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**IBM Electronic Service Agent for Linux on  
xSeries  
Version 3.2 - Director Extension**

**User's Guide**

**Total Pages: 60**

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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 53.

EIGHTH EDITION March 2005

This edition applies to version 3.2 of IBM® Electronic Service Agent™ for Linux® on xSeries® - 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

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### Introduction

This guide provides the installation, configuration, startup, and user instructions for the IBM® Electronic Service Agent™ for Linux® on xSeries® - version 3.2 - 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.

### 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 Console**

The IBM Director 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 Server.

#### **IBM Director Server**

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

#### **Managed systems**

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

#### **IBM Director Agent**

The IBM Director 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:

[www.ibm.com/planetwide/](http://www.ibm.com/planetwide/)

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 servers.

## **Related Information**

Electronic Service Agent for xSeries version 3.2 is designed to be installed as an extension to your IBM Director version 4.20.2 system management application. Electronic Service Agent appears as a task in the **Tasks** pane of your IBM Director Console.

If you require more information about the techniques employed in using the IBM Director Console, refer to your IBM Director version 4.20.2 online 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 product, refer to the following IBM Director web site:

[http://www-1.ibm.com/servers/eserver/xseries/systems\\_management/xseries\\_sm.html](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>

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## Chapter 1. Introducing Electronic Service Agent

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### 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 management application. This agent monitors your xSeries 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 Server. Additionally, it can be installed on a Director Remote Console. 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
- Scheduled system inventory and diagnostic inventory reporting to an IBM database
- Problem-definable threshold levels for error reporting

### What's new in Electronic Service Agent for Linux® on xSeries® version 3.2

Version 3.2 of Electronic Service Agent includes the following enhancements and new features:

- Support for IBM Director version 4.20.2. **Please note that version 4.20 will not work. The version must be 4.20.2**
- Support for Linux ® . Support includes:
  - SUSE Linux Enterprise Server 8 for x86 (Service Pack 3 required)
  - Red Hat Enterprise Linux ES, version 3.0
  - Red Hat Enterprise Linux AS, version 3.0 for Intel x86

### Managed Systems Eligible for Electronic Service

Please refer to the Readme file for the list of managed systems that are eligible.

### 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 39).
- 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

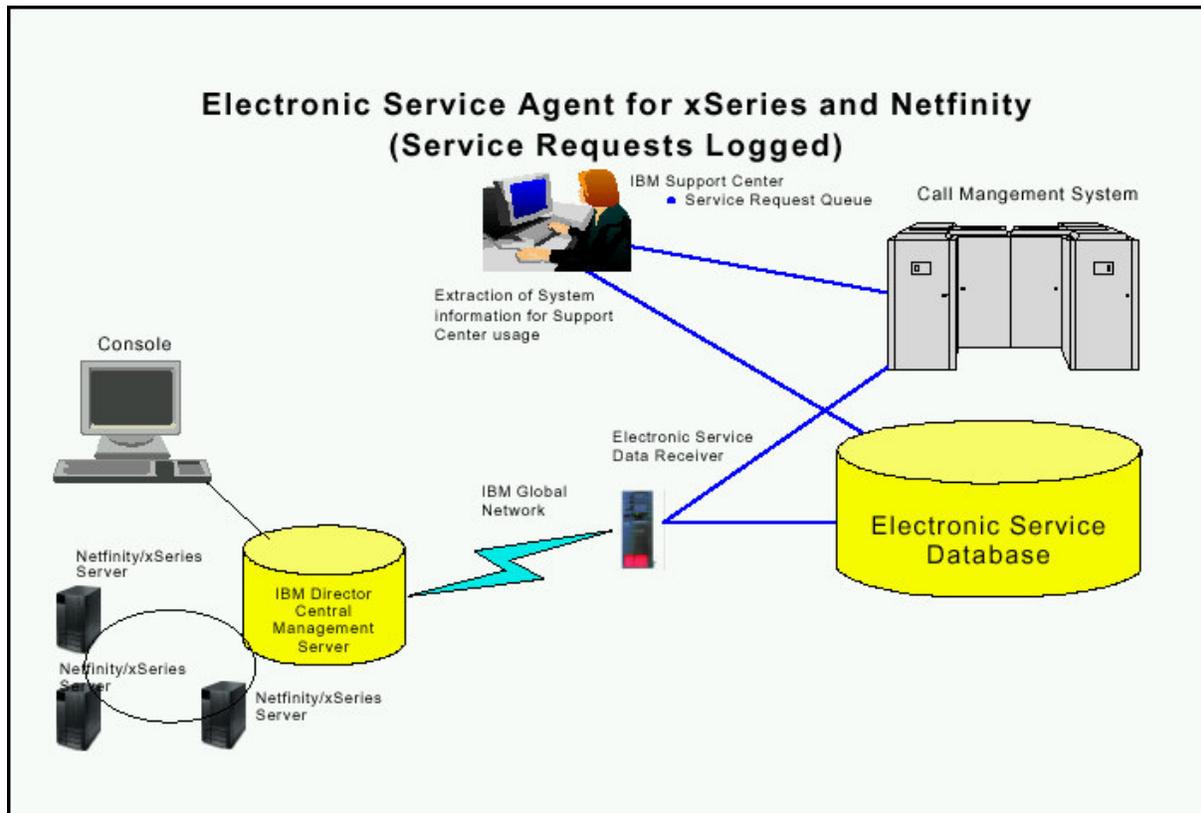
When Electronic Service Agent is properly installed and configured, each of your managed systems must be enabled and enrolled for Electronic Service. If you have an Enhanced Management Services for xSeries Extended Service Levels package installed on your management server, your managed systems should 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 Server and transmitted at weekly intervals to IBM using an Internet connection from your IBM Director 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.

### **Service Time**

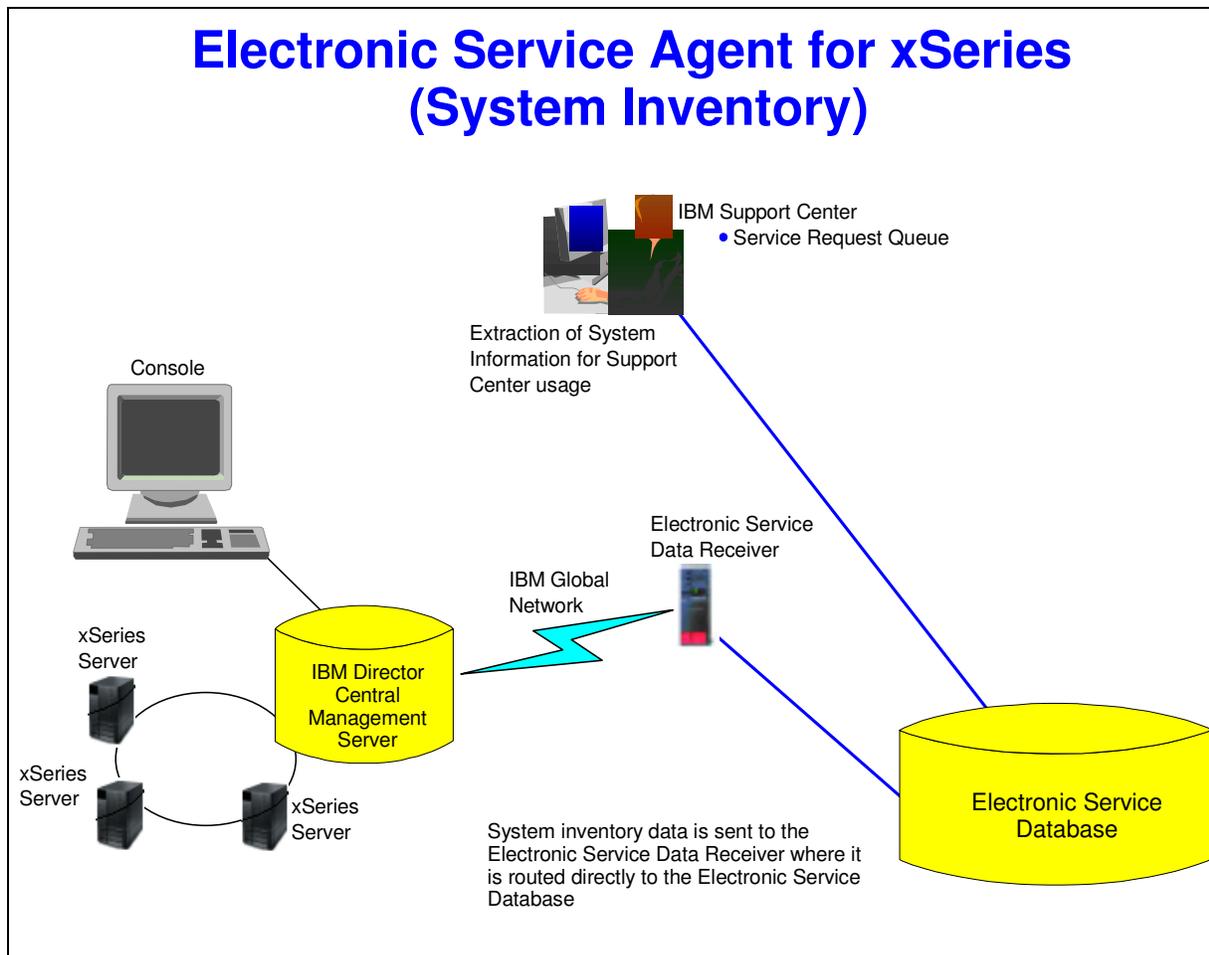
IBM accepts and logs calls in the form of Service Requests generated by Electronic Service Agent in respect of a detected system fault at any time, but deals with the calls during the normal service hours of 9:00 a.m. to 5:00 p.m. If you are calling about a Service Request, please have the Service Request 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 completed using IBM Director. Inventory collections should be initiated by a systems administrator at the initial configuration stage of Electronic Service Agent. For details about performing system inventories, refer to the "Inventory Collection Operation" entry in your IBM Director online help. When inventory collection is complete, Electronic Service Agent checks for a recent inventory update for each system, as shown in the following diagram.



### 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 14).
- Properly install Electronic Service Agent (refer to Chapter 3, "Obtaining and installing Electronic Service Agent" on page 16).
- Properly configure Electronic Service Agent (refer to Chapter 6, "Configuring Electronic Service Agent," on page 21).
- Enable each managed system for Electronic Service either individually or as part of a group (refer to Chapter 7, "Enabling and Enrolling Systems for Electronic Service," on page 30).
- 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, "Using the Targeted and Untargeted Notebooks" on page 31). 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.

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## Chapter 2. Preparing Your Network

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

1. Ensure that your network's management server, Director 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 4.20.2. Refer to the user documentation for detailed system requirements and installation directions.
2. Install IBM Director version 4.20.2. **Version 3.2 of Electronic Service Agent is only compatible with this version of IBM Director.**
3. Check to see that your systems are supported. Electronic Service Agent supports the following systems:
  - **IBM Director Server**
    - SUSE Linux Enterprise Server 8 for x86 (Service Pack 3 required)
    - Red Hat Enterprise Linux ES, version 3.0
    - Red Hat Enterprise Linux AS, version 3.0 for Intel x86
  - **IBM Director Agent**
    - Please see the Director 4.20.2 Documentation for supported operating systems for Director Agent 4.20.2.
  - **IBM Director Console**
    - SUSE Linux Enterprise Server 8 for x86 (Service Pack 3 required)
    - Red Hat Enterprise Linux ES, version 3.0
    - Red Hat Enterprise Linux AS, version 3.0 for Intel x86
4. Record information requested in the table below. You will use this information when configuring the Electronic Service Agent program. See the series of panels in Chapter 6, "Configuring Electronic Service Agent," page 21, for a better idea of the information you will have to supply.

### Configuration Information

Setting	Your details
IBM Director Server <u>Country</u> location.	
<u>Company</u> details: <b>Name, Telephone Number, Telephone Extension, email, Enterprise or ECI ID (optional).</b>	
<u>Contact</u> details: <b>Name, Telephone Number, Telephone Extension, email.</b>	
<u>Location</u> of your managed systems within your company premises: <b>Building, Floor, Office, Address, City, Post code, State/Province.</b>	

Fill in the table as follows:

- Country: the country where your management server is located

**Note:** During the configuration process the 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.

- 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 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.

5. Before installing and running the Electronic Service Agent for xSeries program, read the README document that is accessible from this URL:

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

6. Continue to Chapter 3, "Obtaining and Installing Electronic Service Agent."

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## Chapter 3. Obtaining and Installing Electronic Service Agent

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### 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

These instructions assume you are using an X11 window manager to perform the actual installation. The setup program is an X application

To install Electronic Service Agent on your IBM Director Server:

1. Log in as the user root. Do not 'su' to become the user root; the product will not install properly.
2. 'cd' to the directory where you stored the installation program.
3. Execute the following command:

```
./5639-n89-de32.bin
```

4. At the Electronic Service Agent Setup panel, 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. Click **Finish** to complete the installation.

### Possible Installation Problems

- Once in awhile during installation of Electronic Service Agent, the install program will “hang” on a panel after the files have been copied to your system. As part of the installation process, an uninstall program is created, and this step takes longer than the steps that download files to your system. Give the installer an adequate amount of time to complete its actions.

If you are sure the installation program is in a “hang” state, you can go to the window that you launched the product in, and type Ctrl+C. Or close the terminal window. The installation is complete.

- If you get the following errors:

```
Can't connect to X11 window server using ':0.0' as the value of the
DISPLAY variable.
```

OR

```
Xlib: connection to ":0.0" refused by server
Xlib: No protocol specified
```

the installer is unable to run in graphical mode. Try running the installer with `-console` or `-silent` flag. It is likely that you used 'su' to become the user 'root'. You must log in as the user root. Do not run the installer with the `-console` or `-silent` flags; your product will not install properly.

## Uninstalling Electronic Service Agent for Linux® on xSeries® version 3.2

To permanently remove Electronic Service Agent from your server:

1. Log in as the user root. Do not 'su' to become the user root; the product will not uninstall properly.
2. Execute the following command:

```
/opt/IBM/director/proddata/esa/_uninstall/uninstaller.bin
```

3. At the Electronic Service Agent Setup panel, click **Next** to continue with the program setup.
4. Click **Finish** to complete the uninstall.

## Reinstalling Electronic Service Agent

If you properly install and fully configure Electronic Service Agent version 3.2 and then decide to uninstall this version, your global configuration details will remain stored on your management server. When you reinstall Electronic Service Agent, your previous global configuration settings will be utilized by this installation. You will not be required to configure any settings before using the agent and will therefore not be presented with the Configuration Wizard panels. You can, however, change the configuration settings after reinstallation using the Electronic Service Agent Configuration Notebook.

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

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

**Note:** Electronic Service Agent version 3.2 must be installed on the management server version 4.20.2 **first**. Then upgrade Electronic Service Agent version 3.2 on **all** Remote Consoles managed by the management server. Any down-level version of Electronic Service Agent on any active Remote Console will generate a down-level version error on the management server.

To use a remote IBM Director 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 4.20.2 user documentation.
2. Follow the instructions detailed in Chapter 2, “Preparing your network.”
3. Install the IBM Director Console version 4.20.2 component on the server that you want to use as a Remote IBM Director Console. Insert your IBM Director CD-ROM into the server then select **Console** on the Select Components panel.
4. Install Electronic Service Agent version 3.2 on the Remote Console system:  
Note: These instructions assume you are using an X11 window manager to perform the actual installation. The setup program is an X application.
  - 1) Log in as the user root. Do not ‘su’ to become the user root; the product will not install properly.
  - 2) ‘cd’ to the directory where you stored the installation program.
  - 3) Execute the following command:  
  

```
./5639-n89-de32.bin
```
  - 4) At the Electronic Service Agent Setup panel, 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) Click **Finish** to complete the installation.

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## Chapter 5. Managing Contact and Location Information

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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 management server and managed systems reside in the same country/region
- Scenario 2: Your management server and managed systems reside in two different countries/regions
- Scenario 3: Your 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 management server) reside in more than one country/region (scenarios 2 and 3 above), you should select the country/region where your management server resides.

By default, the country/region that you select for your 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.
- 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 Server or managed systems locations incorrectly, IBM's service delivery may be delayed.

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## Chapter 6. Configuring Electronic Service Agent

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### 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 an easy-to-use Configuration Wizard. It is displayed when you launch the Electronic Service task in these situations:

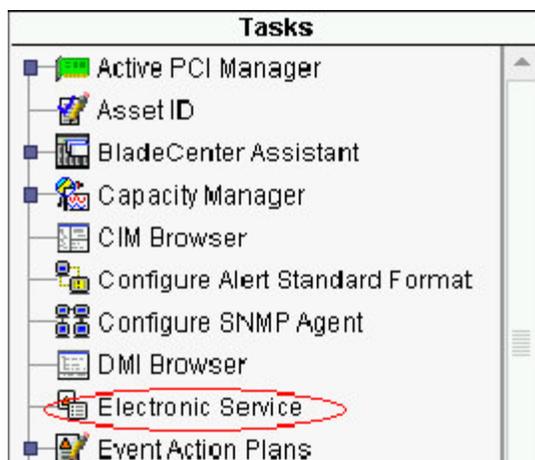
- For the first time after installing Electronic Service Agent version 3.2.
- After you have exited from the configuration process of version 3.2 without having completed it.

### The Electronic Service Agent Configuration Wizard

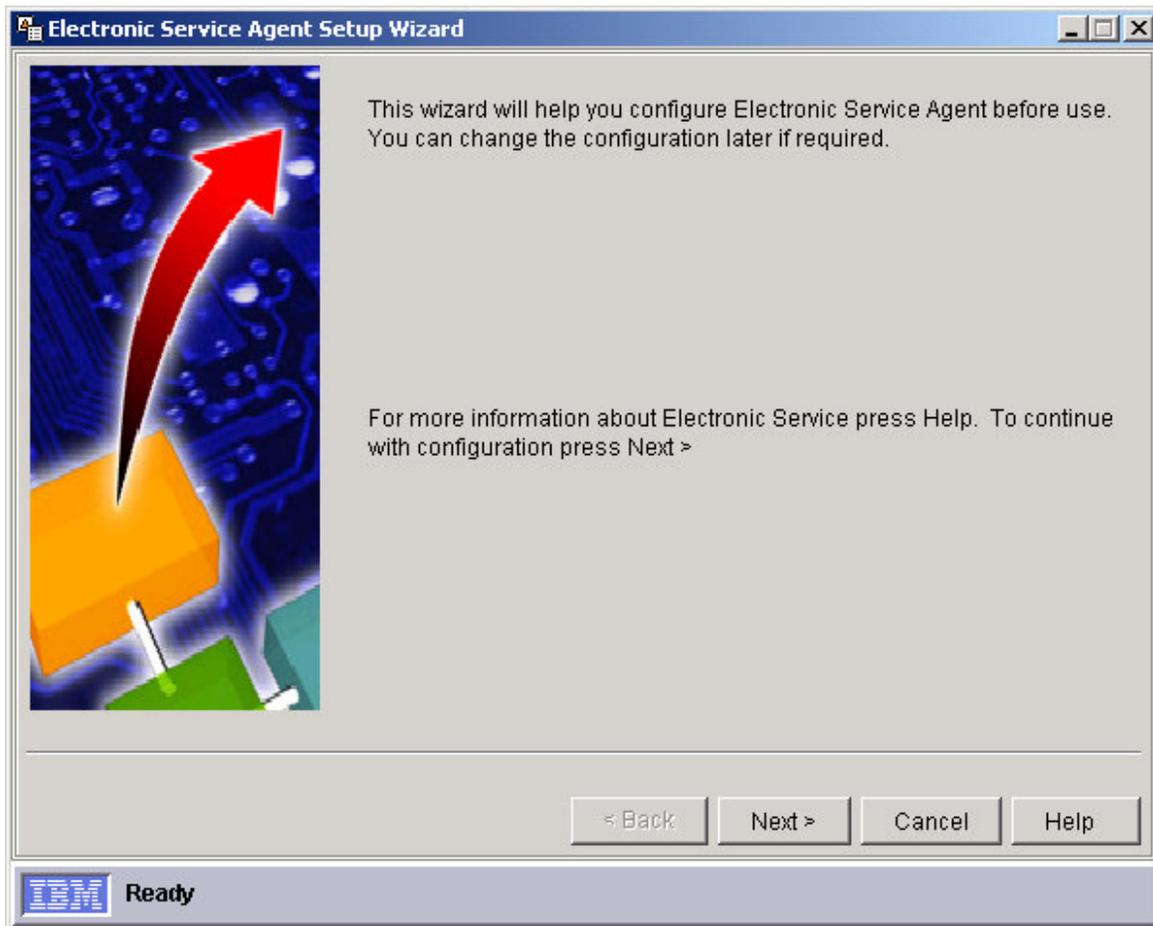
The Configuration Wizard leads you step by step through the configuration process. You use the information that you recorded during the configuration process, as described in Chapter 2, "Preparing your network," step 4, "Record information."

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

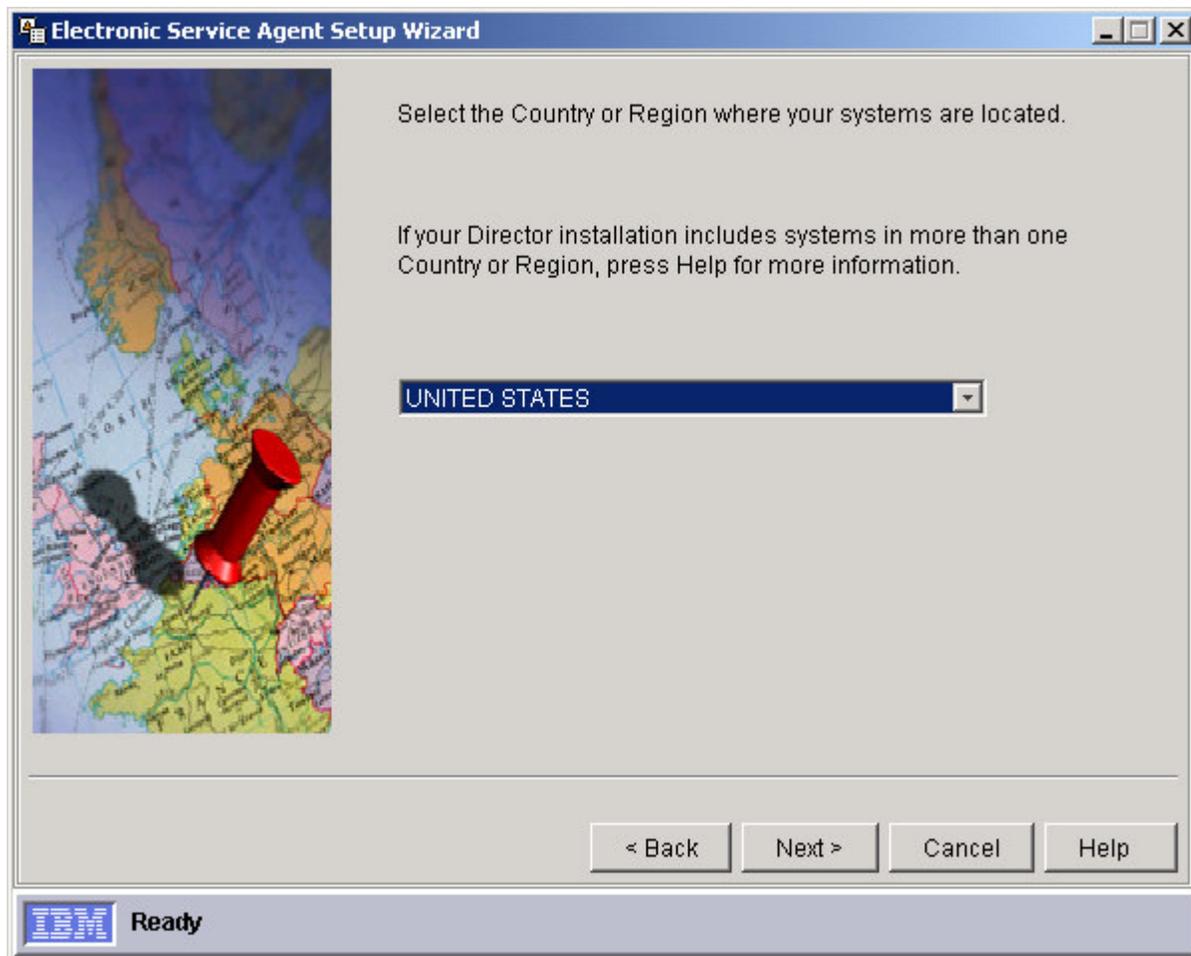
1. Start IBM Director. You see the IBM Director Console window with Electronic service in the Tasks pane.



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



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



4. The Country/Region panel allows you to select the country/region in which your management server resides.
  - Note: During the configuration process the 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 Server location is configured incorrectly, IBM's service delivery may be delayed.

5. Click **Next**. You see the Internet Connection Configuration panel.

Electronic Service Agent Setup Wizard

Enter the proxy details you need to make an Internet connection to <https://www.ibm.com>.

If you do not know the details, contact your network administrator.

You may press the Test connection button to check your set up.

Use Proxy

Proxy Address

Port

Use Authentication

User ID

Password

Confirm Password

Test Connection

< Back   Next >   Cancel   Help

IBM Ready

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.
- **Use Authentication:** Enables the authentication controls.
- **User ID:** enter the user ID, up to 20 characters, specified by your network administrator.
- **Password:** enter the password, up to 20 characters, specified by your network administrator.
- **Confirm password:** enter the password again.
- **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 panel.

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, usual maximum 30 characters; country dependent. In Canada or the United States, maximum 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 panel. 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 panel.

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 Contact Configuration panel 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 panel. 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 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 CConfiguration panel.

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

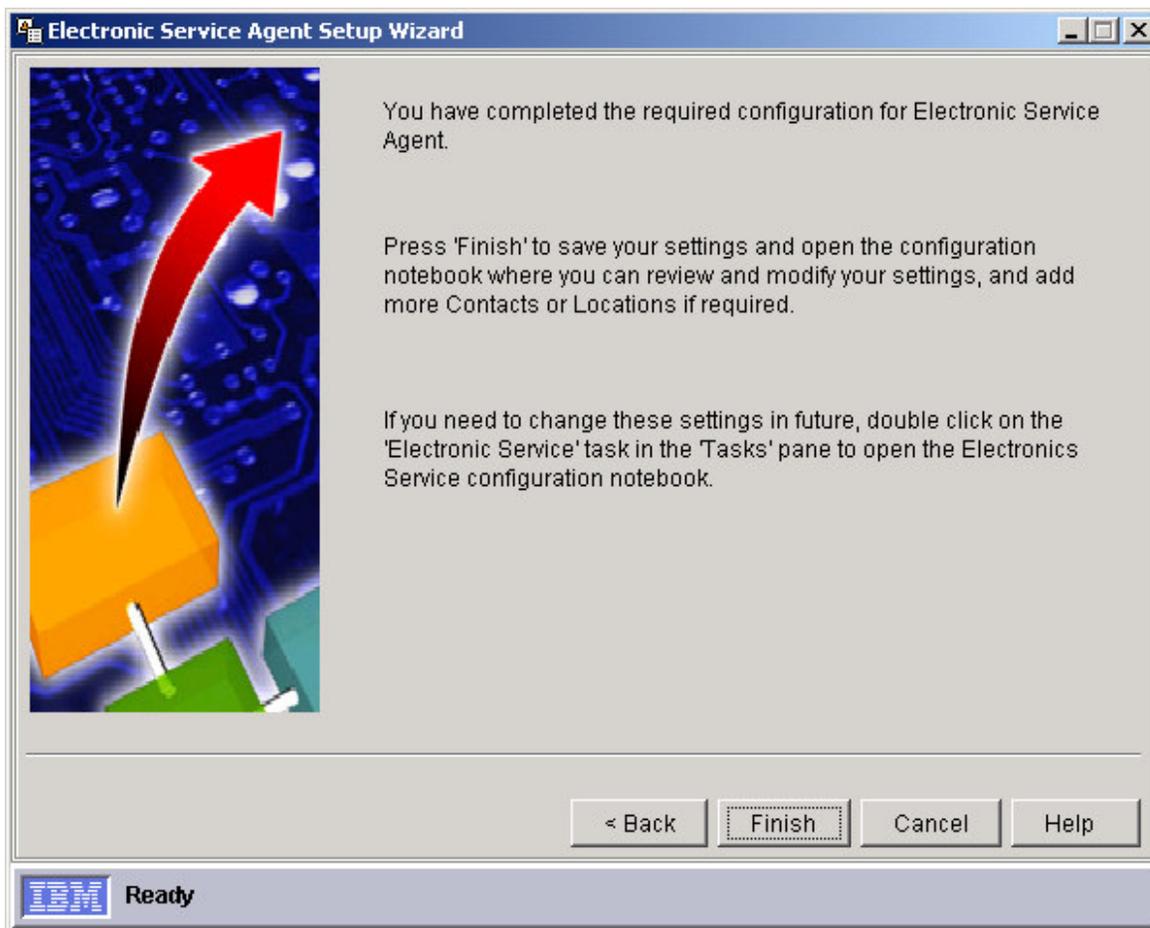
**IBM** Ready

**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** above.

- **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 postal code appropriate for your managed systems. The postal code 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 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 Finish Configuration panel.



- This panel is displayed when you have properly configured settings for all of the Electronic Service Agent Configuration Wizard panels.
- 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 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.

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## Chapter 7. Enabling and Enrolling Systems for Electronic Service

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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.

### 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** for changes to be applied, and then 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.

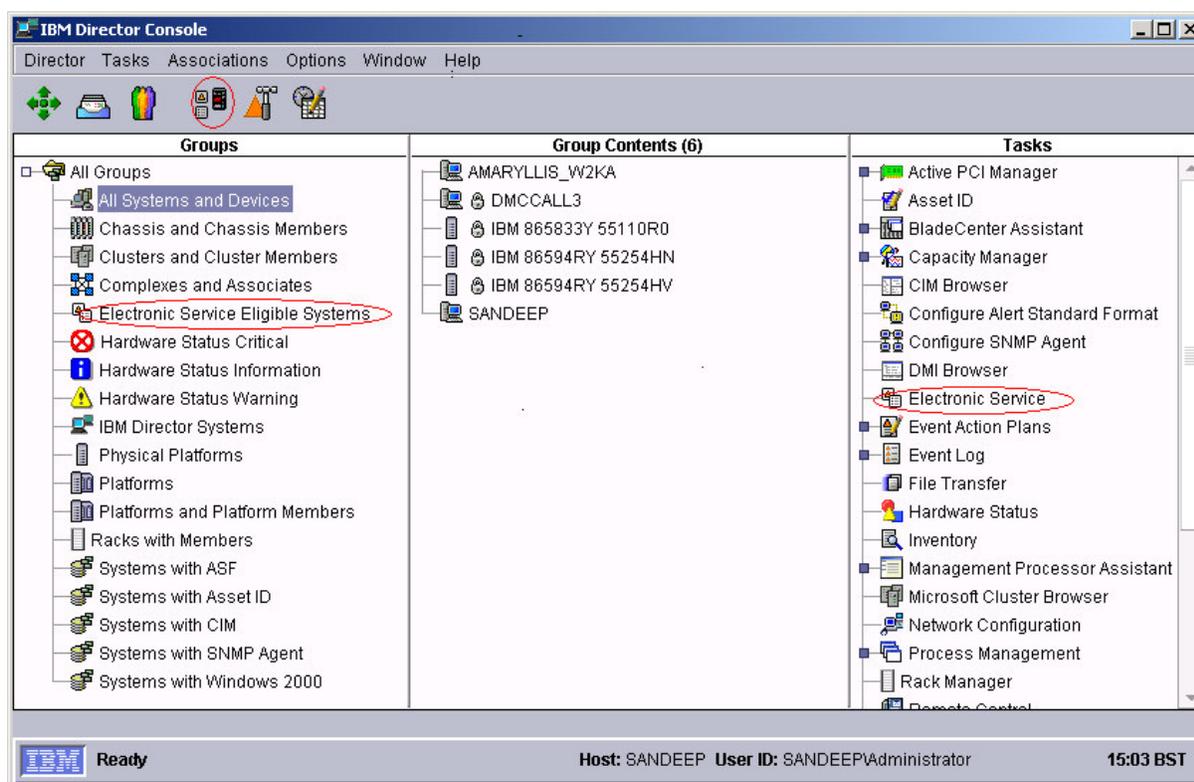
To manually enroll a managed system for Electronic Service:

1. Open the single targeted Electronic Service Agent Configuration Notebook by launching the Electronic Service Task targeted at a **single** managed system. See “Single targeted mode” on page 40.
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 **Apply** for changes to be applied, and then click **OK** to close the System page

## Chapter 8. Using the Untargeted and Targeted Notebooks

### The IBM Director Console

Electronic Service Agent is installed as an IBM Director Extension and is visible on the IBM Director 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, 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 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 40.

**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. **Note:** this and the succeeding panels show an “Updates” tab, but the Update function has been removed from this version of the application.

The screenshot shows a window titled "Electronic Service Agent Configuration" with a tabbed interface. The "Company" tab is selected. The fields are as follows:

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

Buttons: OK, Apply, Cancel, Help

IBM Ready

2. Make necessary changes and click **Apply**. Field entry requirements are the same as those for the Company Configuration panel described on page 25. **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 are tabs for 'Company', 'Contacts', 'Locations', 'Communication', 'Scheduler', 'Inventory', 'Updates', and 'Advanced'. The 'Contacts' tab is active, showing 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. An 'IBM Ready' logo is visible in the bottom left corner of the dialog frame.

2. Make necessary changes and click **Apply**. Field entry requirements are the same as those for the Contacts Configuration panel described on page 26. 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 contains a list of locations on the left, with 'Test Systems (Default)' highlighted. To the right of the list are several input fields for location details: 'Building, Floor, Office' (Test Systems), 'Country or Region' (UNITED STATES), 'Address' (25, Test Lane), 'City' (Mainland), 'Post Code' (T3), and 'State / Province' (Texas). Below the list are buttons for 'New', 'Edit', 'Copy', 'Delete', and 'Set as default'. Below the input fields are 'Save' and 'Cancel' buttons. At the bottom of the dialog are 'OK', 'Apply', 'Cancel', and 'Help' buttons. The IBM Ready logo is visible at the bottom left.

2. Make necessary changes and click **Apply**. Field entry requirements are the same as those for the Contacts Configuration panel described on page 27. 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 'Internet Connection Details' section is visible, containing the following elements:

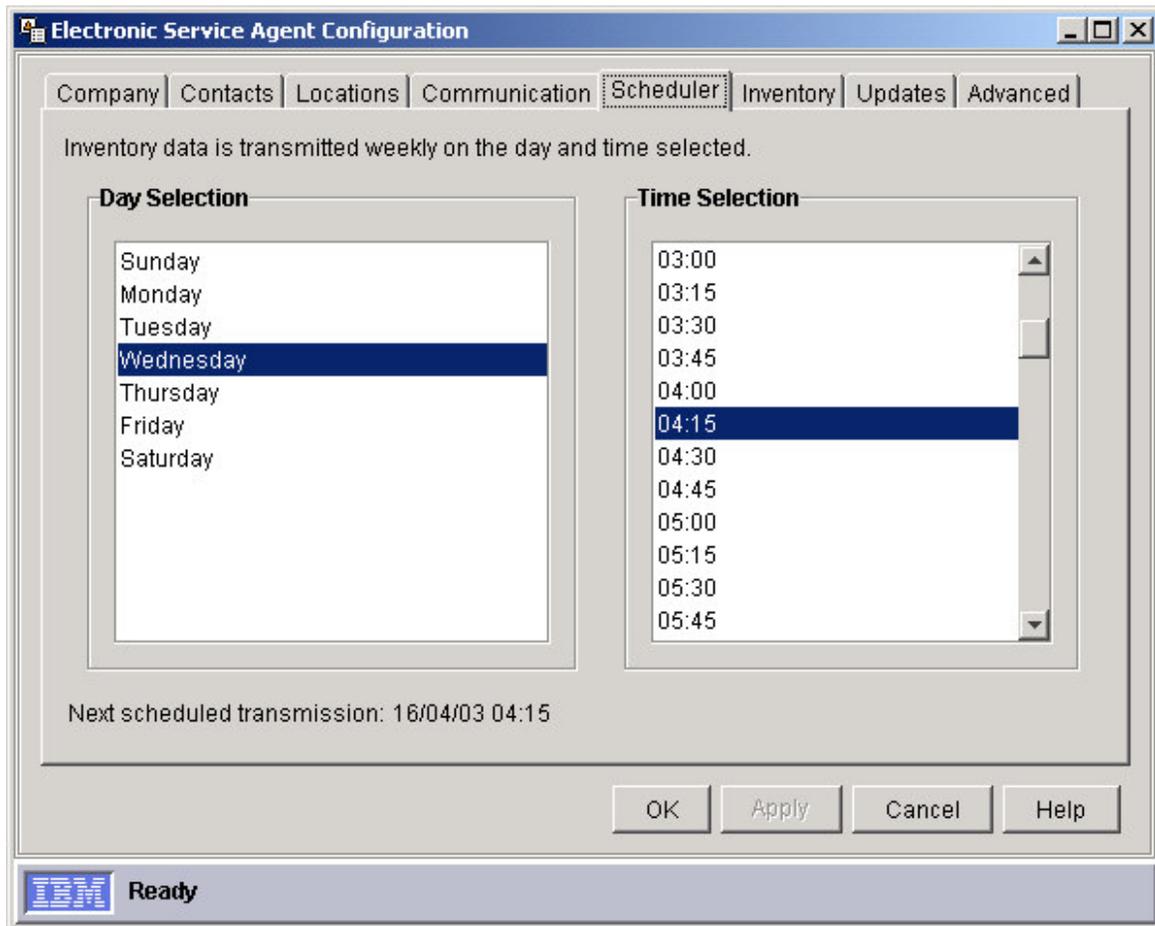
- Use proxy
- Fields for Type, Proxy Address, and Port.
- Use Authentication
- Fields for User ID, Password, and Confirm Password.
- A 'Test Connection' button.

At the bottom of the dialog are buttons for 'OK', 'Apply', 'Cancel', and 'Help'. A status bar at the very bottom displays the IBM logo and the text 'Changes need to be applied'.

2. Make changes and click **Apply**. Field entry requirements are the same as those for the Internet Connection Configuration panel described on page 24.

## Untargeted Scheduler Page

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

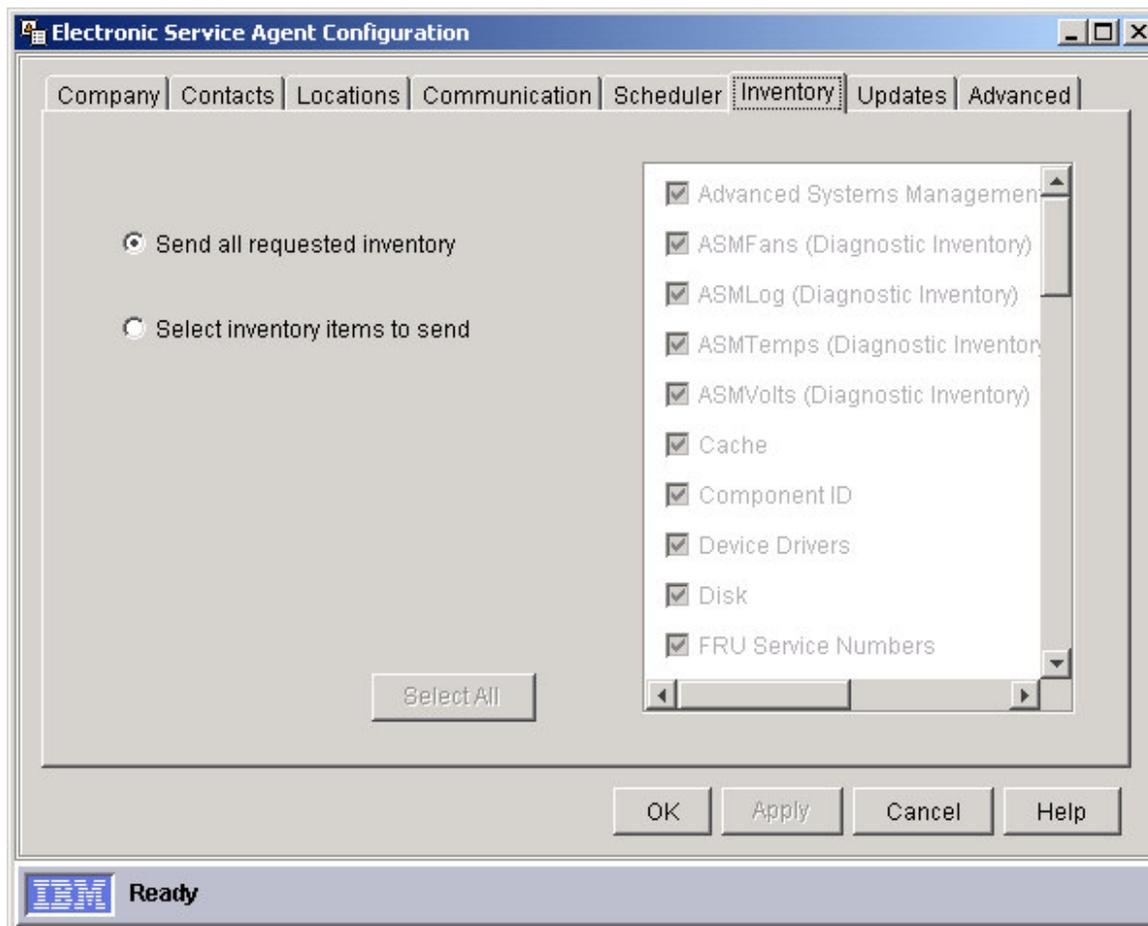


2. Use this page to configure your weekly repeat schedule for inventory collection and transmission to IBM. Select days and times, and then click **Apply**.

**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.

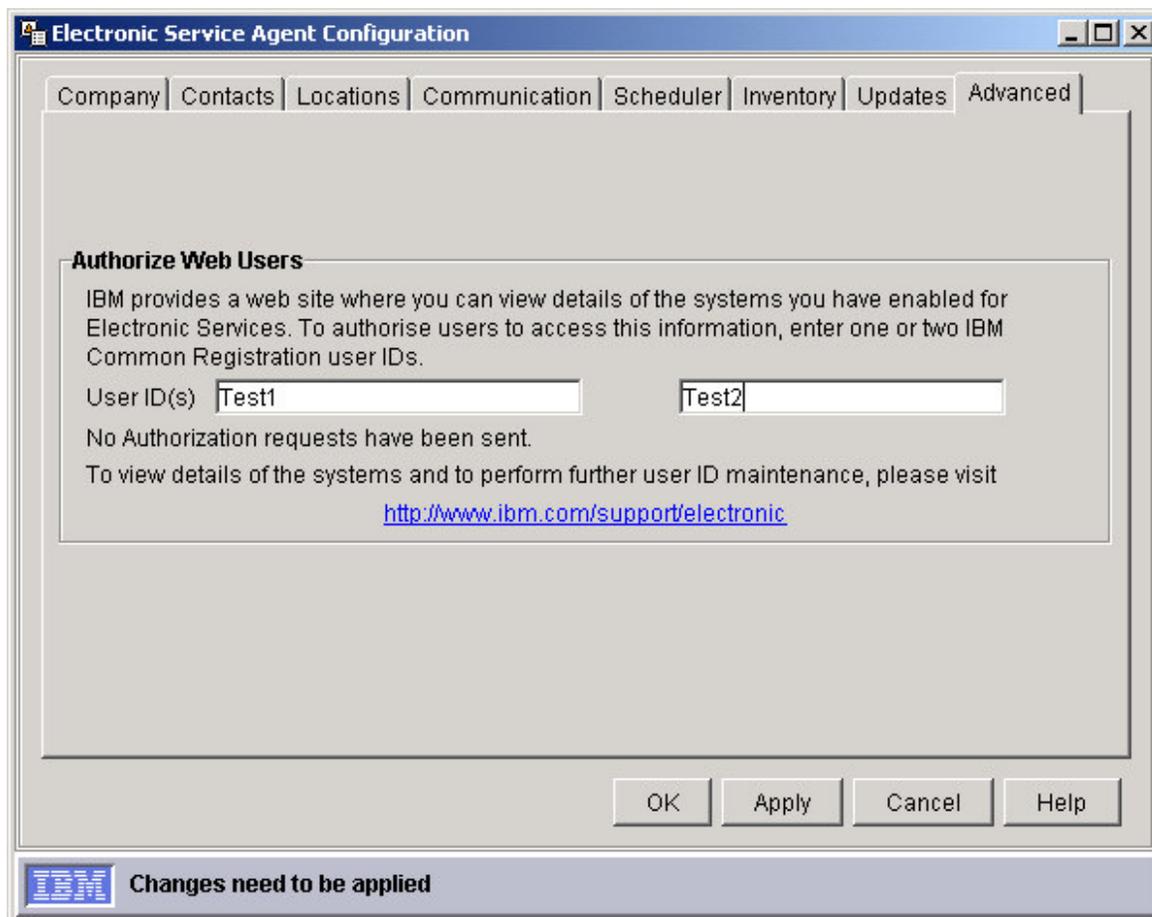
- **Standard inventory:**  
Electronic Service Agent collects standard inventory information from your managed systems in accordance with the inventory items that you have selected from the inventory list and transmits it to IBM on either on a scheduled weekly basis or at the time of sending a Service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

### 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 earlier, 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 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 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 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 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 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 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:

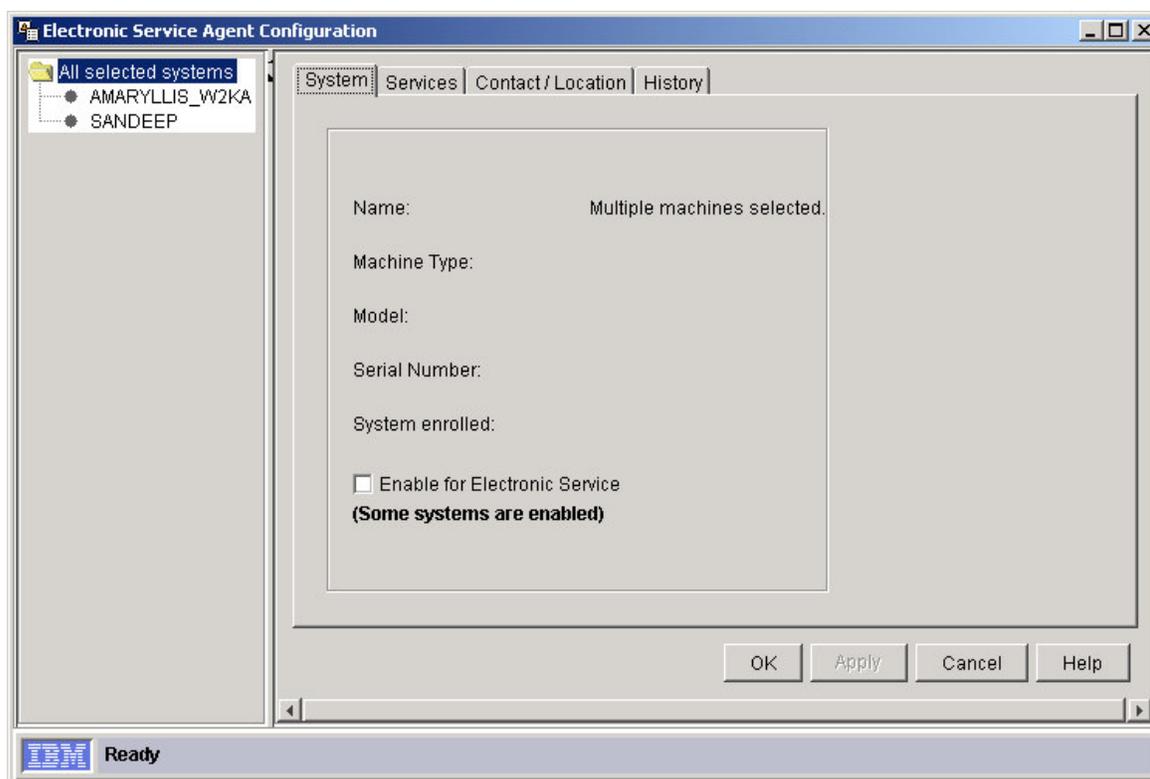
1. Select one of the target modes described above. You see the Targeted Notebook, with tabs for System, Services, Contact/Location, History, and Test (for use in single-targeted mode only).
2. At the bottom of the notebook, and available to each page, are four buttons:



- 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.



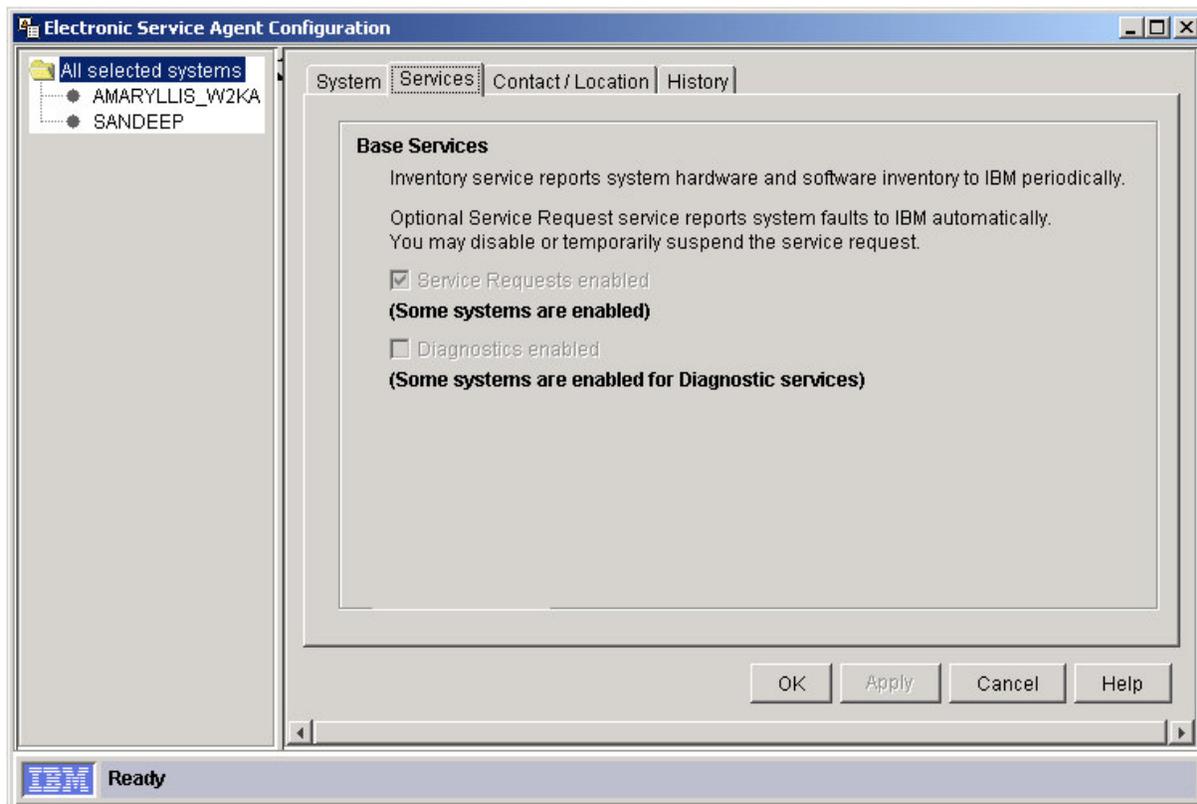
2. Use the Targeted System page to:
  - View a target managed system's details including: Name, Machine Type, Model and Serial Number
  - Verify a target system's enrollment status for Electronic Service
  - Enable a system for Electronic Service

### 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 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 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

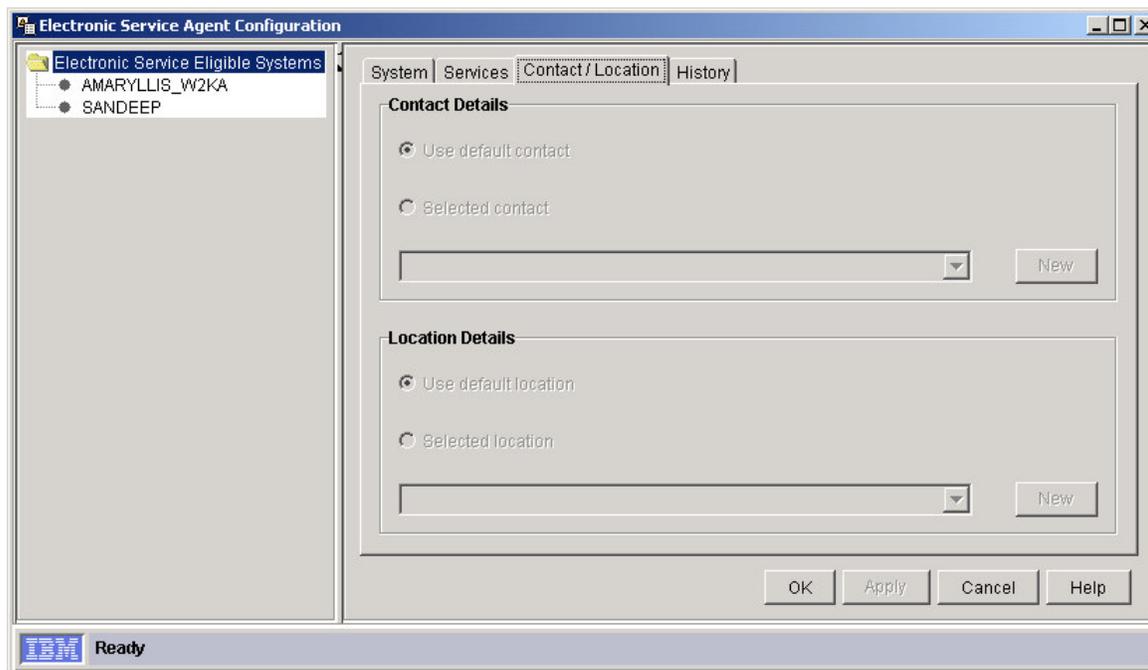
1. Click the **Services** tab. You see the Targeted Services page.



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.
3. Fill in the fields and click **Apply**:
  - **Service Requests enabled:**
    - 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.
  - **Diagnostics enabled:**
    - Select the checkbox to enable one or more managed systems for Electronic Service Agent's diagnostic inventory service. Clear the checkbox to disable one or more managed systems' enablement for Electronic Service Agent's diagnostic inventory 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 the diagnostic inventory service and some that are not.
    - **Note:** Your selected items of diagnostic inventory information are collected from your managed systems and sent to IBM ONLY at the time of sending a Service Request.

## Targeted 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 panel 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 panel.

The screenshot shows a dialog box titled "Electronic Service New Contact". It contains the following fields and values:

Field	Value
Name	Mr. Tester
Country or Region	UNITED STATES
Telephone	1234567890
Extension	234
email	tester@test.com

Buttons: Save, Cancel, Help

Status: IBM Ready

- Use this panel 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 panel 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 panel.

Electronic Service New Location

Building, Floor, Office: Test Systems

Country or Region: UNITED STATES

Address: 25 Test Lane

City: Midlands

Post Code: T3

State / Province: Texas

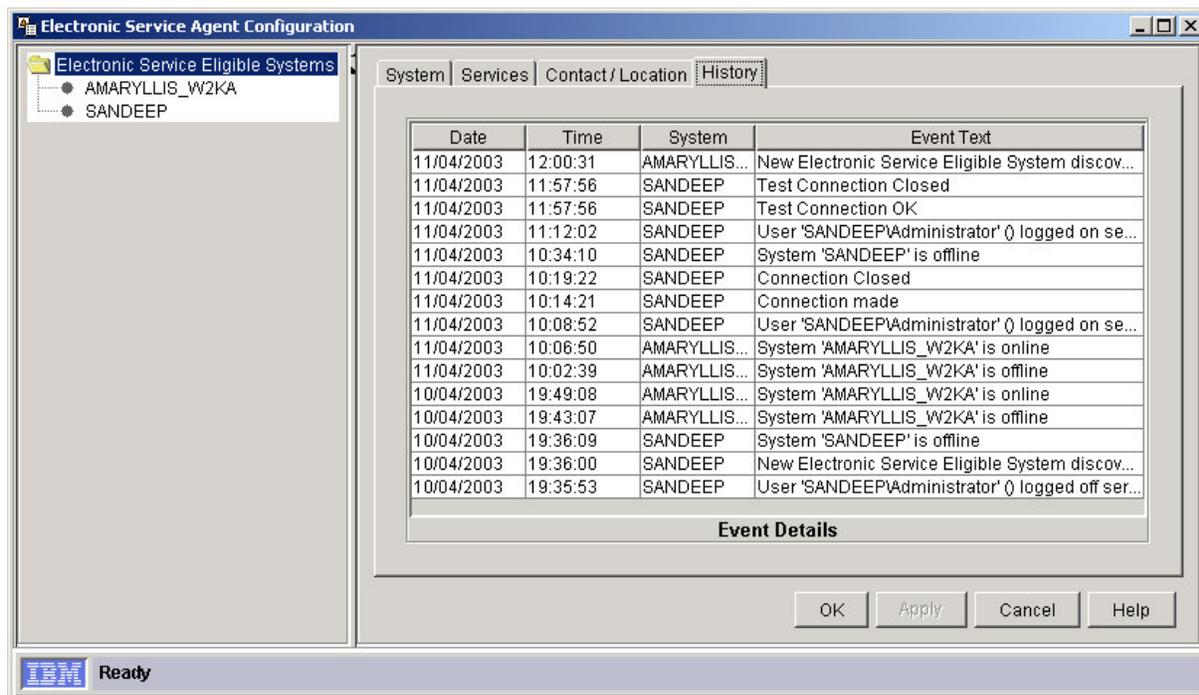
Save Cancel Help

IBM Ready

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

## Targeted History Page

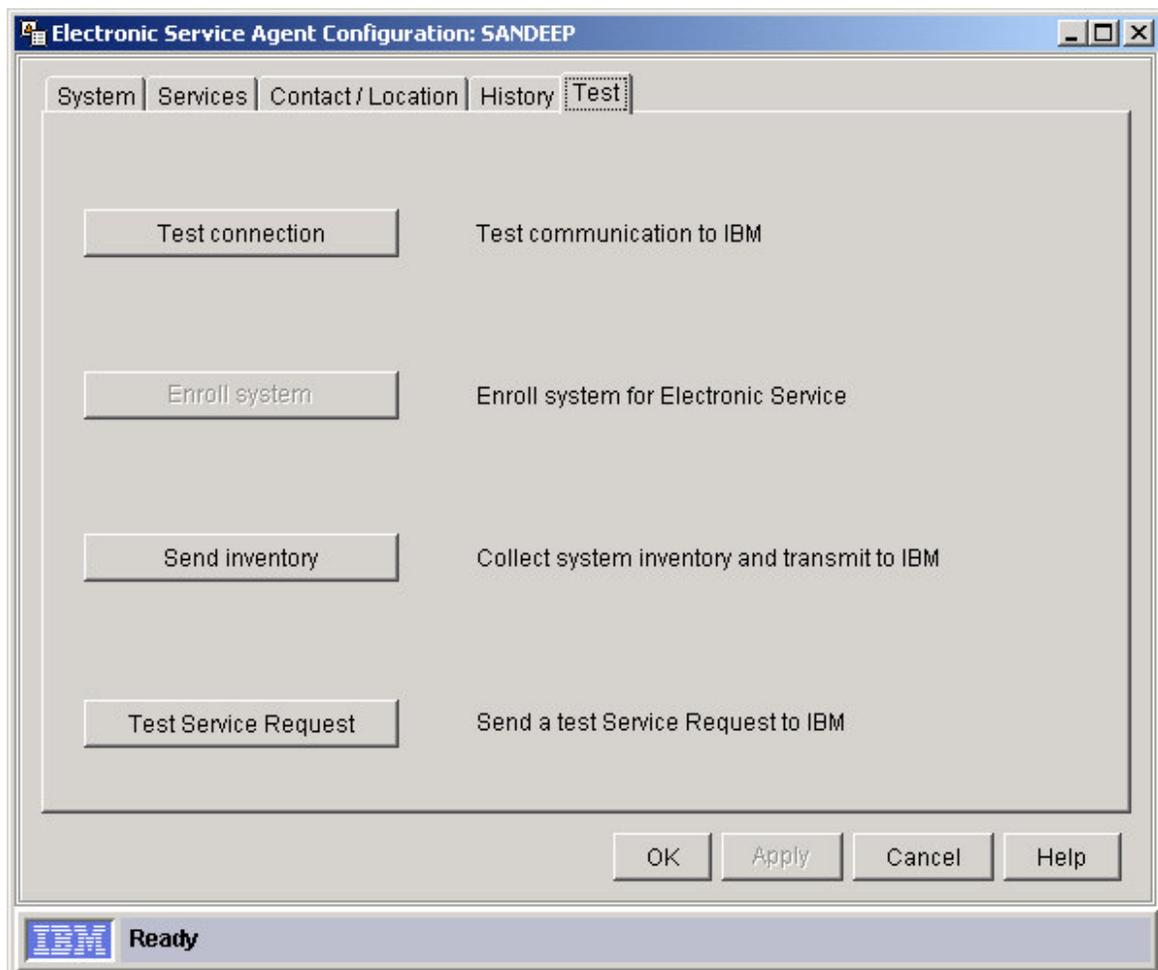
1. Click the **History** tab. You see the Targeted History Page.



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.

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## Chapter 9. Electronic Service Agent Events

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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.

<b>UMS Events</b>
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
<b>RAID Events</b>
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
<b>Service Processor Events</b>
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 3.2 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.
- 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. Getting Help and Technical Assistance

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### Entitlement to Automatic Problem Submission

You are entitled to automatic problem submission from IBM only if your systems are under warranty and/or your organization has a maintenance agreement with IBM Service. This service program is not intended for customers who have a third party maintaining the xSeries servers. IBM's standard warranty response time is the next business day unless you have purchased an upgrade to the service level agreement.

### Contacting Support

If you encounter problems or have technical questions regarding Electronic Service Agent, you should call your nearest IBM support center. You can obtain support center contact details that are appropriate for your country/region from the following web site:

[www.ibm.com/planetwide/](http://www.ibm.com/planetwide/)

If you are a resident in the United States, contact support at 1-800-IBM-SERV (1-800-426-7378) and select hardware support. You should 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.

### Web Sites

#### IBM xSeries Support and Information

<http://www-1.ibm.com/servers/eserver/support/xseries/index.html>

#### IBM Support Center contact information

[www.ibm.com/planetwide/](http://www.ibm.com/planetwide/)

#### Electronic Service Agent installation package

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

#### Director 4 Web Site

#### IBM Director Web Site

[http://www-1.ibm.com/servers/eserver/xseries/systems\\_management/director\\_4.html](http://www-1.ibm.com/servers/eserver/xseries/systems_management/director_4.html)

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## Appendix A. Notices and Trademarks

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## Appendix B. Glossary

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**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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