

Electronic Service Agent for IBM eServer xSeries

Version 3.2 - Standalone

User's Guide

Total Pages: 61

(c) Copyright IBM Corporation, 2000, 2005

FIRST EDITION (May 2005)

This edition applies to version 3.2 of Electronic Service Agent for Linux on xSeries™ (product number 5639-L09) and to all subsequent releases and modifications until otherwise indicated in new editions.

©Copyright International Business Machines Corporation™ 2000, 2005. All Rights Reserved.

Before using this information and the product it supports, read the information in Appendix D. “Notices and Trademarks,” on page 55.

Note to U.S. Government Users Restricted Rights: Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corporation.

Table of Contents

| | |
|--|----|
| Chapter 1. About This User's Guide | 5 |
| Introduction | 5 |
| Who Should Read This Guide | 5 |
| Conventions Used in This Guide | 5 |
| Chapter 2. Introducing Electronic Service Agent | 6 |
| What is Electronic Service Agent | 6 |
| What's New in Version 3.2 | 6 |
| Managed Systems Eligible for Electronic Service | 6 |
| Privacy and Security Features | 6 |
| <i>Administrative User Access</i> | 6 |
| <i>View of Service Agent information on web</i> | 7 |
| <i>Privacy of company information</i> | 7 |
| <i>Communication Security</i> | 7 |
| <i>System Enrollment with IBM</i> | 7 |
| Electronic Service Agent Environment | 8 |
| Electronic Service Agent Components | 8 |
| <i>Gateway</i> | 9 |
| <i>Data Collector</i> | 9 |
| <i>Service Agent Manager</i> | 9 |
| Getting Help | 9 |
| Chapter 3. Electronic Service Agent Requirements | 10 |
| Hardware Requirements | 10 |
| Supported Operating Systems | 10 |
| Network Requirements | 10 |
| <i>Domain Name Server</i> | 10 |
| <i>Firewalls</i> | 11 |
| IBM Director Server | 11 |
| IBM Director Agent | 11 |
| Chapter 4. Before You Install | 12 |
| Prerequisites | 12 |
| Reviewing Your Environment | 12 |
| Identifying Where to Install the Gateway | 12 |
| Determining Whether to Configure a Data Collector Manually | 13 |
| Obtaining Electronic Service Agent | 13 |
| Chapter 5. Installing Electronic Service Agent | 14 |
| Installing the Gateway | 14 |
| Starting the Configuration Program | 17 |
| Installing a Data Collector | 18 |
| <i>Preparing to install a Data Collector</i> | 18 |
| <i>Using the InstallShield Wizard</i> | 18 |
| <i>Installing a Data Collector Manually</i> | 22 |

| | |
|---|----|
| Chapter 6. Unattended Installation of a Data Collector | 24 |
| Chapter 7. Configuring Electronic Service Agent | 28 |
| Understanding Electronic Service Agent Manager | 28 |
| <i>Electronic Service Agent Manager Interface</i> | 29 |
| <i>Navigating Electronic Service Agent Manager</i> | 30 |
| Accessing Electronic Service Agent Manager | 31 |
| The System Status Panel | 32 |
| The Company Panel | 35 |
| The Contact Panel | 36 |
| The Location Panel | 37 |
| The Communications Panel - Gateway | 38 |
| The Communications Panel - Data Collector | 41 |
| The Advanced Panel | 42 |
| The History Panel | 43 |
| The Inventory Panel | 45 |
| The General Panel | 46 |
| Starting the Gateway | 46 |
| Closing the Electronic Service Agent Manager | 47 |
| Chapter 8. Uninstalling Electronic Service Agent | 49 |
| Chapter 9. Getting Help and Technical Assistance | 50 |
| Entitlement to Automatic Problem Submission | 50 |
| Contacting Support | 50 |
| Web Sites | 50 |
| Appendix A. Resolving a Machine IP Address | 51 |
| Appendix B. Resolving a System Host Name | 52 |
| Appendix C. X Server access control | 53 |
| Appendix D. Notices and Trademarks | 54 |
| Notices | 54 |
| Trademarks | 55 |
| Glossary | 56 |
| Index | 59 |

Chapter 1. About This User's Guide

Introduction

This guide provides the installation, configuration, activation, and operational instructions for Electronic Service Agent for Linux on xSeries™ - version 3.2 - Standalone, hereafter referred to as "Electronic Service Agent."

Who Should Read This Guide

This document is intended for use by the Information Technology or network administrators who are responsible for Linux™ systems. Readers should have extensive knowledge of their LAN environment and a general knowledge of operating systems.

Conventions Used in This Guide

This guide uses several typeface conventions for special terms and actions, as follows:

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.

Chapter 2. Introducing Electronic Service Agent

What is Electronic Service Agent

Electronic Service Agent is a “no-charge” software tool that resides on your IBM xSeries systems to monitor events and transmit system inventory information to IBM. Electronic Service Agent has two functions: automatic hardware problem reporting and system inventory collection for monitored systems. With these functions, xSeries Electronic Service Agent can monitor, track, and capture system inventory and hardware errors.

Automatic hardware problem reporting.

This agent monitors your xSeries servers for hardware errors. Hardware errors that meet certain criteria for criticality are automatically reported to IBM. Problems typically reported include power failures and system overheating (as detected by the Advanced Systems Management Adapter) and RAID drive failures.

Inventory collection

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.

What's New in Version 3.2

These enhancements have been provided in version 3.2:

- Support for Linux® is provided.
- Problem Management Report (PMR) history has been expanded
- Inventory filter capability has been added
- The list of supported machines has been expanded.

Managed Systems Eligible for Electronic Service

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

Privacy and Security Features

Following are high-level descriptions of the security features surrounding Electronic Service Agent. These features are provided to protect both your privacy and transactions into IBM. Electronic Services has a reference document on this subject. It can be found at the following web site in the Electronic Service Agent category: <https://www.ibm.com/support/electronic>

Administrative User Access

Installation and deinstallation of Electronic Service Agent is restricted to users with **root** authority. Access to programs providing control over Electronic Service Agent requires the use of a special user account **esadmin**.

View of Service Agent information on web

Access and view of Service Agent information on the Electronic Services web site is controlled by IBM Registration IDs provided during the Electronic Service Agent activation process. The first ID in that field is considered the Administrator of the machine and can add more IDs as needed on the same web site. Follow this procedure:

1. Obtain an IBM Registration user ID. To do this, access this URL:
<http://www.ibm.com/registration/selfreg>
2. Access the Advanced page of the Electronic service Agent Configuration Program (see page 0) and fill in the IBM ID field(s).

Internal IBM view of the Service Agent information is granted only to Support Community representatives with appropriate authorization.

Privacy of company information

Information that is collected by Electronic Service Agent is limited to only machine inventory and error data. Inventory information collected includes:

- Your support contact information, including names, phone numbers, and e-mail addresses
- Your IBM Registration ID
- System utilization, performance, system failure logs, part feature codes, part number, part serial number, part locations, software inventory, operating system applications, program temporary fixes (PTFs), the maintenance level, and configuration values

Inventory information does not include:

- Company's financial, statistical, or personnel data
- Client information
- Business plans

Communication Security

In your networked environment, communication between Data Collectors and the Gateway server is TCP/IP encrypted using Secure Socket Layer (SSL) . Electronic Service Agent has the ability to collect machine inventory information and transmit it to IBM on a scheduled basis.

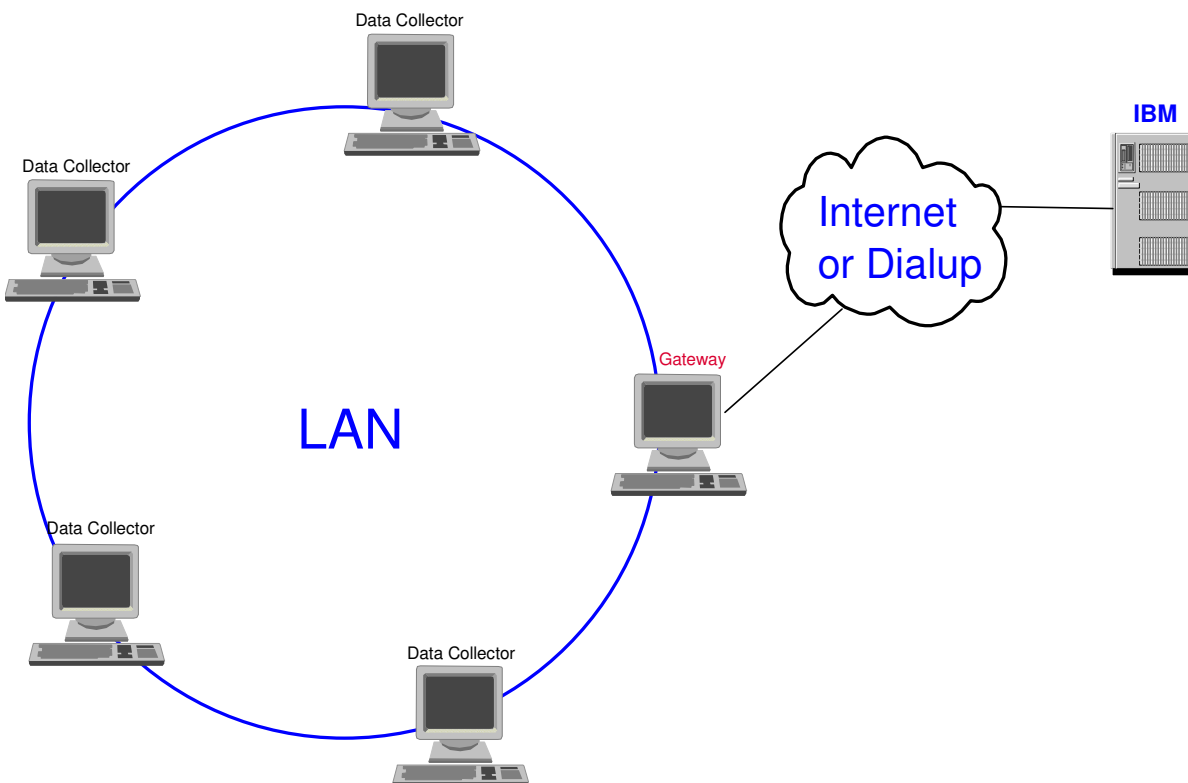
- All Service Agent transactions are outbound requests that are Hypertext Transfer Protocol Secure (HTTPS) secured through encryption.
- Electronic Service Agent has no inbound capability and therefore cannot accept any incoming connection attempts. For example, the Service Agent client initiates a connection with IBM, similar to a Web browser, and then IBM replies. However, IBM never initiates a connection to a client environment.

System Enrollment with IBM

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

Electronic Service Agent Environment

Electronic Service Agent is designed to monitor xSeries servers in a networked environment. In order to do this, Electronic Service Agent must be installed on every system you want to monitor.



Each system to be monitored is designated as a Data Collector, with one system within your network designated as the Gateway server. A Data Collector is responsible for gathering information (machine inventory and errors) about the monitored system and forwarding this to the Gateway server. If the system is under service agreement or warranty, the Gateway server formats and sends the information to IBM, either by dial-up¹ or the Internet.

Electronic Service Agent Components

Electronic Service Agent has three principal components:

- Gateway
- Data Collector
- Service Agent Manager

Gateway must be installed on a server with Internet access capable of making a connection to IBM. When you install Gateway on Linux, Data Collector and Service Agent Manager are installed automatically also.

Data Collector must be installed on each system you want to monitor. When you install Data Collector, Service Agent Manager is installed automatically also.

¹ Available on select Windows platforms only.

Gateway

The Gateway server is responsible for formatting the collected monitored system data and sending it to IBM through the Internet. The Gateway server communicates with all the systems in your network that have Data Collector installed.

Data Collector

Data Collector provides monitored system data to the Gateway server. Data is transferred from the Data Collectors to the Gateway server securely using TCP/IP.

Service Agent Manager

Service Agent Manager is a graphical user interface application that is used to configure and administer Electronic Service Agent. A Service Agent Manager is automatically installed on the Gateway server and each Data Collector in your network. Configuration and administration of each component is performed locally on the respective system as the Service Agent Manager has no remote capability.

From the Service Agent Manager you can:

- Configure system contact information
- View historical details of significant system events
- Start and stop the service agent

Receiving Updates

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

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

Or

<http://www.ibm.com/support/electronic> Select Electronic Service Agent category.

Getting Help

For information about help and technical support, please see “Chapter 9. Getting Help and Technical Assistance” on page 51.

Chapter 3. Electronic Service Agent Requirements

This chapter contains information about Electronic Service Agent installation requirements.

Hardware Requirements

This section contains information about the minimum requirements that must be met when you install Electronic Service Agent. Because a system configured with the minimum requirements might perform poorly in a production environment, consider the following suggestions:

- The microprocessor speed, memory, and disk space minimum requirements are *in addition* to whatever resources are necessary for the software already installed on the system.
- Conduct a performance analysis to ensure that the system has sufficient capacity to handle the additional requirements of functioning as a Gateway

The following table lists the minimum microprocessor speed, random access memory (RAM), and disk space needed.

| Requirements | Data Collector | Gateway |
|------------------------|--|-------------------------------------|
| Microprocessor (speed) | Pentium (300MHz) | Pentium (300MHz) |
| RAM Memory | 128MB | 256MB (512MB recommended) |
| Disk Space | 43 MB for all Linux OSs | 110MB + 2MB for each Data Collector |
| Monitor | Super VGA monitor with the screen resolution set to at least 800 x 600, small fonts setting and 256 colors for Red Hat. For SUSE you need 800 X 1027 for the GUI to work properly. | |
| Connectivity | LAN | Internet Access |

In addition, System Management BIOS (SMBIOS) 2.1 or later is required for all systems

Supported Operating Systems

You can install Electronic Service Agent on the following operating systems:

- Red Hat Enterprise Linux AS, version 3.0, for Intel x86
- Red Hat Enterprise Linux ES, versions 2.1 and 3.0
- SUSE LINUX Enterprise Server 8 for x86 (Service Pack 3 required)

Note: Dial-up modem is not supported.

Network Requirements

Domain Name Server

The Data Collector systems and Gateway communicate with each other using a Local Area Network (LAN). Normally the host names of the systems will be obtained using a Domain Name Server (DNS). It is a requirement that all systems running Electronic Service Agent and communicating with each other be able to resolve the system hostnames. It is expected that in most cases all Electronic Service Agent machines will be on the same subnet, but this is not a requirement for operation. Electronic Service

Agent is intended for a production environment where the network configuration is not undergoing major changes such as systems moving to new subnets.

Firewalls

The normal operation of Electronic Service Agent is “Auto Discovery,” in which the Data Collector systems are able to locate a Gateway system. This is accomplished by the Data Collector executing a multicast operation to network address 239.1.2.3 and port 5557.

It would be unusual to have a hardware firewall between a Data Collector and a Gateway. If there is a hardware firewall, you will need to allow ports 5557 (UDP) and 19955 (TCP) to be open. Consult your firewall documentation or network administrator for exact details.

The normal data communications port is 19955. If this port is blocked by a firewall, it will be necessary to enable communications on this port. If a different port is selected for communications and a firewall is in use, it will be necessary to enable use of the selected port.

If access to the Internet is via an authentication proxy, Electronic Service Agent must be given a user ID and password for the proxy server in order to communicate with IBM.

IBM Director Server

If you have IBM Director Server installed on your system and you try to install Electronic Service Agent, you’ll see a message saying that you will instead have to install the Director Extension version of Electronic Service Agent. While functionally similar to the standalone version described in this document, the Director Extension version is specifically designed to operate with the IBM Director system management application. If you choose not to install the Director Extension version, but plan to install the standalone version, you’ll have to uninstall IBM Director before you may proceed.

If you have any problems uninstalling IBM Director, please consult documents on IBM Director web sites.

IBM Director Agent

Electronic Service Agent requires IBM Director Agent to be installed and running on all Gateway and Data Collector managed systems. **For this release, you must install IBM Director Agent version 4.20.2 (or higher).**

You can download IBM Director Agent from the IBM Systems Management Software:
Download/Electronic Support page at

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

1. Select IBM Director, latest version, and click **Submit**. (You don’t have to fill in any information.) You see a list of items you can download, including the Readme, which gives you the latest information.
2. Download required drivers (LM78 and SMBUS for this version) and the appropriate version of Director Agent for Linux.
3. Install the drivers before installing Director Agent.

Chapter 4. Before You Install

Before starting to install, you should verify that all of the systems meet the requirements and that the prerequisites have been met.

Prerequisites

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

1. Review your environment. **Be sure that you have IBM Director Agent version 4.20.2 (or higher) installed.**
2. Identify which machine will be used as the Gateway.
3. Ensure that the Gateway and all of the Data Collectors meet the system requirements.
4. Ensure that the person installing Electronic Service Agent has **root** authority.
5. Ensure that the monitored machine is under warranty or has an IBM Service agreement.
6. Obtain a proxy user ID and password, if necessary.
7. Obtain Electronic Service Agent.
8. Create ServiceAgent group and user:

```
#groupadd esa  
#useradd -m esadmin -p welcome
```
9. Make sure the Cron daemon is running
From a command prompt, type the following command as **root**:

```
# /etc/init.d/crond status
```

If the cron demon is running the output would be similar to this:
crond (pid 1603) is running...

If the cron demon is not running issue the following command to start it:

```
# /etc/init.d/crond start
```

Reviewing Your Environment

Review the environment that you want to monitor with Electronic Service Agent. Your network must be up and running before you install Electronic Service Agent.

Complete the following tasks to facilitate the installation and discovery of systems and devices:

- Determine the physical locations and network addresses of all systems and devices in your network. Identify local and remote subnets and the network protocols that are used.
- Ensure that all systems and devices are properly installed and cabled.

Identifying Where to Install the Gateway

In order to determine the server on which you will install the Electronic Service Agent Gateway, consider the following:

- Does the machine have access to the Internet?
- Does the machine meet all the system requirements for a Gateway? Check “Chapter 3. Electronic Service Agent Requirements” on page 10 to determine whether your platform is supported.

Determining Whether to Configure a Data Collector Manually

If you install a Data Collector system on a separate subnet from the location of your Gateway, you cannot use the standard auto configuration but must configure a Data Collector manually. This is because the multicast used for auto discovery typically will not be passed across your router.

During installation of a Data Collector you will be asked to select whether you want to configure Data Collectors automatically or manually. Unless your Data Collectors are on a different subnet, you should select automatic installation.

Obtaining Electronic Service Agent

Electronic Service Agent is available by download from an IBM web site using your browser or by ordering a CD.

- **To download from IBM:**
 - 1) Access the following web site:
<http://www.pc.ibm.com/qtechinfo/MIGR-40870.html>
 - 2) Download the following installation package and save it to a temporary directory:
5639_n89_32.bin
- **To order a CD:**
 - 1) Access the web site listed above.
 - 2) Follow the instructions given under “Additional Information.”

Chapter 5. Installing Electronic Service Agent

Installing the Gateway

This section contains instructions for installing a Gateway.

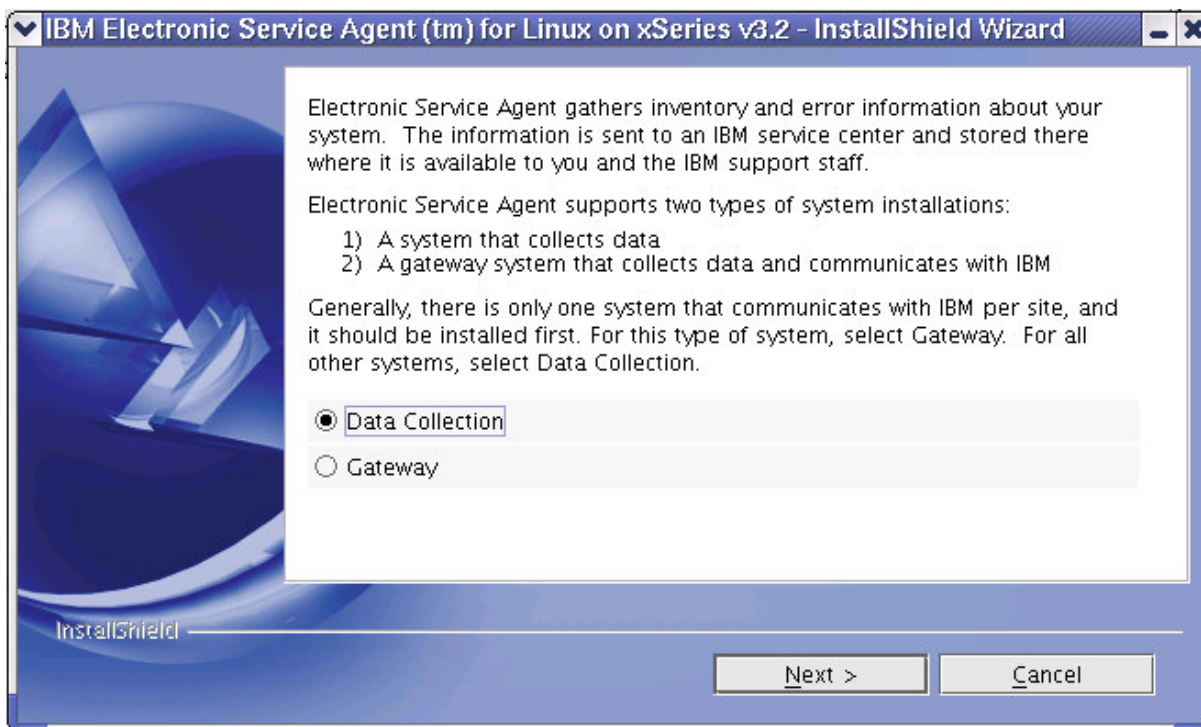
Important: The Gateway must be installed and configured before installing any data collectors.

Before you install:

1. Make sure your network is up and running.
2. Make sure IBM Director Agent version 4.20.2 (or higher) is installed and running. See “IBM Director Agent” on page 11 for more information.
3. Make sure the Gateway machine has access to the Internet.
4. Make sure you have user esadmin and group esa on the machine and that the Cron daemon is running. (See Chapter 4. “Before You Install” on page 12 for more information)

Complete the following steps:

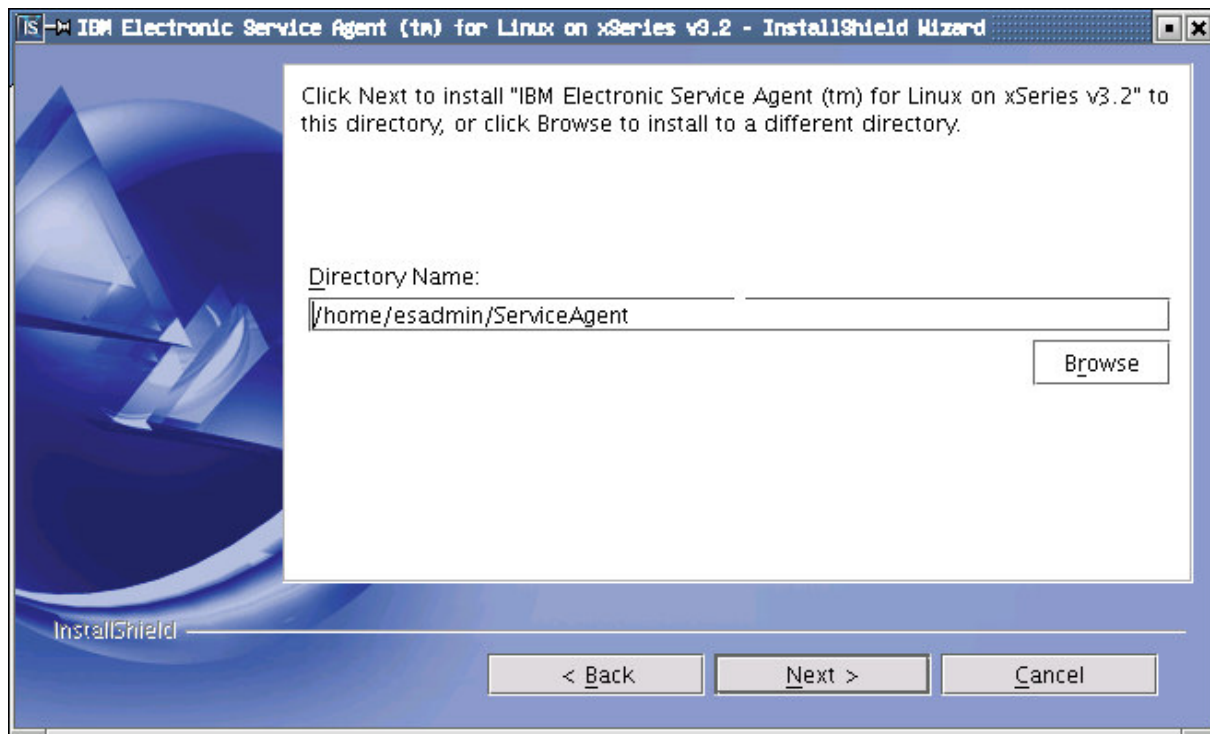
1. Access the 5639-n89-32.bin file in the temporary directory where you saved it or from the CD.
2. As user **root** execute the file to invoke the install wizard. After a brief initialization period, you see a panel asking you to select an installation type.



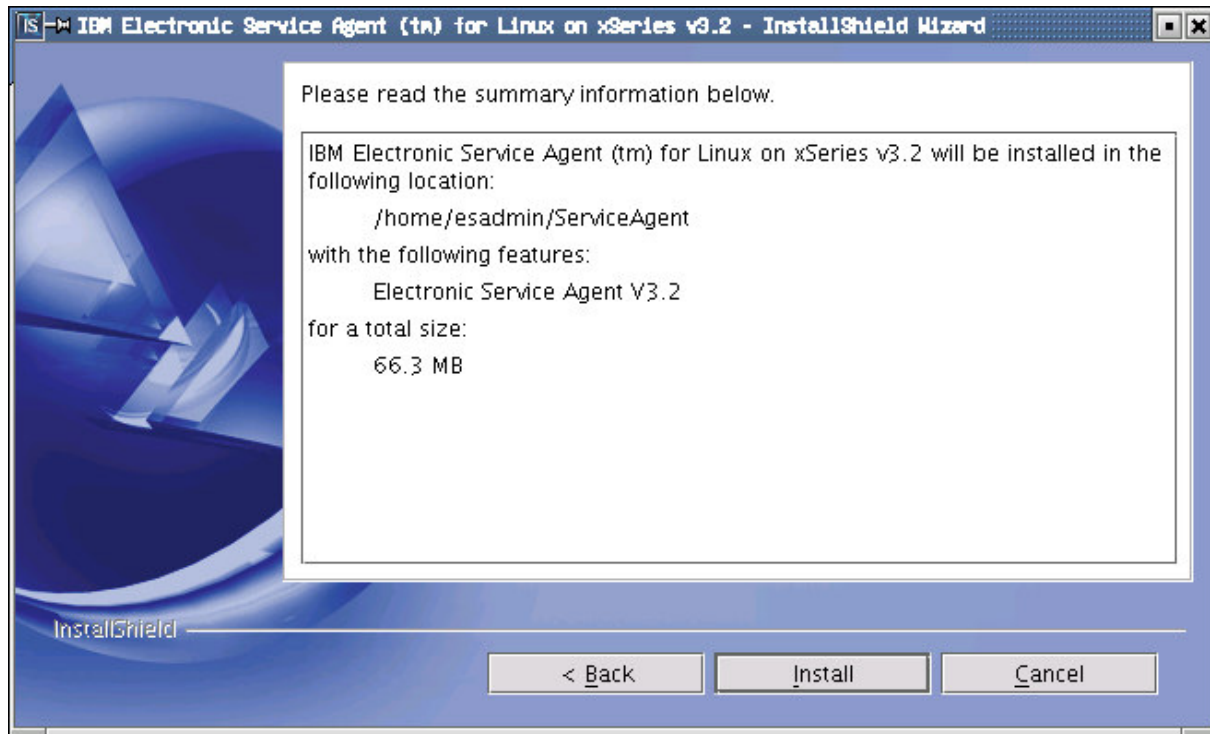
3. Select **Gateway** and click **Next**. You see a panel asking you to read the license agreement.



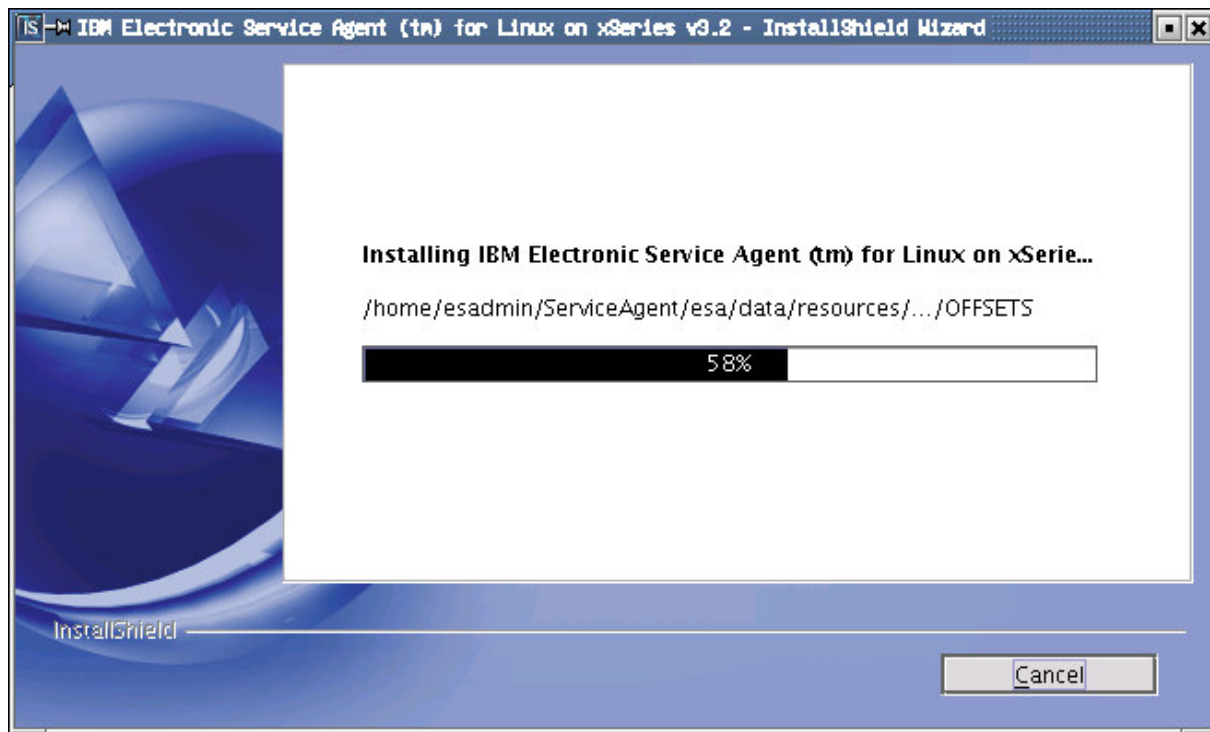
4. Select the option to accept the terms of the agreement and click **Next**. You see a panel asking where (in which directory) you want Electronic Service Agent installed.



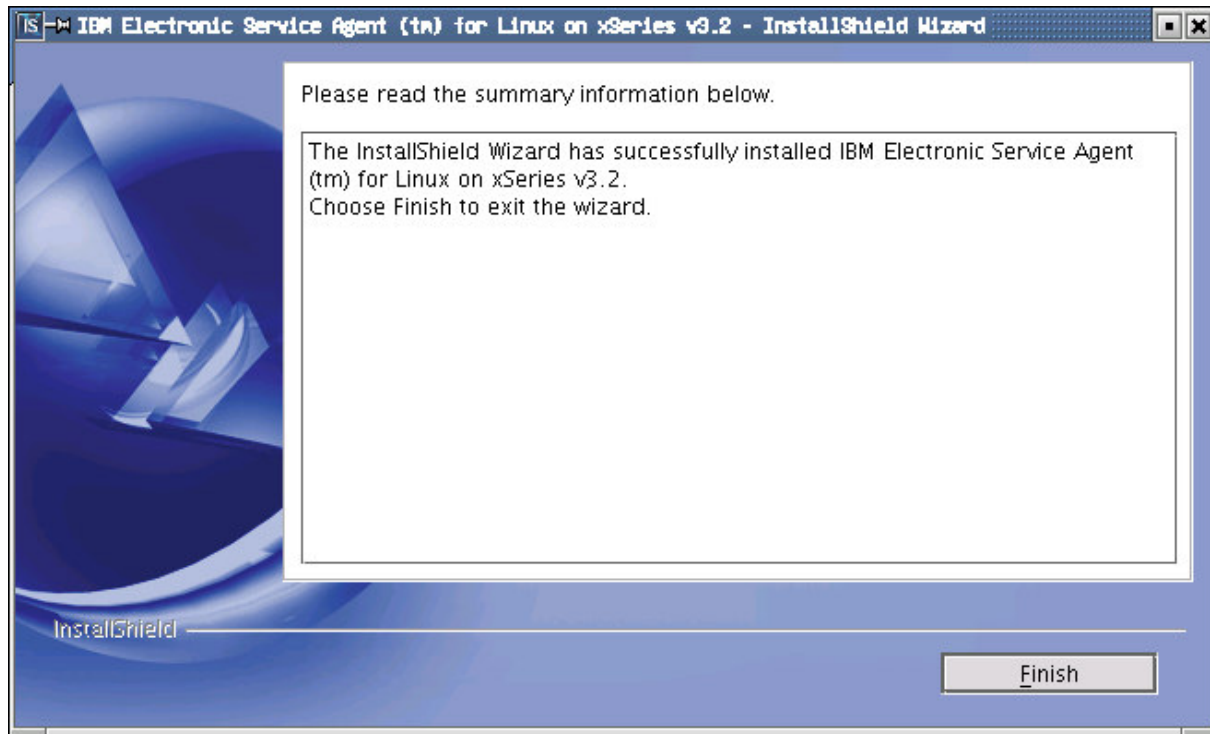
5. Take the default or select **Browse** for a new location. Click **Next**. You see a confirmation panel.



6. Verify your selections, and then click **Next**. A progress indicator will show how long the install process is taking.



7. When completed you see a message that Electronic Service Agent has been successfully installed.



8. Click **Finish** to exit the wizard. **You must now start the Configuration process: it does not start automatically.**

Starting the Configuration Program

After you have installed the Gateway, you must start the program that configures Electronic Service Agent. To do this, follow the instructions below.

Note:

- These instructions assume you are using an X11 window manager. The Configuration program is an X application.
- **/home/esadmin/ServiceAgent** is the default installation location. If an alternate installation location is chosen, the path will have to be modified accordingly.

1. Become the user **esadmin**.
Type **#su - esadmin**
2. 'cd' to ServiceAgent's bin directory
Type **\$cd ServiceAgent/esa/bin**
3. Execute the following command:
./esaManager

You should see the System Status panel of the configuration program. Please see “Chapter 7. Configuration” on page 29 for instructions. If you are unable to start the Configuration program see “Appendix C. X Server access control” on page 53.

Installing a Data Collector

This section contains instructions for installing a Data Collector.

Preparing to install a Data Collector

Before you install a Data Collector, make sure you have installed **and configured** the Gateway. By default, a Data Collector will inherit the Gateway configuration when installed on the same subnet.

If you plan to install a Data Collector system on a separate subnet from the location of the Gateway, you must manually identify the Gateway during installation rather than allowing the Data Collector to automatically determine it. This is because the multicast used for auto discovery typically will not be passed across your router. During installation you will be asked to choose whether to manually or automatically detect the Gateway. It is recommended that you allow the Data Collector to automatically detect the Gateway whenever possible.

Using the InstallShield Wizard

This section provides information about installation prerequisites and instructions for installing a Data Collector on Linux using the InstallShield wizard. The wizard can be used in a standard interactive mode, or you can perform an unattended installation using a response file to provide answers to the questions that the wizard poses.

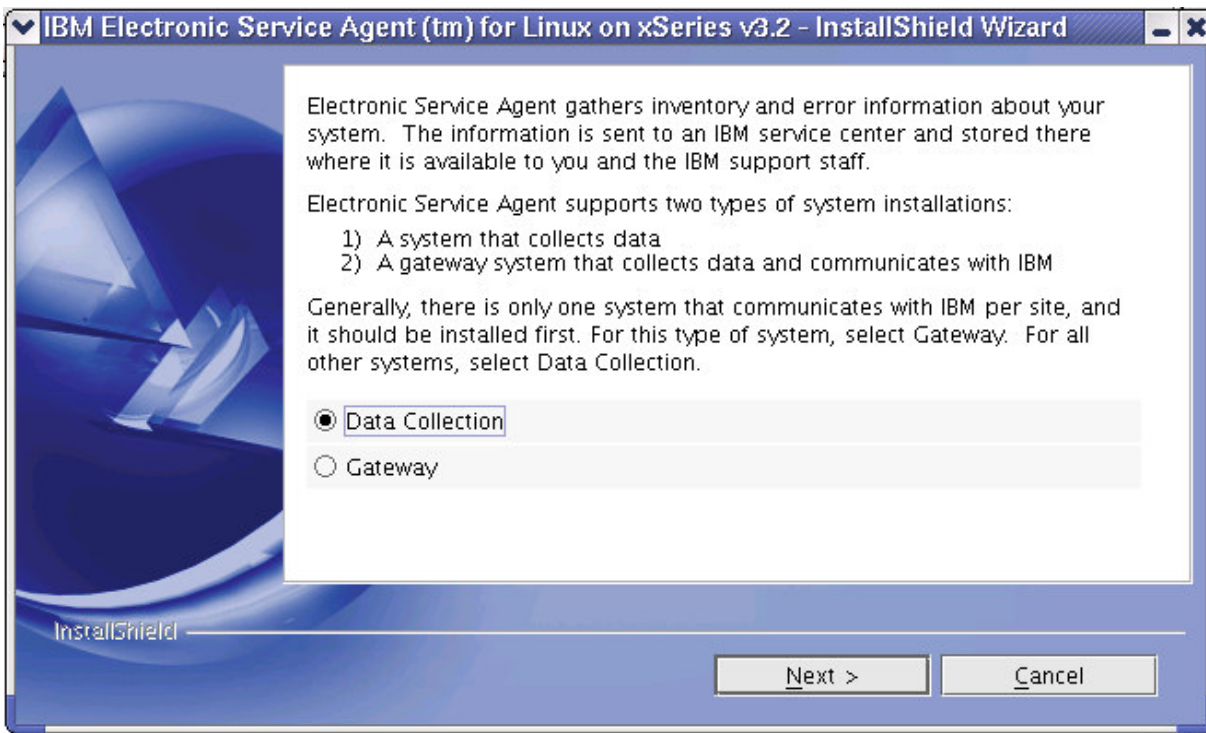
Before you install:

1. You must install and configure the Gateway before installing any Data Collectors.
2. Make sure IBM Director Agent version 4.20.2 (or higher) is installed and running. See “IBM Director Agent” page 11 for more information.
3. Make sure you have user esadmin and group esa on the machine and that the Cron daemon is running. (See Chapter 4. "Before You Install" on page 12 for more information)

Complete the following steps to install a Data Collector on Linux:

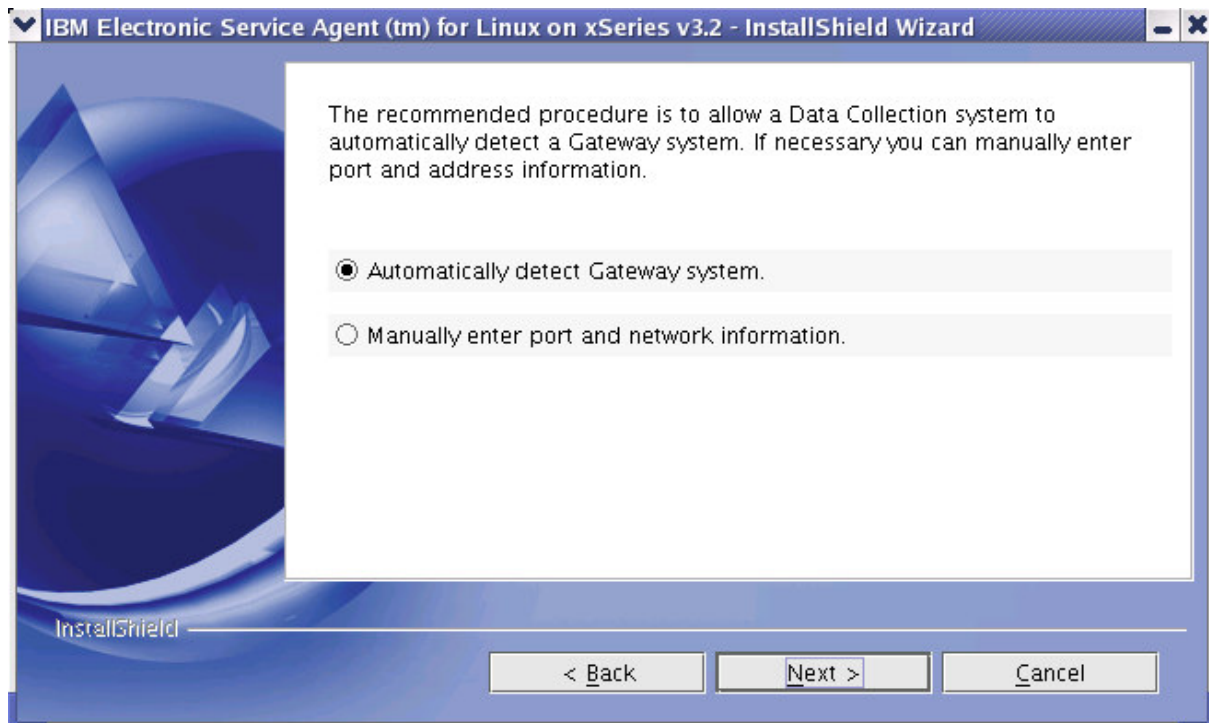
1. Access the 5639-n89-32.bin file in the temporary directory where you saved it or from the CD.

- As user **root** execute the file to invoke the install wizard. You see a panel asking you to select an installation type.



- Select **Data Collection** and click **Next**. You see a panel asking you to read the license agreement. (Please see the panels in the previous section for the remainder of this process. The panels for Gateway and Data Collection are identical.)
- Select the option to accept the terms of the agreement and click **Next**. You see a panel asking where (in which directory) you want Electronic Service Agent installed.
- Take the default or select **browse** for a new location. Click **Next**. You see a confirmation panel.
- Verify your selections, and then click **Next**. A progress indicator will show how long the install process is taking.

7. When completed you see a panel containing configuration choices.

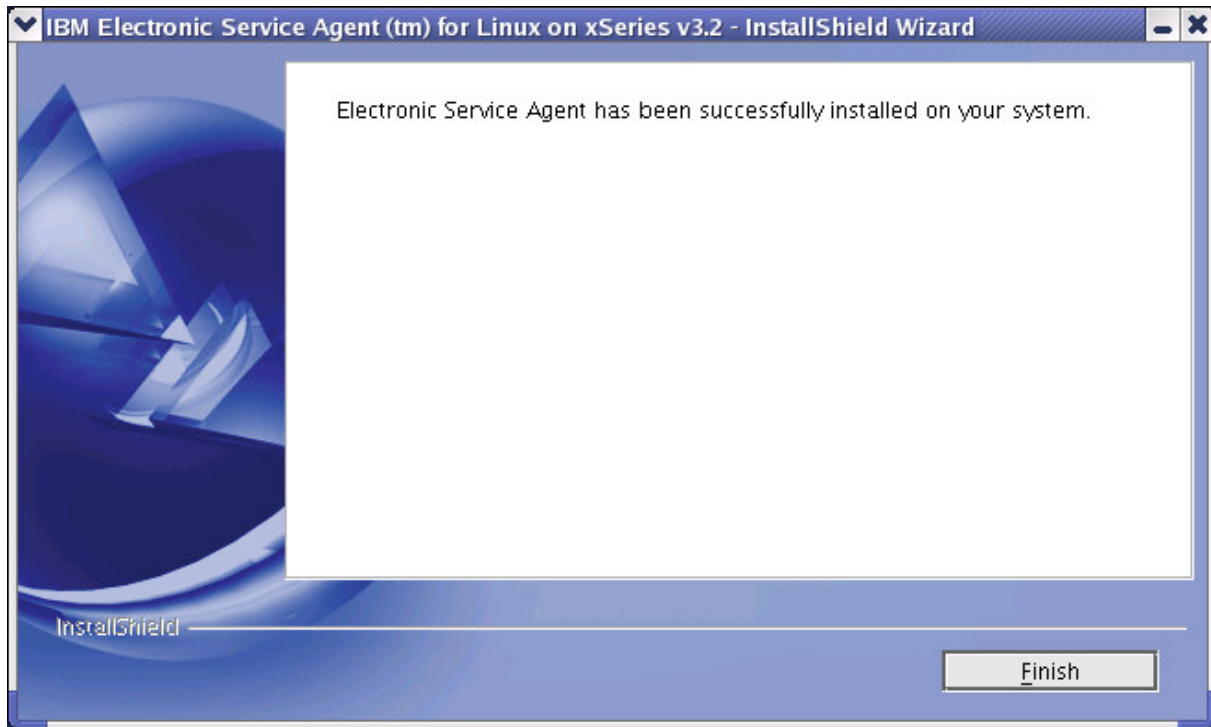


8. Do one of these:

- Select “Automatically detect Gateway System” to have the Data Collector configure itself based on the Gateway configuration. This option should only be selected if the data collector and the gateway are on the same subnet.
- Select “Manually enter port and network information” if the Data Collector you are installing and the gateway are on separate subnets.

9. Click **Next**. One of these events occurs:

- If you selected automatic configuration, you see a panel telling you that installation is Complete.

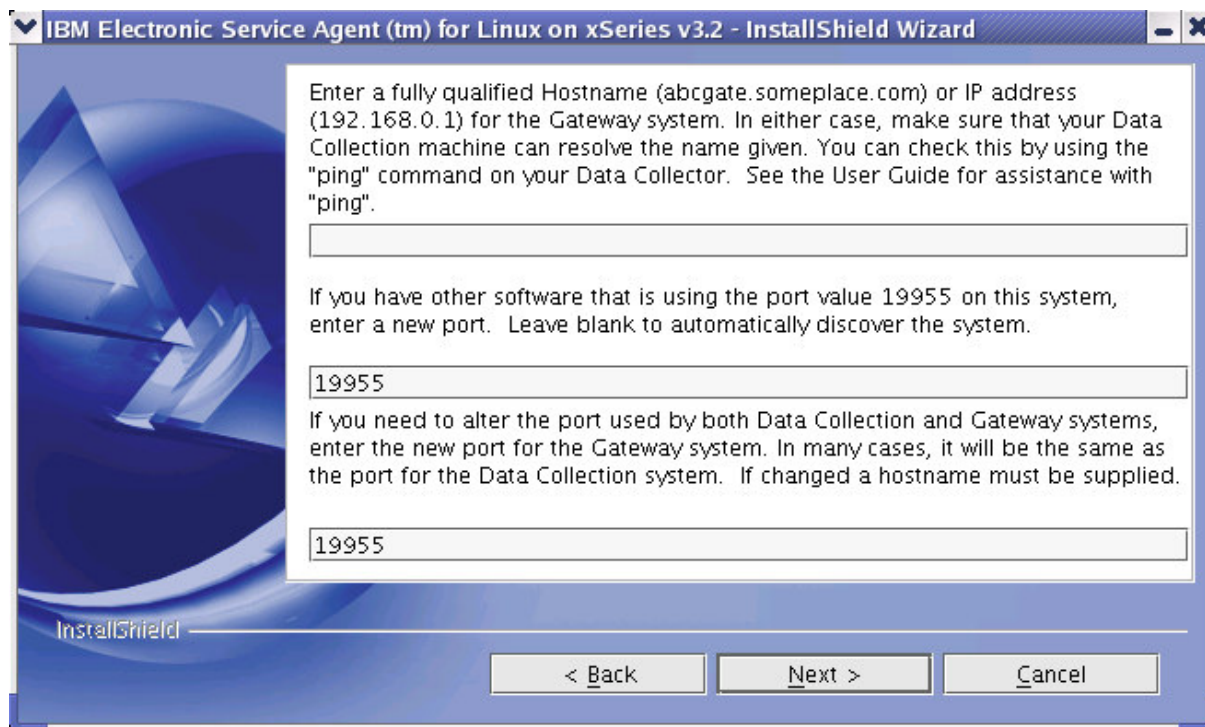


Click **Finish**.

- If you selected manual configuration, you see the panels described in the next section of this document.

Installing a Data Collector Manually

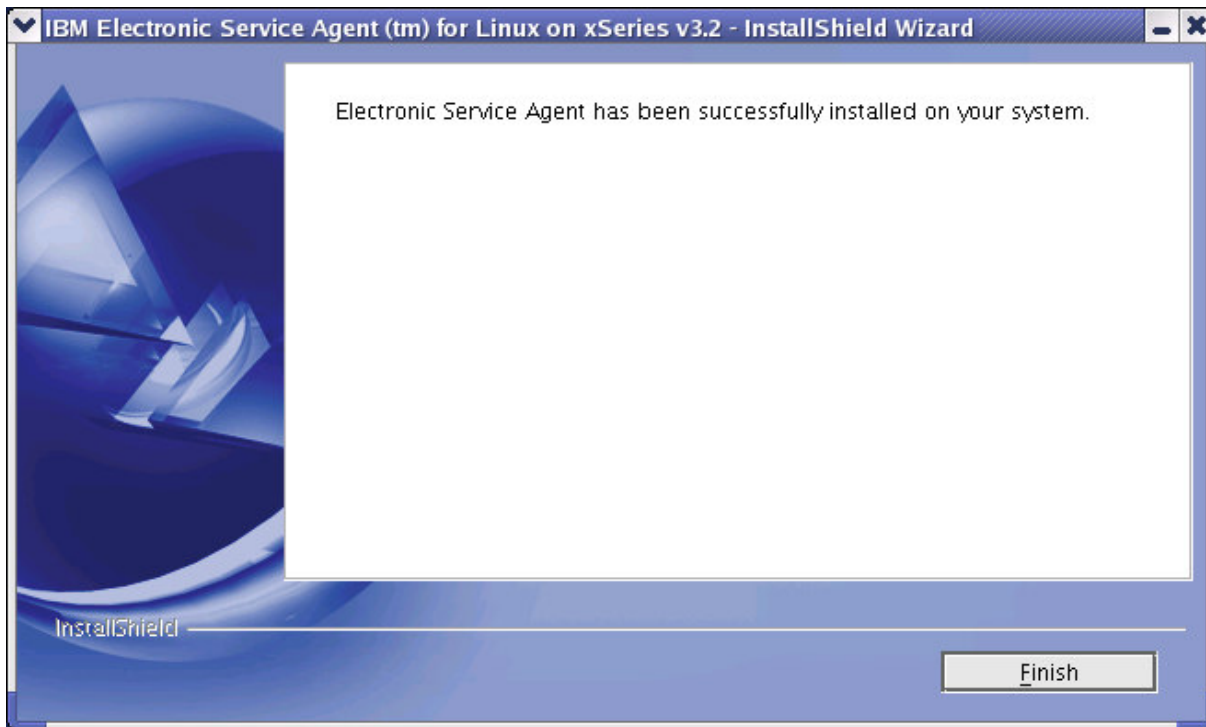
1. Select “Manually enter port and network information.” You see the **Manually enter port and network information** panel.



2. Enter data as follows:
 - In the first field, enter one of these:
 - A fully qualified hostname, for example, “abcgate.someplace.com” rather than just “abcgate.”
 - An IP address such as “12.120.37.15”. See “Appendix A. Resolving a Machine IP Address” on page 52.

In either case, make sure that your Data Collection machine can resolve the name given. You can check this by using the “ping” command on your Data Collector. See "Appendix B: Resolving a Host Name" on page 53.
 - In the second field, if you have other software that is using the port value 19955, and if you need to change the value only on a Data Collection system, enter a new port.
 - In the third field, if you need to alter the port used by both Data Collection and Gateway systems, enter the new port for the Gateway system. In many cases, it will be the same as the port for the Data Collection system.

3. Click **Next**. You see panel confirming the installation.



4. Click **Finish**.

Note: You can perform an unattended installation of a Data Collector using a response file, which provides answers to the questions posed by the InstallShield wizard. You can use this method to create a standard installation file that can be used on many systems.

See “Chapter 6: Unattended Installation” on page 25 for more details.

Chapter 6. Unattended Installation of a Data Collector

IBM Electronic Service Agent gives you the ability to install one or more Data Collectors, using an installation options file named "datacollector.rsp." This file contains the default options for Data Collectors that are installed on the same subnet as the Gateway. To use this file for Data Collectors on different subnets, refer to "Installing a Data Collector Manually" on page 24.

The contents of the file are included here.

```
#####
##
#
# InstallShield Options File
#
# Wizard name: Install
# Wizard source: setup.jar
# Created on: Wed Jan 05 16:54:17 PST 2005
# Created by: InstallShield Options File Generator
#
# This file contains values that were specified during a recent execution of
# Install. It can be used to configure Install with the options specified below
# when the wizard is run with the "-options" command line option. Read each
# setting's documentation for information on how to change its value.
#
# A common use of an options file is to run the wizard in silent mode. This lets
# the options file author specify wizard settings without having to run the
# wizard in graphical or console mode. To use this options file for silent mode
# execution, use the following command line arguments when running the wizard:
#
# -options "datacollector_linux32.rsp" -silent
#
#####
##

#####
##
#
# Custom Dialog: EsaWelcome
#
# The initial state of the System Type panel. The system types are stored as
# Variables and must be set with -V
#
```


-V DataCollector="true"

```
#####  
##  
#  
# Custom Dialog: EsaWelcome  
#  
# The initial state of the System Type panel. The system types are stored as  
# Variables and must be set with -V  
#
```

-V Gateway="false"

```
#####  
##  
#  
# Custom Dialog: License  
#  
# The initial state of the License panel. The accept and reject option states  
# are stored as Variables and must be set with -V  
#
```

-V LICENSE_ACCEPT_BUTTON="true"

```
#####  
##  
#  
# Custom Dialog: License  
#  
# The initial state of the License panel. The accept and reject option states  
# are stored as Variables and must be set with -V  
#
```

-V LICENSE_REJECT_BUTTON="false"

```
#####  
##
```

Chapter 6. Unattended Installation of a Data Collector

```
#  
# Custom Dialog: DaManualConfigureDialog  
#  
# The initial state of the Manual Data Collector panel. The host name, data  
# collection port, and gateway ports are stored as Variables and must be set  
# with -V.  
#
```

```
-V DaPort="19955"
```

```
#####  
##  
#  
# Custom Dialog: DaManualConfigureDialog  
#  
# The initial state of the Manual Data Collector panel. The host name, data  
# collection port, and gateway ports are stored as Variables and must be set  
# with -V.  
#
```

```
-V GatewayPort="19955"
```

```
#####  
##  
#  
# Custom Dialog: DaManualConfigureDialog  
#  
# The initial state of the Manual Data Collector panel. The host name, data  
# collection port, and gateway ports are stored as Variables and must be set  
# with -V.  
#
```

```
-V GatewayHostName="9.47.56.31"
```

```
#####  
##  
#  
# IBM Electronic Service Agent (tm) for Linux on xSeries v3.2 Install Location  
#
```

Chapter 6. Unattended Installation of a Data Collector

```
# The install location of the product. Specify a valid directory into which the
# product should be installed. If the directory contains spaces, enclose it in
# double-quotes. For example, to install the product to C:\Program Files\My
# Product, use
#
# -P installLocation="C:\Program Files\My Product"
#
```

```
-P installLocation="/home/esadmin/ServiceAgent"
```

```
#####
##
```

Chapter 7. Configuring Electronic Service Agent

After you have installed Electronic Service Agent, it must be configured before it can monitor your managed systems. Electronic Service Agent is configured and administered through a graphical user interface application known as the Electronic Service Agent Manager. This chapter explains how to configure Electronic Service Agent using the Electronic Service Agent Manager.

For the Gateway, configuration is required

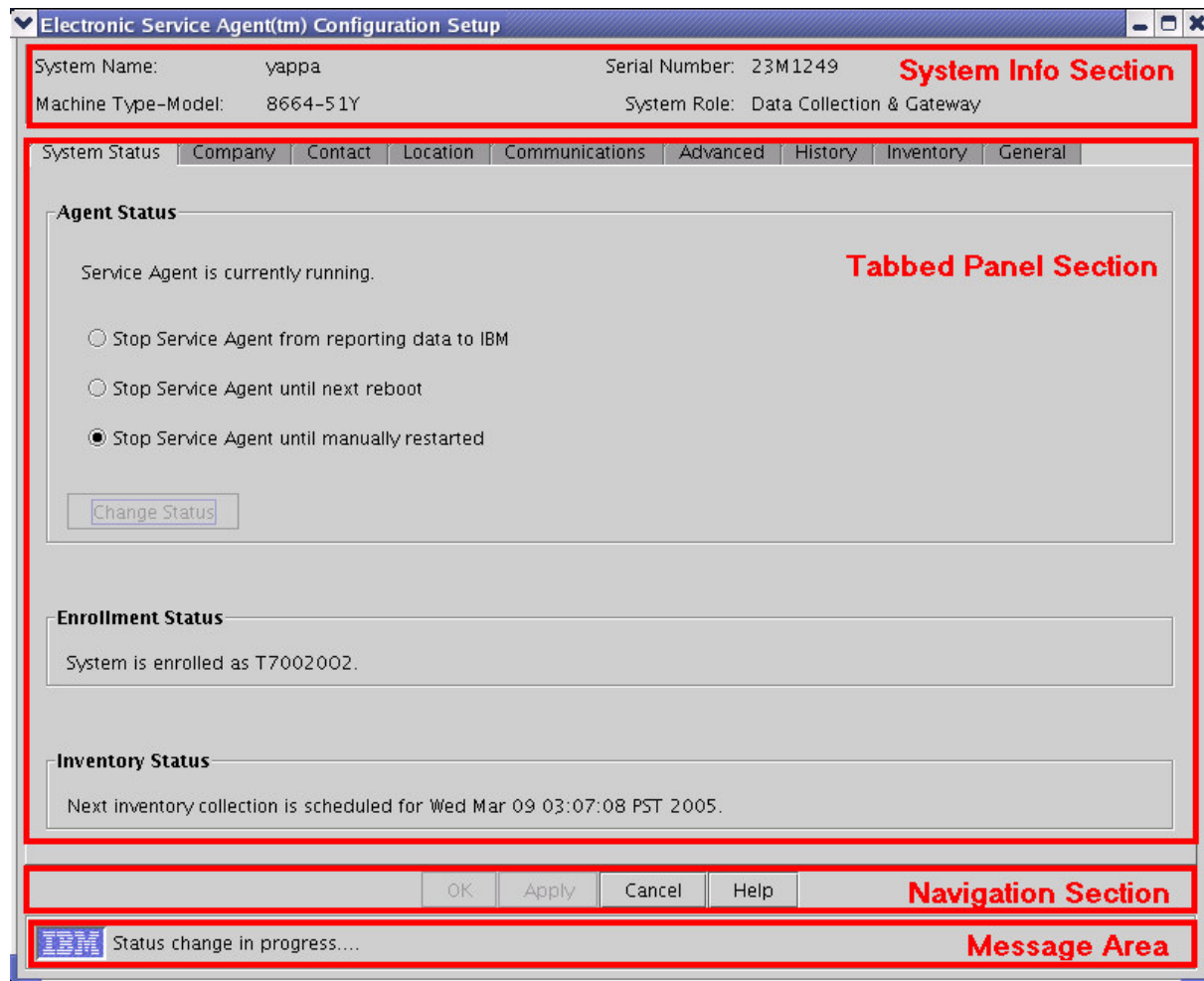
For a Data Collector, configuration is usually not required since it inherits its configuration information from the Gateway during installation. If you do have to make a change in configuration, for instance when the Data Collector has a different physical location or contact name than the Gateway, you may execute the Electronic Service Agent Manager on the Data Collector and manually override the default information.

Understanding Electronic Service Agent Manager

This section is intended to familiarize you with the Electronic Service Agent Manager.

Electronic Service Agent Manager Interface

Before you begin using the Electronic Service Agent Manager, review the layout of its interface.



The interface has four sections:

- The **System Info Section** displays the following information about the managed system:
 - *System name* is the name sent to IBM as the "Customer name" for the system
 - *Machine Type-Model* is the machine type and model number as transmitted by Service Agent.
 - *Serial Number* is the machine serial number as transmitted by Service Agent.
 - *Role* indicates the role of Electronic Service Agent for the managed system either Data Collection or Gateway.
- The **Tabbed Panel Section** contains *tabs* that represent the various configuration panels available through the application.
- The **Navigation Section** contains buttons that correspond to a given configuration panel. Two different sets of navigation buttons are presented depending on whether Electronic Service Agent is being configured for the first time (setup) or has previously been configured. (See the next section, "Navigating Electronic Service Agent Manager.")

- The **Message Area** is used for displaying messages generated by the application.

Navigating Electronic Service Agent Manager

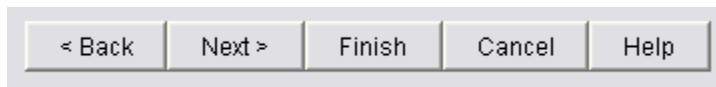
These are the main configuration tabs presented by the Electronic Service Agent Manager:

- **System Status** reports the current status of Electronic Service Agent and lets you start and stop it.
- **Company** contains information about your company.
- **Contact** contains contact detail about the person who is responsible for this system.
- **Location** describes where the managed system is located.
- **Communications** contains information about the network setup.
- **Advanced** lets you define who is authorized to view the data sent to IBM.
- **Inventory** lets you filter inventory and view data collect and run times.
- **History** provides historical details of significant system events.
- **General** shows system details, "about" information, and legal notices.

When a tab is clicked, the corresponding configuration information is displayed along with the appropriate set of navigation buttons. There are two different sets of navigation buttons possible depending on whether Electronic Service Agent is being configured for the first time (setup buttons) or has already been configured for your managed system (operational buttons).

- *Setup Navigation buttons* are presented when Electronic Service Agent is being configured for the first time, when the status of Electronic Service Agent is “not configured” (See System Status Tab).

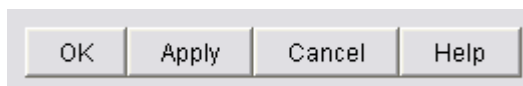
The Setup Navigation buttons use the *Back/Next/Finish* approach found on many installation wizards. They are intended to guide you through initial setup and provide immediate feedback when configuration is complete.



Click:

- **Back** to return to the previous configuration panel.
- **Next** to proceed to the next configuration panel.
- **Finish** to save all changes and remain on the current panel. The Finish button will only be enabled when all required setup information has been provided.
- **Cancel** to cancel all changes and exit the application.

- *Operational Navigation buttons* are presented once the Electronic Service Agent has been set up.



Click:

- **OK** to save changes and exit the application. (You don't have to click **Apply** before clicking **OK**.)
- **Apply** to save your changes and remain on the current panel.
- **Cancel** to cancel changes and exit the application.

Accessing Electronic Service Agent Manager

To access the Electronic Service Agent Manager, for the purpose of configuring a Gateway or a Data Collector, follow this procedure:

Note:

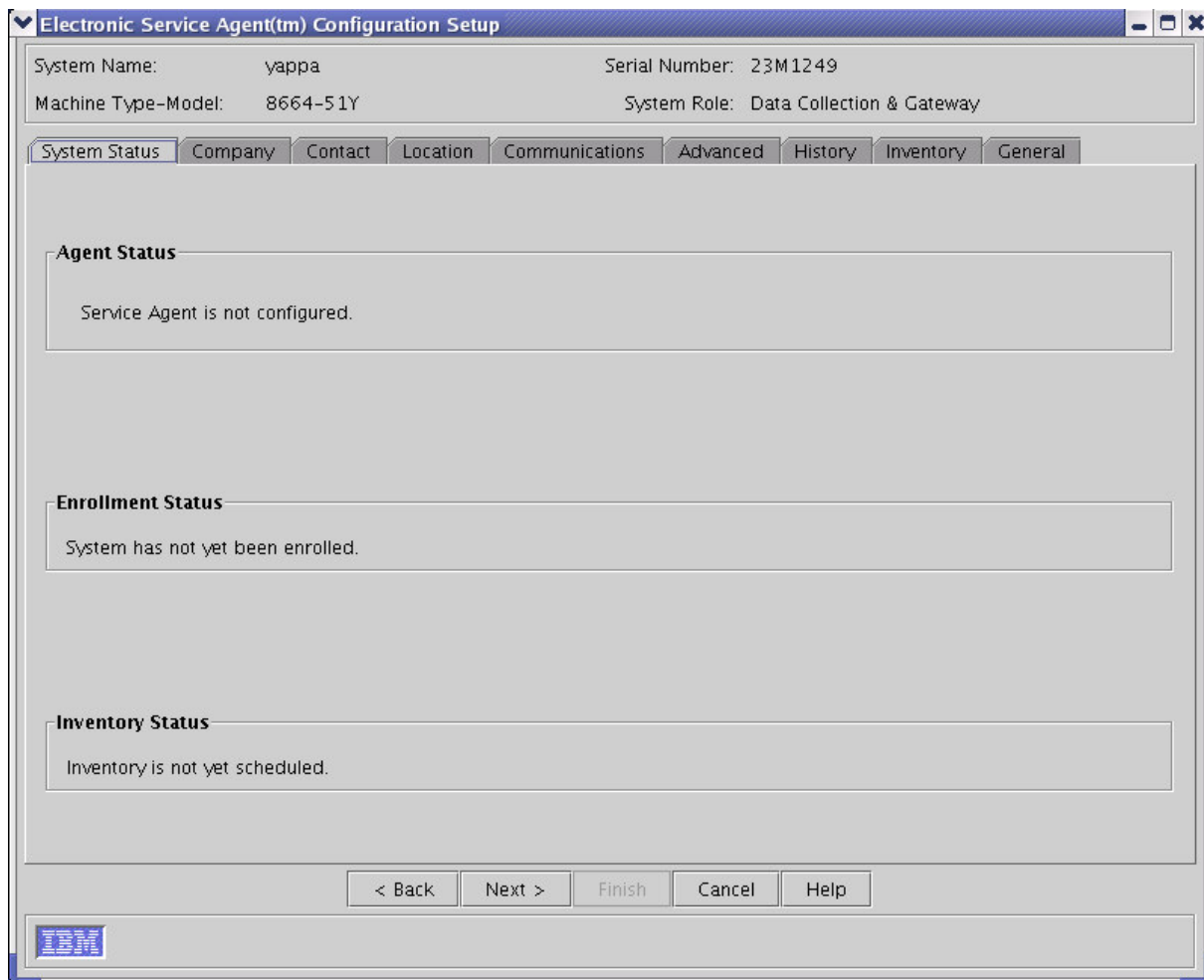
- These instructions assume you are using an X11 window manager. The Configuration program is an X application.
- **/home/esadmin/ServiceAgent** is the default installation location. If an alternate installation location is chosen, the path will have to be modified accordingly.

1. Become the user **esadmin**.
Type **#su - esadmin**
2. 'cd' to ServiceAgent's bin directory
Type **\$cd ServiceAgent/esa/bin**
3. Execute the following command:
./esaManager

You should see the System Status panel of the configuration program. Please see “Chapter 7. Configuration” on page 29 for instructions. If you are unable to start the Configuration program see “Appendix C. X Server access control” on page 53.

The System Status Panel

The *System Status* tab displays the current status of Electronic Service Agent and provides a method to start or stop Electronic Service Agent.



The following information is displayed:

- **Agent Status** displays the current operational status of the Electronic Service Agent (see “Agent Status Messages” below for details.)
- **Enrollment Status** displays the current enrollment status of the Electronic Service Agent with the external Service Data Receiver (SDR). Statuses are either "System is enrolled as xxxxxx" or "System has not yet been enrolled."
- **Inventory Status** displays the locale-sensitive timestamp showing when the next inventory will be collected. If the system has not been enrolled, you see the message: "Inventory is not yet scheduled."

Note: The scheduler state file is updated every hour. If the closest collection time is in the past, the message states: "Inventory has been run within the hour, and the next scheduled time has not yet been recorded. Please check later."

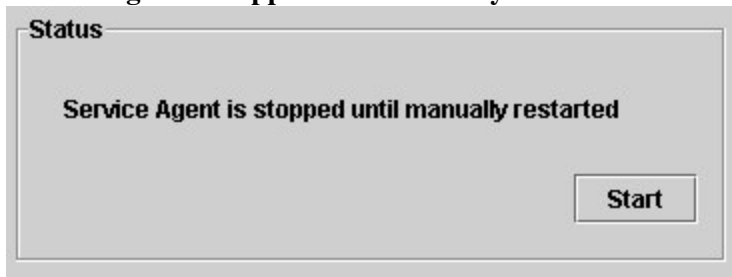
Agent Status Messages

The Agent Status field displays one of the following messages:

- **Service Agent is not configured.** This is the initial status before you have completed configuration.

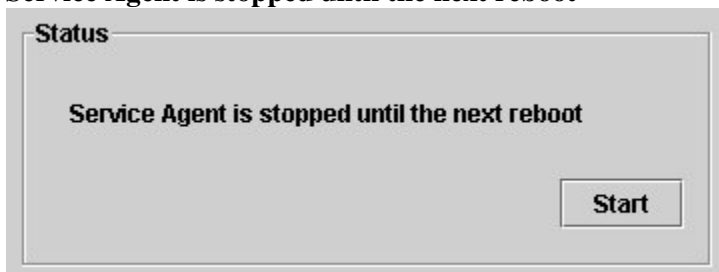


- **Service Agent is stopped until manually restarted**



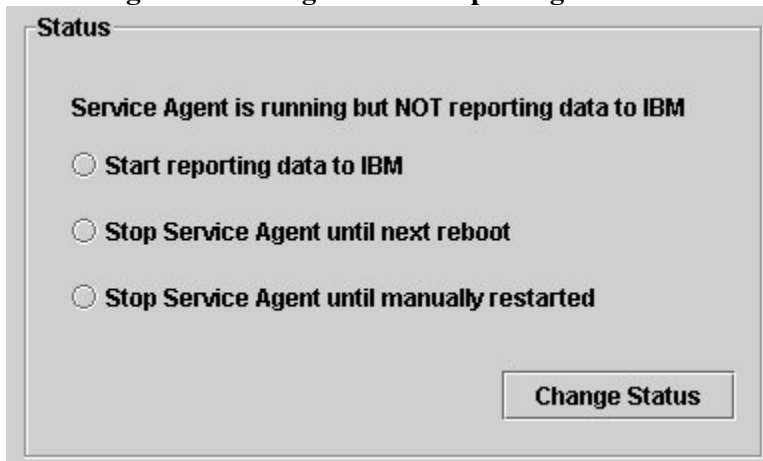
You can elect to start Electronic Service Agent by clicking the **Start** button, or you can wait until the next reboot.

- **Service Agent is stopped until the next reboot**



You can click **Start** or wait until the next reboot.

- **Service Agent is running but NOT reporting data to IBM**



Select one of the options below and then click **Change Status**:

- Start reporting data to IBM.
- Stop Electronic Service Agent until next reboot.
- Stop Electronic Service Agent until manually restarted.

- **Service Agent is running but NOT configured** (Data Collector Only)



Click **Stop** to change the Service Agent status to Stopped.

You can select one of the following options:

- Stop reporting data to IBM.
- Stop Electronic Service Agent until next reboot.
- Stop Electronic Service Agent until manually restarted.

If you make changes, click **Apply** or **Finish** to save them and remain on the panel. Or click **OK** to save changes and exit.

The Company Panel

The Company panel allows you to change the information about your company.

The screenshot shows the 'Electronic Service Agent(tm) Configuration Setup' dialog box with the 'Company' tab selected. The dialog box contains the following information and fields:

- System Name: yappa
- Serial Number: 23M1249
- Machine Type-Model: 8664-51Y
- System Role: Data Collection & Gateway
- System Status (selected)
- Company (selected)
- Contact
- Location
- Communications
- Advanced
- History
- Inventory
- General
- Company Name*: Your Company
- Country or Region*: UNITED STATES
- Telephone*: 1112223333
- Extension: 123
- e-mail Address: johndoe@company.com
- 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. Please see the User's Guide for more information.
- Enterprise or ECI ID: [Empty field]
- Navigation buttons: < Back, Next >, Finish, Cancel, Help
- IBM logo

Fill in the fields and click **Apply**, **Finish** or **Next** to remain in the application or **OK** to save and exit:

- **Company**: free-form text field, restricted to 30 characters
- **Country or Region**: select from pull-down menu
- **Telephone**: telephone number (restricted to 10 digits in the US or Canada, beginning with area code; 30 characters in other countries), no parentheses, hyphens, or spaces
- **Extension**: displayed only in the US and Canada; restricted to 4 digits
- **email**: your company's Internet address, such as abc@abc.com.
- **Enterprise or ECI ID**: enter one of these:
 - Your IBM-assigned Enterprise number. An Enterprise is a grouping of customer numbers.
 - Your Electronic Customer Interface (ECI) ID. These numbers are used to identify customers and their associated service agreement terms, so entering this will help IBM ensure that you receive any special services that your company has arranged with IBM. Your purchasing team may be able to provide an ECI ID.

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

The Contact Panel

Having accurate contact information is fundamental for IBM's service delivery. The Contact panel allows you to change the contact details of the person within your company who will act as a point of contact. IBM will contact this person during the process of resolving your managed systems' hardware problems.

The screenshot shows the 'Electronic Service Agent(tm) Configuration Setup' dialog box with the 'Contact' tab selected. The dialog box contains the following information and fields:

- System Name: yappa
- Serial Number: 23M1249
- Machine Type-Model: 8664-51Y
- System Role: Data Collection & Gateway
- Navigation tabs: System Status, Company, **Contact**, Location, Communications, Advanced, History, Inventory, General
- Contact name*: John Doe
- Country or Region*: UNITED STATES (dropdown menu)
- Telephone*: 1112223333
- Extension: (empty field)
- e-mail Address*: johnDoe@company.com
- Buttons: < Back, Next >, Finish, Cancel, Help
- IBM logo at the bottom left.

Fill in the fields and click **Apply**, **Finish** or **Next** to remain in the application or **OK** to save and exit:

- **Contact name** is the name or job title of the contact person. This field accepts English or Latin characters only and is restricted to 22 characters.
- **Country or Region** in which the contact person resides. Select from pull-down menu.
- **Telephone** telephone number (restricted to 10 digits in the US or Canada, beginning with area code; 30 characters in other countries), no parentheses, hyphens, or spaces
- Telephone number **Extension** of the contact person. This field is displayed only for contacts residing in the US and Canada and is restricted to 4 decimal digits.
- **E-mail Address** of the contact person, such as janedoe@abc.com

The Location Panel

The Location panel allows you to change information about the location of the managed system. **This is not the mailing address.** It is the physical location of the machine used by IBM to dispatch a field service representative to the appropriate site.

The screenshot shows the 'Electronic Service Agent Configuration Setup' dialog box with the 'Location' tab selected. The dialog box contains the following information and fields:

- System Name: yappa
- Serial Number: 23M1249
- Machine Type-Model: 8664-51Y
- System Role: Data Collection & Gateway
- Navigation tabs: System Status, Company, Contact, Location (selected), Communications, Advanced, History, Inventory, General
- Instruction: 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.
- Fields:
 - Building, Floor, Office*: 1,2,3
 - Country or Region*: UNITED STATES (dropdown menu)
 - Address*: 111 Company Lane
 - City*: Your City
 - State / Province*: Texas (dropdown menu)
 - Post / Zip Code*: 77777
- Buttons: < Back, Next >, Finish, Cancel, Help
- IBM logo in the bottom left corner.

Fill in the fields and click **Apply**, **Finish** or **Next** to remain in the application or **OK** to save and exit:

- **Building, Floor, Office** is the location (within your company premises) of your managed system. This field accepts free-form text and is restricted to 22 characters.
- **Country or Region** in which your managed system resides. Select from pull-down menu.
- **Street Address** details of your managed system. This field accepts free-form text and is restricted to 30 characters.
- **City** in which your managed system resides. This field accepts free-form text and is restricted to 30 characters.
- **State/Province** in which your managed system resides. Select from pull-down menu if one exists for the country or region selected above.
- **Post /Zip Code** appropriate for you managed system. This field accepts free-form text and is restricted to 10 characters.

The Communications Panel - Gateway

The Communications panel configures the channel through which the Gateway should communicate with IBM. The Gateway can communicate with IBM either via dial-up modem or the Internet, depending on the version of Electronic Service Agent you have installed.

The screenshot shows a configuration window with the following elements:

- Navigation tabs: System Status, Company, Contact, Location, **Communications**, Advanced, History, Inventory, General.
- Connection to IBM**: A radio button labeled "Internet" is selected.
- Connection to this system**: A text input field labeled "Port Number*" contains the value "19955".

- **Connection to IBM** allows you to select the means by which this Gateway will communication with IBM. For this release, Internet is the only option.
- **Connection to this system** specifies how Data Collectors can communicate with this Gateway.
 - **Port Number** identifies which port this Gateway will use to receive messages. If you have software using port 19955, you will want to change this to an unused port. All port numbers are a decimal number up to 65535.

Before you start, you must determine whether your system can directly connect to the Internet or whether it needs to connect via a proxy server. If a proxy server is required, you will need its *dotted decimal address* or *fully qualified domain name*. Also, if the proxy server requires authentication, you will need a Gateway user ID and password to connect to the Internet. Your network administrator should be able to supply this information for you.

To configure Electronic Service Agent for Internet connection to IBM, complete the following:

1. Select **Internet** as your connection to IBM. You see a panel asking for Internet connection details.

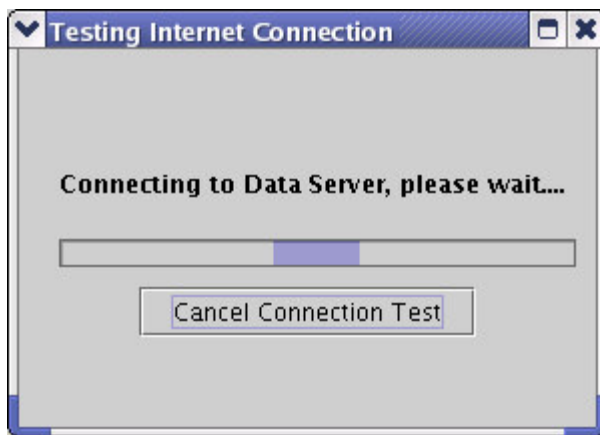
The screenshot shows the 'Electronic Service Agent Configuration Setup' window. At the top, it displays system information: System Name: yappa, Serial Number: 23M1249, Machine Type-Model: 8664-51Y, and System Role: Data Collection & Gateway. Below this is a navigation bar with tabs: System Status, Company, Contact, Location, Communications, **Advanced**, History, Inventory, and General. The 'Advanced' tab is active, showing two main sections: 'Connection to IBM' and 'Connection to this system'. In 'Connection to IBM', the 'Internet' radio button is selected. The 'Connection to this system' section has a 'Port Number*' field with the value '19955'. Below these is the 'Internet Connection Details' section, which includes:

- Use HTTP proxy: Proxy Address* (proxy.company.com) and Port Number* (8888).
- Authentication: User Name* (userid), Password* (masked with asterisks), and Confirm Password* (masked with asterisks).

 At the bottom of this section is a 'Test Connection' area with a 'Test Internet Connection' button. The window footer contains navigation buttons: < Back, Next >, Finish, Cancel, and Help, along with the IBM logo.

2. Select one of these options:
 - If your system can directly connect to the Internet, leave **Use HTTP proxy** unchecked. All other fields will be disabled.
 - If your system connects to the Internet via a proxy server, check **Use HTTP proxy**. Then fill in the fields:
 - **Proxy Address** is either the dotted decimal or fully qualified domain name of the proxy server. This field accepts free-form text and is restricted to 256 characters. No validation is performed.
 - **Port Number** identifies which port the proxy server uses to accept messages. All port numbers are a decimal number up to 65535.
 - If the proxy server is password protected, check **Authentication**. Then fill in the fields:
 - **User Name** is the authorized user ID for the server. This field accepts free-form text and is restricted to 20 characters.
 - **Password** is the password for the user ID. This field accepts free-form text and is restricted to 20 characters.
 - **Confirm Password** is the password repeated.

3. Click **Test Internet Connection** to test your changes. This will resolve the proxy address, contact the proxy server, resolve the IBM address, and establish a secure connection to IBM. You see a progress box that gives you the option to Cancel.



4. If you are changing settings that are working and the test fails, click **Cancel Connection Test**. You see this confirmation.



The existing setting remain unchanged. (Be sure that you have clicked **Apply** or **Finish** to save changes to other panels. If you haven't, your changes will be lost.)

5. Click **OK**.

The Communications Panel - Data Collector

The Communications panel configures the channel through which a Data Collector should communicate with the Gateway.

The screenshot shows the 'Electronic Service Agent(tm) Configuration Setup' dialog box with the 'Communications' tab selected. The dialog box contains the following information and fields:

- System Name:** yappa
- Serial Number:** 23M1249
- Machine Type-Model:** 8664-51Y
- System Role:** Data Collection

The 'Communications' tab is active, showing two main sections:

- Connection to Gateway System:**
 - Port Number*:** 19955
 - IP address or host name*:** esaGateway.company.com
- Connection to this system:**
 - Port Number*:** 19955

At the bottom of the dialog box, there are four buttons: OK, Apply, Cancel, and Help. The IBM logo is visible in the bottom left corner.

Fill in the fields and click **Apply**, **Finish** or **Next** to remain in the application or **OK** to save and exit:

- **Connection to Gateway System** specifies how this Data Collector communicates with the Gateway.
 - **Port Number** identifies which port this Data Collector will use to connect to the Gateway.
 - **IP address or host name** is the address or host name of the Gateway.
 - Normally blank, this field should be filled in only if you do not want to use broadcast to contact the Gateway, or the Gateway is unreachable by broadcast. This would be the case where the Data Collector and the Gateway are on separate subnets.
 - The host name should be entered as a fully qualified name or the IP address of the Gateway. See “Appendix A. Resolving a Machine IP Address” on page 52 and “Appendix B: Resolving a Host Name” on page 53.

- **Connection to this system** specifies how the Gateway communicates with this Data Collector. It must be changed if another application on the local machine uses the default port.
 - **Port Number** identifies which port this Data Collector will use to receive messages. If you have software using port 19955, you will want to change this to an unused port. All port numbers are a decimal number up to 65535.

The Advanced Panel

IBM provides service and support on the web where you can view details of the systems you have enabled and use the data collected by Service Agent. To use the advanced features of Electronic Services and receive the full benefits of Electronic Service Agent, you must enter an IBM Registration ID (IBM ID). The first IBM ID entered will have Administrator authority and is able to authorize additional users on the Electronic Services web site (hotlink to www.ibm.com/support/electronic). The second IBM ID is available as a backup for the Administrator.

The Advanced panel allows you to authorize up to two users to access the web site and view the collected information.

The screenshot shows the 'Electronic Service Agent(tm) Configuration Setup' window. At the top, it displays system information: System Name: yappa, Serial Number: 23M1249, Machine Type-Model: 8664-51Y, and System Role: Data Collection & Gateway. Below this is a tabbed interface with tabs for System Status, Company, Contact, Location, Communications, Advanced (selected), History, Inventory, and General. The 'Advanced' tab contains a section titled 'Authorize Web Users'. This section includes a paragraph of text explaining the purpose of the user IDs, two input fields labeled 'User ID 1' and 'User ID 2', and a URL: <http://www.ibm.com/support/electronic>. At the bottom of the window are buttons for '< Back', 'Next >', 'Finish', 'Cancel', and 'Help'. The IBM logo is visible in the bottom left corner.

Fill in the fields and click **Apply**, **Finish** or **Next** to remain in the application or **OK** to save and exit:

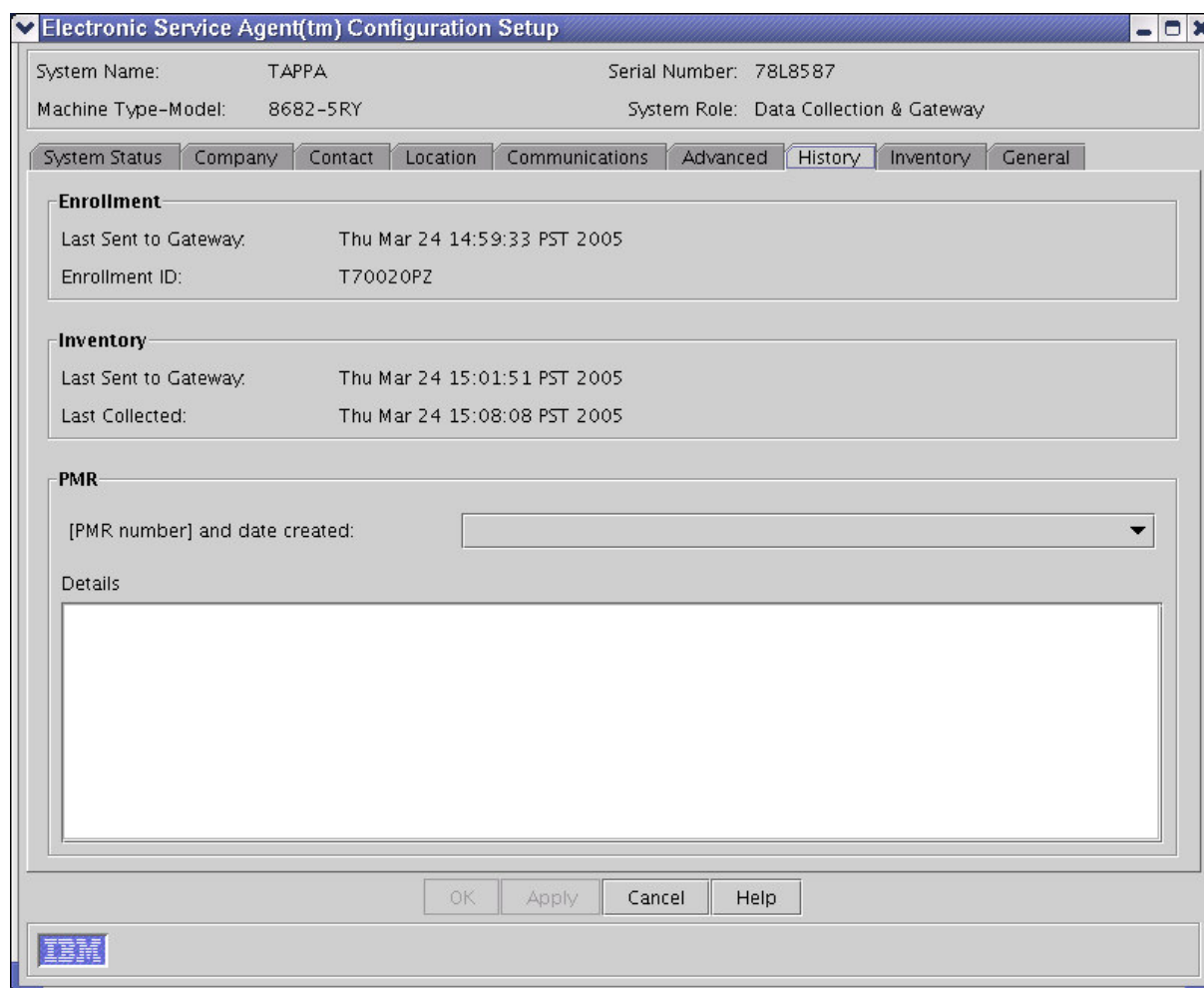
- **Authorize Web Users** displays the authorized users.
 - **User ID1** is the IBM Common Registration ID of authorized user 1
 - **User ID2** is the IBM Common Registration ID of authorized user 2

Consider the following:

- The authorized users must have an IBM Common Registration ID. To obtain this registration, have the users sign on to IBM Registration at <http://www.ibm.com/account/profile>.
- You may add more than two users at the Electronic Service Web Site.
- For more information about the Electronic Service Web Site, please visit <http://www.ibm.com/support/electronic>.

The History Panel

The History panel provides the historical details of significant system events. These include enrollment history, inventory history, and Problem Management Report (PMR) history. The date/time shows inventory not sent when enrolled.



Fill in the fields and click **Apply**, **Finish** or **Next** to remain in the application or **OK** to save and exit:

- **Enrollment** displays historical information concerning enrollment of the managed system.

- **Last Sent to Gateway** is the locale-sensitive timestamp of when the enrollment status was sent to the Service Data Receiver (SDR), the facility on the IBM server that receives messages from Electronic Service Agent
- **Enrollment ID** is the ID with which the Service Agent has been enrolled with IBM.
- **Inventory** displays historical information associated with inventory collection.
 - **Last Sent to Gateway** is the locale-sensitive timestamp of when the inventory status was last sent to IBM.
 - **Last Collected** is the locale-sensitive timestamp of when the inventory was collected.
- **PMR** displays historical information associated with Problem Management Records
 - **PMR Number and date created** shows the identifying number returned from the SDR for the currently selected PMR and the date when the PMR was created. Give this number to the IBM Support Representative when calling IBM about the problem.

If the transaction times out, you will see this message:

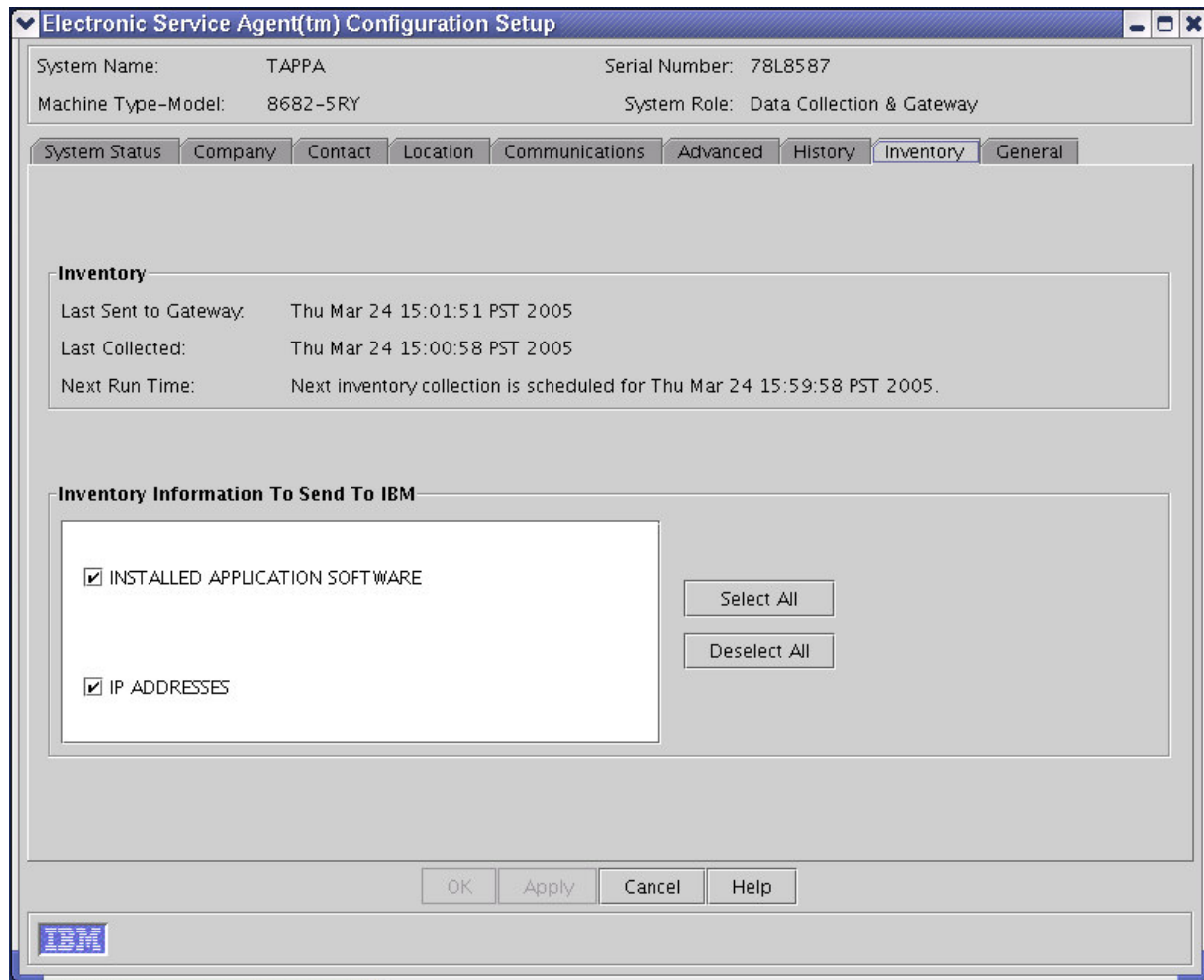
```
PMR Number not available because transaction has  
timed out. Use SDR number nnnnnnnn.
```

Give this number to the Support Representative instead of the PMR number.

- **Details** of the currently selected PMR. This text is only available on the Gateway User Interface and is not translated.

The Inventory Panel

The Inventory panel provides information and control settings for inventory collection.

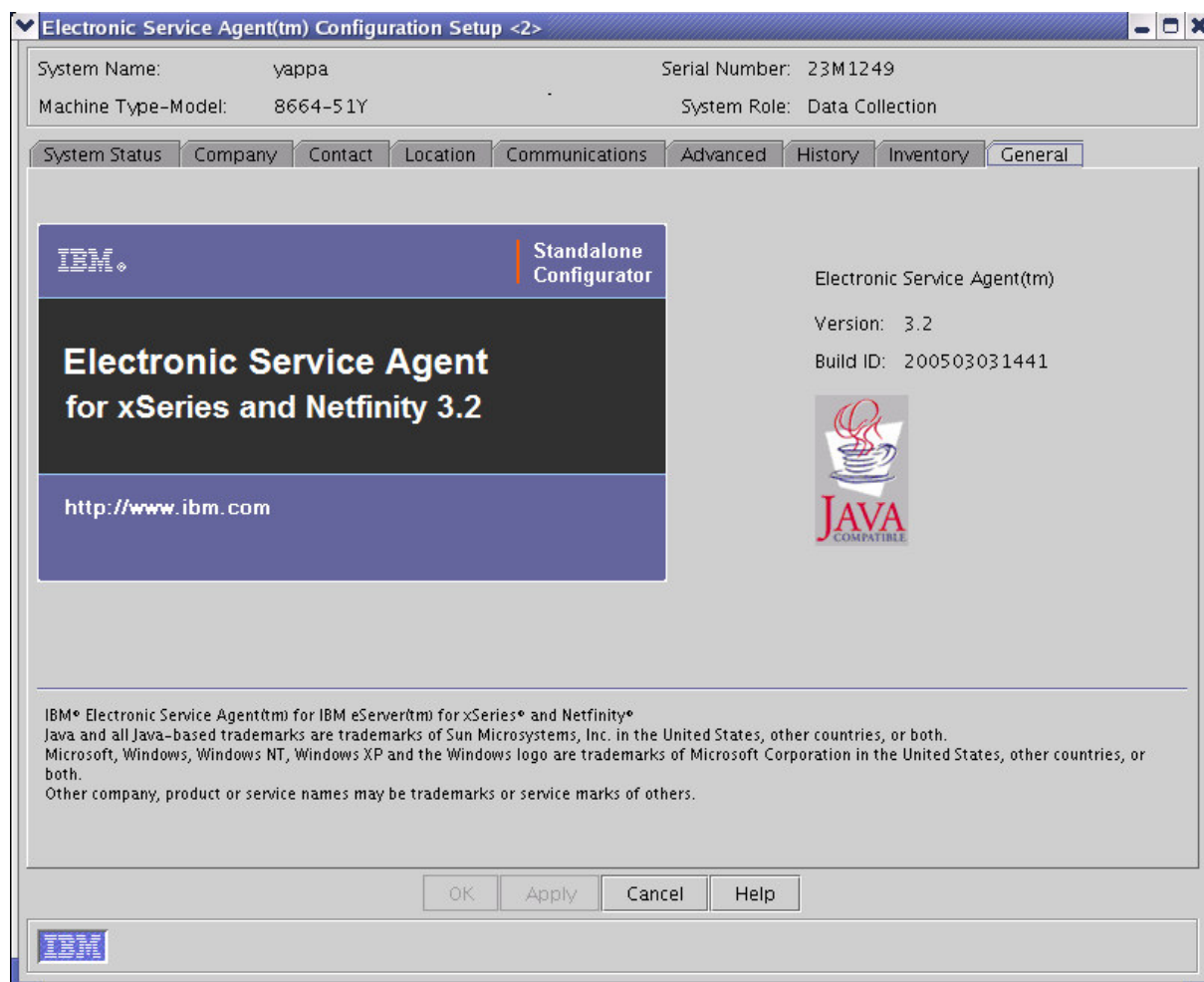


Fill in the fields and click **Apply**, **Finish** or **Next** to remain in the application or **OK** to save and exit:

- **Inventory** displays historical information associated with inventory collection.
 - **Last Sent to Gateway** is the locale-sensitive timestamp of when the inventory status was last sent to IBM.
 - **Last Collected** is the locale-sensitive timestamp of when the inventory was collected.
 - **Next Run Time** indicates when inventory will next be collected, if that information is available.
- **Inventory Information To Send To IBM** enables customers to suppress submissions of certain categories of inventory information. By de-selecting the check boxes for the following items, customers can suppress submission of the associated inventory information. *We recommend sending all inventory items to enable the IBM Support Center to resolve problems faster.*
- **Installed Application Software** is a list of applications and systems software currently installed on the user system.
- **IP Addresses** are the TCP/IP network addresses associated with the user system; for example, 192.168.1.1. See “Appendix A. Resolving a Machine IP Address” on page 52.

The General Panel

The General panel shows system details for the selected systems. It also contains the standard “about” information and legal notices.



The following information is displayed:

- **Version** is the current Electronic Service Agent software version.
- **Build ID** is build identifier of the Electronic Service Agent software.

Starting the Gateway

After configuration is complete, you must start the Gateway. To do this:

1. When configuration is complete, click **Apply** or **Finish**. (See "Closing the Electronic Service Agent Manager" on page 48.) In the Message area, you see the message that Service Agent is configured but not running.
2. Click the **System Status** tab. You see the System Status of "Configured but NOT Running."
3. Click the **Start** button. Notice the Enrollment Status of "System has not yet been enrolled."
4. Click **OK** to exit the electronic service agent manager.
5. Wait 10 to 15 minutes. Then access the Electronic Service Agent Manager again to verify the enrollment status has changed. If status has not changed, call IBM for help.

Closing the Electronic Service Agent Manager

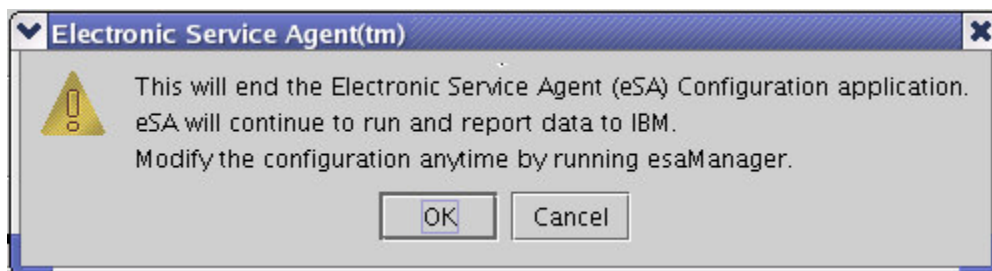
To close the Electronic Service Agent Manager from any panel:

- Click **OK** to save all changes and exit the application.
- Click **Cancel** to cancel all changes and exit the application.

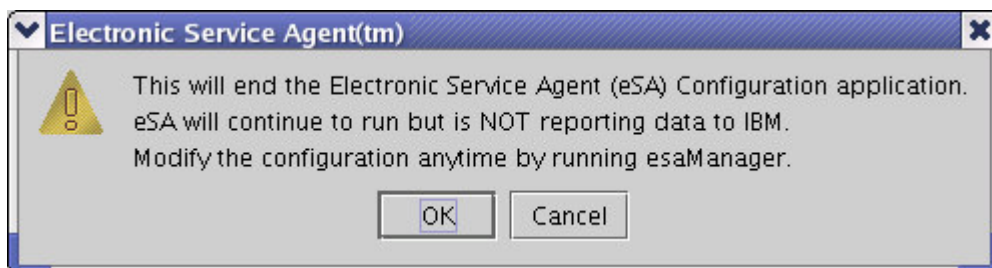
Note: Closing the Electronic Service Agent Manager has no effect on the Service Agent. These are two independently executing processes, so closing one does not affect the other.

When you close the Electronic Service Agent Manager, you'll be presented with one of five pop-up dialogs, shown below, that tell you the status of the Service Agent. For each dialog, click **OK** to close the application, or click **Cancel** to keep the application open.

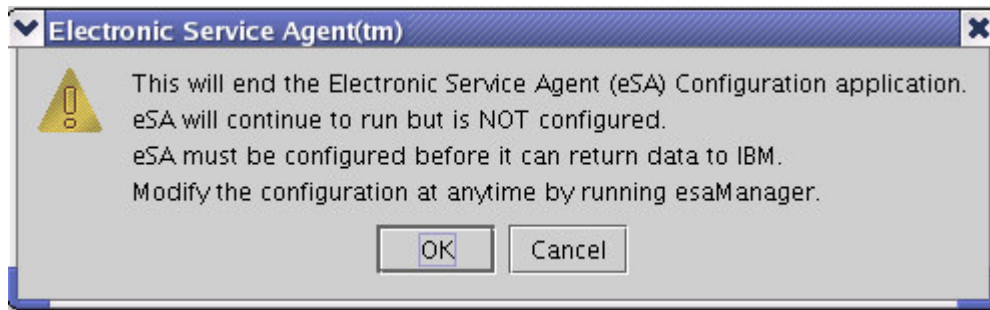
- **Running and reporting**



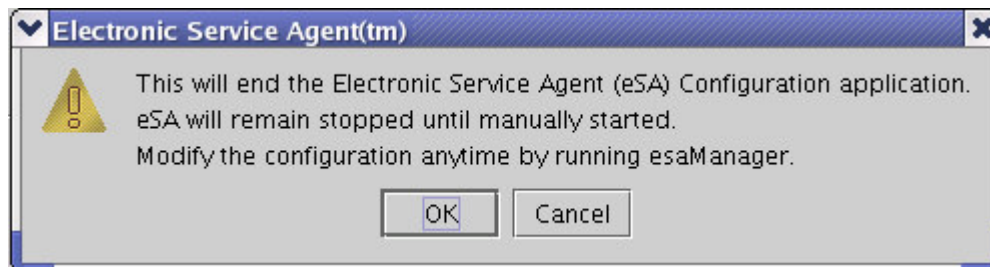
- **Running but not reporting data**



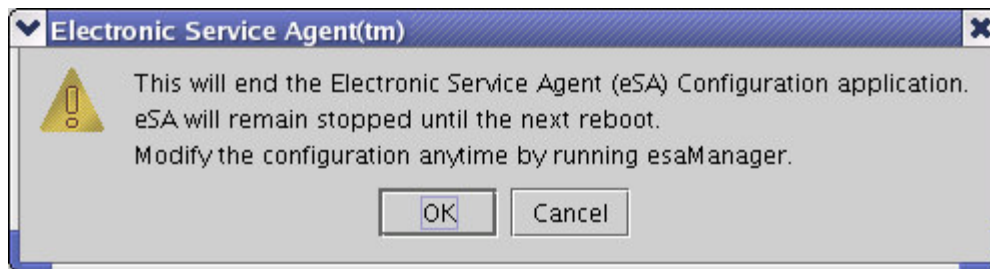
- **Running but not configured**



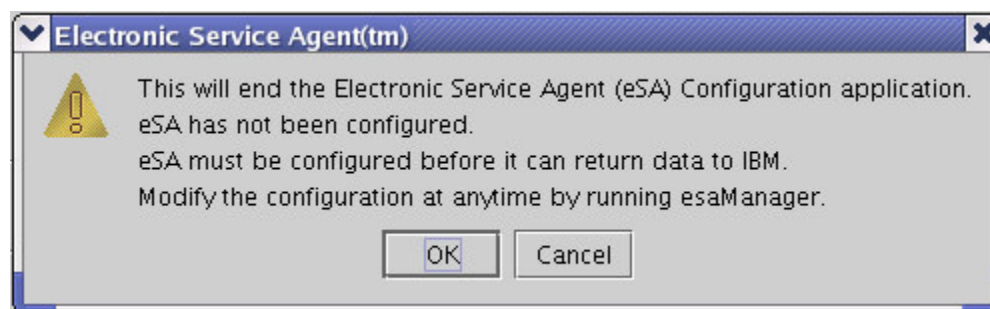
- **Stopped until manually started**



- **Stopped until next reboot**



- **Not configured (Data Collector only)**



Chapter 8. Uninstalling Electronic Service Agent

This chapter contains information for uninstalling Electronic Service Agent.

Important: Before uninstalling Electronic Service Agent, check to be sure that your machine is not a Gateway being used by one or more Data Collectors. Uninstalling the program would disable Electronic Service Agent on those machines.

Complete the following steps to uninstall Electronic Service Agent on Linux:

1. From a command prompt as user **root**, type the following command and press Enter:
`/home/esadmin/ServiceAgent/_uninst/uninstaller.bin`
2. Follow the instructions on the wizard.

Note:

`/home/esadmin/ServiceAgent` is the default installation location. If an alternate installation location is chosen, the path will have to be modified accordingly.

Chapter 9. Getting Help and Technical Assistance

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:

<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

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

Electronic Service Agent installation package

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

Appendix A. Resolving a Machine IP Address

To obtain the IP address of a machine running on a TCP/IP network, take one of the following actions:

For Linux:

- From a command prompt, type the following command and press Enter:

```
/sbin/ifconfig
```

Consider executing `ipconfig` on a machine running Windows, a typical response would appear as follows:

```
C:\>ipconfig

Windows IP Configuration

Ethernet adapter Local Area Connection:

    Connection-specific DNS Suffix  . :
    IP Address. . . . . : 192.168.1.104
    Subnet Mask . . . . . : 255.255.255.0
    Default Gateway . . . . . : 192.168.1.1
```

In this example, the machine's IP address would be `192.168.1.104`

Consider executing `ifconfig` on a machine running Linux, a typical response would appear as follows:

```
esadmin@X300:~> /sbin/ifconfig
eth0      Link encap:Ethernet  HWaddr 00:02:55:FA:5F:85
    inet addr:192.168.1.106 Bcast:192.168.1.255 Mask:255.255.255.0
    inet6 addr: fe80::202:55ff:fe5a:5f85/64 Scope:Link
    UP BROADCAST NOTRAILERS RUNNING MULTICAST  MTU:1500  Metric:1
    RX packets:1503 errors:0 dropped:0 overruns:0 frame:0
    TX packets:74 errors:0 dropped:0 overruns:0 carrier:0
    collisions:0 txqueuelen:1000
    RX bytes:112601 (109.9 Kb)  TX bytes:7169 (7.0 Kb)

lo        Link encap:Local Loopback
    inet addr:127.0.0.1  Mask:255.0.0.0
    inet6 addr: ::1/128 Scope:Host
    UP LOOPBACK RUNNING  MTU:16436  Metric:1
    RX packets:595423 errors:0 dropped:0 overruns:0 frame:0
    TX packets:595423 errors:0 dropped:0 overruns:0 carrier:0
    collisions:0 txqueuelen:0
    RX bytes:29779064 (28.3 Mb)  TX bytes:29779064 (28.3 Mb)
```

In this example, the machine's IP address would be `192.168.1.106`

Appendix B. Resolving a System Host Name

To determine if a system hostname can be resolved, from a command prompt, type the following command and press Enter:

```
ping machine
```

where:

- *machine* is the name of the machine to be contacted

As an example, consider two machines named `quartz` and `slate`, each operating in the role of Data Collector, and a machine named `ruby` operating as a Gateway.

The two machines operating as Data Collectors would execute the command:

```
ping ruby
```

The Gateway machine, `ruby`, would execute the commands:

```
ping quartz
ping slate
```

In all cases, the ping command should show that the destination machine name is resolved. The name resolution is the indication of success, not necessarily the data transmission. This is because some systems ignore ping requests.

The following is an example of successful name resolution in which data is transmitted:

```
# ping www.ibm.com
PING www.ibm.com (129.42.21.99) 56(84) bytes of data.
64 bytes from www.ibm.com (129.42.21.99): icmp_seq=0 ttl=63 time=0.197 ms
64 bytes from www.ibm.com (129.42.21.99): icmp_seq=1 ttl=63 time=0.198 ms
64 bytes from www.ibm.com (129.42.21.99): icmp_seq=2 ttl=63 time=0.187 ms
64 bytes from www.ibm.com (129.42.21.99): icmp_seq=3 ttl=63 time=0.202 ms
.....
```

The following is an example of successful name resolution in which no data is transmitted:

```
#ping www.ibm.com
PING www.ibm.com (129.42.21.99) 56(84) bytes of data.
```

The following is an example of unsuccessful name resolution:

```
#ping www.ibm.com
Unknown host www.ibm.com.
```

If you are unable to resolve the system hostname you should contact your network administrator.

Appendix C. X Server access control

If you are unable to start the Installer or the Configuration Program and get the following error:

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 application is unable to run in graphical mode.

You need to allow connections to your X server from your local machine. The X11 security mechanism does not allow other users than **root** to connect to your desktop.

To give permission to any user on your local machine, execute the following command as **root**:

xhost +

If you prefer to restrict the access only to specific users on the local machine or a given host, please refer to the "xhost" command manual.

Appendix D. Notices and Trademarks

Notices

This information was developed for products and services offered in the U.S.A.

IBM may not offer the products, services, or features discussed in this document in other countries. Consult your local IBM representative for information on the products and services currently available in your area. Any reference to an IBM product, program, or service is not intended to state or imply that only that IBM product, program or service may be used. Any functionally equivalent product, program, or service that does not infringe any IBM intellectual property right may be used instead. However, it is the user's responsibility to evaluate and verify the operation of any non-IBM product, program, or service.

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

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

For license enquiries regarding double-byte (DBCS) information, contact the IBM Intellectual Property Department in your country or send inquiries, in writing, to:

IBM World Trade Asia Corporation Licensing
2-31 Roppongi 3-chome, Minato-ku
Tokyo 106
Japan

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

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

Some states do not allow disclaimer of express or implied warranties in certain transactions; therefore, this statement may not apply to you. This information could include technical inaccuracies or typographical errors. Changes are periodically made to the information herein; these changes will be incorporated in new editions of the publication. IBM may make improvements and/or changes in the products and/or the programs described in this publication at any time without notice.

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

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

Licensees of this program who wish to have information about it for the purpose of enabling (1) the exchange of information between independently created programs and other programs (including this one) and (2) the mutual use of information which has been exchanged, should contact:

IBM Corporation
Department 80D
P.O. Box 12195
3039 Cornwallis
Research Triangle Park
NC 27709
U.S.A.

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

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

This information contains examples of data and reports used in daily business operations. To illustrate them as completely as possible, the examples include the names of individuals, companies, brands, and products. All of these names are fictitious and any similarity to the names and addresses used by an actual business enterprise is entirely coincidental.

Trademarks

The following terms are trademarks of the IBM Corporation in the United States or other countries or both: IBM, Electronic Service Agent, Extended Services, Netfinity, OS/2, xSeries, and eServer.

Java and all Java-based trademarks are trademarks of Sun Microsystems, Inc. in the United States, other countries, or both.

Microsoft, Windows, Windows NT, and the Windows logo are trademarks of Microsoft Corporation in the United States, other countries, or both.

Intel, Intel Inside (logos), MMX, and Pentium are trademarks of Intel Corporation in the United States, other countries, or both.

Linux is a trademark of Linus Torvalds in the United States, other countries, or both.

This product includes software developed by the Apache Software Foundation (<http://www.apache.org>)

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

Glossary

AGN

AT&T Global Network.

Configuration

Adaptation of files to a specific customer site for execution.

Configuration file

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

Configurator

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

Cron Daemon

A program used to schedule commands to be executed periodically or at specific times.

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 IBM .

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 IBM and transfers messages between the Data Collector and IBM.

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.

Program Temporary Fix (PTR)

A code package that fixes a software problem.

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 .

Secure Socket Layer (SSL)

An IBM system that guarantees security.

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.

Index

C

- CD, ordering, 13
- Closing the Electronic Service Agent Manager, 47
- Configuration Panels
 - Advanced panel, 42
 - Communication panel, 38
 - Communications panel - data collector, 41
 - Company panel, 35
 - Contact panel, 36
 - History panel, 43
 - Internet connection to IBM, 38
 - Inventory Panel, 45
 - Location panel, 37
 - System Status panel, 32
- Configuring Electronic Service Agent, 28
- Contacting Support, 50
- Conventions used in this guide, 5

E

- Electronic Service
 - enrolling a managed system for, 7
- Electronic Service Agent
 - what is it?, 6
- Electronic Service Agent Environment, 8
- Electronic Service Agent Manager, 28
 - Accessing, 31
 - Interface, 29
 - Navigating, 30
- Enrollment history, 43
- Enrollment status, 32
- Entitlement to automatic problem submission, 50

H

- Hardware Requirements, 10

I

- Installing a Data Collector, 18
 - Choosing automatic or manual installation, 20
 - Manual installation, 22
 - Using the InstallShield Wizard, 19

Installing a Data Collector Manually, 22
Installing the Gateway, 14
 Confirmation panel, 16
 Progress indicator, 16
 Reading the license agreement, 14, 19
 Selecting a directory, 15
 Selecting installation type, 14
Inventory history, 44, 45
Inventory status, 32

N

Network requirements, 10, 11
Notices, 54
notices and trademarks, 54

O

Obtaining Electronic Service Agent, 13
 Download from IBM, 13
 Order CD, 13

P

PMR history, 44
Prerequisites for installing and configuring, 12

R

Resolving a Machine IP Address, 51
Resolving a System Host Name, 52
Resolving system hostnames, 10

S

Service Agent Manager, 9
Starting the Electronic Service Agent Manager, 31
Starting the Gateway, 46
Support web sites, 50
supported managed servers, 6
Supported Operating Systems, 10

T

The General Panel, 46
The History Panel, 43
The Inventory Panel, 45
Trademarks, 55

U

Unattended installation, 24
Uninstalling Electronic Service Agent, 49
Uninstalling IBM Director Server, 11

W

What's new, 6