:MM:SS WARNING LIMIT | EXCEEDED FOR xxxxxxxxxxxxxxxx: TRANS=ttttt, TASKNO=nnnnnnnn, USER=UNKNOWN |

**Explanation:** The CICS transaction tttt has exceeded the xxxxxxxxxxxxxxxx resource threshold. The ACTION specified in the KOCRLIM macro was warn. (To terminate a transaction with abend code RLaa specify ACTION+KILL in the KOCRLIM macro.) xxxxxxxxxxxxxxxx is a text string explaining the reason for the abend code. The abend codes and their associated texts are listed below.

- **RLAD** ADABAS requests
- **RLCP** CPU time usage
- **RLDB** DB2 requests
- **RLDC** DATACOM requests
- **RLDL** DL/I requests
- **RLDS** DSA HWM storage
- **RLED** EDSA HWM storage
- **RLEL** elapsed time
- **RLFC** file requests
- **RLID** IDMS requests
- **RLMQ** MQ requests
- **RLSU** SUPRA requests

**System Action:** Prior to issuing the message, RLIM disables the exceeded threshold to prevent the reissuing of identical messages. All remaining thresholds are kept intact and active. The transaction is abended.

**User Response:** Correct the application or increase the limit value in the KORCLIM macro, if appropriate.
OCJ messages

**KOCJO001**  INITIALIZE COMPLETED NORMALLY.

Explanation: This facility has initialized successfully.
System Action: Processing continues normally.
User Response: None.
Severity: Confirmation.

**KOCJO002**  INTERFACE SHUTDOWN REQUESTED.

Explanation: A request to shut down is being processed.
System Action: The facility terminates all processing.
User Response: None.
Severity: Confirmation.

**KOCJO003**  INTERFACE SHUTDOWN COMPLETED.

Explanation: This facility was in a suspended state when a shutdown was requested. The shutdown request has completed termination of this facility.
System Action: All processing is terminated.
User Response: None.
Severity: Confirmation.

**KOCJO004**  INTERFACE SUSPEND REQUESTED.

Explanation: A request to suspend the facility is being processed.
System Action: The facility disables operations and returns to a suspended state.
User Response: None.
Severity: Confirmation.

**KOCJO005**  INTERFACE INITIALIZED STATUS: SUSPENDED.

Explanation: This facility has partially initialized to a suspended state.
System Action: The facility remains in a suspended state until a resume request is processed.
User Response: None.
Severity: Confirmation.

**KOCJO006**  INTERFACE RESUMED SUCCESSFULLY.

Explanation: A request to resume operations has been processed.
System Action: The facility is now fully initialized and continues processing normally.
User Response: None.
Severity: Confirmation.

**KOCJO007**  ASSEMBLED AGAINST DIFFERENT CICS RELEASE.

Explanation: Initialization failed because the facility determined that it was not assembled using the correct CICS macro libraries.
System Action: Processing terminates.
User Response: Assemble the facility using the correct CICS macro libraries.
Severity: User error.

**KOCJO008**  UNABLE TO DETERMINE START TYPE.

Explanation: The facility was unable to determine how it was invoked. This can occur if the facility was invoked using a mechanism other than those documented.
System Action: The program terminates without taking any action.
User Response: Determine how the program was invoked. If this seems to be an error in the facility, contact IBM Software Support.
Severity: User or internal error.

**KOCJO009**  KOCPLT00 NOT LOCATED. CHECK LINKEDIT.

Explanation: The facility could not locate entry point KOCPLT00 during execution.
System Action: The program terminates without taking any action.
User Response: Check that module KOCFI200 was available during linkedit of the module. Relink the module using the supplied JCL.
Severity: User error.

**KOCJO010**  FAILURE IN CICS INQUIRE.

Explanation: An unexpected response code was received from an EXEC CICS INQUIRE.
System Action: The program terminates without taking any action.
User Response: Use AUXTRACE or CEDF to determine the cause of the unexpected return code. If you determine the error is in this facility, contact IBM Software Support.
Severity: Internal error.
KOCJO011  KEYWORD UNSUPPORTED, PLEASE REENTER.
Explanation: A keyword was entered which is not supported.
System Action: The program terminates without taking any action.
User Response: Refer to the documentation for a list of supported keywords.
Severity: User error.

KOCJO012  JOURNAL NUMBER ERROR.
Explanation: The journal specified in the JOURNUM parameter could not be located in the CICS region.
System Action: The program terminates without taking any action.
User Response: Correct the JOURNUM parameter or the Journal Control Table.
Severity: User error.

KOCJO013  OMEGAMON IS ALREADY ACTIVE.
Explanation: This facility detected that Tivoli OMEGAMON II for CICS on z/OS was already initialized in this CICS region.
System Action: The program terminates without taking any action.
User Response: Code the facility program before KOCOME00 in the PLT or start this facility before an OMEG INIT is issued.
Severity: User error.

KOCJO014  SUSPEND TRANSACTION INACTIVE.
Explanation: An attempt to suspend the facility was made and the background transaction was not active.
System Action: The program terminates without taking any action.
User Response: Determine why the background transaction is not active. If you determine the error is in this facility, contact IBM Software Support.
Severity: User or internal error.

KOCJO015  INTERFACE ALREADY SUSPENDED.
Explanation: An attempt was made to suspend this facility when it was already in a suspended state.
System Action: The program terminates without taking any action.
User Response: None.
Severity: Information.

KOCJO016  JOURNAL OPEN ERROR.
Explanation: An error was detected when attempting to open the CICS journal.
System Action: The program terminates without taking any action.
User Response: Use AUXTRACE or CEDF to determine the cause of the unexpected return code. If you determine the error is in this facility, contact IBM Software Support.
Severity: User or internal error.

KOCJO017  INTERFACE ALREADY ACTIVE.
Explanation: An attempt to initialize or resume this facility was made when it was already active.
System Action: The program terminates without taking any action.
User Response: None.
Severity: Information.

KOCJO018  EXIT ENABLE ERROR.
Explanation: An error was detected when attempting to enable the CICS global user exit.
System Action: The program terminates without taking any action.
User Response: Use AUXTRACE or CEDF to determine the cause of the unexpected return code. If you determine the error is in this facility, contact IBM Software Support.
Severity: User or internal error.

KOCJO019  EXIT EXTRACT ERROR.
Explanation: An error was detected when attempting to extract information relating to the CICS global user exit.
System Action: The program terminates without taking any action.
User Response: Use AUXTRACE or CEDF to determine the cause of the unexpected return code. If you determine the error is in this facility, contact IBM Software Support.
Severity: User or internal error.

KOCJO020  GETMAIN FAILURE.
Explanation: An error was detected when attempting to obtain storage for use as a buffer.
System Action: The program terminates without taking any action.
User Response: Check the size of the ECDSA or
EDSALIM to ensure there is enough space for the buffers specified.

Severity: User or internal error.

KOCJO021  EXIT START FAILURE.

Explanation: An error was detected when attempting to start the CICS global user exit.

System Action: The program terminates without taking any action.

User Response: Use AUXTRACE or CEDF to determine the cause of the unexpected return code. If you determine the error is in this facility, contact IBM Software Support.

Severity: User or internal error.

KOCJO022  EXIT STOP FAILURE.

Explanation: An error was detected when attempting to stop the CICS global user exit.

System Action: The program terminates without taking any action.

User Response: Use AUXTRACE or CEDF to determine the cause of the unexpected return code. If you determine the error is in this facility, contact IBM Software Support.

Severity: User or internal error.

KOCJO023  FREEMAIN FAILURE.

Explanation: An error was detected when attempting to release buffer storage.

System Action: The program terminates without taking any action.

User Response: Use AUXTRACE or CEDF to determine the cause of the unexpected return code. If you determine the error is in this facility, contact IBM Software Support.

Severity: Internal error.

KOCJO024  EXIT DISABLE FAILURE.

Explanation: An error was detected when attempting to disable the CICS global user exit.

System Action: The program terminates without taking any action.

User Response: Use AUXTRACE or CEDF to determine the cause of the unexpected return code. If you determine the error is in this facility, contact IBM Software Support.

Severity: User or internal error.

KOCJO025  FAILURE IN CICS ASSIGN.

Explanation: An error was detected during the processing of an EXEC CICS ASSIGN command.

System Action: The program terminates without taking any action.

User Response: Use AUXTRACE or CEDF to determine the cause of the unexpected return code. If you determine the error is in this facility, contact IBM Software Support.

Severity: Internal error.

KOCJO026  TRANSACTION START FAILURE.

Explanation: An error was detected when attempting to start the background transaction.

System Action: The program terminates without taking any action.

User Response: Ensure that the transaction named in the TRANSID keyword is defined to CICS. Use AUXTRACE or CEDF to determine the cause of the unexpected return code. If you determine the error is in this facility, contact IBM Software Support.

Severity: User or internal error.

KOCJO027  INTERFACE INACTIVE.

Explanation: An attempt was made to suspend or shut down this feature when it was not active in the system.

System Action: The program terminates without taking any action.

User Response: None.

Severity: Information.

KOCJO028  INITIALIZE IS ALREADY IN PROCESS.

Explanation: A request has been issued and an initialization request is currently in process.

System Action: The program terminates without taking any action.

User Response: Retry the request at a later time.

Severity: Information.

KOCJO029  RESUME IS ALREADY IN PROCESS.

Explanation: A request has been issued while a resume request is currently in process.

System Action: The program terminates without taking any action.

User Response: Retry the request at a later time.

Severity: Information.
KOCJO030  SUSPEND IS ALREADY IN PROCESS.
Explanation:  A request has been issued while a suspend request is currently in progress.
System Action:  The program terminates without taking any action.
User Response:  Retry the request at a later time.
Severity:  Information.

KOCJO031  SHUTDOWN IS ALREADY IN PROCESS.
Explanation:  A request has been issued while a shutdown request is currently in process.
System Action:  The program terminates without taking any action.
User Response:  Retry the request at a later time.
Severity:  Information.

KOCJO032  UNKNOWN FUNCTION IN PROCESS.
Explanation:  A request was issued and an unknown function was in progress.
System Action:  The program terminates without taking any action.
User Response:  Contact IBM Software Support.
Severity:  Internal error.

KOCJO033  ERROR OCCURRED DURING CLEANUP DISABLE.
Explanation:  An error occurred while attempting to disable the CICS global user exit after a previous error had occurred.
System Action:  The program terminates without taking any action.
User Response:  Contact IBM Software Support.
Severity:  Internal error.

KOCJO034  ERROR OCCURRED DURING CLEANUP FREEMAIN.
Explanation:  An error occurred while attempting to release buffer storage after a previous error had occurred.
System Action:  The program terminates without taking any action.
User Response:  Contact IBM Software Support.
Severity:  Internal error.

KOCJO035  HANDLE ABEND FAILURE.
Explanation:  An error was detected when processing an EXEC CICS HANDLE ABEND command.
System Action:  The background task terminates.
User Response:  Use AUXTRACE or CEDF to determine the cause of the unexpected error. If you determine the error is in this facility, contact IBM Software Support.
Severity:  Internal error.

KOCJO036  EXIT WORK AREA NOT LOCATED.
Explanation:  The background transaction was unable to locate the global user exit work area for this facility.
System Action:  The background task terminates.
User Response:  Use AUXTRACE or CEDF to determine the cause of the unexpected error. If you determine the error is in this facility, contact IBM Software Support.
Severity:  Internal error.

KOCJO037  ERROR RECEIVED DURING WAIT PROCESSING.
Explanation:  An error was detected when processing an EXEC CICS WAIT command.
System Action:  The background task terminates.
User Response:  Use AUXTRACE or CEDF to determine the cause of the unexpected error. If you determine the error is in this facility, contact IBM Software Support.
Severity:  Internal error.

KOCJO038  ERROR RECEIVED DURING FREEMAIN PROCESSING.
Explanation:  An error was detected when attempting to release buffer storage.
System Action:  The background task terminates.
User Response:  Use AUXTRACE or CEDF to determine the cause of the unexpected error. If you determine the error is in this facility, contact IBM Software Support.
Severity:  Internal error.

KOCJO039  JOURNAL WRITE FAILURE.
Explanation:  An error was detected while attempting to write a completed buffer to the CICS journal.
System Action:  The background task terminates.
User Response:  Use AUXTRACE or CEDF to determine the cause of the unexpected error. If you
determine the error is in this facility, contact IBM Software Support.

**Severity:** User or internal error.

---

**KOCJO040** INTERFACE TRANSACTION HAS ABENDED.

**Explanation:** The background task has abended.

**System Action:** The background task terminates.

**User Response:** Use AUXTRACE or CEDF to determine the cause of the unexpected error. If you determine the error is in this facility, contact IBM Software Support.

**Severity:** Internal error.

---

**KOCJO044** NETNAME NOT PRESENT IN DICTIONARY.

**Explanation:** The global user exit has determined that the network name field is not present in the dictionary.

**System Action:** The exit ceases processing.

**User Response:** Ensure that MCT field 097, NETNAME, is not excluded from performance records.

**Severity:** User error.

---

**KOCJO045** UOWID NOT PRESENT IN DICTIONARY.

**Explanation:** The global user exit has determined that the unit-of-work ID field is not present in the dictionary.

**System Action:** The exit ceases processing.

**User Response:** Ensure that MCT field 098, UOWID, is not excluded from performance records.

**Severity:** User error.

---

**KOCJO046** OMEGBSC NOT PRESENT IN DICTIONARY.

**Explanation:** The global user exit has determined that the OMEGBSC field is not present in the dictionary.

**System Action:** The exit ceases processing.

**User Response:** Ensure that the OMEGBSC EMP is defined in the MCT as described in the IBM Software Support. You cannot change the name of this field when using this facility.

**Severity:** User error.

---

**OMEGAMON II for CICS KILL Services Transaction Abend Codes**

This section lists the transaction abend codes for OMEGAMON II for CICS KILL Services.

**OCKC**

**Explanation:** KILL/KILS/KILU/KILX/KILR commands terminate transactions with an OCKC transaction abend code.

**System Action:** A dump is produced

**User Response:** None

**OCSD**

**Explanation:** If SHUTOPT=PURGE is specified on the KC2GLOB macro in the KC2GLBcc module, OMEGAMON II for CICS purges user transactions waiting for terminal control input. This abend code is produced at CICS shutdown time.

**System Action:** A dump is produced

**User Response:** None
Explaination: As a result of a KILL/FORCE command, an EXEC CICS ABEND has been issued against the task.

System Action: A dump is produced
User Response: None

OMEGAMON II for CICS Resource-Limiting Abend Codes

This section lists the OMEGAMON II for CICS resource-limiting abend codes.

Each of these codes indicates that the transaction exceeded the resource threshold specified in the KOCRLLIM macro of the global module and that ACTION=KILL was specified (or was the default). The task is abended when the transaction exceeds the resource limit and ACTION=KILL is specified, unless the transaction is executing under CEDF. In this case a message is issued to the terminal, ACTION=KILL is ignored, and the transaction continues normal execution.

- **RLAD**  ADABAS requests exceeded.
- **RLCP**  CPU utilization exceeded.
- **RLDB**  DB2 requests exceeded.
- **RLDC**  DATACOM requests exceeded.
- **RLDL**  DL/I requests exceeded.
- **RLDS**  DSA storage utilization exceeded.
- **RLED**  EDSA storage utilization exceeded.
- **RLEL**  Elapsed time exceeded.
- **RLFC**  File control requests exceeded.
- **RLID**  IDMS requests exceeded.
- **RLMQ**  MQ requests exceeded.
- **RLSU**  SUPRA requests exceeded.
Part 3. Appendixes
Glossary

A

attribute. A system or application element being monitored by the OMEGAMON agent, such as Disk Name and Disk Read/Writes Per Second. An attribute can also be a field in an ODBC-compliant database.

attribute group. A set of related attributes that can be combined in a data view or a situation. When you open the view or start the situation, CandleNet Portal retrieves data samples of the selected attributes. Each type of agent has a set of attribute groups.

C

CandleNet Command Center (CCC). A client-server implementation comprising a Candle Management Server, CandleNet Portal Server, CandleNet Portal client, and Candle monitoring agents that collect and distribute data to the Candle Management Server. The CandleNet Command Center has been renamed to OMEGAMON Platform.

CandleNet Portal Server. The OMEGAMON Platform server you log on to. The CandleNet Portal Server connects to the hub Candle Management Server. It enables retrieval, manipulation and analysis of data from IBM Tivoli Candle managed systems.

Candle Management Server. The host data management component for the OMEGAMON Platform.

Candle Management Workstation (CMW). The client component of a CandleNet Command Center environment. It has been mostly replaced by the CandleNet Portal user interface, but is required for some advanced functions.

Configuration Tool. A user interface tool that is used to configure OMEGAMON XE products.

H

historical data management. The procedures applied to short-term binary history files that perform roll off to either a data warehouse or to delimited text files (krallof utility on UNIX or Windows; KBDXTRA on OS/390 Persistent Data Store), and delete entries in the short-term history files over 24 hours old to make room for new entries.

hub Candle Management Server. The Candle Management Server that has been selected to act as the focal point to which all CandleNet Portal Servers, monitoring agents, and remote Candle management servers connect. A remote Candle Management Server passes its collected data to the hub to be made available to clients, creating an enterprise-wide view.

M

monitor interval. A specified time, scalable to seconds, minutes, hours, or days, for how often the Candle Management Server checks to see if a situation has become true. The minimum monitor interval is 30 seconds; the default is 15 minutes.

N

Navigator. The left pane of the CandleNet Portal window. The Navigator Physical view shows your network enterprise as a physical hierarchy of systems grouped by platform. OMEGAMON DE users can also create other views to create logical hierarchies grouped as you specify, such as by department or function.

O

OMEGAMON monitoring agent. The agent scans a managed system for data and sends information back to the CandleNet Portal formatted into table views.

OMEGAMON Dashboard Edition (OMEGAMON DE). The OMEGAMON which includes all the features of CandleNet Portal included with OMEGAMON XE, plus application integration components.

OMEGAMON Platform. A client-server implementation comprising a Candle Management Server, an application server known as the CandleNet Portal Server, the CandleNet Portal client, and monitoring agents that collect and distribute data to a Candle Management Server.

OMEGAMON Extended Edition (OMEGAMON XE). OMEGAMON XE is a suite of Candle products that monitor and manage system and network applications on a variety of platforms. These products keep track of the availability and performance of all parts of your enterprise from one or more designated workstations, and provide reports you can use to track trends and troubleshoot problems.

OMEGAMON Web Services. An open standards-based interface to the OMEGAMON platform using SOAP requests. Any OMEGAMON XE monitor can be dynamically queried, so performance and availability data can be processed by other applications.
R

**runtime environments (RTEs).** A group of runtime libraries that provide an operational environment on a z/OS system.

S

**seeding the Candle Management Server.** Before you can use a monitoring agent, the Candle Management Server to which it reports must be seeded, that is, initialized with application data. Seeding adds product-provided situations, templates, and other sample data to the Candle Management Server Enterprise Information Base (EIB) tables.

**situation.** A set of conditions that, when met, creates an event. A condition consists of an attribute, an operator such as greater than or equal to, and a value. It can be read as, “If - system condition - compared to - value - is true”. An example of a situation is: IF - CPU usage - GT - 90% - TRUE. The expression “CPU usage GT 90%” is the situation condition.

T

**target libraries.** SMP/E-controlled libraries that contain the data from the distribution media.

V

**view.** A windowpane, or frame, in a workspace. It might contain data from an agent in a chart or table, or it might contain a terminal session or browser, for example. A view can be split into two separate, autonomous views.

W

**workspace.** The viewing area of the CandleNet Portal window, excluding the Navigator. Each workspace comprises one or more views. Every Navigator item has its own default workspace and might have multiple workspaces.
## Index

### A

- accessing a Tivoli OMEGAMON XE host session 357
- adding workspaces 16
- application setup
  - user scenario 81
- attribute group
  - automatic initiate descriptor 105
  - bottleneck analysis 106, 315
  - connection analysis 108
  - DB2 summary 111
  - DB2 task activity 111
  - DBCTL summary 112
  - dispatcher summary 114
  - dispatcher TCB modes 115
  - dispatcher TCB pools 117
  - dump analysis 119
  - dump details 119
  - dynamic storage detail 121
  - enqueue analysis 123
  - enqueue analysis tasks 124
- attribute groups
  - auxiliary temporary storage detail 192
  - file control analysis 125
  - file control data table statistics analysis 126
  - file control details 127
  - file control journal and logging 132
  - file control statistics 133
  - file control summary 136
  - intercommunication summary 138
  - internet status 139
  - interval control elements 139
  - Java program analysis 141
  - journal analysis 143
  - JVM analysis 145
  - JVM classcache analysis 146
  - JVM pool statistics 148
  - JVM profile analysis 149
  - link analysis 151
  - log stream analysis 152
  - LSR pool statistics 150
  - MQ connection details 154
  - MVS TCB details 155
  - MVS TCB global 157
  - online data viewing 159
  - pagepool details 160
  - pagepool summary 164
  - program definitions 166
  - region data sets 169
  - region overview 170
  - response time analysis 173
  - response time elements 175
  - RLS lock analysis elements 176
  - service class analysis elements 177
  - service task details 179
  - storage analysis 180
  - subpool details 181
  - system initialization 184

### attribute groups (continued)

- task class analysis 184
- TCP/IP service statistics 186
- TCP/IP statistics 189
- temporary storage detail 191, 195
- temporary storage summary 196
- terminal storage violations 197
- transaction analysis 198
- transaction application programs 200
- transaction definitions 202
- transaction details 204
- transaction EIB details 208
- transaction EIB summary 210
- transaction file details 206
- transaction I/O waits details 211
- transaction manager 213
- transaction other waits analysis 225
- transaction remote summary 215
- transaction statistics 216
- transaction storage analysis 218
- transaction storage violations 220
- transaction timings 221
- transaction TSQueue details 223
- transaction umbrella analysis 224
- transient data queues 226
- transient data summary 227
- units of work 228
- units of work analysis 232
- units of work enqueue analysis 233
- VSAM analysis 234

### attribute overview 103

### attributes

- AID Address 105
- CICS Region Name 105
- Origin Node 105
- Owning System ID 105
- Request ID 105
- Reuse Status 105
- Status 105
- System ID 105
- Terminal ID 106
- Transaction ID 106
- Type 106
- User ID 106

### audience

- expertise xiii
- responsibilities xiii

### automatic initiate descriptor attribute group 105

### automatic initiate descriptor workspace 315

### auxiliary temporary storage detail attribute group 192

### auxiliary temporary storage workspace 341

### B

- banner 3
- books
  - see publications xvi, xix
- bottleneck analysis attribute group 106, 315
C
Candle
names xiv
terminology xiii
transition to IBM xiii
CandleNet Portal
formats for information 12
v195 xiii
v196 xiii
client 97
client tracing 97
collecting historical data 59, 60
collecting logs 97
command
take action 31, 32
configuration
properties editor 77
connection analysis attribute group 108
connection analysis situations 240
connections analysis workspace 316
conventions
typeface xx
creating a link 84
link wizard 63
creating a query 38
creating a situation 91
creating a threshold 90
creating second situations 27
creating situations 26

D
database analysis situations 242
databases attribute group 317
DB2 summary attribute group 111
DB2 summary workspace 317
DB2 task activity attribute group 111
DB2 task activity workspace 317
DBCTL summary attribute group 112
DBCTL summary workspace 318
delete a query 47
deleting workspaces 16
deleting situations 29
directory names, notation xx
disabling historical data 61
dispatcher summary attribute group 114
dispatcher summary workspace 318
dispatcher TCB mode workspace 319
dispatcher TCB modes attribute group 115
dispatcher TCB pool workspace 319
dispatcher TCB pools attribute group 117
displaying situations 28
dump analysis attribute group 119
dump analysis situations 245
dump details attribute group 119
dump details workspace 320
dynamic storage detail attribute group 121
dynamic storage details workspace 320

E
edit a query 46
editing a situation 27
editing with the situation editor 24
editors
query 36
situations 23
workflow 52
education
see Tivoli technical training xx
enqueue analysis attribute group 123
enqueue analysis situations 248
enqueue analysis tasks attribute group 124
enqueue analysis workspace 321
environment variables, notation xx
event
investigating 16
Event workspace, opening 16
expression
link expression editor 66

F
file control analysis attribute group 125
file control analysis workspace 321
file control data table statistics attribute group 126
file control data tables statistics workspace 321
file control details attribute group 127
file control details workspace 322
file control journal and logging attribute group 132
file control journal and logging workspace 322
file control statistics attribute group 133
file control statistics workspace 323
file control summary attribute group 136
file control summary workspace 323
filtering workspaces 16
filters
properties editor 73
functions
link expression editor 66

H
historical data
collecting 59, 60
disabling 61
starting 61
stopping 61

I
identifying the problem 97
intercommunication summary attribute group 138
intercommunication summary workspace 323
internet status attribute group 139
internet summary workspace 324
intersystem communication 316
interval control element workspace 324
interval control elements attribute group 139
investigating an event 16

482 Using IBM Tivoli OMEGAMON XE for CICS on z/OS
J
Java program analysis group 141
Java program analysis workspace 324
journal analysis group 143
journal analysis situations 249
journal analysis workspace 325
JVM analysis group 145
JVM analysis workspace 325
JVM classcache analysis attribute group 146
JVM classcache workspace 326
JVM pool statistics attribute group 148
JVM pool statistics workspace 326
JVM profile analysis attribute group 149
JVM profile analysis workspace 326

L
link analysis attribute group 151
link expression editor 66
link summary workspace 327
link wizard
  creating a link 63
log stream analysis attribute group 152
log stream analysis workspace 327
LSR pool analysis situations 250
LSR pool statistics attribute group 150
LSR pool status workspace 327

M
managing system events 19
manuals
  see publications xvi, xix
menu bar 4
Message Queuing analysis workspace 329
modifying a threshold 83
monitoring communication problems 89
MQ connection details attribute group 154
MQ connection situations 265
MRO 316
multiregion operation 316
MVS TCB details attribute group 155
MVS TCB details workspace 330
MVS TCB global attribute group 157
MVS TCB summary workspace 330

N
navigator 8
notation
  environment variables xx
  path names xx
  typeface xx

O
OMEGAMON
  classic xiv
OMEGAMON DE xiv
OMEGAMON II xiv
OMEGAMON II for CICS
    library xvii
OMEGAMON platform
    library xviii
OMEGAMON XE xiv
OMEGAMON XE for Mainframe Network
    library xvi
online data viewing attribute group 159
online data viewing workspace 330
online publications
  accessing xix
opening the situation editor 26, 27
operators
  link expression editor 66
ordering publications xix
organization of workspaces 311

P
pagepool details attribute group 160
pagepool details workspace 331
pagepool summary attribute group 164
pagepool summary workspace 331
path names, notation xx
program definitions attribute group 166
program definitions workspace 345
properties
  link expression editor 66
  workspace 16
  workspace properties 16
properties editor 71
  configuration 77
  filters 73
  style 78
  thresholds 75
  view properties 72
publications xvi
  accessing online xix
  ordering xix

Q
queries 35
query
  creating 38
  delete 47
  edit 46
  select 44
query editor 36
query results source 43

R
region data sets attribute group 169
region data sets workspace 332
region overview attribute group 170
region overview situations 266
region overview workspace 332
relationship between attributes and reports 12
resolving a problem 86
response time analysis attribute group 173
response time analysis situations 277
response time analysis workspace 333
response time details workspace 333
response time elements attribute group 175
RLS lock analysis attribute group 176
RLS lock analysis situations 277

S
saving a situation 28
scenario 1
   creating a link 84
   modifying a threshold 83
   resolving a problem 86
scenario 2
   creating a situation 91
   creating a threshold 90
   monitoring 89
scenarios
   user 81
select a query 44
server 98
server tracing 98
service analysis situations 278
service class analysis attribute group 177
service class analysis by region workspace 335
service class analysis workspace 335
service level analysis workspace 334
service task
   OMEGINIT 320
service task details attribute group 179
service task details workspace 336
situation
   creating 26, 27
situation editor 23
   editing 24
   opening 26, 27
situations
   connection analysis 240
database analysis 242
deleting 29
displaying 28
dump analysis 245
editing 27
enqueue analysis 248
journal analysis 249
LSR pool analysis 250
managing system events 19
MQ connection 265
   overview 239
region overview 266
response time analysis 277
RLS lock analysis 277
saving 28
service analysis 278

situations (continued)
   starting 29
   stopping 29
storage analysis 285
task class analysis 290
TCP/IP analysis 291
temporary storage analysis 293
transaction analysis 296
temporary data analysis 297
unit of work analysis 302
VSAM analysis 304
sorting workspaces 16
starting historical data 61
starting situations 29
status bar 9
stopping historical data 61
stopping situations 29
storage analysis attribute group 180
storage analysis situations 285
storage analysis workspace 336
style
   properties editor 78
subpool details attribute group 181
subpool details workspace 336
system events
   managing 19
system initialization attribute group 184
system initialization workspace 337

T
take action command
   define 31
   edit 32
   overview 31
Take Action command
   executing a saved command 33
task class analysis attribute group 184
task class analysis situations 290
task class analysis workspace 337
TCP/IP analysis situations 291
TCP/IP service statistics attribute group 186
TCP/IP service statistics workspace 338
TCP/IP statistics attribute group 189
TCP/IP statistics workspace 338
temporary storage analysis situations 293
temporary storage detail attribute group 191, 195
temporary storage details workspace 341
temporary storage queues workspace 339
temporary storage summary attribute group 196
temporary storage summary workspace 340
terminal storage violations attribute group 197
terminal storage violations workspace 342
thresholds
   properties editor 75
title bar 3
Tivoli software information center xix
Tivoli technical training xx
tool bar 4
tracing 97, 98
training, Tivoli technical xx
transaction analysis attribute group 198
transaction analysis situations 296
transaction analysis workspace 342
transaction application programs attribute group 200
transaction definitions attribute group 202
transaction definitions workspace 345
transaction details attribute group 204
transaction details workspace 346
transaction EIB details attribute group 208
transaction EIB details workspace 346
transaction EIB summary attribute group 210
transaction file details attribute group 206
transaction file details workspace 347
transaction I/O waits details attribute group 211
transaction I/O waits details workspace 347
transaction manager attribute group 213
transaction manager workspace 348
transaction other waits analysis attribute group 225
transaction remote summary attribute group 215
transaction remote summary workspace 348
transaction statistics attribute group 216
transaction statistics workspace 349
transaction storage analysis attribute group 218
transaction storage analysis workspace 350
transaction storage violations attribute group 220
transaction storage violations workspace 350
transaction timings attribute group 221
transaction timings workspace 351
transaction TSQueue details attribute group 223
transaction TSQueue details workspace 351
transaction umbrella analysis attribute group 224
transaction umbrella data workspace 352
transient data analysis situations 297
transient data queues attribute group 226
transient data queues workspace 352
transient data summary attribute group 227
transient data summary workspace 353
troubleshooting 97
typeface conventions xx

U
unit of work analysis situations 302
units of work analysis attribute group 232
units of work attribute group 228
units of work enqueue analysis attribute group 233
UOW analysis workspace 353
UOW by region workspace 354
UOW by transaction workspace 355
UOW enqueue analysis workspace 354
UOW workspace 354
user scenarios 81
  application setup 81
  using the Take Action command 86

V
values
  link expression editor 66
variables, notation for xx
view tool bar 7

VSAM analysis attribute group 234
VSAM analysis situations 304
VSAM analysis workspace 355
VSAM RLS lock analysis workspace 356

W
workflows 49
workflows editor 52
workspace 8
dispacher summary 318
service class analysis 335
system initialization 337
temporary storage queues 339
terminal storage violations 342
transient data summary 353
UOW analysis 353
UOW enqueue analysis 354
workspace properties 8
workspace, Event
  opening 16
workspaces 11, 12
  adding 16
  automatic initiate descriptor 315
  auxiliary temporary storage 341
  connections analysis 316
  databases 317
  DB2 summary 317
  DB2 task activity 317
  DBCTL summary 318
deleting 16
  dispatcher TCB mode 319
  dispatcher TCB pool 319
dump details 320
dynamic storage details 320
enqueue analysis 321
file control analysis 321
file control data tables statistics 321
file control details 322
file control statistics 323
file control summary 323
file journal and logging 322
filtering 16
intercommunication summary 323
internet summary 324
interval control element 324
Java program analysis 324
journal analysis 325
JVM analysis 325
JVM classcache 326
JVM pool statistics 326
JVM profile analysis 326
link summary 327
log stream analysis 327
LSR pool status 327
Message Queuing analysis 329
MVS TCB details 330
MVS TCB summary 330
online data viewing 330
pagepool details 331
pagepool summary 331
workspaces  (continued)
  predefined  15
  program definitions  345
  region data sets  332
  region overview  332
  response time analysis  333
  response time details  333
  service class analysis by region  335
  service level analysis  334
  service task details  336
  sorting  16
  storage analysis  336
  subpool details  336
  task class analysis  337
  TCP/IP service statistics details  338
  TCP/IP statistics details  338
  temporary storage details  341
  temporary storage summary  340
  transaction analysis  342
  transaction definitions  345
  transaction details  346
  transaction EIB details  346
  transaction file details  347
  transaction I/O waits details  347
  transaction manager  348
  transaction remote summary  348
  transaction statistics  349
  transaction storage analysis  350
  transaction storage violations  350
  transaction timings  351
  transaction TSQueue details  351
  transaction umbrella data  352
  transient data queues  352
  UOW  354
  UOW by region  354
  UOW by transaction  355
  VSAM analysis  355
  VSAM RLS lock analysis  356
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, Japan

The following paragraph does not apply in 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 publication 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.

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 United Kingdom Laboratories, MP151, Hursley Park, Winchester, Hampshire, England, SO21 2JN. 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 document and all licensed material available for it are provided by IBM under terms of the IBM Customer Agreement, IBM International Programming License Agreement, or any equivalent agreement between us.

Trademarks

The following terms are trademarks of International Business Machines Corporation in the United States, or other countries, or both:

<table>
<thead>
<tr>
<th>Table 4. Trademarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>AF/OPERATOR</td>
</tr>
<tr>
<td>Candle</td>
</tr>
<tr>
<td>Candle Command Center</td>
</tr>
<tr>
<td>Candle Management Server</td>
</tr>
<tr>
<td>CandleNet Command Center</td>
</tr>
<tr>
<td>CandleNet Portal</td>
</tr>
<tr>
<td>CICS</td>
</tr>
<tr>
<td>CICS/ESA</td>
</tr>
<tr>
<td>CICS/MVS</td>
</tr>
<tr>
<td>DB2</td>
</tr>
</tbody>
</table>

Java and all Java-based trademarks and logos are trademarks of Sun Microsystems, Inc. in the United States, other countries, or both.

UNIX is a registered trademark of The Open Group in the United States and other countries.

Windows is a registered trademark of Microsoft Corporation.

Other company, product, and service names may be trademarks or service marks of others.
Sending your comments to IBM

If you especially like or dislike anything about this book, please use one of the methods listed below to send your comments to IBM.

Feel free to comment on what you regard as specific errors or omissions, and on the accuracy, organization, subject matter, or completeness of this book.

Please limit your comments to the information in this book and the way in which the information is presented.

To ask questions, make comments about the functions of IBM products or systems, or to request additional publications, contact your IBM representative or your IBM authorized remarketer.

When you send comments to IBM, you grant IBM a nonexclusive right to use or distribute your comments in any way it believes appropriate, without incurring any obligation to you.

You can send your comments to IBM in any of the following ways:

• By mail, to this address:
  User Technologies Department (MP095)
  IBM United Kingdom Laboratories
  Hursley Park
  WINCHESTER,
  Hampshire
  SO21 2JN
  United Kingdom

• By fax:
  – From outside the U.K., after your international access code use 44–1962–816151
  – From within the U.K., use 01962–816151

• Electronically, use the appropriate network ID:
  – IBM Mail Exchange: GBIBM2Q9 at IBMMAIL
  – IBMLink™: HURSLEY(IDRCF)
  – Internet: idrcf@hursley.ibm.com

Whichever you use, ensure that you include:

• The publication title and order number
• The topic to which your comment applies
• Your name and address/telephone number/fax number/network ID.
Using IBM Tivoli OMEGAMON XE for CICS on z/OS

Version 3.1.0

IBM Tivoli OMEGAMON for CICS on z/OS

Spine information: