

IBM Electronic Service Agent for AS/400
User Guide
Release 4.5

FIRST Edition (July 2000)

This edition applies to release 4.5 of Electronic Service Agent for AS/400 and to all subsequent releases and modifications until otherwise indicated in new editions.

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Preface

This guide provides overview, setup, and prerequisite information, installation and configuration instructions, and user information about Electronic Service Agent for AS/400.

What's new this release?

Previously: **AS/400 Service Director**, a Licensed Product Offering (LPO), was responsible for the hardware problem reporting function, and **AS/400 Service Agent**, distributed as a PTF to the AS/400 Service Director product, was responsible for system inventory collection and transmission.

Currently: The above two products and their appropriate functions are packaged as **Electronic Service Agent for AS/400**. See the section entitled 'What is Electronic Service Agent for AS/400?' for more information.

Who should read this guide?

This guide is intended for use by IBM Service customers and IBM Hardware Service Representatives (CEs) who will have or be assisting with Release 4.5 of IBM Electronic Service Agent for AS/400 on their system with their operating system, OS/400, at V4R5M0.

Who do I contact if I have a question?

U.S. – Dial 1-800-237-5511 and choose option AS/400 for assistance. Mention Direct Access Routing Code 1400 as a fast path to the Rochester Service Agent Support Center.

Outside U.S. - Contact the local support center in your country for assistance.

Terminology

Throughout this guide, “**Electronic Service Agent for AS/400**” is referred to as “**Service Agent.**”

You need to be familiar with the following terms that are used in this manual:

Electronic Customer Support (ECS) - A part of the operating system that allows a customer access to: the question-and-answer (Q & A) function; problem analysis, reporting, and management; IBM product information; and technical information exchange.

Input/output (I/O) - Data provided to the computer or data resulting from computer processing.

Licensed Program Offering (LPO) - A field-developed program that is not supported on the Licensed Program menu. LPOs have separate instructions for installation.

Original Equipment Manufacturer (OEM) - A manufacturer of equipment that can be marketed by another manufacturer.

Program Temporary Fix (PTF) -

1. A temporary solution to or a bypass of a problem diagnosed by IBM that results from a defect in a current unaltered release of a licensed program.
2. In the System Manager program, a means of correcting a problem or potential problem found within a product, or a means of providing an enhancement to a product before a new release of the product is available. PTFs are designed to replace one or more objects in the product. Generally, PTFs are incorporated in a future release of the product.

Reference Code Translation Table (RCTT) - An object that contains reference code and field-replaceable-unit (FRU) code records. These records are used to report hardware errors and to do problem analysis and resolution. The system-recognized identifier for the object type is *RCT.

System Manager/400 - The IBM licensed program that provides the capability for an AS/400 system in a network to function as a service provider for other AS/400 systems in the network.

System Reference Code (SRC) - The characters that identify the name of the unit that detected the condition, and the reference code that describes the condition.

Introduction to Electronic Service Agent for AS/400

This chapter presents general information about Electronic Service Agent for AS/400.

What is Electronic Service Agent for AS/400?

In the past, **AS/400 Service Director**, a Licensed Product Offering (LPO), was responsible for the hardware problem reporting function, and **AS/400 Service Agent**, distributed as a PTF to the AS/400 Service Director product, was responsible for system inventory collection and transmission. Now, these two functions are packaged as **Electronic Service Agent for AS/400**.

Important!: Throughout this guide, especially for on-screen examples and messages, the terms **Service Director** and **Service Agent** are still used. This is a transition release between the previous terminology and new terminology (e.g. **Hardware problem reporting** and **System inventory collection and transmission**).

Electronic Service Agent for AS/400 is a Licensed Product Offering (LPO) that operates on an IBM AS/400, with operating system, OS/400, at V4R5.

Service Agent provides two functions:

- **Hardware problem reporting** – predicts and prevents hardware errors by early detection of potential problems; downloads fixes, and automatically calls IBM Service when necessary.

Note: The Hardware problem reporting function of Service Agent can **only** be activated if your AS/400 is under warranty, or if you have purchased an IBM Maintenance Services Agreement.

- **System inventory collection and transmission** – collects and electronically sends system information to IBM to be used as input for problem analysis and problem prevention functions, and to assist IBM in providing improved service.

What models are supported?

This level of Service Agent supports all AS/400 machine types running operating system, OS/400, V4R5.

What does Service Agent do?

Hardware problem reporting – The Hardware problem reporting function of Service Agent is a Licensed Program Offering (LPO) provided as part of the IBM Service agreement for AS/400s. Its primary purpose is to inform you and, optionally, your service provider (normally IBM Service) whenever a hardware problem has occurred or is about to occur on an AS/400 system. It does this by analyzing entries in two system logs: the **Problem Log** and the **Product Activity Log**. The AS/400 system reports problems and status changes using a table-lookup approach. Entries in the Problem Log and Product Activity Log contain a Reference Code Translate Table (RCTT) field, and a System Reference Code (SRC) field. The RCTT field identifies a table of possible problems or status changes that can occur on a particular hardware device type or family of device types. The SRC field indicates a particular entry within the associated RCTT. Hardware problem reporting uses the RCTT and SRC to determine the severity of each log entry.

The hardware problem reporting function of Service Agent is part of IBM's electronically delivered service strategy, and has been expanded to perform additional functions in addition to its primary purpose. Currently implemented extensions are:

1. Collection of removable media statistics. These statistics are available to the user in report form to assist with the identification of faulty or deteriorating removable media volumes.
2. Identification and automatic downloading of critical PTFs that should be applied to the system as preventative maintenance.
3. Transmission of service-related information about the machine to IBM Service for summary and analysis by other applications.

Hardware problem reporting uses the **Electronic Customer Support (ECS) link** on the AS/400. It can also automatically do problem analysis on those problems before calling for service.

Automatic Problem Analysis – When a system logs a hardware error in the Problem Log, it attempts to process any Problem Determination Procedures (PDPs) which exist for that particular System Reference Code (SRC). Although it is not able to complete the PDPs for every SRC on the AS/400, it completes as much problem diagnosis as possible so that your Hardware Service Representative will have a better understanding of the problem. This means that when a service call is placed to IBM, it contains a list of possible replacement parts with automatic problem analysis.

This function of Service Agent aids IBM Service personnel in problem source identification. System and I/O errors are dynamically monitored and analyzed. *No user intervention is required.* Hardware problem reporting further simplifies analysis for some errors, by giving the Hardware Service Representative (CE) a list of the most probable parts to be replaced and/or alternate plans of action for the problem.

Note: The **Hardware problem reporting** function of Service Agent does **not** support OEM equipment. If Service Agent is installed on AS/400 systems having OEM equipment, call 1-800-IBM-SERV to place a Service call for your Hardware Service Representative (CE) to deactivate the Resource Descriptions for those devices.

System inventory collection and transmission – AS/400 Service Agent is code that runs on your AS/400 to assist IBM in providing service for your system. The System inventory collection and transmission function of Service Agent automatically collects system information and then electronically sends this information to IBM.

The system information that is collected and sent is categorized as follows:

- Contact Information - The contact information for your organization which includes the name of the person in your organization who is responsible for the repair and maintenance of your system, the mailing address of your organization, and the language code indicating your preferred language for program temporary fix (PTF) cover letters.
- Hardware - System hardware information.
- Network Attributes - Network attributes of the system.
- PTF - Program temporary fixes (PTFs) for the installed software resources.
- Software License - License information for products or features on the system.
- Software Products - Installed software resources.
- Service Attributes - Service attributes of the system.
- System Values - A sub-set of System Values.

How does Service Agent work?

Hardware problem reporting – The hardware problem reporting function of Service Agent has the capability to prepare hardware problems which it detects for automatic problem reporting over the ECS line to IBM. The problems can be from errors detected either in the Problem Log or the Product Activity Log on the AS/400.

If this function determines that a service call should be placed, it will automatically send the call to IBM or to a central site's AS/400 with SystemView System Manager/400 (1) installed. If a service call is placed, a message will also be sent to all specified USER IDs (designated during setup) containing detailed problem information.

This function can also be used even if the 'Report problem automatically' (RPTPRBAUTO) parameter is disabled. In this case, the users specified for the Users to receive messages (RPTUSRID) parameter will receive messages about problems that are discovered, and will suggest that a call be placed manually to IBM Service.

System inventory collection and transmission – When you schedule your information to be collected, one or more entries are added to the system job schedule. If you choose to send your information to IBM immediately after it has been collected, a single entry is added. This entry is for the job that collects and sends the information to IBM. If you specify a time at which the data is to be sent to IBM, two entries are added: one entry for the job that collects the information; another entry for the job that sends the information to IBM. These jobs will run once each day at the designated time.

If you choose to run the service data collectors immediately (from the Service Agent Main Menu), after you are prompted for information, the data will be collected and sent to IBM immediately. This function runs interactively. It does not add an entry to the system job schedule, and it does not affect the job schedule entries that may already exist.

At the time the data is ready to be sent to IBM, Service Agent will determine if any of the information has changed from the previous time it was sent. If any of the data has changed, or if the data has not been sent, it will be now sent to IBM. If there are no changes to the data since the previous time it was sent, the data will not be sent again. After IBM has successfully received the data, Service Agent will update information on the AS/400 indicating that the data was received. This can be viewed using the Display service data collectors option from the Service Agent Main Menu.

To send the data, Service Agent connects to IBM through the AT&T Global Network.

(1) SystemView System Manager/400 is an IBM Licensed Program Product which must be purchased by the user. The central site Service Provider Control Point system must be at the highest OS/400 level of the remote systems it is supporting. See Appendix A. for more information on SystemView System Manager/400.

Prerequisites

This chapter presents, in step-by-step format, prerequisite activities that need to be verified or completed prior to installing IBM Electronic Service Agent for AS/400.

Note: **HPR** is a Hardware Problem Reporting prerequisite, and **SCT** is a System Inventory Collection and Transmission prerequisite.

___ 1. **(HPR and SCT)**

Ensure the OS/400 version and release level:

It must be Version 4, Release 5.

___ 2. **(HPR and SCT)**

Ensure you have ***SECOFR** authority with ***ALLOBJ** special authority in your AS/400 user profile.

To check your security authorities, type this command on the AS/400 command line: **DSPUSRPRF** *user profile*

___ 3. **(SCT)**

Ensure you have **Client Access Express for Windows (V4R5M0)** installed. You will use Operations Navigator (a function of **Client Access**) to configure your communications connection to IBM. Service Agent data is sent to IBM using this connection. How to setup this connection is explained later in the 'How to install IBM Electronic Service Agent for AS/400' section of this guide.

For help in connecting your Windows PC to your AS/400 system, consult Client Access Express for Windows – Setup, SC41-5507.

___ 4. **(HPR and SCT)**

Ensure you have available disk space.

The minimum space required is approximately 6 MB.

___ 6. **(HPR)**

Ensure you use an acceptable Date Format (**QDATFMT**) system value.

Hardware problem reporting will not operate properly if the system value **QDATFMT** is JUL – Julian date format. Any other **QDATFMT** value is acceptable.

___ 7. **(HPR)**

Ensure the Problem Log Filter (**QPRBFTR**) system value can be used by hardware problem reporting.

Hardware problem reporting requests permission to change the QPRBFTR system value. The filter object used by the hardware problem reporting is incompatible with other applications.

Note: If you have written your own application program which makes use of The Problem Log Filter function of the AS/400, you will have to make a choice between using that program or activating and running hardware problem reporting.

During installation, you will be prompted to specify ***REPLACE** for the problem log filter on the settings screen. This will change the value of QPRBFTR to **SDFILTER**. This filter is in library **QSVCDRCTR**.

Note: If QPRBFTR is not set to SDFILTER, hardware problem reporting will not function properly. It cannot make any service calls if it does not have use of the Problem Log Filter.

— 8. **(SCT)**

Ensure that TCP/IP is started on your AS/400.

TCP/IP is shipped as part of the base AS/400 operating system. TCP/IP must be started if you are to send system information (such as hardware/software inventories) to IBM using system inventory collection and transmission. If TCP/IP is not running on your system, type **STRTCP** on a command line and press **Enter** to start it.

— 9. **(SCT)**

Ensure that an asynchronous modem with an attached phone line is available.

About your modem:

If you will be sharing the modem with applications requiring synchronous mode operation of the modem, you must use a dual model IBM 7852-400 modem (this modem supports switching between synchronous and asynchronous modes). Examples of applications that require synchronous mode operation of the modem are Electronic Customer Support (ECS) (for instance: **SNDSRVQRS** and **SNDPTFORD**) and hardware problem reporting (formerly Service Director).

If you have an **IBM 7855**, **IBM 7857** or **IBM 7858** modem, then you must use separate modems for system inventory collection and transmission and any other application that requires synchronous operation of the modem.

— 10. **(SCT)**

Ensure you can identify your communications resource. You must determine the resource name of the communications port that your modem is attached to. You

will need this name when you install/setup system inventory collection and transmission.

If you have a dual model **IBM 7852-400** modem and you want to share this modem with system inventory collection and transmission, type **DSPLIND QESLINE** on a command line and press **Enter**. The Display Line Description display appears. Look for the **resource names** field. The resource name is the communications resource that is currently used by your system for ECS and hardware problem reporting (formerly Service Director). Write down this value to record it for use in your setup. Press **F12** to continue.

___ 11. **(SCT)**

Ensure you have an **AT&T Global Network Services** (also called IBM Global Network Telephone OR Access number) phone number. The AT&T phone connection is used to send your system inventory collection and transmission data to IBM. You will have to type this phone number during the Service Agent install and setup process. You need to identify that number and write it down now.

You can identify your local **access number** by accessing this web site and clicking on your appropriate country:

- **Internet:**
<http://www.attbusiness.net/hlpctr/accessnum.html>

How to Obtain, Install and Setup IBM Electronic Service Agent for AS/400

This chapter explains how to obtain and install IBM Electronic Service Agent for AS/400.

How to obtain IBM Electronic Service Agent for AS/400

There are two ways of obtaining Service Agent:

Obtain Service Agent as a pre-loaded product from manufacturing:

To determine if Service Agent has been pre-loaded on your system in manufacturing, do this:

1. Type **DSPSFWRSC** on an AS/400 command line and press **Enter**. A list of software resources is displayed.
2. Press **F11** to display libraries/releases. Press **Page Down** until you locate product ID **5798RZG** under the **Resource ID** column. Press **Enter**.

If Service Agent is installed, continue with the '**How to Install IBM Electronic Service Agent for AS/400**' section below.

If Service Agent is not installed, continue below to obtain Service Agent via CD.

Obtain Service Agent via CD:

U.S. - call 1-800-879-2755, take option 1 for the National Publications Support Center to order a Service Agent CD (**SK3T-5141**).

Outside U.S. - contact the local support center in your country for assistance in ordering the Service Agent CD (**SK3T-5141**).

Once you receive the CD, continue with the '**How to Install IBM Electronic Service Agent for AS/400**' section below.

How to install IBM Electronic Service Agent for AS/400

There are two methods to install and setup Service Agent. They are dependent on how Service Agent was obtained and are as follows:

If Service Agent was obtained as a pre-loaded product from manufacturing, do this:

1. Check system value **QRETSVRSEC**:

Type **WRKSYSVAL QRETSVRSEC** on a command line and press **Enter**.
Type **"2"** in the option field next to system value **QRETSVRSEC** and press **Enter**.

If the **RETAIN** server security data system value is not set to **"1"**, replace the value with **"1"**.

If this system value currently appears as **"1"**, do not replace it. Press **Enter**.
Press **F3** to exit.

2. Type **GO SERVICE** on a command line and press **Enter**.
3. Verify the Country ID in the **Verify Service Director Country Identifier** display. The current value of the country identifier associated with Service Agent is shown.

If the value is correct, press **F12** to continue processing and go to the next step.

If the value is not correct, press **F5** to change it. From the **Change User Profile** display, press **F4** to display a list of valid country IDs. Type the appropriate country ID and press **Enter** twice. You are returned to the **Verify Service Director Country Identifier** display. Press **F12** to continue processing. [Changing this value affects only Service Agent.]

4. From the **Service Director Activation Menu** or the **Service Director Main Menu**, type the option number to **Activate Service Director** and press **Enter**.
5. Read the **International License Agreement for Services Programs**. Press **F6** if you accept this agreement.
6. From the **AS/400 Service Director Activation** display, enter the activation password for the current date and press **Enter**.

U.S. - You can get this activation password from your **Hardware Service Representative (CE)** by calling **1-800-IBM-SERV** and placing a Service call. Your Hardware Service Representative(CE) will call you and give you the activation password for the current day over the phone.

Outside U.S. – Contact the local support center in your country for assistance.

NOTE: The Rochester Service Agent Support Center is NOT authorized to give out activation passwords.

7. Change the parameter values on the **Change Service Director settings** display to meet the needs of your operating environment. Set the Autostart Service Director parameter to ***YES**. Press **Enter**.
8. From the **AS/400 Enhanced Service Director Function Test** display, press **F3** to exit and bypass this test.

NOTE: The documentation for this test is being reviewed. When it is complete, this guide will be updated. If you would like to send a test now, contact your local support center for assistance.

9. Read the **AS/400 Service Director Data Collection and Usage agreement**. Press **F6** if you accept this agreement.
10. Go to install section **“If Service Agent was ordered via CD, do this:”** below and continue with step 13 until the install (setup) is complete.

If Service Agent was ordered via CD, do this:

1. Check system value **QRETSVRSEC**:

Type **WRKSYSVAL QRETSVRSEC** on a command line and press **Enter**. Type **“2”** in the option field next to system value **QRETSVRSEC** and press **Enter**.

If the RETAIN server security data system value is not set to **“1”**, replace the value with **“1”**.

If this system value currently appears as **“1”**, do not replace it. Press **Enter**. Press **F3** to exit.

2. Insert the **CD** into the CD-ROM device.

Note to Thailand system users:

If your system is located in Thailand, the job **CCSID** must be changed before you install Electronic Service Agent for AS/400.

Thailand systems only!

Do this to change the job to the new value:

Type **DSPJOB OPTION(*DFNA)** on a command line and press **Enter**.

Locate and write down the **Coded character set identifier** value. You will need this value for a later step.

Press **Enter**.

Type **CHGJOB CCSID(838)** on a command line and press **Enter**. Continue to the next step.

3. Type **LODRUN DEV(XXXXX)** on a command line (where XXXXX is the name of the AS/400 CD-ROM device) and press **Enter**.
4. Verify the Country ID in the **Verify Service Director Country Identifier** display. The current value of the country identifier associated with Service Agent is shown.

If the value is correct, press **F12** to continue processing and go to the next step.

If the value is not correct, press **F5** to change it. From the **Change User Profile** display, press **F4** to display a list of valid country IDs. Type the appropriate country ID and press **Enter** twice. You are returned to the **Verify Service Director Country Identifier** display. Press **F12** to continue processing. [Changing this value affects only Service Agent.]

5. From the **Service Director Activation Menu** or the **Service Director Main Menu**, type the option number to **Activate Service Director** and press **Enter**.
6. Read the **International License Agreement for Services Programs**. Press **F6** if you accept this agreement.
7. From the **AS/400 Service Director Activation** display, enter the activation password for the current date and press **Enter**.

U.S. - You can get this activation password from your **Hardware Service Representative (CE)** by calling **1-800-IBM-SERV** and placing a Service call. Your Hardware Service Representative will call you and give you the activation password for the current day over the phone.

Outside U.S. – Contact the local support center in your country for assistance.

Important!: A Support Center Representative is NOT authorized to give out activation passwords.

8. Change the parameter values on the **Change Service Director settings** display to meet the needs of your operating environment. Set the Autostart Service Director parameter to ***YES**. Press **Enter**.

9. From the **AS/400 Enhanced Service Director Function Test** display, press **F3** to exit and bypass this test.

Note: The documentation for this test is being reviewed. When it is complete, this guide will be updated. If you would like to send a test now, contact your local support center for assistance.

10. Read the **AS/400 Service Director Data Collection and Usage** agreement. Press **F6** if you accept this agreement.
11. From the **Service Director Activation Menu** or the **Service Director Main Menu**, type the option number for the **Service Agent Main Menu** and press **Enter**.
12. Choose **Change Service Data Collectors** from the **Service Agent Main Menu** and press **Enter**.
13. Change the parameter values on the **Change Service Collectors** display to meet the needs of your operating environment. Set the Autostart Service Director parameter to ***YES**. Press **Enter**.
14. The **Configure Service Connection** screen is displayed. Press **F12** to bypass the instructions displayed.

The Service Agent communications connection must be configured using Client Access. You will be instructed to return to the Service Agent Main Menu after configuring the communications connection using Client Access. Go to the next step.

15. Open **Client Access**.
16. Open **AS/400 Operations Navigator**.
17. Expand your AS/400 server.
18. Expand **Network**.
19. Expand **Point-to-Point**.
20. Right-click on **Connection Profiles**. Select **New IBM Global Network Dial Connection**.
21. Read the **IBM Global Network (IGN) Dialer Wizard** text and click **Next**.
22. Select **IBM electronic services application** and click **Next**.

If this application is grayed out, it indicates that the connection profile already exists. Click **Cancel** and contact your local support center for assistance.

23. Select a communications **resource** and click **Next**.

If there are no resources available to select, you do not have the required hardware to support Point-to-Point Protocol (PPP) connections. Only PPP connections are supported in OS/400 V4R5.

24. Select **Create a new line** and click **Next**. Type a Line name (QYSDSRVL is recommended) and Description of your choice. Click **Next**.
25. Click the drop-down arrow and select a Modem. [Do not modify Modem Properties]. Click **Next**.

About your modem:

If you will be sharing the modem with applications requiring synchronous mode operation of the modem, you must use a dual model **IBM 7852-400** modem (this modem supports switching between synchronous and asynchronous modes). Examples of applications that require synchronous mode operation of the modem are Electronic Customer Support (ECS) (for instance: **SNDSRVQRS** and **SNDPTFORD**) and hardware problem reporting (formerly Service Director).

If you have an **IBM 7855**, **IBM 7857** or **IBM 7858** modem, then you must use separate modems for system inventory collection and transmission and any other application that requires synchronous operation of the modem.

26. Fill in the **Primary** and, if desired, **Backup IBM Global Network Telephone numbers** (also called AT&T Global Network Services Telephone OR Access number) phone number. Remember to include any dial-out and long distance access numbers. These are the numbers you wrote down in the prerequisites section above. Click **Next**.
27. Your communications connection to IBM has been configured. Click **Finish**.
28. Click **No** in response to the verification prompt.
29. Close **Client Access**.

You will now return to the Service Agent Main Menu. If, on your AS/400, you are no longer at this screen, type **GO SERVICE** from a command line and press **Enter**. From the **Service Director Main Menu**, choose **Service Agent Main Menu** and press **Enter**. Go to the next step.

30. From the **Service Agent Main Menu**, choose **Verify service connection** to test the connection with IBM and press **Enter**. The **Verify operation completed successfully** message appears.
31. From the **Service Agent Main Menu**, choose **Run service data collectors** and press **Enter**. The **Run Service Collector** display appears.

Type ***YES** for **Collect service data**.

Type ***YES** for **Send service data to IBM**.

Type ***ALL** for **Service data**.

Press **Enter**. Wait while Service Agent collects and sends your data.

You are returned to the **Service Agent Main Menu** when sending is complete.

The **Service Collection process *ALL completed successfully** message appears.

32. From the **Service Agent Main Menu**, choose **Display service registration information** and press **Enter**. Print or write down all of the Service Agent registration information that appears on your display. You will use this data in the **Register your AS/400 systems** step below. Press **Enter**.

Note: Gather this information for each system that you want to register. Be aware that both the registration Number and Registration Key may change each time you choose the Display service registration information option. This feature is provided for your security. If your system is already registered, there is no need to register it again.

Note to Thailand system users:

If your system is located in Thailand, the job **CCSID** must be changed back to its original value (now that you have finished installing Electronic Service Agent for AS/400).

Thailand systems only!

Do this to change the job back to the original value:

Type **CHGJOB CCSID(____)** on a command line and press **Enter**.

(Type the original **CCSID (____)** value you wrote down in Step 1 above).

Continue to the next step.

33. You must order, load and apply PTF number **SF66641** (product ID **5798RZG**) for Electronic Service Agent for AS/400 using your normal PTF order process (FAX, ECS, or the AS/400 web site).

If you require assistance:

- **USA:** Call 1-800-237-5511, and choose the **AS/400** menu option to speak with a support representative.
- **Outside USA:** Contact the local support center in your country for assistance.

34. Your Service Agent install and setup is complete.

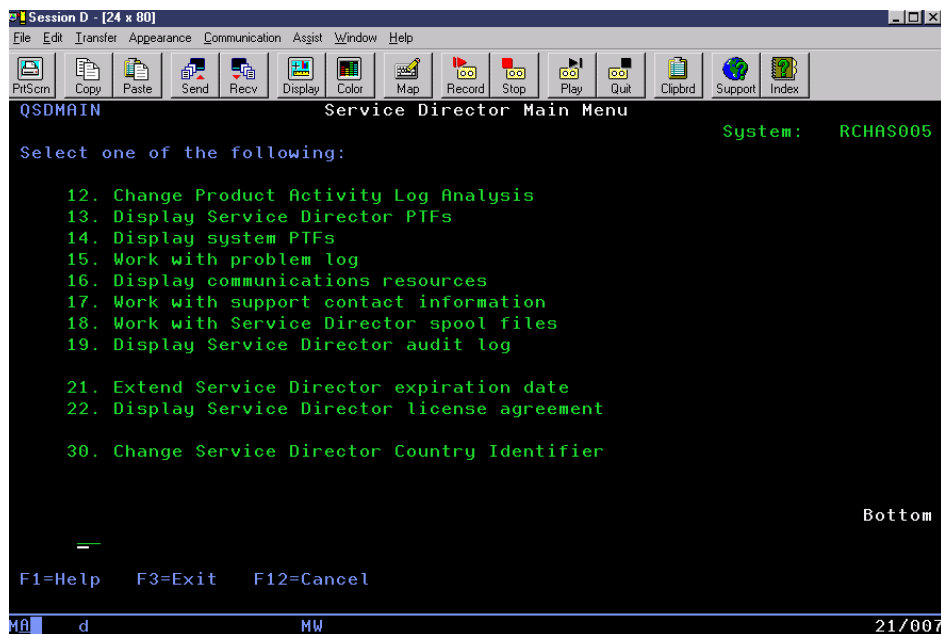
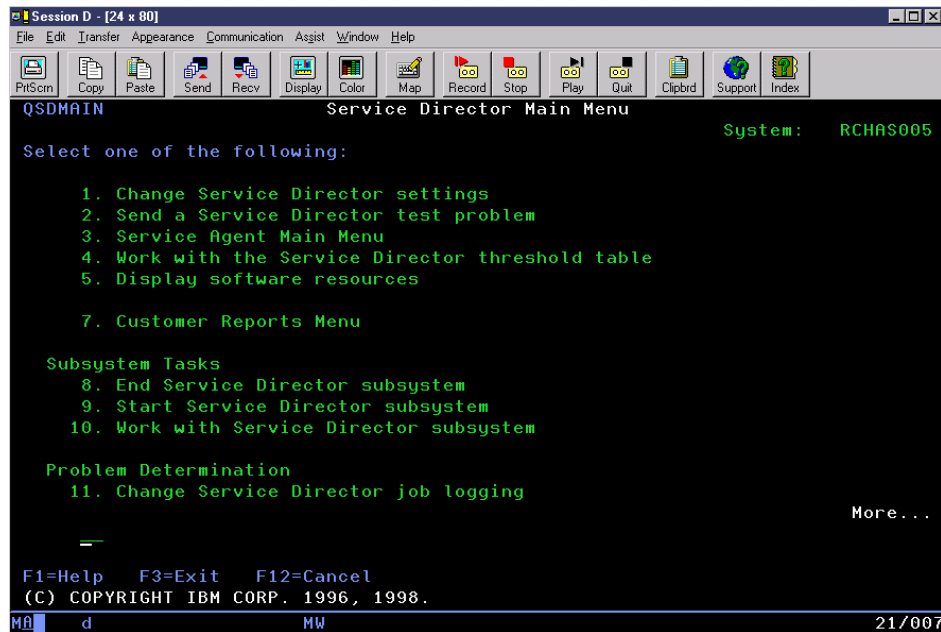
IMPORTANT NOTE:

IBM Electronic Service Agent for AS/400 is now a part of IBM Electronic Services for AS/400. IBM Electronic Services for AS/400 is an exclusive service capability offered to customers that contract for services with IBM. Point your browser to the IBM Electronic Services Web site login page <http://www.ibm.com/services/electronic> to learn more information about IBM Electronic Services for AS/400, including how to register your AS/400(s) and how to view your AS/400 system information.

Menus

Hardware problem reporting Main Menu

To access the Service Director Main Menu, type **GO SERVICE** on the command line.



Service Director Main Menu

Main Menu Option 1: Change Service Director Settings

```

Change Service Director (CHGSD)

Type choices, press Enter.

Report problem automatically . . *YES          *YES, *NO
Replace problem log filter . . . *REPLACE      *REPLACE
PAL analysis interval . . . . . 4             1, 2, 3, 4, 6, 8, 12, 24
Base PAL start hour . . . . . 00            00-23
Report remote problem . . . . . *YES          *YES, *NO
Report problem to:
  Control point name . . . . . *IBMSRV        Name, *IBMSRV
  Network ID . . . . . *NETATR              Name, *NETATR
Users to receive messages:
  User ID . . . . .                      Name
  + for more values
                                     *SYSOPR      *SYSOPR
                                     QSRV         QSRV
Enable line control . . . . . *NO            *YES, *NO

F3=Exit  F4=Prompt  F5=Refresh  F12=Cancel  F13=How to use this display
F24=More keys
More...

```

```

Change Service Director (CHGSD)

Type choices, press Enter.

Configuration object:
  Line description . . . . .          Name
  Controller description . . . . .    Name
  Device description . . . . .        Name
  Device description . . . . .        Name
  + for more values
Enable automatic PTF monitor . . *YES          *YES, *NO
Automatic PTF monitor:
  Schedule day . . . . . *TUE          *TUE, *WED, *THU
  Download PTFs . . . . . *YES          *YES, *NO, *CVRLTR
Run priority . . . . . 51            1-99
Run PAL analysis routines . . . *YES          *YES, *NO
Send configuration data . . . . *YES          *YES, *NO
Autostart Service Director . . . *YES          *YES, *NO
Send PAL Analysis Message . . . *YES          *YES, *NO

F3=Exit  F4=Prompt  F5=Refresh  F12=Cancel  F13=How to use this display
F24=More keys
Bottom

```

Change Service Director Settings

Report problem automatically (RPTPRBAUTO)

Specifies whether service calls are to be placed automatically by Service Director.

The possible values are:

***YES**

Service Director will automatically place service calls.

***NO**

Service Director will not automatically place service calls. The users specified for the Users to receive messages (RPTUSRID) parameter will receive messages about a problem that is discovered.

Replace problem log filter (RPLFTR)

Allows Service Director to replace the system value QPRBFTR. Service Director uses a filter called SDFILTER. This must be in place for Service Director to function.

Note: This field is required the first time CHGSD is used. The value entered will be saved.

The possible value is:

***REPLACE**

Service Director replaces the system value QPRBFTR with SDFILTER.

PAL analysis interval (INTERVAL)

Specifies how often, in hours, to check the product activity log for problems to report.

The possible values are:

- 1 Service Director checks the product activity log every hour.
- 2 Service Director checks the product activity log every 2 hours.
- 3 Service Director checks the product activity log every 3 hours.
- 4 Service Director checks the product activity log every 4 hours.
- 6 Service Director checks the product activity log every 6 hours.
- 8 Service Director checks the product activity log every 8 hours.
- 12 Service Director checks the product activity log every 12 hour.
- 24 Service Director checks the product activity log every 24 hours.

Base PAL start hour (STRAUTORPT)

Specifies the base hour of the day used to determine when product activity log (PAL) analysis runs. PAL analysis will run at the intervals specified (INTERVAL) using the 'Base PAL start hour' as the base hour. PAL analysis will run 10 minutes after the hour.

For example, 00 means to base the hour at midnight. With the PAL analysis interval at 4, it will run at 00:10, 04:10, 08:10 and 12:10.

The possible values are:

00

PAL analysis base hour is 00:10.

hour

Specify a valid value that ranges from 00 through 23 for the base hour.

Report remote problem (RPTRMTPRB)

Specifies whether this system reports problems on behalf of a network of systems.

Note: This system must be the host system and have SystemView System Manager/400 installed.

The possible values are:

***YES**

This system reports problems in the problem log that were sent from a remote system in a network environment.

***NO**

This system does not report problems in the problem log that were sent from a remote system in a network environment.

Report problem to (RPTSRVPVD)

Specifies the name of the service provider to receive automatic notification of a problem.

Notification of a problem will automatically be sent to the system specified by this parameter when RPTPRBAUTO(*YES) is specified. This system must be in the list of service providers. Use the Work with Service Providers (WRKSRVPVD) command to see the service providers defined for your system.

The possible Control Point Name values are:

***IBMSRV**

IBM Service Support is the service provider.

control-point-name

Specify the control point name of the service provider that will be notified of local system problem.

The possible Network ID values are:

***NETATR**

The service provider is in the local network.

network-ID

Specify the network ID of the service provider that is notified of local system problem.

Users to receive messages (RPTUSR)

Specifies the user profiles to receive messages about Service Director activity.

Note: *SYSOPR (QSYSOPR) and QSRV cannot be changed.

The possible values are:

user_ID

Specify the user profile names of the users to receive Service Director messages.

***SYSOPR**

The system operator (QSYSOPR) will receive messages sent by Service Director.

QSRV

QSRV will receive messages sent by Service Director.

Enable line control (LINECTL)

Service Director uses the ECS line to report a problem. If any line description sharing the ECS resource is not in a varied off status, Service Director cannot report the problem. Activating this feature will vary the listed line, controller and device descriptions off while the line is in the connect pending status only. After the ECS line is used, the line, controller, and device descriptions are varied back on. This program will not take any action for any other line status. Enter the names of the line, controller, and device descriptions on the CFGOBJ parameter.

***YES**

The line control feature is enabled.

***NO**

The line control feature is not enabled.

Configuration object (CFGOBJ)

Service Director uses the ECS line to report a problem. If the ECS line is not in a varied off status, Service Director cannot report the problem.

Note: You must ensure the device is attached to the controller and the controller is attached to the line for all entries.

The possible line description value is:

line-description

Specify the line description that is to be varied off if the ECS line cannot be varied on.

The possible controller description value is:

controller-description

Specify the controller description that is to be varied off if the ECS line cannot be varied on.

The possible device description value is:

device-description

Specify the device description that is to be varied off if the ECS line cannot be varied on.

Enable automatic PTF monitor (AUTOPTFMON)

Specifies whether Service Director will electronically (using ECS) check the system to determine if PTFs deemed critical by IBM Service are on the system. If PTFs are needed, fix request entries containing the PTF numbers to be ordered will be created into the problem log.

The possible values are:

***YES**

The function is enabled.

***NO**

The function is not enabled.

Automatic PTF monitor (AUTOPTF)

Specifies the day of the week the automatic PTF processing is to take place and whether any PTFs identified as being needed by the system are downloaded to the system.

Note: The available days from which to choose are shown when F4 is pressed. This provides an even distribution of the IBM Service system resources, thereby maintaining high availability of the IBM Service system.

The day of the week can be selected, however the time of day cannot, for the same reason stated above. This Automatic PTF monitor function may not run at the same time of day each time it runs.

The possible schedule day values are:

***SUN**

The function will run on Sunday.

***MON**

The function will run on Monday.

***TUE**

The function will run on Tuesday.

***WED**

The function will run on Wednesday.

***THU**

The function will run on Thursday.

***FRI**

The function will run on Friday.

***SAT**

The function will run on Saturday.

The possible Download PTFs values are:

***YES**

The PTFs that are found to be needed during the automatic PTF processing will be downloaded to the system.

Important!: PTFs that are downloaded will NOT be loaded or applied.

***NO**

The PTFs that are found to be needed during the automatic PTF processing will not be downloaded to the system. Fix request entries containing the PTF numbers to be ordered will exist in the problem log.

***CVRLTR**

The PTF cover letters for the PTFs that are found to be needed during the automatic PTF processing will be downloaded to the system. Fix request entries containing the PTF numbers to be ordered will exist in the problem log, but only the associated cover letters will be ordered.

Run priority (RUNPTY)

Specifies the run priority for Service Director. Run priority is a value ranging from 1 (highest priority) through 99 (lowest priority) that represents the importance of the job when it competes with other jobs for the machine resources.

The possible values are:

51

The run priority for Service Director is 51.

machine-run-priority

Specify the run priority for Service Director.

Run PAL analysis routines (RPTERRLOG)

Specifies whether product activity log analysis routines are run and errors are reported.

Note: Before a problem found in the product activity log is reported, product activity log analysis routines are run. These analysis routines can be CPU intensive.

The possible values are:

***YES**

Product activity log analysis routines are run. A problem from the product activity log is reported.

***NO**

Product activity log analysis routines are not run. A problem from the product activity log is not reported. There will be no media analysis data or product activity log data available for reports.

Send configuration data (SND CFGDTA)

Specifies whether configuration data is sent to the service provider periodically. When a customer places an upgrade order, this data is used to assist IBM in the ordering process. If *IBMSRV was not specified as the service provider, the configuration data is sent to the service provider who may send it to IBM.

Note: Use the Work with Hardware Products (WRKHDWPRD) command to make sure the configuration data is current.

The possible values are:

***YES**

Configuration data is sent to the service provider periodically.

***NO**

Configuration data is not sent.

Start Service Director Automatically (STRSDAUTO)

Specifies whether the QYSDAJE Autostart Job Entry should be added to the QSYSWRK subsystem description to start the Service Director subsystem.

This option can be used to automatically start Service Director during the IPL process without modifying the system startup program.

This option will have no effect if the QSYSWRK subsystem does not exist or is not started.

The possible values are:

***YES**

Specify that the Service Director subsystem should be started automatically.

***NO**

Specify that the Service Director subsystem should not be started automatically.

Send PAL analysis message (SNDPALMSG)

Specifies whether a message should be sent to the list of users to receive Service Director messages each time Service Director begins analyzing the product activity log.

Note: A change to this parameter will take effect the next time the Service Director subsystem (QSVCDRCTR) is restarted.

The possible values are:

***YES**

The users identified in the USERS parameter will receive messages each time Service Director starts a product activity log analysis cycle. A record will also be created in the Service Director audit log.

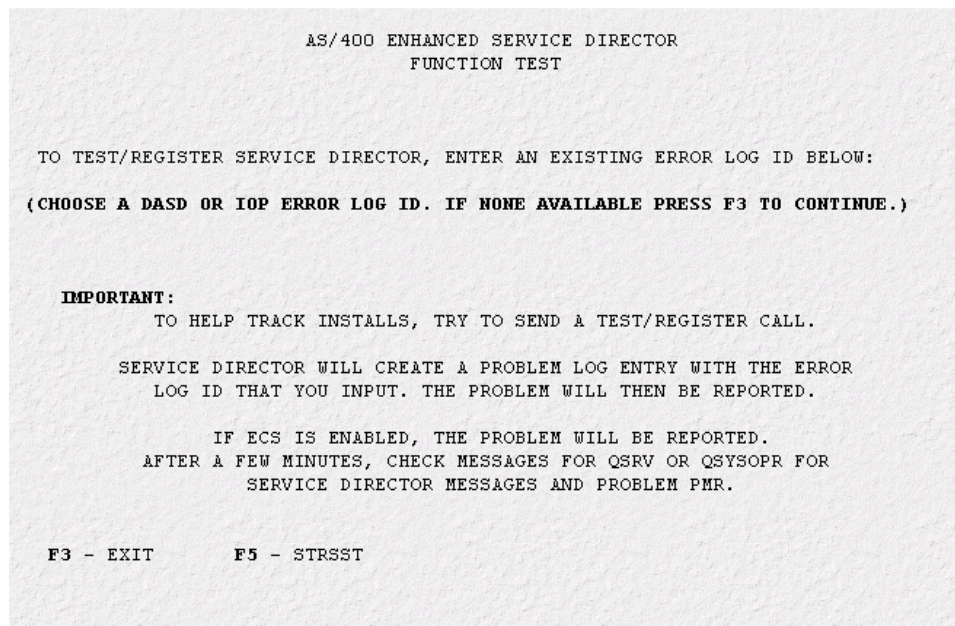
***NO**

Service Director will not send messages to users each time it starts a product activity log analysis cycle. A record will still be created in the Service Director audit log.

Main Menu Option 2:

Send a Service Director test problem

Sends a test problem to the service provider using the specified error log ID. The problem is sent using ECS.



AS/400 Service Director Function Test

Main Menu Option 3:

Service Agent Main Menu

Displays the Service Agent Main menu which allows you to select Service Agent tasks.

Main Menu Option 4: Work with the Service Director threshold table

The threshold table editor is used to do the following:

- Make SRCs (System Reference Codes) active
- Make SRCs inactive
- Add SRCs to the table
- Add new devices

Service Director uses the threshold table to determine what action to take for new Problem Log entries and new Product Activity Log entries.

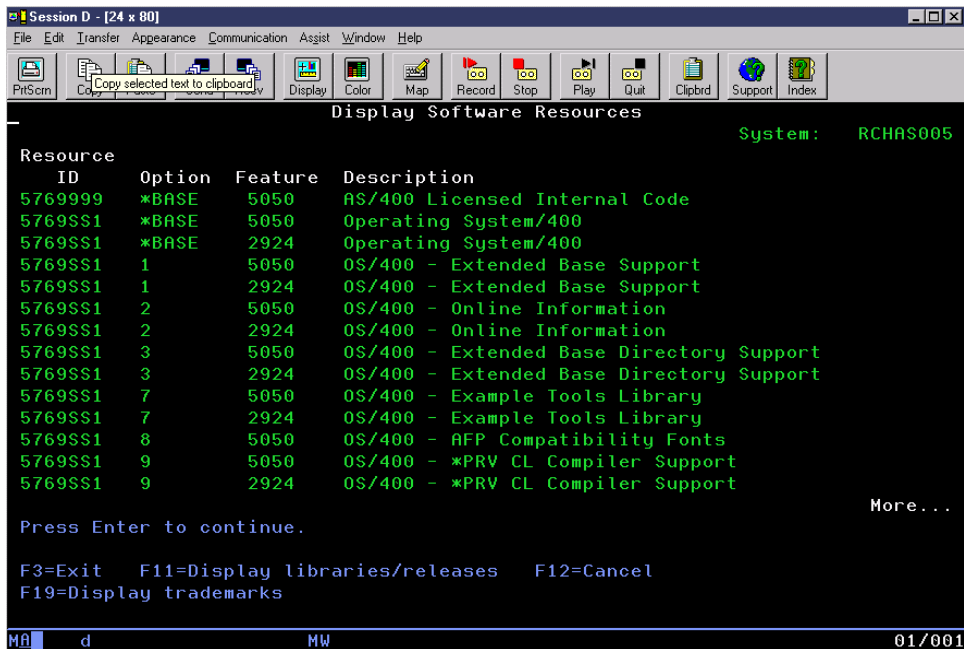
Note: Thresholds should only be changed on the recommendation of your IBM CE or Support Representative.

Work with Device Types			
Type options, press Enter.			
1=Add 2=Change 5=Display 12=Work with SRCs			
Opt	Device	Opt	Device
	0000		261*
	1***		2621
	2440		2623
	2605		2624
	2609		2626
	260*		262*
	2610		2637
	2612		263*
	2613		2644
	2614		2661
	2617		2663
	2618		2664
	2619		2665
			2666
			266A
			2717
			2720
			2722
			2726
			2800
			2801
			2802
			2809
			3422
			3430
			3450
			3480
			3490
			3494
			3495
			3570
			3590
			3995
			5032
			603*
			6050
			6054
			6055
			6056
More...			
F3=Exit F5=Refresh F10=Display threshold table log F12=Cancel			
F17=Locate			

Service Director Threshold Table

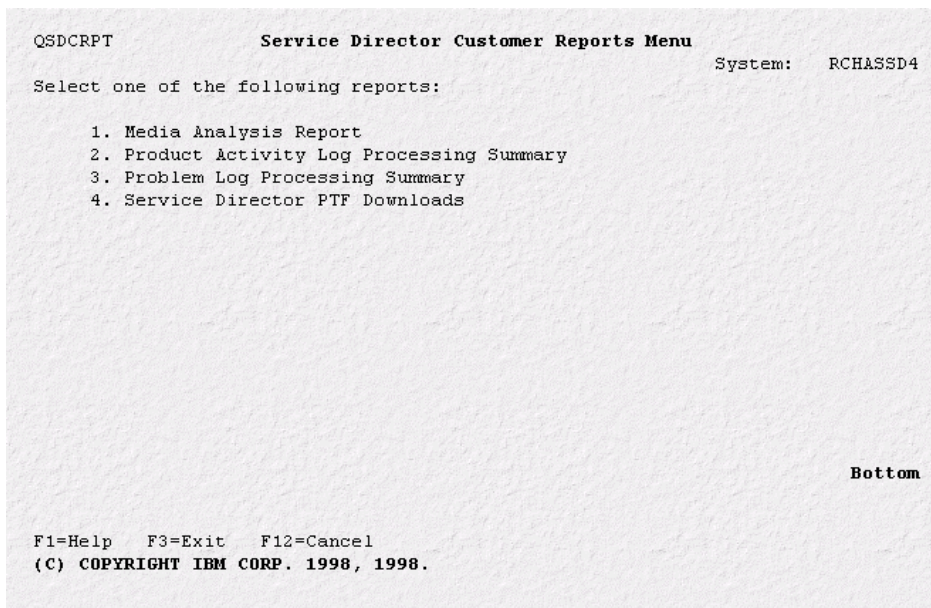
Main Menu Option 5: Display Software Resources

This screen shows the name and maintenance level information for installed software resources. Press **F11** to view the library and release currently installed.



Display Software Resources

Main Menu Option 7: Customer Reports Menu



Service Director Customer Reports Menu

Customer Reports Menu Options

Media Analysis Report

This option allows you to display tape volume statistics. You can use this program to separate media failures from drive failures.

Note: Only media with valid Volume IDs will show up on the Media Events Screens. PAL analysis routines must be active for these statistics to be collected. Use the Change Service Director settings menu option to specify *YES for run PAL analysis routines (RPTERRLOG) to activate the PAL analysis routines. Some non-IBM tape drives do not report Volume Statistics data that can be interpreted by the AS/400 Service Director, so errors occurring on those drives will not be counted in the totals on these screens.

A function of the AS/400 Service Director allows you to delete a specific Volume ID from this report, so that the accumulation of statistics for that ID will start over. You may want to delete an ID if you replace a tape, for example, but continue to use the same Volume ID on a new tape.

Service Director Media Analysis						
Report Date and Time : 10/01/99 17:06:55						
System Name : RCHASSD4						
Type options, press Enter.						
4=Delete						
Opt	Volume	Type	PRE	GB/PRE	TRE	
	AGAIN	6385	N/A	-	0	-
	ARGON2	6385	N/A	-	0	-
	BACKH	6385	N/A	-	0	-
	BACKX	6385	N/A	-	0	-
	DEADBK	6385	N/A	-	0	-
	DEADB2	6385	N/A	-	0	-
	EMEAPF	6385	N/A	-	0	-
	JBACK2	6385	N/A	-	0	-
	MADISO	6385	N/A	-	0	-
	NEWTON	6385	N/A	-	0	-
						More...
F3=Exit F6=Print report F11=Display Write Error Data F12=Cancel						
(C) COPYRIGHT IBM CORP. 1996, 1998.						

Service Director Media Analysis

These media statistics can never cause an automatic service call to be initiated by Service Director. This function is intended as an aid to diagnosing possible media problems.

Media Analysis Screen Definition

An alternate display function key **F11** has been added to the media screen of the AS/400 Service Director that will give you more information regarding, for example: Read Error Data, Write Error Data, Bytes and Mounts and Dates and Times.

Report Date and Time

Indicates the date and time the report was generated.

System Name

Name of the system.

Option

Type a valid value in the option column next to the media record and press Enter.

4=Delete

Type 4 in the option column to delete the media record from the media report.

Volume

The Volume ID of the tape that was read and/or written.

Type

Device type of the drive on which the tape was last mounted.

PRE

Total permanent read errors on this volume.

GB/PRE

The number of gigabytes read divided by the number of permanent read errors.

TRE

Total temporary read errors on this volume.

MB/TRE

The number of megabytes read divided by the number of temporary read errors.

PWE

Total permanent write errors on this volume.

GB/PWE

The number of gigabytes written divided by the number of permanent write errors.

TWE

Total temporary write errors on this volume.

MB/TWE

The number of megabytes written divided by the number of temporary write errors.

Bytes

The number of bytes read and or written.

Mounts

The number of times this tape was mounted to do a read operation or a write operation.

Note: If both read and write operations were performed, it will be counted as a write mount.

First Date and Time

The date and time of the first mount for which Service Director gathered statistics.

Latest Date and Time

The date and time of the most recent mount for which Service Director gathered statistics.

Product Activity Log Processing Summary

This option displays the number of product activity log entries processed by Service Director. Use this option to find error trends over the last several months. The count contain both errors and statistical records, so a high record count *might not* indicate a problem.

The Product Activity Log contains some data that is *not* necessarily critical to the operation of your system. This includes such things as informational errors. Part of Service Director's function is to filter extraneous information that is not vital to proper system performance. *Do not be alarmed by the count values.* Different components of the system output data to the Product Activity Log can be virtually ignored unless the counts for that device exceed a threshold number which is set within Service Director.

The most critical errors on the system are automatically reported to the Problem Log. These errors do not need to exceed any threshold number before Service Director starts problem analysis.

Note: PAL Analysis routines must be active for these statistics to be collected. Use the Change Service Director settings menu option and specify *YES for Run PAL analysis routines to activate the PAL analysis routines.

Product Activity Log Processing Summary				
Report Date and Time : 10/01/99 17:07:23				
System Name : RCHASSD4				
Month	Dasd Entries	Tape Entries	Processor Entries	Total Entries
06/1999	0	0	40	40
05/1999	7	1	76	84
04/1999	3	0	97	100
03/1999	5	0	273	278
02/1999	0	0	93	93
01/1999	0	0	19	19
				Bottom
F3=Exit F6=Print report F12=Cancel				
(C) COPYRIGHT IBM CORP. 1996, 1998.				

Product Activity Log Processing Summary

Report Date and Time

Indicates the date and time the report was generated.

System Name

Name of the system.

Month

The month and year in which the listed activity occurred.

DASD Entries

The number of product activity log entries related to DASD that were processed during the month.

Tape Entries

The number of product activity log entries related to tape, optical or diskette devices processed during the month.

Processor Entries

The number of product activity log entries processed during the month that were not related to DASD, tape, diskette or optical storage devices.

Total Entries

The total number of product activity log records processed by Service Director during the month.

Problem Log Processing Summary

This option displays the number of problem log entries processed by Service Director during the last several months. You can also use this option to find problem trends over the last several months. In general, the AS/400 system records problems requiring attention into the Problem Log. High or increasing problem rates may indicate a noise or user problem.

If your system is acting as a central site for reporting problems for a remote network, this screen will include problems reported from the remote sites as well as from your own local system. The columns will normally not add up to the total entries shown, because the total includes entries in the Problem Log not handled by Service Director, including problems which are not PREPARED.

Service Director Problem Log Processing Summary						
Report Date and Time : 10/01/99 10:24:21						
System Name : RCHASSD4						
Month	Local Entries	Remote Entries	Total Entries	Service Provider Calls	Entries From PAL	
07/1999	3	1	4	4	0	4
06/1999	2	0	2	2	0	0
F3=Exit F6=Print report F12=Cancel						
(C) COPYRIGHT IBM CORP. 1996, 1998.						
						Bottom

Service Director Problem Log Processing Summary

Report Date and Time

Indicates the date and time the report was generated.

System Name

Name of the system.

Month

The month and year in which the listed activity occurred.

Local Entries

The number of entries related to local problems processed during the month.

Remote Entries

The number of entries related to remote problems processed during the month. Remote problems are from AS/400 machines that report problems to this machine.

Total Entries

The total number of problem log entries processed by Service Director during the month.

Processor Entries

The number of calls placed to the Service Provider during the month.

Entries from PAL

The number of problem log entries processed by Service Director during the month that were created by Service Director because of activity detected in the Product Activity Log.

Test Problems

The number of problem log entries that were created as Service Director test problems processed during the month.

Service Director PTF Downloads

This option lists the PTFs identified by Service Director that are needed to fix or prevent system problems. PTFs ordered are downloaded via the ECS line. PTF orders are contained in the Problem Log. This list includes PTFs that were ordered and does *not* indicate if the PTFs have been applied.

If the PTFs were ordered via a remote system, the system origin will be listed on this screen.

Service Director PTF Download information							
Report Date and Time : 10/01/99 17:07:58							
System Name : RCHASSD4							
Type options, press Enter.							
5=Display PTF							
Opt	PTF ID	Product	Problem ID	Origin System	SRC		
	MF21044	5769999	9916053681	RCHA .RCHASSD4	*AUTOPTF	06/09/99	
	MF21621	5769999	9916053681	RCHA .RCHASSD4	*AUTOPTF	06/09/99	
	MF21541	5769999	9916053681	RCHA .RCHASSD4	*AUTOPTF	06/09/99	
	MF21770	5769999	9916053681	RCHA .RCHASSD4	*AUTOPTF	06/09/99	
	MF22238	5769999	9916053681	RCHA .RCHASSD4	*AUTOPTF	06/09/99	
	MF22447	5769999	9916053681	RCHA .RCHASSD4	*AUTOPTF	06/09/99	
	MF22414	5769999	9916053681	RCHA .RCHASSD4	*AUTOPTF	06/09/99	
	MF22354	5769999	9916053681	RCHA .RCHASSD4	*AUTOPTF	06/09/99	
	MF22452	5769999	9916053681	RCHA .RCHASSD4	*AUTOPTF	06/09/99	
	MF22297	5769999	9916053681	RCHA .RCHASSD4	*AUTOPTF	06/09/99	
	MF22291	5769999	9916053681	RCHA .RCHASSD4	*AUTOPTF	06/09/99	
							More...
F3=Exit F6=Print report F12=Cancel							
(C) COPYRIGHT IBM CORP. 1996, 1998.							

PTF Download Information

Report Date and Time

Indicates the date and time the report was generated.

System Name

Name of the system.

Option

Type a valid value in the option column next to the PTF record and press enter.

5=Display PTF

Issues the Display Program Temporary Fix (DSPPTF) command for the PTF listed in this record.

PTF ID

The number assigned to identify the PTF.

Product

The identifier of the product to which this PTF belongs.

Problem ID

The identifier of the problem log record that contains a request for this PTF.

Origin System

Network ID and control point name of the system on which the problem log entry that requested the PTF originated.

SRC

The system reference code from the problem this PTF is intended to address. If the PTF is identified by the Automatic PTF Download function, this value will be *AUTOPTF.

Date

The date on which the PTF was identified as being required.

Main Menu Option 8:**End Service Director subsystem**

Ends the Service Director (QSVCDRCTR) subsystem. The jobs are ended immediately. No new jobs or routing steps are started in the subsystem after this command is run. A message will be issued at the bottom of the screen to indicate that the subsystem is ending.

```
CUSTMAIN                Service Director Main Menu                System:  RCHASSD4

Select one of the following:

    1. Change Service Director settings
    2. Send a Service Director test problem

    4. Work with the Service Director threshold table
    5. Display software resources

    7. Work with Service Director statistics

Subsystem Tasks
    8. End Service Director subsystem
    9. Start Service Director subsystem
   10. Work with Service Director subsystem

Problem Determination
   11. Change Service Director job logging

More...
```

F1=Help F3=Exit F12=Cancel
Ending of subsystem QSVCDRCTR in progress.

End Service Director Subsystem

Main Menu Option 9: Start Service Director subsystem

Starts the Service Director (QSVCDRCTR) subsystem using the Service Director subsystem description. A message will be issued at the bottom of the screen to indicate that the subsystem is being started.

```
CUSTMAIN                Service Director Main Menu                System:  RCHASSD4

Select one of the following:

    1. Change Service Director settings
    2. Send a Service Director test problem

    4. Work with the Service Director threshold table
    5. Display software resources

    7. Work with Service Director statistics

Subsystem Tasks
    8. End Service Director subsystem
    9. Start Service Director subsystem
   10. Work with Service Director subsystem

Problem Determination
   11. Change Service Director job logging

More...
```

F1=Help F3=Exit F12=Cancel
Subsystem QSVCDRCTR in Library QSVCDRCTR being started.

Start Service Director Subsystem

Main Menu Option 10: Work with Service Director subsystem

Shows the performance and status information for jobs that are currently active in the Service Director (QSVCDRCTR) subsystem. Jobs that run in the Service Director subsystem are alphabetized by job name and indented under the subsystem monitor job field with which they are associated.

```

                                Work with Active Jobs
                                10/01/99 08:31:12
                                RCHASSD4
CPU %:      .0      Elapsed time: 00:00:00      Active jobs: 95

Type options, press Enter.
2=Change  3=Hold  4=End  5=Work with  6=Release  7=Display message
8=Work with spooled files  13=Disconnect ...

Opt  Subsystem/Job  User      Type  CPU %  Function
-----
QSVCDRCTR  QSYS          SBS      .0
QSDPALMON  QSVCDRCTR     BCH      .0  DLY-12:10:00  DLYW
QSDPRBMON  QSVCDRCTR     BCH      .0  PGM-QSDPRBMON  DEQW

Parameters or command
==>
F3=Exit      F5=Refresh  F10=Restart statistics  F11=Display elapsed data
F12=Cancel   F23=More options  F24=More keys

```

Work with Service Director Subsystem

Checking Status on WRKACTJOB Screen

If the status of any job in the Service Director subsystem, QSVCDRCTR, is either ICFW or MSGW, Service Director requests you to reply to a message. You may want to periodically check for one of these abbreviations in the Status column of the preceding screen. Service Director will not continue running the job(s) in question until you go to the message queue for QSYSOPR and answer the reply message(s) from Service Director.

Normally, you should see jobs QSDPRBMON, and QSDPALMON. If not, do the following:

End the QSVCDRCTR subsystem with option 8 from the Service Director Main Menu.

Note: This option may take some time to finish depending upon system load.

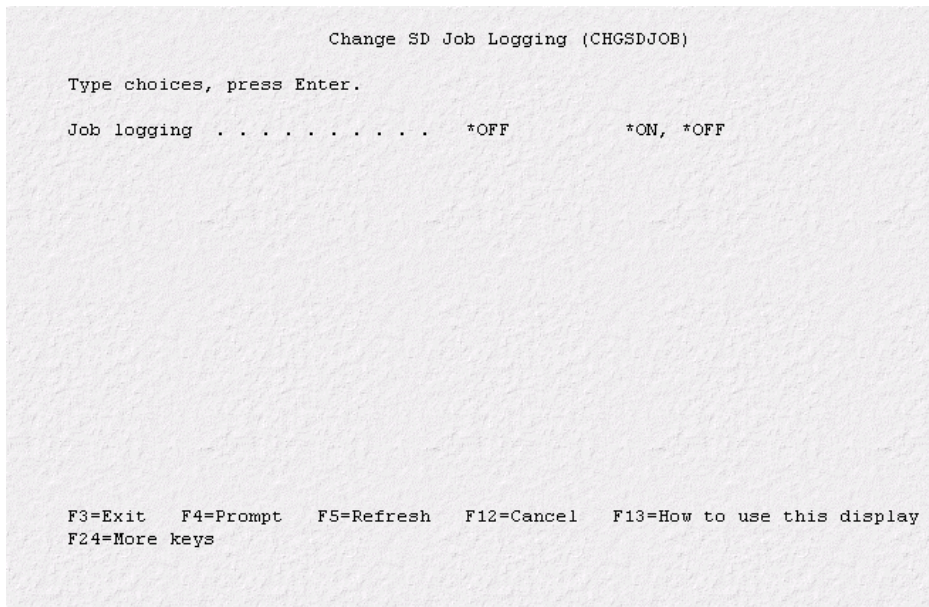
Start the QSVCDRCTR subsystem with option 9 from the Service Director Main Menu.

If, after a few minutes, you do not see the two jobs listed above, call your local support center for assistance.

Note: The job QSDPALMON will *not* be present if the setting for Run PAL Analysis Routines (RPTERRLOG) is set to *NO.

Main Menu Option 11: Change Service Director job logging

This option is used to turn job logging for the Service Director jobs on or off. The default for this parameter is *OFF.



Change Service Director Job Logging

Main Menu Option 12: Change Product Activity Log Analysis

Changes parameters to the next product activity log analysis cycle. The parameters that can be changed are the date and time from which product activity log records are analyzed, and the time at which the next analysis cycle will be initiated.

Note: PAL analysis routines must be active for this function. Use the Change Service Director settings menu option and specify *YES for Run PAL analysis routines (RPTERRLOG) to activate the PAL analysis routines.

```
Change SD PAL Analysis (CHGSDANL)

Type choices, press Enter.

Start analysis immediately . . . *YES          *YES, *NO
Analysis date and time . . . . . *SAME        *CHANGE, *SAME

F3=Exit  F4=Prompt  F5=Refresh  F12=Cancel  F13=How to use this display
F24=More keys
```

Bottom

Change Product Activity Log Analysis

```
Change SD PAL Analysis (CHGSDANL)

Type choices, press Enter.

Start analysis immediately . . . *YES          *YES, *NO
Analysis date and time . . . . . *SAME        *CHANGE, *SAME
Start date . . . . . Date
Start time . . . . . Time

F9=All parameters  F11=Keywords  F14=Command string  F24=More keys
```

Bottom

Change Product Activity Log Analysis

Main Menu Option 13: Display Service Director PTFs

Shows the current Service Director (5798RZG) PTF activity. From this display, you can display the PTF details and print or display the PTF cover letter.

```

                                Display PTF Status
                                System:  RCHASSD4

Product ID . . . . . : 5798RZG
IPL source . . . . . : ##MACH#B
Release . . . . . : V4R4M0

Type options, press Enter.
  5=Display PTF details  6=Print cover letter  8=Display cover letter

PTF                                IPL
Opt ID      Status                 Action
SF56153    Cover letter only      None
SF55103    Save file only         None
SF52692    Cover letter only      None
SF50873    Superseded             None
SF45828    Superseded             None

F3=Exit  F11=Display alternate view  F17=Position to  F12=Cancel

                                Bottom

```

Display Service Director PTFs.

Main Menu Option 14: Display system PTFs

Shows the current PTF activity within a product. Products without PTFs are not displayed. From this display, you can display the PTF details and print or display the PTF cover letter. Each time you press enter on this screen, you will see PTF activity for a different product.

Display PTF Status

System: RCHASSD4

Product ID : 5769999
 IPL source : ##MACH#B
 Release of base option : V4R4MO L00

Type options, press Enter.
 5=Display PTF details 6=Print cover letter 8=Display cover letter

Opt	PTF ID	Status	IPL Action
	TL99068	Temporarily applied	None
	TL98342	Superseded	None
	TL98265	Superseded	None
	TL98195	Superseded	None
	TL98140	Superseded	None
	TL98132	Superseded	None
	TL98083	Superseded	None
	TL98045	Superseded	None
	TL98041	Superseded	None

More...

F3=Exit F11=Display alternate view F17=Position to F12=Cancel

Display PTF Status

Main Menu Option 15: Work with problem log

Shows descriptions of system problems, both system detected and user-perceived problems.

Work with Problems

System: RCHASSD4

Position to Problem ID

Type options, press Enter.
 5=Display details 6=Print details 8=Work with problem
 9=Work with alerts 12=Enter text

Opt	Problem ID	Status	Problem Description
	9722546149	OPENED	Line failed. Automatic recovery started.
	9722537116	OPENED	Line failed. Automatic recovery started.
	9722534139	OPENED	Controller failed. Automatic recovery started
	9722533939	OPENED	Line failed. Automatic recovery started.
	9722533494	OPENED	Line failed. Automatic recovery started.
	9722039888	PREPARED	PTF summary information requested.
	9722039851	PREPARED	PTF summary information requested.
	9722039720	PREPARED	PTF summary information requested.
	9722039527	PREPARED	PTF summary information requested.
	9722039373	PREPARED	PTF summary information requested.

More...

F3=Exit F5=Refresh F6=Print list F11=Display dates and times
 F12=Cancel F15=Sort by Date F18=Work with alerts

Work with Problems

Main Menu Option 16: Display communications resources

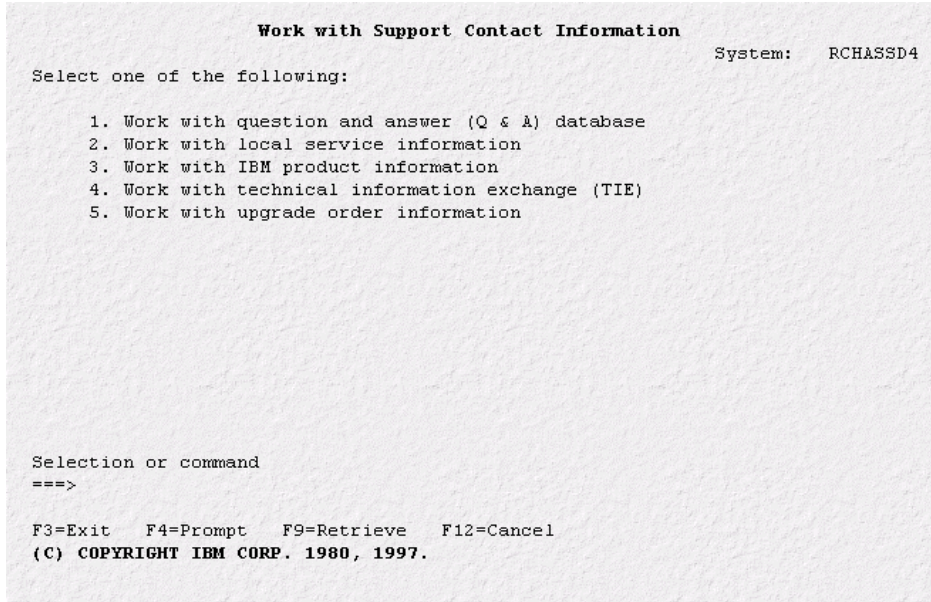
Allows you to display, print, or direct to an output file information about local communications resources on the system. The Display Communications Resources display shows all communication IOPs, IOAs, and ports installed on the system.

Display Communication Resources				
Type options, press Enter.				System: RCHASSD4
5=Display configuration descriptions 7=Display resource detail				
Opt	Resource	Type	Status	Text
	CMB01	9164	Operational	Combined function IOP
	LINO5	2720	Operational	Comm Adapter
	CMNO6	2720	Operational	V.24 Port Enhanced
	LINO1	2850	Operational	File Server IOA
	CMNO1	2724	Operational	Token-Ring Port
	CMNO2	2723	Operational	Ethernet Port
	CMNO3	6B00	Operational	Virtual Port
	LINO2	285A	Operational	LAN Adapter
	CCO1	6616	Operational	File Server IOP
	LINO3	6149	Operational	LAN Adapter
	CMNO4	6149	Operational	Token-Ring Port
	LINO4	6B00	Operational	Virtual Adapter
	CMNO5	6B00	Operational	Virtual Port
F3=Exit F5=Refresh F6=Print F12=Cancel				Bottom

Display Communication Resources

Main Menu Option 17: Work with support contact information

Select this option to display or change the contact information your service provider will use to send parts or assistance to your organization. From this screen you will take option 2, Work with local service information. The next screen will allow you to display or change this information.



Work with Support Contact Information

Main Menu Option 18:

Work with Service Director spool files

Shows all Service Director spooled files currently on the system.

Main Menu Option 19:

Display Service Director audit log

Shows a running log of Service Director activity on the system.

```

                                Display Physical File Member
File . . . . . :  AUDITLOG           Library . . . . . :  QSVCDRCTR
Member . . . . . :  AUDITLOG         Record . . . . . :  1
Control . . . . . :                   Column . . . . . :  1
Find . . . . . :
*...+...1...+...2...+...3...+...4...+...5...+...6...+...7...+...
97/08/13 15:41:28  CUSTOMER ACCEPTED TERMS AND CONDITIONS
97/08/13 15:41:32  ACTIVATION PASSWORD VERIFIED
97/08/13 15:42:08  SERVICE DIRECTOR 4.4 ACTIVATED
97/08/13 15:42:10  SUBSYSTEM STARTING
97/08/14 00:10:07  PROC NEW DATA
97/08/14 00:10:11  QSDANCNTL: PRODUCT ACTIVITY LOG RAN
97/08/14 08:10:02  QSDANCNTL: NO PRODUCT ACTIVITY LOG DATA TO PROCESS
97/08/14 08:31:01  SUBSYSTEM STARTING
                      ***** END OF DATA *****

F3=Exit  F12=Cancel  F19=Left  F20=Right  F24=More keys
Bottom

```

Service Director Audit Log

Main Menu Option 21:

Extend Service Director expiration date

Allows the expiration date of the Service Director product to be extended. Your local IBM Service Representative will provide you with the extension password.

```

AS/400 SERVICE DIRECTOR
EXPIRATION EXTENSION

EXTENSION PASSWORD

PRESS ENTER TO ACCEPT          F3 EXIT

```

Service Director Expiration Extension

Main Menu Option 22:
Display Service Director license agreement

Shows the license agreement for the AS/400 Service Director program.

Main Menu Option 30:
Change Service Director Country Identifier

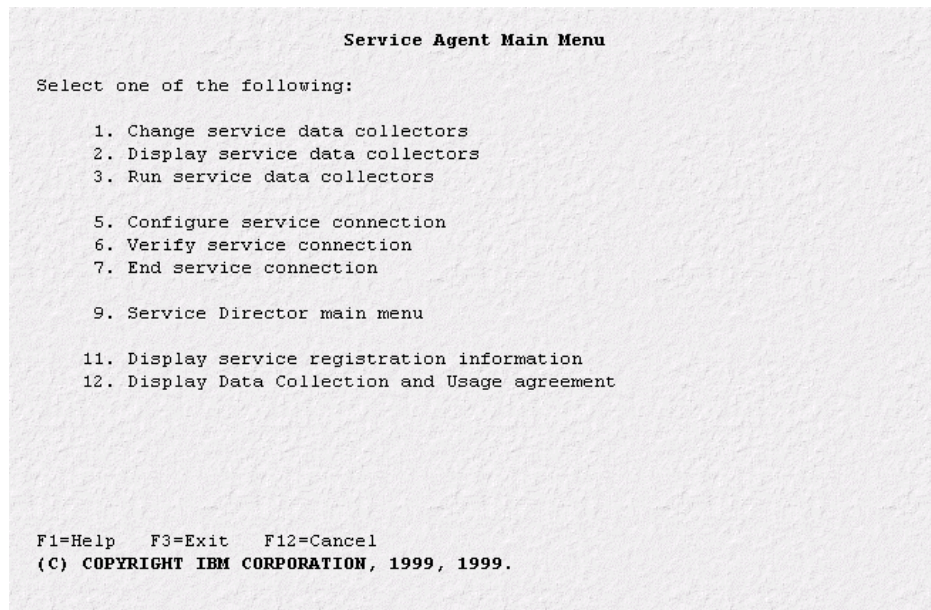
Specifies the country identifier used for this user. Press the **PF4** key from the Country ID prompt (CNTRYID parameter) to see a list of valid identifiers.

System inventory collection and transmission Main Menu

To access the Service Agent Main Menu, type **GO SERVICE** on the command line.

If Service Director has been activated, the Service Director Main Menu is displayed. Choose **option 3** to continue to the Service Agent Main Menu.

If Service Director has not been activated, the Service Director Activation Menu is displayed. Choose **option 3** to continue to the Service Agent Main Menu.



Service Agent Main Menu

Main Menu Option 1: Change service data collectors

The Change Service Collectors (CHGSRVCOL) command is used to:

- Turn Service Collectors on or off.
- Specify the type of connection used to send the collected information to IBM.
- Schedule the time of day that service collectors will collect information.
- Schedule the time of day that service collectors will send the collected information to IBM.

```

                                Change Service Collectors (CHGSRVCOL)

Type choices, press Enter.

Collect service data . . . . . *YES          *YES, *NO, *SAME
Connection type . . . . . *DIAL          *DIAL, *DIRECT, *SAME
Schedule time for collecting . . 230300      Time, *CURRENT, *SAME
Schedule time for sending . . . *COLLECT     Time, *COLLECT, *SAME
Autostart Service Director . . . *YES        *YES, *NO, *SAME

F3=Exit  F4=Prompt  F5=Refresh  F12=Cancel  F13=How to use this display
F24=More keys
                                Bottom

```

Change Service Collectors

Collect service data (COLLECT)

Specifies whether Service Agent will collect system information and send the information to IBM.

The possible values are:

***SAME**

The value does not change.

***YES**

The function is enabled.

***NO**

The function is not enabled.

Connection type (CNNTYPE)

Specifies the type of connection used to send the collected information to IBM.

The possible values are:

***SAME**

The value is not changed.

***DIAL**

A modem is used to make the connection.

***DIRECT**

A direct connection exists.

Schedule time for collecting (COLSCDTIME)

Specifies the starting time the service collectors will run.

The possible values are:

***SAME**

The value is not changed.

***CURRENT**

The service collectors are scheduled for the current time.

Time

Specify the time you want the service collectors run. The time is specified in 24-hour format and can be specified with or without a time separator:

Without a time separator, specify a string of 4 or 6 digits (hhmm or hhmmss) where hh = hours, mm = minutes, and ss = seconds. Valid values for hh range from 00 to 23. Valid values for mm and ss range from 00 to 59.

With a time separator, specify a string of 5 or 8 digits where the time separator specified for your job is used to separate the hours, minutes, and seconds. If this command is entered from the command line, the string must be enclosed in apostrophes. If a time separator other than the separator specified for your job is used, this command will fail.

Schedule time for sending (SNDSCDTIME)

Specifies the starting time the collected information will be sent to IBM.

The possible values are:

***SAME**

The value is not changed.

***COLLECT**

The data will be sent immediately after it has been collected.

Time

Specify the time you want the information to be sent. The time is specified in 24-hour format and can be specified with or without a time separator:

Without a time separator, specify a string of 4 or 6 digits (hhmm or hhmmss) where hh = hours, mm = minutes, and ss = seconds. Valid values for hh range from 00 to 23. Valid values for mm and ss range from 00 to 59.

With a time separator, specify a string of 5 or 8 digits where the time separator specified for your job is used to separate the hours, minutes, and seconds. If this command is entered from the command line, the string must be enclosed in apostrophes. If a time separator other than the separator specified for your job is used, this command will fail.

Start Service Director Automatically (STRSDAUTO)

Specifies whether the QYSDAJE Autostart Job Entry should be added to QSYSWRK subsystem description to start the Service Director subsystem.

This option can be used to automatically start Service Director during the IPL process without modifying the system startup program.

This option will have no effect if the QSYSWRK subsystem does not exist or is not started.

The possible values are:

***YES**

Specify that the Service Director subsystem should be started automatically.

***NO**

Specify that the Service Director subsystem should not be started automatically.

***SAME**

The value is not changed.

Main Menu Option 2: Display service data collectors

The Display Service Collectors (DSPSRVCOL) command shows information about the service data collectors:

- **Collection date and time** - The most recent date and time the Service Collector ran.

- **Send date and time** - The most recent date and time the Service Collector sent the collected information to IBM.
- **Change date and time** - The most recent date and time the Service Collector data changed.

```

                                Display Service Collectors

Schedule:
  Collect time . . . . . : 23:03:00
  Send time   . . . . . : 23:03:00

Collect . . . . . : *YES
Connection type . . . . . : *DIAL

---Last Collect---  ---Last Send---
Collector           Date      Time      Date      Time
CONTACT
HARDWARE
LICENSE
NETATTR
PTF
SOFTWARE
SRVATTR
SYSVAL

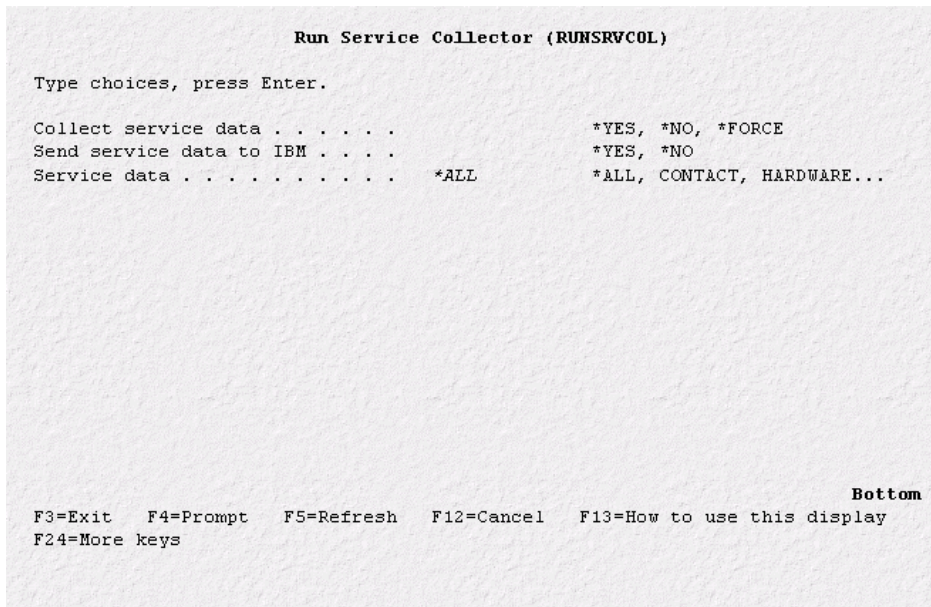
F3=Exit  F6=Print  F11=Alt. View  F12=Cancel
(C) COPYRIGHT IBM CORP. 1999, 1999.
                                Bottom

```

Display Service Data Collectors

Main Menu Option 3: Run service data collectors

The Run Service Collector (RUNSRVCOL) command immediately starts the job which collects system information and sends the information to IBM.



Run Service Collector

Collect service data (COLLECT)

Specifies if the service data is collected.

The possible values are:

***YES**

The specified service data is collected if there have been changes since the last time the data was collected.

***NO**

The service data is not collected.

***FORCE**

The specified service data is collected.

Send service data to IBM (SEND)

Specifies if the service data is sent to IBM.

The possible values are:

***YES**

The specified service data is sent if there have been changes to the data since the last time it was sent.

***NO**

The service data is not sent.

Service data (COLLECTOR)

Specifies the collector that is run.

The possible values are:

***ALL**

All service data collectors run.

CONTACT

The contact information for your organization which includes the name of the person in your organization who is responsible for the repair and maintenance of your system, the mailing address of your organization, and the language code indicating your preferred language for program temporary fix (PTF) cover letters. This information can be viewed or changed using the Work with Contact Information (WRKCNTINF) command and choosing 'Work with local service information'.

HARDWARE

System hardware information.

LICENSE

License information for products or features on the system.

NETATTR

Network attributes of the system.

PTF

Program temporary fixes (PTFs) for the installed software resources.

SOFTWARE

Installed software resources.

SRVATTR

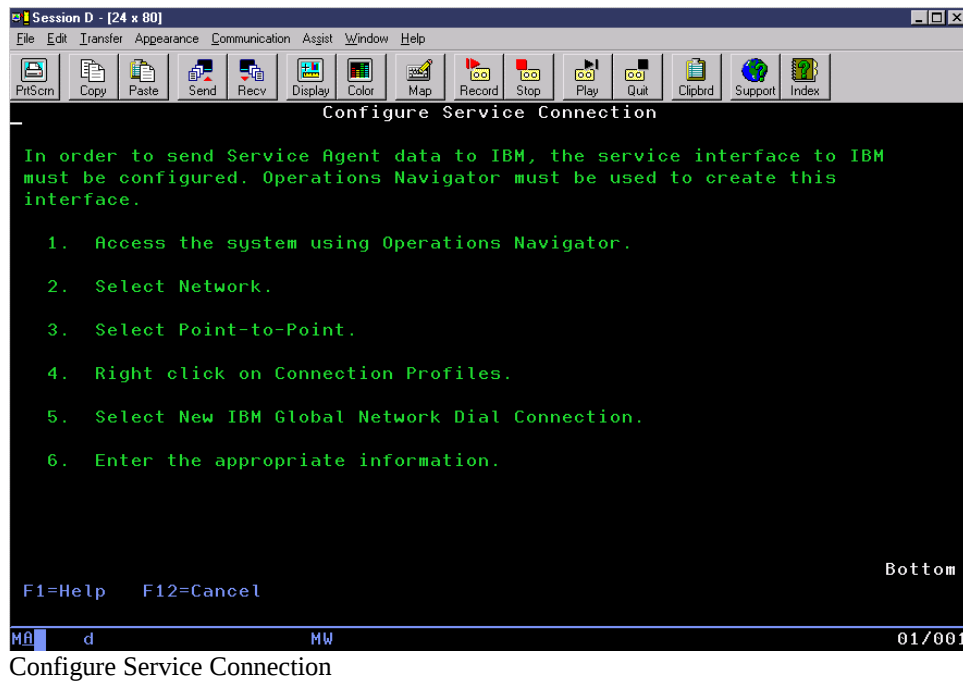
Service attributes of the system.

SYSVAL

System values.

Main Menu Option 5:**Configure service connection**

The Configure Service Connection (QSACFGCNN) menu allows you to select the Service Connection tasks that can be performed by the user.



Configure Service Connection

Main Menu Option 6: Verify service connection

Tests the service communications connection to IBM.

Main Menu Option 7: End service connection

Immediately ends the transmitting of the collected information to IBM.

Main Menu Option 9: Service Director main menu

Displays the Service Director main menu. Depending on whether or not Service Director is activated will determine which menu options are displayed.

Main Menu Option 11: Display service registration information

Displays the information needed to register this system as a Service Agent.

Important!: Be aware that both the Registration Number and Registration Key may change *each* time you choose the Display services registration information option. This feature is provided for your security. If your system is already registered, there is no need to register it again.

```

                                Service Agent Registration Information
Machine Type . . . . . : 94XX
Serial Number . . . . . : XX-XXXXX
LPAR . . . . . : 0

Registration Number . . . : 3826-291B-4325-430D-3B82-5244
Registration Key . . . . : 3313-5E20-281C-3E1B-7391

F6=Print   F12=Cancel
(C) COPYRIGHT IBM CORP. 1998, 1998.
```

Service Agent Registration Information

Main Menu Option 12: Display Data Collection and Usage agreement

This is the agreement for AS/400 Service Director Data Collection and Usage. Please read this agreement carefully. IBM will only collect and use "Your Data" if you first accept the terms of this agreement. Regardless of how you acquire the program (electronically, preloaded, on media, or otherwise), by using it you signify that you agree to these terms.

Message IDs

Hardware problem reporting:

Note: The hardware problem reporting messages that are shipped with a severity equal to or greater than 30 are now **ALERTABLE**.

SDM0000

Severity: 0

Service Director test problem (SD4.5)

SDM0001

Severity: 0

Service Director is analyzing your system Product Activity Log data.

Cause: This message will appear every time Service Director analyzes the system Product Activity Log data. This analysis attempts to predict and prevent unscheduled outages.

SDM1001

Severity: 80

Problem &1 detected by Service Director. Report problem &1 to IBM Service.

Cause: Service Director has created problem &1 in the problem log for a system error it detected.

Recovery: Use the Work with Problems (WRKPRB) command for problem ID &1. Contact your local IBM Service Representative. In the United States, call 1-800-IBM-SERV.

Symbol Field description
&1 Problem log identifier

SDM1002

Severity: 80

Service Director is not able to place a service call - action required.

Cause: Service Director is trying to place a service call, but is not able to place it.

Recovery: Check the ECS line description (QESLINE), modem, and telephone line. Service Director cannot place a service call if the ECS line description, modem, or telephone line is being used by another job. If possible, make the ECS line description, modem, and telephone line available to allow Service Director to place the call.

If the ECS phone line, modem, and line description are available, there may be a problem. Contact your local IBM Service Representative. In the United States, call 1-800-IBM-SERV.

You may also be able to make use of the Service Director Line Monitoring function. To read about this function or to activate this function, enter GO SERVICE. Choose Change Service Director settings.

SDM1003

Severity: 40

Service Director has placed a service call with service assigned number &1.

Cause: A service call has been placed. No further action is required. If this call was placed directly to IBM, an IBM Service Representative will be contacting you soon. If a PTF was downloaded for this problem, you may not be contacted by IBM. If the problem was sent to a service provider, other than IBM, the service assigned number will be blank or contain <SVD>.

Symbol Field description

&1 Service assigned number

SDM1004

Severity: 40

Service Director is placing a service call for problem &1.

Cause: Service Director has placed a service call. The problem log ID is &1.

Symbol Field description

&1 Service assigned number

SDM1005

Severity: 40

Service Director will expire on &1 (MDY date format) - action required.

Cause: Service Director is nearing its expiration date.

Recovery: Contact your local IBM Service Representative. In the United States, call 1-800-IBM-SERV.

Symbol Field description

&1 Date identifier

SDM1006

Severity: 80

Service Director has expired - action required.

Cause: The Service Director expiration date has been exceeded. Service Director is not longer operational on this system.

Recovery: Contact your local IBM Service Representative. In the United States, call 1-800-IBM-SERV.

SDM1007

Severity: 40

Service call for problem &1 not sent - action required.

Cause: Service Director tried to place a service call for problem &1, but was not able to because the automatic service call feature is disabled.

Recovery: Do one of the following:

1. Use the Work with Problems (WRKPRB) command and report problem &1.

2. In the United States, call 1-800-IBM-SERV, or contact your local IBM Service Representative.

If you would like future service calls placed automatically using ECS, do one of the following:

1. Enter GO SERVICE. Choose Change Service Director settings. Change Report problem automatically to *YES.
2. Contact your local IBM Service Representative. In the United States, call 1-800-IBM-SERV.

Symbol Field description

&1 Problem log identifier

SDM1008

Severity: 40

Service Director not able to place a service call - action required.

Cause: Service Director has tried several times to place a service call using ECS but was not able to place the call because of the ECS line description (QESLINE), modem, or telephone line.

Recovery: Do the following:

1. Use the Work with Problems (WRKPRB) command to report problem &1.
2. See the previous Service Director message, SDM1002, to help determine if there is a problem with the ECS line description, modem, or telephone line.
3. If this message continues to appear, enter GO SERVICE and choose Change Service Director settings.
4. If this continues to be a problem, contact your local IBM Service Representative. In the United States, call 1-800-IBM-SERV.

Symbol Field description

&1 Problem log identifier

SDM1009

Severity: 80

Service Director is disabled - action required.

Cause: Service Director is now disabled because the system information used to activate Service Director has changed since it was installed.

Recovery: Contact your local IBM Service Representative to have the Service Director product installed again. In the United States, call 1-800-IBM-SERV.

SDM1010

Severity: 80

Service Director has detected a change in the operating system level. Service Director must be installed again.

Cause: Service Director has detected a change in the operating system level.

Recovery: Service Director is currently disabled. It will not operate until it is installed again. Contact your local IBM Service Representative. In the United States, call 1-800-IBM-SERV.

SDM1011

Severity: 80

Error creating a problem.

Cause: Service Director attempted to create a problem into the problem log for Product Activity Log ID &1. The problem was not created because of an error.

Recovery: Contact your local IBM Service Representative. In the United States, call 1-800-IBM-SERV.

Symbol Field description

&1 Problem log identifier

SDM1012

Severity: 80

Error working with problem &1.

Cause: Service Director attempted to work with problem &1 in the problem log. An error occurred.

Recovery: Contact your local IBM Service Representative. In the United States, call 1-800-IBM-SERV.

Symbol Field description

&1 Problem log identifier

SDM1013

Severity: 30

PTF &1 downloaded for problem &2.

Cause: Service Director sent problem &2. PTF &1 was downloaded and should fix this problem. Do the following:

1. Check the cover letter for instructions.
2. It is recommended that you load and apply this PTF as soon as possible. Enter GO PTF for the PTF menu.

Symbol Field description

&1 PTF identifier

&2 Problem log identifier

SDM1014

Severity: 0

Service Director subsystem QSVCDRCRTR has started successfully.

SDM1020

Severity: 99

Error creating Service Director object - action required.

Cause: Service Director has attempted to create a data queue it requires. The data queue could not be created. Service Director will not function without this object.

Recovery: Contact your local IBM Service Representative. In the United States, call 1-800-IBM-SERV.

SDM1021

Severity: 0

Service Director data queue created.

SDM1022

Severity: 10

Service Director activation did not complete.

Cause: The Enter key may not have been pressed on the Change Service Director (CHGSD) prompt screen.

Recovery: When the Change Service Director (CHGSD) prompt screen appears, enter the required values and press the Enter key.

SDM1023

Severity: 40

Service Director expired on &1 (MDY date format) - action required.

Cause: The Service Director expiration date has been reached. Service Director is currently operational but will soon be disabled.

Recovery: Contact you local IBM Service Representative. In the United States, call 1-800-IBM-SERV.

Symbol Field description

&1 Date identifier

SDM1024

Severity: 10

Services Data Collector Activation did not complete.

Cause: The Enter key may not have been pressed on the Change Services Data Collector (CHGSRVCOL) prompt screen.

Recovery: When the Change Services Data Collector (CHGSRVCOL) prompt screen appears, enter the desired values and press the Enter key.

SDM1025

Severity: 0

Service Director activation completed.

SDM1026

Severity: 0

Services Data Collector activation completed.

SDM1100

Severity: 80

Service Director program &1 encountered an error - action required.

Cause: See the Service Director audit log for additional information regarding this error.

Recovery: Contact your local IBM Service Representative. In the United States, call 1-800-IBM-SERV.

Symbol Field description

&1 Program identifier

SDM1110

Severity: 20

Service Director was unable to send a message to user &1.

Cause: The list of users for Service Director messages includes &1. Service Director was unable to send a message to the default message queue for this user.

Recovery: Verify the list of users to receive Service Director messages is correct. To display or update this list:

1. Enter GO SERVICE.
2. Select option 1 - CHANGE SERVICE DIRECTOR SETTINGS

Symbol Field description

&1 User identifier

SDM1120

Severity: 80

Service Director program &1 was unable to use file &3.

Cause: Operation &2 in program &1 failed for file &3. A Service Director object may be damaged.

Recovery: Contact you local IBM Service Representative. In the United States, call 1-800-IBM-SERV.

Symbol Field description

&1 Program identifier

&2 Operation identifier

&3 File identifier

SDM2000

Severity: 0

Service Director created problem

Cause: This problem was created by Service Director.

SDM3001

Severity: 40

Service Director automatic system PTF monitoring has been disabled.

Cause: Service Director automatic system PTF monitoring was notified by the service provider to disable itself.

SDM3002

Severity: 40

Configuration changes are needed for the Service Director PTF monitoring program - action required.

Cause: A configuration change is needed. Service Director automatic system PTF monitoring program was notified by the service provider to change the schedule day choices.

Recovery: Check your schedule day choice by doing the following:

1. Enter GO SERVICE.
 2. Choose Change Service Director settings.
-

SDM3003

Severity: 40

PTFs not downloaded by Service Director automatic system PTF monitoring program - action required.

Cause: Service Director automatic system PTF monitoring was notified by the service provider not to download the needed PTFs.

Recovery: The fix request(s) for the PTFs are in the problem log. Use the Work with Problems (WRKPRB) command to send the fix requests to the service provider.

SDM3004

Severity: 30

Configuration changes are needed for the Service Director PTF monitoring program - action required.

Cause: A configuration change is needed. Service Director automatic system PTF monitoring program was notified by the service provider to allow a different number of days to choose from to run the function.

Recovery: View and/or change your schedule day choice by doing the following:

1. Enter GO SERVICE.
 2. Choose Change Service Director settings.
-

SDM3005

Severity: 40

Service Director automatic system PTF monitoring needs to be configured - action required.

Cause: Service Director automatic system PTF monitoring program found configuration data missing.

Recovery: Do the following:

1. Enter GO SERVICE.
 2. Choose Change Service Director settings.
-

SDM3010

Severity: 10

Service Director automatic system PTF monitoring program has started.

Cause: The Service Director automatic system PTF monitoring program is checking your system to determine if PTFs are needed. This program compares PTFs on this system to an IBM information repository which contains a list of PTFs that IBM Service has determined necessary to prevent system outages.

SDM3011

Severity: 0

Value must be Y or N.

Cause: The value specified is not allowed for this field.

Recovery: Enter one of the values that is defined for the field.

SDM3012

Severity: 40

Service Director automatic system PTF monitoring program cannot continue - action required.

Cause: Service Director automatic system PTF monitoring program found the Service Director network configuration information missing.

Recovery: Do the following:

1. Enter GO SERVICE.
 2. Choose Change Service Director settings.
 - No further action is required.
-

SDM3013

Severity: 40

PTF order failed - action required.

Cause: Service Director automatic system PTF monitoring program was attempting to order PTFs and the order failed.

Recovery: Use the Work with Problems (WRKPRB) command to manually send the fix request(s). The problem log entry(s) that should be sent have a problem description of 'Service Director required PTF order'. After the PTFs have been downloaded, use the Load PTF (LODPTF) command to load the PTFs. Then use the Apply PTF (APYPTF) command to apply the PTFs.

SDM3014

Severity: 40

PTF &1-&2 downloaded. Please load and apply this PTF.

Cause: As part of IBM Service's continuing effort to provide you with the best available service for your system, Service Director has downloaded PTF &1-&2 to prevent

unscheduled system outages. Use the load PTF (LODPTF) command to load the PTF. Then use the apply PTF (APYPTF) command to apply the PTF.

Symbol Field description

&1 Product identifier

&2 PTF identifier

SDM3015

Severity: 40

Service Director has created a problem log entry for ordering PTF &1-&2 - action required

Cause: As part of IBM Service's continuing effort to provide you with the best available service for your system, Service Director has created one or more problem log entries containing a list of PTFs needed by your system. PTF &1-&2 is in one of the problem log entries. Do the following:

1. Use the Work with Problems (WRKPRB) command to manually send the fix request(s). The problem log entry(s) that should be sent have a problem description of Service Director required PTF order.
2. After the PTFs have been downloaded, use the Load PTF (LODPTF) command to load the PTFs.
3. After the PTFs have been loaded, use the Apply PTF (APYPTF) command to apply the PTFs.

Symbol Field description

&1 Product identifier

&2 PTF identifier

SDM3016

Severity: 10

Service Director has determined that no new PTFs are needed.

Cause: As part of IBM Service's continuing effort to provide you with the best available service for your system, Service Director has checked your system and determined that the system has the PTFs needed. No PTFs have been ordered.

SDM3017

Severity: 40

Service Director has determined that PTF &1-&2 is required. Please load and apply this PTF.

Cause: As part of IBM Service's continuing effort to provide you with the best available service for your system, Service Director was going to download PTF &1-&2 to prevent an unscheduled system outage, however this PTF is already on your system as a save file. It needs to be loaded and applied. Use the Load PTF (LODPTF) command to load the PTF. Then use the Apply PTF (APYPTF) command to apply the PTF.

Symbol Field description

&1 Product identifier

&2 PTF identifier

SDM3018

Severity: 40

Service Director has requested PTF &1-&2. Please load and apply this PTF when it arrives.

Cause: As part of IBM Service's continuing effort to provide you with the best available service for your system, Service Director has requested PTF &1-&2 to prevent an unscheduled system outage. This PTF was requested from a service provider other than IBM. When this PTF arrives, use the Load PTF (LODPTF) command to load the PTF. Then use the Apply PTF (APYPTF) command to apply the PTF. Contact your service provider if the PTF does not arrive.

Symbol Field description

&1 Product identifier

&2 PTF identifier

SDM3019

Severity: 40

PTFs requested by Service Director will be sent on tape.

Cause: As part of IBM Service's continuing effort to provide you with the best available service for your system, Service Director has requested one or more PTFs to prevent unscheduled system outages. The size of the PTFs exceeded the ECS transmit size limit. A tape containing the PTFs will be mailed. Please load and apply the PTFs from the tape when it arrives.

SDM3024

Severity: 40

PTF &1-&2 cover letter downloaded.

Cause: As part of IBM Service's continuing effort to provide you the best available service for your system Service Director has identified PTF &1-&2 to prevent unscheduled system outages. The cover letter for this PTF has been downloaded.

Symbol Field description

&1 PTF identifier

&2 PTF identifier

SDM3028

Severity: 40

Service Director has requested the cover letter for PTF &1-&2.

Cause: As part of IBM Service's continuing effort to provide the best available service for your system Service Director has identified PTF &1-&2 to prevent an unscheduled system outages. The cover letter for this PTF has been requested from a service provider other than IBM.

Symbol Field description

&1 PTF identifier

&2 PTF identifier

SDM3029

Severity: 40

PTF cover letters requested by Service Director will be sent on tape.

Cause: As part of IBM Service's continuing effort to provide you the best available service for your system Service Director has identified one or more PTFs to prevent unscheduled system outages. A tape containing the cover letters for these PTFs will be sent to you.

SDM3030

Severity: 80

Dynamic threshold table update failed.

Cause: The Service Director AutoPTF function attempted to update the threshold table. The update request was not valid or a valid request failed. See the Service Director audit log or threshold table log for additional information.

Recovery: Contact your local IBM Service Representative. In the United States, call 1-800-IBM-SERV.

SDM4001

Severity: 0

Service Director subsystem has been stopped - action required.

Cause: As a result of applying PTF &1-&2, Service Director subsystem QSVCDRCTR was stopped. It needs to be started again.

Recovery: Do the following to start the Service Director subsystem:

1. Enter GO SERVICE.
2. Choose Start Subsystem.

Symbol Field description

&1 Product identifier

&2 PTF identifier

SDM4002

Severity: 80

Service Director subsystem needs to be stopped and restarted.

Cause: As a result of applying or removing PTF &1-&2, Service Director subsystem QSVCDRCTR must be stopped and restarted. Service Director attempts to do this automatically, but an unexpected error occurred.

Recovery: Ensure the QSVCDRCTR subsystem has been stopped and restarted:

1. Enter GO SERVICE.
2. Choose Stop Subsystem.
3. Choose Start Subsystem.

Symbol Field description

&1 PTF identifier

&2 PTF identifier

System inventory collection and transmission:

SDM5105

Severity: 30

Unable to access collector information.

Cause: Collector information could not be found for &1. See the Service Director audit log for additional information.

Recovery: Contact your local IBM Service Representative. In the United States, call 1-800-IBM-SERV.

Symbol Field description

&1 Collector information

SDM5110

Severity: 30

An error occurred while attempting to access file &1.

Cause: See any previously listed messages and the Service Director audit log for additional information.

Recovery: Contact your local IBM Service Representative. In the United States, call 1-800-IBM-SERV.

Symbol Field description

&1 File

SDM5115

Severity: 30

Error processing API request.

Cause: Call to API &1 was not successful. See any previously listed messages and the Service Director audit log for additional information.

Recovery: Contact your local IBM Service Representative. In the United States, call 1-800-IBM-SERV.

Symbol Field description

&1 API

SDM5120

Severity: 30

Write operation not successful.

Cause: A write operation to file &1 was not successful. See the Service Director audit log for additional information.

Recovery: Contact your local IBM Service Representative. In the United States, call 1-800-IBM-SERV.

Symbol Field description

&1 File

SDM5125

Severity: 30

Error processing request.

Cause: Information for service attribute key &1 not retrieved. See the Service Director audit log for additional information.

Recovery: Contact your local IBM Service Representative. In the United States, call 1-800-IBM-SERV.

Symbol Field description

&1 Service attribute key

SDM5130

Severity: 10

An error occurred during Service Agent process &1.

Cause: See any previously listed messages and the Service Director audit log for additional information.

Recovery: Contact your local IBM Service Representative. In the United States, call 1-800-IBM-SERV.

Symbol Field description

&1 Service Agent process

SDM5135

Severity: 30

Service Collection process &1 failed.

Cause: See any previously listed messages and the Service Director audit log for additional information regarding this error.

Recovery: Contact your local IBM Service Representative. In the United States, call 1-800-IBM-SERV.

Symbol Field description

&1 Service collection process

SDM5140

Severity: 00

Service Collection process &1 completed successfully.

Cause: The Service Collection completed with no errors.

Symbol Field description

&1 Service collection process

SDM5141

Severity: 10

Warnings have been issued for Service Collection process.

Cause: The Service Collection process &1 has completed successfully although warning messages have been issued. See any previously listed messages in the joblog.

Symbol Field description

&1 Service collection process

SDM5142

Severity: 00

Service Agent communications have ended.

Cause: A request to end communications has been specified for Service Agent. The request was issued using the ENDSRVCNN (End Service Connection) command.

SDM5145

Severity: 30

Error while locking &1 send status information.

Cause: The &1 send status record was not found.

Recovery: See any previously listed messages and the Service Director audit log for additional information. Contact your local IBM Service Representative. In the United States, call 1-800-IBM-SERV.

Symbol Record

&1 Problem log identifier

SDM5148

Severity: 30

Unable to allocate Service collector &1 inventory file.

Cause: The file is not able to be allocated because of the following:

Another Service Collector process may have the file allocated.

A lock has been placed on the file by another process but not removed.

Recovery:

See any previously listed messages and try the request again at a later time.

Verify that another process has not placed a lock on the file. Correct any errors and try the request again.

Contact your local IBM Service Representative. In the United States, call 1-800-IBM-SERV.

Symbol Record

&1 File

SDM5150

Severity: 00

Verify operation completed successfully.

Cause: Communications has successfully occurred with IBM.

Recovery: None.

SDM5151

Severity: 30

Verify operation not successful.

Cause: An attempt to verify the Service Collector process was successful because of reason code &1.

Recovery: Reason codes and their meaning:

1. An error occurred before a connection with the server was attempted.
2. An attempt to connect with the server was not successful.
3. An error occurred during the conversation with the server.

4. Not able to connect with Service Collector database.

For all reason codes less than 4, see any previously listed messages and the Service Director audit log for additional information. Fix any errors, then try the request again. If the problem continues to occur, contact your local IBM Service Representative.

Symbol Record

&1 Reason code

SDM5155

Severity: 30

Error while connecting.

Cause: An error occurred while attempting to connect because of reason code &1. The reason codes are as follows:

- 1 - Unknown cause.
- 1 - A communications error.
- 2 - An AS/400 dialer error.

Recovery: For the specified reason code:

- 1 - See previously listed messages.
- 1 - See the Service Director audit log for additional information and then try the request again at a later time. If the problem continues to occur, contact your local IBM Service Representative.
- 2 - See previously listed messages and correct any errors.

Symbol Reason code

&1 Problem log identifier

SDM5156

Severity: 40

Error accessing &1 profile - Action required.

Cause: An attempt to use *SERVICE profile &1 failed because the profile is not defined on this system.

Recovery: Define *SERVICE profile using the CRTIGNPTP (Create IGN Point-to-Point TCP/IP Configuration Profile) command.

Symbol Field description

&1 Profile

SDM5160

Severity: 30

Error while replacing inventory file &1 with &2.

Cause: See any previously listed messages and the Service Director audit log for additional information.

Recovery: Correct any errors and retry the request again. Contact your local IBM Service Representative. In the United States, call 1-800-IBM-SERV.

Symbol Field description

&1 File

&2 File

SDM5165

Severity: 30

&2 ended in error while processing &1 data for Service Collector send operation.

Cause: An error occurred during the &2 phase of the Service Collector send operation. See any previously listed messages and the Service Director audit log for additional information.

Recovery: Contact your local IBM Service Representative. In the United States, call 1-800-IBM-SERV.

Symbol Field description

&1 Type of data

&2 Service collection process

SDM5170

Severity: 30

Error while updating send status information for &1.

Cause: An attempt to update and release send status information for &1 failed. See the Service Director audit log for additional information.

Recovery: Contact your local IBM Service Representative. In the United States, call 1-800-IBM-SERV.

Symbol Field description

&1 Type of data

SDM5175

Severity: 30

Error while locking inventory status record &1.

Cause: See the Service Director audit log for additional information.

Recovery: Contact your local IBM Service Representative. In the United States, call 1-800-IBM-SERV.

Symbol Field description

&1 Record

SDM5180

Severity: 30

Error while changing file &1.

Cause: See the Service Director audit log for additional information.

Recovery: Contact your local IBM Service Representative. In the United States, call 1-800-IBM-SERV.

Symbol Field description

&1 File

SDM5185

Severity: 30

Error while closing file &1.

Cause: See the Service Director audit log for additional information.

Recovery: Contact your local IBM Service Representative. In the United States, call 1-800-IBM-SERV.

Symbol Field description

&1 File

SDM5190

Severity: 30

Error while comparing files &1 and &2.

Cause: See the Service Director audit log for additional information.

Recovery: Contact your local IBM Service Representative. In the United States, call 1-800-IBM-SERV.

Symbol Field description

&1 File

&2 File

SDM5195

Severity: 30

Error while releasing inventory status record &1.

Cause: See the Service Director audit log for additional information.

Recovery: Contact your local IBM Service Representative. In the United States, call 1-800-IBM-SERV.

Symbol Field description

&1 Record

SDM5201

Severity: 00

Service Collection configuration changed.

Cause: The Service Collection configuration information was updated with the values specified on the CHGSRVCOL command.

SDM5210

Severity: 30

Service Collection configuration information not available.

Cause: Service Collection must already be configured before *SAME can be specified for the CHGSRVCOL command.

Recovery: Specify something other than *SAME, and then try the request again.

SDM5211

Severity: 40

Service Collection configuration information not available - Action required.

Cause: Service Collection configuration information is missing.

Recovery: Do the following:

1. Enter GO SERVICE.
 2. Choose Service Data Collection Menu.
 3. Choose Change service data collectors.
 4. Enter the appropriate information.
-

SDM5212

Severity: 40

*SERVICE connection profile not found - Action required.

Cause: *DIAL was specified as the connection type and the *SERVICE connection profile does not exist.

Recovery: Do the following:

1. Enter GO SERVICE.
 2. Choose Configure Service Collection.
 3. Enter the appropriate information.
-

SDM5215

Severity: 10

Unable to connect with IBM.

Cause: An attempt was made to connect with an IBM server and was unsuccessful.

Recovery:

See the previously listed messages in the system log and correct any errors. Then try the request again.

Contact your local IBM Service Representative. In the United States, call 1-800-IBM-SERV.

SDM5218

Severity: 40

Error while replacing Service Collector &1 inventory file.

Cause: An error occurred while attempting to replace Service Collector &1 file. Reason codes are as follows:

- 1.Unable to determine if object exists.
- 2.An attempt to create the object failed.
- 3.An attempt to change object ownership failed on an existing object.
- 4.An attempt to copy a file failed.
- 5.An attempt to allocate an existing object failed.

Recovery: See previously listed messages and correct any errors. Then try the request again. Contact your local IBM Service Representative. In the United States, call 1-800-IBM-SERV.

Symbol Field description

&1 File

&2 File

SDM5220

Severity: 30

Error while retrieving system information.

Cause: An attempt to retrieve system information ended with errors.

Recovery: See previously listed messages.

SDM5221

Severity: 20

Error while retrieving status information for &1.

Cause: An attempt to retrieve status information for &1 collector was made and errors were detected.

Recovery: See previously listed messages.

Symbol Field description

&1 Collector

SDM5301

Severity: 30

Error while processing &1 data for send function.

Cause: An error occurred while processing &1 data.

Recovery: See the previously listed messages in the job log and correct any errors. Then try the request again.

Symbol Field description

&1 Type of data

SDM5305

Severity: 00

End connection request issued.

Cause: A request to end the Service Agent connection has been issued.

SDM5310

Severity: 30

Error submitting end request.

Cause: An error occurred while requesting an end to the Service connection.

Recovery: See the previously listed messages in the job log and correct any errors. Then try the request again.

SDM5999

Severity: 40

Service Agent process &1 ended abnormally.

Cause: See any previously listed messages and the Service Director audit log for additional information.

Recovery: Contact your local IBM Service Representative. In the United States, call 1-800-IBM-SERV.

Symbol Field description

&1 Service Agent process

Appendix A.

Electronic Service Agent for AS/400 and SystemView System Manager/400

You may prefer to manage all problems from one central location. The **hardware problem reporting function of Service Agent** will work in this environment if configured properly. For information on how to configure the AS/400 to act as the central reporting site (service provider) for a network and the remote sites (service requesters) see the AS/400 System Manager/400 Use Guide or contact Marketing.

Note: (U.S.) The Service Agent Support Center does NOT support the SystemView System Manager/400 product.

The central site Service Provider Control Point system must be at the highest OS/400 level of the remote systems it is supporting. If your system has SystemView System Manager/400 (1) installed and it is acting as the central site Service Provider for a network of remote systems, you have the option to handle the problems reported from the remote sites manually or through the **hardware problem reporting function of Service Agent**.

To handle local problems automatically and remote problems manually, the **hardware problem reporting function of Service Agent** settings (choose **Change Service Director settings** from the **hardware problem reporting** Main Menu) should be set to:

Report problem automatically

***YES**

Report remote problem

***NO**

To handle both local and remote problems manually (assuming that SystemView System Manager/400 is installed on the host system), the **hardware problem reporting function of Service Agent** settings (choose **Change Service Director settings** from the **hardware problem reporting** Main Menu) should be set to:

Report problem automatically

***NO**

Report remote problem

***NO**

To handle both local and remote problems automatically (assuming that SystemView System Manager/400 is installed on the host system), the **hardware problem reporting**

function of Service Agent settings (choose **Change Service Director settings** from the **hardware problem reporting** Main Menu) should be set to:

Report problem automatically

***YES**

Report remote problem

***YES**

(1)SystemView System Manager/400 is an IBM Licensed Program Product which must be purchased by the user. The central site Service Provider Control Point system must be at the highest OS/400 level of the remote systems it is supporting.

Appendix B.

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