

# IBM Electronic Service Agent for iSeries and AS/400e User Guide

Release 5.1

SA38-0960-00

### FIRST Edition (May 2001)

This edition applies to release 5.1 of Electronic Service Agent for iSeries and AS/400e and to all subsequent releases and modifications until otherwise indicted in new editions.

Copyright © 1992, 1993, 1994, 1995, 1996, 1997, 1999, 2000, 2001 International Business Machines Corporation (IBM). All Rights Reserved.

No part of this computer software (or documentation) may be reproduced or transmitted in any form or in any way, or by any means, without written permission from the International Business Machines Corporation.

# Contents

Preface	6
What's new this release?	6
Who should read this guide?	6
Who do I contact if I have a question?	7
Where can I find more information?	7
Terminology	7
Terminology	'
Chapter 1. Introduction to Electronic Service Agent	10
What is Electronic Service Agent?	10
What models are supported?	10
What does Electronic Service Agent do?	.11
Hardware problem reporting	.11
System inventory collection and transmission	12
How can I view my system information?	13
How does Electronic Service Agent work?	13
Hardware problem reporting	13
System inventory collection and transmission	14
	17
Chapter 2. Requirements	15
Requirements for Hardware problem reporting	15
Requirements for System inventory collection and transmission	16
Requirements for Modem(s)	17
<b>1</b>	
Chapter 3. Prerequisites	18
· ·	
Chapter 4. How do I Obtain Electronic Service Agent?	22
Preload	22
CD	.22
Chapter 5. How do I Install and Set up Electronic Service Agent?.	.23
Chapter 6. Menus – Hardware problem reporting	28
Chapter 7 Panals System inventory collection and transmission	50
<i>Chapter 7</i> . I allels – System Inventory conection and transmission.	.30 50
How do I verify the inventory conection scheduled task(s)	50 50
How do I change the inventory selections?	59 60
now up 1 know that information was sent to IBM?	00
How do I change the Universal Connection Configuration?	62
Chapter 8. Message Ids	64
Hardware nrohlem renorting	64
System inventory collection and transmission	82
	04

Appendix A.	Authority Requirements	87
Appendix B.	Electronic Service Agent and System Manager/400	88
Appendix C.	Notices and trademarks	90

### Preface

This guide provides overview, requirement and prerequisite information, installation and configuration instructions, and user information about Electronic Service Agent.

### What's new this release?

**Electronic Service Agent is now a part of Extreme Support Personalized (ESP).** Extreme Support Personalized (ESP) is IBM's comprehensive technical service and support initiative exclusively for iSeries and AS/400e. Extreme Support Personalized is total solutions support, personalized for you in the form you need it. It involves support over the Internet, voice and onsite support, and support that is integrated right into the product.

New functions, through this ESP offering, include the consolidation of **Electronic Service Agent**, PM/400 and WRKORDINF inventories with Management Central inventory AND the subsequent transmission of the desired inventories to IBM via Electronic Service Agent using TCP/IP through the **Universal Connection**.

What is the Universal Connection? The Universal Connection is a secure connection from your iSeries or AS/400e machine into IBM Service and Support. The Universal Connection is ESP's fundamental electronic assistance enabler, making it possible for you to receive personalized attention and assistance with support. The Universal Connection enables electronic help for such key things as problem determination, performance management, fix management, and software upgrades. For more information on software upgrades / SUA Announce, see: <a href="http://www.ibm.com/servers/eserver/iseries/software/suaweb.htm">http://www.ibm.com/servers/eserver/iseries/software/suaweb.htm</a>
For more information on Extreme Support, see: <a href="http://www.as400service.ibm.com/">http://www.as400service.ibm.com/</a>
For more information on Universal Connection, see: <a href="http://www.redbooks.ibm.com/redpieces/pdfs/sg246224.pdf">http://www.redbooks.ibm.com/redpieces/pdfs/sg246224.pdf</a>

**Also new this release -** the System inventory collection and transmission portion of Electronic Service Agent is now made available from Operations Navigator (a product of Client Access Express). Hardware problem reporting continues to provide the same functions as it provided in V4R5.

### Who should read this guide?

This guide is intended for use by iSeries and AS/400e system administrators and/or System Service Representatives (SSRs) who are familiar with, or have a working knowledge of an iSeries and/or AS/400e system(s). A basic understanding of an iSeries and/or AS/400e system is beneficial to assist you with the information provided in this guide as it pertains to Release 5.1 of IBM Electronic Service Agent for iSeries and AS/400e.

### 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 Electronic Service Agent (Service Director) Support Center. The Support Center is staffed Monday through Friday, 8 AM to 5 PM, Central Standard Time.
- Outside U.S. Contact the local support center in your country / region for assistance. The support center will advise of additional terms and conditions for support, if any are required.

### Where can I find more information?

For information on **why your scheduled task may be running at a different time than scheduled**, see the Management Central site at: <u>http://www.iseries.ibm.com/sftsol/mgmtcentral.htm</u>. Select **FAQs** from the Navigator bar and locate question '**Q: Why are the time scales on the monitor graph off?'.** 

For information on **Electronic Service Agent**, see: <u>http://publib.boulder.ibm.com/as400\_sd/sdsadoc.html</u>.

For information on **Management Central**, see: http://www.iseries.ibm.com/sftsol/mgmtcentral.htm.

For information on **Client Access Express**, see: <u>http://publib.boulder.ibm.com/html/as400/infocenter.html</u>. Select a specific version, release and language and click **GO**. Expand **Client Access Express** from the navigation bar.

For information on **Operations Navigator**, see: <u>http://www.ibm.com/servers/eserver/iseries/oper\_nav/</u>

For information on **AS/400 NetServer**, see: <u>http://www.ibm.com/servers/eserver/iseries/netserver/</u>

For more information on **Universal Connection**, see: <u>http://www.redbooks.ibm.com/redpieces/pdfs/sg246224.pdf</u>

For information on **PM/400**, see: http://www.ibm.com/eserver/iseries/pm400.

For information on **Electronic Services**, see: <u>http://www.ibm.com/services/electronic/</u>.

### Terminology

Throughout this guide, "Electronic Service Agent for iSeries and AS/400e" is referred to as "Electronic Service Agent."

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

**Authority** - The right to do something or to have it done on the system. On an iSeries or AS/400e server, you must have authority to an object to work with it. Private authority and public authority are examples of authorities on the iSeries and AS/400e server(s).

**Electronic Customer Support (ECS)** - A part of the operating system that allows a customer to access: 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 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.

### Synchronous Data Link Control (SDLC) -

- 1. A form of communications line control that uses commands to control the transfer of data over a communications line.
- 2. A communications discipline conforming to subsets of the Advanced Data Communication Control Procedures (ADCCP) of the American National Standards Institute (ANSI) and High-Level Data Link Control (HDLC) of the International Organization for Standardization (ISO), for transferring synchronous, codetransparent, serial-by-bit information over a communications line. Transmission exchanges may be duplex or half-duplex over switched or non-switched lines. The configuration of the connection may be point-to-point, multipoint, or loop.

**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.

### Transmission Control Protocol/Internet Protocol (TCP/IP) -

- 1. A set of communications protocols that support peer-to-peer connectivity functions for both local and wide area networks.
- 2. The primary communications protocol that is used on the Internet. TCP/IP could also be used on an internal network.

**Virtual Private Network (VPN)** - An extension of a company's intranet over the existing framework of either a public or private network. A VPN ensures that the data that is sent between the two endpoints of its connection remains secure.

### Chapter 1. Introduction to Electronic Service Agent

This chapter presents general information about Electronic Service Agent.

### What is Electronic Service Agent?

Electronic Service Agent (product ID 5798-RZG) is a Licensed Product Offering (LPO) that operates on an IBM iSeries or AS/400e, with operating system OS/400 at V5R1.

In the past, **AS/400 Service Director** was responsible for reporting hardware problems. The **AS/400 Service Agent**, which was distributed as a fix (PTF) to the AS/400 Service Director product, was responsible for collecting and sending system inventory. These two functions are now packaged together as **IBM Electronic Service Agent for iSeries and AS/400e**.

**Note**: Throughout this document 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 (HPR) and System inventory collection and transmission (SCT).

Electronic 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:** To activate the hardware problem reporting function of Electronic Service Agent requires that your server be under warranty, or that you purchase an IBM Maintenance Services Agreement.

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

### What models are supported?

This level of Electronic Service Agent supports all iSeries and AS/400e machine types running operating system, OS/400 V5R1.

### What does Electronic Service Agent do?

**Hardware problem reporting** – The Hardware problem reporting function of Electronic Service Agent is a Licensed Program Offering (LPO) provided as part of the IBM Service agreement for iSeries and AS/400e's. 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 iSeries or AS/400e system. It does this by analyzing entries in two system logs: the **Problem Log** and the **Product Activity Log**. The iSeries or AS/400e 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 iSeries or AS/400e.

Note: It is recommended that ECS be configured to use TCP/IP through the Universal Connection. If ECS is configured to use TCP/IP, the Hardware problem reporting function of Electronic Service Agent will also use TCP/IP. See the iSeries Universal Connection for Electronic Support & Electronic Services Redbook at <a href="http://www.redbooks.ibm.com/redpieces/pdfs/sg246224.pdf">http://www.redbooks.ibm.com/redpieces/pdfs/sg246224.pdf</a> for more information on Universal Connection.

Hardware problem reporting can also automatically do problem analysis on 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 system, it completes as much problem diagnosis as possible so that your System Services Representative (CE) 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 Electronic 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 System Services 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 Electronic Service Agent does **not** support OEM equipment. If Electronic Service Agent is installed on iSeries or AS/400e system with OEM equipment, call 1-800-IBM-SERV to place a Service call for your System Services Representative (CE) to deactivate the Resource Descriptions for those devices.

**System inventory collection and transmission** – Electronic Service Agent is code that runs on your iSeries or AS/400e to assist IBM in providing service for your system. The System inventory collection and transmission function of Electronic Service Agent automatically collects system information including hardware, installed software, performance data, and fix levels and then electronically sends this information to IBM over the Universal Connection. You can either inventory a single iSeries or AS/400e, or multiple systems by consolidating multiple systems inventory onto one Management Central system prior to transmission.

**Important!** You control the transmission of data to IBM (what is sent and when it is sent).

### 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** A list of physical objects that includes communications, systems adapters, LAN resources, workstation resources, processor information, and storage devices.
- Network Attributes Network attributes of the system.

- **Fixes** A list of fixes (PTFs), or corrections, to problems or potential problems within a particular software product.
- **Software** A list of installed and supported software products and associated license information.
- Service Attributes Service attributes of the system.
- **System Values** A list of system values and their settings. Available only when both the central system and the endpoint systems are running OS/400 V5R1 or later.
- PM/400 Performance Data Non-proprietary performance and capacity data.
- Users and groups This information is not collected and sent to IBM. This is a Management Central inventory.

### How can I view my system information?

Your system information can be viewed using 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 <u>http://www.ibm.com/services/electronic/</u> to learn more information about IBM Electronic Services for AS/400, including **how to register your iSeries or AS/400e(s)** and **how to view your iSeries or AS/400e system information**.

### How does Electronic Service Agent work?

**Hardware problem reporting** – The hardware problem reporting function of Electronic Service Agent has the capability to prepare hardware problems which it detects for automatic problem reporting and send them over the ECS line using TCP/IP or SDLC to IBM. (It is recommended that ECS be configured to use TCP/IP – See the **iSeries Universal Connection for Electronic Support & Electronic Services Redbook** at <u>http://www.redbooks.ibm.com/redpieces/pdfs/sg246224.pdf</u>). The problems can be from errors detected either in the Problem Log or the Product Activity Log on an iSeries or AS/400e.

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 system with 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.

The hardware problem reporting function can still be used even if you choose not to automatically report problems to IBM. If the **'Report problem automatically'** parameter, (to locate, choose **Change Service Director settings** from the **Electronic Service Agent Main Menu**) is disabled, the users specified for the 'Users to receive messages' parameter (to locate, choose **Change Service Director settings** from the **Electronic Service Agent Main Menu**) 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** – The system inventory collection and transmission function retrieves system information gathered and stored by Management Central. This information is then sent to IBM using the Universal Connection.

An Extreme Support agent is used under Management Central to configure the inventory collection and transmission task(s). Through this agent, the user chooses the type of information to collect and send, the frequency at which to send it, and the time at which to send it. From this information, a Management Central task is created. If you choose to send your information to IBM immediately after it has been collected, a single task is created. This task is for the job that collects and sends the information to IBM. If you schedule the transmission time to be different than the collection time, two Management Central tasks are created: one task for the job that collects the information; another task for the job that sends the information; another task for the job that sends the information to IBM. These tasks will run at the specified frequency and time of day.

If you choose to run the collect and send action immediately after you are prompted for information, the information will be collected and sent to IBM immediately.

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

(1) 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 B. for more information on System Manager/400.

## Chapter 2. Requirements

This section presents the necessary requirements, broken down by function (Hardware problem reporting and System inventory collection and transmission), for Electronic Service Agent.

**Important!** You can continue through this guide for basic set up instructions (**Chapters 2 through 5**) or you may choose to use the enhanced version of these chapters, which include multiple screen shots and also the 'Dial-up Connection using AT & T Global Network Services' connection path used when running the Universal Connection Wizard, for more assistance. This guide is named '**V5R1 Screen Shot Guide'** and is available at <u>http://publib.boulder.ibm.com/as400\_sd/sdsadoc.html</u>

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

### **REQUIREMENTS for Hardware problem reporting:**

If the following **requirements are not met**, you cannot set up Hardware problem reporting. If you would also like System inventory collection and transmission set up, reference section **'REQUIREMENTS for System inventory collection and transmission'**.

- ✓ Date format Verify the date format (system value QDATFMT) is something other than JUL (Julian). To check or change this system value, type WRKSYSVAL QDATFMT on an iSeries or AS/400e command line and press Enter. Important! If the date format is JUL (Julian), and you do not want to change this, this requirement is not met.
- ✓ Problem log filter Verify that hardware problem reporting (Service Director) can have use of the problem log filter (system value QPRBFTR). To check this system value, type WRKSYSVAL QPRBFTR on an iSeries or AS/400e command line and press Enter. Important! If system value QPRBFTR is set to something other than \*NONE or SDFILTER and you do not want to change this, this requirement is not met.
- ✓ Modem see the 'REQUIREMENTS for the Connection to IBM' section on page 17. Important! If you would also like System inventory collection and transmission set up, reference section 'REQUIREMENTS for System inventory collection and transmission' and then continue to the 'REQUIREMENTS for the Connection to IBM' section on page 17.

### **REQUIREMENTS for System inventory collection and transmission:**

If the following **requirements are not met**, you cannot set up System inventory collection and transmission. If you would still like Hardware problem reporting set up, see section **'REQUIREMENTS for Hardware problem reporting'**.

✓ **Personal Computer (PC)** - Verify that a PC is attached to the iSeries or AS/400e.

**Client Access Express:** 

> iSeries or AS/400e

\* Verify Client Access Express for Windows V5R1 (5722-XE1) is installed. Use command DSPSFWRSC to verify.

> PC

\* Verify **Client Access Express for Windows** (full load) is installed. For more information on **Client Access Express**, see:

<u>http://publib.boulder.ibm.com/html/as400/infocenter.html.</u> (Select V5R1 and a language and click **GO**. Expand **Client Access Express** from the navigation bar.) **Note:** Ensure you have set up TCP/IP on your PC as described in the information provided. **Note:** You will use Operations Navigator, a function of Client Access, to configure the communications connection.

\* Verify the **latest Client Access service pack** is installed. The service pack contains the Universal Connection Wizard which will be used to configure your Universal Connection. The service packs are available for download at: <u>http://www.ibm.com/servers/eserver/iseries/clientaccess/</u>. See the **iSeries Universal Connection for Electronic Support & Electronic Services Redbook** at <u>http://www.redbooks.ibm.com/redpieces/pdfs/sg246224.pdf</u> for more information on Universal Connection.

- ✓ QRETSVRSEC Verify that system value QRETSVRSEC on your iSeries or AS/400e is set to '1'. To check or change this system value, type WRKSYSVAL QRETSVRSEC on an iSeries or AS/400e command line and press Enter. If system value QRETSVRSEC is NOT set to '1' and you do not want to change this, this requirement is not met. Note: If you changed system value QRETSVRSEC to a '1', remember this for reference in a future chapter.
- ✓ QCNTRYID Verify that system value QCNTRYID on your iSeries or AS/400e (this includes all endpoint systems) is set correctly for your country / region. To check or change this system value, type WRKSYSVAL QCNTRYID on an iSeries or AS/400e command line and press Enter.
- ✓ Modem see the 'REQUIREMENTS for the Connection to IBM' section.

### **REQUIREMENTS** for the Connection to IBM:

**Important**! The connection to IBM for System inventory collection and transmission is made using the Universal Connection. The connection to IBM for Hardware problem reporting is made using the ECS link (SDLC or TCP/IP). See the **iSeries Universal Connection for Electronic Support & Electronic Services Redbook** at <a href="http://www.redbooks.ibm.com/redpieces/pdfs/sg246224.pdf">http://www.redbooks.ibm.com/redpieces/pdfs/sg246224.pdf</a> for more information about the Universal Connection.

If you are using a modem for your connection(s), reference the following modem requirements. You will then be directed to **Chapter 3. 'Prerequisites'** to reference all or only a certain portion of the prerequisites, depending on your modem situation.

	Hardware problem reporting (formerly Service Director)	System inventory collection and transmission
Synchronous	Х	
Asynchronous (includes the 2771 internal modem)	X *	X
Dual model	Х	Х

### **Modem(s)** - Verify that a modem(s) with an attached phone line is available: **Note:** An internal modem (2771) is shipped with new V5R1 systems.

#### Synchronous -

If you **only have a synchronous modem** (examples: IBM 7855, IBM 7857, or IBM 7858), only Hardware problem reporting can be setup. Reference only the HPR prerequisite items in **Chapter 3**. **Prerequisites**.

#### Asynchronous - (includes the 2771 internal modem)

If you have an asynchronous modem (examples: 2771 internal, IBM 7855, IBM 7857, or IBM 7858), you should configure ECS to use TCP/IP (the Hardware problem reporting function uses the ECS link). The System inventory collection and transmission function uses TCP/IP. Reference both the HPR and SCT prerequisite items in **Chapter 3. Prerequisites.** To use the internal modem to run ECS over TCP/IP, the Universal Connection must be configured. See the **iSeries Universal Connection for Electronic Support & Electronic Services Redbook** at

<u>http://www.redbooks.ibm.com/redpieces/pdfs/sg246224.pdf</u> for information about the Universal Connection.

**Note:** If you will be using a non-IBM modem, any asynchronous modem that supports the RS232 serial interface and the V.34/V.42 protocol (V.90 is optional) can be used for this function. Typically, the default modem setting DSR (Data Set Ready) must be overridden. For an iSeries or AS/400e system to detect a hang-up, DSR must be set to follow CD (Carrier Detect). Refer to the modem manual for more information.

### Dual model -

If you **have a dual model modem** (example: IBM 7852-400 - this modem supports switching between synchronous and asynchronous modes), both Hardware problem reporting and System inventory collection and transmission can be set up. Reference both the HPR and SCT prerequisite items in **Chapter 3. Prerequisites.** 

\* If this modem is to be used for Hardware problem reporting, ECS must also be configured to use TCP/IP.

### **Chapter 3.** Prerequisites

**Note: HPR** is a Hardware problem reporting prerequisite, and **SCT** is a System inventory collection and transmission prerequisite.

### □ (HPR and SCT)

Verify OS/400 is V5R1.

To check the OS/400, type **DSPSFWRSC** on an iSeries or AS/400e command line and press **Enter**. Press **F11** to display libraries/releases.

### □ (HPR and SCT)

You must have **\*ALLOBJ**, **\*IOSYSCFG** and **\*SECADM** special authorities in your iSeries or AS/400e user profile to setup Electronic Service Agent.

To check your special authorities, type **DSPUSRPRF** *user profile* on an iSeries or AS/400e command line and press **Enter**.

**Important!** A user **without \*ALLOBJ** authority would need to have specific authority to these objects to setup Electronic Service Agent AND to collect and send inventory information to IBM. See **Appendix A.** for the specific authorities required.

### **(HPR)**

Verify the **Work with Contact Information** (**WRKCNTINF**) is filled in with the customer's information. To check or change this information, type **WRKCNTINF** on a command line and press **Enter**. From the **Work with Support Contact Information** menu, type the option number to **Work with local service information** and press **Enter**.

### **(HPR)**

Test the Electronic Customer Support (ECS) line. The Hardware problem reporting function uses the ECS link [with either SDLC or TCP/IP configured] on the iSeries or AS/400e. It is recommended that ECS be configured to use TCP/IP through the Universal Connection. (See the **iSeries Universal Connection for Electronic Support & Electronic Services Redbook** at:

http://www.redbooks.ibm.com/redpieces/pdfs/sg246224.pdf for more information).

To test the ECS line, type **SNDSRVRQS \*TEST** on an iSeries or AS/400e command line and press **Enter**. A successful test will produce a service call to the assigned SSR for that account.

If you require assistance:

Hardware Support – If you have a Warranty or Maintenance Agreement:

- USA: Call 1-800-426-7378, and choose the 'to place a Service call' menu option to speak with a support representative.
- **Outside USA:** Contact the local support center in your country / region for assistance. The support center will advise of additional terms and conditions for support, if any are required.

**Software Support** – If you have a Support Line contract:

- USA: Call 1-800-237-5511, and choose the 'iSeries and AS/400e' menu option to speak with a support representative.
- **Outside USA:** Contact the local support center in your country / region for assistance. The support center will advise of additional terms and conditions for support, if any are required.

### **(SCT)**

You must know the name of the iSeries and/or AS/400e system(s) from which you plan to collect information.

### □ (SCT)

Verify that TCP/IP is started on the iSeries or AS/400e. TCP/IP must be started if the customer is to send system inventory information to IBM. If TCP/IP is not running on the system, type **STRTCP** on an iSeries or AS/400e command line and press **Enter** to start it.

**(SCT)** 

Ensure you use an appropriate installed adapter.

Note: Only PPP connections are supported in OS/400 V5R1.

**Note:** At V5R1 there are two types of connections: AT&T dial and VPN. The AT&T dial is not supported via ISDN; you can only use ISDN if you use the VPN connectivity and your ISP supports ISDN connections.

Choose one of the following required adapters:

- **2699**\* : Two-line WAN IOA. **Note:** This IOA requires either a **2629** LAN/WAN/Workstation IOP or a MFIOP.
- **2720**\* : PCI WAN/Twinaxial IOA
- 2721\* : PCI Two-line WAN IOA
- 2745\* : PCI Two-line WAN IOA (replaces IOA 2721)
- 2750 : PCI ISDN Basic Rate Interface U IOA (2-wire interface)
- 2751 : PCI ISDN Basic Rate Interface S/T IOA (4-wire interface)
- **2761** : Eight-port analog modem IOA

- **2771** : Two-port WAN IOA, with a V.90 integrated modem on port 1 and a standard communications interface on port 2. To use port 2 of the 2771 adapter, an external modem or ISDN terminal adapter with the appropriate cable is required.
- 2772 : Two port V.90 integrated modem WAN IOA

\* These adapters require an external V.24 modem, or ISDN terminal adapter, and the appropriate cable.

### □ (SCT)

You must have V5R1 AS/400 Toolbox for Java (5722-JC1) installed on your iSeries or AS/400e. To check, type DSPSFWRSC on an iSeries or AS/400e command line and press Enter. Press F11 to display libraries/releases.

**Note:** This is a preloaded licensed product. If you upgraded your system to V5R1, this product can be found on one of the **CDs** that came with your software upgrade package. Use command **RSTLICPGM** to install this product.

### □ (SCT)

You must have V5R1 IBM Developer Kit for Java [Base with at least one of Options 3, 4 or 5] (5722-JV1) installed on your iSeries or AS/400e. To check, type DSPSFWRSC on an iSeries or AS/400e command line and press Enter. Press F11 to display libraries/releases.

**Note:** This is a preloaded licensed product (Base with Options 3 and 4). If you upgraded your system to V5R1, this product can be found on one of the **CDs** that came with your software upgrade package. Use command RSTLICPGM to install this product.

### **(SCT)**

You must **order** PTF number **SF66377** for Electronic Service Agent for iSeries and AS/400e (5798-RZG) using your normal PTF order process (FAX, ECS, or the AS/400 web site). **Note:** You will be instructed to load and apply this PTF later in this document:

If you require assistance:

- USA: Dial 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 / region for assistance. The support center will advise of additional terms and conditions for support, if any are required.

**(SCT)** 

You must select which system you want to use as your 'Central' system on your PC.

For information on **AS/400 NetServer**, see: http://www.ibm.com/servers/eserver/iseries/netserver/

- > To see what systems (connections) currently exist, do this:
  - 1. Open Client Access.
  - 2. Open AS400 Operations Navigator.
  - 3. Expand **My Connections**. If you do not see the system (connection) that you want to use as your 'Central' system in this list, do this:
    - A. Right-click on My Connections and select Add Connection.
    - B. Continue through the **Operations Navigator Add Connection wizard** to add the system (connection) you want to use as your 'Central' system.
- > To select the system you want to use as your 'Central' system, do this:
  - 1. Right-click on Management Central and select Change Central System.
  - 2. Select, from the drop-down, which system you want to use as your 'Central' system and click **OK**.

### **(SCT)**

Create a Management Central system group.

The systems from which you want to collect inventory data can be defined in a Management Central system group to simplify the task of scheduling for several systems. A system group is required to complete the Electronic Service Agent wizard later in this document.

To create a System Group, using an Operations Navigator window, do this:

- 1. Expand Management Central. Sign on to the system that is your central system, if necessary.
- 2. Right-click on System Groups. Select New System Group.
- 3. Enter a **Name** and **Description** for this new system group. Select endpoint systems from the **Available systems** list and use the **Add** button to add them to the list of **Selected systems**. Click **OK**.

### Chapter 4. How do I obtain Electronic Service Agent?

There are two ways to obtain Electronic Service Agent:

### Preload

To determine if Electronic Service Agent has been preloaded on your iSeries or AS/400e system, do this:

- A. Type **DSPSFWRSC** on an iSeries or AS/400e command line and press **Enter**. A list of software resources is displayed.
- B. Press F11 to display libraries/releases. Press Page Down until you locate product ID 5798RZG under the Resource ID column. Check the Release column associated with the Resource ID to determine the Service Director/Electronic Service Agent release. (For example, V5R1M0 signifies 5.1). Press Enter.
  - If Electronic Service Agent 5.1 is installed, continue to Chapter 5. 'How do I Install and Setup Electronic Service Agent?'.
  - If Electronic Service Agent 4.5 or below is installed OR if Electronic Service Agent is not installed, continue below, in this section, to obtain an Electronic Service Agent 5.1 CD (SK3T-4116-00).

### CD

### **U.S** -

**Customers**: At V5R1, Electronic Service Agent is now shipped with the operating system upgrade package. It is not on the operating system CD's, it is an individual CD (**SK3T-4116-00**).

**SSRs**: Call 1-800-879-2755, take option 1 for the National Publications Support Center to order the Electronic Service Agent 5.1 CD (**SK3T-4116-00**).

**Outside U.S.** - At V5R1, Electronic Service Agent is now shipped with the operating system upgrade package. It is not on the operating system CD's, it is an individual CD (**SK3T-4116-00**).

Once you locate / receive the CD, continue to **Chapter 5. 'How do I Install and Setup Electronic Service Agent?'.** 

# *Chapter 5.* How do I Install and Setup Electronic Service Agent?

**HPR** (Hardware problem reporting) – To install and setup only Hardware problem reporting, follow steps 1 - 10 in this section.

SCT (System inventory collection and transmission) – To install and setup only System inventory collection and transmission, follow steps 1 - 4 [read step 4 carefully], and proceed with steps 10 - 20.

**HPR and SCT** – To install and setup both Hardware problem reporting and System inventory collection and transmission, follow all the steps in this section.

- 1. Using a 5250 emulator, sign on to the system designated as your 'central system' in Management Central.
- 2.
- If Electronic Service Agent was obtained as a preloaded product, type GO SERVICE on an iSeries or AS/400e command line and press Enter. Continue with step 4 in this section.
- If Electronic Service Agent was obtained on a CD, insert the CD into the CD-ROM device on your iSeries or AS/400e. Continue with step 3 in this section.
- 3. Type **LODRUN DEV(XXXXX)** on an iSeries or AS/400e command line (where XXXXX is the name of the AS/400 CD-ROM device) and press **Enter.**
- 4.
- If you plan to ONLY install and setup Hardware problem reporting OR if you plan to install BOTH Hardware problem reporting and System inventory collection and transmission, from the Electronic Service Agent Activation Menu, type the option number to Activate Service Director and press Enter. Continue with step 5 in this section.
- If you plan to ONLY install and setup System inventory collection and transmission, from the Electronic Service Agent Activation Menu, press F3 to exit. Continue with step 10 in this section.
- 5. Read the **International License Agreement for Services Programs**. Press **F6** to accept this agreement to proceed!

6. From the **AS/400 Service Director Activation** display, enter the activation password and press **Enter**.

To obtain the activation password:

- **Primary:** Contact IBM hardware service. (In the U.S., dial 1-800-IBM-SERV and place a Service call to have your Systems Service Representative [SSR] contact you with the activation password).
- Secondary: Contact IBM support center.
- 7. Change the parameter values on the **Change Service Director** display to meet the needs of your operating environment. Set the **'Autostart Service Director'** parameter to **\*YES.** Press **Enter**.

**Note:** Subsystem QSVCDRCTR **must** be active for Electronic Service Agent to function properly. Electronic Service Agent adds autostart job entry QYSDAJE to the QSYS/QSYSWRK subsystem description, which automatically starts this subsystem at IPL time. Specifying \*YES for the Autostart Service Director parameter will do this.

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. A SERVICE AGENT screen is displayed. Press F12 twice to exit.
- 10. Load and apply PTF **SF66377** for product 5798RZG. (This is the PTF you ordered in **Chapter 3. 'Prerequisites'**).

**Important!** If you plan to ONLY install and setup Hardware problem reporting, the install and setup is complete.

- 11. The Service Agent system inventory and collection setup and connections must be configured using **Client Access**. Open **Client Access**.
- 12. Open AS400 Operations Navigator.

For information on **Operations Navigator**, see: http://www.ibm.com/servers/eserver/iseries/oper\_nav/ For information on **AS/400 NetServer**, see: <u>http://www.ibm.com/servers/eserver/iseries/netserver/</u>

### 13. Install the **Electronic Service Agent** Plug-in.

- A. Open File from the AS/400 Operations Navigator window and select Install Plug-ins.
- B. Select the system that is your **central system in Management Central** (the selected central system's OS/400 must be at V5R1) and click **OK.** Sign on.
- C. From the Plug-in Selection window, check (to select) **Electronic Service Agent** and click **Next**.

**Note:** If Electronic Service Agent is not an option, it is already installed. Click **Cancel**. Click **Exit Setup**.

For information on **AS/400 NetServer**, see: <u>http://www.ibm.com/servers/eserver/iseries/netserver/</u>

- D. From the Start Copying Files window, click Next.
- E. From the Setup Complete window, click Finish.
- 14. Expand Management Central.
- 15. Right-click on **Extreme Support** and select **Configuration**. From the **Extreme Support Configuration wizard** Welcome screen, click **Next**.
- 16. Select Send collected data to IBM for service and support. Do not select Receive fixes from IBM and report problems to IBM. Click Next.

Continue through the wizard to setup your contact information and communications needed to connect to IBM.

• If you are unable to find an appropriate phone number, you can identify a number by accessing this web site and clicking on your appropriate country / region:

Internet: http://www.attbusiness.net/hlpctr/accessnum.html

• It is important to add any required prefixes to the phone number once it has been selected.

When you reach the **Collect Inventory** screen, continue with the numbered steps below.

- 17. From the Collect Inventory screen, do this:
  - A. Select the inventory you would like to collect and send to IBM. To maximize IBM's ability to service you, you are recommended to select all inventories, except Users and Groups.
  - B. Select the **'Send Electronic Service Agent inventory to IBM'** action in the lower pane to run.
  - C. Click Schedule.
- 18. From the **Management Central Scheduler** panel, schedule the frequency ('daily' is recommended), date, and time to collect and send the inventory to IBM. Click **OK**.

**Note**: The recommended frequency is daily. Your inventory collection will run as you have specified under 'When to run' and 'Date and Time to start'. When the inventory collection is finished, the information will be sent to IBM.

#### 19. From the Electronic Service Agent – Summary screen, click Next.

**Note**: You can view your inventory collection information by expanding **Management Central** and selecting **Scheduled Tasks**.

20. From the Extreme Support Configuration – Summary, click Finish.

The setup of your selected Extreme Support functions is complete.

**Note:** Subsystem QSVCDRCTR **must** be active for Electronic Service Agent to function properly. Electronic Service Agent adds autostart job entry QYSDAJE to the QSYS/QSYSWRK subsystem description, which automatically starts this subsystem at IPL time.

**Important!** For information on how to verify your collection scheduled task(s), change your inventory selections, verify that your information was sent to IBM and more, reference Chapter 7. 'Panels – System inventory collection and transmission'.

### Chapter 6. Menus - Hardware problem reporting

To access the Hardware problem reporting (Service Director) Main Menu, type **GO SERVICE** on an iSeries or AS/400e command line.

If Hardware problem reporting (Service Director) has not been activated, the **Electronic Service Agent Activation Menu** will display. See Figure 1. For more information on this menu, go to the System inventory collection and transmission section of this chapter.

Electronic Service Agent Activation Menu
--

Service Agent inventory functions moved to Operations Navigator. See the IBM Electronic Service Agent for AS/400 User Guide or look for Extreme Support at the AS/400 Information Center at http://www.as400.ibm.com/infocenter. Select one of the following:

1. Activate Service Director

11. Inventory collection - Change job logging

19. Inventory collection - Display audit log

F1=Help F3=Exit F12=Cancel

1. Electronic Service Agent Activation Menu

If Hardware problem reporting (Service Director) has been activated, the **Electronic Service Agent Main Menu** will display. See Figure 2.

QSDMAIN	Electronic Service Agent Main	Menu System: RCHASDAG
Select one of t	he following:	
1. Change 2. Send a S 3. Inventory 4. Work wit 5. Display s	Service Director settings Service Director test problem Collection Menu h the Service Director threshold table software resources	9
7. Custome	r Reports Menu	
Subsystem T 8. End Serv 9. Start Ser 10. Work wi	asks ⁄ice Director subsystem vice Director subsystem th Service Director subsystem	
Problem Dete 11. Change	ermination Service Director job logging More.	
F1=Help F3= (C) COPYRIG	Exit F12=Cancel HT IBM CORP. 1996, 1998.	

QSDMAIN	Electronic Service Agent Main Menu	System: RCHASDAG
Select one of	the following:	
<ol> <li>12. Change</li> <li>13. Display</li> <li>14. Display</li> <li>15. Work w</li> <li>16. Display</li> <li>17. Work w</li> <li>18. Work w</li> <li>19. Display</li> <li>21. Extend</li> <li>22. Display</li> </ol>	Product Activity Log Analysis Service Director PTFs system PTFs ith problem log communications resources ith support contact information ith Service Director spool files Service Director audit log Service Director expiration date Service Director license agreement	
30. Change	Service Director Country Identifier	
	Bottom	
F1=Help F3=	Exit F12=Cancel	

2. Electronic Service Agent Main Menu(s)

### Main Menu Option 1: Change Service Director Settings

Change Se	rvice Director	(CHGSD)
Type choices, press Enter.		
Report problem automatically Replace problem log filter PAL analysis interval Base PAL start hour Report remote problem	<u>*YES</u> <u>*REPLACE</u> <u>4</u> 00 *NO_	*YES, *NO *REPLACE 1, 2, 3, 4, 6, 8, 12, 24 00-23 *YES, *NO
Control point name	<u>*IBMSRV</u> <u>*NETATR</u>	Name, *IBMSRV Name, *NETATR
User ID		Name
	*SYSOPR QSRV	*SYSOPR QSRV
Enable line control	<u>*NU</u>	*YES, *NU
F3=Exit F4=Prompt F5=Refresh F24=More keys	F12=Cancel	More F13=How to use this display
Change Ser	rvice Director	(CHGSD)
Type choices, press Enter.		
Configuration object: Line description Controller description Device description Device description + for more values		Name Name Name Name
Enable automatic PTF monitor Automatic PTF monitor:	*VES	
		*YES, *NO
Schedule day Download PTFs	<u>*TUE</u> <u>*YES</u>	*YES, *NO *TUE, *WED, *THU *YES, *NO, *CVRLTR
Schedule day	<u>*TUE</u> <u>*YES</u> 51	*YES, *NO *TUE, *WED, *THU *YES, *NO, *CVRLTR 1-99
Schedule day	<u>*TUE</u> *YES 51 *YES	*YES, *NO *TUE, *WED, *THU *YES, *NO, *CVRLTR 1-99 *YES, *NO
Schedule day	<u>*TUE</u> <u>*YES</u> <u>51</u> <u>*YES</u> <u>*YES</u>	*YES, *NO *TUE, *WED, *THU *YES, *NO, *CVRLTR 1-99 *YES, *NO *YES, *NO

F12=Cancel

F24=More keys

F3=Exit

2. Change Service Director Settings

F4=Prompt

F5=Refresh

Bottom

F13=How to use this display

### **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 hours.

**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 (SNDCFGDTA)

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 ENHANCED SERVICE DIRECTOR
FUNCTION TEST

      TO TEST/REGISTER SERVICE DIRECTOR, ENTER AN EXISTING ERROR LOG ID BELOW:

      (CHOOSE A DASD OR IOP ERROR LOG ID. IF NONE AVAILABLE PRESS F3 TO CONTINUE.)

      IMPORTANT:

      TO HELP TRACK INSTALLS, TRY TO SEND A TEST/REGISTER CALL.

      SERVICE DIRECTOR WILL CREATE A PROBLEM LOG ENTRY WITH THE ERROR
LOG ID THAT YOU INPUT. THE PROBLEM WILL THEN BE REPORTED.

      IF ECS IS ENABLED, THE PROBLEM WILL BE REPORTED.

      AFTER A FEW MINUTES, CHECK MESSAGES FOR QSRV OR QSYSOPR FOR
SERVICE DIRECTOR MESSAGES AND PROBLEM PMR.

      F3 - EXIT
      F5 - STRSST
```

AS/400 Service Director Function Test

# Main Menu Option 3:

# **Inventory Collection Menu**

Displays a message stating that the Service Agent inventory functions were moved to Operations Navigator.

# 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.

1=Add 2=Ch	ange 5=Display	12=Work with SRCs	
pt Device	Opt Device	Opt Device	
0000	261*	2666	3480
1***	2621	266A	3490
2440	2 6 2 3	2717	3494
2605	2624	2720	3495
2609	2626	2722	3570
260*	2 62 *	2726	3590
2610	2637	2800	3995
2612	263*	2801	5032
2613	2644	2802	603*
2614	2661	2809	6050
2617	2663	3422	6054
2618	2664	3430	6055
2619	2665	3450	6056
			More
3=Exit F5=R	efresh F10=Displa	y threshold table log	F12=Cancel

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.

🕶 Session D - [2	4 x 80]			_ 🗆 🗵
<u>File E</u> dit <u>T</u> ransfe	er Ap <u>p</u> earance <u>C</u> o	ommunication As <u>s</u> ist	<u>W</u> indow <u>H</u> elp	
PrtSom Copy	y selected text to clip	board Display	Color Map Record Stop Play Quit Clipbrd Support Index	
			Display Software Resources	
			System:	RCHAS005
Resource				
ID	Option	Feature	Description	
5769999	*BASE	5050	A\$/400 Licensed Internal Code	
5769881	*BASE	5050	Operating System/400	
5769881	<b>*BASE</b>	2924	Operating System/400	
5769881	1	5050	0\$/400 - Extended Base Support	
5769\$\$1	1	2924	0\$/400 – Extended Base Support	
5769881	2	5050	0\$/400 - Online Information	
5769\$\$1		2924	0S/400 - Online Information	
5769\$\$1		5050	0S/400 - Extended Base Directory Support	
5769\$\$1		2924	0S/400 - Extended Base Directory Support	
5769\$\$1		5050	0S/400 - Example Tools Library	
5769\$\$1		2924	0S/400 - Example Tools Library	
5769\$\$1	8	5050	0S/400 - AFP Compatibility Fonts	
5769\$\$1		5050	0S/400 - *PRV CL Compiler Support	
5769\$\$1		2924	0S/400 - *PRV CL Compiler Support	
				More
Press En	ter to co	ntinue.		
F3=Exit	F11=Dis	play libr	aries/releases F12=Cancel	
F19=Disp	lay trade	marks		
MA d		MW		01/001

Display Software Resources

# Main Menu Option 7: Customer Reports Menu

QSDCRPT Select one of t	Service Direct	or Customer Report: s:	<b>s Menu</b> Syste	m: RCHASSD4
1. Media A 2. Product 3. Problem 4. Service	analysis Report : Activity Log Proce 1 Log Processing Sum : Director PTF Downl	ssing Summary mary oads		
				Bottom
F1=Help F3=Ex (C) COPYRIGHT I	tt F12=Cancel IBM CORP. 1998, 1998	-1-10-10		

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.

Repo Syst	rt Date a em Name	nd Time 	.: 10 .: RC	/01/99 17:0 HASSD4	06:55	
Гуре	options,	press Enter.				
4=	Delete					
pt	Volume	Туре	PRE	GB/PRE	TRE	
	AGAIN	6385	N/A		0	
	ARGON2	6385	N/A	-	0	
	BACKH	6385	N/A		0	1999 - 1999 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 -
	BACKX	6385	N/A	1997 - H	0	1010-1941-1940-1940 1940-1940-1940-1940
	DEADBK	6385	N/A		0	
	DEADB2	6385	N/A	States and - e	0	Shadah ing tang 🚽 👌 Tang
	EMEAPE	6385	N/A		0	
	JBACK2	6385	N/A		0	
	MADISO	6385	N/A	at any fait of - the	0	
	NEWTOM	6385	N/A		0	
						More
3=E	xit F6=	Print report	F11=Dis	play Write H	Error Data	F12=Cancel

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.

# Туре

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 contains 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.

Report Date System Name	and Time	: 10/01/99 : RCHASSD4	17:07:23	
Month	Dasd Entries	Tape Entries	Processor Entries	Total Entries
06/1999	0	o	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
73=Exit F	6=Print report	F12=Cancel		Botte

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.

	Servio	ce Director	Problem Lo	og Processin	g Summary	
Report Da System Na	te and Time me	:::: <b>:</b>	10/01/99 RCHASSD4	10:24:21		
Month	Local Entries	Remote Entries	Total Entries	Service Provider Calls	Entries From PAL	
07/1999 06/1999	3 2	1 0	4 2	4 2	0	4 0
F3=Exit (C) COPYR	F6=Print re IGHT IBM COI	eport F12: 2 <b>P. 1996, 1</b> 1	=Cancel 998.			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
     PTF
                        Problem
                                    Origin
Opt
     ID
              Product
                        ID
                                    System
                                                       SRC
     MF21044 5769999 9916053681
MF21621 5769999 9916053681
                       9916053681
                                   RCHA
                                            .RCHASSD4
                                                       *AUTOPTF
                                                                 06/09/99
                                            .RCHASSD4
                                    RCHA
                                                       *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
                       9916053681
     MF22447 5769999
                                    RCHA
                                            .RCHASSD4
                                                       *AUTOPTF
                                                                 06/09/99
              5769999
     MF22414
                        9916053681
                                    RCHA
                                            .RCHASSD4
                                                       *AUTOPTF
                                                                 06/09/99
     MF22354 5769999 9916053681
                                    RCHA
                                           .RCHASSD4
                                                       *AUTOPTF
                                                                 06/09/99
              5769999
                        9916053681
                                    RCHA
                                            .RCHASSD4
                                                       *AUTOPTF
                                                                 06/09/99
     MF22452
     MF22297
              5769999
                                    RCHA
                                            .RCHASSD4
                                                                 06/09/99
                        9916053681
                                                       *AUTOPTE
     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
                                                                      RCHASSD4
                                                            System:
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
                                                                      RCHASSD4
                                                            System:
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.

RCHASSD4 Work with Active Jobs 10/01/99 08:31:12 CPII %: .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 SVCDRCTR QSYS SBS .0 QSDPALMON QSVCDRCTR BCH .0 DLY-12:10:00 QSDPRBMON QSVCDRCTR BCH .0 PGM-QSDPRBMON QSVCDRCTR DEQU DLYM DEQU Bottom 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 SD Job Logging (CHGSDJOB)
Type choices, press Enter.
Job logging ..... *OFF *ON, *OFF
*ON, *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 Analysis date and time	*YES *SAME	*YES, *NO *CHANGE, *SAME	
F3=Exit F4=Prompt F5=Refresh F24=More keys	F12=Cancel	F13=How to use this	<b>Bottom</b> display

Change Product Activity Log Analysis

Chang	ge SD PAL Analysis (	CHGSDANL)
Type choices, press Enter.		
Start analysis immediately . Analysis date and time Start date Start time	*YES *SAME 	*YES, *NO *CHANGE, *SAME Date Time
F9=All parameters F11=Keyw	ords F14=Command :	Bottom string F24=More keys

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.

Prod IPL Rele	luct ID . source . ase		System: RCHASSD4
Туре	options,	press Enter.	
5=	Display P	TF details 6=Print cover letter 8=Disp.	lay 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
			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.

			Disp	lay PT	F Status			
-						an a	System:	RCHASSD4
Proc	luct ID .			Sanda Sa	5769999	<b>J</b>		
IPL	source .		1. A. A. A.	1.1.1.1.	##MACH	₿₿		
Rele	ase of ba	se option .	:::::	••••••••	V4R4MO	LOO		
Туре	options,	press Enter						
5=	Display P	TF details	6=Print	cover	letter	8=Display	cover let	ter
	PTF						IPL	
Opt	ID	Status					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=E	xit F11	=Display alt	ernate vi	lew F	17=Posit:	ion to F	12=Cancel	
		and the states						

Display PTF Status

# Main Menu Option 15: Work with problem log

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

		W	fork with Problems
Posi	tion to	• • • • •	System: RCHASSD4 Problem ID
Type 5= 9=	options, pr Display deta Work with al	ess Enter. Mils 6=Print erts 12=Enter	details 8=Work with problem • text
Ont	Problem ID	Status	Problem Description
opt	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=E	xit 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.

pe options, pre	ss Enter.	deggrintiong	7-Digplow recourse detail
5-Display Confi	guración	descriptions	-Display resource decail
ot Resource	Туре	Status	Text
CMB01	9164	Operational	Combined function IOP
LIN05	2720	Operational	Comm Adapter
CMN06	2720	Operational	V.24 Port Enhanced
LIN01	2850	Operational	File Server IOA
CMN01	2724	Operational	Token-Ring Port
CMN02	2723	Operational	Ethernet Port
CMN03	6B00	Operational	Virtual Port
LIN02	285A	Operational	LAN Adapter
CC01	6616	Operational	File Server IOP
LIN03	6149	Operational	LAN Adapter
CMN04	6149	Operational	Token-Ring Port
LINO4	6B00	Operational	Virtual Adapter
CMN05	6B00	Operational	Virtual Port
			Botto

**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 Select one of the following:	System:	RCHASSD4
<ol> <li>Work with question and answer (Q &amp; A) database</li> <li>Work with local service information</li> <li>Work with IBM product information</li> <li>Work with technical information exchange (TIE)</li> <li>Work with upgrade order information</li> </ol>		
Selection or command ===>		
F3=Exit F4=Prompt F9=Retrieve F12=Cancel (C) COPYRIGHT IBM CORP. 1980, 1997.		

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	. : Q	SVCDRCTR
Member	: AUDITLOG	Record	.: 1	
Control	the state of the second state	Column	. : 1	
Find				
*+1+	2 + 3 + 4	++	6	.+7+
97/08/13 15:41:28	CUSTOMER ACCEPTED TEN	MS AND CONDITIO	NS	
97/08/13 15:41:32	ACTIVATION PASSWORD V	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 AC	TIVITY LOG RAN		
97/08/14 08:10:02	QSDANCNTL: NO PRODUCT	ACTIVITY LOG D.	ATA TO P	ROCESS
97/08/14 08:31:01	SUBSYSTEM STARTING			
****** END OF DATA *****				
				Bottom
F3=Exit F12=Can	el F19=Left F20=R	aht F24=More	kevs	
			and the state	

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.



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

# *Chapter 7.* Panels - System inventory collection and transmission

# How do I verify the inventory collection scheduled task(s)?

To verify an inventory collection task was scheduled, using an Operations Navigator window, do this:

1. Expand **Management Central** and **sign on** to the system that is your central system, if necessary.



- 2. Expand **Scheduled Tasks**. Select **Inventory** and in the right pane you will see scheduled tasks that have previously run or scheduled tasks that are currently running.
- 3. Locate the inventory task you would like to verify. Right-click on the task to view your choices.

For information on **Management Central**, see: http://www.iseries.ibm.com/sftsol/mgmtcentral.htm.

# How do I change the inventory selections?

**Note:** These steps will not change the inventory for any tasks already created and scheduled.

To change your inventory selections, using Operations Navigator, do this:

- 1. Expand Management Central and sign on to the system that is your central system, if necessary.
- 2. Expand **Endpoint Systems or System Groups**. Right-click on either the endpoint or the group for which you would like to collect and send inventory. Select **Inventory** and choose **Collect**.



Collect Inventory - Rchasdag	? ×
Inventory to collect:	
✓Hardware	
✓Software	
✓ Fixes	
✓System values	
✓Users and Groups	
Contact information	-
	•
Actions to run on central system when collection completes:	
Send Electronic Service Agent inventory to IBM	
OK Schedule Cancel Hel	р

# How do I know that information was sent to IBM?

To verify that data was sent to IBM, do this:

- 1. Expand **Management Central** and **sign on** to the system that is your central system, if necessary.
- 2. Expand Extreme Support.

ØAS/400 Operations Navigator			
<u>File E</u> dit <u>V</u> iew <u>O</u> ptions <u>H</u> elp			
X 🖻 🖻 🗙 🖆 🔇 🚺 🛇			16 minutes old
Central System: Rchasdag	Management Central (Rchasdag):	Scheduled Tasks Scheduled by: All	
Anagement Central (Rchasdag)     Anagement Central (Rchasdag)     Anagement Central (Rchasdag)     Anagement Central (Rchasdag)     Support Sector (Rechard (Rec	Name Commands Packages and Products Inventory Fixes Collection Services System Values System Values	Description Contains run command tasks. Contains send file and product tasks. Contains collect inventory tasks. Contains fixes management tasks. Contains collection services tasks. Contains users and groups tasks. Contains system values tasks.	

3. Select **Agents** and in the right pane you will see the agents. Right-click **Electronic Service Agent** and select **History**.



For information on **Management Central**, see: <u>http://www.iseries.ibm.com/sftsol/mgmtcentral.htm</u>.

# How do I change the Universal Connection Configuration?

To run the Universal Connection Wizard to modify the configuration, do this:

1. Expand **My Connections**. Go to the system connection under "**My Connections**" that is your central system in Management Central and **sign on**, if necessary.



- 2. Expand Network.
- 3. Expand Remote Access Services.
- 4. Right-click on Originator Connection Profiles and select Universal Connection Wizard.



# Chapter 8. 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

#### **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 does not support this release of the operating system - action required.

Cause: The installed version of Service Director does not support this release of the operating system. The operating system release is &1. The Service Director version is &2.

Recovery: Service Director is currently disabled. A PTF or a different version of the Service Director product is required on this system. For assistance, contact your local IBM Service Representative. In the United States, call 1-800-IBMSERV.

Symbol Field description

- &1 Operating system release level identifier
- &2 Service Director version identifier

#### **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 QSVCDRCTR has started successfully.

#### **SDM1017**

Severity: 40

Error creating a test problem.

Cause: Service Director attempted to create a problem entry in the problem log for product activity log record &1. The problem was not created because of an error.

Recovery: See the previously listed messages in the job log and the Service Director audit log for additional information on the cause of the error. The most likely reason for failure is that the selected product activity log entry is incomplete. Select another product activity log entry and try the request again.

Symbol Field description

&1 Product activity log record identifier

## SDM1018

Severity: 0

Test problem created.

Cause: A test problem entry has been created in the problem log using product activity log record &1. To view the problem log, enter GO SERVICE and select the Work with problem log item.

Symbol Field description

&1 Product activity log record identifier

#### 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. See the previously listed messages in the job log for additional information if the Change Services Data Collector command has failed.

## 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:

Enter GO SERVICE.
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:

#### Unable to retrieve the registration identification for this system

The inventory you requested to display has not been collected since you activated the Electronic Service Agent. You must collect the inventory again to view the most current level. To collect inventory on a system, follow these steps:

- 1. In AS/400 Operations Navigator, expand Management Central.
- 2. Expand AS/400 Endpoint Systems.
- 3. Right-click a system, and select Inventory.
- 4. Select Collect.
- 5. Select one or more inventories to collect.
- 6. Click OK to start collecting inventory immediately or click Schedule to specify when to collect inventory.

#### Unable to retrieve registration information

Check for error messages in the audit log for the Electronic Service Agent (Service Director).

- 1. From the AS/400 command line, type GO SERVICE.
- 2. Select the Display Service Director audit log option.

If the problem still persists, check the technical information databases at http://www.as400service.ibm.com. If the information you need to solve the problem cannot be found there, contact your technical support provider, or see http://www.as400service.ibm.com again for information about IBM support and services.

#### An error occurred while trying to retrieve information from the server

Check the technical information databases at http://www.as400service.ibm.com. If the information you need to solve the problem cannot be found there, contact your technical support provider, or see http://www.as400service.ibm.com again for information about IBM support and services.

#### The subsystem could not be started

Check the technical information databases at http://www.as400service.ibm.com. If the information you need to solve the problem cannot be found there, contact your technical support provider, or see http://www.as400service.ibm.com again for information about IBM support and services.

#### The subsystem could not be ended

Check the technical information databases at http://www.as400service.ibm.com. If the information you need to solve the problem cannot be found there, contact your technical support provider, or see http://www.as400service.ibm.com again for information about IBM support and services.

#### An unexpected error occurred

Check the technical information databases at http://www.as400service.ibm.com. If the information you need to solve the problem cannot be found there, contact your technical support provider, or see http://www.as400service.ibm.com again for information about IBM support and services.

#### User not authorized to this function

To use this function, you must have all object special authority (\*ALLOBJ) and security administrator user class (\*SECOFR). Contact the security officer to obtain the required authorities, and try the request again.

#### An error occurred before a connection with the server was attempted

Check for error messages in the audit log for the Electronic Service Agent (Service Director).

- 1. From the AS/400 command line, type GO SERVICE.
- 2. Select the Display Service Director audit log option.

If the problem still persists, check the technical information databases at http://www.as400service.ibm.com. If the information you need to solve the problem cannot be found there, contact your technical support provider, or see http://www.as400service.ibm.com again for information about IBM support and services.

#### An attempt to connect with the server was not successful

Check for error messages in the audit log for the Electronic Service Agent (Service Director).

- 1. From the AS/400 command line, type GO SERVICE.
- 2. Select the Display Service Director audit log option.

If the problem still persists, check the technical information databases at http://www.as400service.ibm.com. If the information you need to solve the problem cannot be found there, contact your technical support provider, or see http://www.as400service.ibm.com again for information about IBM support and services.

#### An error occurred during the conversation with the server

Check for error messages in the audit log for the Electronic Service Agent (Service Director).

- 1. From the AS/400 command line, type GO SERVICE.
- 2. Select the Display Service Director audit log option.

If the problem still persists, check the technical information databases at http://www.as400service.ibm.com. If the information you need to solve the problem cannot be found there, contact your technical support provider, or see http://www.as400service.ibm.com again for information about IBM support and services.

#### The Management Central task could not be scheduled to collect inventory

Check for error messages in the job log for the Management Central servers (see 'Viewing the server job log' for step-by-step instructions).

Make sure your central system is running Version 5 Release 1 Modification 0 or later of the operating system.

Make sure the TCP/IP connection to the central system is working correctly.

Make sure the Client Access connection is working correctly.

If the problem persists, end Operations Navigator and start it again.

Restart the Management Central servers and try again. See 'Starting the Management Central server' for step-by-step instructions.

## At least one system group must be selected to continue. Create a system group using Management Central, then click Refresh to update the list.

A system group is a collection of endpoint systems defined by a user for the purpose of performing Management Central functions in one step, as if they were a single system. To create a new system group, follow these steps:

1. In AS/400 Operations Navigator, expand Management Central.

- 2. Right-click AS/400 System Groups and select New System Group.
- 3. On the New System Group dialog, specify a unique name for the new system group and a brief description that will help you identify this group in a list of system groups.
- 4. From the Available systems list, select the endpoint systems that you want to include in this new group. Click Add to add the systems to the Selected systems list.
- 5. Click OK to create the new system group, which will include all the endpoint systems in the Selected systems list.

#### Default browser could not be opened

Verify that you have an Internet browser installed on your system.

Check the technical information databases at http://www.as400service.ibm.com. If the information you need to solve the problem cannot be found there, contact your technical support provider, or see http://www.as400service.ibm.com again for information about IBM support and services.

#### You do not have the proper authority to run the Electronic Service Agent action

To perform this action, you must have \*USE authority to library QSVCDRCTR. Contact the security officer to obtain the required authorities, and try the request again.

#### User not authorized to perform this action

To perform this action, you must have \*USE authority to the QASASNDHST file in library QSVCDRCTR. Contact the security officer to obtain the required authorities, and try the request again.

#### User not authorized to perform this action

To perform this action, you must have \*USE authority to the QSAUTIL service program in library QSVCDRCTR. Contact the security officer to obtain the required authorities, and try the request again.

#### User not authorized to perform this action

To perform this action, you must have \*USE authority to the QASASNDOPT file in library QSVCDRCTR. Contact the security officer to obtain the required authorities, and try the request again.

#### User not authorized to perform this action

To perform this action, you must have \*CHANGE authority to the QASASNDOPT file in library QSVCDRCTR. Contact the security officer to obtain the required authorities, and try the request again.

#### User not authorized to perform this action

To perform this action, you must have \*USE authority to the QASAAGRMNT file in library QSVCDRCTR. Contact the security officer to obtain the required authorities, and try the request again.

#### User not authorized to perform this action

To disable the subsystem, you must have \*JOBCTL authority. Contact the security officer to obtain the required authorities, and try the request again.

To disable the subsystem, you must have \*USE authority to subsystem description QSVCDRCTR/QSVCDRCTR. Contact the security officer to obtain the required authorities, and try the request again.

#### User not authorized to perform this action

To enable the subsystem, you must have \*JOBCTL authority. Contact the security officer to obtain the required authorities, and try the request again.

## Appendix A. Authority Requirements

A user **without** \***ALLOBJ** authority would need to have specific authority to these objects to setup Electronic Service Agent AND to collect and send inventory information to IBM. See the table below for the specific authorities required:

Object	Library	Object type	Authority required
Use GRTOBJAUT for these objects:			
QSARTVINV	QSVCDRCTR	*PGM	*USE
QSVCDRCTR	QSYS	*LIB	*USE
QA1PONE	QUSRSYS	*FILE	*CHANGE
Q1PRIGS	QSYS	*PGM	*USE
QMARIGS	QSYS	*PGM	*USE
QSASENDER	QSVCDRCTR	*PGM	*USE
QTOCCNNINF	QSYS	*SRVPGM	*USE
QSASRVID	QUSRSYS	*VLDL	*CHANGE
QAYIVSYS	QUSRSYS	*FILE	*USE
QAYIVHDW	QUSRSYS	*FILE	*USE
QAYIVSFW	QUSRSYS	*FILE	*USE
QAYIVPTF	QUSRSYS	*FILE	*USE
QAYIVSYV (v5r1)	QUSRSYS	*FILE	*USE
QAYIVRIG	QUSRSYS	*FILE	*CHANGE
QYPSSRVS	QSYS	*SRVPGM	*USE
QUSRSYS	QSYS	*LIB	*CHANGE
QASA*	QSVCDRCTR	*FILE	*CHANGE
*ALL	QSVCDRCTR	*SRVPGM	*USE
QSVCDRCTR	QSVCDRCTR	*ALL	*USE
AUDITLOG	QSVCDRCTR	*FILE	*CHANGE
QYPSSTRS	QSYS	*PGM	*USE
Use CHGAUT for these objects:	,	,	*D)/
qibm/proddata/sa400/esrvagt.jar	n/a	n/a	*KX
qıbm/proddata/sa400	n/a	n/a	*KX

# Appendix B. Electronic Service Agent and System Manager/400

You may prefer to manage all problems from one central location (host/remote setup). The **Hardware problem reporting function of Electronic Service Agent** will work in this environment if configured properly. To manage all problems from one central location, Electronic Service Agent Hardware problem reporting requires the use of **System Manager/400**.

Note: This does not include the System inventory collection and transmission function.

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

For information on how to configure the iSeries or AS/400e to act as the central reporting site (service provider) for a network and the remote sites (service requesters) see the **System Manager Use Guide** at

http://as400bks.rochester.ibm.com/pubs/html/as400/v5r1/ic2924/books/c4153211.pdf or contact Marketing.

System Manager/400 must be installed **only** on the central site Service Provider Control Point (host) system. The host system must be at the highest OS/400 level of the remote systems it is supporting.

System Manager/400 acts as the vehicle to transfer / send problem log entries from a (specified) remote system(s) to the (specified) host system, taking advantage of the System Manager/400 network setup of service providers and Service requestors to accomplish this. The problem log entries from a remote system will be identified by the serial number in the (host) problem log entry. These problem log entries, now at the host system, will be treated as just another problem log entry on the system, meaning that once the problem log entries are received on the host system, Hardware problem reporting will send them to IBM as a reported problem. There are no 'specific' messages generated for a remote or host reported problem; only the standard message is generated, with the unique system serial number identified, for (in) the problem log entry.

If your system has 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 Electronic Service Agent Main Menu) should be set to:

Report problem automatically \*YES

Report remote problem \*NO

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

Report problem automatically \*NO

Report remote problem \*NO

To handle both local and remote problems automatically (assuming that 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 Electronic Service Agent Main Menu) should be set to:

Report problem automatically \*YES

Report remote problem \*YES

**Report problem to:** 

**Control point name -** Specify the control point name of the service provider that will be notified of local system problem (host system).

**Network ID** - Specify the network ID of the service provider that is notified of local system problem (host system).

**Note:** Use the **Work with Service Providers (WRKSRVPVD)** command to see the service providers defined for the host system. See figure below.

#### IBM Electronic Service Agent for iSeries and AS/400e 10/11/01

Work with Service Providers							
Positi Netw	on to ork ID		Control point -	System:	RCHAS005		
Type options, press Enter. 1=Add 2=Change 3=Copy 4=Remove 5=Display							
0pt	Control Point	Network ID	Description				
-	*IBMSRV		IBM Service Support				
					Bottom		
F3=Exi F22=Ch (C) C0	t F5=Refres ange IBM ser PYRIGHT IBM	sh F12=Cancel vice route CORP. 1980, 2000	F13=Configure distribut	ion service	25		

(1) 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 C. Notices and trademarks

**Notices** – This information was developed for products and services offered worldwide.

IBM may have patents or pending patent applications covering subject matter described in this document. The furnishing of this document does not give you any license to these patents. You can send license inquiries, in writing, to:

IBM Director of Licensing IBM Corporation North Castle Drive Armonk, NY 10504-1785 U.S.A.

The following paragraph does not apply to the United Kingdom or any other country / region where such provisions are inconsistent with local law:

#### INTERNATIONAL BUSINESS MACHINES CORPORATION PROVIDES THIS PUBLICATION "AS IS" WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF NON-INFRINGEMENT, MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.

Some states do not allow disclaimer of express or implied warranties in certain transactions, therefore, this statement may not apply to you.

This information could contain technical inaccuracies or typographical errors. Changes are periodically made to the information herein; these changes will be incorporated in new editions of the publication. IBM may make improvements and/or changes in the product(s) and/or the program(s) described in this publication at any time without notice.

Any references in this information to non-IBM Web sites are provided for convenience only and do not in any manner serve as an endorsement of those web sites. The materials at those Web sites are not part of the materials for this IBM product and use of those Web sites is at your own risk.

IBM may use or distribute any of the information you supply in any way it believes appropriate without incurring any obligation to you.

Licensees of this program who wish to have information about it for the purpose of enabling the exchange of information between independently created programs and other programs (including this one) and the mutual use of information which has been exchanged, should contact:

IBM Corporation Department 80D P.O. Box 12195 3030 Cornwallis Research Triangle Park NC 27709 U.S.A.

Such information may be available, subject to appropriate terms and conditions, including in some cases payment of a fee.

The licensed program described in this document and all licensed material available for it are provided by IBM under terms of the IBM Customer Agreement, IBM International Program License Agreement or any equivalent agreement between us.

**Trademarks** – The following terms are trademarks of the IBM Corporation in the United States or other countries or both:

IBM OS/400 AS/400 Service Director Service Director AS/400 Service Agent Electronic Service Agent Service Agent Client Access IBM Electronic Service Agent for AS/400 IBM Electronic Services for AS/400 IBM Global Network

Other company, product, and service names may be trademarks or service marks of others.