

HP Insight Management Agents Installation Guide



July 2004 (Third Edition)
Part Number 333513-003
Product Version 7.10

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About This Guide

This guide contains step-by-step instructions for installation of HP Insight Management Agents and is a reference for operation, troubleshooting, and future upgrades.

Audience Assumptions

This guide is for the person who installs, administers, and maintains servers. HP assumes you are qualified in installing, using, and administering server software and are familiar with basic administration tasks.

Where to Go for Additional Help

In addition to this guide, the following information sources are available:

- *HP Insight Management Agents User Guide*
- HP Insight Manager software

Telephone Numbers

For the name of the nearest HP authorized reseller:

- In the United States, call 1-800-345-1518.
- In Canada, call 1-800-263-5868.

For HP technical support:

- In the United States and Canada, call 1-800-652-6672.
- Outside the United States and Canada, refer to <http://www.hp.com>.

Introduction

HP Insight Management Agents deliver multisystem access to all key system administration tools for predictive fault management, access to critical system information, and integration with partner management solutions. Insight Management Agents provides system administrators with:

- Performance monitoring—IT administrators can proactively monitor the performance of their HP ProLiant servers by setting predefined thresholds for memory, CPUs, NICs, and logical disks. These thresholds can be set on the Task menu of the System Management Homepage. Web-enabled System Management Agents can be configured to notify designated IT administrators when predefined thresholds are exceeded.
- Greater control of systems—Agents monitor over 1,000 parameters in the system and generate alerts in the event of a fault. Any fault and, in some cases, impending faults are communicated to the designated administrator.
- Day-one control and ease of use—Insight Management Agents are easy to install and deploy and can also be installed silently while configuring the system using the SmartStart configuration process.
- Maintenance of existing infrastructure—Insight Management Agents use industry standards to deliver their alerts and configuration and performance data.

Insight Management Agents

Insight Management Agents operate on devices, performing in-depth monitoring of the device's state by collecting and measuring parameters. These parameters indicate the current state of subsystems by counting the occurrence of particular events (for example, the number of read operations performed on a disk drive) or by monitoring the state of a critical function (for example, whether the cooling fan is operating). Insight Management Agents provide access to device management data using a Web browser over industry-standard HTTP protocol, enabling you to access data from any location with network access.

Management Agents can be installed in two ways:

- Manually using the SmartStart autorun menu
- Manually using the HP Management CD

IMPORTANT: Insight Management Agents for Servers are not the same as HP Client Management Agents.

Insight Management Agents provide information to management applications, such as HP Systems Insight Manager, and can generate alarm notifications if significant changes occur in the fault or performance aspects of system operation. Information is delivered to and from the Insight Management Agents through the industry-standard SNMP.

HP Systems Insight Manager

HP Systems Insight Manager delivers intelligent monitoring and alerting as well as visual control of your HP hardware. In the unlikely event of a hardware failure, HP Systems Insight Manager also provides a full complement of remote maintenance and control facilities.

NOTE: To install HP Systems Insight Manager on the management console, refer to the *HP Systems Insight Manager User Guide* on the Management CD.

Installation Instructions for Microsoft Windows

Installing the Insight Management Agents

The following is a list of services that are installed:

- Insight Foundation Agents
- Insight NIC Agents
- Insight Storage Agents
- Insight Server Agents
- Web Agent
- Event Notifier

System Requirements and Preinstallation

Insight Management Agents for Microsoft® Windows® are supported on HP ProLiant servers. The agents require the hardware and software described in Table 2-1.

Table 2-1: System Requirements

Operating system	<ul style="list-style-type: none">• Microsoft Windows Server 2003• Microsoft Windows 2000
Browser	<ul style="list-style-type: none">• Microsoft Internet Explorer 5.5 or 6.0• Netscape 4.79, 6.22, or 6.23
Device drivers	ProLiant Support Pack for Windows (contains the HP specific device drivers)
Disk space	Installation of all agents requires at least 30.5 MB of reserved disk space.
SNMP	SNMP service must be installed before the Insight Management Agents for Servers are installed.

Preinstallation of TCP/IP and SNMP

TCP/IP and SNMP must be installed on your system before you install the Insight Management Agents for Servers.

SNMP services must be installed to take full advantage of the management capabilities provided with your ProLiant server. Failure to install SNMP prevents the HP Systems Insight Manager and other enterprise management applications from receiving hardware pre-failure alerts and disables Insight Manager functions, such as advanced ProLiant status polling, inventory reporting, and version control.

If TCP/IP or SNMP is installed after the Insight Management Agents are installed, the Management Agents must be reinstalled. Before proceeding with the agent installation, complete the procedures in the following sections of this guide.

NOTE: For Windows 2000, SNMP support has been installed. For Windows Server 2003, SNMP is included in the base product but is not installed.

TCP/IP and SNMP for Windows 2000

TCP/IP support

TCP/IP support under Windows 2000 has been installed. TCP/IP support is included in the base Windows 2000 product. To install the TCP/IP protocol:

1. Select **Network and Dial-up Connection**.
2. Right-click the **Local Area Connection** icon, and select **Properties**.
3. Select **TCP/IP**.

Refer to your Windows 2000 documentation for further instructions.

SNMP support

SNMP support under Windows 2000 has been installed. SNMP support is included in the base Windows 2000 product. To install the SNMP service:

1. Select **Start>Settings>Control Panel**.
2. Click **Add/Remove Programs>Add/Remove Windows Components**.
3. From the Windows Components Window wizard, select **Management and Monitoring Tools**, then click **Next**.
4. From the Management and Monitoring Tools window, select **Simple Network Management Protocol**.
5. Click **OK**. The Component Wizard window appears.
6. Click **OK** to start the installation.

Refer to your Windows 2000 documentation for further instructions.

Configuring SNMP for Windows 2000

To configure SNMP for Windows 2000:

1. Select **Start>Programs>Administrative Tools>Computer Management**.
2. Select **Services and Applications>Services**.
3. Double-click **Service Name**, and then select **SNMP Service Properties**.
4. Select the **Security** tab, and click the **Add** button to add the community string.
5. Choose a name for the string and access rights.
6. Click **Apply>OK**.

TCP/IP and SNMP for Windows Server 2003

TCP/IP support

TCP/IP support under Windows Server 2003 has not been installed. TCP/IP support is included in the base Windows Server 2003 product. To install the TCP/IP protocol:

1. Select **Network and Dial-up Connection**.
2. Right-click the **Local Area Connection** icon, and then select **Properties**.
3. Select **TCP/IP**.

Refer to your Windows Server 2003 documentation for further instructions.

SNMP support

SNMP support under Windows Server 2003 has not been installed. SNMP support is included in the base Windows Server 2003 product. To install the SNMP service:

1. Select **Start>Settings>Control Panel**.
2. Click **Add/Remove Programs>Add/Remove Windows Components**.
3. From the Windows Components Wizard window, select **Management and Monitoring Tools**, then click **Next**.
4. From the Management and Monitoring Tools window, select **Simple Network Management Protocol**.
5. Click **OK**. The Component Wizard window appears.
6. Click **OK** to start the installation.

Refer to your Windows Server 2003 documentation for further instructions.

Configuring SNMP for Windows Server 2003

To configure SNMP for Windows Server 2003:

1. Select **Start>Programs>Administrative Tools>Computer Management**.
2. Select **Services and Applications>Services**.
3. Double-click **Service Name**, and then select **SNMP Service Properties**.
4. Select the **Security** tab, and click **Add** to add the community string.

For the Insight Agents to function correctly, at least one community string needs to have READ/WRITE access. The community string can be a large, non-unique string that can be forgotten once inputted (i.e. it is not used except for inter-agent communications).

5. Select a name for the string and access rights.
6. Click **Apply>OK**.
7. Select the **Security** tab and make sure under **Accept SNMP Packets from these Hosts** includes loopback (127.0.0.1). This is needed for inter-agent communications.

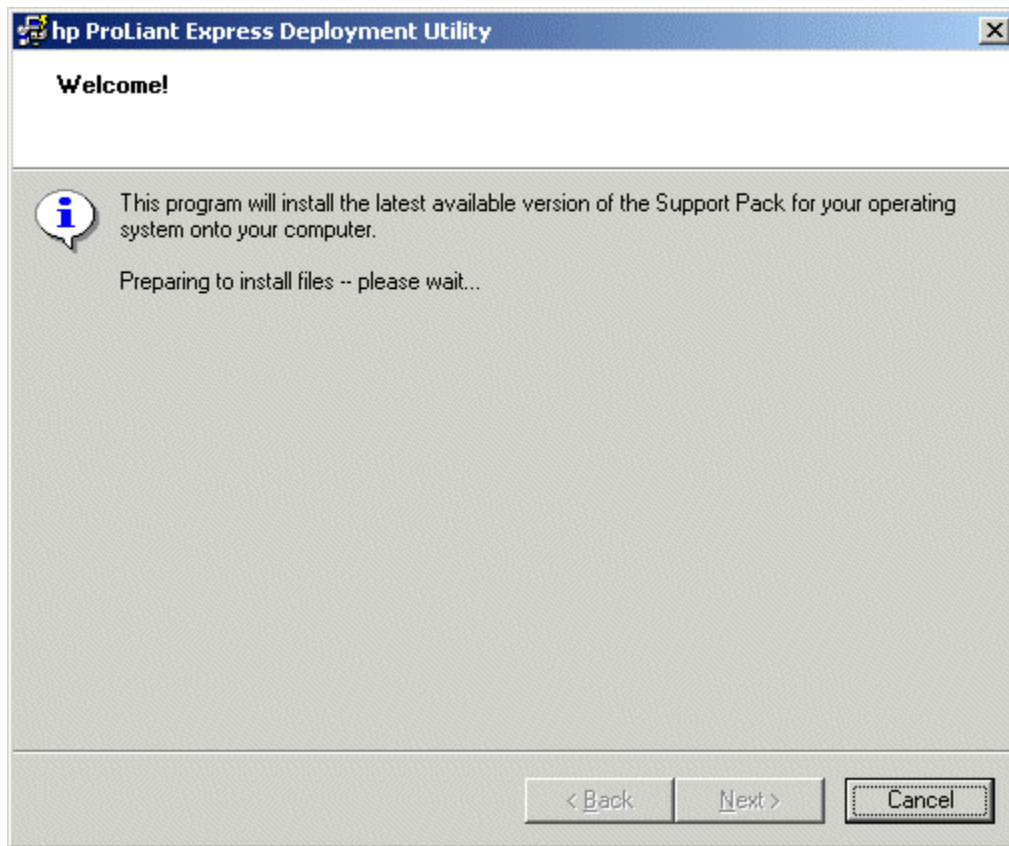
Installing the Agents from the SmartStart CD

1. Insert the SmartStart CD into the CD-ROM drive. The SmartStart autorun menu appears.

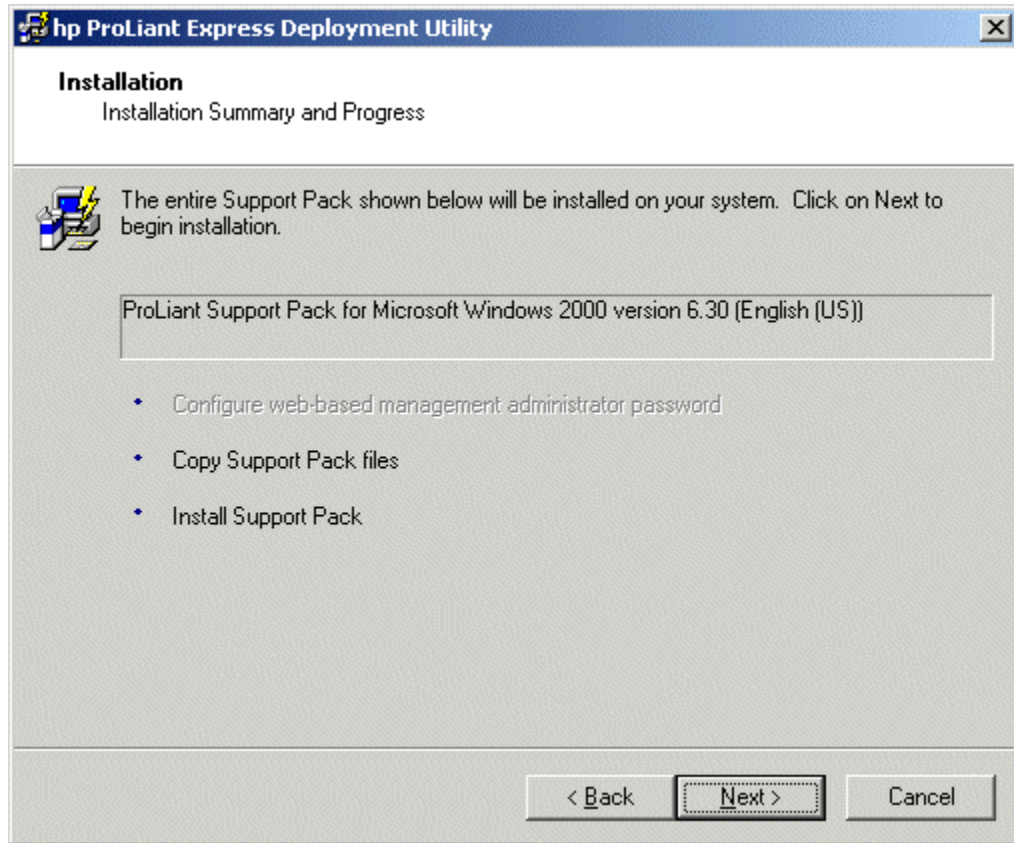
NOTE: If this is your first time installing this version of the SmartStart CD, you must first accept the license agreement.



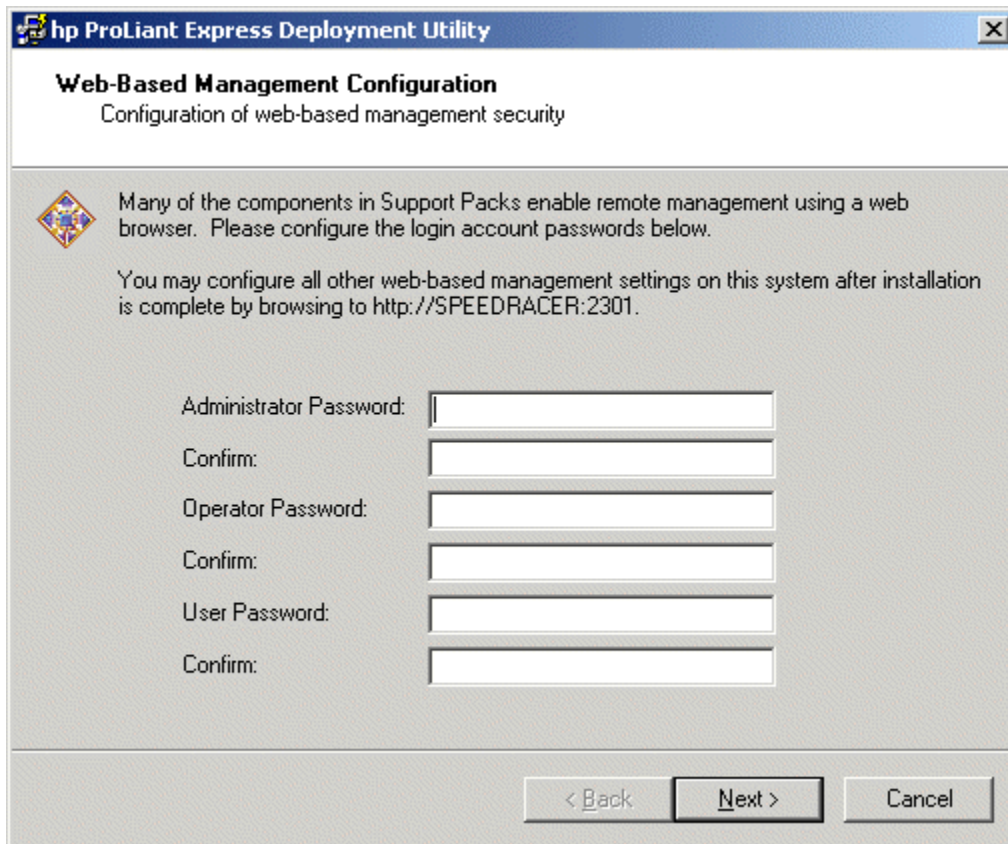
2. Click **Install Software** to display the Welcome screen.



3. Click **Next** to install ProLiant Support Pack.



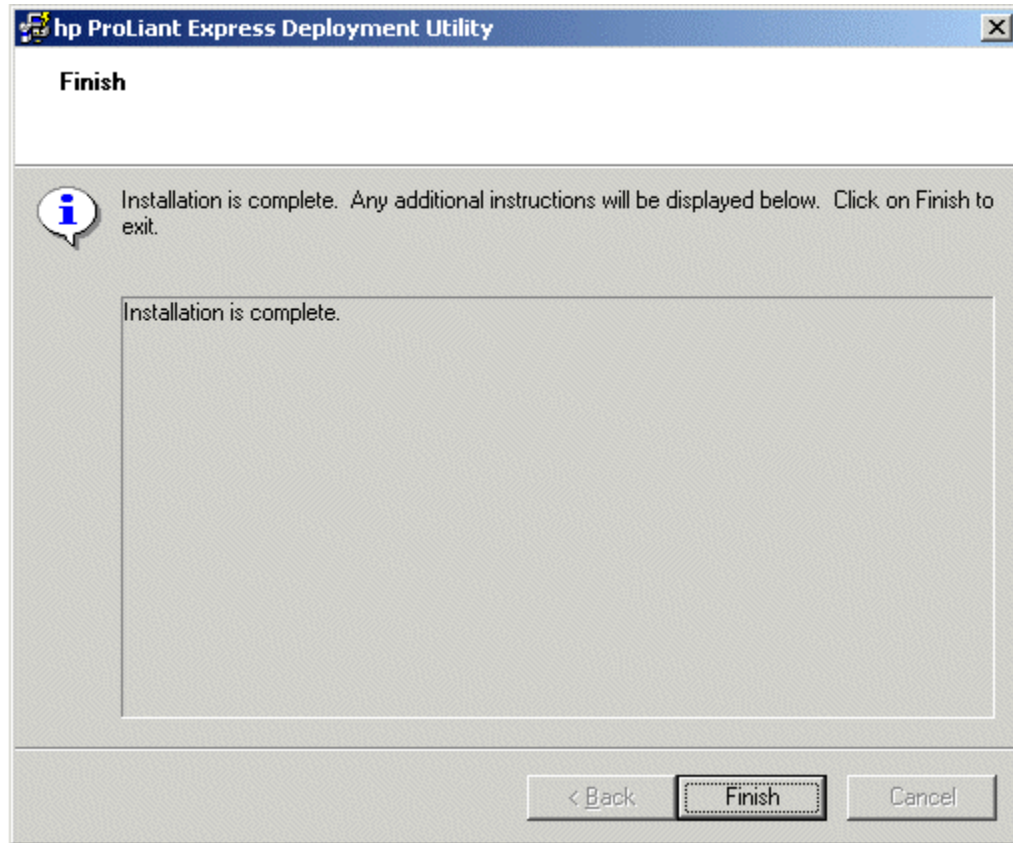
The Web-based Management Configuration has three accounts with different access levels. The Web-based Management Configuration screen enables you to set the administrator, operator, and user passwords.



4. To enable remote management using a Web browser, configure the login account passwords.

NOTE: The login account passwords screen appears the first time the agents are installed.

5. After you have configured the agents, click **OK**.



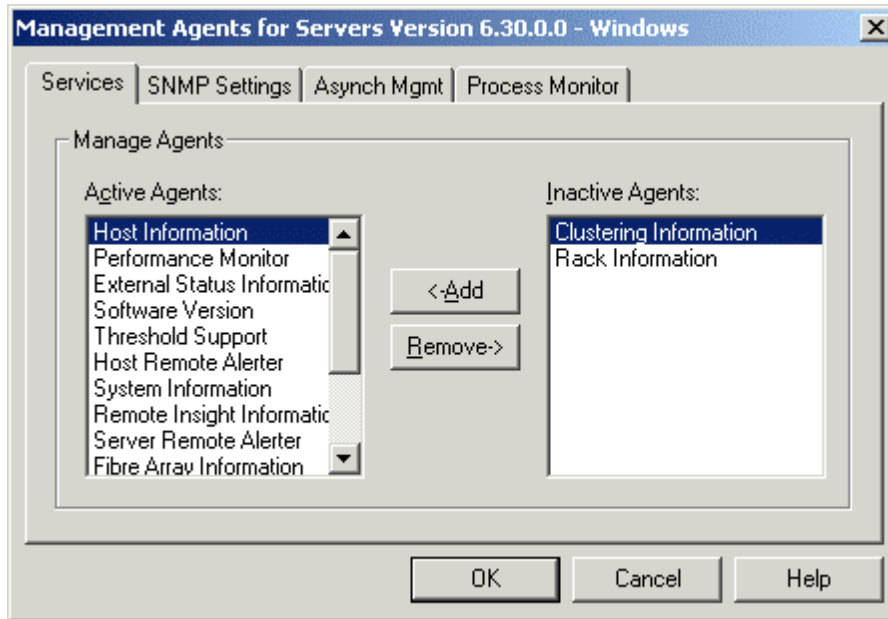
The installation is complete. Click **Finish** to exit.

Configuring the SNMP Agents

To configure the SNMP Agents, click the **HP Management Agents** icon from the Windows Control Panel.

IMPORTANT: You must have administrator rights to access the Insight Management Agents for Servers for Windows Control Panel.

NOTE: Not all tabs shown in the following screens are available on all servers.



Services Tab Screen

The Services tab enables you to activate or deactivate Management Agents. Agents can be added or removed by highlighting the agent and clicking the appropriate button.

SNMP Settings Tab Screen

The SNMP Settings tab enables you to:

- Set the data collection interval—Controls the interval at which the Insight Management Agents for Servers collect data. Set the time interval for data collection by selecting an interval from the dropdown menu.
- Enable SNMP sets—Allows a management console to modify a limited number of hardware-related parameters. The Insight MIBs define the monitored items that can be modified by the management console. If this system is a UPS group member, mark this item to allow shutdown when commercial power fails.
- Enable remote reboot—Allows a remote management console to reboot the system. Select this option if you want to give a remote machine permission to reboot the system.
- Enable the application exception trap—Allows a managed system to send an SNMP trap and log a Windows event when an application generates an exception. Afterwards, the default system exception handler is called to handle the exception. The trap and Windows event contain a detailed description of the process causing the exception. If this feature is disabled, no trap or event is generated after an application exception. However, the default debugger is invoked to manage the exception.

NOTE: To view the exception traps in HP Systems Insight Manager, set the SNMP trap destination to the address of your management console.

- Disable telnet detection—Prevents detection of telnet. In doing so, the Server Agents report that telnet is not available and the remote console feature of HP Systems Insight Manager is disabled for this device.
- Send test trap—Allows a test SNMP trap to be sent to the management console. This is a useful feature to test the setup of the Insight Management Agents for Servers and SNMP.
- Clear all thresholds—Allows you to clear all defined thresholds for the device on which the Management Agent for Servers is running.

Asynch Mgmt Tab Screen

NOTE: Remote Access Service (RAS) must be installed to have access to the Asynch Mgmt tab screen.

The Asynch Mgmt tab enables you to:

- Enable asynchronous management traps—Allows traps to be sent through RAS to a remote management console over a modem. You must also enter the following data for asynchronous management trapping to occur:
 - Destination phone—Dials the number.
 - User name and password—Logs in to the remote machine. You can select a specific logon domain to use, or, if you do not select a specific domain, the domain for the remote machine is used. Refer to the Remote Access documentation from Microsoft for further information on remote user names and domains.
 - Retry count—Redials if a busy signal is encountered.

NOTE: For information on setting up Insight Asynchronous Management on the management console for Windows Agents, refer to the *HP Insight Asynchronous Management User Guide*.

Process Monitor Tab Screen

The Process Monitor tab screen enables you to have SNMP traps generated when a process (a Windows service) starts, stops, or both. This screen displays a list of processes that are currently running. The following Process Monitor options are available:

- Select Monitoring Operations—Select a process from the list to set monitoring options for that process. The following options are available:
 - None—No SNMP traps are generated for this process.
 - Start—An SNMP trap is generated when this process starts.
 - Stop—An SNMP trap is generated when this process stops.
 - Start & Stop—An SNMP trap is generated when this process starts or stops.
- Adding a New Process—Click **Add** to add a new process to the monitor. Enter the name of the new process, and then click **Apply** to add the process.
- Deleting a Process—Highlight a process in the list, and click **Delete** to delete the process.

NOTE: You can only delete processes that have been created by a user. The Delete button is disabled for system default processes.

Remote Insight Tab Screen

NOTE: The Remote Insight Board must be installed for access to the Remote Insight tab.

The Remote Insight tab enables you to:

- Enable the battery—Allows the user to activate the board while the server is powered off. When disabled, the battery is turned off to prevent power loss. This function is particularly useful when the server is powered off for an extended period of time.
- Enable remote alerting—Reports events to the user through the dial-out function. When disabled, the board will not report events (for example, power off or reboot alert). This function is particularly useful to prevent dialing out during a reboot.
- Enable server reset pending—Prevents the sending of server reset alerts for the next reboot. After the server reboots, this option is automatically disabled. When disabled, the board will process alerts as configured. If you are about to perform an intentional reboot and you want to prevent the Remote Insight board from sending an alert or page, you should select this item.
- Reset Remote Insight board—Forces a reset of the board's processor and firmware.

For more information on the Remote Insight board, refer to the *Remote Insight User Guide* located on the Management CD.

Configuring SNMP Settings for OpenView Network Node Manager

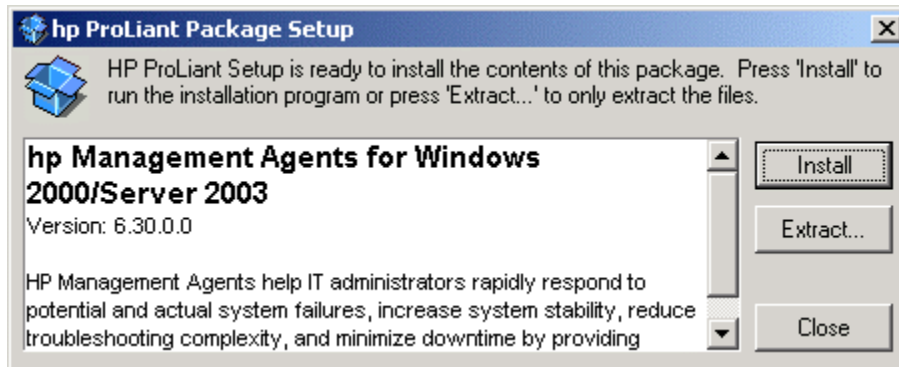
When OpenView Network Node Manager (NNM) is installed, the SNMP settings must be configured in the SNMP EMANATE agent. The settings are configured in the `snmpd.conf` file, located in the NNM installation directory under `\HP Openview\NNM\conf\SNMP Agent`.

The following is a sample configuration. Other examples are provided in the `snmpd.conf` file.

```
get-community-name: public
set-community-name: PUBLIC
contact: Lab Administrator
location: Integration Test Lab
trap-dest: 170.20.1.10
trap-dest: 170.20.1.11
```

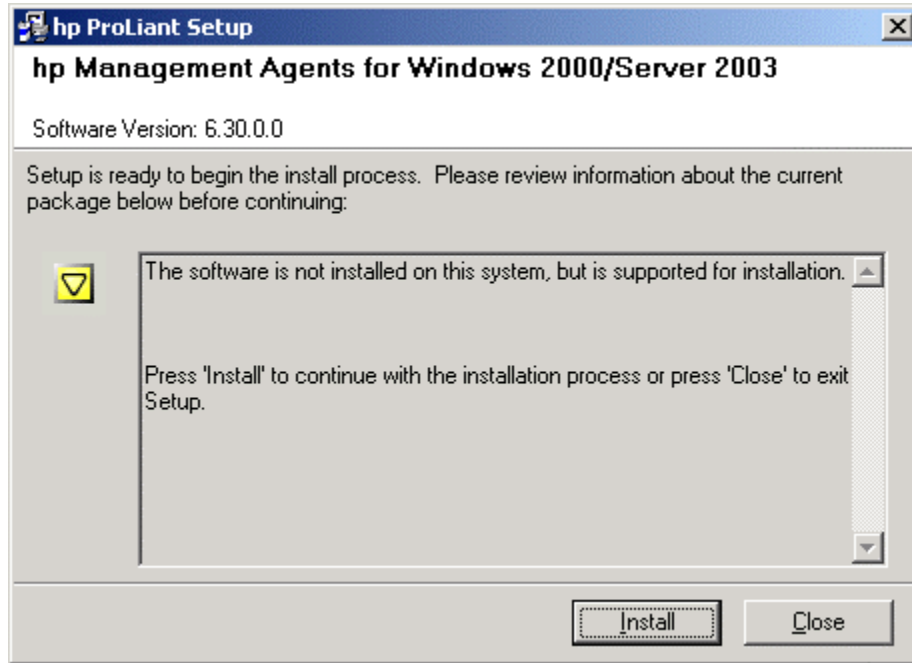
Installing the Agents from a cp00xxxx.exe File

1. Download the smart component cp00xxxx.exe file you want to install from <http://h18023.www1.hp.com/support/files/server/us/index.html>. (The version 7.10 HP Insight Management Agents for Windows 2000/Server 2003 are contained in cp004188.exe.)
2. Read the user guide to be sure you meet the prerequisites for installation.
3. Read the release notes.
4. Log in to Windows as a user with administrator rights.
5. Execute the cp00xxxx.exe file that contains the HP Insight Management Agents. The HP ProLiant Package Setup window appears.



6. Click **Install**. The extraction progress starts.

7. The HP ProLiant Setup dialog box appears. Setup is ready to begin the install process. Click **Install**.



Command Line Syntax

The general command line syntax for single component installation is:

```
cpxxxxxx [/s[ilent]] [/f[orce]] [/r[eboot]] [/h[elp]] [/?]
```

where `cpxxxxxx` is the filename of the Smart Component; the `xs` represent the component number.

NOTE: All arguments and information enclosed in brackets are optional. Refer to the “Command Line Arguments” section for a full description of the arguments the Smart Components accept.

If no command line arguments are passed on the command line, the component GUI appears.

Command Line Arguments

The following table lists the arguments recognized by Smart Components.

Table 2-2: Command Line Arguments

Command Line Argument	Description
<code>/h[elp]</code>	Displays command line Help information.
<code>/?</code>	Identical to the <code>/help</code> argument.
<code>/s[ilent]</code>	Specifies whether the GUI is suppressed or displayed. Use this argument when scripting the Smart Components to suppress the GUI. If this argument is omitted from the command line, the GUI is displayed.
<code>/f[orce]</code>	When used with the <code>/silent</code> command, installs component in one of the following ways: <ul style="list-style-type: none"> • If the component is already installed and current, it reinstalls itself and the installed version number remains the same. • If a newer version of the component is already installed, the component installs itself and downgrades the component to the older version number. If this argument is omitted from the command line, the installation is not forced.
<code>/r[eboot]</code>	When used with the <code>/silent</code> command, causes the target system to reboot if the installation requires a reboot to complete installation. If this argument is omitted from the command line, the server must be rebooted manually for the installation to take effect. <p>The reboot only takes place if no installation errors occur.</p>

Command Line Examples

The following table lists examples of command line input for single component installation.

NOTE: Although lowercase letters are used in these examples, either uppercase or lowercase letters can be used.

Table 2-3: Examples of Single Component Installations

Command Line Input	Result
<code>cp002575</code>	This command line starts installation of the CP002575.EXE component.
<code>cp002575 /s</code>	This command line installs the CP002575.EXE component on the target server using the defaults of the component. The GUI is not displayed.
<code>cp002575 /s /f /r</code>	This command line installs the CP002575.EXE component, forcing the component to install over an existing version and allowing the server to reboot automatically if needed. The GUI is not displayed.

Return Codes

When each Smart Component has finished running, the component reports a return code to the operating system or the calling application.

These return codes are used to determine the status of the component installation. You can also use return codes in a script to control the execution of the script and to determine any branching that is required. Table 2-4 summarizes the Smart Component return codes.

Table 2-4: Return Codes

Error Level	Meaning
0	The Smart Component failed to install. Refer to the log file for more details.
1	The Smart Component installed successfully.
2	The Smart Component installed successfully, but the system must be restarted.
3	The installation was not attempted because the required hardware was not present or the software was current.

Configuring the HP Event Notifier

When the system restarts after installing Insight Management Agents for Servers, the Event Notifier Configuration Wizard runs to complete the installation process. Selecting **Event Notifier Config** from the Insight Management Agents group from the Start menu initiates the configuration wizard. Use the configuration wizard to completely configure the notification service. The wizard displays the following three screens to guide you easily through the process:

- Welcome to the HP Event Notifier Configuration Wizard
- Mail (SMTP) Server Information
- Event Recipients Information

Installation Instructions for NetWare

System Requirements and Pre-Installation

Insight Management Agents for Servers for Novell NetWare require the following hardware and software.

Table 3-1: System Requirements

Hardware and Software	Minimum Requirements
Disk Space—Insight Foundation Agents	4 MB of reserved disk space
Disk Space—Insight Server Agents	2 MB of reserved disk space
Disk Space—Insight Storage Agents	2 MB of reserved disk space
Disk Space—Insight NIC Agents	1 MB of reserved disk space
Server Memory	32 MB of RAM (if using the Web Agent)
Software	NetWare 4.x or greater. The latest Novell operating system patch should be installed (if using the HP Web Agent).
Device Drivers	Novell Support Software Diskette (NSSD). This diskette provides the HP specific device drivers for NetWare.

Browser Requirements

The minimum browser requirements include support for tables, frames, Java™, JavaScript, and Java Development Kit (JDK) 1.1.

Additional browsers, or the browsers in Table 3-2 used with different operating systems, might or might not work correctly, depending on their specific implementations of the required browser technologies.

The required browsers use TCP/IP protocol and are listed in Table 3-2.

Table 3-2: Browser Requirements

To View Systems Running	Browser Requirements
NetWare 4.x and 5.x	Microsoft Internet Explorer 4.0 version 4.72.2106.8 or higher Netscape Navigator 4.05 or higher

Pre-Installation

The appropriate device drivers must be installed before installing Insight Management Agents for Servers. Management Agents for Servers for NetWare requires several device drivers from the NSSD. Install the NSSD version listed in the README file.

IMPORTANT: The version of Insight Manager installed on the Management Console must be identical to or higher than the version of Insight Management Agents for Servers you are installing on your systems.

Insight Management Agents for Servers

The following tables list Insight Management Agents for Servers (NLMs) and the installation utility delivered with this release of Insight Management Agents for Servers for NetWare. The Insight Management Agents for Servers is composed of the following four components:

- Insight Foundation Agents
- Insight Server Agents
- Insight Storage Agents
- Insight NIC Agent

Table 3-3: Insight Foundation Agents

File Name (NLM)	Description
CPQHOST.NLM	HP Management Host Agent
CPQTHRSA.NLM	HP Threshold Agent
CPQAGIN.NLM	HP Server Agent Installation and Configuration Utility
CPQWEBAG.NLM	HP Web-enabled Server Management Agent

Table 3-4: Insight Server Agents

File Name (NLM)	Description
CPQBSSA.NLM	HP Base System Agent
CPQHTHSA.NLM	HP Server Health Agent
CPQRISA.NLM	HP Remote Insight Agent

Table 3-5: Insight Storage Agents

File Name (NLM)	Description
CPQIDESA.NLM	HP IDE Subsystem Agent
CPQSCSA.NLM	HP SCSI Subsystem Agent
CPQDASA.NLM	HP Array Subsystem Agent
CPQFCASA.NLM	HP Fibre Channel Array Agent
CPQSSSA.NLM	HP Storage Box Subsystem Agent

Table 3-6: Insight NIC Agent

File Name (NLM)	Description
CPQNCSA.NLM	HP NIC Management Agent

Installing or Upgrading HP Insight Management Agents for Servers

IMPORTANT: The version of Insight Manager installed on the management console must be identical to or higher than the version of Insight Management Agents for Servers you are installing on your systems.

It is important to read the installation instructions completely before installing the software.

IMPORTANT: You can download newer versions of Insight Manager and Insight Management Agents for Servers from the HP management website at <http://www.hp.com/servers/manage>. After accepting the click-wrap license agreement, you can install the HP Insight Management Agents for Servers on additional devices. Insight Manager and Insight Management Agents for Servers can be used on any number of networked clients and servers. You can also obtain newer versions through a SmartStart subscription.

If you have already installed the Insight Management Agents for Servers for NetWare using SmartStart, go to the “Setting Up SNMP System Description and Trap Destinations” section.

Installing from the Management CD

NOTE: You can also install the Insight Management Agents from the ProLiant Support Pack for Novell NetWare, which is available with SmartStart or downloadable from <http://www.hp.com/support/files>. Refer to the ProLiant Support Pack for Novell NetWare Help file (CPQCSP.TXT) for more detailed installation information.

Read this installation procedure completely before installing the software. The installation will vary, depending on whether you are installing all four of the Insight Management Agents for Servers components, or updating only specific components.

To install the Server Agents for NetWare from the Management CD, insert the Management CD into the CD-ROM drive.

- If you want to install **all** Insight Management Agents for Servers components, and the CD is mounted as a NetWare volume:
 - a. At the NetWare system console, enter:

```
LOAD [NetWare VOL]:\AGENTS\NETWARE\ENG\ COMPAQ\CPQAGIN
```

The installation utility, CPQAGIN.NLM, installs and configures the Insight Management Agents for Servers for NetWare.
 - b. Follow the on-screen instructions, pressing the **F1** key for online help, if needed.

- If you want to install or update specific Insight Management Agents for Servers components, choose from the following entries made at the NetWare system console.
 - To update only the Insight Foundation Agents, enter:
LOAD [NetWare VOL] : \AGENTS\NETWARE\ENG\ COMPAQ\CQMGHOST\CPQAGIN
 - To update only the Insight Server Agents, enter:
LOAD [NetWare VOL] : \AGENTS\NETWARE\ENG\ COMPAQ\CQMGSERV\CPQAGIN
 - To update only the Insight Storage Agents, enter:
LOAD [NetWare VOL] : \AGENTS\NETWARE\ENG\ COMPAQ\CQMGSTOR\CPQAGIN
 - To update only the Insight NIC Agents, enter:
LOAD [NetWare VOL] : \AGENTS\NETWARE\ENG\ COMPAQ\CQMGNICS\CPQAGIN

After the installation is complete, you must reboot the system to enable the Insight Management Agents for Servers for NetWare. These agents automatically start each time you reset the system.

Disabling Web-Enabled Server Agent from a NetWare Server

If you chose to enable Web-based Management when you installed the Insight Management Agents for Servers for NetWare and would like to disable it later, from the NetWare server console:

1. Load CPQAGIN.
2. Select the **Configure Existing NetWare Agents** option.
3. Select the line that specifies the load of CPQWEBAG and select **No**.
4. Save changes and exit CPQAGIN.

This procedure prevents the Web-enabled Server Agent from loading.

Installing HP Power Manager

HP Power Manager is a set of sophisticated UPS software management tools that come with HP UPS systems. It provides comprehensive configuration and management of UPS systems. Power Manager comes with two main components: server and console. Refer to the HP Power Manager documentation for complete information on installation and configuration of the Power Manager components.

Server Component

The Power Manager server component is installed from the Management CD. Power Manager is backward compatible with Insight Management Agents for Servers. Existing Insight Manager consoles see the same data with Power Manager as with Insight Management Agents for Servers.

IMPORTANT: Power Manager requires Insight Server Management Agents v3.30 or higher. You must install Power Manager software after installing Insight Management Agents for Servers software.

Console Component

The console component of Power Manager is an addition to Insight Manager. Insight Manager must be installed before installing the Power Manager software. When viewing UPS information on servers with the Power Manager server component installed, the Power Manager screen is displayed. When viewing UPS information on servers without the Power Manager server component, the traditional UPS screen is displayed.

Installing Client Management Support

Client management support can be performed either by Windows NT® domain controllers or NetWare servers. To successfully install this support, Insight Management Agents for Servers must already be installed on all of the client machines you intend to manage. For more detailed information on specific features, refer to the online *Intelligent Manageability Installation and Configuration Guide (IMINST.HLP)* and the online *Intelligent Manageability Guide (INTMGT3.HLP)*.

When a client logs in to a server, the login script executes the program CPQCLNT.EXE. This program registers the client with the server and enables you to manage it using Insight Manager.

You can register the client in one of two ways:

- With a server designated in the file CPQCLNT.INI
- With a designated server

The method of registration is determined by command line parameters in CPQCLNT.EXE. By default, the agent installation uses the first method.

Client Registration Using a Server Designated in CPQCLNT.INI

Client registration using a server designated in CPQCLNT.INI is the default method of client management. It is set up when client management is enabled in the Insight Management Agents for Servers Control Panel under Windows NT, or through the CPQAGIN.NLM installation program under Novell NetWare. This method is suitable for small networks where it is easy to identify a particular client in a list. In larger networks with multiple Windows NT domain controllers, a designated server should be used to prevent clients from appearing on multiple servers, depending on where the client actually logs in.

To register clients using a server designated in CPQCLNT.INI, enter:

```
cpqclnt.exe <cpqclient ini directory>
```

Where *<cpqclient ini directory>* is the fully qualified UNC path to a directory where CPQCLNT.INI resides.

CPQCLNT.EXE reads the CPQCLNT.INI file specified on the command line, then writes the client INI file to the directory specified in CPQCLNT.INI.

CPQCLNT.INI contains the following lines:

[Options]

```
DestinationDirectory="\\<server>\<directory>"
```

Where:

<server> is the name of the desktop management server. For Windows NT, this server must be a domain controller (primary or backup).

<directory> is the shared directory where client INI files are written by CPQCLNT.EXE.

Client Registration Using a Designated Server

The method of using a designated server for client registration requires removing the existing command line option and replacing it with the **-F** parameter. In addition, CPQCLNT.INI must be removed from the server. This method is intended for large, even global, networks. It enables multiple servers in a directory-replicated NT domain to participate in client discovery. For example, this method enables the Australian division of a company to readily manage their clients separately from the Japanese division.

To register clients using a designated server, enter:

```
cpqclnt.exe -F <output directory>
```

Where *<output directory>* is the fully qualified UNC path to a shared directory named CPQDATA.

With this method of registration, CPQCLNT.EXE writes the client INI file to the CPQDATA directory specified by the **-F** command line option.

Installing and Updating Web Agents on Multiple NetWare Systems

The following procedure is for administrators wanting to use software distribution tools to distribute agent settings from one server to multiple servers on the network. This procedure makes it possible to quickly update all servers on the network automatically without having to manually browse each one.

If this is an update to an existing installation, and the current settings are being overwritten, refer to the “Updating Existing Web Agent Installations on Multiple NetWare Systems” section.

If this is a new installation of Web Agents, and a common configuration set and passwords are desired, use the following procedure for installation:

1. Install the Web Agents on a single system.
2. Set up the desired passwords using the Web browser, and change the password capability.
3. Search the SYS:SYSTEM\COMPAQ\WBEM directory for the file CPQHMMMD.ACL. Save this file for use during bulk deployment.
4. Using the Web browser, set up any desired options on the Options page (follow the Options link from the Web Agent home page).
5. Search the SYS:SYSTEM\COMPAQ\WBEM\HOMEPAGE directory for the file CPQHMMMD.INI, and save this file for use during bulk deployment.
6. Using whatever bulk deployment tools are at your disposal, create the SYS:SYSTEM\COMPAQ\WBEM directory on each system being deployed.
7. Copy CPQHMMMD.ACL to the SYS:SYSTEM\COMPAQ\WBEM DIRECTORY on each system.

8. Create the SYS:SYSTEM\COMPAQ\WBEM\HOMEPAGE directory on each system being deployed.
9. Copy CPQHMD.INI to the SYS:SYSTEM\COMPAQ\WBEM\HOMEPAGE directory on each system.

The remainder of the procedure should follow the normal setup process.

Updating Existing Web Agent Installations on Multiple NetWare Systems

If this is an update to an existing installation and the current settings are being overwritten, use the following procedure to update Web Agents:

1. Unload the Web Agent (CPQWEBAG.NLM) before proceeding. This procedure will stop the HTTP server.
2. Follow the previous installation procedure.
3. When the .ACL and .INI files have been copied to the target systems, restart the Web Agent.

The remainder of the procedure should follow the normal setup process.

Setting Up SNMP System Description and Trap Destinations

The next step in installing Management Agents for Servers is to set up the SNMP system description and trap destinations. You can accomplish this installation by editing the following files to match your system and network management configurations:

- SNMP.CFG
- TRAPTARG.CFG

Editing SNMP.CFG

SNMP.CFG is an ASCII text file that provides the SNMP NLM with system name, hardware, location, and contact information. The SNMP.CFG is a sample file and must be edited to reflect the correct information specific to your installation. The SNMP NLM enables configuration of some MIB-II system identification information with the SNMP.CFG file. You must have the SNMP.CFG file in the \SYS:\ETC directory when the SNMP NLM is loaded for proper configuration of the identification information.

Editing TRAPTARG.CFG

TRAPTARG.CFG is an ASCII text file that lists the addresses of management consoles that should be alerted when the Server Agents detect an important event. This file provides the SNMP NLM with information about where to send alarms. Because the TRAPTARG.CFG in \SYS:\ETC is a sample file, it must be edited to reflect the correct information for your environment. Follow the instructions provided in the sample TRAPTARG.CFG file to update the file to match your environment configuration. Be sure to place the alarm destination address under the appropriate protocol section and to indent each address with at least one space.

Verify that the network address of the management console where Insight Manager runs is included in TRAPTARG.CFG.

To help you determine the network address of your management console when using IPX, you can execute the USERLIST program from the management console by entering the following command at the DOS prompt:

```
USERLIST /A
```

For NetWare 4.11, enter:

```
NLIST USER /A
```

A list of PCs logged in to the system is displayed along with the address of each. The PC listed with an asterisk preceding the user name is the PC you are using. The TRAPTARG.CFG file needs both the network address and the node address provided by USERLIST.

NOTE: If you enter trap destinations into your TRAPTARG.CFG file, you must shut down the system and restart it for the destinations to be active.

To verify that you have the proper address configured, use CPQAGIN. At the system console prompt, enter:

```
LOAD CPQAGIN
```

Select the **Initiate Test Trap** option. This option delivers an alarm to each configured management application.

Setting Up SNMP Community Strings

The final step in installing Management Agents for Servers is to set up SNMP community strings. SNMP defines a community as the relationship between an SNMP agent and one or more SNMP managers. When SNMP messages are exchanged, they contain two parts:

- A community name and information to validate that the entity sending SNMP messages is a member of an identified community
- Data

The community name defines the authentication mechanism.

Management Agents for Servers for NetWare enables two different user communities to be specified—the monitor community and the control community. The monitor community is designed to give read-only privileges to all SNMP attributes. The control community provides read-write or set privileges.

Use CPQAGIN.NLM or INETCFG to configure community strings. To enable Insight Manager to perform set operations on system parameters on a NetWare system, you must specify a control community.

NOTE: If you want read-write or set privileges, you must use a control community name other than “public.”

Configuring Agents

NOTE: CPQBSSA must be installed to allow Insight Manager to verify that the system is manageable.

To configure Management Agents for Servers for NetWare:

1. At the NetWare console prompt, enter:
`LOAD CPQAGIN`
2. Select the **Configure Existing NetWare Agents** option to display a list of Management Agents for Servers to be configured. The next screen enables you to select which agents you want to configure.
3. To select any additional agents that you want to load or remove, move the cursor to the desired agent and choose **Yes** or **No**. You can then move the cursor to select or remove additional agents or save the information and continue.

4. Configure Management Agents for Servers for the following parameters:
 - SNMP Monitor and Control support (community and monitor strings)—Use either CPQAGIN.NLM or INETCFG to change the SNMP community and monitor strings.
 - SNMP Set support—SNMP sets will not be accepted if a control community is not defined.
 - Insight Manager Remote Reboot Polling Interval

The screens that follow depend on the individual Management Agents for Servers installed:

- CPQHOST can be configured to issue or not issue NetWare SAP packets.
- CPQTHRSA can be configured to support the maximum number of threshold entries.

Installation Instructions for SCO UnixWare 7

Requirements

System Requirements

To install Insight Management Agents for Servers for SCO UnixWare 7 on ProLiant servers, the hardware and software described in Table 4-1 are required.

Table 4-1: System Requirements

Hardware and Software	Minimum Requirements
System	EISA/PCI-bus, 486DX processor
Disk Space	8 MB of disk space for installation, 15 MB (or more) at run time, depending on your system configuration
Software	SCO UnixWare 7

SNMP Configuration/Community Strings

Proper operation of Insight Management Agents for Servers requires that you first configure SCO UnixWare 7 SNMP software. Refer to manual pages Section 4 SNMP for more information on the following SNMP configuration files (for example, `%man 4snmp snmpd.comm`):

- `/etc/netmgt/snmpd.comm`
- `/etc/netmgt/snmpd.conf`
- `/etc/netmgt/snmpd.trap`
- `/etc/netmgt/snmpd.peers`

`/etc/netmgt/snmpd.comm` File

This configuration file determines who may access the SNMP gateway. Each line consists of four items:

```
protocol_name session_name address privileges
```

where:

- `protocol_name` is either IP or IPX.
- `session_name` controls SNMP user access to this system. The `session_name` must match the community string configured at the management console.

NOTE: The default community string for HP Systems Insight Manager is *public*. If you enter a different community string here, you must also enter it on the management console responsible for the device. To change the community string in HP Systems Insight Manager, refer to the section on community strings in the *HP Systems Insight Manager User Guide* Help file.

- `address` is an IP address in dot notation or an IPX address (depending on the `protocol_name`). If the IP address is 0.0.0.0, then any IP address can communicate on the `session_name`. If the IPX address is 00000000:000000000000, then any IPX address can communicate on the `session_name`.
- `privileges` configures SNMP privileges to be associated with `session_name` and `address` pair. The privileges should be READ or WRITE.

NOTE: Permissions must be configured to WRITE to allow both SNMP “get” and “set” operations on HP MIB data items.

NOTE: During the agents installation, the `/etc/netmgt/snmpd.comm` file is updated according to the user configuration parameters. Refer to “Modifying the Default Configuration” for details.

/etc/netmgt/snmpd.conf File

This configuration file sets up the parts of the MIB supported by the SNMP daemon, and includes:

- System Description (descr)—SNMP version and vendor
- System Contact (contact)—Usually the person responsible for this system
- System Location (location)—Physical location for this system
- Object Identification (objid)—Provides an easy and unambiguous means for determining the kind of device being managed (This value is supplied with SCO UnixWare 7 SNMP and should not be changed.)

/etc/netmgt/snmpd.trap File

This configuration file sets up SNMP trap destinations. Each line consists of the following items:

```
protocol_name session_name address socket_port
```

where:

- `protocol_name` is either IP or IPX.
- `session_name` is a session or community string that can be used by the system receiving the trap to filter out trap messages that it wants to monitor.

NOTE: In this case, the community string is not used for authentication purposes.

- `address` is an IP address in dot notation or an IPX address (depending on the `protocol_name`). The IP address, 0.0.0.0, and the IPX address, 00000000:000000000000, are used as wild cards, meaning that the trap packet is broadcast over the indicated transport (`protocol_name`).
- `socket_port` is set to the well-known port 162.

/etc/netmgt/snmpd.peers File

This configuration file enables the SCO UnixWare 7 SNMP daemon to identify the HP SMUX Manager software. Each line consists of the following items:

```
SMUX_peer_name Object_id_port Password Priority
```

where:

- `SMUX_peer_name` is the name of the HP SMUX daemon.
- `Object_ID_port` is the object ID of the Compaq Enterprise MIB in dot notation.
- `Password` is the password for access to the SNMP daemon from SMUX daemon.
- `Priority` is an optional priority value that SNMP daemon uses to determine which SMUX peer to consult when more than one peer is registered to the same `Object_ID_port`. Valid values are 0 to (2³¹)-1, with a lower number having a higher priority.

The following lines, which must appear in the `/etc/netmgt/snmpd.peers` file, are inserted during installation of each package of the Management Agents for Servers:

- Inserted during the Insight Foundation Agents installation:
"cmafdtnsmuxd" 1.3.6.1.4.1.232 "compaq_passwd"
- Inserted during the Insight Server Agents installation:
"cmasvrsmuxd" 1.3.6.1.4.1.232 "compaq_passwd"
- Inserted during the Insight Storage Agents installation:
"cmastorsmuxd" 1.3.6.1.4.1.232 "compaq_passwd"
- Inserted during the Insight NIC Agents installation:
"cmanicsmuxd" 1.3.6.1.4.1.232 "compaq_passwd"

OpenView Network Node Manager

When HP OpenView Network Node Manager (NNM) is installed, the SNMP settings must be configured in the SNMP EMANATE agent. The settings are configured in the `snmpd.conf` file, located in the NNM installation directory under `\HP Openview\NNM\conf\SNMP Agent`.

The following is a sample configuration. Other examples are provided in the `snmpd.conf` file.

```
get-community-name: public
set-community-name: PUBLIC
contact: Lab Administrator
location: Integration Test Lab
trap-dest: 170.20.1.10
trap-dest: 170.20.1.11
```

Installing Insight Management Agents for Servers

The appropriate device drivers must be installed before installing the Insight Management Agents for Servers. Insight Management Agents for Servers for SCO UnixWare 7 require several device drivers from the HP ProLiant Extended Features Supplement (EFS) for SCO UnixWare 7.

Currently, Insight Management Agents for Servers for SCO UnixWare 7 are available only as a SoftPaq. The latest SoftPaqs are available on the Web at <http://www.hp.com>. For more information on installing all of the Insight Management Agents for Servers packages, refer to “Installing Insight Management Agents for Servers for SCO UnixWare 7.” For more information on installing individual packages, choose from the following:

- “Installing Only the Insight Foundation Agents for SCO UnixWare 7”
- “Installing Only the Insight Server Agents for SCO UnixWare 7”
- “Installing Only the Insight Storage Agents for SCO UnixWare 7”
- “Installing Only the Insight NIC Agents for SCO UnixWare 7”

IMPORTANT: HP Systems Insight Manager must be the latest version.

Installing Insight Management Agents for Servers for SCO UnixWare 7

All four packages in the Insight Management Agents for Servers for SCO UnixWare7 can be installed simultaneously.

To create four Insight Management Agents for Servers for SCO UnixWare 7 diskettes:

1. Download the latest SoftPaq from <http://www.hp.com> to a directory on your hard drive and change to that directory. The downloaded file is SP24926.exe.
2. From that drive and directory, execute the downloaded file and follow the on-screen instructions.

The following files are created:

- SP24926._01
- SP24926._02
- SP24926._03
- SP24926._04
- README.TXT
- QRST5.exe

IMPORTANT: The SoftPaq numbers are subject to change. Use the latest SoftPaq available at <http://www.hp.com>.

3. Obtain four DOS-formatted 1.44-MB diskettes.

IMPORTANT: Only 1.44-MB DOS-formatted diskettes can be used. Other types of media cannot be substituted.

4. Execute the QRST5.EXE program by entering the following command and pressing the **Enter** key:

```
QRST5
```
5. Insert the formatted diskettes in a drive when prompted to create the diskettes containing Insight Management Agents for Servers for SCO UnixWare 7.
6. The `Enter Destination Drive` prompt appears. Either A or B will be included in the prompt, depending on where your 3.5-inch diskette drive is located. If the drive shown in the prompt is not the one you want to use, change the value by pressing either the **A** or **B** key.
7. At this point, you can optionally print a label (if your printer is attached) by pressing the **F9** key.
8. Press the **Enter** key to accept the diskette drive letter. The same screen reappears. Press the **Enter** key again to extract and decompress the diskette image. The `Ready to copy diskette` prompt appears, prompting for one 1.44-MB diskette.

9. Verify that you have a formatted 1.44-MB diskette in the appropriate disk drive, and press the **Enter** key to begin diskette creation.

A counter box appears during creation showing status. The number of cylinders counts up to 80.

10. Repeat steps 6 through 9 to create all four diskettes.
11. When QRST has completed, it exits back to DOS. At this point, Management Agents for Servers diskettes are created and ready for use.

Installation Notes

1. Log in to the UnixWare Server as `root`.
2. Create a temporary directory to store the files:

```
# mkdir /tmp/SP24926
```

3. Change to newly created directory:

```
# cd /tmp/SP24926
```

4. Insert the diskette into the diskette drive, and enter:

```
# tar xv
```

Four directories and a common install script are created in the `/tmp/SP24926` directory:

- `cmafdtn`
- `cmasvr`
- `cmastor`
- `cmanic`
- `install`

5. Execute the following command to install the Insight Management Agents for Servers:

```
# sh ./install
```

6. Follow the on-screen instructions.

7. Remove the diskette, remove all the temporary files, and execute the following commands:

```
# cd /
```

```
# rm -rf /tmp/SP24926
```

8. Reboot the server:

```
#init 6
```

Uninstalling Insight Management Agents for Servers for SCO UnixWare 7

Use the following procedure to remove the Insight Management Agents for Servers:

1. Log in as the `root` user.
2. Enter the following commands:

```
pkgrm cmafdsn
pkgrm cmasvr
pkgrm cmastor
pkgrm cmanic
```

Modifying the Default Configuration

For a first-time installation of any package in Insight Management Agents for Servers for SCO UnixWare 7, an installation form with default configuration values appears.

The following list briefly details the values that can be modified:

- System Contact—The local administrator’s name and a phone number (optional) where the administrator can be contacted
- System Location—The location of the system
- Community Name—The SNMP community string
- Trap Destination—The IP address where traps and alarms should be sent
- Enable Sets—A value of “Yes” ensures that the following configurations are performed during installation:
 - Insight Management Agents will be configured to have SET operations enabled.
 - The SNMP daemon configuration file (`/etc/netmgt/snmpd.comm`) is updated to grant “Trap Destination” with SNMP SET privilege using “Community Name.”
 - The SNMP daemon configuration file (`/etc/netmgt/snmpd.comm`) is updated to grant localhost (127.0.0.1) with SNMP READ privilege using “Community Name.” This update is for the Web Agent.

A value of “No” ensures that the following configurations are performed during installation:

- Insight Management Agents are configured to have SET operations disabled.
- The SNMP daemon configuration file (`/etc/netmgt/snmpd.comm`) is updated to grant “Trap Destination” with SNMP READ privilege using “Community Name.”
- The SNMP daemon configuration file (`/etc/netmgt/snmpd.comm`) is updated to grant localhost (127.0.0.1) with SNMP READ privilege using “Community Name.” This update is for the Web Agent.

- Enable Remote Reboot—Allows Insight Manager and other management applications to manually reboot the device remotely if set (Yes)

Modify the default values as necessary and select **Apply**.

Insight Management Agents for Server Files

Insight Management Agent for Servers Files: Insight Foundation Agents

Table 4-2 lists the files used by the Management Agents for Servers for SCO UnixWare 7 Foundation Agents.

Table 4-2: Insight Foundation Agent Files

File	Description
/etc/init.d/cmafdtnsmux	Foundation SMUX Manager manual startup/shutdown script
/etc/rc2.d/S98cmafdtnsmux	Foundation SMUX Manager automatic startup script
/etc/rc0.d/K01cmafdtnsmux	Foundation SMUX Manager automatic shutdown script
/etc/rc1.d/K01cmafdtnsmux	Foundation SMUX Manager automatic shutdown script
/opt/compaq/foundation/bin/cmasmuxd	Foundation SMUX Manager daemon
/etc/init.d/cmaweb	Web Agent startup/shutdown script
/etc/rc2.d/S99cmaweb	Web Agent automatic shutdown script
/etc/rc1.d/K01cmaweb	Web Agent automatic shutdown script
/opt/compaq/foundation/bin/cmawebd	Web Agent daemon
/opt/compaq/foundation/bin/libcpqhmmo.so	HTTP server shared library (Common HMMO Service Provider for SCO UnixWare 7) used by Web Agent daemon
/opt/compaq/foundation/etc/cmafdtnsmuxd.defs	The "mosy"-compiled HP MIB text file that is read at startup time by the Foundation SMUX Manager
/opt/compaq/foundation/etc/config	Foundation SMUX Manager configuration text file that is read at startup time by the Foundation SMUX Manager
/opt/compaq/mailcfg	Trap e-mail configuration text file that is read at startup time by all the SMUX Managers

continued

Table 4-2: Insight Foundation Agent Files *continued*

File	Description
/opt/compaq/foundation/etc/registry.mib	HP Foundation Data Registry MIB text file for supported MIB items that is read at startup time by the Foundation SMUX Manager
/opt/compaq/foundation/etc/cqmghost.tar.Z	Compressed tar file containing Data component of Web Agent for Foundation Agents (template files, gif files, html files, and so on) that is installed under the /opt/compaq/webagent directory during installation
/opt/compaq/foundation/bin/cmahostd	SCO UnixWare 7 host OS agent daemon for collecting host MIB information
/opt/compaq/foundation/bin/cmathreshd	Threshold agent daemon that implements User-Defined Thresholds for the threshold MIB
/var/spool/compaq/foundation/registry/...	Foundation Data Registry, which holds MIB data files containing information collected by Foundation agents
/var/spool/compaq/agenterrs.log	Management Agents error log and message file

Insight Management Agent for Servers Files: Insight Server Agents

Table 4-3 lists the files used by the Insight Management Agents for Servers for SCO UnixWare 7 Insight Server Agents.

Table 4-3: Insight Server Agent Files

File	Description
/etc/init.d/cmasvrsmux	Server SMUX Manager manual startup/shutdown script
/etc/rc2.d/S98cmasvrsmux	Server SMUX Manager automatic startup script
/etc/rc0.d/K01cmasvrsmux	Server SMUX Manager automatic shutdown script
/etc/rc1.d/K01cmasvrsmux	Server SMUX Manager automatic shutdown script
/opt/compaq/server/bin/cmasvrsmuxd	Server SMUX Manager daemon
/opt/compaq/server/etc/cmasvrsmuxd.defs	The "mosy"-compiled MIB text file that is read at startup time by the Server SMUX Manager
/opt/compaq/server/etc/config	Server SMUX Manager configuration text file that is read at startup time by the Server SMUX Manager
/opt/compaq/mailcfg	Trap e-mail configuration text file that is read at startup time by all the SMUX Managers

continued

Table 4-3: Insight Server Agent Files *continued*

File	Description
/opt/compaq/server/etc/registry.mib	Server Data Registry MIB text file for supported MIB items that is read at startup time by the Server SMUX Manager
/opt/compaq/server/etc/cqmgserv.tar.Z	Compressed tar file containing Data component of Web Agent for Server Agents (template files, gif files, html files, and so on) that is installed under the /opt/compaq/webagent directory during installation
/opt/compaq/server/bin/cmastdeqd	Standard Equipment agent daemon for collecting the Standard Equipment MIB and system MIB information
/opt/compaq/server/etc/cpqbssa.txt	User-configurable text file that is read by the Standard Equipment agent to identify EISA/PCI boards
/var/spool/compaq/server/registry/...	Server Data Registry, which holds MIB data files containing information collected by Server Agents
/var/spool/compaq/agenterrs.log	Management Agents error log and message file
/opt/compaq/server/bin/cmahealthd	Health agent for collecting the health MIB information
/opt/compaq/server/bin/cmasm2d	Remote Insight agent for collecting the Remote Insight MIB information
/etc/init.d/cmahealth	Health agent manual startup/shutdown script
/etc/rc2.d/S99cmahealth	Health agent automatic startup script
/etc/rc1.d/K02cmahealth	Health agent automatic shutdown script
/etc/rc0.d/K02cmahealth	Health agent automatic shutdown script
/etc/init.d/cmasm2	Remote Insight agent manual startup/shutdown script
/etc/rc2.d/S99cmasm2	Remote Insight agent automatic startup script
/etc/rc1.d/K02cmasm2	Remote Insight agent automatic shutdown script
/etc/rc0.d/K01cmasm2	Remote Insight agent automatic shutdown script

Insight Management Agents for Servers Files: Insight Storage Agents

Table 4-4 lists the files used by the Insight Management Agents for Servers for SCO UnixWare 7 Insight Storage Agents.

Table 4-4: Insight Storage Agent Files

File	Description
/etc/init.d/cmastorsmux	Storage SMUX Manager manual startup/shutdown script
/etc/rc2.d/S98cmastorsmux	Storage SMUX Manager automatic startup script
/etc/rc0.d/K01cmastorsmux	Storage SMUX Manager automatic shutdown script
/etc/rc1.d/K01cmastorsmux	Storage SMUX Manager automatic shutdown script
/opt/compaq/storage/bin/cmastorsmuxd	Storage SMUX Manager daemon
/opt/compaq/storage/etc/cmastorsmuxd.defs	The "mosy"-compiled MIB text file that is read at startup time by the Storage SMUX Manager
/opt/compaq/mailcfg	Trap e-mail configuration text file that is read at startup time by all the SMUX Managers
/opt/compaq/storage/etc/registry.mib	Storage Data Registry MIB text file for supported MIB items that is read at startup time by the Storage SMUX Manager
/opt/compaq/storage/etc/cqmgstor.tar.Z	Compressed tar file containing Data component of Web Agent for Storage Agents (template files, gif files, html files, and so on) that is installed under the /opt/compaq/webagent directory during installation
/var/spool/compaq/storage/registry/...	Storage Data Registry, which holds MIB data files containing information collected by Storage Agents
/var/spool/compaq/agenterrs.log	Management Agents error log and message file
/opt/compaq/storage/bin/cmascsid	SCSI device agent for collecting SCSI MIB information
/opt/compaq/storage/bin/cmaidad	Drive Array agent for collecting Intelligent Drive Array MIB information
/opt/compaq/storage/bin/cmafcd	Fibre Channel Array agent for collecting Fibre Channel Array MIB information
/etc/init.d/cmascsi	SCSI agent manual startup/shutdown script
/etc/rc2.d/S99cmascsi	SCSI agent automatic startup script
/etc/rc1.d/K02cmascsi	SCSI agent automatic shutdown script
/etc/rc0.d/K01cmascsi	SCSI agent automatic shutdown script

continued

Table 4-4: Insight Storage Agent Files *continued*

File	Description
/etc/init.d/cmaida	IDA agent manual startup/shutdown script
/etc/rc2.d/S99cmaida	IDA agent automatic startup script
/etc/rc1.d/K02cmaida	IDA agent automatic shutdown script
/etc/rc0.d/K01cmaida	IDA agent automatic shutdown script
/etc/init.d/cmafca	FCA agent manual startup/shutdown script
/etc/rc2.d/S99cmafca	FCA agent automatic startup script
/etc/rc1.d/K02cmafca	FCA agent automatic shutdown script
/etc/rc0.d/K01cmafca	FCA agent automatic shutdown script

Insight Management Agents for Servers Files: Insight NIC Agents

Table 4-5 lists the files used by the Insight Management Agents for Servers for SCO UnixWare 7 Insight NIC Agents.

Table 4-5: Insight NIC Agent Files

File	Description
/etc/init.d/cmanicsmux	NIC SMUX Manager manual startup/shutdown script
/etc/rc2.d/S98cmanicsmux	NIC SMUX Manager automatic startup script
/etc/rc0.d/K01cmanicsmux	NIC SMUX Manager automatic shutdown script
/etc/rc1.d/K01cmanicsmux	NIC SMUX Manager automatic shutdown script
/opt/compaq/nic/bin/cmanicsmuxd	NIC SMUX Manager daemon
/opt/compaq/nic/etc/cmanicsmuxd.defs	The "mosy"-compiled MIB text file that is read at startup time by the NIC SMUX Manager
/opt/compaq/mailcfg	Trap e-mail configuration text file that is read at startup time by all the SMUX Managers
/opt/compaq/nic/etc/registry.mib	Data Registry MIB text file for supported MIB items that is read at startup time by the NIC SMUX Manager
/var/spool/compaq/nic/registry/...	NIC Data Registry that holds MIB data files containing information collected by NIC Agents
/opt/compaq/nic/etc/cqmgnic.tar.Z	Compressed tar file containing Data component of Web Agent for NIC Agents (template files, gif files, html files, and so on) that is installed under the /opt/compaq/webagent directory during installation

continued

Table 4-5: Insight NIC Agent Files *continued*

File	Description
/var/spool/compaq/agenterrs.log	Management Agents error log and message file
/opt/compaq/nic/bin/cmanicd	Network agent for collecting Ethernet and token-ring MIB information
/etc/init.d/cmanic	Network agent manual startup/shutdown script
/etc/rc2.d/S99cmanic	Network agent automatic startup script
/etc/rc1.d/K02cmanic	Network agent automatic shutdown script
/etc/rc0.d/K02cmanic	Network agent automatic shutdown script
/opt/compaq/nic/bin/cmanicd	NIC Agent daemon for collecting NIC MIB information

Installing Individual Agent Products

Installing Only the Insight Foundation Agents for SCO UnixWare 7

Insight Foundation Agents for SCO UnixWare 7 can be installed individually from the SoftPaq available at <http://www.hp.com>.

To create four Insight Foundation Agents for SCO UnixWare 7 diskettes:

1. Download the latest SoftPaq from <http://www.hp.com> to a directory on your hard drive and change to that directory. The downloaded file is SP24922.exe.
2. From that drive and directory, execute the downloaded file and follow the on-screen instructions.

The following files are created:

- SP24922._01
- SP24922._02
- README.TXT
- QRST5.exe

IMPORTANT: The SoftPaq numbers are subject to change. Use the latest SoftPaq available at <http://www.hp.com>.

3. Obtain four DOS-formatted 1.44-MB diskettes.

IMPORTANT: Only 1.44-MB DOS-formatted diskettes can be used. Other types of media cannot be substituted.

4. Execute the QRST5.EXE program by entering the following command and pressing the **Enter** key:

```
QRST5
```

5. Insert the formatted diskettes into a drive when prompted to create the diskettes containing Insight Foundation Agents for Servers for SCO UnixWare 7.

6. The `Enter Destination Drive` prompt appears. Either **A** or **B** will be included in the prompt, depending on where your 3.5-inch diskette drive is located. If the drive shown in the prompt is not the one you want to use, change the value by pressing either the **A** or **B** key.
7. At this point, you can optionally print a label (if your printer is attached) by pressing the **F9** key.
8. Press the **Enter** key to accept the diskette drive letter. The same screen reappears. Press the **Enter** key again to extract and decompress the diskette image. The `Ready to copy diskette` prompt appears, prompting for one 1.44-MB diskette.
9. Verify that you have a formatted 1.44-MB diskette in the appropriate disk drive, and press the **Enter** key to begin diskette creation.
A counter box appears during creation showing status. The number of cylinders counts up to 80.
10. Repeat steps 6 through 9 to create all four diskettes.
11. When QRST has completed, it exits back to DOS. At this point, Insight Foundation Agents diskettes are created and ready for use.

Installation Notes

1. Log in to the UnixWare Server as `root`.
2. Create a temporary directory to store the files:

```
# mkdir /tmp/SP24922
```
3. Change to newly created directory:

```
# cd /tmp/SP24922
```
4. Insert the diskette into the diskette drive, and enter:

```
# tar xv
```

Two files are created in the `/tmp/SP24922` directory:

 - `cmafdtn.tar`
 - `instfdtn`
5. Execute the following command to install the Insight Foundation Agent:

```
# sh ./instfdtn
```
6. Follow the on-screen instructions.

7. Remove the diskette, remove all temporary files, and execute the following commands:

```
# cd /  
# rm -rf /tmp/SP24922
```

8. Reboot the server:

```
#init 6
```

If multiple packages are being installed, reboot the system only after all the packages are installed.

Installing Only the Insight Server Agents for SCO UnixWare 7

Insight Server Agents for SCO UnixWare 7 can be installed individually from the SoftPaq available at <http://www.hp.com>.

To create four Insight Server Agents for SCO UnixWare 7 diskettes:

1. Download the latest SoftPaq from <http://www.hp.com> to a directory on your hard drive and change to that directory. The downloaded file is SP24923.exe.
2. From that drive and directory execute the downloaded file and follow the on-screen instructions.

The following files are created:

- SP24923._01
- README.TXT
- QRST5.exe

IMPORTANT: The SoftPaq numbers are subject to change. Use the latest SoftPaq available at <http://www.hp.com>.

3. Obtain four DOS-formatted 1.44-MB diskettes.

IMPORTANT: Only 1.44-MB DOS-formatted diskettes can be used. Other types of media cannot be substituted.

4. Execute the QRST5.EXE program by entering the following command and pressing the **Enter** key:

```
QRST5
```

5. Insert the formatted diskettes into a drive when prompted to create the diskettes containing Insight Server Agents for Servers for SCO UnixWare 7.
6. The `Enter Destination Drive` prompt appears. Either **A** or **B** will be included in the prompt, depending on where your 3.5-inch diskette drive is located. If the drive shown in the prompt is not the one you want to use, change the value by pressing either the **A** or **B** key.
7. At this point, you can optionally print a label (if your printer is attached) by pressing the **F9** key.

8. Press the **Enter** key to accept the diskette drive letter. The same screen reappears. Press the **Enter** key again to extract and decompress the diskette image. The `Ready to copy diskette` prompt appears, prompting for one 1.44-MB diskette.
9. Verify that you have a formatted 1.44-MB diskette in the appropriate disk drive, and press the **Enter** key to begin diskette creation.
A counter box appears during creation showing status. The number of cylinders counts up to 80.
10. Repeat steps 6 through 9 to create all four diskettes.
11. When QRST has completed, it exits back to DOS. At this point, Insight Server Agents diskettes are created and ready for use.

Installation Notes

1. Log in to the UnixWare Server as `root`.
2. Create a temporary directory to store the files:

```
# mkdir /tmp/SP24923
```
3. Change over to newly created directory:

```
# cd /tmp/SP24923
```
4. Insert the diskette into the diskette drive, and enter:

```
# tar xv
```

Two files are created in the `/tmp/ SP24923` directory:

 - `cmasvr.tar`
 - `instsvr`
5. Execute the following command to install the Insight Server Agents:

```
# sh ./instsvr
```
6. Follow the on-screen instructions.
7. Remove the diskette, remove all temporary files, and execute the following commands:

```
# cd /  
# rm -rf /tmp/SP24923
```
8. Reboot the server:

```
#init 6
```

If multiple packages are being installed, reboot the system only after all the packages are installed.

Installing Only the Insight Storage Agents for SCO UnixWare 7

Insight Storage Agent for SCO UnixWare 7 can be installed individually from the SoftPaq available at <http://www.hp.com>.

To create four Insight Storage Agents for SCO UnixWare 7 diskettes:

1. Download the latest SoftPaq from <http://www.hp.com> to a directory on your hard drive and change to that directory. The downloaded file is SP24925.exe.
2. From that drive and directory, execute the downloaded file and follow the on-screen instructions.

The following files are created:

- SP24925._01
- README.TXT
- QRST5.exe

IMPORTANT: The SoftPaq numbers are subject to change. Use the latest SoftPaq available at <http://www.hp.com>.

3. Obtain four DOS-formatted 1.44-MB diskettes.

IMPORTANT: Only 1.44-MB DOS-formatted diskettes can be used. Other types of media cannot be substituted.

4. Execute the QRST5.EXE program by entering the following command and pressing the **Enter** key:

```
QRST5
```
5. Insert the formatted diskettes into a drive when prompted to create the diskettes containing Insight Storage Agents for Servers for SCO UnixWare 7.
6. The `Enter Destination Drive` prompt appears. Either A or B will be included in the prompt, depending on where your 3.5-inch diskette drive is located. If the drive shown in the prompt is not the one you want to use, change the value by pressing either the **A** or **B** key.
7. At this point, you can optionally print a label (if your printer is attached) by pressing the **F9** key.
8. Press the **Enter** key to accept the diskette drive letter. The same screen reappears. Press the **Enter** key again to extract and decompress the diskette image. The `Ready to copy diskette` prompt appears, prompting for one 1.44-MB diskette.
9. Verify that you have a formatted 1.44-MB diskette in the appropriate disk drive, and press the **Enter** key to begin diskette creation.

A counter box appears during creation showing status. The number of cylinders counts up to 80.

10. Repeat steps 6 through 9 to create all four diskettes.
11. When QRST has completed, it exits back to DOS. At this point, Insight Storage Agents diskettes are created and ready for use.

Installation Notes

1. Log in to the UnixWare Server as `root`.
2. Create a temporary directory to store the files:

```
# mkdir /tmp/SP24925
```
3. Change to newly created directory:

```
# cd /tmp/SP24925
```
4. Insert the diskette into the diskette drive, and enter:

```
# tar xv
```

Two files are created in the `/tmp/SP24925` directory:

 - `cmastor.tar`
 - `inststor`
5. Execute the following command to install the Insight Storage Agents.

```
# sh ./inststor
```
6. Follow the on-screen instructions.
7. Remove the diskette, remove all the temporary files, and execute the following commands:

```
# cd /  
# rm -rf /tmp/SP24925
```
8. Reboot the server.

```
#init 6
```

If multiple packages are being installed, reboot the system only after all the packages are installed.

Installing Only the Insight NIC Agents for SCO UnixWare 7

Insight NIC Agents for SCO UnixWare 7 can be installed individually from the SoftPaq available at <http://www.hp.com>.

To create four Insight NIC Agents for SCO UnixWare 7 diskettes:

1. Download the latest SoftPaq from <http://www.hp.com> to a directory on your hard drive and change to that directory. The downloaded file is SP24924.exe.
2. From that drive and directory, execute the downloaded file and follow the on-screen instructions.

The following files are created:

- SP24924._01
- README.TXT
- QRST5.exe

IMPORTANT: The SoftPaq numbers are subject to change. Use the latest SoftPaq available at <http://www.hp.com>.

3. Obtain four DOS-formatted 1.44-MB diskettes.

IMPORTANT: Only 1.44-MB DOS-formatted diskettes can be used. Other types of media cannot be substituted.

4. Execute the QRST5.EXE program by entering the following command and pressing the **Enter** key:

```
QRST5
```

5. Insert the formatted diskettes into a drive when prompted to create the diskettes containing Insight NIC Agents for Servers for SCO UnixWare 7.
6. The `Enter Destination Drive` prompt appears. Either A or B will be included in the prompt, depending on where your 3.5-inch diskette drive is located. If the drive shown in the prompt is not the one you want to use, change the value by pressing either the **A** or **B** key.
7. At this point, you can optionally print a label (if your printer is attached) by pressing the **F9** key.
8. Press the **Enter** key to accept the diskette drive letter. The same screen reappears. Press the **Enter** key again to extract and decompress the diskette image. The `Ready to copy diskette` prompt appears, prompting for one 1.44-MB diskette.
9. Verify that you have a formatted 1.44-MB diskette in the appropriate disk drive, and press the **Enter** key to begin diskette creation.

A counter box appears during creation showing status. The number of cylinders counts up to 80.

10. Repeat steps 6 through 9 to create all four diskettes.
11. When QRST has completed, it exits back to DOS. At this point, Insight NIC Agents diskettes are created and ready for use.

Installation Notes

1. Log in to the UnixWare Server as `root`.
2. Create a temporary directory to store the files:

```
# mkdir /tmp/SP24924
```
3. Change to newly created directory:

```
# cd /tmp/SP24924
```
4. Insert the diskette into the diskette drive, and enter:

```
# tar xv
```

Two files are created in the `/tmp/SP24924` directory:

 - `cmanic.tar`
 - `instnic`
5. Execute the following command to install the Insight NIC Agents:

```
# sh ./instnic
```
6. Follow the on-screen instructions.
7. Remove the diskette, remove all the temporary files, and execute the following commands:

```
# cd /  
# rm -rf /tmp/SP24924
```
8. Reboot the server:

```
#init 6
```

If multiple packages are being installed, reboot the system only after all the packages are installed.

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