

**IBM Electronic Service Agent for IBM
eServer xSeries and Netfinity**

Version 3.1 - Director Extension

User's Guide

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Note

Before using this information and the product it supports, read the information in Appendix A, “Notices and Trademarks,” on page 72.

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This edition applies to version 3.1 of IBM® Electronic Service Agent™ for IBM® eServer xSeries® and Netfinity® - Director Extension (product number 5639-N89) and to all subsequent releases and modifications until otherwise indicated in new editions.

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About this User's Guide

Introduction

This guide provides the installation, configuration, startup, and user instructions for the IBM® Electronic Service Agent™ for IBM® eServer xSeries® and Netfinity® version 3.1 - Director Extension product, hereafter referred to as "Electronic Service Agent."

Who Should Read This Guide

This guide is intended for IT administrators responsible for IBM Director. Readers should have extensive knowledge of their LAN environment, a general knowledge of operating systems and database functions, and should be familiar with or have a working knowledge of IBM Director version 4.11.

Conventions used in this guide

This guide uses several typeface conventions for special terms and actions. These conventions have the following meaning:

Bold

Commands and other controls, keywords, and other information you should use literally appear in **bold**.

Italics

Variables that you must provide appear in *italics*.

Monospace

Examples of code or text you should type appear in monospace .

Terminology

In the chapters that follow you will see the following terms used:

IBM Director Management Console

The IBM Director Management Console is the graphical user interface from which administrative tasks are performed. It is your primary interface to the various IBM Director tasks. The console can be run from a desktop environment that is connected to the IBM Director Central Management Server.

IBM Director Central Management Server

The IBM Director Central Management Server is where the management data, the server engine, and the management application logic reside. Throughout this guide the IBM Director Central Management Server may also be referred to as the Central Management Server.

Managed systems

This term refers to Systems and devices on your network managed by your IBM Director Central Management Server. A managed system may also be referred to as a managed server in this User's Guide.

IBM Director Agent

The IBM Director Central Management Server manages systems and devices in your network by communicating with the IBM Director Agent installed on each of these managed systems. The

agent provides all of the code and interfaces necessary for each system to be managed by IBM Director.

Event

An event is a means of identifying a change of state of a process or device on the network. For example, an event is generated when a critical resource threshold such as virtual memory utilization is met.

Threshold Monitor

If you assign a threshold for a given attribute, an event is generated when the threshold is met for the system to which the attribute applies.

For example, you can set a threshold on a file server to generate an event if there is less than 100 Mb of free space on the disk drive. When the threshold is set, the free space on the server is monitored. When the free disk space is less than 100 Mb, the event is generated.

Thresholds can be numeric or set as strings.

Contacting Customer Support

If you encounter problems or have technical questions regarding your xSeries server, IBM Director or Electronic Service Agent, you should call your nearest IBM support center. You should also have your machine type and serial number ready to give to the IBM support staff. Your machine type is identified by a four-digit number. You can obtain support center contact details that are appropriate for your country/region from the following web site:

<http://publib.boulder.ibm.com/pubs/html/as400/v4r4/ic2924/info/rzajitbl.htm>

If you are a resident in the United States and you encounter problems or have technical questions regarding IBM Director or Electronic Service Agent, you must have a SupportLine contract. Please contact 1-800-IBM-SERV (1-800-426-7378), and select Option 2-Software Support Services. When calling regarding Electronic Service Agent, refer to Program Number 5639-N89. For information on SupportLine Services in the United States, please call 1-888-426-4343.

About Your Entitlement to Hardware Support from IBM

IBM's standard warranty response time is the next business day. If an upgrade has been purchased, service level response times may vary from 2 to 4 hours. However, it should be noted that service levels are response time objectives and are not guarantees. If a system is not under warranty or there is no maintenance agreement with IBM, then your nominated company representative will be contacted by the IBM Service Entitlement Group. Thereafter an IBM service engineer will be dispatched to the customer site with the hardware components required to correct the problem reported.

Note: You are entitled to automatic support from IBM only if your systems are under warranty or your organization has a maintenance agreement with IBM. This service program is not intended for customers who have a third party maintaining their xSeries and Netfinity servers.

Related Information

Electronic Service Agent for xSeries and Netfinity version 3.1 is designed to be installed as an extension to your IBM Director version 4.11 system management application. Electronic Service Agent appears as a task in the **Tasks** pane of your IBM Director Management Console.

If you require more information about the techniques employed in using the IBM Director Management Console, refer to your IBM Director version 4.11 on-line help and User's Guide. A copy of the User's Guide is available in PDF format on your IBM Director program CD-ROM.

If you require more information about the IBM Director version 4.11 product, refer to the following IBM Director web site:

http://www-1.ibm.com/servers/eserver/xseries/systems_management/xseries_sm.html

Receiving Updates

You can download updated versions of Electronic Service Agent when they are available from the following World Wide Web site:

<http://www.pc.ibm.com/qtechinfo/MIGR-40870.html>

Chapter 1. Introducing Electronic Service Agent

What is Electronic Service Agent?

Electronic Service Agent is an IBM program designed to help you minimize the resources required to run and maintain your networked computers and allows IBM to provide you with enhanced problem prevention and resolution capabilities.

Electronic Service Agent is an extension to the IBM Director version 4.11 management application. This agent monitors your xSeries and Netfinity servers for hardware errors. Hardware errors that meet certain criteria for criticality are reported to IBM.

Electronic Service Agent also administers hardware and software inventory collections, and reports inventory changes to IBM.

All information sent to IBM is stored in a secure IBM database and used for improved problem determination.

Electronic Service Agent should be installed on your IBM Director Central Management Server. You do not need to install Electronic Service Agent on each of your managed systems.

The key features of Electronic Service Agent include:

- Automatic problem reporting: service calls placed to IBM without operator intervention
- Automatic customer notification
- Scheduled system inventory and diagnostic inventory reporting to an IBM database
- Problem-definable threshold levels for error reporting
- Configurable automatic upgrade of Electronic Service Agent

Electronic Service Agent also provides generic support for IBM's Extended Service Levels packages. For more information refer to Chapter 10, "Enhanced Availability Services for xSeries" on page 70.

What's new in Electronic Service Agent for xSeries and Netfinity version 3.1

Version 3.1 of Electronic Service Agent includes the following enhancements and new features:

- Support for IBM Director version 4.11
- Additional operating system support
- Support for an extended number of managed system (server) models
- Features included in eFix 3.1:
 - 1) Alerts fail when OP_SYS_REVISION is empty
 - 2) Enable Support for Caribbean Countries
 - 3) Implementation of Sun JSSE
 - 4) Updated Phone list

Support for IBM Director version 4.11

Electronic Service Agent version 3.1 is compatible only with systems running IBM Director version 4.11.

Additional operating system support

Electronic Service Agent now includes support for additional operating systems. For more information, refer to Chapter 2, “Preparing Your Network,” on page 16.

Support for an extended number of managed system (server) models

Electronic Service Agent now has the ability to monitor a greater number of managed system (server) models. Refer to Table 1 on page 10 for further details.

Managed Systems Eligible for Electronic Service

This release of Electronic Service Agent supports the xSeries and Netfinity range of managed servers listed in the table below.

Note: This list of servers is exhaustive for managed systems only, including any systems that you want to use as a remote IBM Director Management Console. Electronic Service Agent can be installed on any Central Management Server supporting IBM Director version 4.11. Refer to your IBM Director version 4.11 documentation for a list of supported Central Management Servers.

List of Systems

Table 1: Electronic Service supported managed systems

Machine Type	Brand Names
8478	xSeries 200
8479	xSeries 200
8480	xSeries 205
8645	xSeries 220
8646	xSeries 220
8651	Netfinity 7000 Rack Mount
8654	xSeries 330
8656	Netfinity 4500R, xSeries 340
8658	Netfinity 5100, xSeries 150, xSeries 230
8659	Netfinity 5000
8660	Netfinity 5500
8661	Netfinity 5500, Netfinity 5500 M10
8662	Netfinity 5500 M20
8664	Netfinity 5600, xSeries 240
8665	Netfinity 7600, xSeries 250
8666	Netfinity 7100
8668	xSeries 232
8669	xSeries 342
8670	xSeries 345
8671	xSeries 235
8672	Netfinity 4100 R, xSeries 130, xSeries 135, xSeries 300 DC power
8673	xSeries 305
8674	xSeries 330
8676	xSeries 335
8680	Netfinity 7000 M10
8681	Netfinity 8500R
8682	Netfinity 6000R, xSeries 350
8683	xSeries 380
8684	RXE - 100
8685	xSeries 255
8686	xSeries 360
8687	xSeries 440
8688	xSeries 460
8860	xSeries 365
8870	xSeries 445

System Enrollment for Electronic Service

System enrollment is a security feature. During an enrollment process, Electronic Service Agent informs IBM's service data receiver of the existence of a new IBM Director-managed system on your network. System information, including but not restricted to machine type, serial number, and configuration details, is also sent to IBM's service data receiver. IBM's service data receiver returns unique system identifiers. Managed systems are identified by IBM's service data receiver using the unique system identifiers and system configuration information during all subsequent transactions between Electronic Service Agent and IBM's service data receiver.

Viewing System Information on a Secure IBM Web Site

IBM provides a web site that allows you to view the system details and inventory information that Electronic Service Agent collects from each of your company-owned managed systems that are enabled and enrolled for Electronic Service. To become authorized to view this information:

- Obtain an IBM Registration user ID. To do this, access this URL:
<http://www.ibm.com/registration/selfreg>
- Register for authorization to view this information using the “Advanced” page of the Untargeted Electronic Service Agent Configuration Notebook (see page 47).
- View each of your managed systems with IBM by accessing this URL:
<http://www.ibm.com/support/electronic>
- When you have obtained an IBM Registration user ID, you will also have the authority to grant other users access to information on this web site.

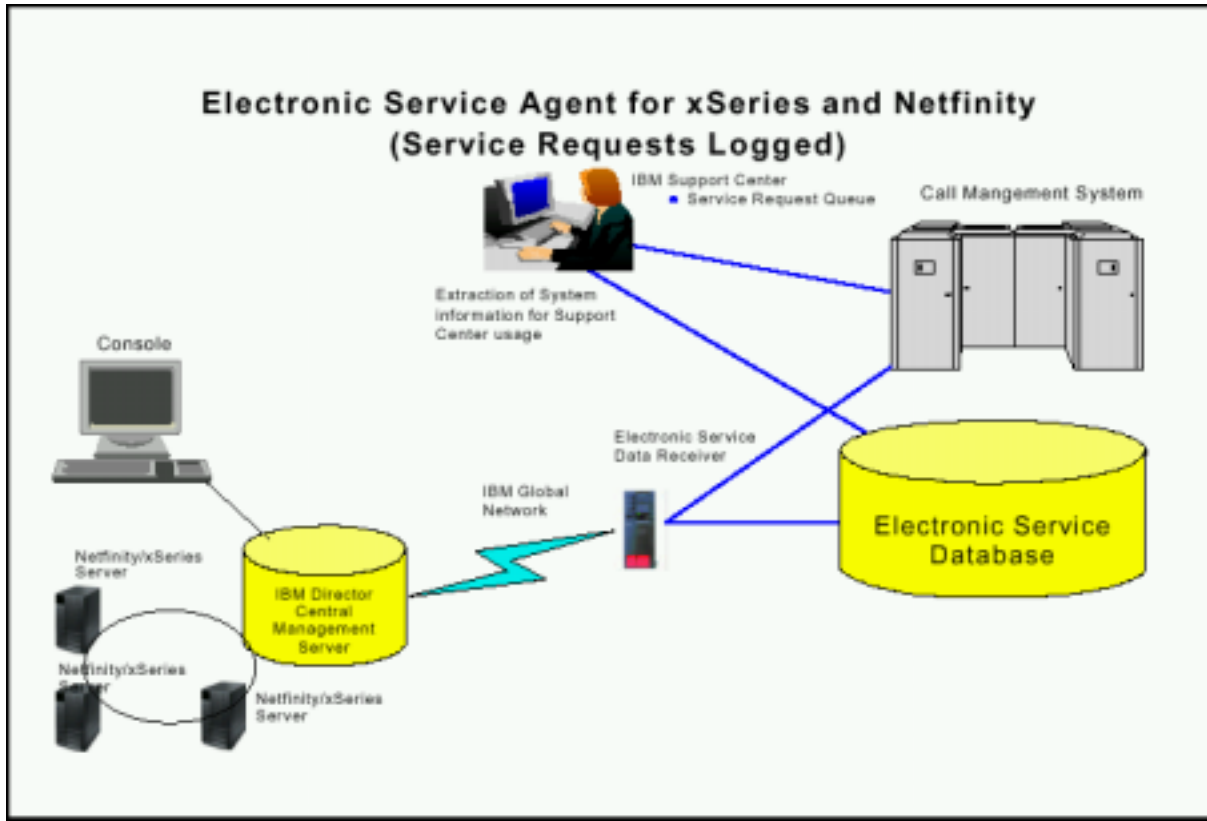
How Electronic Service Agent Works

When Electronic Service Agent is properly installed and configured, each of your managed systems must be enabled and enrolled for Electronic Service. If you have an Enhanced Management Services for xSeries Extended Service Levels package installed on your Central Management Server, your managed systems should also be enabled for the appropriate Extended Service Level, if required. Thereafter, Electronic Service Agent runs in your systems' background. Electronic Service Agent has two main functions:

- To initiate a Service Request and send it to IBM when it detects managed system hardware errors that meet certain criteria for criticality
- To perform information-gathering operations and hardware and software inventory updates and send this information to IBM

Initiating a Service Request

The information that Electronic Service Agent gathers is stored in your IBM Director Central Management Server and transmitted at weekly intervals to IBM using a dial-out or Internet connection from your IBM Director Central Management Server to a service data receiver inside IBM's firewall. IBM warehouses and collates this transmitted data, as shown in the diagram below.



The process works as follows:

1. An event is generated when a hardware error exceeds a preset threshold. Electronic Service Agent is pre-configured to capture specific hardware failure events and assign a level of severity to them.
 - The significance of an event is determined by the level of severity that has been assigned to it. These severity levels are utilized by Electronic Service Agent's event filtration process, which is optimized so that a low severity event does not mask the occurrence of an event of higher severity.
 - The types of problems that Electronic Service Agent typically reports to the call management system include power failures and system overheating (as detected by the Advanced Systems Management Adapter) and RAID drive failures.
2. When Electronic Service Agent captures a significant event, it sends a Service Request to IBM's service data receiver.
3. From here the Service Request is forwarded to the call management system that is appropriate for the defective managed system location and service level. Details sent with the Service Request include unique identifiers, system machine type and serial number, machine name (as displayed in IBM Director), company, contact person, and location details, as well as other useful standard inventory and diagnostic information.
4. If all communications have been successful, IBM's service data receiver initially responds by returning a Service Request Number, Branch Number and Country Code.

5. Electronic Service Agent generates an event on successful completion of this transaction. This event, together with the Service Request Number, Branch Number and Country Code, is recorded in IBM Director's Event Log and the History page of the targeted Electronic Service Agent Configuration Notebook.

Enhanced Availability Services for xSeries

If you have an Enhanced Availability Services for xSeries Extended Service Levels package installed, the sets of events that are detected by Electronic Service Agent are dependent on the Extended Service Level for which a specific system is enabled.

Note: IBM Enhanced Availability Services for xSeries may only be available in selected countries.

Connection and Service Time

When Electronic Service Agent is configured to use a modem for communication to IBM, the event filtration process is optimized so that the connection time between your IBM Director Central Management Server and IBM is kept to a minimum. When Electronic Service Agent calls IBM and sends a Service Request, and if all communications are successful, the modem connection remains open for only a short period of time. This short time interval is configurable by IBM.

IBM accepts and logs calls in the form of Service Requests generated by Electronic Service Agent in respect of a detected system fault at any time, but deals with the calls during the normal service hours of 9:00 a.m. to 5:00 p.m. If you are calling about a Service Request, please have the Service Request number available.

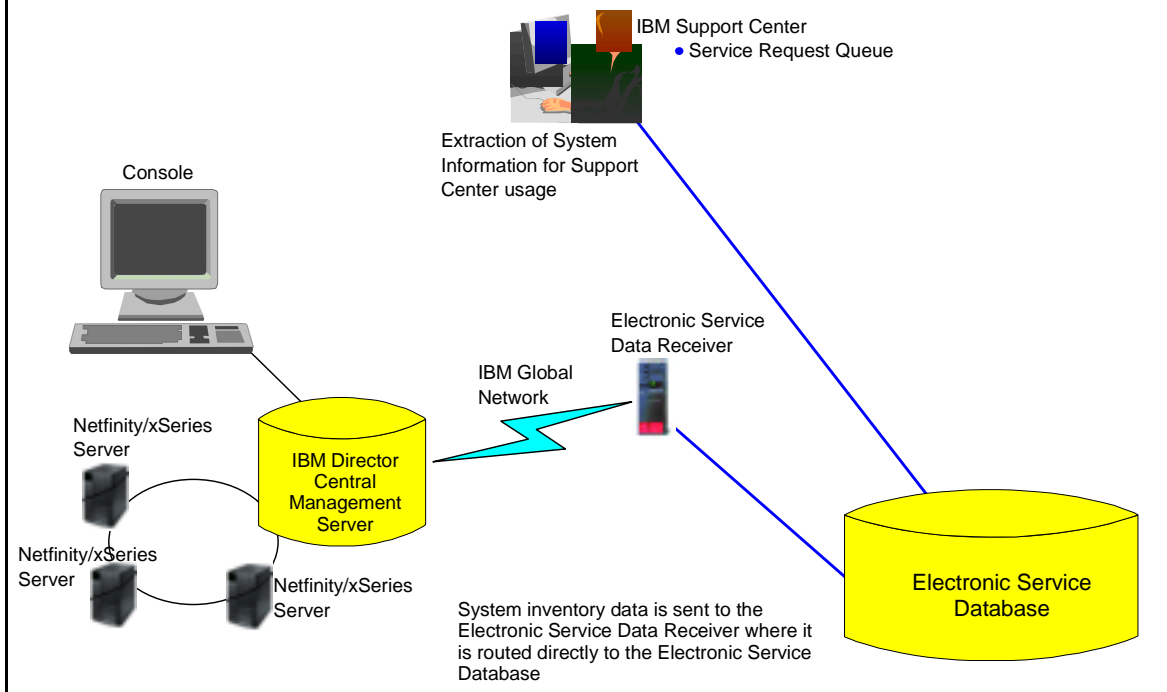
Gathering Inventory Information

Using Electronic Service Agent's Inventory Management feature, your systems' hardware and software inventory can be remotely monitored and stored in a secure IBM database.

Electronic Service Agent collects and sends both standard inventory and diagnostic inventory to IBM.

Prior to running Electronic Service Agent, a complete hardware and software inventory collection must be taken in IBM Director 4.11. Inventory collections should be initiated by a systems administrator at the initial configuration stage of Electronic Service Agent. Systems administrators are instructed how to perform inventory collections in Chapter 6, "Configuring Electronic Service Agent" on page 25. When inventory collection is complete, Electronic Service Agent checks for a recent inventory update for each system, as shown in the following diagram.

Electronic Service Agent for xSeries and Netfinity (System Inventory)



Standard inventory

- Managed systems must be enrolled and enabled for Electronic Service before Electronic Service Agent can collect standard inventory information from the managed systems and send it to IBM. Managed systems are automatically enabled for Electronic Service Agent's standard inventory service at the time Electronic Service Agent is enabled.
- Electronic Service Agent checks for a recent standard inventory update for each system that is enrolled and enabled for Electronic Service. This check is carried out at weekly intervals on the day and time that is configured in Electronic Service Agent's scheduler. The scheduler is configurable by users.
- An inventory refresh is initiated for any system that does not have a recent successful update.
- Electronic Service Agent communicates with the IBM service data receiver regardless of whether or not there are any inventory changes to report.
- The specific items of standard inventory information that Electronic Service Agent collects and sends to IBM are configurable by users. For more information refer to Chapter 8, "Using the Untargeted and Targeted Notebooks" and your Electronic Service Agent online help.

Diagnostic inventory

- Managed systems must be enrolled, enabled for Electronic Service, and enabled for Electronic Service Agent's diagnostic inventory service before Electronic Service Agent can collect diagnostic inventory information from the managed systems and send it to IBM. Managed systems are

automatically enabled for Electronic Service Agent's diagnostic inventory service at the time Electronic Service is enabled.

- Specific items of diagnostic inventory information that Electronic Service Agent collects and sends to IBM are configurable by users.
- In contrast with the standard inventory information, Electronic Service Agent does not collect and send diagnostic inventory information to IBM at weekly intervals. Instead, this information is collected from managed systems and sent to IBM when Electronic Service Agent sends a Request for Service. Standard inventory information is also collected and sent to IBM at this time in addition to the weekly scheduled inventory collection and transmission.

Administering Electronic Service Agent

In order for any of your systems to be properly monitored by IBM using Electronic Service Agent, you must:

- Properly prepare your network (refer to Chapter 2, "Preparing your network," on page 16).
- Properly install Electronic Service Agent (refer to Chapter 3, "Obtaining and installing Electronic Service Agent" on page 20).
- Properly install IBM's Enhanced Availability Services for xSeries Extended Service Levels package (optional). Refer to Chapter 10, "Enhanced Availability Services for xSeries" on page 70.
- Properly configure Electronic Service Agent (refer to Chapter 6, "Configuring Electronic Service Agent," on page 25).
- Enable each managed system for Electronic Service either individually or as part of a group (refer to Chapter 7, "Enabling and Enrolling One or More Systems for Electronic Service," on page 46).
- Enroll each managed system that you have enabled for Electronic Service. Systems are usually automatically enrolled when they are enabled for Electronic Service. If the automatic enrollment transaction fails, then you can manually enroll your systems for Electronic Service (refer to Chapter 7).
- Enable each managed system that you have enrolled and enabled for Electronic Service for Electronic Service Agent's Service Request Service if required (refer to Chapter 8). The Service Request service is enabled by default when Electronic Service Agent's Service Request Service is enabled, but it can be disabled at a later stage. Electronic Service Agent will not report managed system hardware failures to IBM if this service is not enabled.
- Enable each managed system that you have enrolled and enabled for Electronic Service for Electronic Service Agent's diagnostic inventory service when required, if it is not already enabled (refer to Chapter 8). The diagnostic inventory service is enabled by default when Electronic Service Agent's Service Request service is enabled, but it can be disabled at a later stage. When Electronic Service Agent sends a Service Request to IBM, it will not collect and send diagnostic inventory information if this service is not enabled.

Chapter 2. Preparing Your Network

To prepare your environment for installing, configuring and using Electronic Service Agent, complete the following steps:

1. If using a modem for communicating with IBM, ensure that your IBM Director Central Management Server has access to a modem capable of dialing the IBM Electronic Service site and making a connection at a minimum of 56 Kbps.
2. If your Central Management Server is running Windows 2000 Server or greater, or Advanced Server with Service pack 2, any modem that you install will automatically be configured for RRAS (Routing and Remote Access Service).
3. Electronic Service Agent 3.1 is an extension to your IBM Director version 4.11 systems management application. IBM Director version 4.11 is a prerequisite for the installation of Electronic Service Agent 3.1.

You should therefore ensure that your network's Central Management Server, Management Console, and managed systems are configured with the correct processor speed and adequate amounts of free disk space, virtual memory, and RAM before installing IBM Director version 4.11. Refer to your IBM Director version 4.11 user documentation for detailed system requirements.

4. Check to see that your systems are supported. Electronic Service Agent supports the following systems:
 - **IBM Director Server**
 - Windows 2000 Advanced Server and Server (Service Pack 3 required)
 - Windows 2003 (Standard, Enterprise, and Web Editions) for Internet connection only
 - **IBM Director Agent**
 - Please see the Director 4.11 Documentation for supported operating systems for Director Agent 4.11.
 - **IBM Director Console**
 - Windows XP Professional (Service Pack 1 recommended)
 - Windows 2000, Server, and Advanced Server (Service Pack 3 required)
 - Windows 2003 (Standard, Enterprise, and Web Editions) for Internet connection only
5. Record information requested in Table 2 below. You will use this information when configuring the Electronic Service Agent program. See the series of screens in Chapter 6, "Configuring Electronic Service Agent," page 25, for a better idea of the information you will have to supply.

Table 2: Configuration Information

Setting	Your details
IBM Director Central Management Server <u>Country</u> location.	
<u>Modem</u> or <u>Internet</u> details.	

Company details: Name, Telephone Number, Telephone Extension, email, Enterprise or ECI ID (optional).	
Contact details: Name, Telephone Number, Telephone Extension, email.	
Location of your managed systems within your company premises: Building, Floor, Office, Address, City, Post code, State/Province.	

Fill in the table as follows:

- **Country:** the country where your Central Management Server is located

Note: During the configuration process the Central Management Server country will also be assigned as the default for the following:

- Company country: country location for your registered company address
- Managed systems' country: country where your managed systems reside
- Contact person country: country location where the person that your company has nominated to act as a contact for IBM service representatives resides
- If any of your systems reside in different country locations, then you should record these countries. You can change the default country locations later using the Electronic Service Agent Configuration Notebook. Refer to the online help for further details.

- **Modem or Internet information:** the modem or the Internet connection that you want to use to communicate with IBM

- **Company:** supply requested details

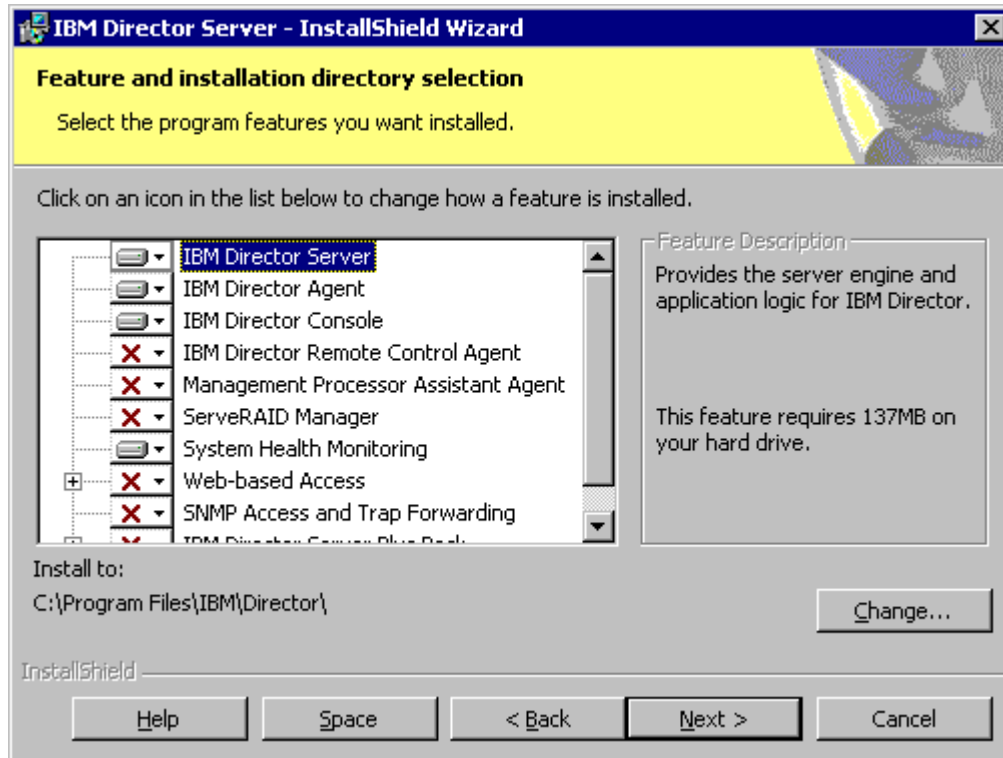
Note: The Enterprise or ECI ID field is optional. Your company may have an Enterprise number or an ECI ID that is used for customer identification and unique service terms and conditions. Your purchasing team may be able to provide an Enterprise number, and your help desk may be able to provide an ECI ID. ECI ID is also known as ESC+ID or an ECCO ID.

- **Contact details.** This is the person that your company has nominated to act as a point of contact for IBM representatives when a hardware failure occurs in any of your systems.
- **Location details** of your managed systems. The location details allow IBM's service representatives to locate your managed systems if they need to be dispatched to your company premises with replacement parts to rectify a system hardware failure. If you record your IBM Director Central Management Server location details incorrectly, IBM's service delivery will be delayed. Similarly, if you record your managed systems' location details incorrectly, IBM service representatives will not be dispatched to the correct site location after a hardware problem has been reported.

6. Before installing and running the Electronic Service Agent for xSeries and Netfinity program, read the README document that is accessible from World Wide Web site:

<http://www.pc.ibm.com/qttechinfo/MIGR-40870.html>

- Version 3.1 of Electronic Service Agent is not compatible with versions of IBM Director earlier than version 4.1. To install IBM Director version 4.11, run the install program from your IBM Director CD-ROM and use the Select Components screen, shown below, to install the appropriate IBM Director components as detailed in steps 8 and 9 below.



Note: Steps 7-9 are provided for guidance only. For detailed instructions on installing IBM Director version 4.11, refer to Chapter 3, “Installing and Configuring Director,” of your IBM Director User’s Guide.

- Install the IBM Director Management Server component on your Central Management Server. Insert your IBM Director CD-ROM into your Central Management Server; then select **Server** on the Select Components screen. When you install the IBM Director Management Server, the IBM Director Management Console and IBM Director Agent are also installed.

Ensure that you select **Director Extension** in the Director Agent Configuration screen during the installation process.

- Install the IBM Director Agent on each of your managed systems. Insert your IBM Director CD-ROM into each system you want to manage using IBM Director then select **Client** on the Select Components screen.

Ensure that you select **Director Extension** in the Director Agent Configuration screen during the installation process.

6. Electronic Service Agent version 2.1 or Electronic Service Agent 3.0 can be upgraded to version 3.1. If you are running a version of Electronic Service Agent earlier than version 2.1, you should use the "Uninstalling Electronic Service Agent" procedure detailed on page 20 to remove all down-level files from your IBM Director Central Management Server.

Note: Electronic Service Agent version 3.1 can only be used in conjunction with IBM Director version 4.11. If you are upgrading from Electronic Service Agent version 2.1 or version 3.0, then you must also upgrade the version of IBM Director that is running on your Central Management Server and Remote Director Management Consoles to version 4.11.

7. You have now completed all of the prerequisites for installing Electronic Service Agent version 3.1.
8. If you want to further enhance Electronic Service Agent's monitoring capabilities by utilizing one of IBM's Enhanced Availability Services for xSeries packages, you should call your local IBM representative.
9. Continue to Chapter 3, "Obtaining and Installing Electronic Service Agent for xSeries and Netfinity".

Chapter 3. Obtaining and Installing Electronic Service Agent

Obtaining Electronic Service Agent

The Electronic Service Agent program is available by download from the following web site:

<http://www.pc.ibm.com/qtechinfo/MIGR-40870.html>

Installing Electronic Service Agent

To install Electronic Service Agent on your IBM Director Central Management Server:

1. Double-click on your **setup.exe** file to run the setup program and begin the installation process.
2. At the Language Option screen, select the language option that you want to use, and then click **OK**.
3. At the Electronic Service Agent Setup screen, click **Next** to continue with the program setup.
4. If you accept the terms and conditions of the License Agreement, click **Yes** to continue with the setup program.
5. If you accept the terms and conditions of the Communications Charges Agreement, click **Yes** to continue with the setup program.
6. At the Question dialog box, click **Yes** to view the README file, and then click **Next**.
7. At the Set-up Complete screen, select **Yes** to restart your system now.
8. Click **Finish** to complete the installation.

Upgrading from Electronic Service Agent for xSeries and Netfinity version 2.1

To upgrade Electronic Service Agent from version 2.1 or version 3.0 to version 3.1 on your Central Management Server or Remote Director Management Console, you must first upgrade IBM Director to version 4.11 . Electronic Service Agent version 3.1 can only be used in conjunction with IBM Director version 4.11.

1. Double-click on your **setup.exe** file to run the setup program and begin the installation process.
2. At the Language Option screen, select the language option that you want to use, and then click **OK**.
3. The Question dialog box informs you that the current installation program has detected an existing version of Electronic Service Agent. Click **Yes** to update the existing version.
4. At the Electronic Service Agent Setup screen, click **Next** to continue with the program setup.
5. If you accept the terms and conditions of the License Agreement, click **Yes** to continue with the setup program.
6. If you accept the terms and conditions of the Communications Charges Agreement, click **Yes** to continue with the setup program.
7. At the Question dialog box, click **Yes** to view the README file, and then click **Next**.
8. At the Information dialog box, click **OK**.
9. At the Set-up Complete screen, select **Yes** to restart your system now.
10. Click **Finish** to complete the installation.

Uninstalling Electronic Service Agent for xSeries and Netfinity version 3.1

To permanently remove Electronic Service Agent from your server, use your administrator console to do the following:

1. From the Windows desktop, click **Start**
2. Select **Settings**
3. Select **Control Panel**
4. Select **Add/Remove Programs**
5. Select **Electronic Service Agent(tm) for xSeries and Netfinity Version 3.1**
6. Click **Add/Remove**
At the Language Selection screen select the language of your choice from the pull-down list, then click **OK**
7. Select **Electronic Service Agent(tm) for xSeries and Netfinity Version 3.1 - Director Extension**
8. Click **Add/Remove**
At the Language Selection screen select the language of your choice from the pull-down list, then click **OK**
9. At the **Question** dialog box select **Yes** to restart your computer now or **No** to restart your computer later, and then click **OK**
10. At the Set-up screen click **Finish**

Reinstalling Electronic Service Agent

If you properly install and fully configure Electronic Service Agent version 3.1 and then decide to uninstall this version, your global configuration details will remain stored on your Central Management Server. When you reinstall version 3.1 of Electronic Service Agent, your previous global configuration settings will be utilized by this installation of Electronic Service Agent. You will not be required to configure any settings before using the agent and will therefore not be presented with the Configuration Wizard screens. You can, however, change the configuration settings after reinstallation using the Electronic Service Agent Configuration Notebook.

Chapter 4. Administering Electronic Service Agent Using a Remote IBM Director Management Console

You can administer Electronic Service Agent using a remote IBM Director Management Console.

Note: Electronic Service Agent version 3.1 must be installed on the Central Management Server version 4.11 **first**. Then upgrade Electronic Service Agent version 3.1 on **all** Remote Consoles managed by the Central Management Server. Any down-level version of Electronic Service Agent on any active Remote Console will generate a down-level version error on the Central Management Server.

To use a remote IBM Director Management Console:

1. Ensure that the system you want to use as a Remote Console is included in the list of supported servers detailed in your IBM Director version 4.11 user documentation.
2. Follow the instructions detailed in Chapter 2, “Preparing your network.”
3. If your Central Management Server is running Windows 2000 Server or Advanced Server with Service pack 2 or Windows XP, your modems will automatically be configured for RRAS (Routing and Remote Access Service).
4. Install the IBM Director Management Console version 4.11 component on the server that you want to use as a Remote IBM Director Management Console. Insert your IBM Director CD-ROM into the server then select **Console** on the Select Components screen.

Ensure that you select **Director Extension** in the Director Agent Configuration screen during the installation process.

5. Install Electronic Service Agent version 3.1 on the Remote Console system.
6. Reboot the server on which you have installed the Remote Console and Electronic Service Agent.

Chapter 5. Managing Contact and Location Information

The configuration of Electronic Service Agent using accurate contact and location information is fundamental for IBM's service delivery.

Contact information

Defines the contact details (including **Name, Country or Region, Telephone number, extension** and **email address**) of the person you have nominated within your company who will act as a point of contact. When Electronic Service Agent sends a Request for Service to IBM, IBM will contact this person during the process of resolving your company's managed systems' hardware problems.

Location information

Defines the location details of your managed systems (including **Building/Floor/Office, Address, City, Postal Code, State/Province, and Country or Region**)

The Electronic Service Agent interface is designed to accommodate the following three scenarios:

- Scenario 1: Your Central Management Server and managed systems reside in the same country/region
- Scenario 2: Your Central Management Server and managed systems reside in two different countries/regions
- Scenario 3: Your Central Management Server resides in a different country/region from your managed systems, and additionally your managed systems reside in a number of countries/regions

At the initial configuration stage of Electronic Service Agent you will be asked to configure a country/region for your systems. If your systems (including Central Management Server) reside in more than one country/region (scenarios 2 and 3 above), you should select the country/region where your Central Management Server resides.

By default, the country/region that you select for your Central Management Server will also be set for the following:

- Company country/region: country/region for your registered company address.
- Managed systems country/region: country/region where your managed systems reside.
- Contact person country/region: country/region where the person that your company has nominated as a point of contact for IBM service representatives resides.

You should change the country/region settings and other details if required later using Electronic Service Agent's Targeted and Untargeted Configuration Notebook as follows:

- Company country/region: Assign a country/region using the Company page of the untargeted Electronic Service Agent Configuration Notebook
- Managed systems country/region:

- If your managed systems reside in one country/region: Assign the global country/region using the Locations page of the untargeted Electronic Service Agent Configuration Notebook..
- If your managed systems reside in more than one country/region: Assign a country/region to any number of your managed systems using the Contact/Location page and associated Location editor panel of the targeted Electronic Service Agent Configuration Notebook.0
- Contact person country/region:
 - If your managed systems reside in one country/region: Assign the global contact persons' country/region using the Contacts page of the untargeted Electronic Service Agent Configuration Notebook.
 - If your managed systems reside in more than one country/region: Assign a country/region to any number of your managed systems' contact persons using the Contact/Location page and associated Contact editor panel of the targeted Electronic Service Agent Configuration Notebook.

Important: If you configure your IBM Director Central Management Server or managed systems locations incorrectly, IBM's service delivery may be delayed.

Chapter 6. Configuring Electronic Service Agent

Introduction

After you have installed Electronic Service Agent, you must configure a number of settings before you can use it to monitor your managed systems and perform any other administrative tasks.

Electronic Service Agent provides you with two different easy-to-use wizards: the Configuration Wizard and Upgrade Wizard.

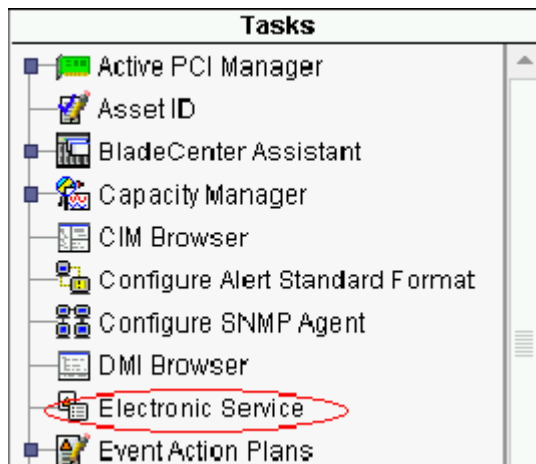
- The Configuration Wizard is displayed when you launch the Electronic Service task in these situations:
 - For the first time after installing Electronic Service Agent version 3.1.
 - After you have exited from the configuration process of version 3.1 without having completed it
 - After you have upgraded from version 2.1 that had not previously been fully configured
 - After you have upgraded from version 2.1 that had previously been fully configured but you have chosen to discard the settings that were presented to you in the Upgrade Wizard
- The Upgrade Wizard screens are displayed when you launch the Electronic Service task after you have upgraded from either version 2.1, that had previously been fully configured.

The Electronic Service Agent Configuration Wizard

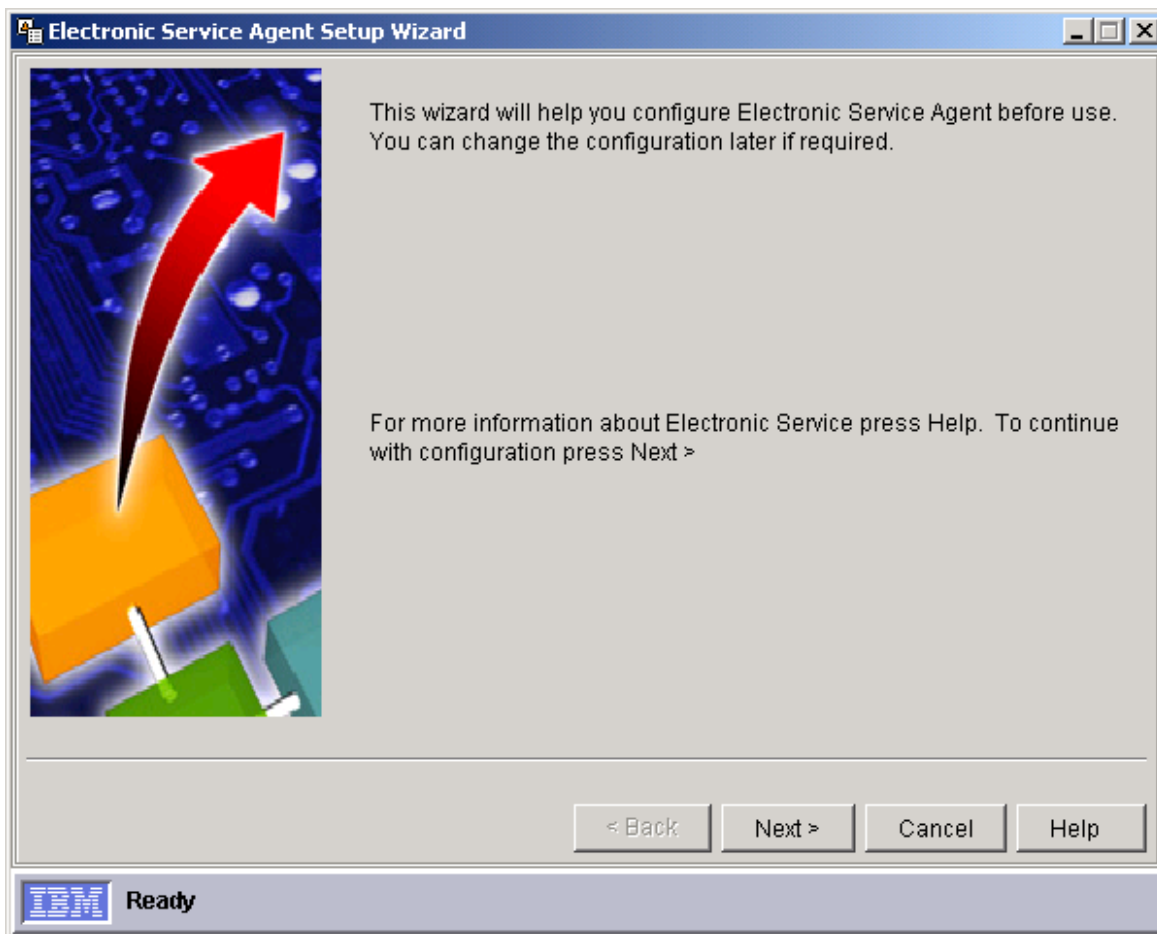
The Configuration Wizard leads you step by step through the configuration process. You use the information that you recorded during the configuration process, as described in Chapter 2, “Preparing your network,” step 5, “Record Information,” on page 16.

To launch the Configuration Wizard so that you can configure global settings for Electronic Service Agent:

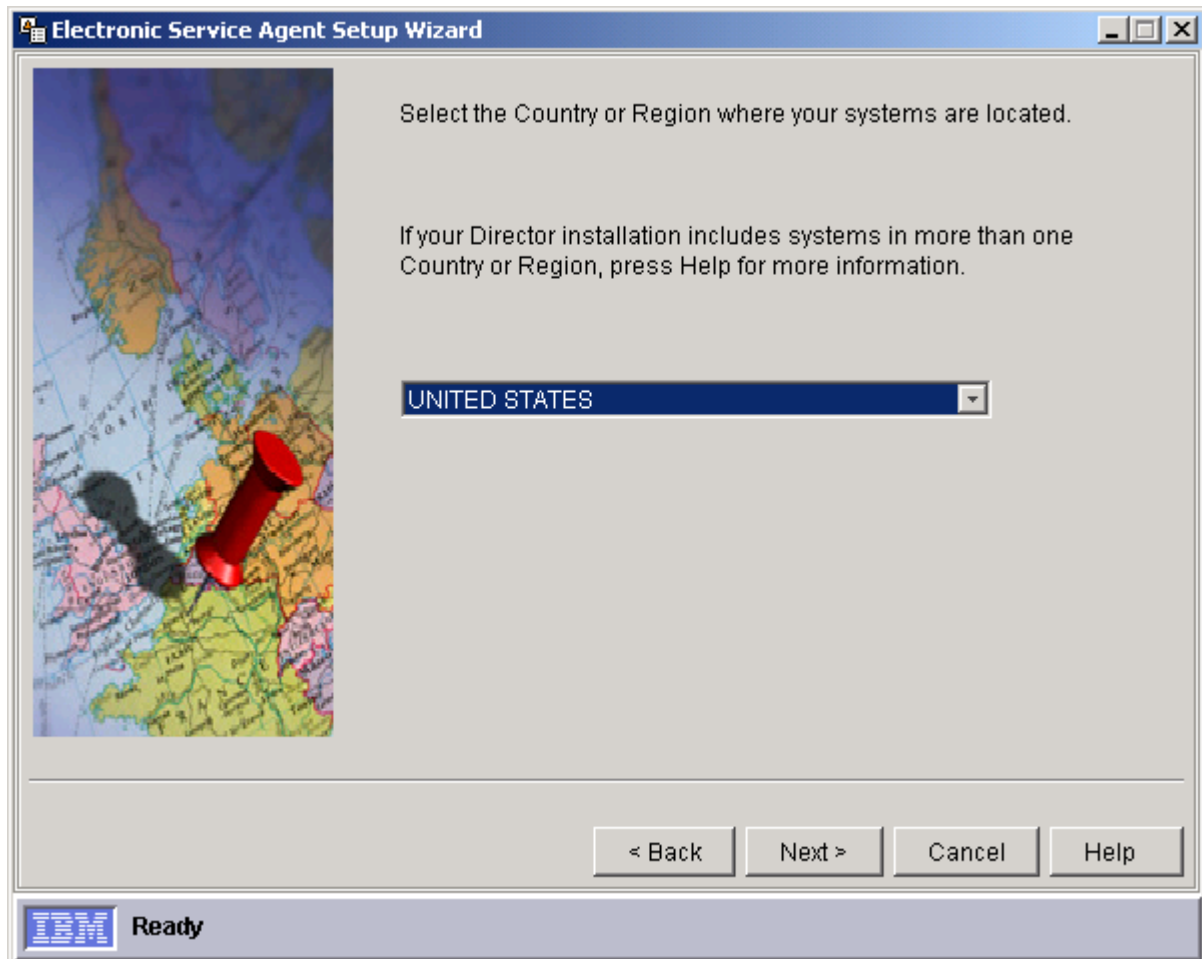
1. Start IBM Director. You see the IBM Director Management Console window with Electronic service in the Tasks pane.



2. Double-click on the Electronic Service task. You see the Introduction screen.

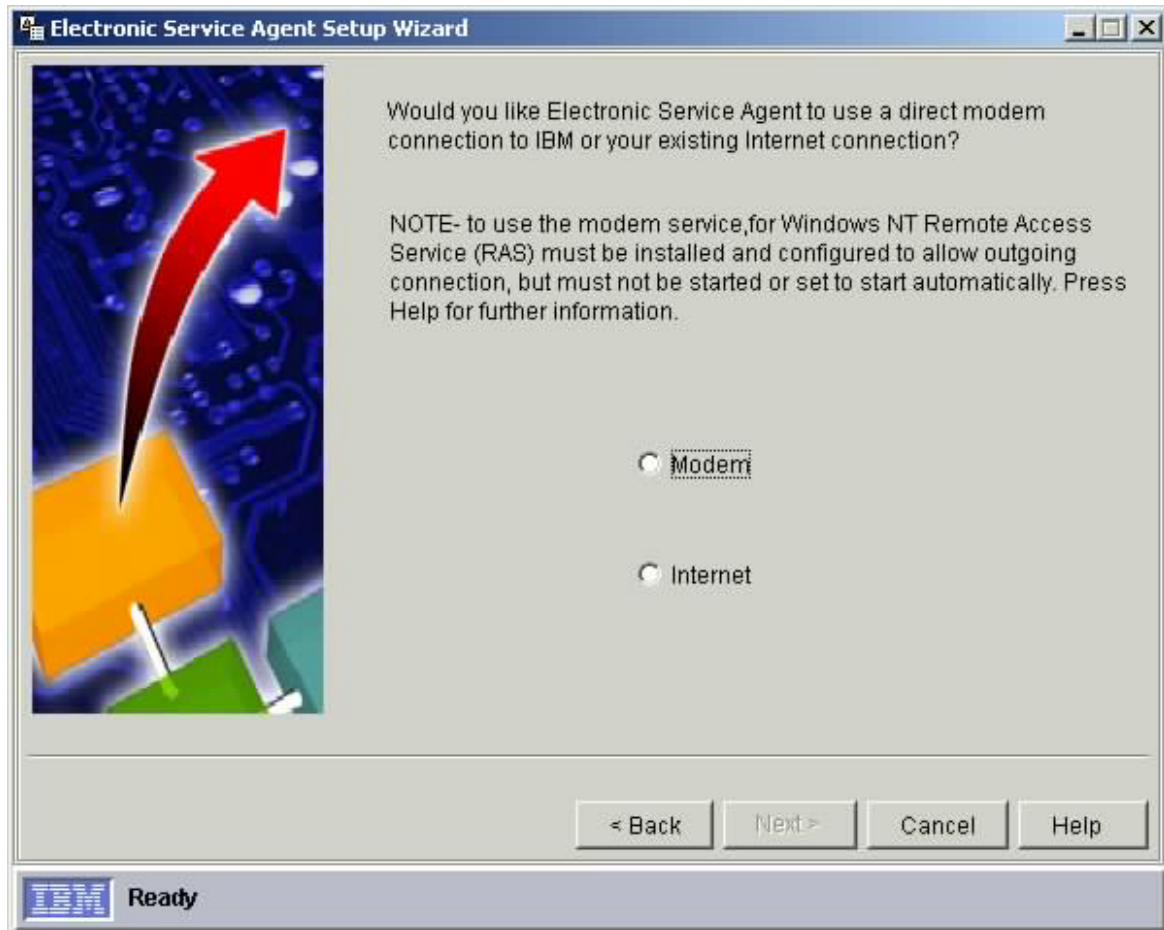


3. Click **Next**. You see the Country/Region screen.



4. The Country/Region screen allows you to select the country/region in which your Central Management Server resides.
- Note: During the configuration process the Central Management Server country will also be assigned as the default for the following:
 - Company country: country location for your registered company address.
 - Managed systems' country: country where your managed systems reside.
 - Contact person country: country location where the person that your company has nominated to act as a point of contact for IBM service representatives resides.
 - If any of your systems reside in different country locations, you can change the default country locations later using the Electronic Service Agent Configuration Notebook. Refer to the online help for further information.
 - **Important:** If your IBM Director Central Management Server location is configured incorrectly, IBM's service delivery may be delayed.

5. Click **Next**. You see the Communications Configuration screen, which lets you select a connection to IBM.



6. Select **modem** to use your modem connection or **Internet** to use your Internet connection.

- If you select **modem**, you see a screen that lets you enter modem data.

Fill in these fields:

- **Modem:** Select a modem from the pull-down list.
- **Region:** Select the region in which your IBM Director Central Management Server is located from the pull-down list.
 - The options displayed here are restricted by the choice of Country/Region that you have made in the Country/Region screen of the Configuration Wizard.
 - This field is disabled if the country/region that you have selected in the Country/Region screen of the Configuration Wizard does not have any associated regions.
- **City:** Select the City in which your IBM Director Central Management Server is located from the pull-down list.
 - This field offers a choice of cities relevant to the region you have selected above.
 - If the Region field is disabled, the City field offers a list of options appropriate for the country/region that you have selected in the Country/Region screen of the Configuration Wizard.

- **Number to dial:** The city that you have selected from the pull-down list of the **City** field determines which telephone number is displayed by default in this field.

Note: You should modify the number displayed to one that is of a local dialing form. For example, remove the area code or add a local dialing prefix. This will minimize your call charges. Your telephone number should not exceed 32 characters.

- **Test connection:** Initiates a test of the current settings and displays the Connection Test window for you to monitor the progress of the test that you are performing.
- If you select **Internet**, you see a screen that lets you configure the settings for your Internet connection.

Fill in these fields:

- **Use proxy:** Enables the proxy controls.
Note that the proxy must support HTTPS tunneling. In some networks this is a different proxy from the standard HTTP proxy. Your network administrator can tell you the values you need for the proxy host and port settings. These are the same values as you would use for the 'Secure' proxy setting in the system Internet settings.
- **Proxy address:** Enter either a dotted decimal IP address or a DNS host name of the proxy.
- **Port number:** Enter the port number of the proxy.

- **Test connection:** Initiates a test of the current settings and displays the Connection Test window for you to monitor the progress of the test that you are performing.

7. Click **Next**. You see the Company configuration screen.

Electronic Service Agent Setup Wizard

Type in details of your company.

If YOUR COMPANY has an IBM 'Enterprise Number' or 'ECI ID' it helps IBM ensure that you receive any special services that your company has arranged with IBM.

Company Name

Telephone

Extension

e-Mail

Enterprise or ECI ID

< Back Next > Cancel Help

IBM Ready

Fill in the fields:

- **Company Name:** Type the name of your company. The details that you type should not exceed 30 characters.
- **Telephone:** Type the telephone number of your nominated contact person. Usually, the telephone number that you type should not exceed 30 characters; however, sometimes the character restrictions in this field are country dependent. If your company is located in Canada or the United States, the telephone number that you type should not exceed 10 decimal digits.
- **Extension:** This mandatory field is displayed only if it is required for the country/region that you have selected from the pull-down list of the Country/Region field of the Country/Region screen. The character restrictions in this field are country dependent. If your company is located in Canada or the United States then the telephone number extension that you type should not exceed 4 decimal digits.
- **Email:** Type an email address that does not exceed 256 characters.

- Enterprise or ECI ID:** This field is optional and accepts Enterprise or ECI IDs up to 10 characters. Your company may have an enterprise number or an ECI (Electronic Customer Interface) ID. These numbers are used by IBM to identify each customer and their associated unique service agreement terms and conditions. Your purchasing team may be able to provide an ECI ID. An ECI ID is also known as **ESC + ID** or **ECCOID**.

8. Click **Next**. You see the Contact configuration screen.

Electronic Service Agent Setup Wizard

Enter details of the default contact person

This is the person IBM service will contact if Electronic Service creates a Service Request for one of your systems.

The name may be a role, like 'Central Service Desk' or a person's name.

If you have different contacts for different systems, you can enter more details later.

Name

Telephone

Extension

e-Mail

< Back Next > Cancel Help

IBM Ready

Use the Contacts screen to configure the details of the person you have nominated within your company who will act as a point of contact. When Electronic Service Agent sends a Service Request to IBM, IBM will contact this person during the process of resolving your company's managed systems' hardware problems.

Fill in the fields:

- Name:** Type the name or job title of your nominated contact person. This field accepts English or Latin characters only. The name that you type should not exceed 22 characters.
- Telephone:** Type the telephone number of your nominated contact person. Usually, the telephone number that you type should not exceed 30 characters; however, sometimes the character restrictions in this field are country dependent. If a contact person resides in Canada or the United States then the telephone number that you type should not exceed 10 decimal digits.

- **Extension:** This mandatory field is displayed only if it is required for the country/region that you have selected from the pull-down list of the Country/Region field of the Country/Region screen. The character restrictions in this field are country/region dependent. If this person resides in Canada or the United States then the telephone number extension that you type should not exceed 4 decimal digits.
- **Email:** Type an email address that does not exceed 256 characters.

Note: If your IBM Director Central Management Server and managed systems reside in different locations or your managed systems reside in a number of different locations or both, you must change the country/regions where the relevant contact persons for these managed systems reside, either individually or on a group basis. To do this:

- a. Complete this initial configuration stage using the Electronic Service Agent Configuration Wizard.
- b. Change the setting using the Contact/Location page of the targeted Electronic Service Agent Configuration Notebook or the Contacts page of the untargeted Electronic Service Agent Configuration Notebook to make changes.

9. Click **Next**. You see the Location configuration screen.

Type in details of the location of your managed systems. This information is used by the IBM service representative to find the system if a Service Request is sent to IBM.

If you have systems in more than one location, you can add more location details later.

Building/Floor/Office	<input type="text" value="Test Zone"/>
Address	<input type="text" value="25 Test Lane"/>
City	<input type="text" value="Midlands"/>
PostCode	<input type="text" value="T3"/>
State/Province	<input type="text" value="Texas"/>

< Back Next > Cancel Help

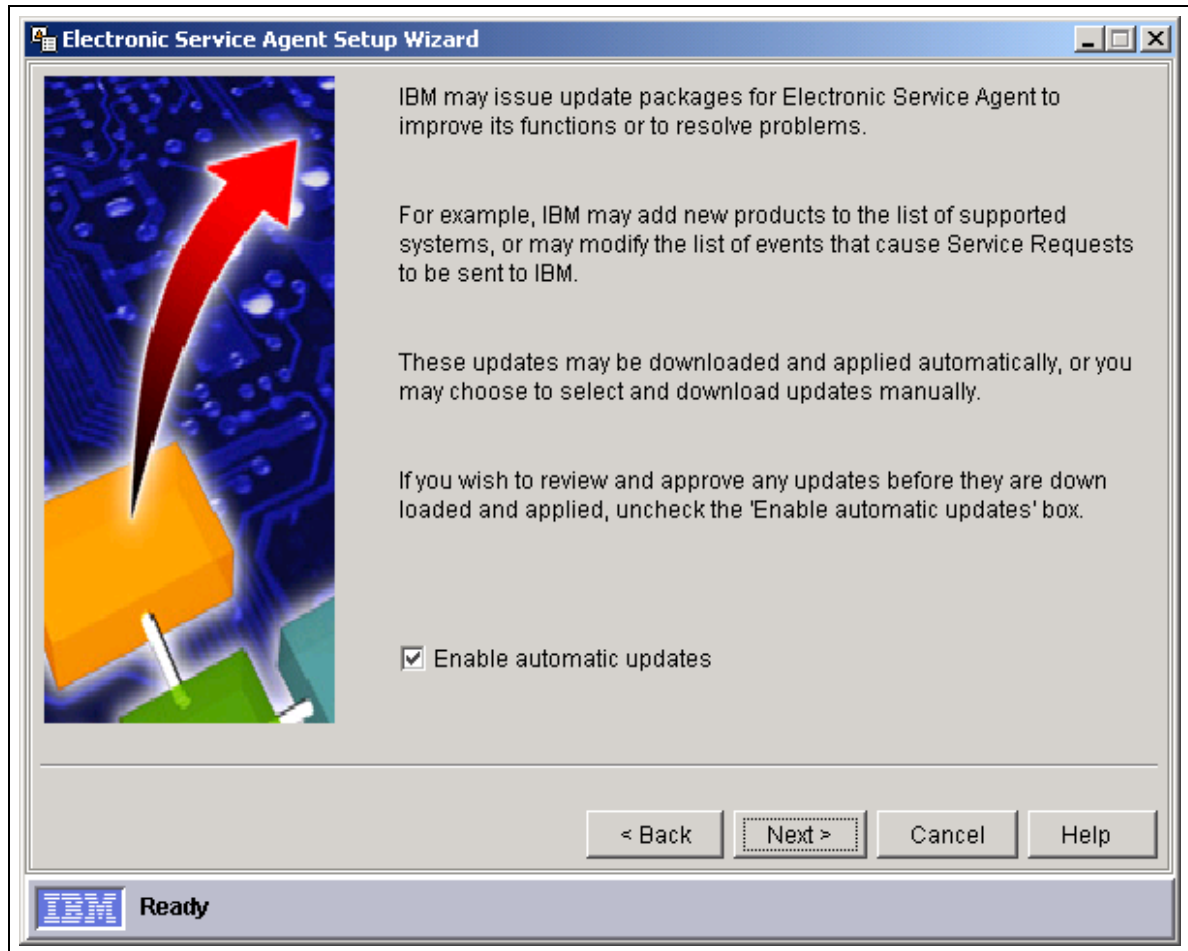
IBM Ready

Fill in the fields: It is important that you configure your managed systems' location details accurately.

The location details that you type here will enable IBM's service representatives to locate the defective managed systems within your company premises so that they can repair them. See the **Note** on page 33.

- **Building, Floor, Office:** Type the location (within your company premises) of your managed systems. The location that you type should not exceed 22 characters.
- **Address:** Type the address details of your managed systems. The address that you type should not exceed 30 characters.
- **City:** Type the city in which your managed systems reside. The city that you type should not exceed 30 characters.
- **Post Code:** Type the postcode appropriate for your managed systems. The postcode that you type should not exceed 10 characters.
- **State/Province:** This field type is dependent upon the country/region that you have selected from the scrollable list of the Country/Region field.
 - If the country/region that you have selected has a defined list of states or provinces, the state/province is selectable from a pull-down list.
 - If the country/region that you have selected does not have a defined list of states or provinces, then you should type the state/province or type **none**. The number of characters that you type should not exceed 30.
 - By default, the field type and the list of states/provinces displayed is dependent upon the country/region location of your Central Management Server. If your systems reside in more than one country location, you should edit the State/Province fields of your managed systems. To do this:
 - Complete this initial configuration stage using the Electronic Service Agent Configuration Wizard.
 - Change the setting using the Contact/Location page of the targeted Electronic Service Agent Configuration Notebook or the Contacts page of the untargeted Electronic Service Agent Configuration Notebook.

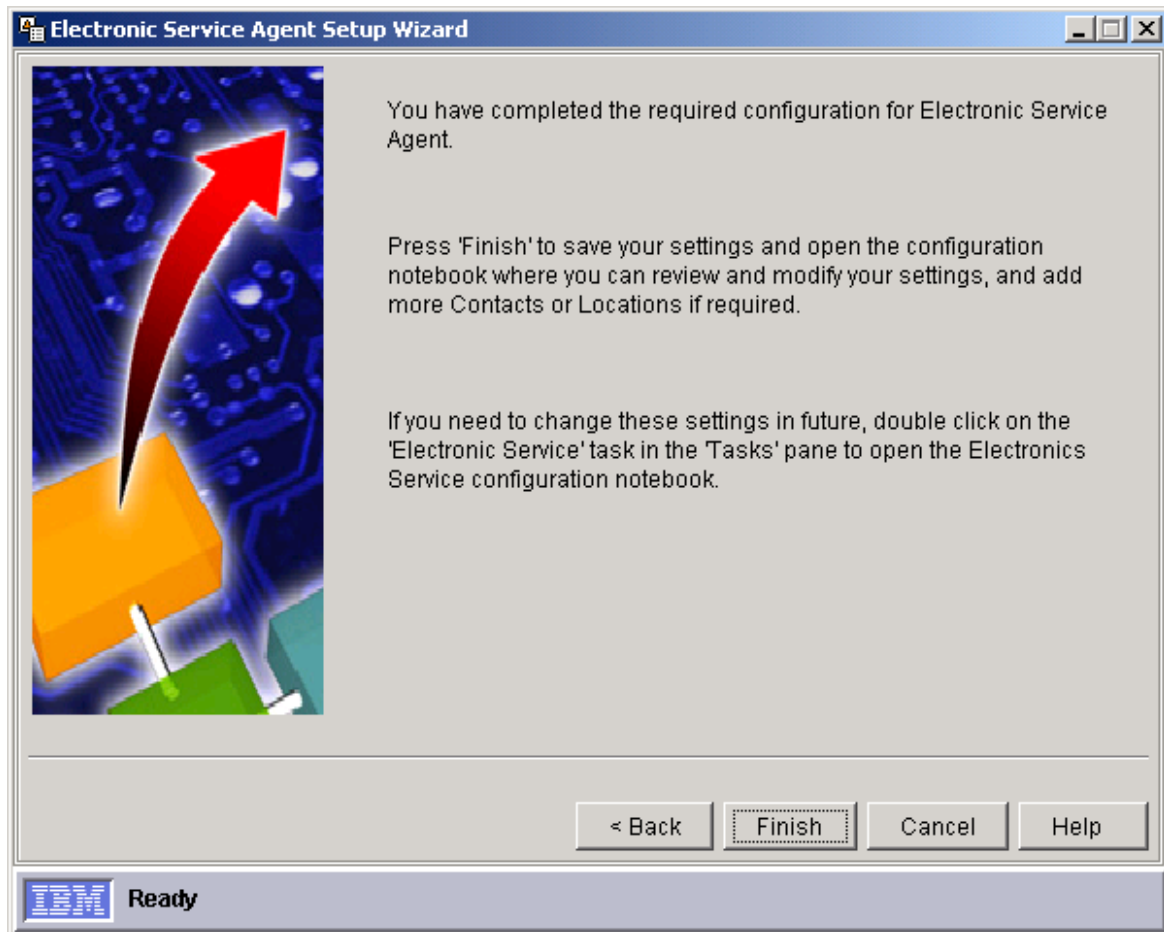
10. Click Next. You see the Auto-Upgrade configuration screen.



Fill in the fields. You can:

- Configure Electronic Service Agent to download and apply program updates automatically when they are available. This checkbox is enabled by default.
 - Select the checkbox if you want Electronic Service Agent to download and apply updates automatically.
 - Clear the checkbox if you want to select and download Electronic Service Agent updates manually at a later date.
- Manually download and apply Electronic Service Agent program updates. This allows you to view the details about the latest program updates before choosing to download them.

11. Click **Next**. You see the Finish Configuration screen.



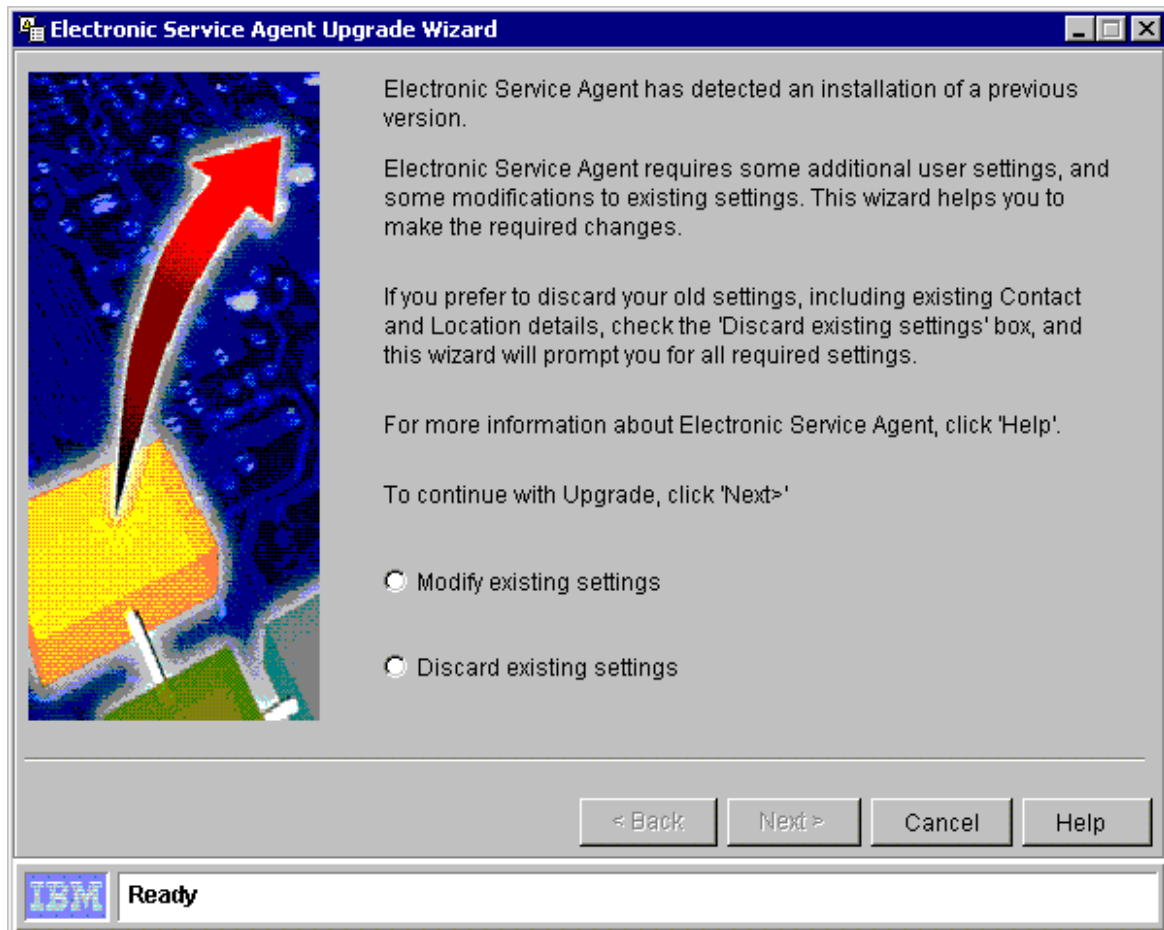
- This screen is displayed when you have properly configured settings for all of the Electronic Service Agent Configuration Wizard screens.
- If you need to change these global configuration settings in future, you can do so using the untargeted Electronic Service Agent Configuration Notebook.
- Click **Finish**. The untargeted Electronic Service Agent Configuration Notebook is automatically displayed. Electronic Service Agent is now ready for you to perform administrative tasks.
- Before running Electronic Service Agent, use your IBM Director Management Console to perform an initial systems inventory. For details of performing system inventories refer to the “Inventory Collection Operation” entry of your IBM Director online help.

The Electronic Service Agent Upgrade Wizard

The Upgrade Wizard leads you step by step through the upgrade configuration process. You should use the information that you recorded in step 5 of Chapter 2, “Preparing your network” during the configuration process.

To launch the Upgrade Wizard so that you can configure global settings and all contact and location settings for Electronic Service Agent:

1. Start IBM Director
2. Double-click on the Electronic Service task in the **Tasks** pane of the IBM Director Management Console. If in doubt, refer to Chapter 8, "Using the Untargeted and Targeted Notebooks," on page 47. You see the Introduction screen.



3. Select an option: to modify existing settings or to discard existing settings and configure new settings:
 - If you select **Discard existing settings**, you see the Country configuration screen shown on page 27. You go through the process of selecting configuration options on all the successive screens.
 - If you select **Modify existing settings**, and your managed systems reside in one location, you see the Company Upgrade screen shown on page 39.

- If you select **Modify existing settings**, and your managed systems reside in different countries, you see the International Upgrade screen, shown below. This screen is displayed when the installation program has detected that you have previously configured more than one country/region setting for two or more of the following:
 - Communications country/region
 - Company country/region
 - Managed system location country/region



Note: This current version of Electronic Service Agent sets all country/region entries to that of the previously configured country/region, that is, to the country/region that you have previously selected as the location of your Central Management Server.

You can modify any of your country/region settings later, when you have completed the configuration process, using the using the untargeted Electronic Service Agent Configuration Notebook. You can modify system-specific details using the targeted Electronic Service Agent Configuration Notebook.

4. Click **Next**. You see the Company Upgrade screen.

Electronic Service Agent Upgrade Wizard

Type in details of your company.

If your company has an IBM 'Enterprise Number' or 'ECI ID', it helps IBM ensure that you receive any special services that your company has arranged with IBM.

Company

Telephone

Extension

email

Enterprise or ECI ID

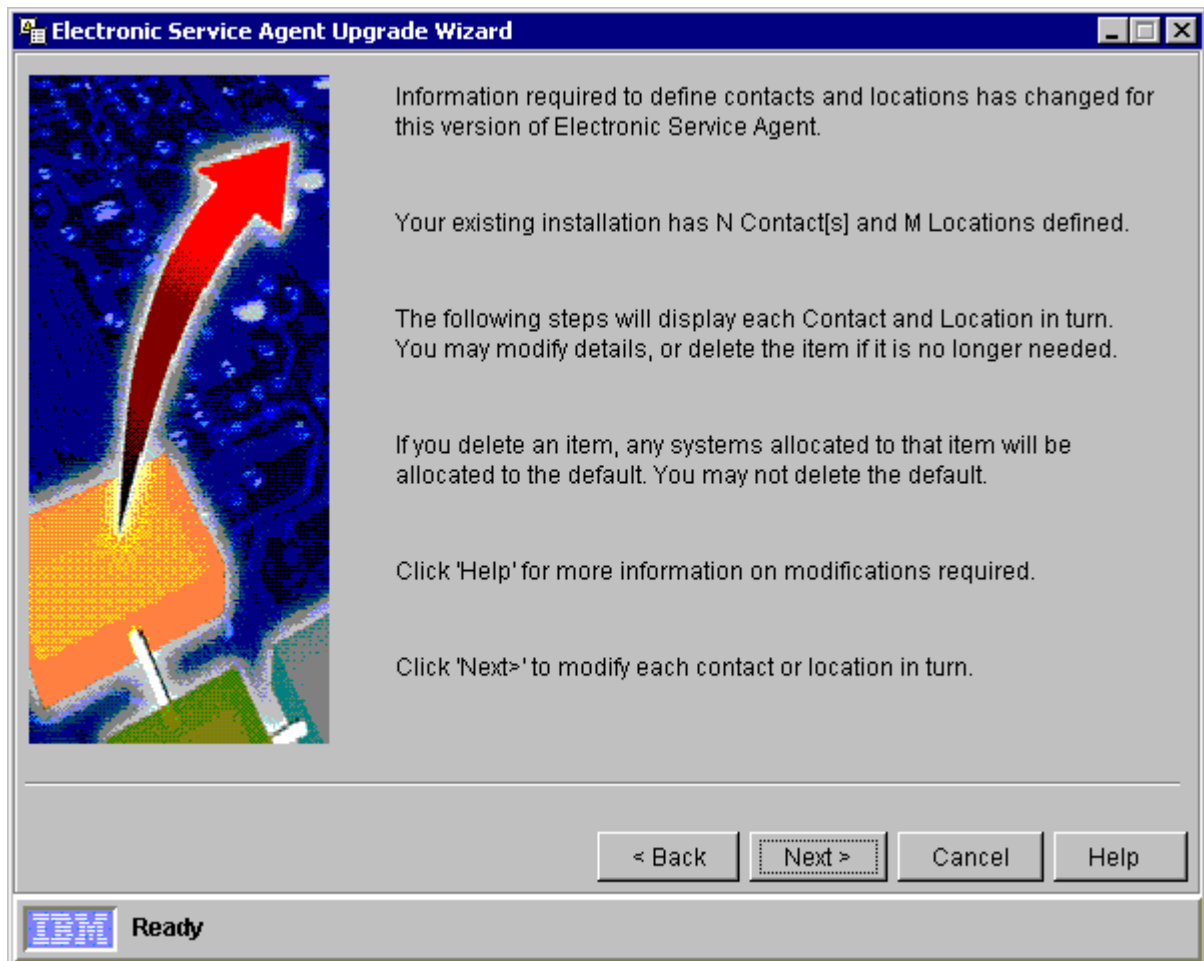
< Back Next > Cancel Help

IBM Ready

Use this screen to modify the company details that you assigned as the configuration settings for your previous version (2.0) of Electronic Service Agent. If you are upgrading from version 1.1.2, you must type new information in the fields.

5. Fill in the fields:
- **Company:** The name of your company. Edit the details as appropriate or type new details. The details that you type should not exceed 30 characters.
 - **Telephone:** The telephone number of your nominated contact person. Edit the details as appropriate or type new details.
Usually, the telephone number that you type should not exceed 30 characters: however, sometimes the character restrictions in this field are country dependent. If your company resides in Canada or the United States then the telephone number that you type should not exceed 10 decimal digits.
 - **Extension:** This field is displayed only if it is relevant for the country/region that is configured for your systems. Edit the details as appropriate or type new details. The character restrictions in this field are country dependent. If your company is located in Canada or the United States then the telephone number extension that you type should not exceed 4 decimal digits.
 - **Email:** Edit the email address as appropriate or type new details. Type an email address that does not exceed 256 characters.

- **Enterprise or ECI ID.** This field is optional and accepts Enterprise or ECI IDs up to 10 characters in length. Your company may have an enterprise number or an ECI (Electronic Customer Interface) ID. These numbers are used by IBM to identify customers and their associated unique service agreement terms and conditions. Your purchasing team may be able to provide an ECI ID. An ECI ID is also known as ESC + ID or ECCOID.
6. Click **Next**. You see the Location Upgrade screen. This screen is displayed when the installation program detects that you have more than one set of contact or location details configured for your managed systems.



The screen displays:

- The number of separate locations settings previously configured for your managed systems
 - The number of associated sets of previously configured contact details for the people that your company has nominated to act as points of contact for IBM if a hardware failure occurs in any of your company owned managed systems.
7. Click **Next**.
- If your systems reside in one country/region location, you see the Contact Upgrade screen, shown below. When you complete this screen, you see the Location Upgrade screen shown on page 43.

- If your systems reside in more than one country/region location, Electronic Service Agent may detect more than one set of previously configured contact or location settings or both, and you will see consecutive Contact Upgrade screens for each set of contact details that you have previously configured. When you have completed modifying the contact details, you see consecutive Location Upgrade screens for each set of location details that you have previously configured.
 - If you delete a contact or location that is currently assigned to one or more managed systems, Electronic Service Agent assigns the default contact or location settings to these systems. You cannot delete the default contact or location settings
8. Fill in the fields in the Contact Upgrade screen.

Electronic Service Agent Upgrade Wizard

Delete

Old Contact Details

Name: Test

Telephone: 1234

email: test@ibm.com

New Contact Details

Name: Test

Telephone: 1234567890

Extension: 234

email: test@testzone.com

< Back Next > Cancel Help

IBM Ready

Note: You cannot change the country/region setting using this screen.

- **Delete:** You can check the **Delete** box at the top of the screen to remove all information on the screen, but if you delete a contact that is currently assigned to one or more managed systems, Electronic Service Agent assigns the default contact settings to these systems. You cannot delete the default contact settings.

- **Old contact details:** displays the **Name**, **Telephone** and **email** details that have been assigned to one or more of your managed systems when your previous version of Electronic Service Agent was configured. The fields are disabled; however, the contents of each field can be copied and pasted into the fields of the New contact details section as appropriate.

If the entry in each field of the old contact details is valid, the entries will be displayed in the corresponding fields of the new contact details for deletion or modification. If an entry in any of the fields of the old contact details is not valid, the corresponding field of the new contact details will be empty

- **(New contact details) Name:** Type the name of your nominated contact person. This field accepts English or Latin characters only. The name that you type should not exceed 22 characters.
- **(New contact details) Telephone** Type the telephone number of your nominated contact person. Usually, the telephone number that you type should not exceed 30 characters; however, sometimes the character restrictions in this field are country dependent. If this person resides in Canada or the United States, the telephone number that you type should not exceed 10 decimal digits.
- **(New contact details) Extension:** This field is displayed only if it is relevant for the country/region that is configured for your systems. The character restrictions in this field are country dependent. If this person resides in Canada or the United States, the telephone number extension that you type should not exceed 4 decimal digits.
- **(New contact details) Email:** Type an email address that does not exceed 256 characters.

9. Click **Next**. You see the Upgrade Location screen.

Electronic Service Agent Upgrade Wizard

Delete

Old Location Details

Name: Test

Address: IBM

City: Green

Post Code: L3

State / Province:

New Location Details

Building, Floor, Office: Test

Address: Test Zone

City: Midlands

Post Code: T3

State / Province: Texas

< Back Next > Cancel Help

IBM Ready

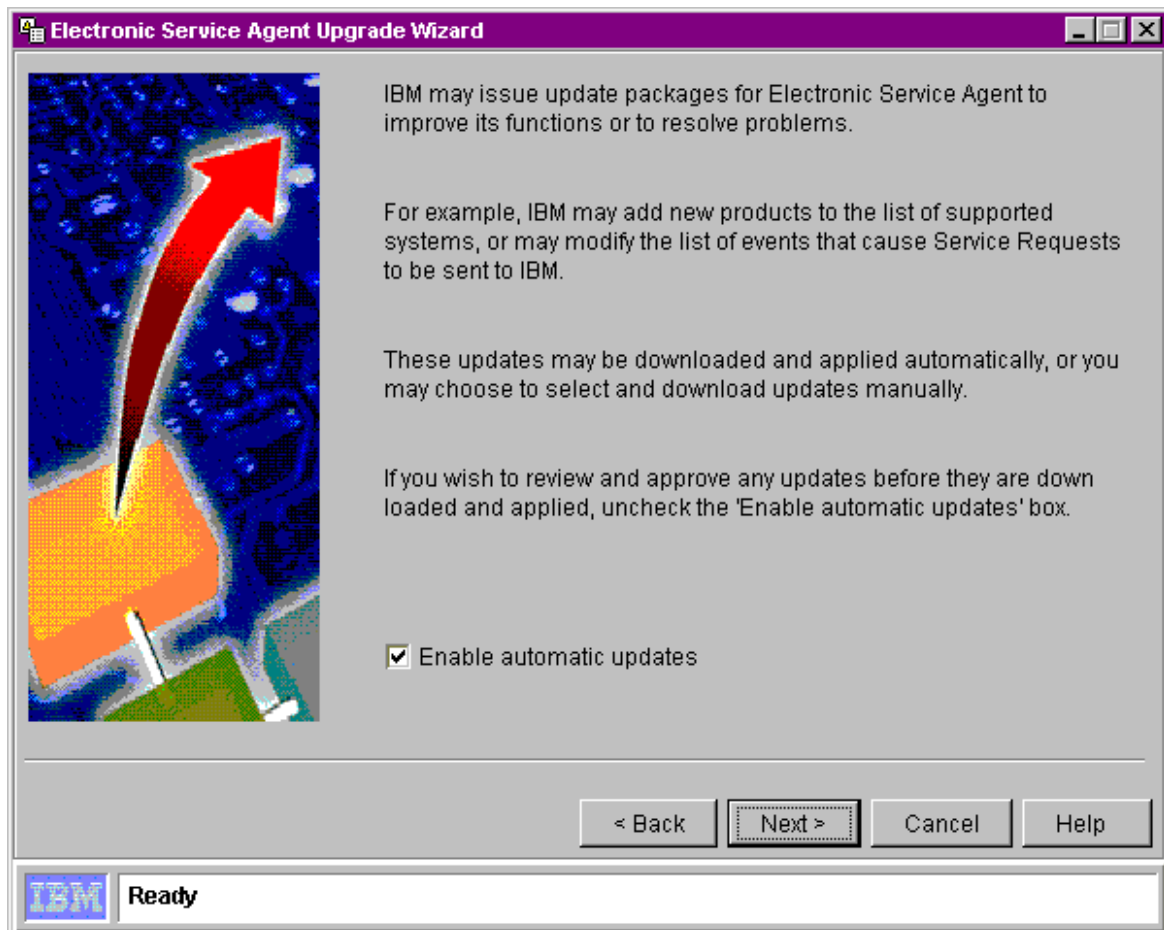
Use this screen to modify or delete the location settings that have been assigned to one or more of your managed systems when your previous version of Electronic Service Agent was configured.

Note: You cannot change the country/region setting using this screen. You can use these fields:

- **Delete:** Click the Delete box to delete all the information on the screen. If you delete a location that is currently assigned to one or more managed systems, Electronic Service Agent assigns the default location settings to these systems. You cannot delete the default location settings.
- **Old location details:** Displays the **(Building, floor, office), Address, City, Post Code** and **State/Province** details that have been assigned to one or more of your managed systems when your previous version of Electronic Service Agent was configured. The fields are disabled, however the contents of each field can be copied and pasted into the fields of the New location details section as appropriate.
- **(New location details) Building, Floor, Office:** Type the location (within your company premises) of your managed system(s). The location that you type should not exceed 22 characters.
- **(New location details) Address:** Type the address details of your managed systems. The address that you type should not exceed 30 characters.
- **(New location details) City:** Type the city in which your managed systems reside. The city that you type should not exceed 30 characters.

- **(New location details) Post Code:** Type the post code appropriate for your managed systems. The post code that you type should not exceed 10 characters in length.
- **(New location details) State/Province:**
 - Select from the pull-down list if available. If not, type a state/province (maximum 30 characters) or type **None**.
 - By default, the field type and the list of states/provinces displayed are dependent upon the country/region location of your Central Management Server.
 - If your systems reside in more than one country location, you should edit the State/Province fields of your managed systems. To do this:
 - Complete this initial configuration stage using the Electronic Service Agent Configuration Wizard.
 - Change the setting using the Contact/Location page of the targeted Electronic Service Agent Configuration Notebook or the Contacts page of the untargeted Electronic Service Agent Configuration Notebook.

10. Click **Next** to display the Auto Update screen.

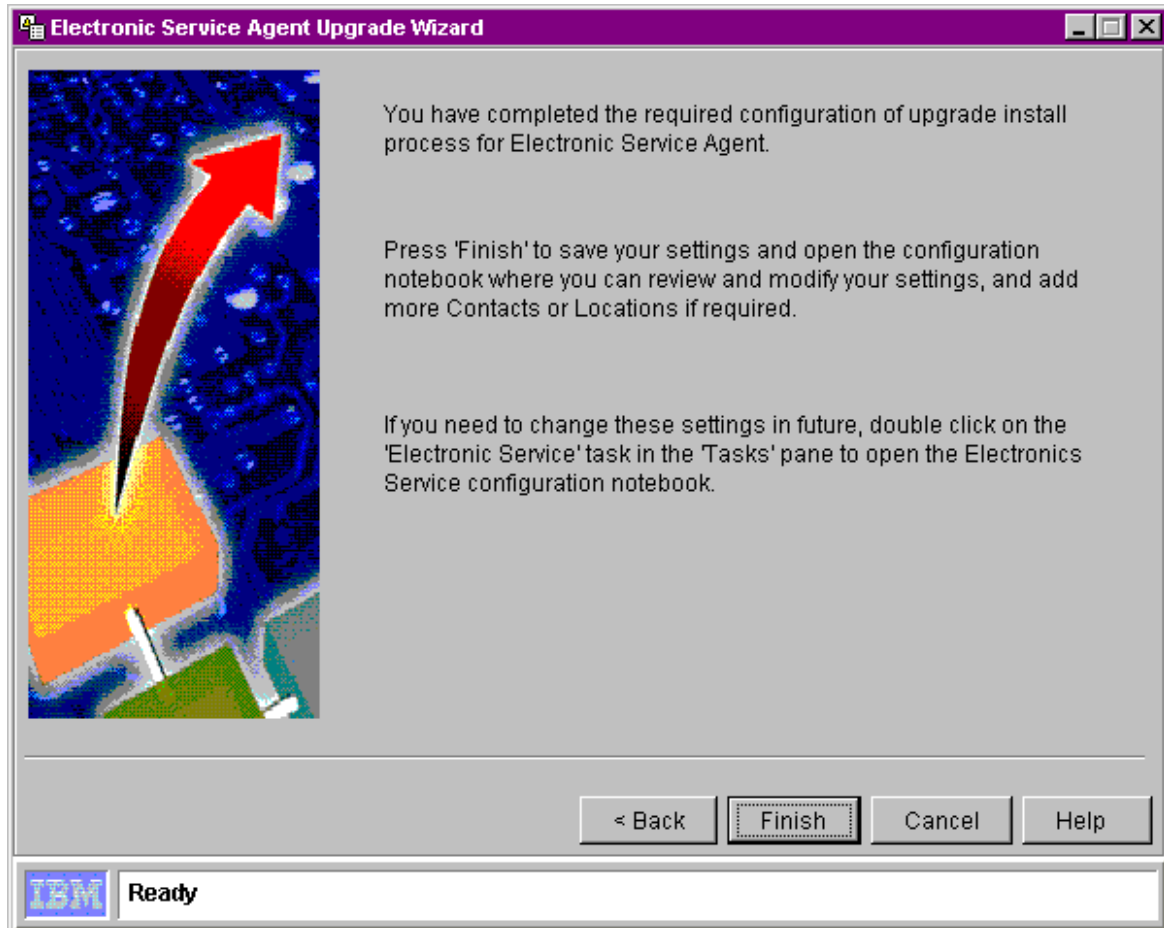


Use this screen to configure the way you want to apply updates to the Electronic Service Agent program. You can:

- Leave the checkbox checked to configure Electronic Service Agent to download and apply program updates automatically when they are available.

- Clear the checkbox if you want to select and download Electronic Service Agent updates manually at a later date. This allows you to view the details about the latest program updates before choosing to download them.

11. Click **Next**. You see the Upgrade Finish screen.



This screen is displayed when you have properly configured settings for all of the Electronic Service Agent Configuration Wizard screens.

- Click **Finish**. The untargeted Electronic Service Agent Configuration Notebook is automatically displayed. Electronic Service Agent is now ready for you to perform administrative tasks. You can use it to change global configuration settings now or in the future.
- However, before running Electronic Service Agent, use your IBM Director Management Console to perform a systems inventory. For details of performing system inventories refer to the “Inventory Collection Operation” entry of your IBM Director online help. Also see how to enable and enroll your systems, described in Chapter 7.

Chapter 7. Enabling and Enrolling One or More Systems for Electronic Service

When you have properly installed and configured Electronic Service Agent, you must enable and enroll each of your managed systems for Electronic Service before the agent can perform information-gathering operations and send Service Requests to IBM.

A note to users upgrading from Electronic Service Agent version 2.1

If you have previously enrolled your managed systems while running Electronic Service Agent version 2.1, and you have now upgraded to version 3.1, then you will not have to enroll the same systems again.

Enabling one or more managed systems for Electronic Service

To enable one or more managed systems for Electronic Service:

1. Open the targeted Electronic Service Agent Configuration Notebook by launching the Electronic Service Task targeted at an individual managed system, group of managed systems, or multiple selected managed systems.
2. Open the System page.
3. Select **Enable for Electronic Service**.
4. Click **Apply** or click **OK** to close the System page.

Enrolling a managed system for Electronic Service

When you enable a managed system for Electronic Service for the first time, Electronic Service Agent initiates an enrollment transaction. If this transaction is unsuccessful, you can manually initiate another enrollment transaction.

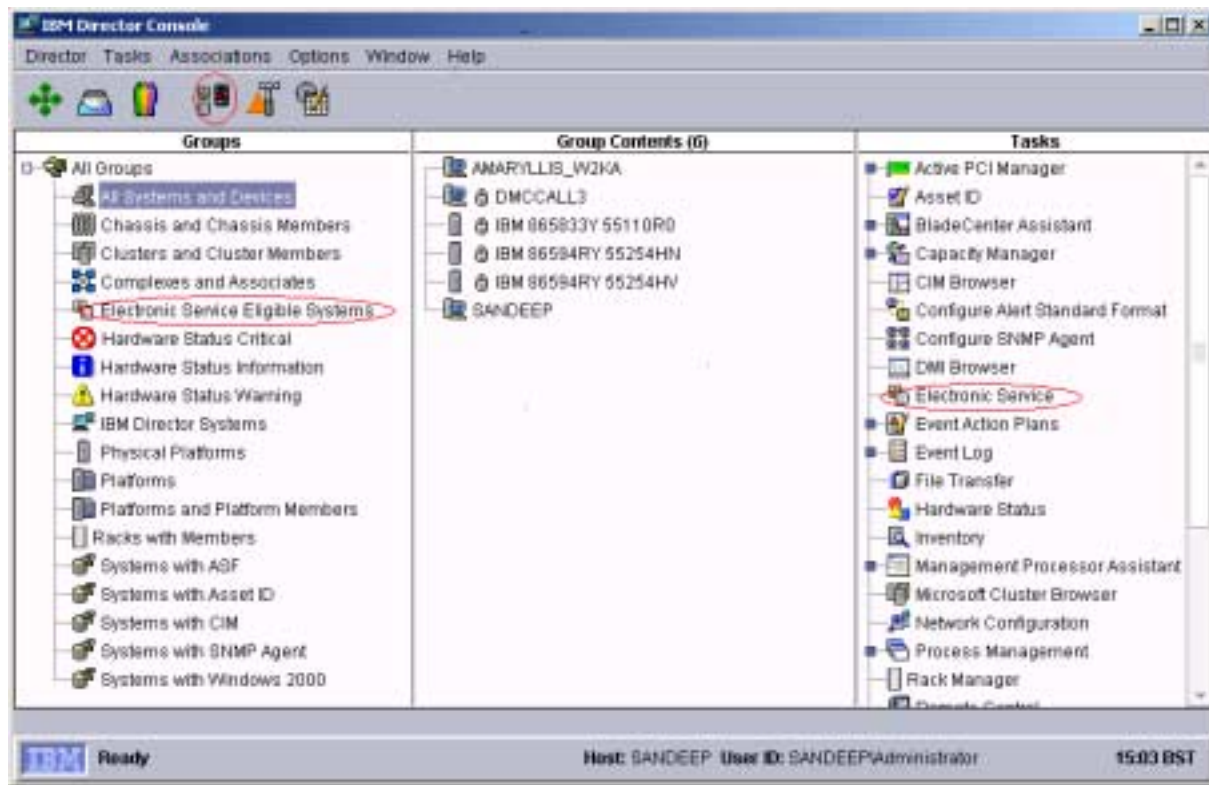
To manually enroll a managed system for Electronic Service:

1. Open the single targeted Electronic Service Agent Configuration Notebook by launching the Electronic Service Task targeted at a **single** managed system. See page 57.
2. Open the **Test** page.
3. Click **Enroll System**. Wait for the Enroll System Test window to confirm that the transaction has been successful or follow on-screen instructions.
4. Click **OK** to close the Test page.

Chapter 8. Using the Untargeted and Targeted Notebooks

The IBM Director Management Console

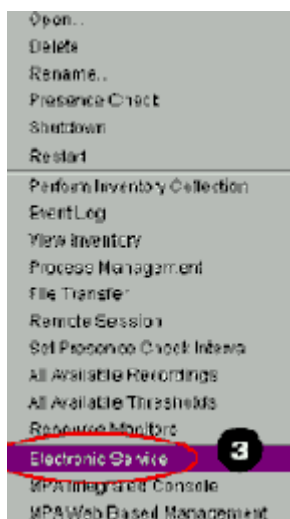
Electronic Service Agent is installed as an IBM Director Extension and is visible on the IBM Director Management Console as shown below. Refer to your IBM Director online help for more information about using the IBM Director Console.



Note: The Electronic Service Manually Subscribed Events filter appears as a sub-category of the Event Log task in the Tasks pane. This is not intended for use; it appears automatically when Electronic Service Agent is installed.

- To view a list of systems that are eligible for Electronic Service, double-click on the **Electronic Service Eligible Systems** group in the Groups pane (circled in the diagram above). This group is a static group that is automatically populated with all of the systems managed by your IBM Director Central Management Server that meet the eligibility criteria for Electronic Service.
- To launch Electronic Service Agent:
The Electronic Service Agent can be launched in untargeted or targeted mode:
 - **Untargeted mode:**
 - An untargeted action is one that applies to the Electronic Service Agent installation as a whole.
 - To launch Electronic Service Agent in untargeted mode, do one of these:
 - Double-click on the circled icon on the Toolbar.

- Double-click on the circled "Electronic Service" in the Tasks pane.
- Right-click on the circled "Electronic Service" in the Tasks pane. You see a Context menu.



- Select **Open**, the top item on the menu.
- You see the Untargeted Electronic Service Agent Configuration Notebook.
- **Targeted mode:**
 - A targeted action is one that applies to one or more managed systems.
 - To launch Electronic Service Agent in targeted mode, do one of these:
 - Drag and drop a system listed in the Groups pane onto the circled "Electronic Service" in the Tasks pane.
 - Drag and drop the circled "Electronic Service" task onto a system listed in the Groups pane.
 - Right-click on a system listed in the Groups pane. You see a Context menu (shown above). Select the circled **Electronic Service**.
 - You see the Targeted Electronic Service Agent Configuration Notebook. The Targeted Notebook is discussed on page 57.

Important: Do not open more than one instance of the Electronic Service Agent Configuration Notebook at a time. If you open and use multiple Electronic Service Agent Configuration Notebooks, some of your data may not be saved when you close any of the Notebooks.

The Untargeted Electronic Service Agent Configuration Notebook

To use the Untargeted Notebook to change global settings:

1. Use one of the methods above. You see the Untargeted Notebook, with tabs for Company, Contacts, Locations, Communication, Scheduler, Inventory, Updates, and Advanced.
2. At the bottom of the notebook, and available to each page, are four buttons:



- When you have made changes to a page that you want to have applied to the system, click **Apply**. You will remain on the notebook page.

- When you have made all changes to the notebook, click **OK** to save and exit.
 - Click **Cancel** to discard changes and exit.
 - Click **Help** to see online help for the page.
3. Select the tabs for the pages you need to change. You may select these in any order.

Untargeted Company Page

1. Click the **Company** tab. You see the Untargeted Company page.

The screenshot shows a Windows-style dialog box titled "Electronic Service Agent Configuration". It has a tabbed interface with the following tabs: Company, Contacts, Locations, Communication, Scheduler, Inventory, Updates, and Advanced. The "Company" tab is selected. The form contains the following fields:

Company	TEST LOGIC
Country or Region	UNITED STATES
Telephone	1234567890
Extension	234
email	test@ibm.com
Enterprise or ECI ID	TEST

At the bottom right of the dialog are four buttons: OK, Apply, Cancel, and Help. At the bottom left is the IBM logo and the text "Ready".

2. Make necessary changes and click **Apply**. Field entry requirements are the same as those for the Company Configuration screen described on page 31. **Do not click OK** until you are ready to exit the notebook.

Untargeted Contacts Page

1. Click the **Contacts** tab. You see the Untargeted Contacts page.

The screenshot shows the 'Electronic Service Agent Configuration' dialog box with the 'Contacts' tab selected. The dialog has a title bar with standard window controls. Below the title bar is a tabbed interface with tabs for 'Company', 'Contacts', 'Locations', 'Communication', 'Scheduler', 'Inventory', 'Updates', and 'Advanced'. The 'Contacts' tab is active, displaying a list of contacts on the left and a 'ContactDetails' form on the right. The list contains one entry: 'Mr. Tester T (Default)'. Below the list are buttons for 'New', 'Edit', 'Copy', 'Delete', and 'Set as default'. The 'ContactDetails' form has fields for 'Name' (Mr. Tester T), 'Country or Region' (UNITED STATES), 'Telephone' (1234567890), 'Extension' (234), and 'email' (tester@test.com). At the bottom of the form are 'Save' and 'Cancel' buttons. At the bottom of the dialog are 'OK', 'Apply', 'Cancel', and 'Help' buttons. A status bar at the very bottom shows the IBM logo and the word 'Ready'.

2. Make necessary changes and click **Apply**. Field entry requirements are the same as those for the Contacts Configuration screen described on page 32. Note that you cannot delete default contact settings.

Untargeted Locations Page

1. Click the **Locations** tab. You see the Untargeted Locations page.

The screenshot shows the 'Electronic Service Agent Configuration' dialog box with the 'Locations' tab selected. The dialog has a title bar with standard window controls. Below the title bar is a tabbed interface with tabs for 'Company', 'Contacts', 'Locations', 'Communication', 'Scheduler', 'Inventory', 'Updates', and 'Advanced'. The 'Locations' tab is active, displaying a list of locations on the left and a configuration form on the right. The list contains one entry, 'Test Systems (Default)', which is highlighted. Below the list are buttons for 'New', 'Edit', 'Copy', 'Delete', and 'Set as default'. The configuration form on the right is titled 'Locations' and contains the following fields: 'Building, Floor, Office' (text box with 'Test Systems'), 'Country or Region' (dropdown menu with 'UNITED STATES'), 'Address' (text box with '25, Test Lane'), 'City' (text box with 'Mainland'), 'Post Code' (text box with 'T3'), and 'State / Province' (dropdown menu with 'Texas'). At the bottom of the form are 'Save' and 'Cancel' buttons. The main dialog has 'OK', 'Apply', 'Cancel', and 'Help' buttons at the bottom. The status bar at the very bottom shows the IBM logo and the text 'Ready'.

2. Make necessary changes and click **Apply**. Field entry requirements are the same as those for the Contacts Configuration screen described on page 33. Note that you cannot delete default location settings.

Untargeted Communication Page

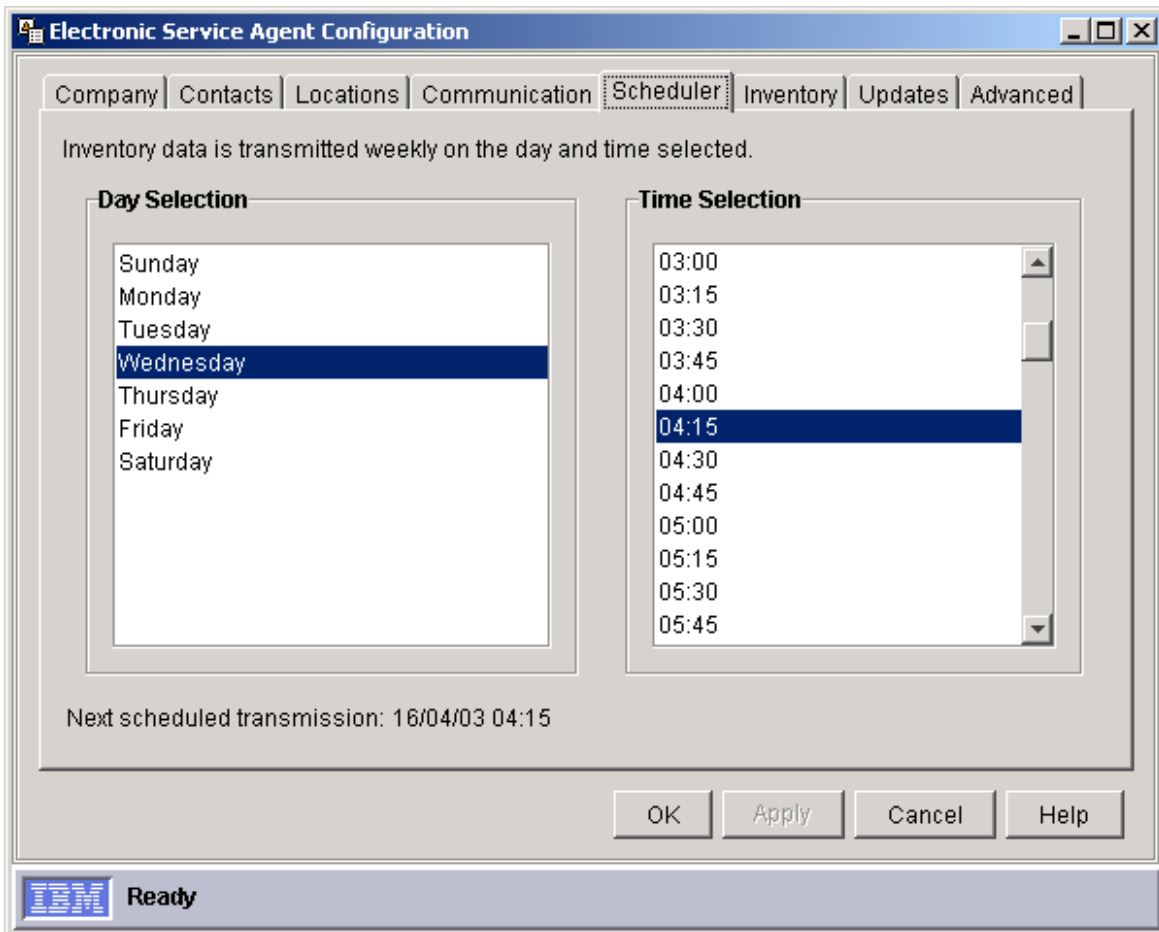
1. Click the **Communication** tab. You see the Untargeted Communication page.

The screenshot shows the 'Electronic Service Agent Configuration' dialog box with the 'Communication' tab selected. The 'Country or Region' dropdown is set to 'UNITED STATES'. The 'Dial-Up' radio button is selected, and the 'Internet' radio button is unselected. The 'Dial-Up Connection Details' section contains the following fields: 'Modem' (Conexant 56K Data,Fax,Voice Modem), 'Region' (Nationwide), 'City' (800-586-3089 Nationwide Toll), and 'Number to dial' (908459122401). A 'Test Connection' button is located below the details section. At the bottom of the dialog are 'OK', 'Apply', 'Cancel', and 'Help' buttons. A status bar at the very bottom shows 'Ready'.

2. Make changes to either Dial-Up or Internet, and click **Apply**. Field entry requirements are the same as those for the Communication Configuration screen described in the pages beginning on page 28.

Untargeted Scheduler Page

1. Click the **Scheduler** tab. You see the Untargeted Scheduler page.

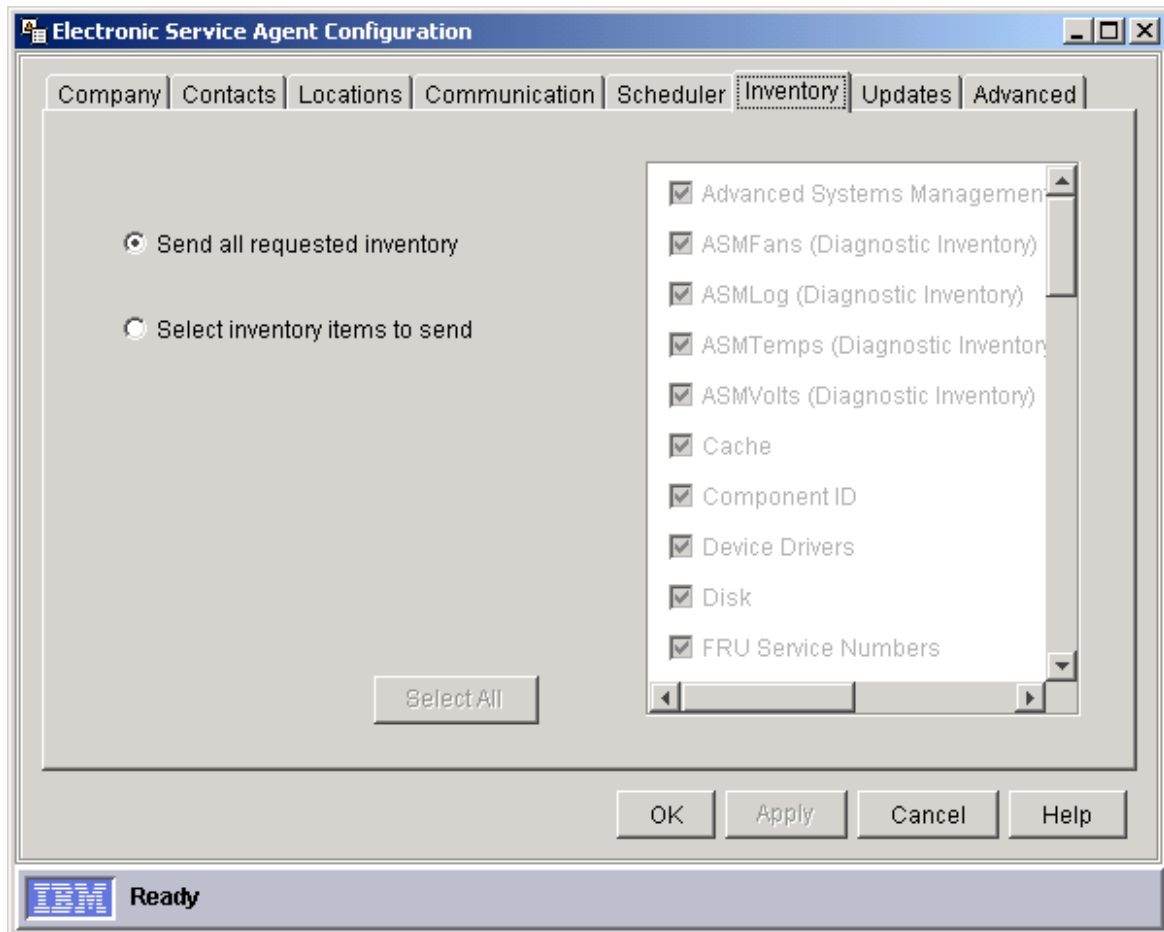


2. Use this page to configure your weekly repeat schedule for inventory collection and transmission to IBM. Select days and times, and then click **Apply**.

Note: All changes made to the Scheduler are applied universally to all managed systems. Different weekly schedules cannot be set for individual managed systems or groups of managed systems.

Untargeted Inventory Page

1. Click the **Inventory** tab. You see the Untargeted Inventory page.



2. Use this page to select the items of inventory information you want Electronic Service Agent to transmit to IBM. Select one of these:
 - **Send all requested inventory:**
 - Enables Electronic Service Agent to collect and send all configured inventory to IBM.
 - Disables the Select all button.
 - Disables the list of inventory items.
 - **Select inventory items to send:** enables the Select all button and the selectable list of inventory items.
 - **Select all:** selects all of the inventory items in the scrollable list.

Electronic Service Agent collects and transmits both standard inventory and diagnostic inventory to IBM.

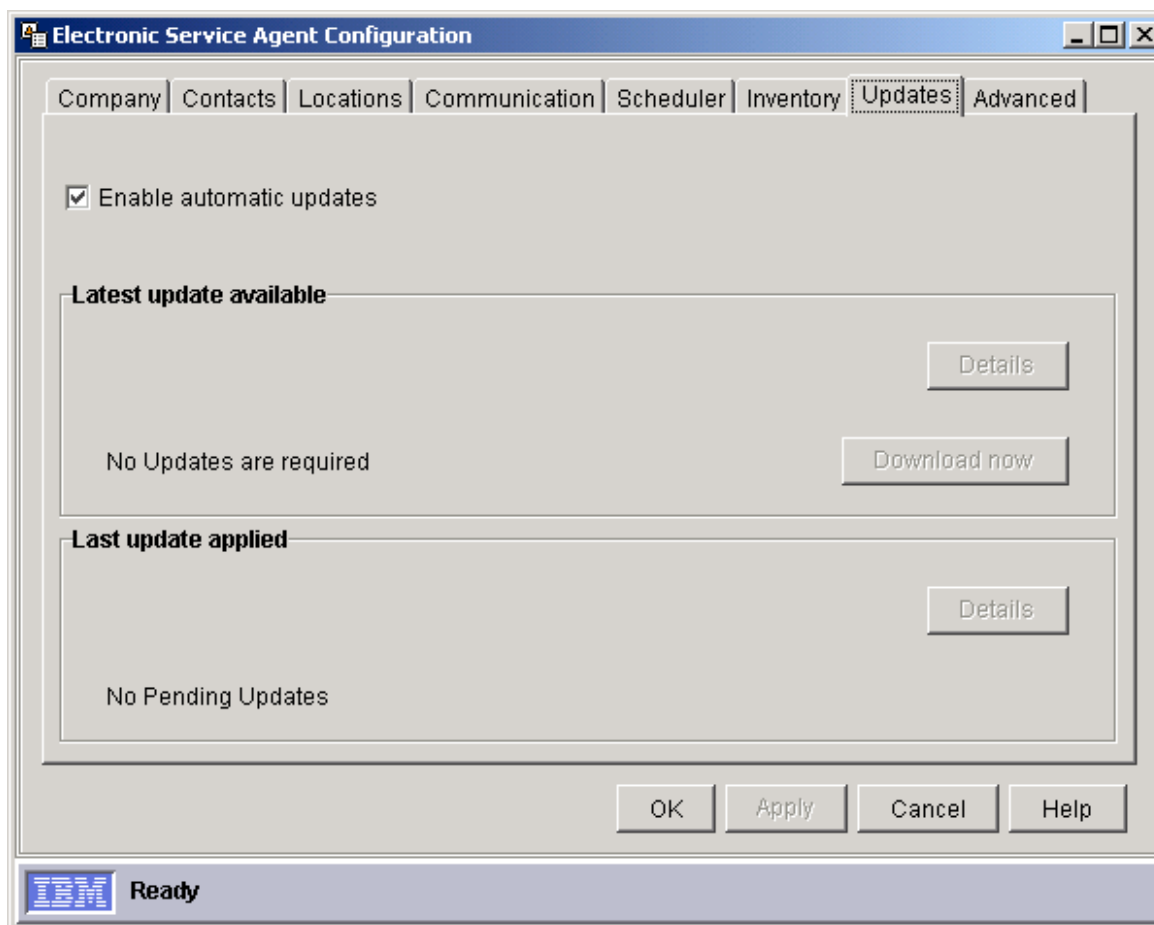
- **Standard inventory:**
Electronic Service Agent collects standard inventory information from your managed systems in accordance with the inventory items that you have selected from the inventory list and transmits it to IBM on either on a scheduled weekly basis or at the time of sending a Service Request.
- **Diagnostic Inventory:**
Electronic Service Agent collects diagnostic inventory information from your managed

systems and transmits it to IBM ONLY at the time of sending a Service Request.

- **Note:** If you want Electronic Service Agent to send a managed system's diagnostic inventory information to IBM, you must specifically enable the diagnostic inventory service using the **Services** page of the targeted Electronic Service Agent Configuration Notebook.

Untargeted Updates Page

1. Click the **Updates** tab. You see the Untargeted Updates page.

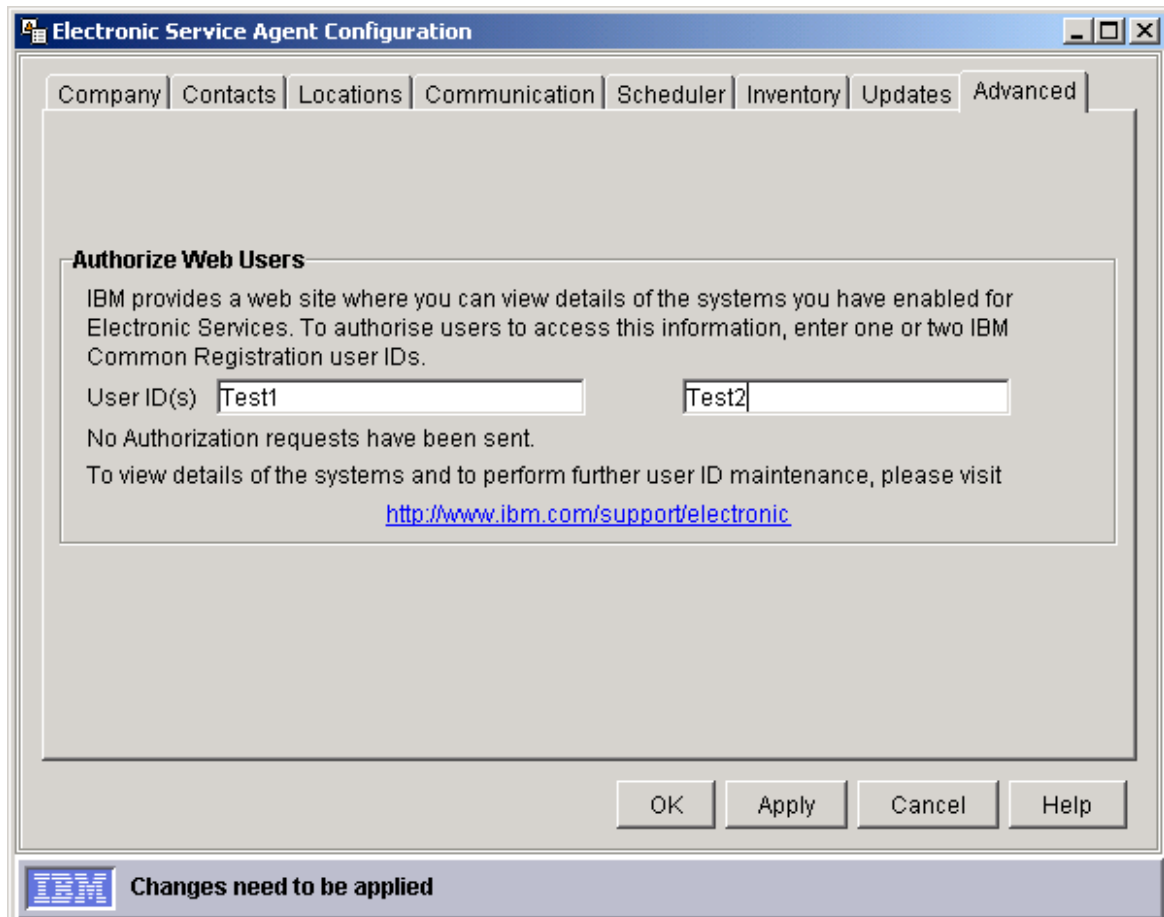


2. Use this page to configure how you want to receive Electronic Service Agent updates when they are available. The changes that you make here will overwrite the global settings that you configured using Electronic Service Agent's Configuration Wizard or Upgrade Wizard subsequent to installing Electronic Service Agent. To do this, you can clear the "Enable automatic updates" box to enable the "Download now" button so that you can manually download one of these available program updates:
 - **(Latest update available) Update package:** Displays the name of latest software updates package if one is available.
 - **(Latest update available) Date available:** Displays the availability date of the latest software updates package if one is available.
 - **(Latest update available) Details:** Displays details about the latest software updates package if one is available.

- **(Latest update available) Download now:** Button-click initiates a download of the latest software updates package. You may have to restart your IBM Director Central Management Server to apply the latest program updates.
- **(Latest update available) Apply now:** Button-click initiates a download of the latest software updates package. You do not have to restart your Central Management Server to apply the latest program updates.
- **(Last update applied) Update package:** Displays the name of the last software updates package.
- **(Last update applied) Date available:** Displays the availability date of the last software updates package.
- **(Last update applied) Date applied:** Displays the date that the last software updates package was applied.
- **(Last update applied) Details:** Displays details about the last available software updates package.

Untargeted Advanced Page

1. Click the **Advanced** tab. You see the Untargeted Advanced page.



2. IBM provides a web site that allows you to view the system details and inventory information that Electronic Service Agent collects from each of your company-owned managed systems that are enabled and enrolled for Electronic Service. To become authorized to view this information:

- Obtain an IBM Registration user ID. To do this, access this URL:
<http://www.ibm.com/registration/selfreg>
- Register for authorization to view this information using this page.
- View each of your managed systems with IBM by accessing this URL:
<http://www.ibm.com/support/electronic>

Using the Targeted Electronic Service Agent Configuration Notebook

You can display the Electronic Service Agent Configuration Notebook in the following three targeted modes:

- Single targeted: select a single managed system
- Multi-targeted: select two or more managed systems
- Group targeted: select a group of managed systems.

Single targeted mode

As discussed on page 47, you can display the Targeted Notebook in single targeted mode by performing any one of the following actions:

- Drag and drop a system listed in the Groups pane of the IBM Director Management Console onto the Electronic Service task in the Tasks pane.
- Drag and drop the Electronic Service task in the Tasks pane of the IBM Director Management Console onto a system listed in the Groups pane.
- Right-click on a system in the Groups pane and select **Electronic Service** from the context menu.
- Launch Electronic Service Agent in multi-targeted or group targeted mode (see below) and then select a single system from the list of systems displayed in the System tree of the Electronic Service Agent Configuration Notebook. The System tree is visible in the figures in the System and History pages of the targeted Electronic Service Agent Configuration Notebook that are illustrated later in this chapter.

Multi-targeted mode

You can display the Targeted Notebook in multi-targeted mode by performing any one of the following actions:

- Select two or more systems listed in the Groups pane of the IBM Director Management Console, then drag and drop any of the selected systems onto the Electronic Service task in the Tasks pane.
- Select two or more systems listed in the Groups pane of the IBM Director Management Console, then drag and drop the Electronic Service task in the Tasks pane on to any of the selected systems.
- Select two or more systems listed in the Groups pane of the IBM Director Management Console, and then right-click on any of the selected systems and select **Electronic Service** from the context menu.

Group targeted mode

You can display the Targeted Notebook in group targeted mode by performing any one of the following actions:

- Drag and drop a group, listed in the Groups pane of the IBM Director Management Console onto the Electronic Service task in the Tasks pane.
- Drag and drop the Electronic Service task from the Tasks pane onto a group listed in the Groups pane.

- Right-click on a group listed in the Groups pane, and then select **Electronic Service** from the context menu.

Note: Multi-targeted and group targeted launches of Electronic Service Agent display the same targeted Notebook and therefore provide the same functionality.

When the Electronic Service task is launched in group or multi-targeted mode, a Systems tree is displayed on the left side of the Targeted Notebook (refer to the System and History pages sections below). This System tree is visible for all pages except the Test page which can only be used in single targeted mode. The root of the tree is denoted as "All Selected Systems." If you select a system from the System tree, the targeted Electronic Service Agent Configuration Notebook switches to single targeted mode for that selected system.

To use the Targeted Notebook to change system-specific settings:

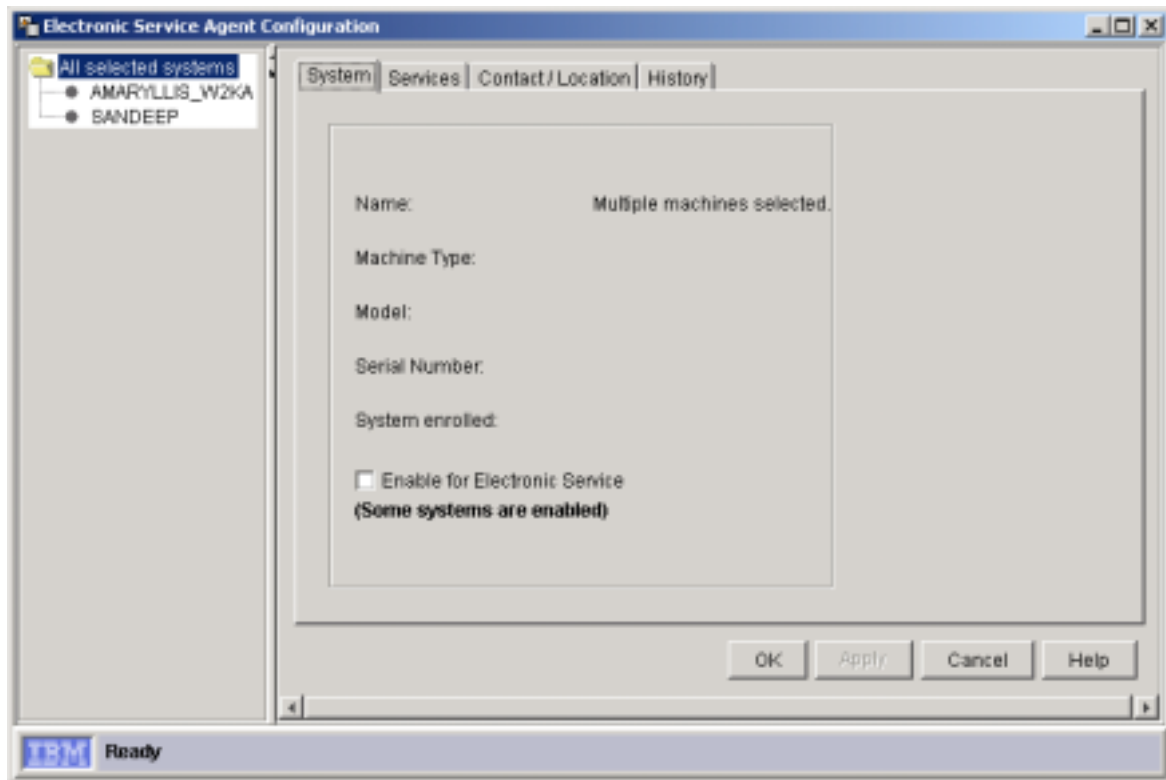
1. Select one of the target modes described above. You see the Targeted Notebook, with tabs for System, Services, Contact/Location, History, and Test (for use in single-targeted mode only).
2. At the bottom of the notebook, and available to each page, are four buttons:



- When you have made changes to a page that you want to have applied to the system, click **Apply**. You will remain on the notebook page.
 - When you have made all changes to the notebook, click **OK** to save and exit.
 - Click **Cancel** to discard any changes you have made and exit the notebook.
 - Click **Help** to see online help for the page you are viewing.
3. Select the tabs for the pages you need to change. You may select these in any order.

Targeted System Page

1. Select the **System** tab. If you selected Multi-Targeted mode, you see the Multi-Targeted view of the System page.

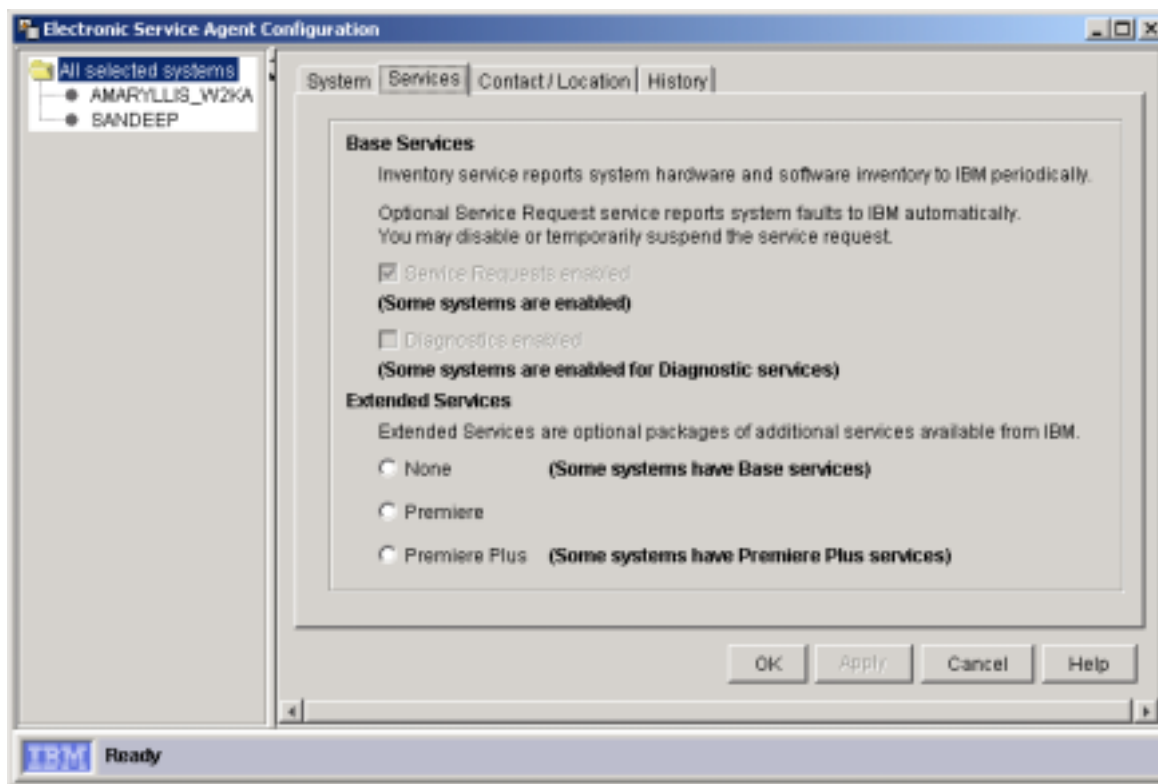


2. Use the Targeted System page to:
 - View a target managed system's details including: Name, Machine Type, Model and Serial Number
 - Verify a target system's enrollment status for Electronic Service
 - Enable a system for Electronic Service
3. Fill in the fields and click **Apply**:
 - **Name:**
 - Single managed systems: Denotes the name of a managed system as displayed in the Group Contents pane of your IBM Director Management Console. This is the name that Electronic Service Agent sends to IBM as the name you have designated for the system.
 - Group of managed systems: Denotes the name of a group of managed systems as displayed in the Groups pane of your IBM Director Management Console.
 - Multiple Systems: Denoted as "All selected systems."
 - **Machine type:** The machine type that is transmitted to IBM by Electronic Service Agent. In multi-targeted mode, the machine type is shown if all selected systems have the machine type. Otherwise the multi-targeted machine type is indicated as "various."
 - **Model:** The machine model that is transmitted to IBM by Electronic Service Agent. In multi-targeted mode, the model is shown if all selected systems have the same machine type. Otherwise the multi-targeted model is indicated as "various."
 - **Serial Number:** The machine serial number that is transmitted to IBM by Electronic Service Agent. The machine serial number is displayed for single targeted systems only.

- **System enrolled:** Displays “Yes” if a system is enrolled for Electronic Service.
Note: Electronic Service Agent automatically initiates an enrollment transaction when a managed system is enabled for Electronic Service for the first time. If this transaction fails, you can manually initiate another enrollment transaction using the Test page of this notebook. For multi-targeted systems, this field displays “Yes,” “No,” or “Some.” This field entry is updated if a system is successfully enrolled using the Test page.
- **Enable for Electronic Service:** Select the checkbox to enable one or more managed systems for Electronic Service.

Targeted Services Page

1. Click the **Services** tab. You see the Targeted Services page.

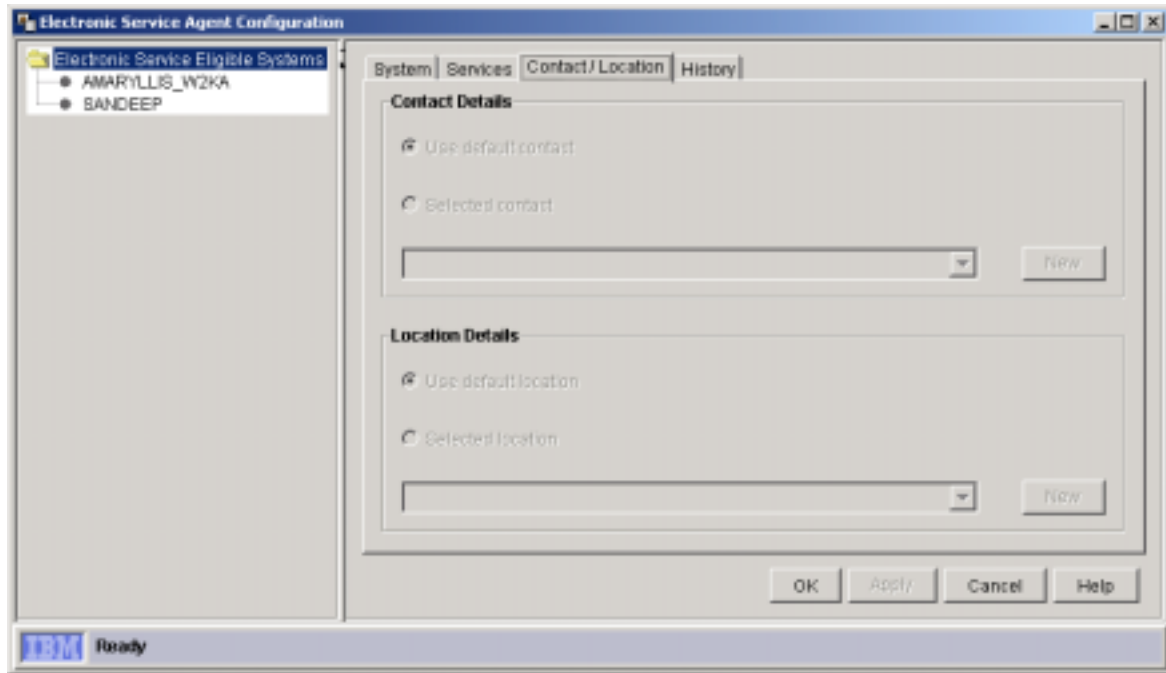


2. Use this page to:
 - Enable a managed system for IBM's Service Request service or disable a managed system's enablement for IBM's Service Request service.
 - Temporarily suspend or resume one or more managed systems' enablement for IBM's Service Request service.
 - Enable one or more managed systems for a non-restricted Enhanced Availability Services for xSeries Extended Service Level or disable one or more managed systems' enablement for a non-restricted Enhanced Availability Services Extended Service Level.
3. Fill in the fields and click **Apply**:
 - **(Base Services) Service Requests enabled:**
 - Select the checkbox to enable one or more managed systems for IBM's Service Request service.
 - Clear the checkbox to disable one or more managed systems' enablement for IBM's Service Request service. In multi-targeted mode this checkbox may have a gray background,

- indicating that your current selection of managed systems consists of some managed systems that are enabled for IBM's Service Request service and some that are not.
- This checkbox will automatically be selected when you enable a managed system for an Enhanced Availability Services for xSeries Extended Service Level that requires Service Requests.
- **(Base Services) Suspended:**
 - Select the checkbox to temporarily suspend a managed system's enablement for IBM's Service Request service.
 - Clear the checkbox to resume IBM's Service Request service for the managed system.
 - If a persistent condition on any of your managed systems is causing an excessive number of Service Requests to be sent to IBM, you should temporarily suspend the managed system's enablement for IBM's Service Request service. You can later resume service for that managed system when the problem has been rectified.
 - **Extended Services) none:**
 - This radio button is displayed only if you have installed an Extended Service Levels software package on your IBM Director Central Management Server.
 - Select **none** to disable one or more managed systems' enablement for a non-restricted Extended Service Level.
 - **Premiere:** Select **Premiere** to enable one or more managed systems for the Premiere Extended Service Level.
 - **Premiere Plus:**
 - Select **Premiere Plus** to enable one or more managed systems for the Premiere Plus Extended Service Level.
 - You can only enable one or more managed systems for an Extended Service Level if you have properly installed the software for that Extended Service Level. Installation of the Extended Service Level software requires the assistance of an IBM on-site representative.
 - You will require the assistance of an IBM on-site service representative if you want to enable one or more managed systems for the Premiere Plus Extended Service Level or disable one or more managed systems' enablement for the Premiere Plus Extended.

Contact/Location Page

1. Click the **Contact/Location** tab. You see the Targeted Contact/Location page.



2. Use the **Contact/Location** page and associated Electronic Service New Contact and Electronic Service New Location editor panels to:
 - Assign new contact or location details to a managed system or group of managed systems without changing Electronic Service Agent's global settings
 - Assign Electronic Service Agent's global default contact or location settings or both to one or more managed systems
3. Define these settings:
 - **Contact:** details of the person you have nominated within your company who will act as a point of contact. When Electronic Service Agent sends a Service Request to IBM, IBM will contact this person during the process of resolving your company's managed systems' hardware problems.
 - **Use default contact:** Assigns the global default contact details to one or more managed systems. The global default contact details are those that you configured in the Contact screen of the Configuration Wizard or the Contacts page of the untargeted Notebook.
 - **Select contact:** Enables the pull-down list of contact settings and the **New** button.

- **New** :Displays the Electronic Service New Contact screen.

Use this screen to add new contacts for one or more managed systems.

- **Location:** The location details will enable IBM's service representatives to locate within your company premises the defective managed systems.
 - **Use default location:** Assigns the global default location details to one or more managed systems. The global default location details are those that you configured in the Location screen of the Configuration Wizard or the Locations page of the untargeted Notebook.
 - **Select location:** Enables the pull-down list of location settings and the **New** button.

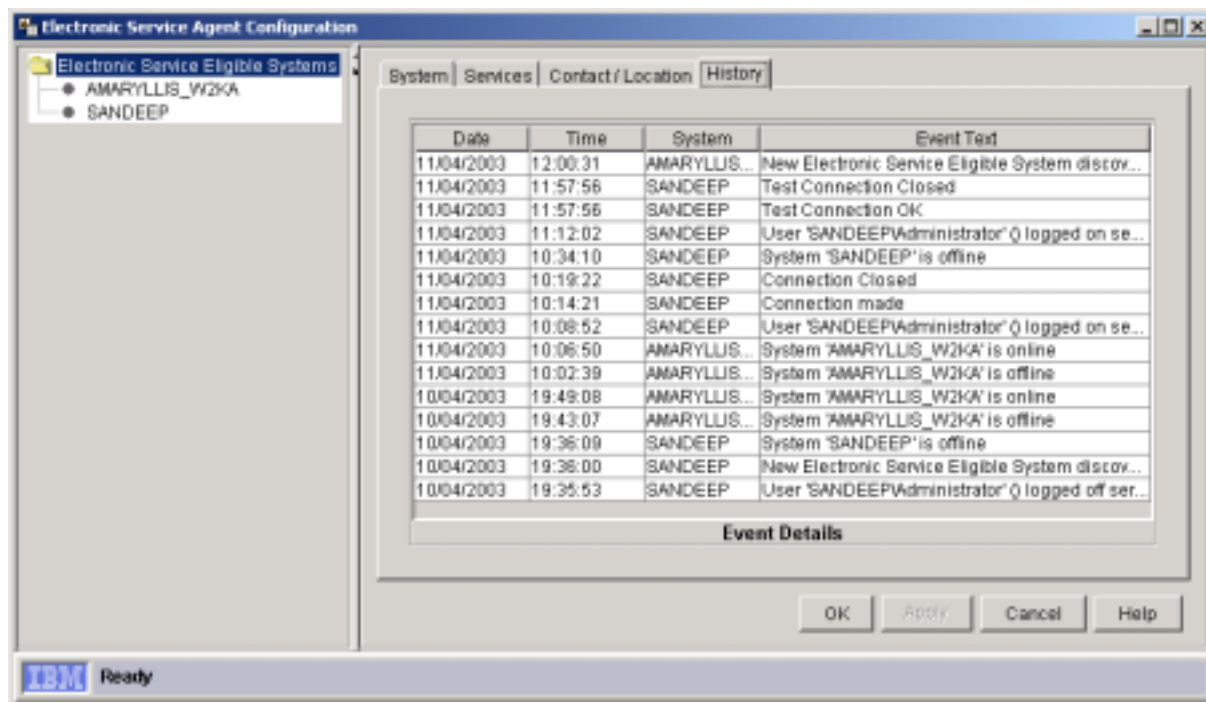
- **New:** Displays the Electronic Service New Location screen.

The screenshot shows a standard Windows-style dialog box titled "Electronic Service New Location". It features a light gray background and a blue title bar with standard window controls (minimize, maximize, close). The dialog contains six input fields arranged vertically, each with a label to its left. The first field is "Building, Floor, Office" with the text "Test Systems". The second is "Country or Region" with a dropdown menu showing "UNITED STATES". The third is "Address" with the text "25 Test Lane". The fourth is "City" with the text "Midlands". The fifth is "Post Code" with the text "T3". The sixth is "State / Province" with a dropdown menu showing "Texas". Below these fields are three buttons: "Save", "Cancel", and "Help". At the bottom of the dialog is a status bar with the IBM logo and the word "Ready".

Use this screen to add new locations for one or more managed systems.

Targeted History Page

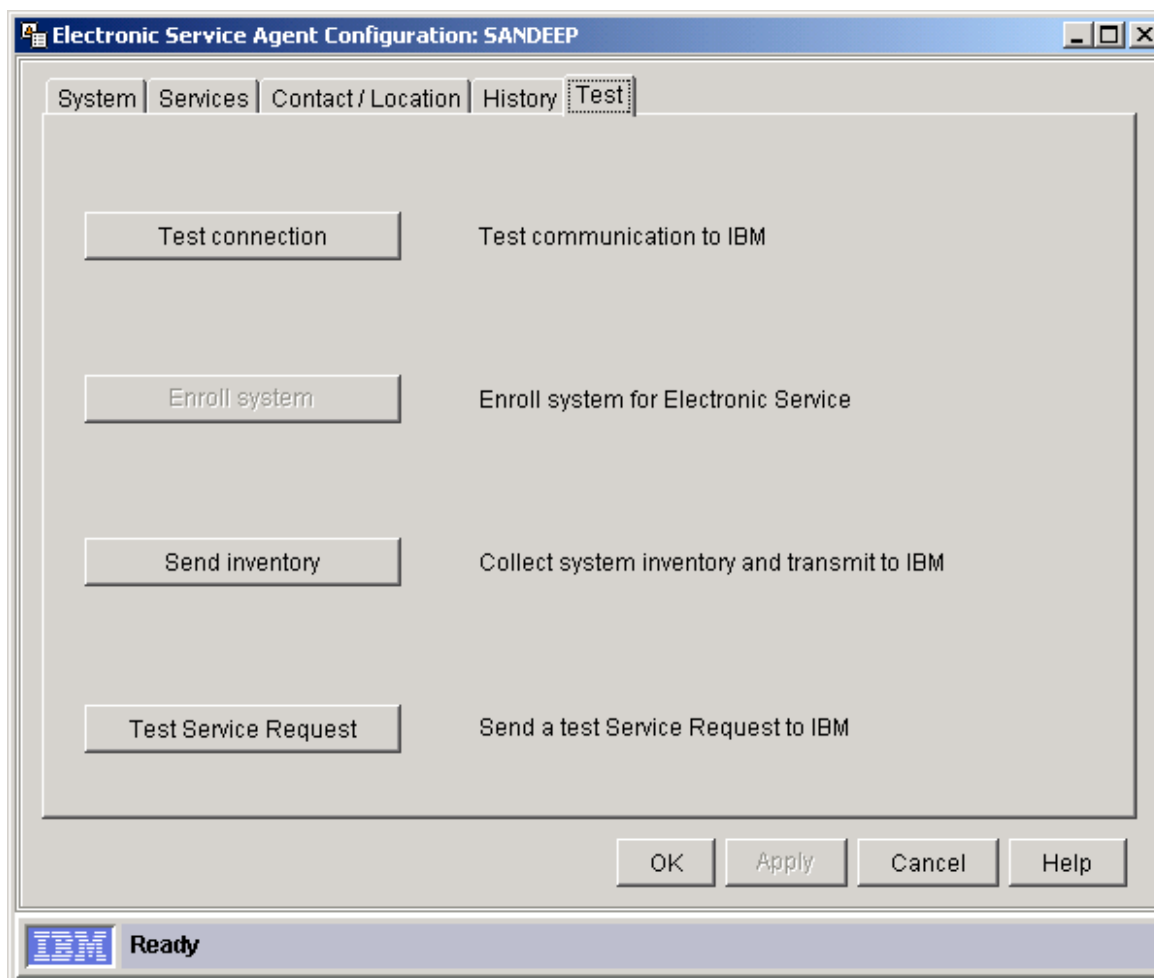
1. Click the **History** tab. You see the Targeted History Page.



2. Use this page to view Electronic Service events. These events can be generic or system-specific.
 - The details that are displayed for each event include:
 - Date the event was detected by Electronic Service Agent
 - Time the event was detected by Electronic Service Agent
 - The system for which the event recorded is applicable
 - The event type and associated event text
 - When an event is selected from the event table, its associated details are displayed in the Event Details field.
 - Refer to Chapter 9, “About Electronic Service Agent Events” for more information about Electronic Service Agent’s event handling capabilities.

Targeted Test Page

1. If you are in single-targeted mode, and you have been requested to perform a test, click the **Test** tab. You see the Targeted Test Page.



2. Use the Test page to:
 - Initiate a test of your connection to IBM
 - Enroll a system for Electronic Service
 - Send an immediate test Service Request to IBM and confirm that Electronic Service Agent is successfully exchanging data
 - Initiate an immediate inventory collection and transmission to IBM.
You should perform these test actions only at the request of an IBM service engineer or representative.
3. Use the options as follows:
 - **Test connection:** Displays the Connection Test window and initiates a test of your connection to IBM.
 - **Enroll System:** Displays the Enroll System Test window and initiates an enrollment transaction. This button is disabled if your system is already enrolled for Electronic Service. Your managed system may have been automatically enrolled when it was enabled for Electronic Service for the first time.
 - **Test Service Request:**
 - This button is disabled if your system has not been enrolled for Electronic Service.

- Button-click displays the Service Request Test window and initiates an immediate test Service Request to IBM. If all communications are successful, IBM returns a Service Request Number, Branch Number, and Country Code. These are displayed in the History page of the Targeted Notebook.
- **Send Inventory:** Displays the Send Inventory Test window and initiates an immediate inventory collection and transmission to IBM. This button is disabled if your targeted managed system is not enrolled for Electronic Service.

Chapter 9. Electronic Service Agent Events

Electronic Service Agent both detects and generates events. The events that Electronic Service Agent detects are known as base events.

Electronic Service Agent is pre-configured to detect specific hardware failure base events that are generated by managed systems that are enabled and enrolled for Electronic Service. These base events are listed in the tables below.

UMS Events
CIM.Director Agent Events.Fan
CIM.Director Agent Events.Temperature
CIM.Director Agent Events.Power Supply
CIM.Director Agent Events.Voltage Abnormal
CIM.Director Agent Events.SMART Drive
CIM.Director Agent Events.Processor PFA
CIM.Director Agent Events.Memory PFA

RAID Events
IBMPSG_ServRAID Controller.State.Failed
IBMPSG_ServRAID Controller.Logical Drive.State.Critical
IBMPSG_ServRAID Controller.Logical Drive.rebuild.Failed
IBMPSG_ServRAID Controller.Synchronize.Failed
IBMPSG_ServRAID Controller.Physical Drive.State.failed
IBMPSG_ServRAID Controller.Physical Drive.PFA Error.Yes
IBMPSG_ServRAID Controller.Enclosure.State.Failed
IBMPSG_ServRAID Controller.Enclosure.Fan.Failed
IBMPSG_ServRAID Controller.Enclosure.Power Supply.Failed
IBMPSG_ServRAID Controller.Enclosure.Temperature.Failed

Service Processor Events
Netfinity System.Critical.Temperature
Netfinity System.Critical.Voltage
Netfinity System.Critical.Voltage regulator module failure
Netfinity System.Critical.Power
Netfinity System.Critical.HDD
Netfinity System.Critical.MFF
Netfinity System.PFA
Netfinity System.Non-critical.SFF

The base events (listed above) that Electronic Service Agent processes may change in the future therefore this list is current only at the time of release of the Electronic Service Agent version 3.1 product.

These rules apply:

- On detection of the base events, Electronic Service Agent assigns a level of severity to them and then sends a Service Request to IBM.
 - The defined levels of severity that Electronic Service Agent can assign to an event (in ascending order of severity) are: Unknown, harmless, warning, minor, critical and fatal. The majority of the base events that Electronic Service Agent is configured to detect and for which it subsequently sends a Service Request to IBM are assigned with severities in the minor and critical levels.
 - The levels of severity that Electronic Service Agent assigns to events assists in the event filtration process. Electronic Service Agent has a number of integrated filters. These filters ensure that:
 - Rogue Service Requests are not sent to IBM because of isolated events
 - Repeated Service Requests are not sent to IBM for the same fault occurring on a particular managed system
 - The overall rate of Service Requests sent to IBM is controlled. Electronic Service Agent ensures that if a Service Request is sent to IBM for a particular event type, then no other event of equal or lower severity will cause Electronic Service Agent to send a Service Request to IBM for a specified period of time, usually 30 minutes.
- You can enhance the number of base events that Electronic Service Agent processes by installing IBM's Enhanced Availability Services for xSeries Extended Service Levels. For more information about this refer to Chapter 10, "Enhanced Availability Services for xSeries." The events that Electronic Service Agent generates relate to the tasks that it performs. For example:
 - Sending a Service Request to IBM
 - Transmitting system inventory updates to IBM
 - Enrolling a managed system for Electronic Service
 - Detecting eligible managed systems
 - Performing tests including testing your modem connection to IBM
- All network events (including the base events that Electronic Service Agent is configured to detect) are listed in IBM Director's Event Log.
- Events generated by Electronic Service Agent alone are displayed in the History page of the [Targeted Electronic Service Agent Configuration Notebook](#).

Event Action Plan configuration

The Event Management feature of IBM Director enables you to identify, categorize, and automatically initiate actions in response to network events. For more information about setting Event Filters and Event Action Plans, refer to your IBM Director online help.

Electronic Service Agent adds new event types to the event type tree in IBM Director's Event Filter Builder interface. You can use these Electronic Service events to build Event Action Plans so that someone within your company is contacted by pager, email or telephone when Electronic Service Agent is unable to complete its information gathering operations and is unable to communicate with IBM.

Chapter 10. Enhanced Availability Services for xSeries.

Introducing IBM Operational Support Services - enhanced availability

Your business relies on a high-performance IT infrastructure. To keep your end-user environment running efficiently, you need to be aware of network problems and take action before they occur. IBM's Electronic Service Agent provides you with this level of awareness and with services to assist you in maintaining higher availability and performance.

IBM's Operational Support Services - enhanced availability for systems management, hereafter referred to as "Enhanced Availability" is a service designed to implement the Electronic Service Agent in your xSeries environment.

Enhanced Availability provides IBM services specialists to enable the Electronic Service Agent and its remote monitoring capabilities in your server environment. The result of this service is remote real-time monitoring of your server environment, notification to you and the IBM Remote Support Center if a problem occurs, and activation of the necessary level of support you require to keep your network up and running.

Enhanced Availability will:

- * Install, configure and enable the electronic service agent on your managed systems
- * Assist you in preventing and planning for systems outages by monitoring systems events
- * Automatically generate problem tickets for systems events and notify you and IBM's call management center
- * Send critical and non-critical hardware server system events and Predictive Failure Analysis to IBM and you simultaneously
- * Monitor over 3000 system events (OEM and IBM), and notify you and IBM through a secure network transaction

Enhanced Availability also includes a group of scalable services that provide automated solutions for systems, applications and performance management:

- * **Applications management** - Application Management eliminates the need for you to have an internal resource to support application recovery services and enables the end user to self-heal application failures as they occur with or without help-desk assistance or intervention, whichever your environment demands. With this service, the end-user can increase his/her productivity time and the help desk can reduce its application management workload, thereby helping to reduce the Total Cost of Ownership.
- * **Performance management** - By monitoring your customers' network environment for capacity and performance issues, performance management can identify where performance problems exist and identify possible downtime situations, by providing reports that assist customers in understanding change, inventory, performance, and capacity management issues. In addition, asset, inventory tracking, and software distribution help to manage the customer IT life cycle.

Note: Enhanced Availability may only be available in selected countries. Equipment utilizing the Electronic Service Agent must be covered under an IBM warranty or maintenance agreement. For more information, call your local IBM representative.

Chapter 11. Troubleshooting

Error message - Test failed

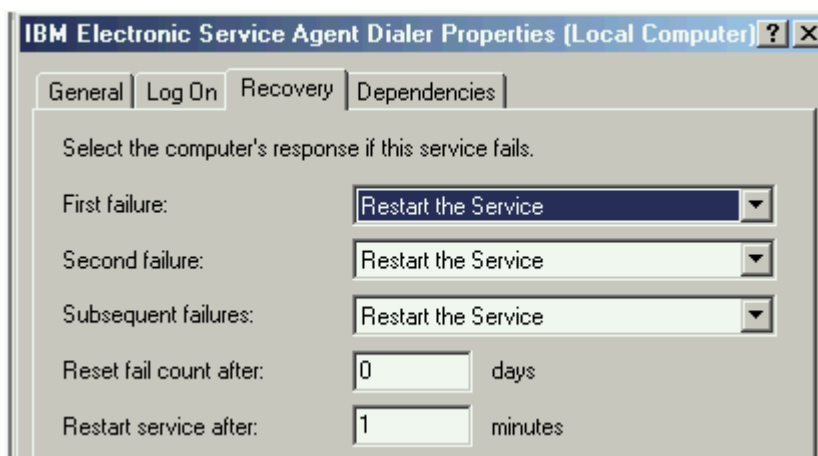
If you have not configured your modems for RAS, then the modems will be displayed and will be selectable from the **Modem** fields of the **Telephone number** screen of the Electronic Service Agent Configuration Wizard and **Communication** page of the untargeted Electronic Service Agent Configuration Notebook; however, they will **not** be functional.

Error message - Dialer service cannot be started

On some systems during reboot Windows could display an error message stating that the Dialer service cannot be started.

To resolve the problem:

1. Go to **Start Menu\Settings\Control Panel\Administrative Tools\Services**.
2. From the list of services, select **IBM Electronic Service Agent Dialer**.
3. Right click and select **Properties**.
4. Select **Recovery** tab and set the following settings, as shown in the screen image below.
 - First failure: select **Restart the Service**
 - Second failure: select **Restart the Service**
 - Subsequent failures: select **Restart the Service**
 - Reset fail count after: **0** days
 - Restart service after: **1** minutes



5. Click **OK**.

Appendix A. Notices and Trademarks

Notices

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Appendix B: Glossary

AGN

AT&T Global Network.

Configuration

Adaptation of files to a specific customer site for execution.

Configuration file

A file that contains information supplied by the customer, for example, customer contact information. It is created or changed during the install and configuration process; may also be changed during an Electronic Service Agent upgrade or via commands from other subsystems or from the SDR.

Configurator

The program that performs the process of configuring to the requirements of the customer site.

Data Collector

The subsystem responsible for collecting system and information and sending it to the appropriate destination as messages.

ECI

Electronic Customer Interface.

Encryption

A method of encoding messages to provide message security. Local encryption encodes messages moving among distributed subsystems in a networked environment. External encryption encodes messages before transfer between the Gateway and the SDR.

Entitlement

Relates to the level of support provided to a customer. The level of support is determined by the contractual arrangement between IBM Global Services and the customer.

Error information

Information describing the conditions on the managed system that are beyond the specified tolerances of normal system behavior.

Event

An event is a means of identifying a change of state of a process or device on the network. For example, an event identifies when a critical resource threshold such as virtual memory utilization is met.

FRU

Field Replaceable Unit.

Gateway

The subsystem that establishes secure communication with the SDR and transfers messages between the Data Collector and the SDR.

IBM Director

A systems management product providing support for IBM xSeries servers.

ICR

IBM Common Registration.

Installation

The placement of binary, non-customized control files, and support files in a directory hierarchy on the customer system. Establishment of specific user accounts, groups, etc., and of default permissions and authentication requirements.

Inventory information

Information describing the basic configuration of a managed system. Included are a list of the physical characteristics of the managed system (number of processors, amount of memory and disk, etc.), and a list of installed software.

LAN

Local Area Network.

Log File

Files that record information about normal and abnormal operation. A file that contains entries delimited by a time stamp.

Managed systems

An operating system instance or hardware platform monitored by Electronic Service Agent.

Problem report

A technology-neutral term describing a problem that requires the attention of IBM service personnel. This term can be used in place of the RETAIN-specific term, *problem management report (PMR)*.

Registration

Registration associates authorized local users with a managed system, allowing them access to data about that system on the Electronic Service Agent web site. Registration is initiated by Electronic Service Agent .

Schedule driven

Collectors and detectors that gather information about managed systems at specified times.

Service Data Receiver (SDR)

The facility on the IBM server that receives messages from Electronic Service Agent

SSL

Secure Socket Layer.

WAN

Wide Area Network.

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