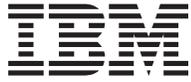# IBM

@server

iSeries

Electronic Service Agent
for iSeries User's Guide

Version 5 Release 2

SC41-5016-00

IBM

@server

iSeries

Electronic Service Agent for iSeries User's Guide

Version 5 Release 2

SC41-5016-00

> **Note**
>
> Before using this information and the product it supports, be sure to read the information in
> Appendix F, "Notices and Trademarks" on page 51.

Contents

Preface

This guide provides overview, prerequisite information, installation, set up and configuration instructions, and user information for V5R2 **Electronic Service Agent for iSeries, 5798–RZG**.

Who Should Read This Guide

This guide is intended for use by iSeries server administrators who are familiar with, or have a working knowledge of iSeries servers and iSeries Navigator. A basic understanding of an iSeries server is beneficial to assist you with the information provided in this guide as it pertains to V5R2 of Electronic Service Agent for iSeries.

How To Use This Guide

Use the following outline as a path to use Hardware problem reporting and System inventory collection and transmission:

To use Hardware problem reporting and System inventory collection and transmission, read and perform the steps in these chapters:

- *Chapter 4. Install Electronic Service Agent, 5798–RZG*
- *Chapter 5. Set up and Configure Hardware Problem Reporting*
- *Chapter 6. Set up and Configure System Inventory Collection and Transmission*

Summary of changes to Electronic Service Agent

Following are the changes you should be aware of for V5R2 Electronic Service Agent for iSeries.

- **Hardware problem reporting**
  - Two new functions:
    - Send a test problem without an error log id

      Service Agent Main menu; Option 2. Send a Service Agent test problem
    - Automated Operational Test

      Send a test request automatically every 13 weeks
  - One less restriction:
    - *JUL date format is allowed
  - Service Agent Main Menu:
    - Option 1. Change Service Agent settings parameters

      Report Problem Automatically defaults to *YES (formerly a required [blank] parameter)

      Replace Problem Log Filter defaults to *REPLACE (formerly a required [blank] parameter)
- **Inventory Collection and Transmission**
  - Inventory Collection and Transmission:
    - Configure Electronic Services

Interface to enter a user's IBM® Registration id to send to IBM for use with the Electronic Services web site

https://www.ibm.com/support/electronic/itssysprof/

- Ability to turn job logging on and off
- Ability to display the audit log

Display audit log information from V5R2 as well as V5R1 central servers

– Wizard:
  - The user needs to fill the Contact Information only once for either the Electronic Service Agent or Electronic Customer Support (ECS) connection setups.

– History Panel:
  - Can be refreshed by using F5 or Refresh from the context menu on the history panel.

Part 1. About Electronic Service Agent

1

Chapter 1. About Electronic Service Agent

Electronic Service Agent is a no charge licensed program, 5798–RZG, that resides on your server and is designed to monitor events and to transmit server inventory information to IBM on a periodic, customer-definable timetable. This release of Electronic Service Agent supports all iSeries servers running OS/400® V5R2. The two key functions of Electronic Service Agent are:

- **Hardware problem reporting** predicts and prevents hardware errors by early detection of potential problems, fix downloads, and automatic calls to IBM Service when necessary. With early knowledge about potential problems, IBM can provide proactive service, assisting in maintaining higher availability and performance. The Hardware problem reporting configuration is done in the iSeries 'command line format' environment.

  Note: The Hardware problem reporting function can be activated only if your server is under warranty, or if you have purchased an IBM Maintenance Services Agreement.

- **System inventory collection and transmission** assists IBM in providing improved service by collecting and electronically sending server information to IBM as input to problem analysis and problem prevention functions. The server information is gathered and stored by **Management Central**. It is then sent to IBM using the **Universal Connection**. Through the Management Central graphical user interface (GUI), 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.

  Inventory examples. You can collect any of the following server information: hardware, software, fixes, system values, service attributes, contact information, network attributes, PM/400 performance data, and system registration.

  This function of Electronic Service Agent also has the ability to collect and transmit information from multiple servers. This is done by consolidating inventory from multiple servers onto one central system prior to transmisson over the connection.

  The System inventory collection and transmission function of Electronic Service Agent is available with **iSeries Navigator** (a product of iSeries Access).

About Extreme Support

Electronic Service Agent is part of Extreme Support. Extreme Support is IBM's comprehensive technical service and support initiative exclusively for IBM iSeries. Extreme Support 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.

One of the offerings includes support that uses TCP/IP with Performance Management/400, **Electronic Service Agent**, and inventory consolidation with Management Central.

For more information on Extreme Support, see:

    www.ibm.com/servers/eserver/iseries/support

About Management Central

Management Central extends the value of the iSeries by making it as easy to manage a group of iSeries servers as it is to manage one. The graphical user interface provides significantly enhanced functions for managing multiple servers. Management Central is part of iSeries Navigator and the operating system; it comes with every iSeries. It is easy to access - just select Management Central in iSeries Navigator to start managing your servers.

For information on **Management Central**, see:

> http://www.ibm.com/servers/eserver/iseries/sftsol/mgmtcentral.htm

About Universal Connection

Universal Connection allows you to control how your business connects to IBM support services. Once connected, you can access a variety of customer support options as you need them. The Universal Connection is Extreme Support'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, and fix management.

The System inventory collection and transmission function of Electronic Service Agent uses the Universal Connection. You will be asked to set up and configure the Universal Connection later in this guide. To prepare for this, it is recommended that you reference the Universal Connection Web site below.

For more information on **Universal Connection**, see:

> http://www.ibm.com/servers/eserver/iseries/software/univconn.htm

About iSeries Navigator

IBM iSeries Navigator is a powerful graphical interface for managing your iSeries servers. iSeries Navigator functionality includes server navigation, configuration, planning capabilities, and online help to guide you through your tasks. iSeries Navigator makes operation and administration of the server easier and more productive and is the only user interface to the new, advanced features of the OS/400 operating system. It also includes Management Central for managing multiple servers from a central system.

For information on **iSeries Navigator**, see:

> http://www.ibm.com/servers/eserver/iseries/navigator/

Chapter 2. Related Technical Information

It is *HIGHLY* recommended that you become familiar with the associated products used by Electronic Service Agent. Reference the available Frequently Asked Questions, use the iSeries Information Center, the iSeries home page and the provided list of additional reference information to view *other* iSeries technical information.

- **Frequently Asked Questions**

  The Electronic Service Agent Web site maintains a section dedicated to your most frequently asked questions (FAQs). This section answers PTF, installation, set up, configuration and miscellaneous questions.

  You can access the Electronic Service Agent Web site at:

  > http://publib.boulder.ibm.com/as400_sd/sdsadoc.html

- **iSeries Information Center**

  You can access the iSeries Information Center two ways:

  – From the following Web site:

    > http://www.ibm.com/eserver/iseries/infocenter

  – From CD-ROMS that ship with your Operating System/400® order:

    iSeries Information Center, SK3T-4091–02. This package also includes the PDF versions of the iSeries manuals, *iSeries Information Center: Supplemental Manuals*, SK3T-4092–01, which replaces the Softcopy Library CD-ROM.

  The iSeries Information Center contains advisors, important topics of reference and it also includes links to related IBM Redbooks and Internet links to other IBM Web sites such as the Technical Studio and IBM iSeries Support.

- **iSeries home page**

  You can access general information from the iSeries home page at the following Web site:

  > http://www.ibm.com/servers/eserver/iseries/

- **Additional Reference Information**

  – For information on **Electronic Service Agent**, see:

    > http://publib.boulder.ibm.com/as400_sd/sdsadoc.html

  – For information on **Management Central**, see:

    > http://www.ibm.com/servers/eserver/iseries/sftsol/mgmtcentral.htm

  – For information on **iSeries Navigator**, see:

    > http://www.ibm.com/servers/eserver/iseries/navigator/

  – For information on **iSeries NetServer**, see:

    > http://www.ibm.com/servers/eserver/iseries/netserver/

  – For information on **Performance Management/400 (PM/400)**, see:

    > http://www.ibm.com/servers/eserver/iseries/pm400

  – For information on **Universal Connection**, see:

http://www.ibm.com/servers/eserver/iseries/software/univconn.htm

– For information on **iSeries Access** , see:

http://www.ibm.com/servers/eserver/iseries/clientaccess/

– For information on how to view individual server information which
Electronic Service Agent has collected and sent to IBM, see:

https://www.ibm.com/support/electronic/itssysprof/

Who Do I Contact if I Have a Question

- Contact your local **iSeries Support Center**.

Part 2. Overview of Electronic Service Agent

Chapter 3. Overview of Electronic Service Agent

This chapter presents general information about Electronic Service Agent.

What Does Electronic Service Agent Do

What Does Hardware Problem Reporting Do

The Hardware problem reporting function of Electronic Service Agent is provided as part of the IBM Service agreement for iSeries servers. 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 server. It does this by analyzing entries in two server logs: the Problem Log and the Product Activity Log. The iSeries server 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. If a matching SRC code is not found in the Electronic Service Agent threshold table, the Error Analysis Framework (EAF) flags are referenced. Error Analysis Framework intercepts an error before it reaches the Product Activity Log and adds information to it and sets various flags. The flags used include whether the problem is isolated, whether or not EAF intercepted the error, and whether or not Electronic Service Agent should report the error.

Hardware problem reporting can also automatically do problem analysis on problems before calling for service. When a server 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 server, it completes as much problem diagnosis as possible so that your System Services Representative (SSR) 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. Server 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 (SSR) a list of the most probable parts to be replaced and 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 an iSeries server with OEM equipment, call 1-800-IBM-SERV to place a Service call for your System Services Representative (SSR) to deactivate the Resource Descriptions for those devices.

Hardware problem reporting 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 server as preventive maintenance.
3. Transmission of service-related information about the machine to IBM Service for summary and analysis by other applications.

The connection to IBM for Hardware problem reporting is made using the ECS link with either SDLC or TCP/IP on your iSeries.

Note: To configure ECS with either SDLC or TCP/IP, see *Appendix B. Modem and Connection Information* for assistance.

What Does System Inventory Collection and Transmission Do

The System inventory collection and transmission function of Electronic Service Agent automatically collects server 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 server or multiple servers by consolidating multiple servers' inventory onto one Management Central system prior to transmission.

Note: You control the transmission of data to IBM; which information is sent and when it is sent.

The server inventory information that you can choose to collect and send to IBM is categorized as follows:

- **Hardware** - A list of physical objects that includes communications, systems adapters, LAN resources, workstation resources, processor information, and storage devices.
- **Software** - A list of installed and supported software products and associated license information.
- **Fixes** - A list of fixes (PTFs), or corrections, to problems or potential problems within a particular software product and associated Group PTF information.
- **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 V4R5 or later.
- **Service Attributes** - Service attributes of the server.
- **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 server, the mailing address of your organization, and the language code indicating your preferred language for program temporary fix (PTF) cover letters.
- **Network Attributes** - Network attributes of the server.
- **PM/400 Performance Data** - Non-proprietary performance and capacity data.
- **System Registration** - A list of the information that you provide (contact information, contact mailing address, machine type, serial number, install date, etc...) when you register your server with IBM.

What Models Are Supported

This level of Electronic Service Agent installs on all iSeries servers running OS/400 V5R2.

How Does Electronic Service Agent Work

How Does Hardware Problem Reporting Work

The Hardware problem reporting function of Electronic Service Agent has the capability to detect hardware problems, prepare them for automatic problem reporting and send them to IBM over the ECS line, using TCP/IP or SDLC.

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 server with System Manager/400 installed — for more information on Electronic Service Agent and System Manager/400, reference the FAQ section from the Electronic Service Agent Web site at:

> http://publib.boulder.ibm.com/as400_sd/sdsadoc.html

If a service call is placed, a message will also be sent to all specified USER IDs (designated during the set up of Hardware problem reporting) containing detailed problem information.

How Does System Inventory Collection and Transmission Work

The System inventory collection and transmission function of Electronic Service Agent retrieves server information gathered and stored by Management Central. This information is then sent to IBM using the Universal Connection.

Extreme Support is used under Management Central to configure the inventory collection and transmission task(s). Through a wizard, the user chooses the type of information to collect and send, and the frequency and 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 single task runs a job that both collects the information and sends it to IBM. If you schedule the transmission time to be different than the collection time, then two Management Central tasks are created: one task for the job that collects 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.

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 iSeries server indicating that the information was received. This can be viewed using the history function of Electronic Service Agent. The information that was sent to IBM can be viewed at the IBM Electronic Service Agent Information Web site. For details, see *Chapter 7. View Electronic Service Agent System Information*.

Part 3. Install, Set up and Configure Electronic Service Agent

Chapter 4. Install Electronic Service Agent, 5798–RZG

This chapter presents the necessary steps to install Electronic Service Agent.

How to obtain Electronic Service Agent

There are two ways to obtain Electronic Service Agent, 5798–RZG:

- Preloaded from manufacturing on your iSeries server.
- Included with your OS/400 software order on the **B29xx_07 standard set products** CD-ROM.

Determine if Electronic Service Agent is Installed

To determine if Electronic Service Agent, 5798–RZG, is **already** installed on your iSeries server, do this:

1. Type **DSPSFWRSC** on an iSeries command line and press **Enter**. A list of software resources is displayed.

2. Press **F11** to display libraries/releases. Press **Page Down** until you locate product ID **5798RZG** under the Resource ID column. Check the Release column associated with the Resource ID to determine the Electronic Service Agent release. Press **Enter**.

   Notes:

   a. Release V5R2 of Electronic Service Agent installs on all iSeries servers running OS/400 V5R2.

   b. If you determine that V5R2 of Electronic Service Agent is installed on your server, you **do not** have to **re-install** the product.

   c. If you determine that V5R2 of Electronic Service Agent is NOT installed on your server, or if a previous release of Electronic Service Agent is installed on your server, go to the next section to install Electronic Service Agent.

```
 B - rchassd1                                               _ □ ✕
                        Display Software Resources
                                                   System:   RCHASD2D

Resource                    Feature
   ID     Option  Feature   Type    Library     Release
5769FN1   *BASE    5050     *CODE   QFNT60      V4R2M0
5769FN1   *BASE    2924     *LNG    QFNT60      V4R2M0
5769FN1    1       5075     *CODE   QFNT61      V4R2M0
5769FN1    2       5076     *CODE   QFNT62      V4R2M0
5769FN1    3       5077     *CODE   QFNT63      V4R2M0
5769FN1    4       5078     *CODE   QFNT64      V4R2M0
5769FN1    5       5079     *CODE   QFNT65      V4R2M0
5769VG1   *BASE    5050     *CODE   QVGEN       V4R4M0
5769VG1   *BASE    2924     *LNG    QVGEN       V4R4M0
5798FAX   *BASE    5050     *CODE   QFAX        V5R2M0
5798FAX   *BASE    2924     *LNG    QFAX        V5R2M0
5798RZG   *BASE    5050     *CODE   QSVCDRCTR   V5R2M0
5798RZG   *BASE    2924     *LNG    QSVCDRCTR   V5R2M0
AJDGP01   *BASE    5050     *CODE   ##MACH#B    V5R2M0 L0B
                                                            More...
Press Enter to continue.

F3=Exit   F11=Display descriptions   F12=Cancel   F19=Display trademarks
```

Install Electronic Service Agent

To install Electronic Service Agent, 5798–RZG on your iSeries server, do this:

Note: A User Profile with ***SECADM** and ***ALLOBJ** authority is required to use the RSTLICPGM command.

Note: Electronic Service Agent, 5798–RZG does **NOT** support installing a secondary language.

Note: If you are upgrading from a prior release, complete the installation steps to install Electronic Service Agent.

1. Find the CD labeled **B29xx_07 standard set products** that you received with your OS/400 software order. Electronic Service Agent, 5798–RZG, is included on this CD.
2. Insert the CD into the CD-ROM device on your iSeries server.
3. Sign on to your iSeries server.
4. Type **RSTLICPGM LICPGM(5798RZG) DEV(XXXXX)** (where XXXXX is the name of the iSeries CD-ROM device) on an iSeries command line and press **Enter**.

   Note: GO LICPGM can also be used to install Electronic Service Agent.

Chapter 5. Set up and Configure Hardware Problem Reporting

This chapter contains a prerequisite checklist and the necessary steps to set up and configure the Hardware problem reporting function of Electronic Service Agent.

iSeries Server Prerequisites

Table 1. iSeries Server Prerequisites

iSeries Server Prerequisites:	Checklist
A **user profile** (other than QSECOFR) with ***SECOFR** authority with ***ALLOBJ, *SECADM** and ***IOSYSCFG** special authorities. A user without *ALLOBJ authority would need to have specific authority to the objects accessed by Electronic Service Agent. See *Appendix A. Authority Requirements* for the specific authorities required.	
WRKCNTINF completed with correct customer information. Use command **GO MAIN**, options 7, 4, 2 to verify.	
Network Attribute parameter MDMCNTRYID must be set to the correct country or region code. Use command **CHGNETA** and press **F4** (to prompt) to verify.	
Verify that a **modem with an attached phone** line is available. The connection to IBM for Hardware problem reporting is made using the ECS link. See *Appendix B. Modem and Connection Information* for additional information. **Note:** The 2771 internal modem is shipped with new iSeries servers.	

PTF Prerequisites

Table 2. PTF Prerequisites

PTF Prerequisites	Checklist
Electronic Service Agent, iSeries Access, Management Central, and other necessary PTFs for use with Hardware problem reporting. See Electronic Service Agent Web site at: http://publib.boulder.ibm.com/as400_sd/sdsadoc.html and reference the FAQ section.	

Set up and Configure Hardware Problem Reporting

To set up and configure Hardware problem reporting, do this:

1. Type **GO SERVICE** on an iSeries command line and press **Enter**.
2. *If* the **Display Program Messages** screen is *displayed*, position the cursor on the message and press **F1** for additional message information and then press enter to continue. Type a **G** to change system value QRETSVRSEC to 1 and press **Enter**.
3. Select option 1 to **Activate Service Agent** and press **Enter**.
4. Read the **International License Agreement for Services Programs**. **You must read and press F6 to accept this agreement to proceed**.
5. Enter the **activation password** and press **Enter**.

   To obtain the activation password:
   - **Primary:** Contact IBM **hardware service**.

- **Secondary:** Contact your local **iSeries support center**.

6. Change the parameter values on the **Change Service Agent** display to meet the needs of your operating environment. Press **Enter**.

7. Change the parameter values on the **Send Service Request** display to meet the needs of your operating environment. Press **Enter**.

8. From the Function Test display:

- To test / register Electronic Service Agent now, press **Enter** to create a test problem without an Error Log ID, or enter a DASD or IOP Error Log ID and press **Enter** to create a test problem with an Error Log ID.

  Note: To check the results of the test, use option 15 from the Electronic Service Agent Main Menu. A problem log entry should have been created for the test problem. Use the Status field to determine if the test problem was successfully sent.

The steps to set up and configure the Hardware problem reporting function of Electronic Service Agent are complete.

Chapter 6. Set up and Configure System Inventory Collection and Transmission

This chapter contains a prerequisite checklist and the necessary steps to set up and configure the System inventory collection and transmission function of Electronic Service Agent.

iSeries Server Prerequisites

Table 3. iSeries Server Prerequisites

iSeries Server Prerequisites:	Checklist
V5R2 iSeries Access for Windows (5722-XE1) must be installed. Use command DSPSFWRSC to verify.	
A **user profile** (other than QSECOFR) with ***SECOFR** authority with ***ALLOBJ, *SECADM** and ***IOSYSCFG** special authorities. A user without *ALLOBJ authority would need to have specific authority to the objects accessed by Electronic Service Agent. See *Appendix A. Authority Requirements* for the specific authorities required.	
Network Attribute parameter MDMCNTRYID must be set to the correct country or region code. Use command **CHGNETA** and press **F4** (to prompt) to verify.	
TCP/IP networking must be active. Check CFGTCP option 10 & 12; Option 10 should match Option 12 for the fully qualified host name (host + domain). Use command **STRTCP** to start it, if needed.	
You must know the **iSeries server(s)** from which you plan to collect information.	
You must have an appropriate installed **I/O adapter**. See *Appendix B. Modem and Connection Information* for a list of adapters.	
Verify that a **modem with an attached phone** line is available. The connection to IBM for System inventory collection and transmission is made using the Universal Connection. See *Appendix B. Modem and Connection Information* for additional information. **Note:** The 2771 internal modem is shipped with new iSeries servers.	

PC Prerequisites

Table 4. PC Prerequisites

PC Prerequisites:	Checklist
V5R2 iSeries Access for Windows - Full installation (*iSeries Setup and Operations* CD — publication number SK3T- 4098–01). For install instructions, see: http://www.ibm.com/eserver/iseries/infocenter Refer to **Connecting to iSeries —> What to connect with —> iSeries Access —> iSeries Access for Windows**.	

Table 4. PC Prerequisites (continued)

PC Prerequisites:	Checklist
iSeries Navigator (a function of iSeries Access) **with a TCP/IP network connection** to the iSeries server on which Electronic Service Agent will be configured (iSeries Navigator includes Management Central for managing multiple servers from a central system). For information, see: http://www.ibm.com/eserver/iseries/infocenter Refer to **Connecting to iSeries —> What to connect with —> iSeries Navigator**.	

The **latest V5R2 iSeries Access service pack** must be installed. For service pack download information, see:
    http://www.ibm.com/eserver/iseries/infocenter
Refer to **Connecting to iSeries —> What to connect with —> iSeries Access —> iSeries Access for Windows —> Administration —> Administering service packs**.
 	
For information on Netserver, see:
    http://www.ibm.com/servers/eserver/iseries/netserver/	

Select which server you want to use as your central system. See *Appendix C. Additional Prerequisite Information* for assistance.	
Create a Management Central system group. See *Appendix C. Additional Prerequisite Information* for assistance.	

PTF Prerequisites

Table 5. PTF Prerequisites

PTF Prerequisites	Checklist
Electronic Service Agent, iSeries Access, Management Central, and other necessary PTFs for use with System inventory collection and transmission. See Electronic Service Agent Web site at: http://publib.boulder.ibm.com/as400_sd/sdsadoc.html and reference the FAQ section.	

Electronic Service Agent Plug-in Prerequisite

Table 6. Plug-in Prerequisite

Plug-in Prerequisite:	Checklist
The **Electronic Service Agent Plug-in** must be installed. To install: From iSeries Navigator, open **File**, select **Install Options**, and **Install Plug-ins**. Select source **server** (select an OS/400 V5R2 server to install the V5R2 plug-in) and click **OK**. Sign on, if necessary. If presented with **Install Plug-ins** window, read the information and click **Add to LMHOSTS**. From the **Plug-in Selection** window, select **Electronic Service Agent** and click **Next**. From **Start Copying Files**, click **Next**. From **Setup Complete**, click **Finish**. **Note:** If Electronic Service Agent is not an option, it is already installed. Click **Cancel**. Click **Exit Setup**.	

Set up and Configure Universal Connection for Electronic Service Agent

To set up and configure the Universal Connection for System inventory collection and transmission, do this:

1. Open **iSeries Navigator**.
2. Expand **My Connections**.
3. Select and expand the system which will contain the system inventory collection.
4. Expand **Network**.
5. Expand **Remote Access Services**.
6. Right-click on **Originator Connection Profiles** and select **Configure IBM Universal Connection**.
7. Click **Next** on the **Wizard Welcome** window.
8. Verify the **Service Information** and click **Next**.
9. Verify the **Company Address** Information and click **Next**.
10. Select the correct country or region on the **Location** window (the check box titled **My location is not in the list** is only checked if a country or region is not listed) and click **Next**.

    Note: The Country or Region window will display only if the box My location is not in the list is checked. Hemisphere specification is used to look up default nodes for the application.

11. Select **Electronic Service Agent** on the **Application** window and click **Next**.
12. Select a **Connection Type** from the list of options. (To continue with these instructions, choose the 'A dial-up connection using AT&T Global Network Services' option).

    Note: 'Dial-up connection using AT&T Global Network Services' - This connection is made across the AT&T Global Network Service (AGNS), which provides a secure connection between the customer and IBM. Authentication occurs when a connection is made to AGNS. At that time, AGNS assigns an IP address to the Point-to-Point Protocol (PPP) client.

13. Select the correct **Hardware Resource** from the list and click **Next**.

    Note: After selecting a resource, a line description needs to be provided.
    - If multiple PPP lines exist for the resource that was selected, a choice is given between an existing line or a new one can be created. The Choose Line window will display if this is your situation.
    - If only one line exists for the selected resource, that line will be used and there will not be an option (window) to select or create a line description.

14. The **Line Description** window will display if no line descriptions exist for the resource selected. It will prompt to create a new line. The default line name is QYSDPPLIN. A different name can be used if preferred. Click **Next**.
15. Select the **Primary phone number** that will be used for the connection to IBM. The country or region and state or province fields will be pre-filled with the values that were specified earlier. If the fields are not correct, change them to what they should be. If there are special dial prefixes that need to be used, these should be input at this time, as suggested by the instruction at the

bottom of the screen. The 800 numbers (USA Only) may be selected, but if at all possible should not be used for the primary number. Click **Next**.

Note: If you are unable to find an appropriate phone number, you can identify a number by accessing the AT&T Business Web site at:

http://help.attbusiness.net

Select **Access Numbers** from the **Help Center** box.

16. Select a **Backup phone number** for contacting IBM. It is important to select a backup phone number to ensure that you will get connected. Click **Next**.

Note: The Modem window (requesting a modem name) will display if the resource selected does not contain an internal modem. There is a pull—down menu for the modem selection. If the desired modem (the modem must be PPP capable) is not listed, you may create a new modem definition. This is done through iSeries Navigator by expanding **Network** and right-clicking on the **modems** folder that is listed under **Remote Access Services**.

17. The **Summary** window will display upon completing all of the configuration screens. The summary screen will list the choices which have been made. Click **Finish**.

Note: Test the Universal Connection now by clicking on **Yes**.

The set up of Universal Connection is complete.

Set up and Configure Inventory Collection through Extreme Support

To set up and configure System inventory collection and transmission through Extreme Support, do this:

1. In **iSeries Navigator**, expand **Management Central**. If necessary, sign on.
2. Right-click **Extreme Support** and select **Configuration**.
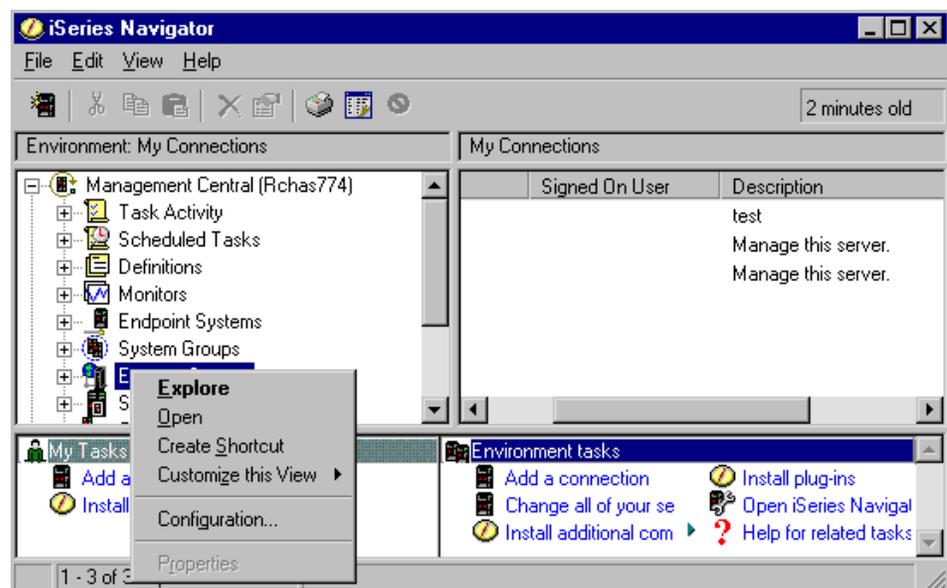
3. From the **Extreme Support Configuration** wizard **Welcome** screen, click **Next**.

4. The **Extreme Support Configuration Functions** window will display. De-select **Receive fixes from IBM and report problems to IBM**. Do **not** de-select **Send collected information to IBM for service and support**. Click **Next**.

5.
   - If Universal Connection **has been** set up, go on to the next step to continue through the Extreme Support wizard.
   - If Universal Connection **has not been** set up, the **Connection Not Found** window will display. If you did not previously complete the Universal Connection configuration, you are given another opportunity to configure that connection *now* with the Extreme Support wizard. After you have completed the necessary Universal Connection set up windows, the **Extreme Support Configuration Setup** window will display. Go on to the next step to continue through the Extreme Support wizard.

6. The **Extreme Support Configuration Setup** window will display. This will begin set up for the System inventory and collection function of Electronic Service Agent. Click **Next**.

7. The **Electronic Service Agent Welcome** window will display. This wizard helps you set up the collecting and sending of your server information to IBM. Read the entire window and click **Next**.

8.
   - If the Electronic Service Agent License Agreement **has** already been accepted, go on to the next step to continue through the Extreme Support wizard.
   - If the Electronic Service Agent Agreement **has not** already been accepted, the **Electronic Service Agent License Agreement** window will display. Read the License Agreement and choose the appropriate radio button. Click **Next**.

     Note: The Electronic Service Agent License Agreement must be accepted to be able to send inventory information to IBM.

9.
   - If you **did** create a system group, as directed in the PC Prerequisites table, the **Select System Groups** window will display. Select the system group(s) that will be used to collect the information that will be sent to IBM. Click **Next**.
   - If you **did not** create a system group, as directed in the PC Prerequisites table, you will be asked to do this now. Click **Details** for instructions on how to create a system group. After you have completed this task, click **OK**. The **Select System Groups** window will display. Click **Refresh** to display your new system group(s). Select the system group(s) that will be used to collect the information that will be sent to IBM. Click **Next**.

10. The **Run Actions** window will display. From the **Available actions** list, select **Send Electronic Service Agent inventory to IBM**. Make changes to the pre-selected list of recommended inventories by selecting the type of information to collect and send from the **Inventory for selected action**list and add them to the **Selected actions to run**list.

    Note: Do **not** de-select **Collect inventory before selected actions are run**. Click **Schedule**. Specify when you want the send task to run by using the 'When to run' and 'Date and Time to start' parameters. (The recommended frequency to send the information to IBM is *daily*). Click **OK**.

11. The **Electronic Service Agent Summary** window will display. Click **Next**.

12. The **Extreme Support Configuration Summary** window will display. Click **Finish**.

   The set up of your selected Extreme Support functions is complete.

Note: It is recommended that you manage your scheduled inventory tasks to avoid duplication.

Inventory Collection and Transmission Tasks

This section describes the available System inventory collection and transmission tasks.

Note: You must have *USE authority to QUSRSYS/QAEDCDBPF if you plan to collect server inventory '**Contact Information**' from a V5R2 endpoint system using a pre-V5R2 Central system.

Verify the Inventory Collection Scheduled Task(s)

To verify that an inventory collection task was scheduled, do this:
1. In **iSeries Navigator**, expand Management Central. If necessary, sign on.
2. Expand **Scheduled Tasks**. Select **Inventory** and in the right pane you will see your scheduled tasks.
3. Locate the inventory task you would like to verify. Right-click on the task to view its schedule and properties.

Collect inventory with Management Central and send information to IBM at the same time

You can collect inventory with Management Central and send the information to IBM immediately after the collection is completed by doing the following:
1. In **iSeries Navigator**, expand **Management Central**. If necessary, sign on.
2. Expand **Endpoint Systems** or **System Groups**.
3. Right-click any one of the selected endpoint systems or system groups that you want to collect and send inventory from, select **Inventory**, and then select **Run Actions**.
4. In the **Available actions** list, select **Send Electronic Service Agent inventory to IBM**.
5. Select the inventories from the **Inventory for selected action** list, and add them to the **Selected actions to run** list.
6. Select **Collect inventory before selected actions are run**.
7. Click **OK** to collect and send once immediately or click **Schedule** to specify a frequency and time, and then click **OK**.

Collect inventory with Management Central and send information to IBM at separate times

If you do not want to collect your inventory and send the information to IBM at the same time, you can schedule to collect inventory as one task and then send the information to IBM, at a different time, as another task.
1. In **iSeries Navigator**, expand **Management Central**. If necessary, sign on.
2. Expand **Endpoint Systems** or **System Groups**.
3. Right-click any one of the selected endpoint systems or system groups that you want to collect inventory from, select **Inventory**, and then select **Collect**.

4. Select the inventories that you want to collect.
5. Click **Schedule** to specify when you want the collection task to run. Click **OK**.
6. Right-click the same endpoint system(s) or system group(s) as specified in Step 3, and select **Inventory**, and then select **Run Actions**.
7. In the **Available actions** list, select **Send Electronic Service Agent inventory to IBM**.
8. Select the inventories from the **Inventory for selected action** list and add them to the **Selected actions to run** list. Select the inventories that you previously specified in Step 4.
9. Do not select **Collect inventory before selected actions are run**.
10. Click **Schedule** to specify when you want the send task to run. Click **OK**.

Verify Inventory Information Sent to IBM

To verify that inventory information was sent to IBM, do this:
1. In **iSeries Navigator**, expand Management Central. If necessary, sign on.
2. Expand **Extreme Support**.
3. Select **Agents**.
4. Right-click **Electronic Service Agent** and select **History**.

Chapter 7. View Electronic Service Agent System Information

IBM Electronic Service Agent Information Web site

The **IBM Electronic Service Agent Information Web site** allows you to view individual server information which Electronic Service Agent has collected and sent to IBM. It provides server information to customers in any country or region who send Electronic Service Agent information to IBM. No contract is required to view this information on the web. You can view server information *only* for the individual iSeries servers that you have registered with IBM, and associated with your IBMid.

You can authorize users to access this information by providing valid IBM Registration user IDs. You must have all object (*ALLOBJ) authority and security administrator (*SECADM) special authority. To authorize users to view server information, do this:

To Register for an IBMid

To register for an IBMid, go to the Electronic Service Agent Information Web site at:

> https://www.ibm.com/support/electronic/itssysprof/

1. From below the *Sign in arrow*, select **register** to register for an IBMid.

To Register Your iSeries Servers

There are two ways you can register your iSeries servers:

Note: The recommended way is from iSeries Navigator.

1. From iSeries Navigator:
   a. In iSeries Navigator, expand **Management Central**.
   b. Expand **Extreme Support**.
   c. Select **Agents**.
   d. Right-click **Electronic Service Agent**, select **Configure Electronic Services**.
   e. Select **Authorize users to access information** and provide up to two valid IBM registration user IDs.
   f. To authorize additional users, go to the Electronic Service Agent Information Web site at:

   > https://www.ibm.com/support/electronic/itssysprof/

      1) Fill in your IBMid and Password and click **Sign in**.
      2) Select the **System Registration** link from the navigation bar.
      3) Select the **Register systems for users** link from the navigation bar to authorize the additional users.
2. At the Electronic Service Agent Web site:
   a. From your PC:
      1) In iSeries Navigator, expand **Management Central**.
      2) Expand **Extreme Support**.
      3) Select **Agents**.

4) Right-click **Electronic Service Agent**, select **Retrieve Registration ID**.

5) Select your iSeries server from the available list and click **Retrieve ID**. This information can be copied and pasted into the Electronic Service Agent Information Web site later in the instructions.

b. From the Electronic Service Agent Information Web site using iSeries Navigator and your web browser:

https://www.ibm.com/support/electronic/itssysprof/

1) Fill in your IBMid and Password and click **Sign in**.

2) Select the **System Registration** link from the navigation bar.

3) Select the **Add System** link from the navigation bar.

4) Select **iSeries** as your platform.

5) Fill in the required fields to register each iSeries server in the service agent database. This is the information you previously gathered in Step 2.a.5.

6) Click **Submit**.

To View your Server Information

To view individual server information which Electronic Service Agent has collected and sent to IBM, go to the Electronic Service Agent Information Web site at:

https://www.ibm.com/support/electronic/itssysprof/

Chapter 8. Delete Electronic Service Agent

To delete Electronic Service Agent, 5798–RZG, from your iSeries server, do this:

1. Sign on to the iSeries server.
2. Type **DLTLICPGM LICPGM(5798RZG)** on an iSeries command line and press **Enter**.

Part 4. Appendixes

Appendix A. Authority Requirements

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

Table 7. Authority Requirements

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
QLZARIGS	QSYS	*PGM	*USE
QEDRIGS	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
QAYIVNET	QUSRSYS	*FILE	*USE
QAYIVFGP	QUSRSYS	*FILE	*USE
QAYIVSER	QUSRSYS	*FILE	*USE
QAYIVCON	QUSRSYS	*FILE	*USE
QAYIVPTF	QUSRSYS	*FILE	*USE
QAYIVSYV	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:			
qibm/proddata/sa400/esrvagt.jar	N/A	N/A	*RX
qibm/proddata/sa400	N/A	N/A	*RX

Appendix B. Modem and Connection Information

Hardware Problem Reporting

The connection to IBM for Hardware problem reporting is made using the ECS link with either SDLC or TCP/IP (Universal Connection) on your iSeries server.

- **To configure ECS with SDLC**, see:

    http://www.ibm.com/eserver/iseries/infocenter

    Refer to **Troubleshooting and Service —> Get started with troubleshooting —> Customer Support —> Electronic customer support**. Select **Adding Electronic customer support** and then **Traditional connection**.

- **To configure ECS with TCP/IP (Universal Connection)**, see:

    http://www.ibm.com/eserver/iseries/infocenter

    Refer to **Troubleshooting and Service —> Get started with troubleshooting —> Customer Support —> Electronic customer support**. Select **Adding Electronic customer support** and then **Universal Connection**.

For additional information on Universal Connection, see:

    http://www.ibm.com/servers/eserver/iseries/software/univconn.htm

System Inventory Collection and Transmission

The connection to IBM for System inventory collection and transmission is made using TCP/IP through Universal Connection. If you need additional information to determine which option you would like to use for your TCP/IP connection (e.g. Dial up connection using AT&T Global Network), see:

    http://www.ibm.com/servers/eserver/iseries/software/univconn.htm

Modem Requirements

If you determined that you will be using a modem for your connection(s), see the following modem requirements.

The following table can be used to help determine the functions that can be set up depending on your modem(s). Additional information is located below the table.

Table 8. Modem Options

	Hardware problem reporting	System inventory collection and transmission
Synchronous	X	
Asynchronous (includes the 2771 and 9771 internal modems)	X*	X
Dual model	X	X

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

Synchronous – If you configure your modem to operate in synchronous mode, only Hardware problem reporting can be set up. (examples of synchronous capable modems: IBM 7855, IBM 7857, or IBM 7858).

Asynchronous – If you configure your modem to operate in asynchronous mode, both Hardware problem reporting and System inventory collection and transmission can be set up (examples: 2771 and 9771 internal modems, IBM 7855, IBM 7857, or IBM 7858 and dual model IBM 7852–400).

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 server 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 (synchronous) and System inventory collection and transmission (asynchronous) can be set up.

Communications I/O Adapter Requirements

Notes:

1. Only PPP connections are supported in OS/400 V5R2.
2. At V5R2 there are two types of connections: AT&T dial and VPN.

Determine if you have one of the following appropriate I/O adapters:

Table 9. I/O Adapters

2699*	Two-line WAN IOA. This IOA requires either a 2629 LAN/WAN/Workstation IOP or MFIOP.
2720*	PCI WAN/Twinaxial IOA
2721*	PCI Two-line WAN IOA
2745*	PCI Two-line WAN IOA (replaces IOA 2721)
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 with the appropriate cable is required.
2772	Two port V.90 integrated modem WAN IOA
2793	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 with the appropriate cable is required.
2805	Four port V.92 integrated modem WAN IOA

* These adapters require an external V.24 modem and the appropriate cable.

Appendix C. Additional Prerequisite Information

Select which Server you want to use as your central system

Note: Central system refers to the server that will be managing other servers inventory collected through Management Central.

- **To see what servers (connections) currently exist, do this:**
  1. Open **iSeries Navigator**.
  2. Expand **My Connections**.

     If you do not see the server (connection) that you want to use as your central system in this list, do this:
     a. Right-click on **My Connections** and select **Connection to Servers** and **Add connection**.
     b. Continue through the **iSeries Navigator Add Connection** wizard to add the server (connection) you want to use as your central system.
- **To select the server 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 server you want to use as your central system and click **OK**.

Create a Management Central system group

The servers from which you want to collect inventory information can be defined in a Management Central system group to simplify the task of scheduling. **A system group is required to complete the Electronic Service Agent wizard**.

To create a system group, using iSeries Navigator, do this:

1. Expand **Management Central** and if necessary, sign on.
2. Right-click on **System Groups** and 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**.

Appendix D. Messages

SDM0000   Service Agent test problem

Severity: 0

Problem Determination: N/A

SDM0001   Service Agent is analyzing your system Product Activity Log data.

Severity: 0

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

SDM1001   Problem &1 detected by Service Agent. Report problem &1 to IBM Service.

Severity: 80

Problem Determination: Cause: Service Agent 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–IBMSERV.

SDM1002   Service Agent is not able to place a service call — action required.

Severity: 80

Problem Determination: Cause: Service Agent 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 Agent 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 Agent 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 10–800–IBMSERV. You may also be able to make use of the Service Agent Line Monitoring function. To read about this function or to activate this function, enter GO SERVICE. Choose Change Service Agent settings.

SDM1003   Service Agent has placed a Service call with service assigned number &1.

Severity: 40

Problem Determination: 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>.

SDM1004   Service Agent is placing a service call for problem &1.

Severity: 40

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

SDM1005   Service Agent will expire on &1 (MDY date format) — action required.

Severity: 40

Problem Determination: Cause: Service Agent is nearing its expiration date.

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

SDM1006   Service Agent has expired — action required.

Severity: 80

Problem Determination: Cause: The Service Agent expiration date has been exceeded. Service Agent is no longer operational on this system.

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

SDM1007   Service call for problem &1 not sent — action required.

Severity: 40

Problem Determination: Cause: Service Agent 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–IBMSERV, 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 Agent settings. Change Report problem automatically to *YES.
2. Contact your local IBM Service Representative. In the United States, call 1–800–IBMSERV.

SDM1008   Service Agent not able to place a service call — action required.

Severity: 40

Problem Determination: Cause: Service Agent 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 Agent 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 Agent settings.
4. If this continues to be a problem, contact your local IBM Service Representative. In the United States, call 1–800–IBMSERV.

SDM1009   Service Agent is disabled — action required.

Severity: 80

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

Recovery: Contact your local IBM Service Representative to have the Service Agent product installed again. In the United States, call 1–800–IBMSERV.

SDM1010   Service Agent does not support this release of the operating system — action required.

Severity: 80

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

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

SDM1011   Error creating a problem.

Severity: 80

Problem Determination: Cause: Service Agent attempted to create a problem in 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–IBMSERV.

SDM1012   Error working with problem &1.

Severity: 80

Problem Determination: Cause: Service Agent 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–IBMSERV.

SDM1013   PTF &1 downloaded for problem &2.

Severity: 30

Problem Determination: Cause: Service Agent 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.

SDM1017   Error creating a test problem.

Severity: 40

Problem Determination: Cause: Service Agent 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 message in the job log and the Service Agent 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.

SDM1018   Test problem created.

Severity: 0

Problem Determination: 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.

Severity:

Problem Determination:

SDM1020   **Error creating Service Agent object — action required.**

Severity: 99

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

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

SDM1022   **Service Agent activation did not complete.**

Severity: 10

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

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

SDM1023   **Service Agent expired on &1 (MDY date format) — action required.**

Severity: 40

Problem Determination: **Cause:** The Service Agent expiration date has been reached. Service Agent is currently operational but will soon be disabled.

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

SDM1024   **Services Data Collector activation did not complete.**

Severity: 10

Problem Determination: **Cause:** The ENTER key may not have been pressed on the Change Services Data Collector (CHGSRVCOL) prompt screen or the Change Services Data Collector command may have failed.

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.

SDM1033   **Service Agent has placed an autotest call with service assigned number &1.**

Severity: 40

Problem Determination: **Cause:** An automated operational test call has been placed to check the service connection. No further action is required. You will not be contacted by an IBM Service Representative about this call. IF the test call was sent to a service provider, other than IBM, the service assigned number will be blank or contain <SVDH.

SDM1100   **Service Agent program &1 encountered an error — action required.**

Severity: 80

Problem Determination: **Cause:** See the Service Agent audit log for additional information regarding this error. To browse the audit log, enter GO SERVICE and select the Display Service Agent audit log item.

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

SDM1110   **Service Agent was unable to send a message to user &1.**

Severity: 20

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

Recovery: Verify the list of users to receive Service Agent messages is correct. to display or update this list:
1. Enter GO SERVICE
2. Select option 1 — CHANGE SERVICE AGENT SETTINGS

SDM1120   **Service Agent program &1 was unable to use file &3.**

Severity: 80

Problem Determination: **Cause:** Operation &2 in program &1 failed for file &3. A Service Agent object may be damaged.

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

SDM2000   **Service Agent created problem**

Severity: 0

Problem Determination: **Cause:** This problem was created by Service Agent.

SDM3001 Service Agent automatic system PTF monitoring has been disabled.

Severity: 40

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

SDM3002 Configuration changes are needed for the Service Agent PTF monitoring program — action required.

Severity: 40

Problem Determination: Cause: A configuration change is needed. Service Agent 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 Agent settings.

SDM3003 PTFs not downloaded by Service Agent automatic system PTF monitoring program — action required.

Severity: 40

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

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

SDM3004 Configuration changes are needed for the Service Agent PTF monitoring program — action required.

Severity: 30

Problem Determination: Cause: A configuration change is needed. Service Agent 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 Agent settings.

SDM3005 Service Agent automatic system PTF monitoring needs to be configured — action required.

Severity: 40

Problem Determination: Cause: Service Agent automatic system PTF monitoring program found configuration data missing.

Recovery: Do the following:
1. Enter GO SERVICE.
2. Choose Change Service Agent settings.

SDM3010 Service Agent automatic system PTF monitoring program has started.

Severity: 10

Problem Determination: Cause: The Service Agent 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.

SDM3012 Service Agent automatic system PTF monitoring program cannot continue — action required.

Severity: 40

Problem Determination: Cause: Service Agent automatic system PTF monitoring program found the Service Agent network configuration information missing.

Recovery: Do the following:
1. Enter GO SERVICE.
2. Choose Change Service Agent settings. – No further action is required.

SDM3013 PTF order failed — action required.

Severity: 40

Problem Determination: Cause: Service Agent 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 Agent required PTF order'. After the PTFs have been downloaded, use the Load PTF (LODPTF) command to load the PTFs. The use the Apply PTF (APYPTF) command to apply the PTFs.

SDM3014   PTF &1 — &2 downloaded. Please load
                 and apply this PTF.

Severity: 40

Problem Determination: Cause: As part of IBM
Service's continuing effort to provide you with the best
available service for your sytstem, Service Agent has
downloaded PTF &1 — &2 to prevent unscheduled
system outages. Use the load PF (LODPTF) command
to load the PTF. Then use the apply PTF (APYPTF)
command to apply the PTF.

SDM3015   Service Agent has created a problem log
                 entry for ordering PTF &1–&2 — action
                 required.

Severity: 40

Problem Determination: Cause: As part of IBM
Service's continuing effort to provide you with the best
available service for your system, Service Agent has
created one of 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 Agent 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.

SDM3016   Service Agent has determined that no
                 new PTFs are needed.

Severity: 10

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

SDM3017   Service Agent has determined that PTF
                 &1–&2 is required. Please load and
                 apply this PTF.

Severity: 40

Problem Determination: Cause: As part of IBM
Service's continuing effort to provide you with the best
available service for your system, Service Agent 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.

SDM3018   Service Agent has requested PTF
                 &1–&2. Please load and apply this PTF
                 when it arrives.

Severity: 40

Problem Determination: Cause: As part of IBM
Service's continuing effort to provide you with the best
available service for your system, Service Agent 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. The
use the apply PTF (APYPTF) command to apply the
PTF. Contact your service provider if the PTF does not
arrive.

SDM3019   PTFs requested by Service Agent will be
                 sent on tape.

Severity: 40

Problem Determination: Cause: As part of IBM
Service's continuing effort to provide you with the best
available service for your system, Service Agent 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   PTF &1–&2 cover letter downloaded.

Severity: 40

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

SDM3028   Service Agent has requested the cover
                 letter for PTF &1–&2.

Severity: 40

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

SDM3029   PTF cover letters requested by Service
                 Agent will be sent on tape.

Severity: 40

Problem Determination: Cause: As part of IBM
Service's continuing effort to provide you the best
available service for your system, Service Agent 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   Dynamic threshold table updated failed.

Severity: 80

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

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

SDM3105   Service Agent automated operational test configured.

Severity: 10

Problem Determination: Cause: Service Agent automated operational test program has been configured. To display the values, do the following: enter QSVCDRCTR/CHGAUTOTST, press F4 (prompt).

SDM3110   Service Agent automated operational test program has started.

Severity: 10

Problem Determination: Cause: Service Agent automated operational test program will send a test problem periodically to the service provider.

SDM4001   Service Agent subsystem has been stopped — action required.

Severity: 0

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

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

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

SDM4002   Service Agent Subsystem needs to be stopped and restarted.

Severity: 80

Problem Determination: Cause: As a result of applying or removing PTF &1–&2, Service Agent Subsystem QSVCDRCTR must be stopped and restarted. Service Agent 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.

SDM5130   An error occurred during Service Agent process &1.

Severity: 10

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

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

SDM5500   QRETSVRSEC system value currently has a value of 0. (G I)

Severity: 0

Problem Determination: Cause: In order to use the Inventory Collection and Transmission function of Electronic Service Agent, the Retain Server Security (QRETSVRSEC) system value must be set to 1. This will allow the system to retain the server the server security data.

Recovery: Do one of the following:
- Type a I to ignore this message and keep the current value.
- Type G to change the system value to 1.

Possible choices for replying to message:
- Ignore this message.
- Change system value to 1.

SDM5505   An error occurred while testing the communications link to the remote service support system.

Severity: 0

Problem Determination: Cause: An exception was detected while running the SNDSRVRQS ACTION(*TEST) command. This communications link is required by Electronic Service Agent to alert IBM of potential hardware problems. If the Hardware Problem Reporting function of Electronic Service Agent will not be used, this message can be ignored.

Recovery: Look at the previously listed messages in the job log to determine the cause of the error. If you need assistance, contact your local IBM Service Representative. In the United States, call 1–800–IBMSERV.

SDM5999   **Service Agent process &1 ended abnormally.**

Severity: 40

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

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

Appendix E. Glossary

Terminology Used in This Guide

asynchronous communications
> A method of communications supported by the operating system that allows an exchange of data with a remote device, using either a start-stop line or an X.25 line. Asynchronous communications includes the file transfer support and the interactive terminal facility support.

asynchronous/SDLC
> A data-link level communications protocol that allows data to be transmitted over an asynchronous line using a control protocol similar to SDLC.

authority
> The right to do something or to have it done on the system. On an iSeries server, you must have authority to an object to work with it. Private authority and public authority are examples of authorities on the iSeries server.

CD-ROM
> High-capacity read-only memory in the form of an optically read compact disc. On iSeries, a CD-ROM drive is also known as an optical device.

central system
> A single Management Central iSeries server that handles system management functions to a Management Central endpoint system.

collapse
> In the Distributed Computing Environment (DCE), to remove the contents of a directory from the display (close it) using the Cell Directory Service (CDS) browser. Contrast with *expand*.

configure
> To describe the interconnected arrangement of the devices, programs, communications, and optional features installed on a system.

connection
> In TCP/IP, the path between two protocol applications that provides reliable data stream delivery service.

device A piece of equipment that is used with the computer. A device does not generally interact directly with the system, but is controlled by a controller. Each device has a device description associated with it, and often also has a job associated with it. Devices can be workstations, printers, diskette units, tape units, or remote systems.

electronic customer support
> 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.

endpoint system
> Any system that is running OS/400 and is connected to the central system. An endpoint system is defined from the central system for the purpose of performing Management Central functions.

error log
> A record of machine checks, device errors, and media statistics.

expand
> In the Distributed Computing Environment (DCE), to display the contents of (open) a directory using the Cell Directory Service (CDS) Browser. Contrast with *collapse*.

Extreme Support
> Extreme Support is IBM's comprehensive technical service and support initiative exclusively for IBM iSeries.

EZ-Setup
> A wizard that allows user to install iSeries Navigator; set the system name, date, time, and some basic security values, and perform some other tasks.

graphical user interface (GUI)
> A type of user interface that takes advantage of high-resolution graphics. A graphical user interface includes a combination of graphics, the object-action relationship, the use of pointing devices, menu bars and other menus, overlapping windows, and icons.

host
> 1. The controlling or highest-level system in a data communications configuration; for example, an iSeries server is the host system for the work stations connected to it.
> 2. In TCP/IP, any system that has at least one internet address associated with it. A host with multiple network interfaces may have multiple internet addresses associated with it. The host can be (a) a client, (b) a server, or (c) both a client and a server simultaneously.

input/output adapter (IOA)
> 1. A functional unit or a part of an I/O controller that connects devices to an I/O processor.
> 2. For devices, the electrical circuits on a logic card that connect one device to another.

iSeries Access for Windows
> The IBM licensed program that allows Windows 95, Windows 98, Windows NT®, and Windows 2000 clients to perform client/server functions from a personal computer over TCP/IP.

iSeries Navigator
> A no-charge feature of iSeries Access for Windows that is bundled with the OS/400 operating system. iSeries Navigator provides a Microsoft® Windows like interface to common iSeries management functions. Some of the common management functions include basic operations, TCP/IP configuration, job management, users and groups, database management, and Management Central.

iSeries Support for Windows Network Neighborhood (iSeries NetServer)
> A function of the OS/400 operating system that enables Microsoft Windows clients on a network to access iSeries shared directory paths and shared output queues without any unique software. The clients use the file and print sharing functions that are included in their Windows operating systems.

job log

A record of requests submitted to the system by a job, the messages related to the requests, and the actions performed by the system on the job.

license

In OS/400 license management, a license gives the user authorization to use a user-based priced product.

licensed program offering (LPO)

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

line description

An object that contains information describing a particular communications line that is attached to the system. The system-recognized identifier for the object type is *LIND.

Management Central

A suite of systems management functions that is an integrated part of iSeries Navigator. Management Central provides the base for managing multiple systems.

Operating System/400 (OS/400)

Pertaining to the IBM licensed program that can be used as the operating system for the iSeries server.

optical device

On iSeries, a device which can read either a CD-ROM, a digital video disc (DVD), or both.

parameter

A value supplied to a command or program that is used either as input or to control the actions of the command or program.

password

A unique string of characters known to a computer system and to a user. The user must specify the character string to gain access to a system and to the information stored within it.

plug-in

A separately installable component of iSeries Navigator. A plug-in adds folders and objects to the hierarchy tree, choices to iSeries Navigator menus, and property pages to the property sheet for a folder or object.

Point-to-Point Protocol (PPP)

In the Internet suite of protocols, a method of connecting a computer to the Internet. Point-to-Point Protocol provides host-to-network and router-to-router connections.

preloaded system

A system that is shipped with the licensed programs and some program temporary fixes (PTFs) already installed on the disk.

primary language

The national language installed on the system as the default language used to display and print information. The primary language is also used to service the system.

problem log

A record of problems and the status of the analysis of those problems.

product

In System Manager, a program or application that is identified as a product to the OS/400 operating system by a product identifier and a product definition.

product activity log

The general-use system log that contains entries for information events, thresholding incidents, dumps, and errors.

program temporary fix (PTF)

A temporary solution to or bypass of a problem diagnosed by IBM as resulting from a defect in a current unaltered release of a licensed program. Synonymous with fix.

reference code translation table

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

service pack

A collection of code fixes for an iSeries licensed program that contains PC code. The fixes are contained in a single, orderable iSeries program temporary fix (PTF) and can be downloaded from the iSeries Access Web site.

system group

In iSeries Navigator, a logical collection of endpoint systems.

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.

System Manager

The IBM licensed program that provides the capability for an iSeries server in a network to function as a service provider for other iSeries servers in the network.

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.

user name

The name of the user profile that the system associates with a user when that user signs on the system. Also known as the user ID.

wizard

Graphical tool that directs users through complex or infrequently performed tasks. Presented sequentially, the panels of the wizard prompt the user for responses, then take that data and perform the task. Wizards complete a single task and are usually self-contained.

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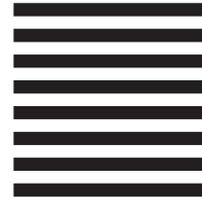Fold and Tape   **Please do not staple**   Fold and Tape

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