Electronic Service Agent™ for xSeries® and Netfinity® Version 2.0

User's Guide

Note
Before using this information and the product it supports, read the information in Appendix A**,**
"Notices and trademarks".

Contents

About this user's guide

Introduction

This guide provides the installation, configuration, startup and user instructions for the Electronic Service Agent™ for xSeries® and Netfinity product. The additional functions available with Electronic Service Agent are also described.

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 be familiar with or have a working knowledge of IBM Director version 3.1.

What this guide contains

This guide is organized into the following chapters:

1. Chapter 1, "Introducing Electronic Service Agent for xSeries and Netfinity"
2. Chapter 2, "Preparing your network"
3. Chapter 3, "Obtaining and installing Electronic Service Agent for xSeries and Netfinity"
4. Chapter 4, "Administering Electronic Service Agent using a remote IBM Director Management Console"
5. Chapter 5, "Managing contact and location information"
6. Chapter 6, "Configuring Electronic Service Agent for xSeries and Netfinity"
7. Chapter 7, "Enabling and enrolling one or more systems for Electronic Service"
8. Chapter 8, "Using the Electronic Service Agent for xSeries and Netfinity interface"
9. Chapter 9, "About Electronic Service Agent Events"
10. Chapter 10, "Receiving Electronic Service Agent updates"
11. Chapter 11, "Introducing Electronic Systems Management Services for xSeries Extended Service Levels"
12. Chapter 12, "Troubleshooting"
13. Appendix A, "Notices and trademarks"

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 system (s)
> 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 identifies 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 100Mb 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 100Mb, the event is generated.
>
> Thresholds can be numeric or set as strings.

Throughout this guide Electronic Service Agent for xSeries and Netfinity may also be referred to as Electronic Service Agent and Electronic Systems Management Services for xSeries Extended Service Levels may also be referred to as Extended Service Levels.

Contacting customer support

If you encounter problems or have technical questions regarding the Electronic Service Agent for xSeries and Netfinity product, 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:

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

When calling IBM quote program number 5639-L09.

You should have your machine type ready when calling. Your machine type is identified by a four digit number. You will be asked for this four digit number by IBM support staff.

About your entitlement to 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 and 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 2.0 is designed to be installed as an extension to your IBM Director version 3.1 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 3.1 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 3.1 product, refer to the following IBM Director web site:

> **http://sysman.sl.dfw.ibm.com/NfD/roadrun.htm**

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Chapter 1. Introducing Electronic Service Agent for xSeries and Netfinity

What is Electronic Service Agent?

Electronic Service Agent for xSeries and Netfinity version 2.0 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 3.1 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 for xSeries and Netfinity include:

- Automatic problem reporting: service calls placed to IBM without operator intervention
- Automatic customer notification
- Automated and user-initiated system inventory reporting to an IBM database
- Problem-definable threshold levels for error reporting

Electronic Service Agent also provides generic support for IBM's Extended Service Levels packages. For more information refer to Chapter 11, "Introducing Electronic Systems Management Services for xSeries Extended Service Levels"

What's new in Electronic Service Agent for xSeries and Netfinity version 2.0

Version 2.0 of Electronic Service Agent includes the following enhancements and new features:

- Support for IBM Director version 3.1
- An enhanced user interface
- An enhanced system inventory
- Extended operating system support
- Support for an extended number of managed system (server) models
- Enhanced security features
- A facility for registering for authorization to access your managed systems' inventory information on a secure IBM web site.

Note: This version of Electronic Service Agent no longer supports system performance monitoring and reporting.

Support for IBM Director version 3.1

Electronic Service Agent version 2.0 is compatible only with systems running IBM Director version 3.1.

Enhanced user interface

Enhancements to Electronic Service Agent's user interface include:

- A new set of easy-to-use configuration wizards that lead you through Electronic Service Agent's configuration process (refer to Chapter 8, "Using the Electronic Service Agent for xSeries and Netfinity interface")
- New Electronic Service Agent Configuration Notebooks that allow you to easily differentiate between Electronic Service Agent's global configuration settings and system specific settings when you are performing administrative tasks (refer to Chapter 8, "Using the Electronic Service Agent for xSeries and Netfinity interface")
- A new History screen that displays a log of events generated by Electronic Service Agent (refer to Chapter 8, "Using the Electronic Service Agent for xSeries and Netfinity interface")
- Improved feedback from user actions
- Reduced user interface lock-up time. This allows you to continue using the Electronic Service Agent interface while Electronic Service Agent is performing other tasks. For example, sending inventory or testing your modem connection.

Enhanced system inventory

In keeping with IBM Director version 3.1, Electronic Service Agent's inventory function is enhanced to provide an improved level of information that can be made available to customer service engineers. This will improve IBM's service delivery times.

Extended operating system support

Electronic Service Agent now includes support for additional operating systems. For more information refer to Chapter 2, "Preparing your network".

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 the table 1 below, for further details.

Enhanced security features

IBM's new system enrolment scheme prevents your system information, that is stored in a secure IBM database, from being accessed by unauthorized users or overwritten because of inadvertent or malicious duplication of system serial numbers.

Registering for authorization to access your managed systems' information on a secure IBM web site

It is proposed that IBM's Electronic Service infrastructure will enable you to view information about your managed systems on a secure web site provided that you register for authorization with IBM. The anticipated availability of this web site is the end of March 2002. See below for more information.

What managed systems are eligible for Electronic Service?

This release of Electronic Service Agent supports the xSeries and Netfinity range of managed servers listed in Table 1 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 should be installed on your Central Management Server. Electronic Service Agent can be installed on any Central Management Server supporting IBM Director version 3.1. Refer to your IBM Director version 3.1 documentation for a list of supported Central Management Servers.

Table 1: Electronic Service supported managed systems

Machine type	Brand names	Machine type	Brand names
8478 8479	xSeries 200	8668	xSeries 232
8645 8646	xSeries 220	8669	xSeries 342
8651	Netfinity 7000 Rack Mount	8672	Netfinity 4100 R xSeries 130 xSeries 135 xSeries 300 xSeries 300 DC power
8656	Netfinity 4500R xSeries 340	8674 8654	xSeries 330
8658	Netfinity 5100 xSeries 150 xSeries 230	8680	Netfinity 7000 M10
8659	Netfinity 5000	8681	Netfinity 8500R
8660	Netfinity 5500	8682	Netfinity 6000R xSeries 350
8661	Netfinity 5500 Netfinity 5500 M10	8683	xSeries 380
8662	Netfinity 5500 M20	8685	xSeries 252
8664	Netfinity 5600 xSeries 240	8686	xSeries 352
8665	Netfinity 7600 xSeries 250	8687	xSeries 370
8666	Netfinity 7100		

Supported managed systems are also listed at the following Electronic Service Agent web site:

http://www.ibm.com/pc/qtechinfo/MIGR-4L4QVC.html

About system enrolment for Electronic Service

System enrolment is a security feature. During an enrolment 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 are 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 inventory information on a secure IBM web site

IBM proposes to provide a web site that will allow 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. We anticipate that this web site will be available at the end of March 2002. When this web site is available, you must do the following before you can view the information that it contains about your company owned managed systems:

- Obtain an IBM Registration user ID
- Register each of your managed systems with IBM
- Register for authorization to view this information using the **Advanced** page of the Untargeted Electronic Service Agent Configuration Notebook (refer to Chapter 8, "Using the Electronic Service Agent for xSeries and Netinity interface")

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.

You can obtain an IBM Registration user ID at the following IBM web site:

http://www.ibm.com/registration/selfreg

You can register each of your company owned managed systems and view their details and inventory information at the following IBM web site:

http://www.ibm.com/support/electronic

How Electronic Service Agent for xSeries and Netfinity 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 Electronic Systems Management Services for xSeries Extended Service Levels package installed on your Central Management Server, then 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

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 connection from your IBM Director Central Management Server to a service data receiver inside IBM's firewall. IBM warehouses and collates this transmitted data.

Error reporting and Requests for Service
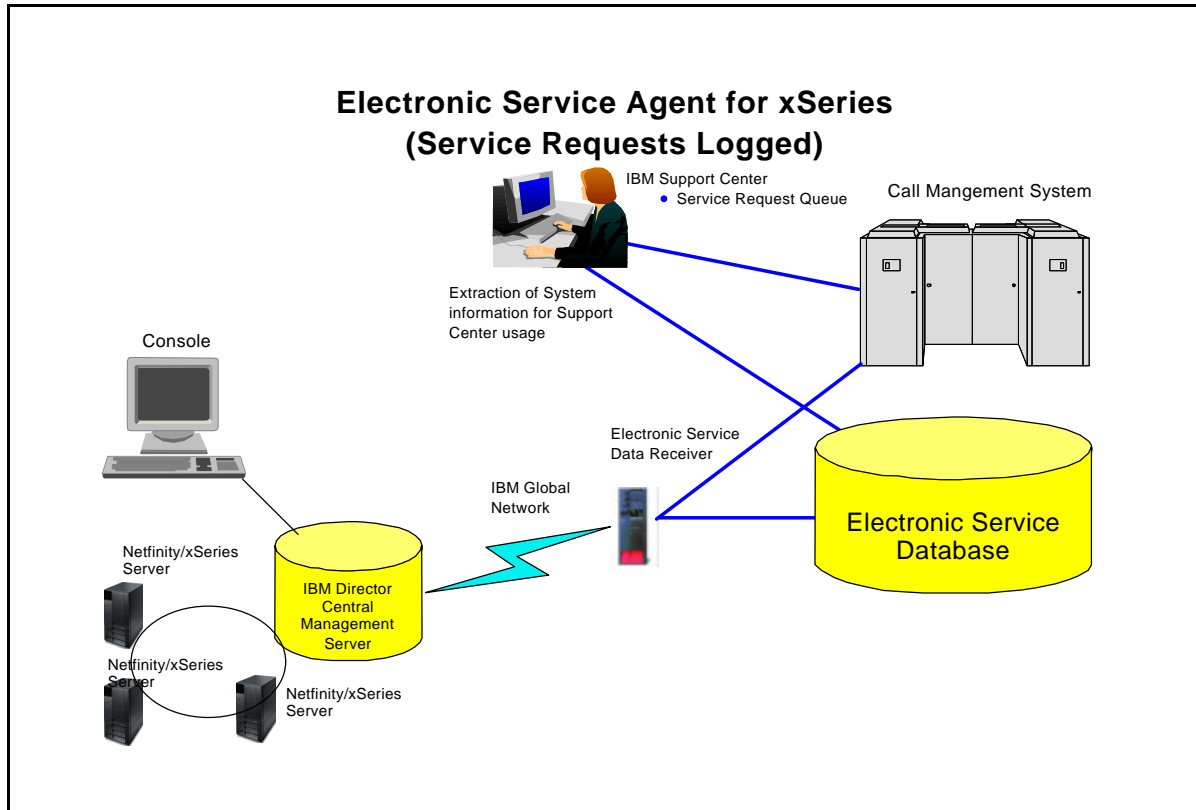
An event is generated when a hardware error exceeds a preset threshold. Electronic Service Agent is pre-configured to capture specific hardware failure events and assign a level of severity to them. The significance of an event is determined by the level of severity that has been assigned to it. These 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.

When Electronic Service Agent captures events it sends a **Service Request** to IBM's service data receiver from where it is forwarded to the call management system that is appropriate for the defective managed system location and service level. Managed system details, including, but not restricted to: 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 diagnostic information are also sent to IBM's service data receiver with each **Service Request**. 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.

If all communications have been successful, IBM's service data receiver initially responds by returning a **Service Request Number**, **Branch Number** and **Country Code**. 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 <u>targeted</u> Electronic Service Agent Configuration Notebook (refer to Chapter 8, "Using the Electronic Service Agent for xSeries and Netfinity interface" for more information). The IBM **Service Request Number** should be used as a referral when calling IBM.

If you have an Electronic Systems Management Services for xSeries Extended Service Levels package installed, then the sets of events that are detected by Electronic Service Agent and for which Electronic Service Agent subsequently sends a **Service Request** to IBM, is dependent on the Extended Service Level for which a specific system is enabled.

Note: IBM's Electronic Systems Management Services for xSeries Extended Service Levels (eSMS) may only be available in selected countries.

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 9am to 5pm.

Inventory Management

**Electronic Service Agent for xSeries
(System Inventory)**
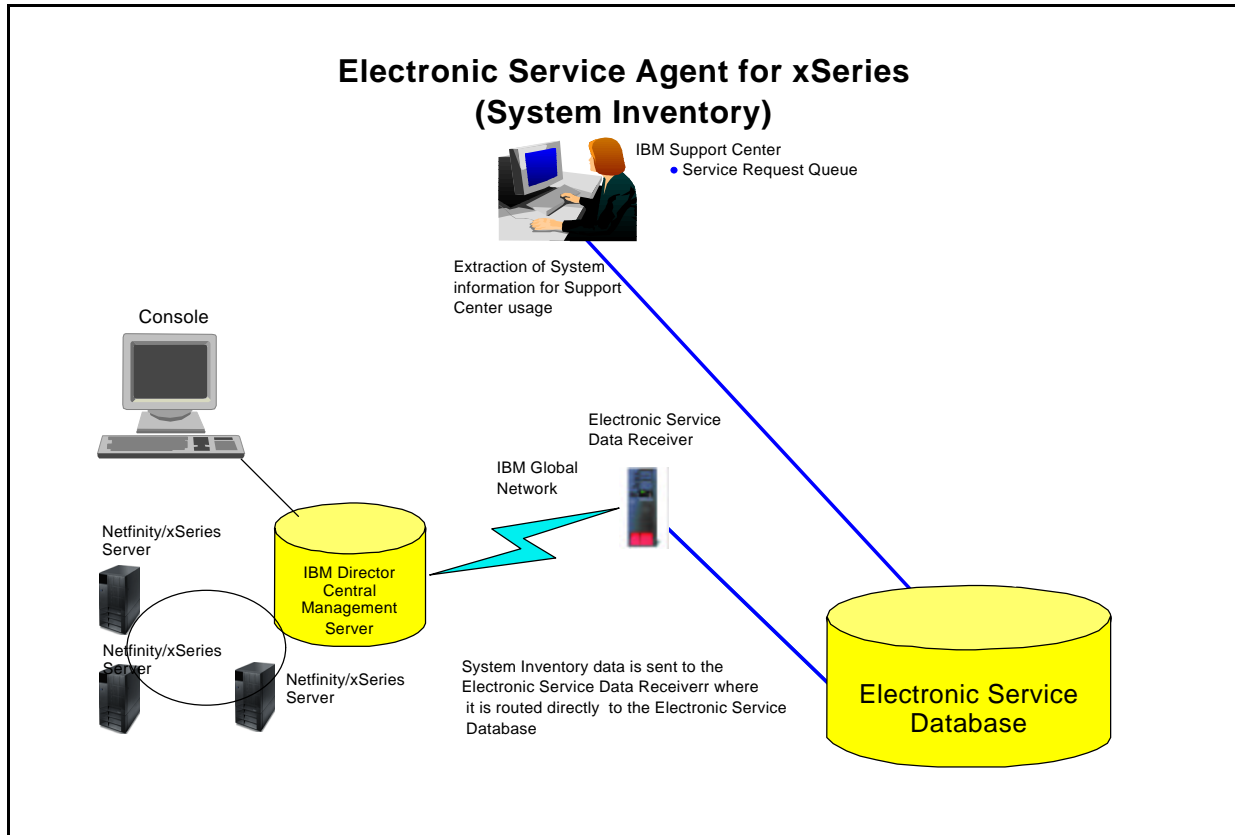
Using Electronic Service Agent's Inventory Management feature, your systems' hardware and software inventory can now be remotely monitored and stored in a secure IBM database.

Prior to running Electronic Service Agent, a complete hardware and software inventory collection must be taken. Inventory collections should be initiated by a systems administrator at the initial configuration stage of Electronic Service Agent. Systems administrators are instructed to perform inventory collections later in Chapter 6, "Configuring Electronic Service Agent for xSeries and Netfinity". Thereafter, Electronic Service Agent checks for a recent inventory update for each system which has been enrolled and enabled for Electronic Service. This check is carried out at weekly intervals on a selected day and time configured in Electronic Service Agent's Scheduler. For further details, refer to Chapter 8, "Using the Electronic Service Agent for xSeries and Netfinity interface" and your IBM Director on-line help.

An inventory refresh is initiated for any system which does not have a recent successful update.

Electronic Service Agent dials into the IBM service data receiver regardless of whether or not there are any inventory changes to report.

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")
- Properly install Electronic Service Agent (refer to Chapter 3, "Obtaining and installing Electronic Service Agent for xSeries and Netfinity")
- Properly install IBM's Electronic Systems Management Services for xSeries Extended Service Levels package (optional, if you want to add enhancements to Electronic Service Agent's system's health monitoring capabilities, refer to Chapter 11, Introducing Electronic Systems Management Services for xSeries Extended Service Levels)
- Properly configure Electronic Service Agent (refer to Chapter 6, "Configuring Electronic Service Agent for xSeries and Netfinity)
- 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")
- Enrol 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 enrolment transaction fails, then you can manually enrol your systems for Electronic Service (refer to Chapter 7, "Enabling and enrolling one or more systems for Electronic Service").

Each item above is explained in more detail in the chapters that follow.

Chapter 2. Preparing your network

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

1. 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 56Kbps.

2. If your Central Management Server is running Windows NT version 4.0 Server or Server Enterprise with Service Pack 4 or higher, then you must manually configure each modem you install on this Central Management Server for RAS (Remote Access Service).

   If your Central Management Server is running Windows 2000 Server or Advanced Server with Service pack 2 then any modem that you install will automatically be configured for RRAS (Routing and Remote Access Service).

3. Electronic Service Agent is an extension to your IBM Director version 3.1 systems management application. IBM Director version 3.1 is a prerequisite for the installation of Electronic Service Agent.

   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 3.1.

   Refer to your IBM Director version 3.1 user documentation for detailed system requirements.

4. Electronic Service Agent supports the following operating systems:

   a. **IBM Director Central Management Server**
      - Windows NT 4.0 Server with Service Pack 4 or higher
      - Windows NT 4.0 Server Enterprise Edition with Service Pack 4 or higher
      - Windows 2000 Server through Service Pack 2
      - Windows 2000 Advanced Server through Service Pack 2

b. **Managed systems**

1) Windows NT
   - Windows NT 4.0 Server with Service Pack 4 or higher
   - Windows NT 4.0 Server Enterprise Edition with Service Pack 4 or higher

2) Windows 2000
   - Windows 2000 Data Center
   - Windows 2000 Server through Service Pack 2
   - Windows 2000 Advanced Server through Service Pack 2

3) Caldera Open Unix
   - Version 8.0

4) Red Hat Linux
   - Version 6.2
   - Version 7.1

5) TurboLinux
   - Server Edition 6.0.5
   - Server Edition 6.5

6) SuSe Linux
   - Version 7.1
   - Version 7.2

7) Caldera Linux
   - Version 2.3.1
   - Version 3.1

8) Novell Netware
   - Version 5.0 Service Pack 1 or higher
   - Version 6.x

9) OS/2
   - Warp Merlin 4.0 with Service Pack 5
   - Warp server for eBusiness

c. **IBM Director Management Console**

   - Windows 98 Second Edition

   - Windows XP Professional

- Windows NT 4.0 Server with Service Pack 4 or higher
- Windows NT 4.0 Workstation with Service Pack 4 or higher
- Windows NT 4.0 Server Enterprise Edition with Service Pack 4 or higher

- Windows 2000 Professional through Service Pack 2
- Windows 2000 Server through Service Pack 2
- Windows 2000 Advanced Server through Service Pack 2

5. Record information for the following bulleted list in the table below. You will use this information when configuring the Electronic Service Agent for xSeries and Netfinity program (Chapter 6, "Configuring Electronic Service Agent for xSeries and Netfinity").

   Note: Accurate location details must be recorded for all bullet points. This is particularly important in respect of the location details of your IBM Director Central Management Server and managed systems. If you record your IBM Director Central Management Server location details incorrectly then IBM's service delivery will be delayed. Similarly, if you record your managed systems' location details incorrectly, then IBM service representatives will not be dispatched to the correct site location after a hardware problem has been reported.

   - 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 on-line help for further details.

   - The modem that you want to use to dial out to IBM
   - Basic company details
   - 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 system(s). The location details allow IBM's service representatives to locate your managed system(s) if they need to be dispatched to your company premises with replacement parts to rectify a system hardware failure.

| Setting	Your details
IBM Director Central Management Server **country** location.	
Modem details.	
Company details: **Name**, **Telephone Number**, **Telephone Extension**, **email**, **Enterprise** or **ECI ID**[1].	
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**.	

[1] 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.

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

 http://www.ibm.com/pc/qtechinfo/MIGR-4L4QVC.html

7. Version 2.0 of Electronic Service Agent is not compatible with versions of IBM Director earlier than version 3.1. To install IBM Director version 3.1, 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 3.1, refer to Chapter 3, "Installing and Configuring Director" of your IBM Director User's Guide.
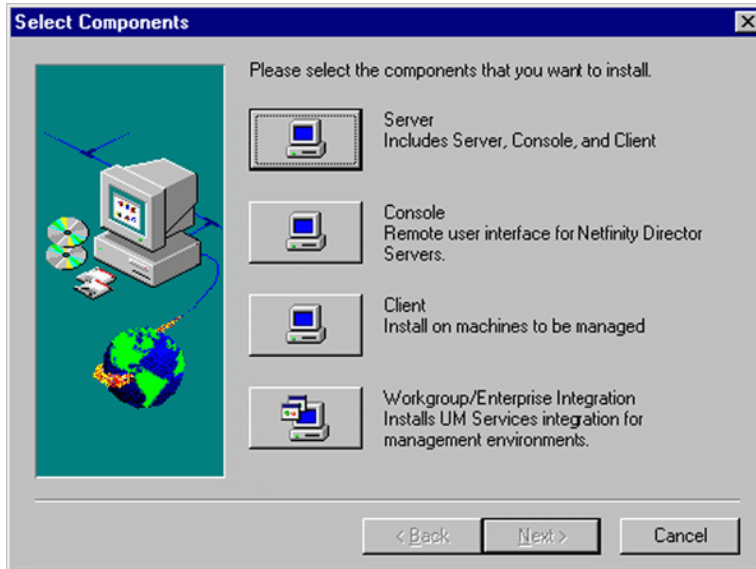
8. Install the IBM Director Management Server component on your Central Management Server. Insert your IBM Director CD-ROM into your Central Management Server then select **Server** on the Select Components screen. When you install the IBM Director Management Server, the IBM Director Management Console and IBM Director Agent is also installed.

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

9. 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.

10. Electronic Service Agent for Netfinity version 1.x is not upgradeable to Electronic Service Agent for xSeries and Netfinity version 2.0. If you have an earlier version of Electronic Service Agent (version 1.x) installed then you should use the uninstalling procedure detailed in Chapter 3, "Obtaining and installing Electronic Service Agent for xSeries and Netfinity", to properly remove all version 1.x files from your IBM Director Central Management Server.

11. You have now completed all of the prerequisites for installing Electronic Service Agent for xSeries and Netfinity version 2.0.

12. If you want to further enhance Electronic Service Agent's health monitoring capabilities by utilizing one of IBM's Electronic Systems Management Services for xSeries Extended Service Levels packages, you should call your local IBM representative.

13. Continue to Chapter 3, "Obtaining and Installing Electronic Service Agent for xSeries and Netfinity".

Chapter 3. Obtaining and installing Electronic Service Agent for xSeries and Netfinity

How to obtain Electronic Service Agent for xSeries and Netfinity

The Electronic Service Agent program is available by download from the following World Wide Web site:

http://www.ibm.com/pc/qtechinfo/MIGR-4L4QVC.html

Installing Electronic Service Agent for xSeries and Netfinity

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, then click **OK**.
3. At the Welcome 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. Clicking **No** displays the Exit Set-up screen. Click **Yes** to cancel the installation process.
5. If you accept the terms and conditions of the Communications Charges Agreement click **Yes** to continue with the setup program. Clicking **No** displays the Exit Set-up screen. Click **Yes** to cancel the installation process.
6. At the Information screen, click **Yes** to view the README file (or click **No**, then click **OK** to view the README later) then click **Next**.
7. At the Set-up Complete screen, click **Yes** to restart your system now or **No** to restart your system later. Click **Finish** to complete the installation.

Uninstalling Electronic Service Agent for xSeries and Netfinity

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

1. From the Windows NT desktop, click **Start**
2. Select **Settings**
3. Select **Control Panel**
4. Select **Add/Remove Programs**
5. Select **Electronic Service Agent for xSeries**
6. Click **Add/Remove**

At the Language Selection screen select the language of your choice from the pull-down list, then click **OK**

7. At the **Question** dialog box select **Yes** to restart your computer now or **No** to restart your computer later, then click **OK**

8. At the Set-up screen click **Finish**

A note about re-installing Electronic Service Agent for xSeries and Netfinity

If you properly install and fully configure **version 2.0** of Electronic Service Agent (the configuration process is detailed in Chapter 6, "Configuring Electronic Service Agent for xSeries and Netfinity") and then decide to uninstall this version, then your configuration details will remain stored on your Central Management Server. When you re-install version 2.0 of Electronic Service Agent, your previous 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 re-installation using the Electronic Service Agent Configuration Notebook (refer to Chapter 8, "Using the Electronic Service Agent for xSeries and Netfinity interface).

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.

To use a remote IBM Director Management Console:

1. Ensure that the system you want to use as a remote IBM Director Management Console constitutes part of the list of supported servers detailed in your IBM Director version 3.1 user documentation.

2. Follow the instructions detailed in Chapter 2, "Preparing your network", if you have not already done so.

3. On the Remote Console system., enable RAS (Remote Access Service) for systems running Windows NT version 4.0, or RASS (Routing and Remote Access for systems running windows 2000. This can be done by selecting a modem driver during the operating system installation without physically attaching a modem.

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

4. Install the IBM Director Management Console component on the server that you want to use as an IBM Director Management Console. Insert your IBM Director CD-ROM into the server then select **Console** on the Select Components screen.

5. Install Electronic Service Agent version 2.0 on the Remote Console system.

6. Reboot the server on which you have installed the IBM Director Remote Console.

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 system(s) hardware problems(s).

Location information
> Defines the location details of your managed systems (including **Building/Floor/Office**, **Address**, **City**, **Postcode**, **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), then 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.

- Contact person country/region:

  - If your managed systems reside in one country/region: Assign the global contact person (s)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 your configure your IBM Director Central Management Server or managed systems location(s) incorrectly then IBM's service delivery may be delayed.

Chapter 6. Configuring Electronic Service Agent for xSeries and Netfinity

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

Electronic Service Agent provides you with a set of Configuration Wizard screens that lead you step by step through the 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 configuration wizard so that you can configure global 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 Electronic Service Agent for xSeries and Netfinity interface".

During the Electronic Service Agent configuration process, click **Next** to display each Electronic Service Agent Configuration Wizard screen. The Electronic Service Agent Configuration Wizard consists of the following screens:

- Electronic Service Agent Configuration-Introduction
- Electronic Service Agent Configuration-Country
- Electronic Service Agent Configuration-Telephone number
- Electronic Service Agent Configuration-Company
- Electronic Service Agent Configuration-Contact
- Electronic Service Agent Configuration-Location
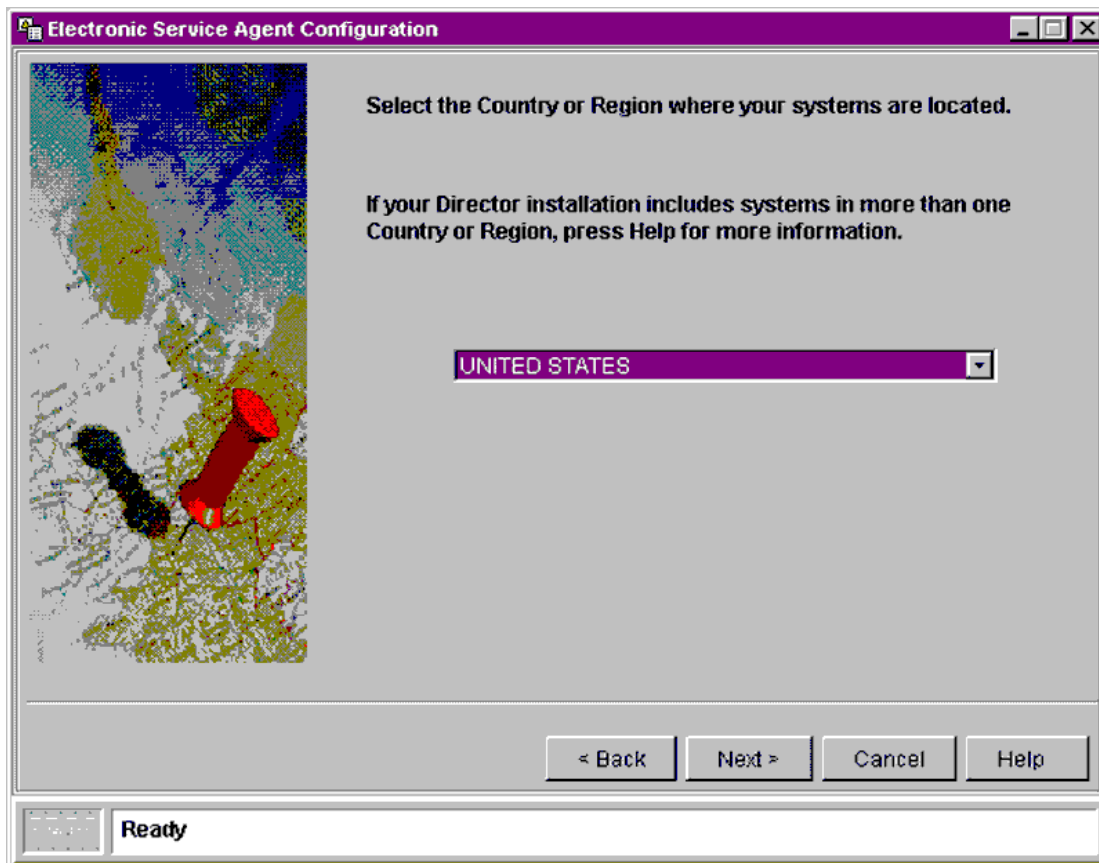- Electronic Service Agent Configuration-Finish

The individual Electronic Service Agent Configuration Wizard screens are discussed below in the pages that follow.

Electronic Service Agent Configuration-Introduction
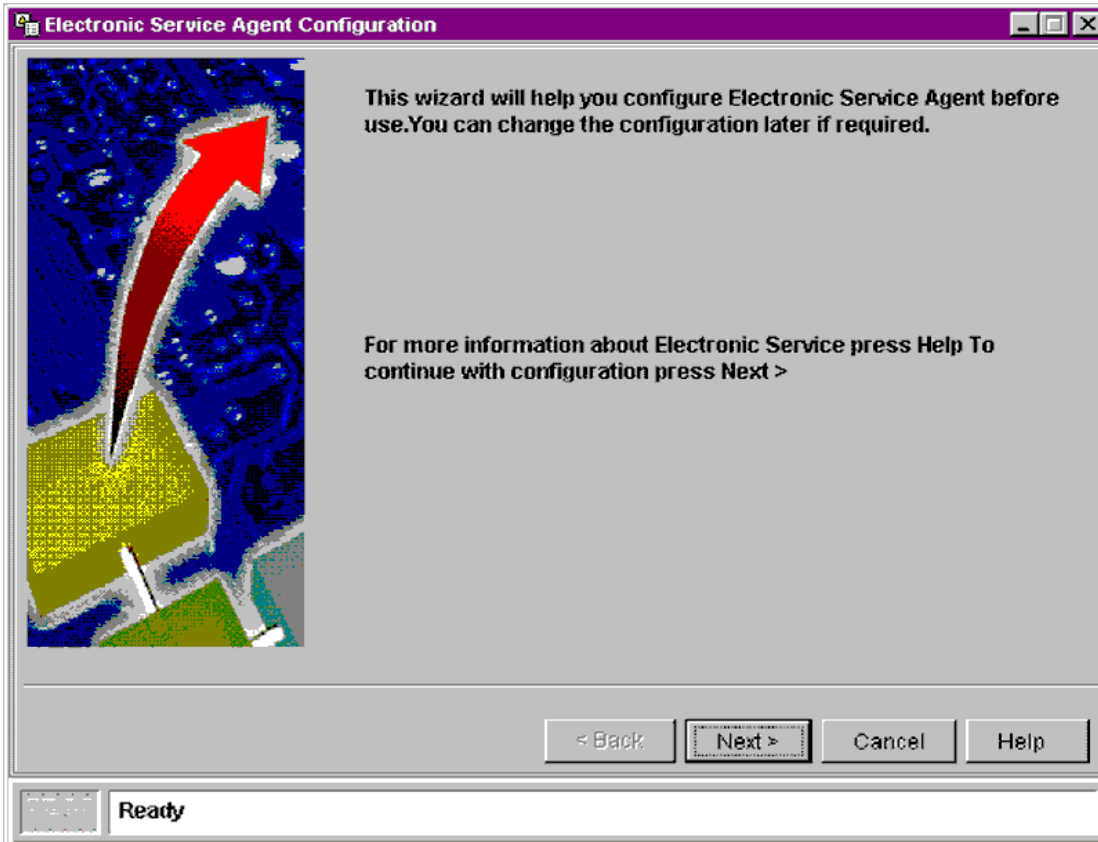
The **Electronic Service Agent Configuration Wizard Introduction** screen is displayed when you launch the Electronic Service Agent task for the first time or before Electronic Service Agent has been properly configured.

Electronic Service Agent Configuration-Country/Region

The **Electronic Service Agent Configuration Wizard 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, then you can change the default country locations later using the Electronic Service Agent Configuration Notebook. Refer to the on-line help for further information.

Important: If your IBM Director Central Management Server location is configured incorrectly then IBM's service delivery may be delayed.

Electronic Service Agent Configuration-Telephone number

.
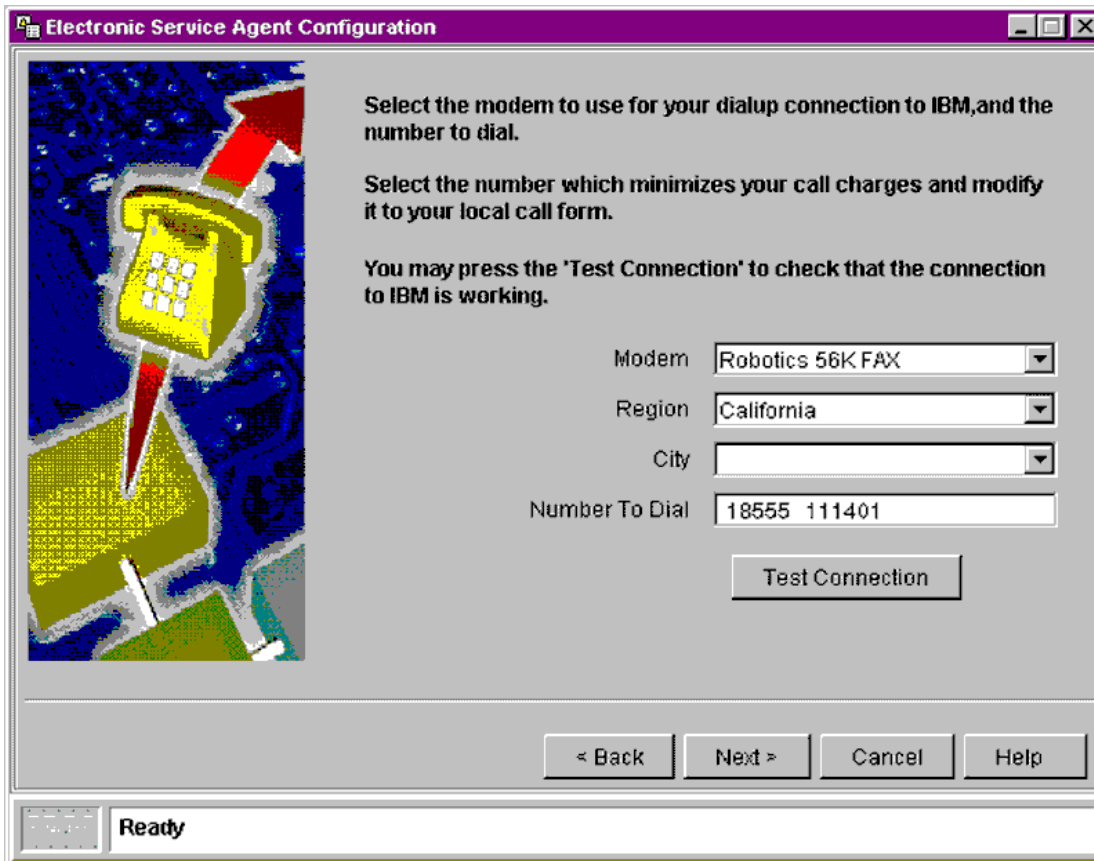
Use the **Electronic Service Agent Configuration Wizard Telephone Number** screen to configure the settings for your dial-up connection to IBM.

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 in length.

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.

Electronic Service Agent Configuration-Company

Use the **Electronic Service Agent Configuration Wizard Company** screen to configure your company details.

Company
> Type the name of your company. The details that you type should not exceed 30 characters in length.

Telephone
> Type the telephone number of your nominated contact person. Usually, the telephone number that you type should not exceed 30 characters in length, however sometimes the character restrictions in this field are country dependent. If your company is located in Canada or the United States then the telephone number that you type should not exceed 10 decimal digits in length.

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 in length.

Email

Type an email address that does not exceed 256 characters in length.

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 each customer and their associated unique service agreement terms and conditions. Your purchasing team may be able to provide an ECI ID.

Note: An ECI ID is also known as **ESC + ID** or **ECCOID**.

Electronic Service Agent Configuration-Contact

Use the **Electronic Service Agent Configuration Wizard 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 system(s) hardware problem(s).

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 in length.

Telephone

> Type the telephone number of your nominated contact person. Usually, the telephone number that you type should not exceed 30 characters in length, 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 in length.

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 in length.

Email

Type an email address that does not exceed 256 characters in length.

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, then you must change the country/regions where the relevant contact persons for these managed systems reside, either individually or on a group basis using the **Contact/Location** page of the targeted Electronic Service Agent Configuration Notebook or globally using the **Contacts** page of the untargeted Electronic Service Agent Configuration Notebook, after you have completed this initial configuration stage using the Electronic Service Agent Configuration Wizard.

For further details about the Electronic Service Agent Configuration Notebook, refer to Chapter 8, "Using the Electronic Service Agent for xSeries and Netfinity interface".

Electronic Service Agent Configuration-Location

Use the **Electronic Service Agent Configuration Wizard Location** screen to configure the location(s) of your managed systems.

Important: It is important that you configure your managed system(s) location details accurately. The location details that you type here will enable IBM's service representatives to locate the defective managed system(s) within your company premises so that they can repair them.

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, then you must change the country/regions where the managed systems reside, either individually or on a group basis using the **Contact/Location** page of the **targeted** Electronic Service Agent Configuration Notebook, or globally using the **Locations** page of the untargeted Electronic Service Agent Configuration Notebook, after you have completed this initial configuration stage using the Electronic Service Agent Configuration Wizard. For more information about the Electronic Service Agent Configuration Notebook, refer to Chapter 8, "Using the Electronic Service Agent for xSeries and Netfinity interface".

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 in length.

Address

Type the address details of your managed systems. The address that you type should not exceed 30 characters in length.

City

Type the city in which your managed systems reside. The city that you type should not exceed 30 characters in length.

Post Code

Type the postcode appropriate for your managed systems. The postcode that you type should not exceed 10 characters in length.

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.

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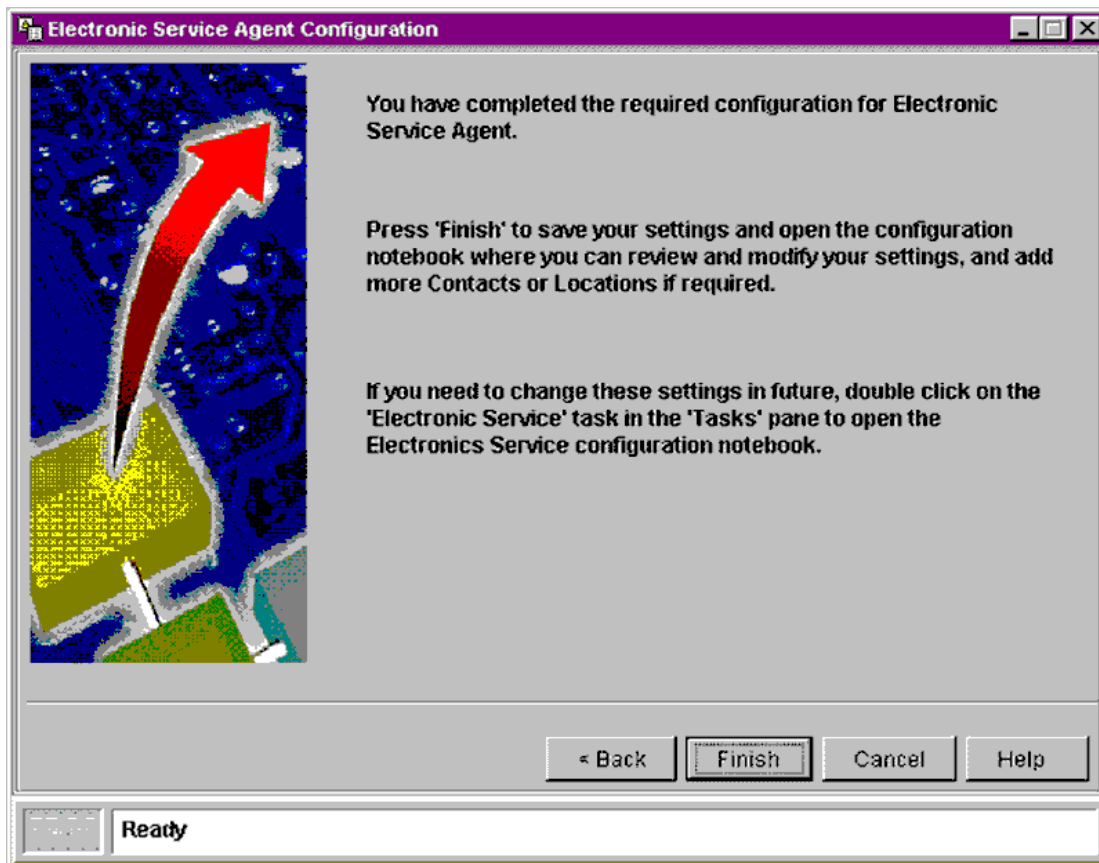
The **Electronic Service Agent Configuration Wizard Finish** screen is displayed when you have properly configured settings for all of the Electronic Service Agent Configuration Wizard screens.

If you need to change these global configuration settings in future you can do so using the untargeted Electronic Service Agent Configuration Notebook. Refer to Chapter 8, "Using the Electronic Service Agent for xSeries and Netfinity interface" for further information.

When you click **Finish**, the untargeted Electronic Service Agent Configuration Notebook is automatically displayed. Electronic Service Agent is now ready for you to perform administrative tasks. Click **Cancel** if you do not want to use Electronic Service Agent at this time.

Before running Electronic Service Agent for xSeries and Netfinity, 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 on-line help.

Chapter 7. Enabling and enrolling one or more systems for Electronic Service

Enabling and enrolling one or more systems for Electronic Service

Introduction

When you have properly installed and configured Electronic Service Agent, you must enable and enrol 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**.
       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 enrolment transaction. If this transaction is unsuccessful, then you can manually initiate another enrolment transaction.

To manually enrol 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.
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 any onscreen instructions.
4. Click **OK** to close the **Test** page.

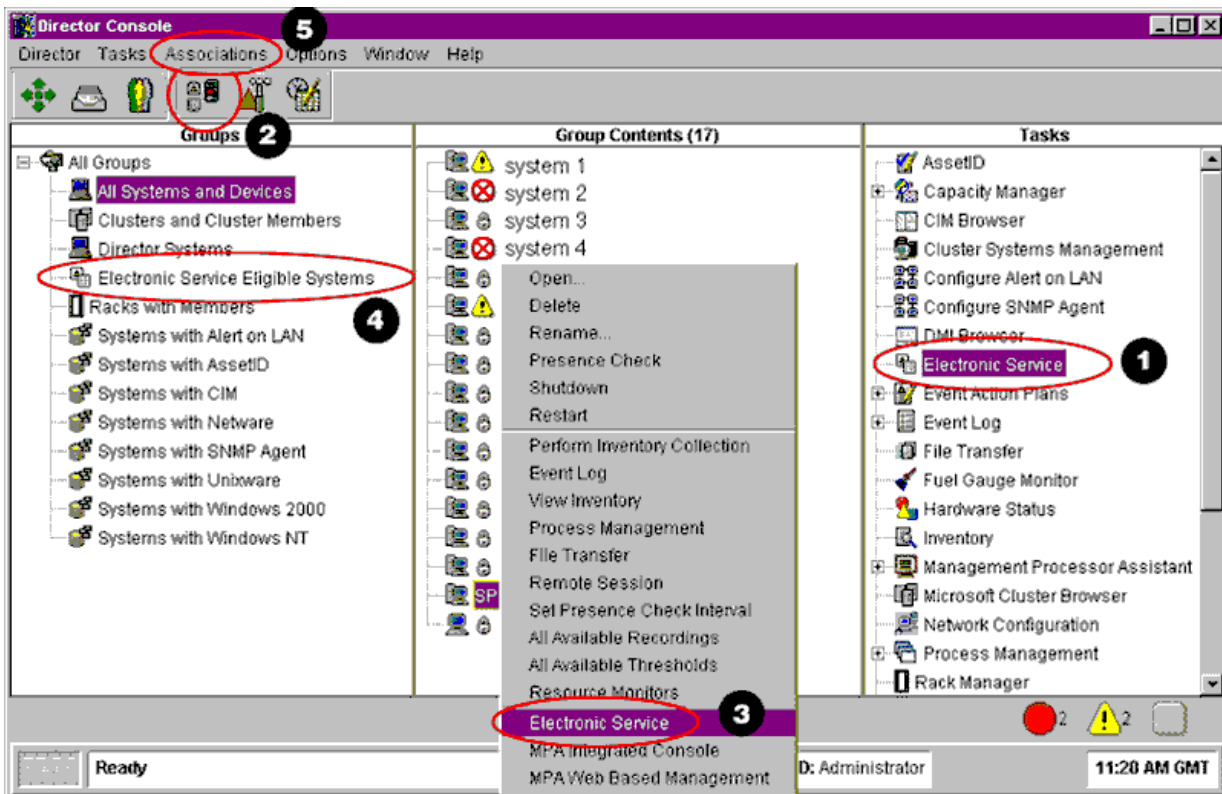# Chapter 8. Using the Electronic Service Agent for xSeries and Netfinity interface

Introduction

Electronic Service Agent installs as an IBM Director Extension and is visible on the IBM Director Management Console at five locations as shown below.

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 (item 4, IBM Director Management Console, below). 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.

<u>**The IBM Director Management Console**</u>

Refer to your IBM Director on-line help for more information about using the IBM Director Console.

The Electronic Service Agent can be launched in **untargeted** or **targeted** mode. When you launch the Electronic Service Agent task, the **Electronic Service Agent Configuration Notebook** is displayed. You will use the pages displayed within the Electronic Service Agent Configuration Notebook to alter Electronic Service Agent's settings and perform administrative tasks. The pages that are displayed are dependent upon which mode you use to activate the Electronic Service task.

Untargeted mode

An untargeted action is one that applies to the Electronic Service Agent installation as a whole. Untargeted actions display the <u>untargeted</u> version of the Electronic Service Agent Configuration Notebook. This provides the interface for you to modify Electronic Service Agent's global configuration settings.

Targeted mode

A targeted action is one that applies to one or more managed systems. Targeted actions display the <u>targeted</u> version of the Electronic Service Agent Configuration Notebook. This provides the interface for you to perform administrative tasks in relation to specific managed systems, or selections of managed systems, without disrupting Electronic Service Agent's global configuration settings.

The <u>targeted</u> and <u>untargeted</u> Electronic Service user interfaces are discussed in more detail below.

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 then some of your data may not be saved when you close any of the Notebooks.

The untargeted Electronic Service Agent Configuration Notebook

You can display the <u>untargeted</u> Electronic Service Agent Configuration Notebook by performing any one of the following actions:

- Double-click on the **Electronic Service** task (item 1, IBM Director Management Console above) in the tasks pane of the IBM Director console
- Right-click on the **Electronic Service** task (item 1, IBM Director Management Console above) in the tasks pane of the IBM Director console, then select **Open** from the context menu
- Double-click on the Electronic Service icon (item 2, IBM Director Management Console above) on the Main icon bar

The <u>untargeted</u> Electronic Service Agent Configuration Notebook contains the following main pages:

- Company
- Contacts
- Locations
- Communication
- Scheduler
- Advanced

The untargeted Electronic Service Agent Configuration Notebook-Company page

Use the **Company** page of the <u>untargeted</u> Electronic Service Agent Configuration Notebook to edit the company details that you configured using Electronic Service Agent's Configuration Wizard subsequent to installing Electronic Service Agent.

The changes that you make here will overwrite the details that you typed in the **Company** screen of the Electronic Service Agent Configuration Wizard.

The field entry requirements in this page are the same as those of the **Company** screen of the Electronic Service Agent Configuration Wizard. For more information about the field entry requirements, refer to Chapter 6, "Configuring Electronic Service Agent for xSeries and Netfinity", or click **Help** in the **Company** page to view the on-line help.

The untargeted Electronic Service Agent Configuration Notebook-Contacts page
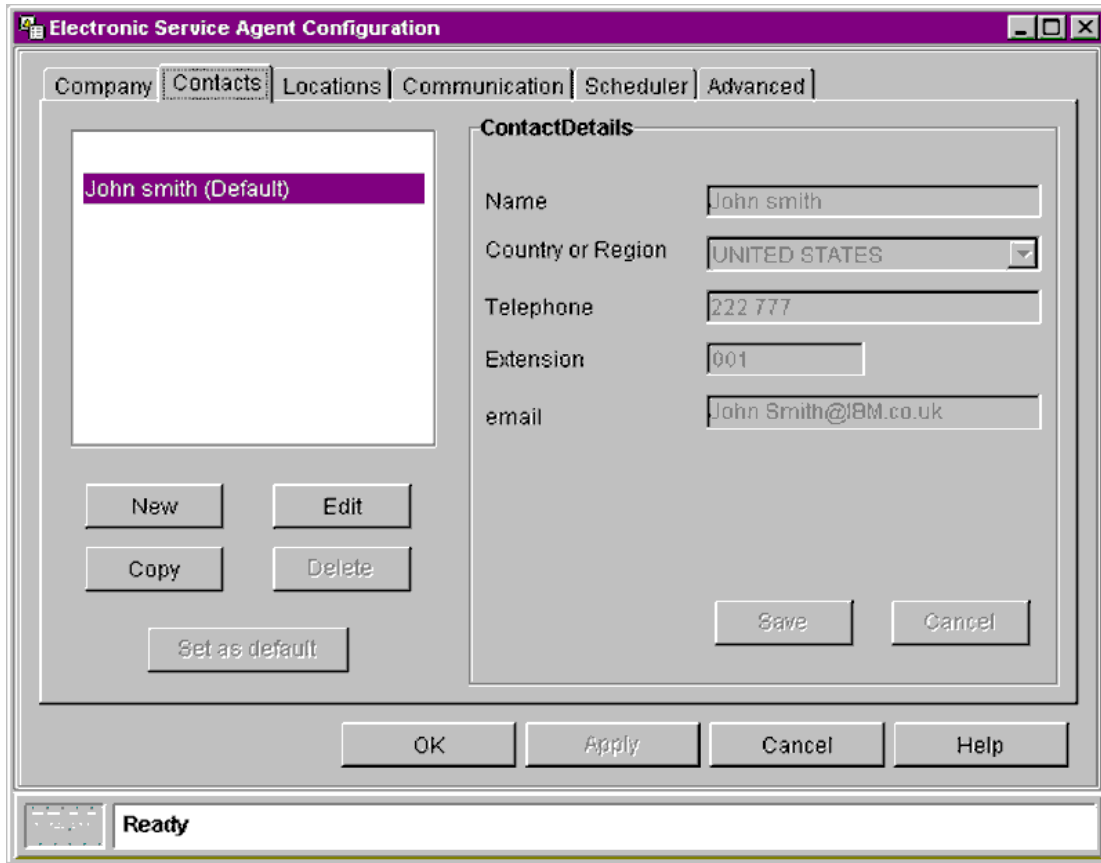
Use the **Contacts** page of the <u>untargeted</u> Electronic Service Agent Configuration Notebook to:
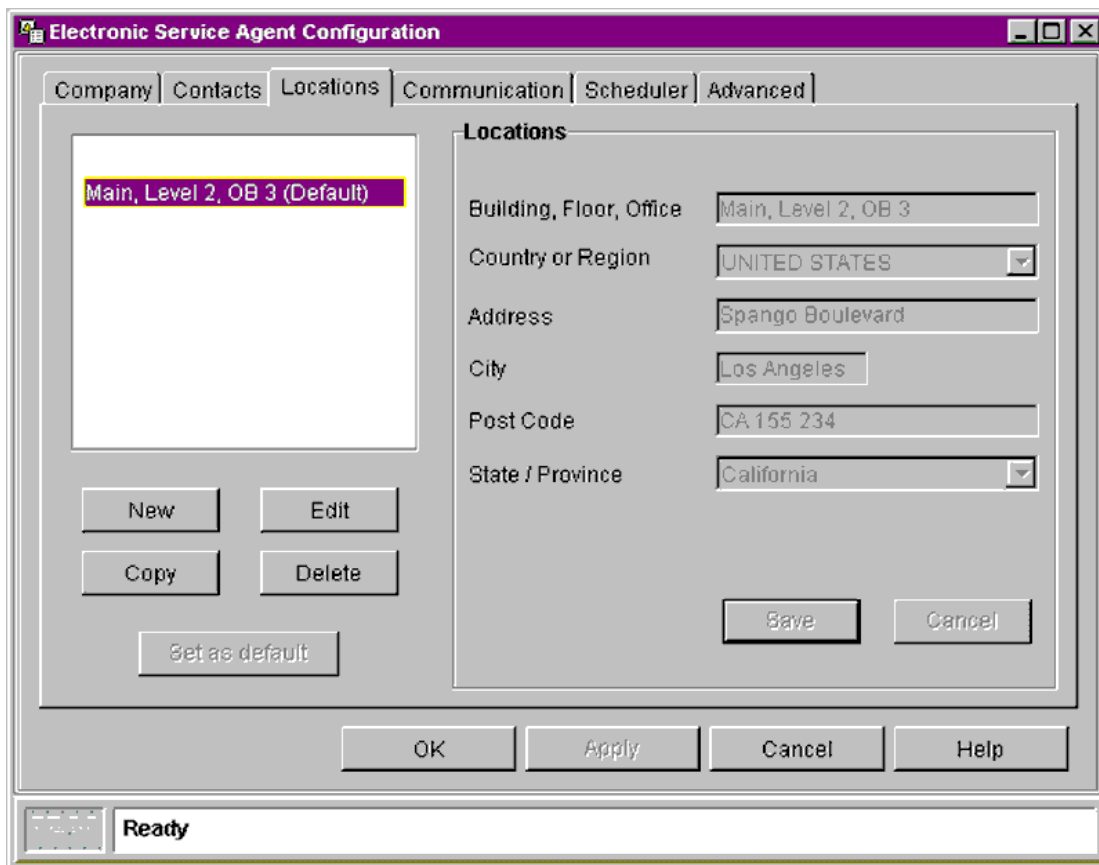
- Make changes, additions and deletions to the global contact details that you configured using Electronic Service Agent's Configuration Wizard subsequent to installing Electronic Service Agent
- Assign a new set of contact details as Electronic Service Agent's global default settings

The changes that you make here will overwrite the details that you typed in the **Contact** screen of the Configuration Wizard.

Note: If you delete a contact that is currently assigned to one or more managed systems, then Electronic Service Agent assigns the default contact settings to these systems. You cannot delete the default contact settings.

For more information about the field entry requirements, refer to Chapter 6, "Configuring Electronic Service Agent for xSeries and Netfinity", and click **Help** in the **Contacts** page to view the on-line help.

The untargeted Electronic Service Agent Configuration Notebook-Locations page

Use the **Locations** page of the <u>untargeted</u> Electronic Service Agent Configuration Notebook to:

- Make changes, deletions and additions to the global location details that you configured using Electronic Service Agent's Configuration Wizard subsequent to installing Electronic Service Agent
- Assign a new set of location details as Electronic Service Agent's global default settings

The changes that you make here will overwrite the details that you typed in the **Location** screen of the Configuration Wizard.

Important: It is important that you configure your managed system(s) location details accurately. The location details that you type here will enable IBM's service representatives to locate your defective managed systems within your company premises so that they can repair them.

Note: If you delete a location that is currently assigned to one or more managed systems, then Electronic Service Agent assigns the default location settings to these systems. You cannot delete the default location settings.

For more information about the field entry requirements, refer to Chapter 6, "Configuring Electronic Service Agent for xSeries and Netfinity", and click **Help** in the **Locations** page to view the on-line help.

The untargeted Electronic Service Agent Configuration Notebook-Communication page
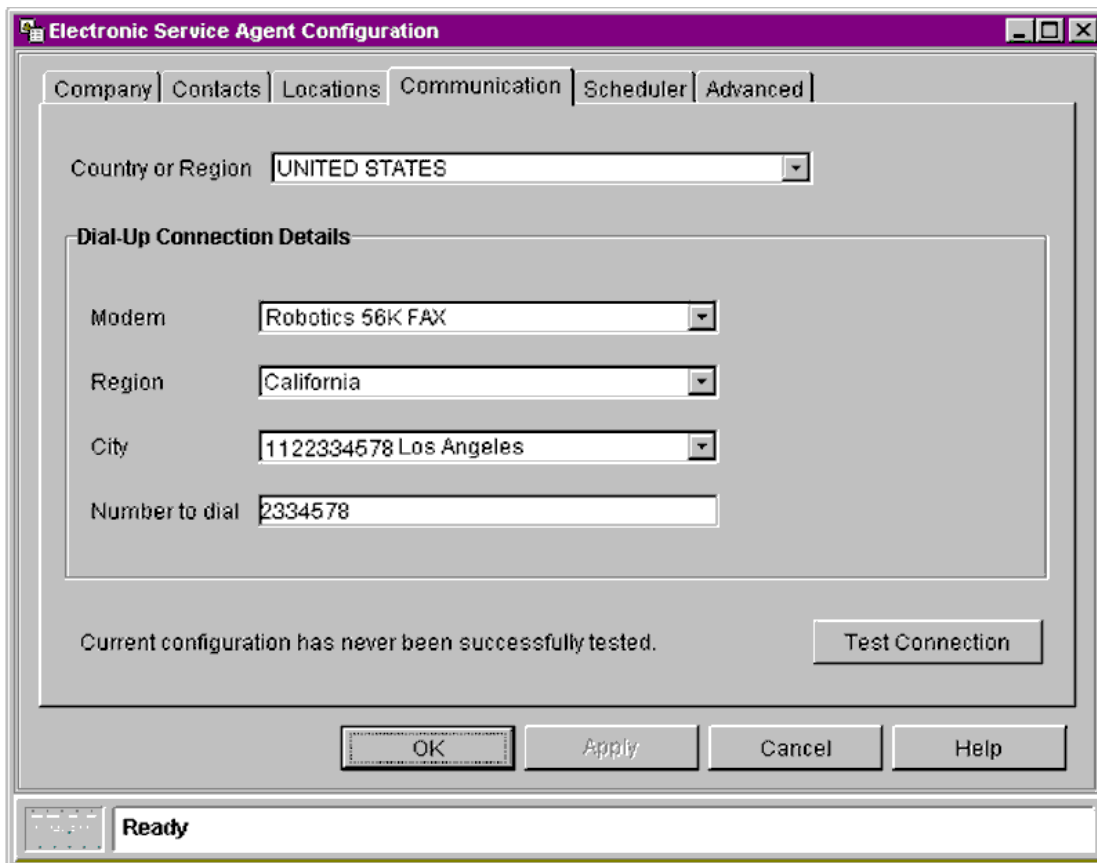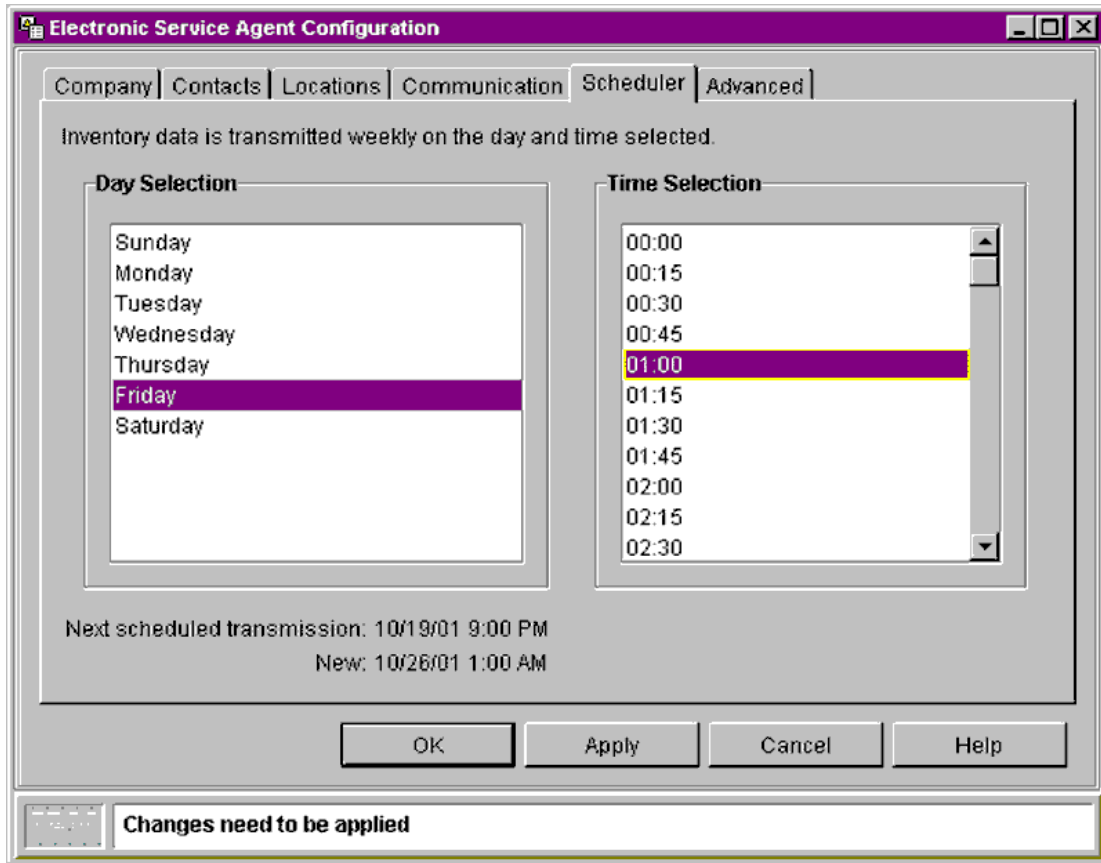

Use the **Communication** page of the <u>untargeted</u> Electronic Service Agent Configuration Notebook to make changes to your dial-up connection details and test the changes that you have made before committing them.

The changes that you make here will overwrite the connection details that you have configured in the **Country/Region** and **Telephone number** screens of the Configuration Wizard.

During installation, Electronic Service Agent detects what modems you have installed on your IBM Director Central Management Server, and displays them in the pull-down list of the **Modem** field.

For more information about the field entry requirements, refer to Chapter 6, "Configuring Electronic Service Agent for xSeries and Netfinity", and click **Help** in the **Communication** page to view the on-line help.

The untargeted Electronic Service Agent Configuration Notebook-Scheduler page
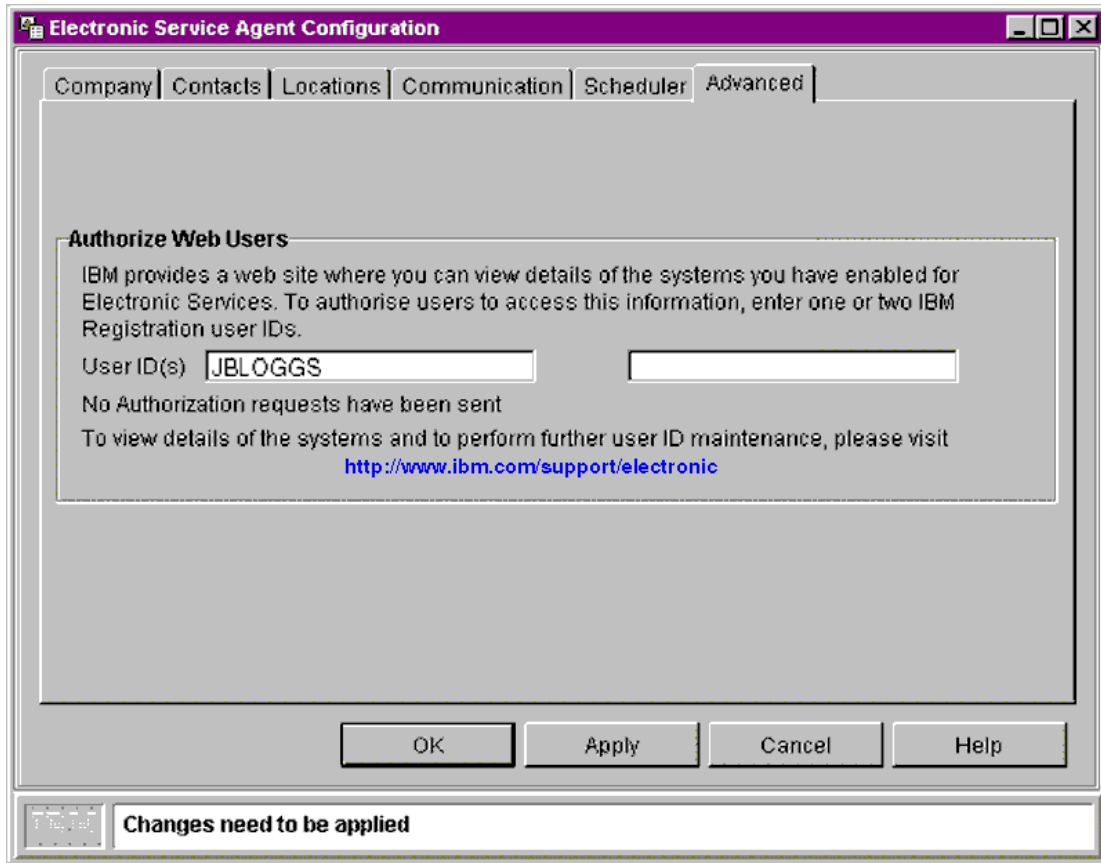

Use the **Scheduler** page of the <u>untargeted</u> Electronic Service Agent Configuration Notebook to configure your weekly repeat schedule for inventory collection and transmission to IBM.

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.

For further information, click **Help** in the **Scheduler** page to view the on-line help.

The untargeted Electronic Service Agent Configuration Notebook-Advanced page

Use the **Advanced** page of the <u>untargeted</u> Electronic Service Agent Configuration Notebook to request authorization that will enable other users to view inventory information about Electronic Service enabled and enrolled managed systems on a secure IBM web site. We anticipate that this web site will be available at the end of March 2002.

About web authorization and user registration

User registration is the process of associating your IBM Director Central Management Server with one or two **IBM Registration user IDs**. IBM's Service Data Receiver then associates these IDs with any systems that are enrolled by the IBM Central Management Server.

If you have an **IBM Registration user ID**, then you will have the authority to view the inventory information and details about your company owned managed systems, that are enabled and enrolled for Electronic Service, on a secure web site provided by IBM and you will also have the authority to grant other users access to information on this web site.

Note: You must register each of your company owned managed systems with IBM before you can view their details and inventory information on this secure web site.

You can obtain an **IBM registration user ID** at the following IBM web site:

http://www.ibm.com/registration/selfreg

You can register each of your company owned managed systems and view their inventory information and details at the following secure IBM web site when it is available:

http://www.ibm.com/support/electronic

For more information about the field entry requirements click **Help** in the **Advanced** page to view the on-line help.

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

You can display the <u>targeted</u> Electronic Service Agent Configuration Notebook by launching the Electronic Service Agent 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 (item 1, IBM Director Management Console).
- Drag and drop the **Electronic Service** task in the **Tasks** pane (item 1, IBM Director Management Console) of the IBM Director Management Console onto a system listed in the **Group Contents** pane.
- Right-click on a system in the **Group Contents** pane and select **Electronic Service** from the context menu (item 3, IBM Director Management Console).
- Launch Electronic Service Agent in multi-targeted or group targeted mode (see below) 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 <u>targeted</u> Electronic Service Agent Configuration Notebook that are illustrated later in this chapter.

Multi-targeted mode

You can display the <u>targeted</u> Electronic Service Agent Configuration Notebook by launching the Electronic Service Agent in multi-targeted mode by performing any one of the following actions:

- Select two or more systems listed in the **Group Contents** 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 (item 1, IBM Director Management Console).
- Select two or more systems listed in the **Group Contents** pane of the IBM Director Management Console, then drag and drop the **Electronic Service** task in the **Tasks** pane (item 1, IBM Director Management Console) on to any of the selected systems.
- Select two or more systems listed in the **Group Contents** pane of the IBM Director Management Console, then right-click on any of the selected systems and select

Electronic Service from the context menu (item 3, IBM Director Management Console).

Group targeted mode

You can display the <u>targeted</u> Electronic Service Agent Configuration Notebook by launching the Electronic Service Agent 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 (item 1, IBM Director Management Console above).
- Drag and drop the **Electronic Service** task from the **Tasks** pane (item 1, IBM Director Management Console above) of the IBM Director Management Console onto a group listed in the **Groups** pane.
- Right-click on a group listed in the **Groups** pane, then select **Electronic Service** from the context menu (item 3, IBM Director Management Console above).

Note: Multi-targeted and group targeted launches of Electronic Service Agent, display the same <u>targeted</u> Electronic Service Agent Configuration 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 hand side of the <u>targeted</u> Electronic Service Agent Configuration 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**, then the <u>targeted</u> Electronic Service Agent Configuration Notebook switches to single targeted mode for that selected system.

The targeted **Electronic Service Agent Configuration Notebook** contains the following main pages:

- System
- Services
- Contact/Location
- History
- Test (use in single targeted mode only)

The targeted Electronic Service Agent Configuration Notebook-System page

Multi-targeted/group targeted view of the System page
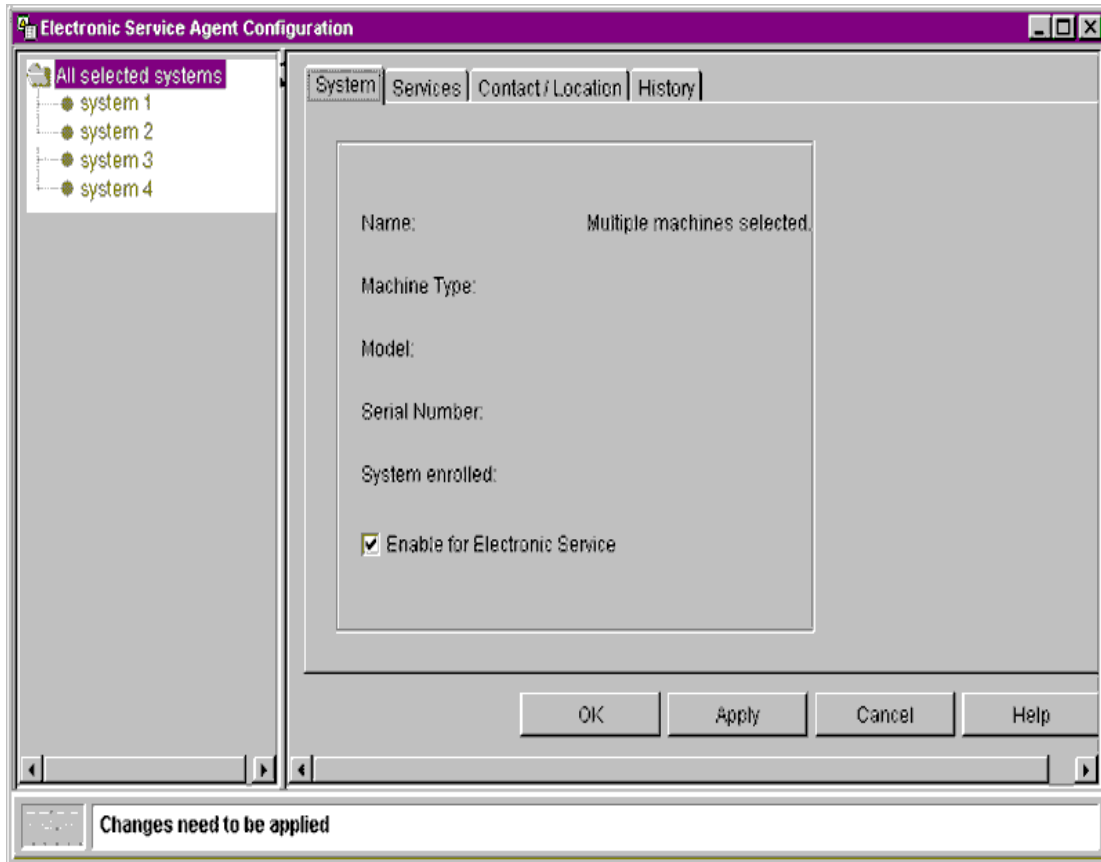
Use the **System** page to:

- View a target managed system's details including: Name, Machine Type, Model and Serial Number
- Verify a target system's enrolment status for Electronic Service
- Enable a system for Electronic Service

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 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 enrolment transaction when a managed system is enabled for Electronic Service for the first time. If this transaction fails, then you can manually initiate another enrolment transaction using the **Test** page of the Targeted Electronic Service Agent Configuration 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.

The targeted Electronic Service Agent Configuration Notebook-Services page
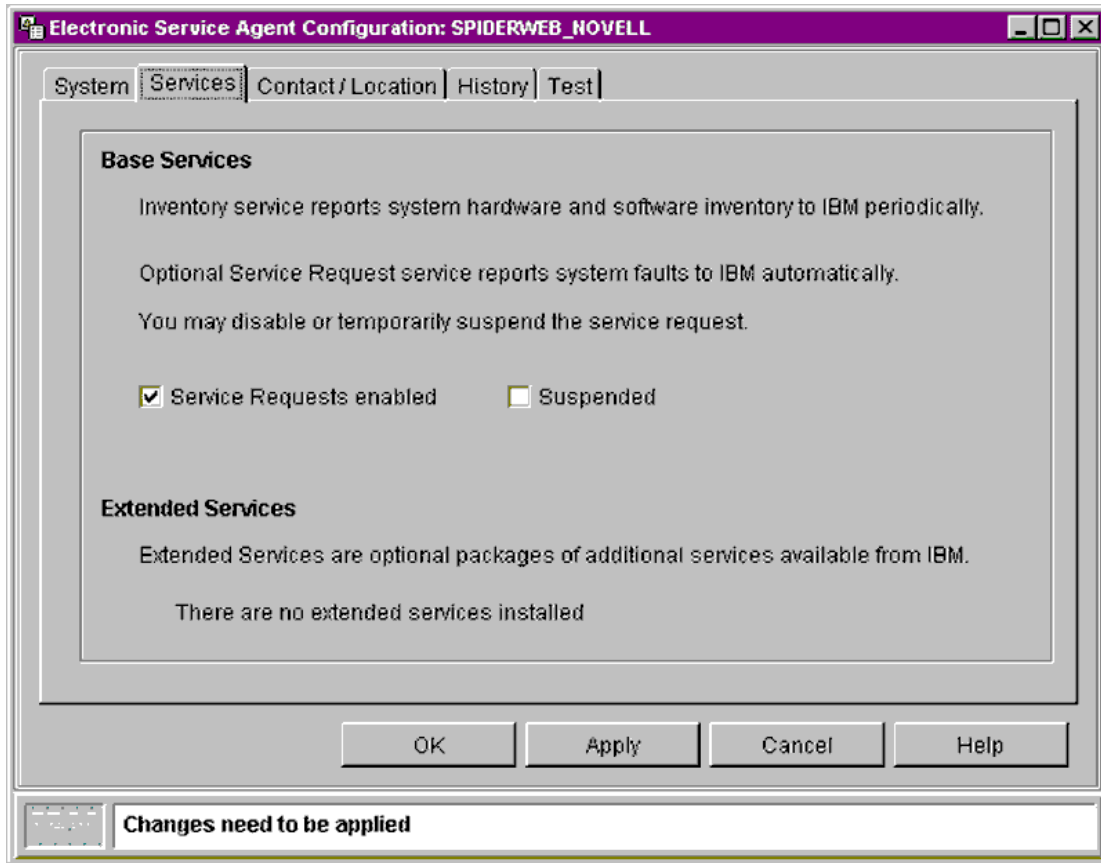
Use the **Services** page to:

- 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 Electronic Systems Management Services (eSMS) for xSeries Extended Service Level or disable one or more managed systems' enablement for a non-restricted Electronic Systems Management Services (eSMS) for xSeries Extended Service Level

(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 Electronic Systems Management Services (eSMS) 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 then you should temporarily suspend the managed system's enablement for IBM's Service Request service. You can later resume IBM's Service Request service for that managed system when the problem has been rectified

(Extended Services) none

The 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.

Note: 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 Levels 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 Service Level.

The targeted Electronic Service Agent Configuration Notebook-Contact/Location page
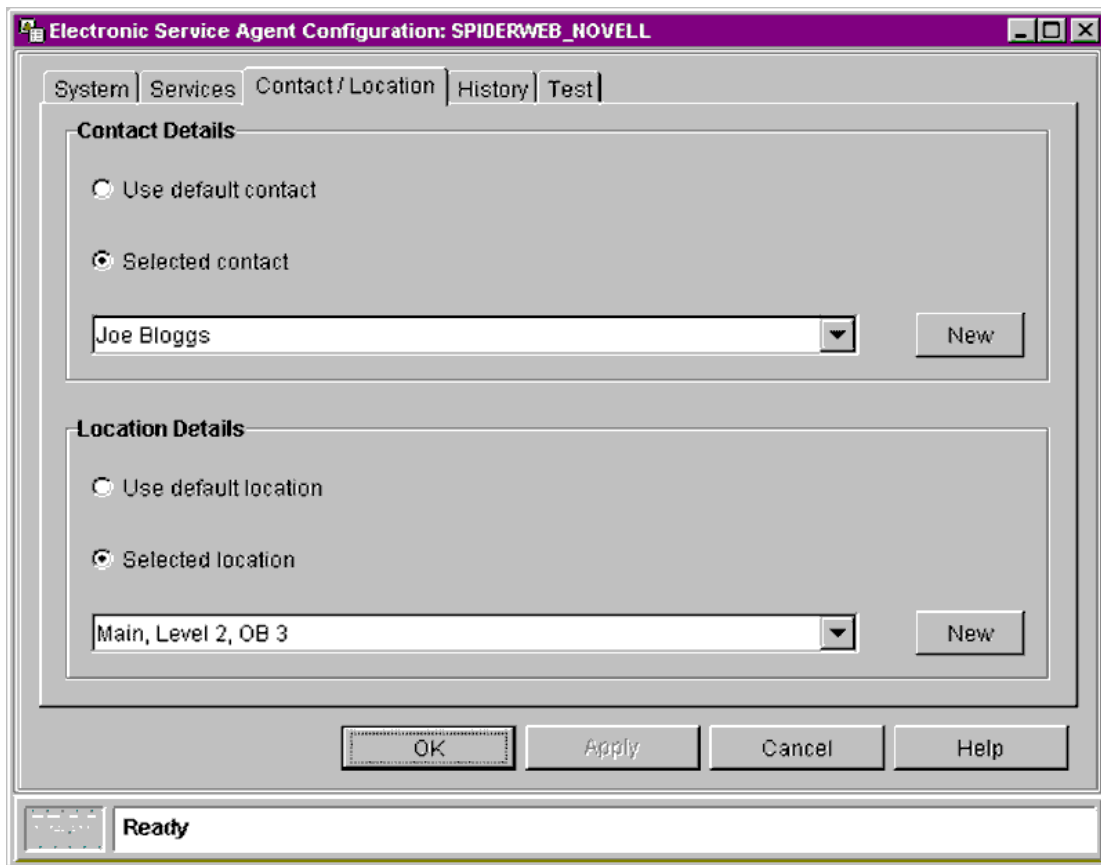
Use the **Contact/Location** page and associated Electronic Service New Contact and Electronic Service New Location editor panels to:

- 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

The settings that you define and assign locally to one or more managed systems are:

- **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 system(s) hardware problem(s).

- **Location**: The location details will enable IBM's service representatives to locate (within your company premises) and repair the defective managed system(s) for which

Electronic Service Agent has sent a **Service Request**. Ensure that your location details are accurate. Inaccurate details may delay IBM's service delivery.

(Contact Details) 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 Electronic Service Agent Configuration Wizard or the **Contacts** page of the <u>untargeted</u> Electronic Service Agent Configuration Notebook.

(Contact Details) select contact
> Enables the pull-down list of contact settings and the **New** button.

New (Contact Details)
> Displays the Electronic Service New Contact panel.

(Location Details) 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 Electronic Service Agent Configuration Wizard or the **Locations** page of the untargeted Electronic Service Agent Configuration Notebook.

(Location Details) select location
> Enables the pull-down list of location settings and the **New** button.

New (Location Details)
> Displays the Electronic Service New Location panel.

The Electronic Service New Contact panel
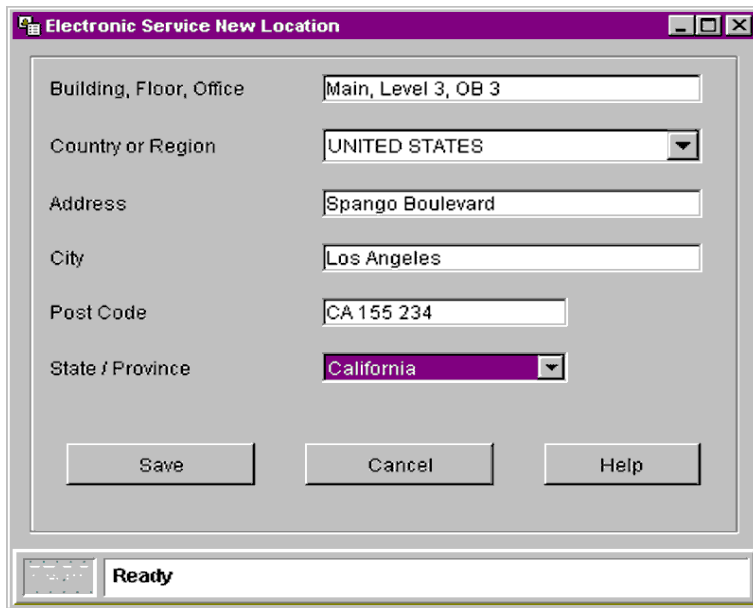
Use the Electronic Service New Contact editor panel to add new contact details to Electronic Service Agent's list of contact details, so that you can assign them as the contact details for one or more managed systems using the **Contact/Location** page of the <u>targeted</u> Electronic Service Agent Configuration Notebook.

For more information about the field entry requirements, refer to Chapter 6, "Configuring Electronic Service Agent for xSeries and Netfinity", and click **Help** in the Electronic Service New Contact panel to view the on-line help.

The Electronic Service New Location panel

Use the Electronic Service New Location editor panel to add new location details to Electronic Service Agent's list of location details so that you can assign them as the location details for one or more managed systems using the **Contact/Location** page of the <u>targeted</u> Electronic Service Agent Configuration Notebook.

For more information about the field entry requirements, refer to Chapter 6, "Configuring Electronic Service Agent for xSeries and Netfinity", and click **Help** in the Electronic Service New Location panel to view the on-line help.

The targeted Electronic Service Agent Configuration Notebook-History page
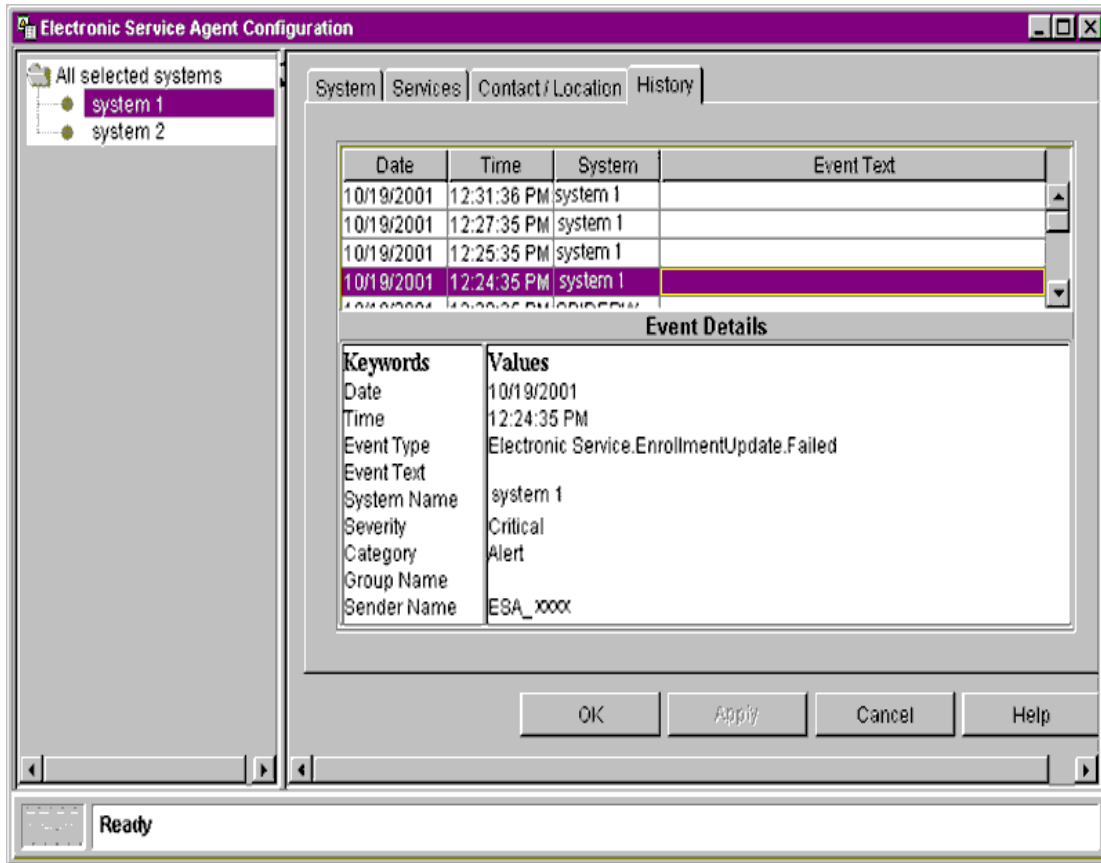
Use the **History** page to view Electronic Service events. These Electronic Service events can be generic or system specific. The details that are displayed for each event include:

- 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.

For further information, click **Help** in the **History** page of the targeted Electronic Service Agent Configuration Notebook to view the on-line help.

Refer to Chapter 9, "About Electronic Service Agent Events" for more information about Electronic Service Agent's event handling capabilities.

The targeted Electronic Service Agent Configuration Notebook-Test page
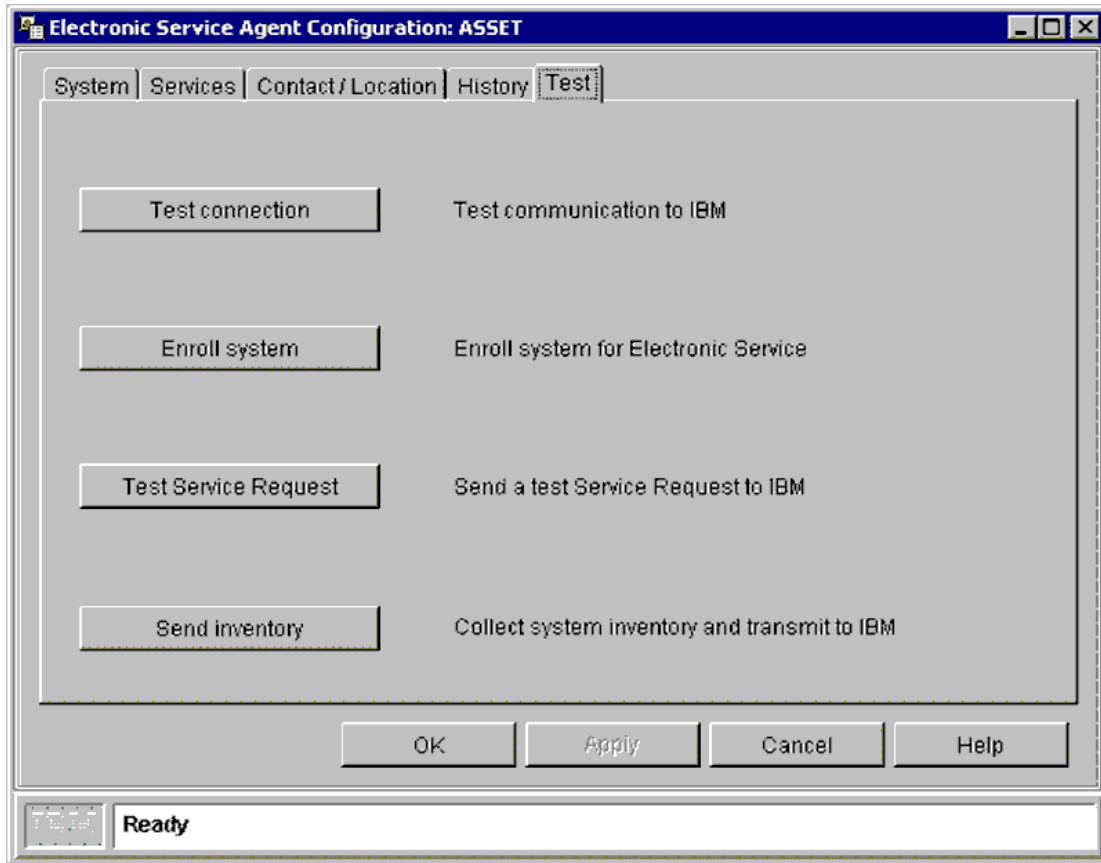
The **Test** page is only displayed when you launch the Electronic Service task in **single** targeted mode. Use the **Test** page to:

- Initiate a test of your connection to IBM
- Enrol 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

Note: You should perform these test actions only at the request of an IBM service engineer or representative.

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 enrolment transaction. This button is disabled if your system is already enrolled for Electronic Service.

Note: 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 then IBM returns a Service Request Number, Branch Number and Country Code. These are displayed in the **History** page of the <u>targeted</u> Electronic Service Agent Configuration 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. About 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.UM Services Events.Fan
CIM.UM Services Events.Temperature
CIM.UM Services Events.Power Supply
CIM.UM Services Events.Voltage Abnormal
CIM.UM Services Events.SMART Drive
CIM.UM Services Events.Processor PFA
CIM.UM Services Events.Memory PFA

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

Note: 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 2.0 product.

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 Electronic Systems Management Services (eSMS) for xSeries Extended Service Levels. For more information about this refer to Chapter 11, "Introducing Electronic Systems Management Services (eSMS) for xSeries Extended Service Levels".

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 on-line help.

Electronic Service Agent adds new event types to the **event type** tree in IBM Director's **Event Filter Builder** interface (see figure below). 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.
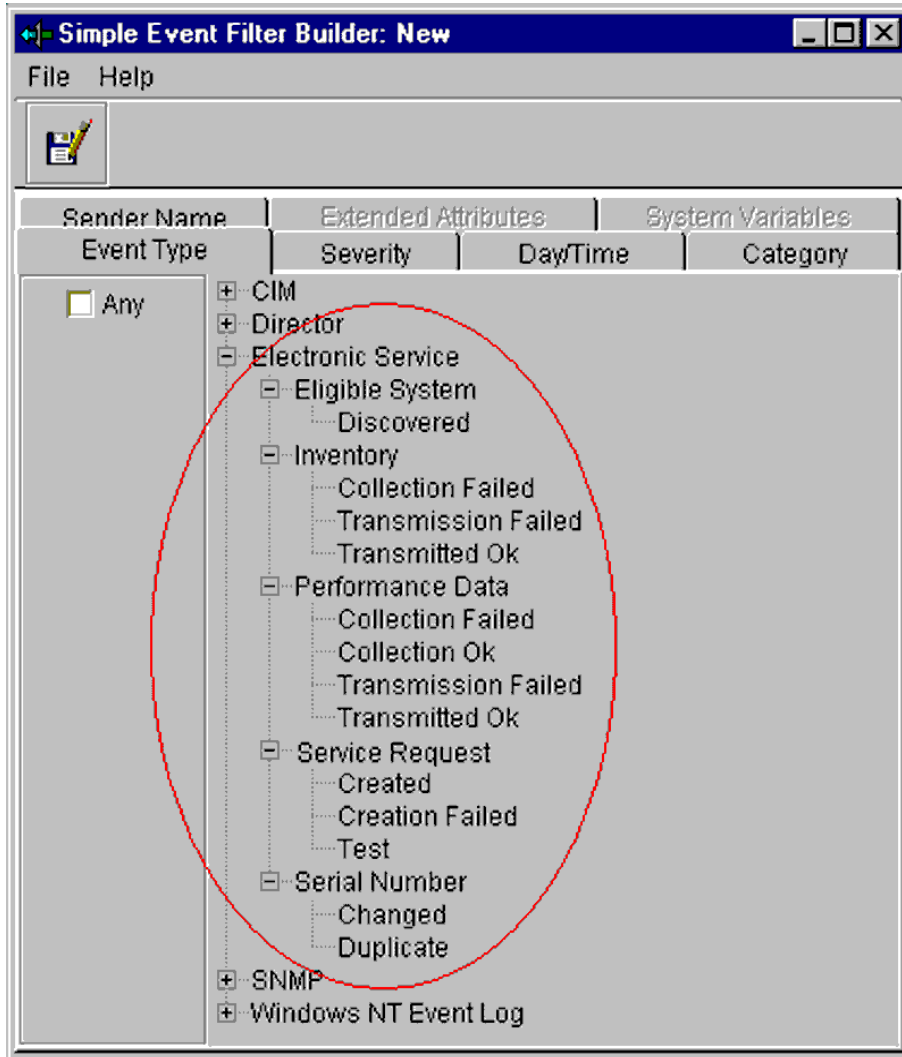
Chapter 10. Receiving Electronic Service Agent updates

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

http://www.ibm.com/pc/qtechinfo/MIGR-4L4QVC.html

Chapter 11. Introducing Electronic Systems Management Services for xSeries Extended Service Levels

Introduction

Electronic Service Agent for xSeries and Netfinity version 2.0 provides you with remote systems' health monitoring capabilities. You can further enhance your systems' health monitoring capabilities by installing the Electronic Systems Management Services for xSeries (eSMS) Extended Service Levels package.

Note: The Electronic Systems Management Services for xSeries (eSMS) Extended Service Levels package may only be available in selected countries.

The Electronic Systems Management Services for xSeries (eSMS) Extended Service Levels package is one of a suite of Extended Service Levels packages that utilize IBM's Electronic Service infrastructure. The Electronic Systems Management Services for xSeries (eSMS) Extended Service Levels package currently provides the option of two Extended Service Levels. Each Extended Service Level consists of a software extension that will provide a combination of hardware, software and capacity monitor events in addition to those provided with Electronic Service Agent version 2.0.

The Electronic Systems Management Services for xSeries (eSMS) Extended Service Levels package offers the option of the following two Extended Service Levels:

Premiere
> Provides additional RAID and service processor events in addition to the base events provided with Electronic Service Agent.

Premiere Plus
> Provides system capacity and utilization events in addition to the base events provided with Electronic Service Agent.

An Extended Service Level can be categorized as restricted or non-restricted. The **Premiere** Extended Service Level is currently categorized as non-restricted. The **Premiere Plus** Extended Service Level is currently categorized as restricted.

You can enable a managed system for a non-restricted Extended Service Level using the **Services** page of the targeted Electronic Service Agent Configuration Notebook. You will require the assistance of an IBM on-site representative to:

- Install the Electronic Systems Management Services (eSMS) for xSeries Extended Service Levels package
- Enable one or more managed systems for a restricted Extended Service Level
- Disable one or more managed system's enablement for a restricted Extended Service Level

For more information about IBM's Electronic Systems Management Services for xSeries (eSMS) Extended Service Levels, call your local IBM representative.

Enabling one or more systems for a non-restricted Extended Service Level

If you have an Extended Service Levels package installed, you can only enable a managed system or group of managed systems for a non-restricted Extended Service Level.

To enable one or more systems for a non-restricted Extended Service Level:

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 **Services** page.
3. Select **Premiere**.
4. Click **Apply**
     or
   Click **OK** to close the **Services** page.

Using an Electronic Systems Management Services for xSeries (eSMS) Extended Service Level

When you have properly installed the Electronic Systems Management Services for xSeries (eSMS) Extended Service Levels package on your IBM Director Central Management Server and you have enabled one or more of your managed systems for an Extended Service Level, no further user intervention is required. You should note however that when a managed system is enabled for an Extended Service Level, the **Service Request** service is automatically enabled for that system. You cannot disable a managed system's enablement for the **Service Request** service while the system is enabled for an Extended Service Level that requires it.

Chapter 12. Troubleshooting

Error message - Test failed

If you are managing your systems using a Central Management Server running Windows NT version 4.0 Server or Server Enterprise with Service Pack 4, then make sure that you have configured the modems that you have installed on your Central Management Server for RAS (Remote Access Service). To complete the RAS configuration process you must restart your Central Management Server.

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 <u>untargeted</u> Electronic Service Agent Configuration Notebook, however they will **not** be functional.

Appendix A. Notices and trademarks

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