

COMPAQ

Updating Compaq System Software from an Integration Server

Compaq TechNote

Includes information on:

- Overview of the Integration Server
- Using the Compaq Integration Maintenance utilities
- Using Systems Management Server to distribute Compaq system software with Compaq servers and workstations
- Using Norton Administrator for Networks to distribute Compaq system software with Compaq servers and workstations

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Updating Compaq System Software from an Integration Server

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Chapter 1

About This TechNote

This TechNote provides guidelines for distributing Compaq system software from an Integration Server, based on our testing of hardware and software products from Compaq and other vendors.

NOTE: The network and hardware configurations that Compaq selected to test might not be the same as your configuration.

This TechNote also provides the following:

- Overview of the Compaq Integration Server.
- Discussion on how to use the Compaq Integration Maintenance utilities.
- Discussion on how to use Systems Management Server to distribute Compaq system software.
- Discussion on how to use Norton Administrator for Networks to distribute Compaq system software.

This TechNote is for system integrators and network administrators with a knowledge of Compaq server products, Compaq Insight Manager, Microsoft Systems Management Server, and Symantec Norton Administrator for Networks. It is a supplement to the *Compaq Integration Server and Integration Maintenance Utilities User Guide*, *Compaq Insight Manager User Guide*, the *Compaq Insight Management Agents for Microsoft Windows NT User Guide*, the *Compaq Hardware Reference* documentation, and the *Microsoft Systems Management Server* documentation.

Chapter Organization

The chapters in this Compaq TechNote contain the following information:

- **Chapter 1** -- Introduces the TechNote with a brief summary of each chapter, general information about notational conventions used, additional resources you can use, and an overview on the Integration Server.
 - **Chapter 2** – Discusses updating Compaq system software on Windows NT servers using three different methods: locally, remote attended, and remote unattended.
 - **Chapter 3**– Discusses updating and distributing Compaq system software using Systems Management Server and Norton Administrator for Networks.
 - **Chapter 4** – Discusses updating Compaq system software on Netware servers and how to distribute Compaq system software locally, remote attended mode, and remote unattended mode.
 - **Appendix A**-- Provides an overview to third-party distribution tools.
 - **Appendix B**-- Provides information on how to get individual Compaq TechNotes, including location of Web site, pricing information, toll free telephone numbers, and a list of the latest TechNotes available.
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Notational Conventions

Table 1-1 lists the conventions that this TechNote uses to distinguish elements of text found within this document.

Convention	Use
CAUTION	Indicates that failure to follow directions could result in damage to equipment or loss of information.
COMMANDS, DIRECTORY NAMES, DRIVE NAMES, PROGRAMS, and UTILITIES	These items always appear in uppercase in DOS and in other environments.
<i>FILENAMES</i>	Names of files appear in uppercase italics in DOS and in other environments.
<i>Get, Set</i>	Screen button labels appear in italic initial caps.
IMPORTANT	Presents clarifying or specific points of information.
<i>items of importance</i>	Presents important or specific points of information. These items appear in italics in all chapters of this TechNote.
Keys	Keys on your keyboard appear in boldface.

continued

Notational Conventions *continued*

Convention	Use
Key+Key	When you see a plus sign (+) between two keys, hold down the first key while you simultaneously press the second key. For example, "Press the Ctrl+Z keys" means press and hold down the Ctrl key while you press and release the Z key.
"new terms" and "prompts"	The first occurrence of a technical term, prompts, or references to a word other than a command appears in quotes.
NOTE	Presents commentary, sidelights, or interesting points of information.
<i>screen selections and variables</i>	These items appear in italics in all chapters of this TechNote.
Select item → item → item	Items separated by arrows indicate menu items you select in a sequence.
type	When instructed to type information, do so without pressing the Enter key.
User input and screen displays	Information you type exactly as it appears on the screen.
WARNING	Indicates that failure to follow directions could result in bodily harm or in damage to equipment.

Additional Resources to Use

Use the following list of resources, which are used throughout this TechNote, for more information on Compaq Integration Server, Compaq Insight Manager, or Microsoft Systems Management Server:

- *Compaq Integration Server and Integration Maintenance Utilities User Guide*, P/N 185748-002

This document provides guidelines on how to install, configure, and use the Compaq Integration Server and the Compaq Integration Maintenance Utilities.

- Compaq TechNote, *Integrating Compaq Insight Manager with Enterprise Management Platforms*, P/N 145806-005

This TechNote provides Compaq server management integration guidelines for managing Compaq servers with SunNet Manager, HP OpenView, and IBM NetView for AIX. See Appendix A, “Multivendor Integration from Compaq,” for ordering information.

- Compaq TechNote, *Integrating Compaq Insight Manager with Microsoft Systems Management Server*, P/N 184720-003

This TechNote provides Compaq server management integration guidelines for managing Compaq servers with Systems Management Server. See Appendix A, “Multivendor Integration from Compaq,” for ordering information.

- *Compaq Insight Manager User Guide*, P/N 133394-012

This document explains how to install, configure, and use Compaq Insight Manager.

- *Compaq Insight Management Agents for Microsoft Windows NT User Guide*, P/N 145891-011

This document explains how to install, use and troubleshoot Compaq Insight Management Agents for Microsoft Windows NT.

- *Microsoft Systems Management Server for Windows NT Administrator's Guide*, Document No. 66254

This document explains how to plan, install, and configure a Microsoft Systems Management Server system. It also tells you how to use Systems Management Server to manage software for servers and clients, to provide direct support to users with the remote troubleshooting utilities, to analyze network protocols, and to monitor the Systems Management Server system itself using alerts and events.

- *Microsoft Windows NT Administrator's Guide*

This document provides detailed information for network administrators on the Microsoft Windows NT operating system.

- *Compaq Hardware Reference* documentation

This documentation can help isolate a problem to a certain computer component or cable segment. Some network problems occur because of malfunctioning hardware; check the documentation that came with the hardware involved.

- Microsoft Windows NT On-Line Help Guide

This online guide contains information on configuring and using the Microsoft Windows NT operating system.

- Microsoft FastTips

This is an electronic service provided by Microsoft to receive automated answers to common questions and access a library of technical notes, which are delivered by recording or fax.

To access FastTips, call 800-936-4400 on a touch-tone telephone.

- Internet

This electronic service is available to interact with other users and support engineers or to get product information.

- To access the Compaq home page on the Internet:

<http://www.compaq.com>

- To access the Microsoft home page on the Internet:

<http://www.microsoft.com>

- To access the Symantec home page on the Internet:

<http://www.symantec.com>

Integration Server Overview

This section gives an overview of what is an Integration Server and introduces three methods for using an Integration Server for system updates.

An Integration Server acts as a focal point for internal system standards, based on tested and proven systems software versions and hardware/software configurations. Because it is a repository of software products on the network, it helps to streamline the processes of setting up and maintaining distributed systems consistent with the established system standards. SmartStart and Compaq Insight Manager enable an administrator to set up and maintain an Integration Server.

Any Compaq server running Windows NT 3.51, Windows NT 4.0, NetWare 3.12, or NetWare 4.1x can be designated as an Integration Server. It must have sufficient storage space for the selected system software, have Insight Management Agents installed so it can be managed from an Insight Manager console, and be accessible over the network by new servers being installed and existing servers for maintenance. It can be a multi-function server or it can be dedicated to function as an Integration Server. An Integration Server can be set up and loaded automatically when using SmartStart at initial setup, or an administrator can establish the appropriate directory structure and access rights on an existing server. The Integration Server Maintenance task in Compaq Insight Manager allows software to be added or removed from an Integration Server.

To be truly effective in an ever-changing environment, internal system standards must be stable, but not static. Recognizing this, Compaq provides innovative tools and services for managing an Integration Server. These tools provide timely and easy access to the latest system software and the information needed to determine what updates are appropriate to a given environment.

Access to the latest software for the update of an Integration Server is enabled through a dedicated Compaq Support Software Server on the World Wide Web and through the Compaq SmartStart Subscription Service -- with periodic releases of CD updates. Through Integration Server Maintenance in Compaq Insight Manager, the administrator can compare the latest software versions available via the Internet or CD to those stored on the Integration Server and use the information provided to assess the need for any new versions. The administrator can then select the versions desired for download to the Integration Server. Once the Integration Server is updated, the new software is available for both new SmartStart installs and for update of production servers.

This document references the Compaq Systems Management Toolkit, which is located on the Compaq Management CD. The Systems Management Toolkit can also be downloaded via the Internet onto an Integration Server.

NOTE: This TechNote presumes the Systems Management Toolkit resides on an Integration Server.

Using an Integration Server

Three different approaches can be used for update of production servers, which are:

- Local Method
 - Remote Attended Method
 - Remote Unattended Method
-

Local Method

For fully attended updates, the Integration Maintenance utility provides the ability to perform updates at each production server. This utility is installed automatically when SmartStart is used to install the operating system, or it can be installed manually at a later time. It can be accessed locally at the server. The Integration Maintenance utility accesses the Integration Server (or SmartStart-enabled CD) for application of updates to the production server. When performing an update of the system software, the Integration Maintenance utility provides the best means for ensuring that the upgrade is completed successfully. It provides a level of system integrity, ease of use, and optimization comparable to that achieved when using SmartStart at setup.

Remote Attended Method

This method is similar to the local method except that remote control software is used to access the Integration Maintenance utility on a production server. This allows access to servers that are on other LAN/WAN segments or servers across an asynchronous link. In addition to the remote capabilities, this method provides the same benefits as the local method.

Remote Unattended Method

Alternatively, for greater automation of system updates, leading third-party distribution tools, Microsoft Systems Management Server or Symantec Norton Administrator for Networks can be used to distribute updates, such as drivers, from the Integration Server to production servers. Compaq tools assist the administrator in selecting appropriate updates based on the approved versions of software stored on the Integration Server; the Microsoft and Symantec tools enable automation of the process. This enables administrators to effectively support multiple servers without requiring technical staff to travel to each server.

The efficiencies achieved through greater automation of the update process also enable the administrator to proactively maintain distributed systems and avoid potential problems.

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1-10 *About This TechNote*

Compaq provides scripting files for use with both Systems Management Server and Norton Administrator for Networks. These files can be found in the Systems Management Toolkit, which is located on the Integration Server, in following directory:

 \TOOLKIT*<version>*

Where: *<version>* is a version of the Systems Management Toolkit.

Chapter 2

Updating Compaq Software on Windows NT Servers

This chapter describes three ways to update a Windows NT server from an Integration Server:

- Locally
- Remote attended
- Remote unattended

As well as updating Compaq servers via Systems Management Server or Norton Administrator for Networks.

Updating a Windows NT Server Locally

With SmartStart, Compaq has created a program called the Compaq Integration Maintenance utility to assist in the process of updating Compaq software on a Windows NT server. This utility presents a list of available software and updates the server from software stored on a Compaq Integration Server or SmartStart-enabled CD. This method of updating a Windows NT server calls for using a copy of the Integration Maintenance utility on a server-by-server basis.

Using the Compaq Integration Maintenance Utility for Windows NT

In a Microsoft Windows NT 3.51 or 4.0 environment, the following images are supported by the Integration Maintenance utility for Windows NT on an Integration Server:

- Windows NT Support Software Diskette 1.18 and later
- Compaq Insight Management Agents for Windows NT 3.0 and later
- Compaq Survey Utility for Windows NT 1.00
- Windows NT 3.51 or later
- ARCserve 2.01 for Windows NT
- ARCserve Changer Option for Windows NT

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- ARCserve for Windows NT 2.0 to 2.01 Upgrade
- ARCserve Agent for Microsoft SQL Server
- ARCserve Agent for Oracle
- ARCserve Agent for SAP
- ARCserve Windows NT Push Agent
- Adobe Acrobat Reader for Windows NT
- Microsoft Service Pack 4 for Windows NT 3.51 or later

The Compaq Integration Maintenance utility is automatically loaded on the server during the initial SmartStart process. An icon is created for the utility. It can also be manually installed by running the *SETUP.EXE* located in the \CIMU\ENG directory on the Windows NT SmartStart CD. An example of the Compaq Integration Maintenance utility is shown in Figure 2-1.

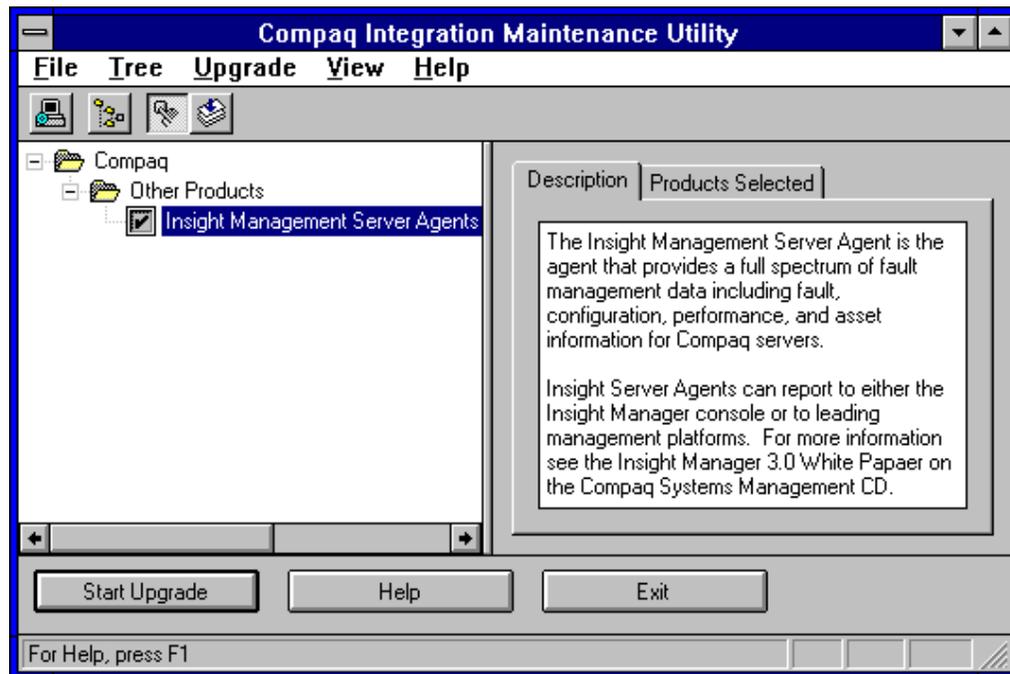


Figure 2-1. Compaq Integration Maintenance Utility

To update an existing server from an Integration Server, follow these steps:

1. Select the *Compaq Integration Maintenance Utility* icon from the Compaq Products and Services group box.
2. Select the source and location for the Compaq products, either a SmartStart-enabled CD or an Integration Server. A list of selected updates then displays. The images listed in italics are available to be installed or upgraded.
3. Select one of the products from the list by selecting the box next to the name.

4. Press the *Start Upgrade* button to launch the install program.
5. Answer any questions that may arise for the product during the install process.

Repeat steps 1 through 5 for each update you want to perform.

Updating a Windows NT Server Using the Remote Attended Method

Using the Compaq Maintenance utility located on that server, a Windows NT Server can be updated using a remote attended method. This requires the use of a third-party Windows NT remote control software such as Symantec pcANYWHERE32 or Remotely Possible from Avalan.

NOTE: Depending on the capabilities of the remote control software, this update can be performed over the network or via an asynchronous connection.

To perform an upgrade using the remote attended method, follow these steps:

1. Connect to the target server with the remote control software.
2. Use the Compaq Maintenance utility as described in the previous section, *Updating a Windows NT Server Locally*.

The operation of the Integration Maintenance utility is the same for remote attended method and local method.

Updating a Windows NT Server Using the Remote Unattended Method

To update servers using the remote unattended method, you can use Microsoft Systems Management Server or Norton Administrator for Networks. These products allow you to update several Windows NT servers at once via the distribution capabilities built into each of these third-party distribution tools. See Appendix A, *Third Party Distribution Tools Overview*, for more information on how Systems Management Server and Norton Administrator for Networks perform distribution.

See Chapter 3, “Updating Compaq Systems Using Third-Party Distribution Tools,” for details on using Systems Management Server and Norton Administrator for Networks with Compaq software and an Integration Server.

Chapter 3

Updating Compaq Systems Using Third-Party Distribution Tools

This chapter discusses updating Compaq Servers using Norton Administrator for Networks and Systems Management Server. These third-party distribution tools are used with the remote unattended method for updating system software.

Systems Management Server

This section discusses the issues involved in using Systems Management Server to distribute software and how to distribute Compaq software to Windows NT servers from an Integration Server.

Considerations for Using Systems Management Server

Systems Management Server is designed to work with Windows NT systems; it has facilities to distribute software directly to Windows NT systems. Ideally, the distribution process should allow for an unattended background installation of software to a Windows NT server at a login prompt.

There are some limitations surrounding the distribution of software to Windows NT machines. These limitations are apparent in two areas:

- Background installation
- Fault recovery

Background Installation

A key feature of Systems Management Server is the ability to distribute files to Windows NT clients. There is also a facility to install software on a server while the server (not a Windows NT workstation) is at a login prompt. This facility allows for the unattended background installation of software.

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3-2 Updating Compaq Systems Using Third-Party Distribution Tools

There are a few restrictions on this process which make it difficult to distribute software in the background. These restrictions are:

- The install application must not open any windows and it must not require user input.
- The Package Command Manager does not allow a server to be rebooted while at a login prompt. This forces the system administrator to shutdown and reboot the target server to have the changes to system files take effect.

NOTE: Use Windows NT Service Pack 4 to allow a server to be rebooted while at a login prompt.

These limitations might affect the Compaq Insight Management Agents for Windows NT (Insight Agents) and the Compaq Support Software for Microsoft Windows NT (Windows NT SSD).

The Insight Agents use the *SETUP.EXE* install application which comes with Windows NT. The install application allows the Compaq install process to use the same framework as Microsoft applications. However, the Microsoft *SETUP* application opens windows during the install process, causing unpredictable results during a background install and usually resulting in a failed installation.

The Insight Agents require an administrator-level user context for the install application to run. Since the Insight Agents do not meet the first requirement for background installs, an administrator-level user must be logged in to the target Windows NT server. This can cause a security problem, if the server is located in a unsecured location. A solution is to have a password-protected screen saver set to run during installation. This allows the Insight Agent installation program to run normally.

NOTE: The Windows NT SSD uses a different install program which does not open any windows or require user input. As a result, you can distribute the Windows NT SSD to a Windows NT server which is at a login prompt. However, you cannot update with reboot while the server is at a login prompt.

Fault Recovery

Systems Management Server has no built-in facility to detect and recover from errors during distributions. The system administrator must take care of this inside any distribution scripts.

Compaq has two command (.CMD) files that are distributed in the Systems Management Toolkit for use with the Insight Agents and the Windows NT SSD. These two files are:

- *INSTALL.CMD*
- *RESTORE.CMD*

The *INSTALL.CMD* and *RESTORE.CMD* are located in the following directories on an Integration Server:

\CPQIS\TOOLKIT\\SMS\PDF\NTCMA

\CPQIS\TOOLKIT\\SMS\PDF\SSD

Where: <version> is a version of the Systems Management Toolkit

These command files perform a rudimentary backup and restore of the appropriate files. The backup file, *INSTALL.CMD*, makes backup copies of existing files that are overwritten during an install. The restore file, *RESTORE.CMD*, can be used to clean up after an incomplete install.

NOTE: Both the Windows NT SSD and the Insight Agent install process make changes to the Windows NT registry. This registry can not be backed up easily from the command line. Compaq recommends backing up any server that will have software distributed to it and having an Emergency Repair diskette that contains the current system configuration information.

Using Systems Management Server to Distribute Compaq Software

This section explains how to use Systems Management Server to distribute the following software to Windows NT servers:

- Windows NT SSD for Compaq Systems
- Insight Agents for Compaq Systems
- Compaq Survey Utility for Compaq Systems
- ELSA Display Driver for Compaq Professional Workstations
- ESS Audio Drivers for Compaq Professional Workstations
- MATROX Display Drivers for Compaq Professional Workstations

Files Supplied by Compaq

Compaq supplies package definition files (.PDF) and other files for the Compaq software in the Systems Management Toolkit. These files describe the command lines you need to run to install the respective software. Each package can have more than one command line for each piece of software (one for manual install, one for automated install, and so on). It can also describe any inventory information for that application.

The other files are a set of Windows NT command files (each pair is included in each directory for the Windows NT SSD and the Insight Agents) called *INSTALL.CMD* and *RESTORE.CMD*. The following sections are a reference for each of these files.

Windows NT SSD for Compaq Systems

The Windows NT SSD PDF file is designed for use with versions 1.18 and later of the Windows NT SSD. Earlier versions use a different install process and are incompatible with the command lines in this acrobat file. The name of the file is *CPQSETUP.PDF*. On the Integration Server, this file can be found in the following subdirectory:

```
\\<servername>\CPQIS1\CPQIS\TOOLKIT\<version>\SMS\PDF\SSD
```

Where: <servername> is the name of an Integration Server

<version> is a version of the Systems Management Toolkit

The *CPQSETUP.PDF* file contains the following four command lines:

Install /SMS

This command line performs an automated install of the Windows NT SSD on a target Windows NT server. This install checks for new hardware, adds new drivers, and updates existing drivers. It does not perform a reboot when finished. This is the default setting chosen by Systems Management Server.

Install /SMS /REBOOT

This command line performs an automated install of the Windows NT SSD on a target Windows NT server. This install checks for new hardware, adds new drivers, and updates existing drivers. It also performs a reboot when finished.

Install /REFRESH

This command line performs an automated refresh of the Windows NT SSD on a target Windows NT server. This refresh updates existing drivers.

Install /REFRESH /REBOOT

This command line performs an automated refresh of the Windows NT SSD on a target Windows NT server. This refresh updates existing drivers. It also performs a reboot when finished.

Insight Agents for Compaq Systems

The Insight Agents PDF file is designed for use with version 2.60 and later of the Insight Agents. Due to the Insight Agents using the setup program supplied by Microsoft with Windows NT, they cannot be installed in an unattended background mode (server at a login prompt). The Insight Agents can only be installed to a server that has an administrator-level user logged in to it.

The name of this file is *CPQMGMT.PDF*. On the Integration Server, this file can be found in the following subdirectory:

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3-6 Updating Compaq Systems Using Third-Party Distribution Tools

\\<servername>\CPQIS1\CPQIS\TOOLKIT\<version>\SMS\PDF\WTCMA

Where: <servername> is the name of an Integration Server

<version> is a version of the Systems Management Toolkit

The *CPQMGMT.PDF* file contains the following two command lines:

install auto

This command line performs an automated install or upgrade of the Insight Agents on a Windows NT server. It does not perform a reboot when finished. This is the default setting chosen by Systems Management Server.

install

This command line launches the setup program and waits for user interaction. It does not perform a reboot when finished.

Compaq Survey Utility for Compaq Systems

The Compaq Survey utility PDF file is designed for use with Systems Management Server. This file specifies how the Compaq Survey utility is to be installed on target Windows NT servers.

The name of this file is *SURVEY.PDF*. On the Integration Server, this file can be found in the following subdirectory:

\\<servername>\CPQIS1\CPQIS\TOOLKIT\<version>\SMS\PDF\SURVEY

where: <servername> is the name of an Integration Server

<version> is a version of the Systems Management Toolkit

This file contains the following command line:

survey.exe -i

This command installs the Compaq Survey utility on the target Windows NT server, configures the Survey service entry, and takes the first snapshot of the Windows NT server. The default setting runs the utility every Wednesday at 12 a.m.

ELSA Display Driver for Compaq Professional Workstations

Compaq supplies several files for use in distributing the video driver files. These files are *ELSADISP.PDF*, *INSTALL.CMD*, and *RESTORE.CMD*. These files specify how to distribute the driver files, make backups of any existing ELSA drivers, and restore from previously backed up driver files. These files can be found on the Compaq SmartStart for Workstations CD in the following directory:

```
\TOOLKIT\SMS\PDF\ELSA\DISPDR\<ntversion>
```

The *ELSADISP.PDF* file contains the following command lines:

- ELSA Display File Copy - This command invokes the *INSTALL* command file, backs up any existing ELSA driver files, creates a temporary directory to hold the new drivers, and copies the driver files into the temporary directory.
- ELSA Display File Restore - This command restores the original ELSA files from existing backup files.

ESS Audio Drivers for Compaq Professional Workstations

Compaq supplies several files for use in distributing the video driver files. These files are *ESS1868.PDF*, *INSTALL.CMD*, and *RESTORE.CMD*. These files specify how to distribute the driver files, make backups of any existing ESS drivers, and restore from previously backed up driver files. These files can be found on the Compaq SmartStart for Workstations CD in the following directory:

```
\TOOLKIT\SMS\PDF\ESS1868\<ntversion>
```

The *ESS1868.PDF* file contains the following command lines:

- ESS File Copy - This command invokes the *INSTALL* command file, backs up any existing ESS driver files, creates a temporary directory to hold the new drivers, and copies the driver files into the temporary directory.
- ESS File Restore - This command restores the original ESS files from existing backup files.

MATROX Display Drivers for Compaq Professional Workstations

Compaq supplies several files for use in distributing the video driver files. These files are *MATROX.PDF*, *INSTALL.CMD*, and *RESTORE.CMD*. These files specify how to distribute the driver files, make backups of any existing MATROX drivers, and restore from previously backed up driver files. These files can be found on the Compaq SmartStart for Workstations CD in the following directory:

`\\TOOLKIT\SMS\PDF\MATROX\<ntversion>`

The *MATROX.PDF* file contains the following command lines:

- MATROX File Copy - This command invokes the *INSTALL* command file, backs up any existing MATROX driver files, creates a temporary directory to hold the new drivers, and copies the driver files into the temporary directory.
 - MATROX File Restore - This command restores the original MATROX files from existing backup files.
-

Distributing the Windows NT SSD

The Windows NT SSD contains various drivers and other specific software for Compaq hardware running Windows NT. The Windows NT SSD updates the Windows NT software on Windows NT servers to take advantage of Compaq hardware. On the Integration Server, the software can be found in the following directory:

```
\\<servername>\CPQIS1\CPQIS\CPQSUPSWANTSSD\<version>
```

Where: <servername> is the name of an Integration Server

<version> is a version of the Windows NT SSD

To distribute the software via Systems Management Server, follow these steps:

1. Copy all files located in the following directory on the Integration Server:

```
\\<servername>\CPQIS1\CPQIS\TOOLKIT\<version>\SMS\PDF\SSD
```

to the directory:

```
\\<servername>\CPQIS1\CPQIS\CPQSUPSWANTSSD\<version>
```

Where: <servername> is the name of an Integration Server

<version> is a version of the Windows NT SSD

This is now the source directory Systems Management Server uses to access the Windows NT SSD files.

The files being copied are:

- ❑ *CPQSETUP.PDF* - distributes the Windows NT SSD used by Systems Management Server. This file runs *INSTALL.CMD*.
- ❑ *INSTALL.CMD* - backs up existing Windows NT SSD files, then launches the Windows NT SSD setup program.
- ❑ *RESTORE.CMD* - restores previous Windows NT SSD files from backups made by *INSTALL.CMD*.

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3-10 Updating Compaq Systems Using Third-Party Distribution Tools

2. Create a package under Systems Management Server for the Windows NT SSD. Press the *Import* button to load the *CPQSETUP.PDF* for the Windows NT SSD which is now located in the directory:

\\<servername>\CPQIS1\CPQIS\CPQSUPSW\NTSSD\<version>

Where: <servername> is the name of an Integration Server

<version> is a version of the Windows NT SSD

You can do this by typing the full UNC pathname for *CPQSETUP.PDF* or by mapping a drive and using the selection box to select the correct directory.

3. Configure the source directory for the Windows NT SSD. This is located under the *Workstation* button. The source directory for the Windows NT SSD is the source directory specified in step 1.

You can enter this path by using the UNC name or by mapping a drive and selecting the appropriate directory.

NOTE: Both the Systems Management Server service account on the primary site server and the user ID running the Admin Tool must have at least read-access rights to this directory.

4. Make sure the following properties are set if you are performing an automated, background install:

Automated Command Line, System Task, Windows NT (x86)

If you are performing an automated job only, the target server is running a screen saver with a password, the properties should be:

Automated Command Line, Windows NT (x86)

Make sure the command line properties for each command line are set as follows:

Automated Driver Installation for SSD

(install /SMS)

Automated Driver Installation for SSD (with reboot)

(install /SMS /REBOOT)

Automated Driver Refresh for SSD

(install /REFRESH)

Automated Driver Refresh for SSD (with reboot)

(install /REFRESH /REBOOT)

Considerations for Distributing the Windows NT SSD

The Windows NT SSD is now ready to be distributed to Windows NT servers. To do this, create a job to send the package to target Windows NT servers. There are several factors to consider when creating a distribution job:

- Which machines will receive the job?

You can use either a query or a Machine Group to specify the target Windows NT machines. See the *Systems Management Server Administrator Guide* for more information on creating queries and Machine Groups. If you are using the Compaq Inventory Collector, you can use the extended Compaq information in the System Management Server database to create queries. See the Compaq TechNote, *Integrating Compaq Insight Manager with Microsoft Systems Management Server* for more information on how to use the Compaq Inventory Collector.

- Will the job perform a reboot?

If the job performs a reboot, try to schedule the job for late at night to impact as few users as possible. Schedule enough down time after the scheduled time in Systems Management Server to account for execution lag due to the polling interval in the Package Command Manager. If the job is scheduled for 1 a.m., the Package Command Manager might not run the job until almost an hour later due to its polling interval. The default value is once an hour.

You can change this interval by running the Admin Tool and performing the following steps:

1. Open the Properties window and select the *Clients* button for each primary site.
2. Select the *Proposed Properties* button and enter the new polling interval in the box, *Package Command Manager Polling Interval (minutes)*.
3. Select *OK*, and then select *Yes*.

Systems Management Server now updates all clients for that site.

- Is the job an unattended, background install?

If this is an unattended, background install, you must mark the job as *mandatory* in the Job Details window which you reach from the Job Properties dialog box. This allows the Package Command Manager to run the job when the server is at a login prompt.

The job is now created and Systems Management Server begins the distribution process.

Distributing the Insight Agents

The PDF file for the Insight Agents is designed for use with versions 2.60 and later of the Insight Agents. Due to the nature of the installation program, the Insight Agents can not be distributed to a server that is running at the login prompt. They can only be distributed to a server that has an administrator security-level user logged in at the console. However, if you use a password-protected screen saver, you minimize the possibility of unauthorized access to the server.

On the Integration Server, the Insight Agent files can be found in the following subdirectory:

```
\\<servername>\CPQIS1\CPQIS\AGENTS\WIN-NT\ENG\<version>
```

Where: <servername> is the name of an Integration Server

<version> is a version of the Insight Agents

To install the Insight Agents, follow these steps:

1. Copy all files located in the following directory on the Integration Server:

\\<servername>\CPQIS1\CPQIS\TOOLKIT\<version>\SMS\PDF\NTCMA

to the directory:

\\<servername>\CPQIS1\CPQIS\AGENTS\WIN-NT\ENG\<version>

Where: <servername> is the name of an Integration Server

<version> is a version of the Insight Agents

This is now the source directory Systems Management Server uses to access the Insight Agents files.

The files being copied are:

- ❑ *CPQMGMT.PDF* - distributes the Insight Agents used by Systems Management Server. This file runs *INSTALL.CMD*.
 - ❑ *INSTALL.CMD* - backs up existing Insight Agent files, then launches the Insight Agent setup program.
 - ❑ *RESTORE.CMD* - restores previous Insight Server Agent files from backups made by *INSTALL.CMD*.
2. Create a package under Systems Management Server for the Insight Agents. Press the *Import* button to load the *CPQMGMT.PDF* for the Insight Agents which is now located in the following directory:

\\<servername>\CPQIS1\CPQIS\AGENTS\WIN-NT\ENG\<version>

Where: <servername> is the name of an Integration Server

<version> is a version of the Insight Agents

You can do this by entering the full UNC pathname for *CPQMGMT.PDF* or by mapping a drive and using the selection box to select the correct directory.

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3. Configure the source directory for the agents. This is located under the Workstation button. The source directory for the agents is the source directory specified in step 1.

You can enter this path by using the UNC name or by mapping a drive and selecting the appropriate directory.

NOTE: Both the Systems Management Server service account on the primary site server and the user ID running the Admin Tool must have at least read-access rights to this directory.

4. Make sure the command line properties are set as follows if you are performing an automated job (target server running a password-protected screen saver):

Automated Command Line, Windows NT (x86)

(install auto)

If you are distributing the agents as a manual job only, the command line properties should be:

Windows NT (x86)

(install)

NOTE: The Insight Agents do not perform a reboot of the server after they have been installed. The system administrator must perform this.

Considerations for Distributing the Insight Agents

The Insight Agents are now ready to be distributed to Windows NT servers. To do this, create a job to send the package to target Windows NT servers. There are several factors to consider when creating a distribution job:

- Which machines will receive the job?
-

You can use either a query or a Machine Group to specify the target Windows NT machines. See the *Systems Management Server Administrator Guide* for more information on creating queries and Machine Groups. If you are using the Compaq Inventory Collector, you can use the extended Compaq information in the Systems Management Server database to create queries. See the Compaq TechNote, *Integrating Compaq Insight Manager with Microsoft Systems Management Server* for more information on how to use the Compaq Inventory Collector.

■ Is the job an unattended install?

If this is an unattended install, you must mark the job as *mandatory* in the Job Details window you can reach from the Job Properties dialog box. This allows the Package Command Manager to run the job without a user starting the job.

The job is created and Systems Management Server begins the distribution process.

Distributing the Compaq Survey Utility

On the Integration Server, the Compaq Survey Utility software can be found in the following directory:

```
\\<servername>\CPQIS1\CPQIS\SURVEY\WIN-NT\ENG\<version>
```

where: <servername> is the name of an Integration Server

<version> is a version of the Survey Utility

To distribute the software via Systems Management Server, follow these steps:

1. Copy all files in the following directory on an Integration Server:

```
\\<servername>\CPQIS1\CPQIS\TOOLKIT\SMS\PDF\SURVEY
```

to the directory:

```
\\<servername>\CPQIS1\CPQIS\SURVEY\WIN-NT\ENG\<VERSION>
```

This is now the source directory Systems Management Server uses to access the Compaq Survey Utility files.

.....

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2. Create a package under Systems Management Server for the Survey Utility. Press the *Import* button to load the *SURVEY.PDF* file which is now located in the following directory:

\\<servername>\CPQIS1\CPQIS\SURVEY\WIN-NT\ENG\<VERSION>

You can do this by typing the full UNC pathname for *CPQSETUP.PDF* or by mapping a drive and using the selection box to select the correct directory.

3. Configure the source directory for the Survey Utility. This is located under the *Workstation* button. The source directory for the Survey Utility is the source directory specified in step 1.

You can enter this path by using the UNC name or by mapping a drive and selecting the appropriate directory.

NOTE: Both the Systems Management Server service account on the primary site server and the user ID running the Admin Tool must have at least read-access rights to this directory.

4. Make sure the following properties are set if you are performing an automated, background install:

Automated Command Line, System Task, Windows NT (x86)

If you are performing an automated job only, and the target server is running a screen saver with a password, the properties should be:

Automated Command Line, Windows NT (x86)

Make sure the command line property is set to:

survey.exe -i

Considerations for Distributing the Compaq Survey Utility

The Compaq Survey Utility is now ready to be distributed to Windows NT servers. To do this, create a job to send the package to target Windows NT servers. There are several factors to consider when creating a distribution job:

- Which machines will receive the job?

You can use either a query or a Machine Group to specify the target Windows NT machines. See the *Systems Management Server Administrator Guide* for more information on creating queries and Machine Groups. If you are using the Compaq Inventory Collector, you can use the extended Compaq information in the Systems Management Server database to create queries. See the Compaq TechNote, *Integrating Compaq Insight Manager with Microsoft Systems Management Server* for more information on how to use the Compaq Inventory Collector.

- Is the job an unattended background install?

If this is an unattended background install, you must mark the job as mandatory in the Job Details window which you reach from the Job Properties dialog box. This allows the Package Command Manager to run the job when the server is at a login prompt.

The job is now created and Systems Management Server begins the distribution process.

Distributing the ELSA Display Driver

The ELSA Display Drivers for Windows NT 3.51 and 4.0 can be found on the Compaq SmartStart for Workstations CD in the following directory:

```
\CPQDRV\ELSA\\DISPDRV
```

To distribute the software via Systems Management Server, follow these steps:

1. Create a temporary directory on the Systems Management Server site server and copy the files from the Compaq SmartStart for Workstations CD into this directory.
2. Copy all files in the following directory on Compaq SmartStart for Workstations CD:

\TOOLKIT\SMS\PDF\ELSA\DISPDRV\<ntversion>

to the temporary directory configured in step 1. This temporary directory is now the source directory for Systems Management Server.

3. Create a package under Systems Management Server for the ELSA Display Drivers. Press the *Import* button to load the *ELSADISP.PDF* file which is now located in the temporary directory from step 1.
4. Configure the source directory for the ELSA driver files. This is located under the *Workstation* button. The source directory for the driver files is the source directory specified in step 2.

NOTE: Both the Systems Management Server service account on the primary site server and the user ID running the Admin Tool must have at least read-access rights to this directory.

5. Make sure the following properties are set if you are performing an automated, background install:

Automated Command Line, System Task, Windows NT (x86)

If you are performing an automated job only, and the target server is running a screen saver with a password, the properties should be:

Automated Command Line, Windows NT (x86)

Make sure the command line property is set to:

install.cmd

Considerations for Distributing the ELSA Display Driver

The ELSA Display Driver files are now ready to be distributed to Windows NT systems. To do this, create a job to send the package to target Windows NT systems. There are several factors to consider when creating a distribution job:

- Which machines will receive the job?

You can use either a query or a Machine Group to specify the target Windows NT machines. See the *Systems Management Server Administrator Guide* for more information on creating queries and Machine Groups. If you are using the Compaq Inventory Collector, you can use the extended Compaq information in the Systems Management Server database to create queries. See the Compaq TechNote, *Integrating Compaq Insight Manager with Microsoft Systems Management Server* for more information on how to use the Compaq Inventory Collector.

- Is the job an unattended background install?

If this is an unattended background install, you must mark the job as mandatory in the Job Details window which you reach from the Job Properties dialog box. This allows the Package Command Manager to run the job when the server is at a login prompt. The job is now created and Systems Management Server begins the distribution process.

Once the files have been distributed to the target NT workstations, follow the instructions in the *README.TXT* file located on the Compaq SmartStart for Workstations CD in the following directory:

```
\\TOOLKIT\SMS\PDF\ELSA\DISPDR\<ntversion>
```

for information on installing the ELSA Windows NT 3.51 or 4.0 Display Drivers.

Distributing the ESS Audio Drivers

The ESS Audio Drivers can be found on Compaq SmartStart for Workstations CD in the following directory:

`\CPQDRV\ESSAUDIO\<ntversion>`

To distribute the software via Systems Management Server, follow these steps:

1. Create a temporary directory on the Systems Management Server site server, and copy the files from the Compaq SmartStart for Workstations CD into this directory.
2. Copy all files in the following directory on Compaq SmartStart for Workstations CD:

`\TOOLKIT\SMS\PDF\ESS1868\<ntversion>`

to the temporary directory configured in step 1. This temporary directory is now the source directory for Systems Management Server.

3. Create a package under Systems Management Server for the ESS Audio Drivers. Press the *Import* button to load the *ESS1868.PDF* file which is now located in the temporary directory from step 1.
4. Configure the source directory for the ESS1868 Driver files. This is located under the *Workstation* button. The source directory for the driver files is the source directory specified in step 2.

NOTE: Both the Systems Management Server service account on the primary site server and the user ID running the Admin Tool must have at least read-access rights to this directory.

5. Make sure the following properties are set if you are performing an automated, background install:

Automated Command Line, System Task, Windows NT (x86)

If you are performing an automated job only, and the target server is running a screen saver with a password, the properties should be:

Automated Command Line, Windows NT (x86)

Make sure the command line property is set to:

install.cmd

Considerations for Distributing the ESS Audio Drivers

The ESS Audio Drive files are now ready to be distributed to Windows NT systems. To do this, create a job to send the package to target Windows NT systems. There are several factors to consider when creating a distribution job:

- Which machines will receive the job?

You can use either a query or a Machine Group to specify the target Windows NT machines. See the *Systems Management Server Administrator Guide* for more information on creating queries and Machine Groups. If you are using the Compaq Inventory Collector, you can use the extended Compaq information in the Systems Management Server database to create queries. See the Compaq TechNote, *Integrating Compaq Insight Manager with Microsoft Systems Management Server* for more information on how to use the Compaq Inventory Collector.

- Is the job an unattended background install?

If this is an unattended background install, you must mark the job as mandatory in the Job Details window which you reach from the Job Properties dialog box. This allows the Package Command Manager to run the job when the server is at a login prompt. The job is now created and Systems Management Server begins the distribution process.

Distributing the MATROX Display Drivers

The MATROX Video Drivers can be found on the Compaq SmartStart for Workstations CD in the following directory:

`\CPQDRV\MATROX\`

To distribute the software via Systems Management Server, follow these steps:

1. Create a temporary directory on the Systems Management Server site server, and copy the files from the above directory into this directory.
2. Copy all files in the following directory on Compaq SmartStart for Workstations CD:

`\TOOLKIT\SMS\PDF\MATROX\`

to the temporary directory configured in step 1. This temporary directory is now the source directory for Systems Management Server.

3. Create a package under Systems Management Server for the MATROX Drivers. Press the *Import* button to load the *MATROX.PDF* file which is now located in the temporary directory from step 1.
4. Configure the source directory for the MATROX Driver files. This is located under the *Workstation* button. The source directory for the driver files is the source directory specified in step 2.

NOTE: Both the Systems Management Server service account on the primary site server and the user ID running the Admin Tool must have at least read-access rights to this directory.

5. Make sure the following properties are set if you are performing an automated, background install:

Automated Command Line, System Task, Windows NT (x86)

If you are performing an automated job only, and the target server is running a screen saver with a password, the properties should be:

Automated Command Line, Windows NT (x86)

Make sure the command line property is set to:

install.cmd

Considerations for Distributing the MATROX Display Drivers

The MATROX Video Driver files are now ready to be distributed to Windows NT systems. To do this, create a job to send the package to target Windows NT systems. There are several factors to consider when creating a distribution job:

■ Which machines will receive the job?

You can use either a query or a Machine Group to specify the target Windows NT machines. See the *Systems Management Server Administrator Guide* for more information on creating queries and Machine Groups. If you are using the Compaq Inventory Collector, you can use the extended Compaq information in the Systems Management Server database to create queries. See the Compaq TechNote, *Integrating Compaq Insight Manager with Microsoft Systems Management Server* for more information on the Compaq Inventory Collector.

■ Is the job an unattended background install?

If this is an unattended background install, you must mark the job as mandatory in the Job Details window which you reach from the Job Properties dialog box. This allows the Package Command Manager to run the job when the server is at a login prompt.

The job is now created and Systems Management Server begins the distribution process.

Using the *RESTORE.CMD* File

The *RESTORE.CMD* file restores the previous version of the software. This file only restores the previous files, not the Windows NT registry. If the registry is corrupted, you must restore the Windows NT registry from a backup.

To use the *RESTORE.CMD* file, follow these steps:

1. Copy the *RESTORE.CMD* file located in the directory for the particular software you need to restore. For example:

- ❑ From the directory for Insight Agents:

\\<servername>\CPQIS1\CPQIS\TOOLKIT\<version>\SMS\PDF\WTCMA

- ❑ From the directory for the Windows NT SSD:

\\<servername>\CPQIS1\CPQIS\TOOLKIT\<version>\SMS\PDF\SSD

- ❑ From the directory for the ELSA Display Driver:

\TOOLKIT\SMS\PDF\ELSA\DISPDRV\<ntversion>

- ❑ From the directory for the ESS Audio Drivers:

\TOOLKIT\SMS\PDF\ESS1868\<ntversion>

- ❑ From the directory for the MATROX Display Drivers:

\TOOLKIT\SMS\PDF\MATROX\<ntversion>

Copy the *RESTORE.CMD* file to a temporary directory on the Systems Management Server primary site server.

Where: <servername> is the name of an Integration Server

<version> is a version of the Systems Management Toolkit

2. Create a package that has a source directory as the temporary directory named in step 1.
 3. Create a command line that runs *RESTORE.CMD* with no command line arguments.
-

.....

Create a job to distribute the package to the system(s) in question. Because *RESTORE.CMD* is a batch file, it can be run as a Automated, System Task and sent to system running at a login prompt. You must mark the job as *mandatory* for it to work properly at the target system.

Norton Administrator for Networks

This section details the issues involved in using Norton Administrator for Networks for distribution, how to use Norton Administrator to stage software distribution, and how to distribute Compaq software using Norton Administrator.

Considerations for Using Norton Administrator for Networks

Norton Administrator for Networks is designed to work with a variety of operating systems, including Windows NT systems; it has facilities to distribute software directly to Windows NT systems. Ideally, the distribution process should allow for an unattended, background installation of software to a Windows NT server at a login prompt.

Because Norton Administrator for Networks is evolving from a system designed for use with 16-bit Windows systems, it does have some limitations surrounding the distribution of software to Windows NT machines. Norton Administrator also has a limitation when dealing with fault detection and recovery. Finally, because of the way Norton Administrator distributes files, there are a few things to be aware of, especially in a WAN environment, before distributing software via Norton Administrator.

Background Installation

Norton Administrator for Networks distributes software to Windows NT machines via a 16-bit agent running on the target machine. Because this code is 16-bit, the agent cannot run as a service on a Windows NT server. This means that there is no way to distribute software to a Windows NT server while that server is at a login prompt. The server must have someone logged in to it. In the case of the Insight Server Agents and the Windows NT SSD, this user must have administrator-level security rights.

Because there must be a user logged in to the Windows NT server, there is a potential security risk if the target server is not in a secure environment. A solution is to configure a screen-saver with a password. This will effectively lock anyone out who does not have the password.

Fault Recovery

Norton Administrator for Networks does not incorporate complete fault detection and recovery features. It does have a file backup feature, but only if each file is copied one at a time using the Norton Administrator for Networks *File Copy* command. Files are not backed up during an install from an install program such as the ones used by the Insight Agents or the Windows NT SSD.

Compaq has written two command files (*INSTALL.CMD* and *RESTORE.CMD*) for use with Norton Administrator for Networks that perform a file backup of existing Compaq software and perform a restore from the backup files. The use of these files is detailed in the following sections.

NOTE: Both the Windows NT SSD and the Insight Agent install process make changes to the Windows NT registry. This registry can not be backed up easily from the command line. Compaq recommends backing up any server that will have software distributed to it and having an Emergency Repair diskette containing the current system configuration information.

Strategy for Updating Windows NT Servers via Norton Administrator for Networks

Norton Administrator for Networks (NAN) does not use distribution servers to distribute software. A distribution server is basically a holding area for the software and allows access by each target server. Each target server must have access to the source files, wherever those files are located. This can cause problems, especially in a WAN environment when the source files might reside on the opposite side of the WAN link or where the server is on a busy LAN segment.

Compaq recommends a two-step process for distributing the listed Compaq software to Windows NT servers. First, copy the source files from an Integration Server to a target machine across the WAN link or to a machine that resides in a domain with target clients. This machine acts as a distribution server. Second, configure a separate job for each WAN/domain to update the servers at that site.

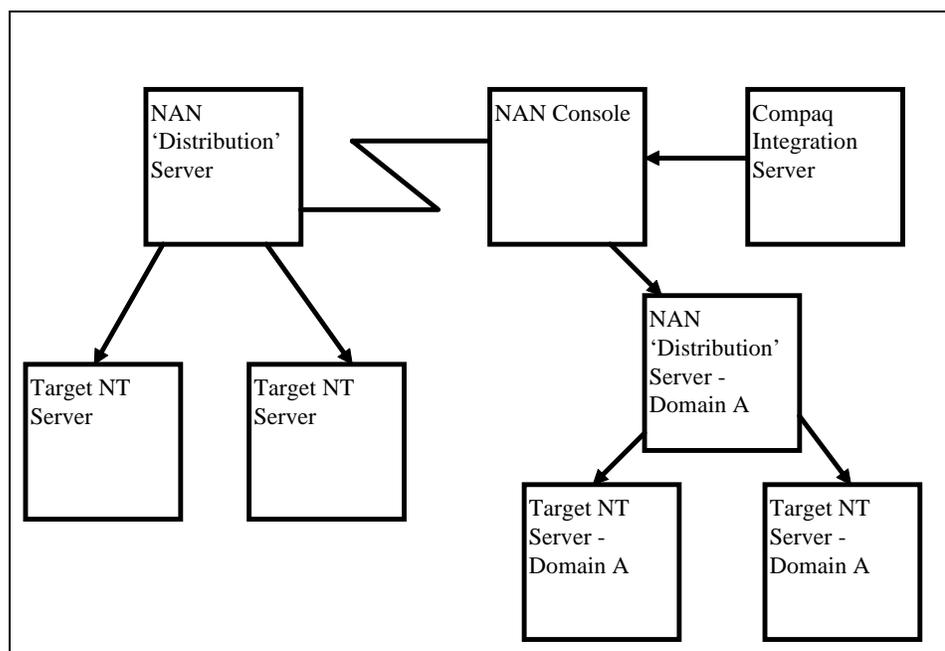


Figure 3-1. Using "Distribution" Servers in a NAN Environment

This process keeps network traffic isolated to the segments where the target machines reside.

NOTE: The distribution server can also be a target Windows NT server for the job.

Using Norton Administrator for Networks to Distribute Compaq Software

This section explains how to use Norton Administrator for Networks to distribute the following products to Windows NT servers:

- Window NT SSD for Compaq Systems
- Insight Agents for Compaq Systems
- Compaq Survey Utility for Compaq Systems
- ELSA Display Driver for Professional Workstations
- ESS Audio Drivers for Professional Workstations
- MATROX Display Drivers for Professional Workstations

Compaq Files for Norton Administrator for Networks

Compaq supplies several files for use with Norton Administrator. These files install the software for each product. Each package has the same two command files associated with it. These files are:

- *INSTALL.CMD*

This file makes a backup copy of any existing version and then launches the setup program to install the files.

- *RESTORE.CMD*

This file restores the previous version's files from the backups made by the *INSTALL.CMD* file.

NOTE: This does not restore the Windows NT registry.

Windows NT SSD for Compaq Systems

The files for Norton Administrator for Networks are in the following directory:

```
\\<servername>\CPQIS1\CPQIS\TOOLKIT\<version>\NAN\SCRIPTS\SSD
```

Where: <servername> is the name of an Integration Server

<version> is a version of the Systems Management Toolkit

Insight Agents for Compaq Systems

The files for Norton Administrator for Networks are in the following directory:

```
\\<servername>\CPQIS1\CPQIS\TOOLKIT\<version>\NAN\SCRIPTS\INTCMA
```

Where: <servername> is the name of an Integration Server

<version> is a version of the Systems Management Toolkit

Compaq Survey Utility for Compaq Systems

The files for Norton Administrator for Networks are in the following directory:

```
\\<servername>\CPQIS1\CPQIS\TOOLKIT\<version>\NAN\SCRIPTS\SURVEY
```

Where: <servername> is the name of an Integration Server

<version> is a version of the Systems Management Toolkit

ELSA Display Driver for Compaq Professional Workstations

The files for Norton Administrator for Networks are in the following directory on the Compaq SmartStart for Workstations CD:

```
\TOOLKIT\NAN\SCRIPTS\ELSA\DISPDRV\<ntversion>
```

or in the following directory on an Integration Server:

```
\\<servername>\TOOLKIT\<version>\NAN\SCRIPTS\ELSA\DISPDRV\<ntversion>
```

Where: <servername> is the name of an Integration Server

<version> is a version of the Systems Management Toolkit

<ntversion> is the version of Windows NT the target machine is running

ESS Audio Drivers for Compaq Professional Workstations

The files for Norton Administrator for Networks are in the following directory on the Compaq SmartStart for Workstations CD:

\\TOOLKIT\NAN\SCRIPTS\ESS1868\<ntversion>

or in the following directory on an Integration Server:

\\<servername>\TOOLKIT\<version>\NAN\SCRIPTS\ESS1868\<ntversion>

Where: <servername> is the name of an Integration Server

<version> is a version of the Systems Management Toolkit

<ntversion> is the version of Windows NT the target machine is running

MATROX Display Drivers for Compaq Professional Workstations

The files for Norton Administrator for Networks are in the following directory on the Compaq SmartStart for Workstations CD:

\\TOOLKIT\NAN\SCRIPTS\MATROX\<ntversion>

or in the following directory on an Integration Server:

\\<servername>\TOOLKIT\<version>\NAN\SCRIPTS\MATROX\<ntversion>

Where: <servername> is the name of an Integration Server

<version> is a version of the Systems Management Toolkit

<ntversion> is the version of Windows NT the target machine is running

Distributing the Windows NT SSD Using an Integration Server

The Windows NT SSD contains various drivers and other specific software for Compaq hardware running Windows NT. The Windows NT SSD updates the Windows NT software on Windows NT servers to take advantage of Compaq hardware. The software can be found in the following directory on an Integration Server:

```
\\<servername>\CPQIS1\CPQIS\CPQSUPSW\NTSSD\<version>
```

Where: <servername> is the name of an Integration Server

<version> is a version of the Windows NT SSD

Before you can install the Windows NT SSD from this directory, this directory must be shared because the Windows NT SSD requires a drive mapping to these files. To share this directory, you can either go to the Integration Server and use File Manager to share the directory, or you can use Norton Administrator for Networks to distribute a job to the Integration Server that executes the following command:

```
net share <sharename>=\\<servername>\CPQIS1\CPQIS\CPQSUPSW\NTSSD\<version>
```

Where: <servername> is the name of an Integration Server

<version> is a version of the Windows NT SSD

<sharename> is the name other computers will use to access this directory

NOTE: The target Windows NT servers must be granted read access to this directory. This can be done by granting access to the User ID that will be logged into the target servers.

To distribute the software via Norton Administrator for Networks, follow these steps:

1. Copy the *INSTALL.CMD* and *RESTORE.CMD* files located in the directory:

```
\\<servername>\CPQIS1\TOOLKIT\<version>\NAM\SCRIPTS\SSD
```

to the directory:

```
\\<servername>\CPQIS1\CPQIS\CPQSUPSWANTSSD\<version>
```

Where: <servername> is the name of an Integration Server

<version> is a version of the respective product

The *INSTALL.CMD* file backs up any existing Windows NT SSD files and performs the drive mapping needed for the installation.

2. Open the Software Distribution window and press the *Add* button to add a new job.
3. Give the job a title, such as "SSD Install" and select the *ADD/DELETE* button to select the target Windows NT servers to receive this job.
4. Press the *Add* button to add the specific Windows NT servers to the list. For information on how to use queries to specify target machines, consult the *Norton Administrator for Networks User's Guide*.
5. Press the *OK* button to return to the Distribution Job window. From here, press the *Add* button under the *Actions to Perform* box.
6. Select *Execute File*. Select the *Specify File To Execute* button and enter one of the following command lines, depending on how you want the install to behave.

The following command installs Windows NT SSD in the background, but does not reboot:

```
\\<servername>\<sharename>\install.cmd
```

```
\\<servername>\<sharename> /SMS
```

The following command installs Windows NT SSD in the background and reboots:

```
\\<servername>\<sharename>\install.cmd  
\\<servername>\<sharename>/SMS /REBOOT
```

Where: <servername> is the name of an Integration Server

<sharename> is the Windows NT file share created in the opening paragraph

Make sure the *Use UNC Names Only* box is checked.

7. Press the *OK* button, then select the *OK* button to end.

The job is now ready for distribution. The next time you run the Norton Administrator for Networks Distribution Agent, the Windows NT SSD will be installed or upgraded on that server.

Distributing the Insight Agents Using an Integration Server

The Insight Agents Diskette contains various hardware component agents for use with Insight Manager. The agents are on an Integration Server in the following directory:

```
\\<servername>\CPQIS1\CPQIS\AGENTS\WIN-NT\ENG\<version>
```

Where: <servername> is the name of an Integration Server

<version> is a version of the Insight Agents

Before you can install the agents from this directory, this directory must be shared because the agent install requires a drive mapping to these files. To share this directory, you can either go to the Integration Server and use file manager to share the directory, or you can use Norton Administrator for Networks to distribute a job to the Integration Server that executes the following command:

```
net share <sharename>=\\<servername>\CPQIS1\CPQIS\AGENTS\WIN-NT\ENG\<version>
```

.....

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Where: <servername> is the name of an Integration Server

<version> is a version of the Insight Server Agents

<sharename> is the name other computers see for this directory

NOTE: The target Windows NT servers must be granted access to this directory. This can be done by granting access to the User ID that will be logged into the target server.

To distribute the software via Norton Administrator for Networks, follow these steps:

1. Copy the *INSTALL.COMD* and the *RESTORE.COMD* files located in the directory:

```
\\<servername>\CPQIS1\CPQIS\TOOLKIT\<version>\NAN\SCRIPTS\NTCMA
```

to the directory:

```
\\<servername>\CPQIS1\CPQIS\AGENTS\WIN-NT\ENG\<version>
```

Where: <servername> is the name of an Integration Server

<version> is a version of the respective product

This file backs up any existing agent files and performs the drive mapping needed for the agent installation.

2. Open the Software Distribution window and press the *Add* button to add a new job.
 3. Give the job a title, such as "Insight Agent Install," and select the *ADD/DELETE* button to select the target Windows NT servers to receive this job.
 4. Press the *Add* button to add the target Windows NT servers to the list. For information on how to use queries to specify target machines, consult the *Norton Administrator for Networks User's Guide*.
 5. Press the *OK* button to return to the Distribution Job window. From here, press the *Add* button under the *Actions to Perform* box.
-

6. Select *Execute File*. Press the *Specify File To Execute* button and enter one of the following command lines, depending on how you want the install to behave.

The following command is for an automated install and no reboot:

```
\\<servername>\<sharename>\install.cmd
```

```
\\<servername>\<sharename> auto
```

The following command is for a manual install and no reboot:

```
\\<servername>\<sharename>\install.cmd
```

```
\\<servername>\<sharename>
```

Where: <servername> is the name of an Integration Server

<sharename> is the Windows NT file share as described in the opening paragraph of this section.

Make sure the *Use UNC Names Only* box is checked.

7. Press the *OK* button twice.

The job is now ready for distribution. The next time the Norton Administrator for Network Software Distribution Agent is run, the Insight Agents will be installed or updated on that server.

Distributing Compaq Survey Utility Using an Integration Server

This section describes how to distribute the Compaq Survey utility directly from a Compaq Integration Server. The Compaq Survey utility software can be found in the following directory on an Integration Server:

```
\\<servername>\CPQIS1\CPQIS\SURVEY\WIN-NT\ENG\<version>
```

Where: <servername> is the name of an Integration Server

<version> is a version of the Survey utility

Before you can install the Compaq Survey utility from this directory, this directory must be shared because the Survey utility requires a drive mapping to these files. To share this directory, you can either go to the Integration Server and use File Manager to share the directory, or you can use Norton Administrator for Networks to distribute a job to the Integration Server that executes the following command:

```
net share <sharename>=\\<servername>\ CPQIS1\CPQIS\SURVEY\WIN-NT\ENG\<version>
```

Where: <servername> is the name of an Integration Server

<version> is a version of the Survey utility

<sharename> is the name other computers will use to access this directory

NOTE: The target Windows NT servers must be granted read access to this directory. This can be done by granting access to the User ID that will be logged into the target servers.

To distribute the software via Norton Administrator for Networks, follow these steps:

1. Copy the *INSTALL.CMD* and *RESTORE.CMD* files located in the directory:

```
\\<servername>\CPQIS1\TOOLKIT\<version>\NAN\SCRIPTS\SURVEY
```

to the directory:

```
\\<servername>\CPQIS1\CPQIS\SURVEY\WIN-NT\ENG\<version>
```

Where: <servername> is the name of an Integration Server

<version> is a version of the Survey utility

The *INSTALL.CMD* file backs up any existing Windows NT SSD files and performs the drive mapping needed for the installation.

2. Open the Software Distribution window and press the *Add* button to add a new job.
 3. Give the job a title, such as Survey Install and press the *Add/Delete* button to select the target Windows NT servers to receive this job.
-

4. Press the *Add* button to add the specific Windows NT servers to the list. See the *Norton Administrator for Networks User's Guide* for information on how to use queries to specify target machines.
5. Press the *OK* button to return to the Distribution Job window. From here, press the *Add* button under the Actions to Perform box.
6. Select Execute File. Press the *Specify File To Execute* button and enter the following command line.

```
\\<servername>\<sharename>\install.cmd \\<servername>\<sharename>
```

Make sure the Use UNC Names Only box is checked.
7. Press the *OK* button, then press the *OK* button to end.

The job is now ready for distribution. The next time you run the Norton Administrator for Networks Distribution Agent, the Compaq Survey utility will be installed or upgraded on that server.

Distributing ELSA Display Driver From SmartStart for Workstations

This section describes how to distribute the ELSA Video files from the Compaq SmartStart for Workstations CD. The ELSA Video Driver files can be found in the following directory on the Compaq SmartStart for Workstations CD:

```
\CPQDRV\ELSA\<ntversion>\DISPDRV
```

To distribute the software via Norton Administrator for Networks, use the following procedure:

1. Create a temporary directory on the Norton Administrator Console to hold the ELSA files. Copy the files from the previous directory into the temp directory.
2. Make this directory shared access. This will allow the target machines access to the source files. To share this directory, you can use the File Manager to create the share, or you can use the Net Share command. Make a note of the share name. This name will be used later in step 8.

NOTE: The target Windows NT systems must be granted read access to this directory. This can be done by granting access to the User ID that will be logged into the target servers.

3. Copy the *INSTALL.CMD* and *RESTORE.CMD* files from the following directory on the Compaq SmartStart for Workstations CD:

\TOOLKIT\NAN\SCRIPTS\ELSA\DISPDRV\<ntversion>

to the temp directory created in step 1.

The *INSTALL.CMD* file backs up any existing ELSA files and performs the drive mapping needed for the installation.

4. Open the Software Distribution window and press the *Add* button to add a new job.
5. Give the job a title, such as ELSA Install and press the *Add/Delete* button to select the target Windows NT systems to receive this job.
6. Use the *Add* button to add the specific Windows NT systems to the list. See the *Norton Administrator for Networks User's Guide* for information on how to use queries to specify target machines.
7. Press the *OK* button to return to the Distribution Job window. From here, press the *Add* button under the Actions to Perform box.
8. Select Execute File. Press the *Specify File To Execute* button and enter the following command line.

\\<servername>\<sharename>\install.cmd

\\<servername>\<sharename>

where: <servername> is the name of the Norton Administrator Console

<sharename> is the name of the share for the temp directory
from step 2. Make sure the Use UNC Names Only
box is checked.

9. Press the *OK* button, then press the *OK* button to end.

The job is now ready for distribution. The next time you run the Norton Administrator for Networks Distribution Agent, the ELSA Audio files will be copied to that system.

NOTE: For information on how to install the ELSA Drivers, see the *README.TXT* file located on the Compaq SmartStart for Workstation CD in the \CPQDRV\ELSA\\DISPDRV directory.

Distributing ESS Audio Drivers From SmartStart for Workstations

This section describes how to distribute the ESS Driver from the Compaq SmartStart for Workstation CD. The ESS Audio Driver files can be found in the following directory on the Compaq SmartStart for Workstations CD:

\CPQDRV\ESSAUDIO\

To distribute the software via Norton Administrator for Networks, follow these steps:

1. Create a temporary directory on the Norton Administrator Console to hold the ESS files. Copy the files from the above directory into the temp directory.
2. Make this directory shared access. This will allow the target machines access to the source files. To share this directory, you can use the File Manager to create the share, or you can use the Net Share command. Make a note of the share name. This name will be used later in step 8.

NOTE: The target Windows NT systems must be granted read access to this directory. This can be done by granting access to the User ID that will be logged into the target servers.

3. Copy the *INSTALL.CMD* and *RESTORE.CMD* files from the following directory on the Compaq SmartStart for Workstations CD:

\TOOLKIT\NAN\SCRIPTS\ESS1868\

to the temp directory created in step 1.

The *INSTALL.CMD* file backs up any existing ESS files and performs the drive mapping needed for the installation.

4. Open the Software Distribution window and select the *Add* button to add a new job.

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5. Give the job a title, such as ESS Install and select the *Add/Delete* button to select the target Windows NT systems to receive this job.
6. Use the *Add* button to add the specific Windows NT systems to the list. For information on how to use queries to specify target machines, consult the *Norton Administrator for Networks User's Guide*.
7. Select the *OK* button to return to the Distribution Job window. From here, select the *Add* button under the Actions to Perform box.
8. Select Execute File. Press the *Specify File To Execute* button and enter the following command line:

```
\\<servername>\<sharename>\install.cmd
```

```
\\<servername>\<sharename>
```

where: <servername> is the name of the Norton Administrator Console

<sharename> is the name of the share for the temp directory
from step 2. Make sure the Use UNC Names Only
box is checked.

9. Select the *OK* button, then select the *OK* button to end.

The job is now ready for distribution. The next time you run the Norton Administrator for Networks Distribution Agent, the ESS Audio files will be copied to that system.

NOTE: For information on how to install the ESS Drivers, see the *README.TXT* file located on the Compaq SmartStart for Workstation CD in the \CPQDRV\ESSAUDIO \<ntversion> \DISPDRV directory.

Distributing MATROX Display Drivers From SmartStart for Workstations

This section describes how to distribute the MATROX Driver files from the Compaq SmartStart for Workstation CD. The MATROX Video Driver files can be found in the following directory on the Compaq Professional Workstation NT CD:

`\CPQDRV\MATROX\<ntversion>`

To distribute the software via Norton Administrator for Networks, use the following procedure:

1. Create a temporary directory on the Norton Administrator Console to hold the MATROX files. Copy the files from the above directory into the temp directory.
2. Make this directory shared access. This will allow the target machines access to the source files. To share this directory, you can use the File Manager to create the share, or you can use the Net Share command. Make a note of the share name. This name will be used later in step 8.

NOTE: The target Windows NT systems must be granted read access to this directory. This can be done by granting access to the User ID that will be logged into the target servers.

3. Copy the *INSTALL.CMD* and *RESTORE.CMD* files from the following directory on the Compaq SmartStart for Workstations CD:

`\TOOLKIT\NAN\SCRIPTS\MATROX\<ntversion>`

to the temp directory created in step 1.

The *INSTALL.CMD* file backs up any existing MATROX files and performs the drive mapping needed for the installation.

4. Open the Software Distribution window and select the *Add* button to add a new job.
5. Give the job a title, such as MATROX Install and select the *Add/Delete* button to select the target Windows NT systems to receive this job.
6. Use the *Add* button to add the specific Windows NT systems to the list. For information on how to use queries to specify target machines, consult the *Norton Administrator for Networks User's Guide*.

7. Select the *OK* button to return to the Distribution Job window. From here, select the *Add* button under the Actions to Perform box.
8. Select Execute File. Press the *Specify File To Execute* button and enter the following command line:

```
\\<servername>\<sharename>\install.cmd
```

```
\\<servername>\<sharename>
```

where: <servername> is the name of the Norton Administrator Console

<sharename> is the name of the share for the temp directory

Make sure the Use UNC Names Only box is checked.

7. Select the *OK* button, then select the *OK* button to end.

The job is now ready for distribution. The next time you run the Norton Administrator for Networks Distribution Agent, the MATROX files will be copied to that system.

NOTE: For information on how to install the MATROX Drivers, see the *README.TXT* file located on the Compaq SmartStart for Workstation CD in the \CPQDRV\MATROX\<ntversion> \DISPDRV directory.

Distributing the Source Files to a Distribution Server

This section describes how to use Norton Administrator for Network to distribute the source files for the software products to intermediate servers, called distribution servers, to facilitate the distribution to target Windows NT servers.

NOTE: This step might not be required if you have a small site or a small number of servers. Refer to the next section, "Distributing the Source Files to an Integration Server."

1. Copy the Norton Administrator for Networks *INSTALL.CMD* file and the *RESTORE.CMD* file located in the following directory:
 - For Windows NT SSD:
-

\\<servername>\CPQIS1\CPQIS\TOOLKIT\<version>\WAN\SCRIPTS\SSD

To the source directory on the Integration Server:

\\<servername>\CPQIS1\CPQIS\CPQSUPSWANTSSD\<version>

❑ For Insight Agents:

\\<servername>\CPQIS1\CPQIS\TOOLKIT\<version>\WAN\SCRIPTS\INTCMA

To the source directory on the Integration Server:

\\<servername>\CPQIS1\CPQIS\AGENTS\WIN-NT\ENG\<version>

❑ For Compaq Survey Utility:

\\<servername>\CPQIS1\CPQIS\TOOLKIT\<version>\WAN\SCRIPTS\SURVEY

To the source directory on the Integration Server:

\\<servername>\CPQIS1\CPQIS\SURVEY\WIN-NT\ENG\<version>

- ❑ For ELSA Display Driver from the SmartStart for Workstation CD:

```
\TOOLKIT\\NAN\SCRIPTS\ELSA\DISPDRV\>  
\CPQDRV\ELSA\\DISPDRV
```

To a temporary directory on the Norton Administrator for Networks console and create a drive sharing for this directory.

- ❑ For ESS Audio Drivers from the SmartStart for Workstation CD:

```
\TOOLKIT\\NAN\SCRIPTS\ESS1868\>  
\CPQDRV\ESSAUDIO\>
```

To a temporary directory on the Norton Administrator for Networks console and create a drive sharing for this directory.

- ❑ For MATROX Display Drivers from the SmartStart for Workstation CD:

```
\CPQIS1\CPQIS\TOOLKIT\\NAN\SCRIPTS\SSD  
\CPQDRV\MATROX\>
```

To a temporary directory on the Norton Administrator for Networks console and create a drive sharing for this directory.

2. Open the Software Distribution window from the Norton Administrator for Networks console. Press the *ADD* button to add a new distribution job.
3. Give this job a name and press the *ADD/DELETE* button.
4. Add all the intermediate servers receiving the software copies.

NOTE: The User IDs logged on to these target servers must have read access to the directory on the Integration Server where the source files reside.

5. From the Distribution Job window, press the *ADD* button to add the action to be performed during this install. In the Execute File box, enter the following command, using the information specific to your network:

For the Windows NT SSD enter:

```
xcopy \\<servername>\CPQIS1\CPQIS\CPQSUPSWANTSSD\<version> \<tempdir> /e/s/i/h
```

For the Insight Agents enter:

```
xcopy \\<servername>\CPQIS1\CPQIS\AGENTS\WIN-NT\ENG\<version> \<tempdir> /e/s/i/h
```

For the Compaq Survey Utility enter:

```
xcopy \\<srvarname>\CPQIS1\CPQIS\SURVEY\WIN-NT\ENG\<version> \<tempdir> /e/s/i/h
```

Where: <servername> is the name of an Integration Server

<version> is a version of the respective product

<tempdir> is a temporary directory to be used to store source files on the distribution server. This can be anything you want. For example, c:\temp. The /i option will automatically create this directory.

For the ELSA Display Driver enter:

```
xcopy \\<srvarname>\<sharename> c:\<tempdir> /e/s/i/h
```

For the ESS Audio Drivers enter:

```
xcopy \\<srvarname>\<sharename> c:\<tempdir> /e/s/i/h
```

For the MATROX Display Drivers enter:

```
xcopy \\<srvarname>\<sharename> c:\<tempdir> /e/s/i/h
```

Where: <servername> is the name of the Norton Administrator for Networks console

<sharename> is the name of the share create in step 1

<tempdir> is a temporary directory to be used to store source files on the distribution server. This can be anything you want. For example, c:\temp. The /i option will automatically create this directory.

Make sure the *Use UNC Names Only* box and the *Delay Job Until Command Completes* box are checked.

6. Press the *ADD* button, then the *Execute File* action. Enter the following:

```
net share <sharename>=\<tempdir> /y
```

<sharename> - This is the name used by other machines to map a drive to this directory. Adding a dollar sign (\$) will make this share invisible to normal users.

<tempdir> is the temp directory specified in step 5.

Make sure the *Use UNC Names Only* box is checked.

NOTE: Both the Insight Agents and the Windows NT SSD must be installed from a mapped drive. This step facilitates this drive mapping during installation by creating a share for the source files on the distribution server.

7. Press the *OK* button to return to the Distribution Job window, and press the *OK* button to begin the job.

The job is now ready to execute. The next time the distribution agent on a target machine runs, it will see the waiting job and execute it. See the *Norton Administrator for Networks User's Guide* for more information on creating a distribution job.

Distributing the Windows NT SSD Using a Distribution Server

The Windows NT SSD contains various drivers and other specific software for Compaq hardware running Windows NT. The Windows NT SSD updates the Windows NT software on Windows NT servers to take advantage of Compaq hardware. The source files will be found on a distribution server under the sharename share specified in step 6 of the section, "Distributing the Source Files to a Distribution Server."

To distribute the software via Norton Administrator for Networks, follow these steps:

1. Open the Software Distribution window from the NAN console and press the *Add* button to add a new job.
2. Give the job a title, such as “SSD Install” and select the *ADD/DELETE* button to select the target Windows NT servers to receive this job.
3. Press the *Add/Delete* button to add the specific Windows NT servers to the list. See *Norton Administrator for Networks User’s Guide* for information on how to use queries to specify target machines.
4. Press the *OK* button to return to the Distribution Job window. From here, select the *Add* button under the *Actions to Perform* box.
5. Select *Execute File*. Select the *Specify File To Execute* button and enter one of the following command lines, depending on how you want the install to behave:

```
\\<servername>\<sharename>\install.cmd
```

```
\\<servername>\<sharename> /SMS
```

Where: <servername> is the name of the distribution server

<sharename> is the Windows NT file share without the dollar sign (\$) created by step 6 in the section, “Distributing the Source Files to a Distribution Server.”

This installs Windows NT SSD in the background, but does not reboot.

```
\\<servername>\<sharename>\install.cmd
```

```
\\<servername>\<sharename> /SMS /REBOOT
```

Where: <servername> is the name of the distribution server

<sharename> is the Windows NT file share without the dollar sign (\$) created by step 6 in the section, “Distributing the Source Files to a Distribution Server”.

This installs the Windows NT SSD in the background and reboots.

Make sure the *Use UNC Names Only* box is checked.

6. Press the *OK* button, then select the *OK* button to end.

The job is now ready for distribution. The next time the Norton Administrator for Networks Distribution Agent is run, the Windows NT SSD will be installed or upgraded on that server.

Distributing the Insight Agents Using a Distribution Server

The Insight Agents consist of various hardware component agents for use with Compaq Insight Manager. The source files will be found on a distribution server under the sharename share specified in step 6 of the section, "Distributing the Source Files to a Distribution Server."

To distribute the software via Norton Administrator for Networks, follow these steps:

1. Open the Software Distribution window and press the *Add* button to add a new job.
2. Give the job a title, such as "Insight Agent Install," and select the *ADD/DELETE* button to select the target Windows NT servers to receive this job.
3. Press the *Add* button to add the target Windows NT servers to the list. See *Norton Administrator for Networks User's Guide* for information on how to use queries to specify target machines.
4. Press the *OK* button to return to the Distribution Job windows. From here, press the *Add* button under the *Actions to Perform* box.
5. Select *Execute File*. Press the *Specify File To Execute* button and enter one of the following command lines, depending on how you want the install to behave:

```
\\<servername>\<sharename>\install.cmd
```

```
\\<servername>\<sharename> auto
```

This command is for an automated install and no reboot.

```
\\<servername>\<sharename>\install.cmd
```

```
\\<servername>\<sharename>
```

This command is for a manual install and no reboot.

Where: <servername> is the name of the distribution server

<sharename> is the Windows NT file share without the dollar sign (\$) created by step 6 in the section, "Distributing the Source Files to a Distribution Server".

Make sure the *Use UNC Names Only* box is checked.

6. Select *OK* twice.

The job is now ready for distribution. The next time the Norton Administrator for Network Software Distribution Agent is run, the agents will be installed or updated on that server.

Distributing Compaq Survey Utility Using a Distribution Server

The source files will be found on a distribution server under the sharename specified in step 7 of the section, "Distributing the Source Files to a Distribution Server."

To distribute the software via Norton Administrator for Networks (NAN), follow these steps:

1. Open the Software Distribution window from the NAN console and press the *Add* button to add a new job.
2. Give the job a title, such as Survey Install and press the *Add/Delete* button to select the target Windows NT servers to receive this job.
3. Press the *Add/Delete* button to add the specific Windows NT servers to the list. See the *Norton Administrator for Networks User's Guide* for information on how to use queries to specify target machines.
4. Press the *OK* button to return to the Distribution Job window. From here, press the *Add* button under the Actions to Perform box.

5. Select Execute File. Press the *Specify File To Execute* button and enter the following command line:

```
\\<servername>\<sharename>\install.cmd
```

```
\\<servername>\<sharename>
```

Where: <servername> is the name of the distribution server
<sharename> is the Windows NT file share without the dollar sign (\$) created by step 6 in the section, *Distributing the Source Files to a Distribution Server*.

This installs the Compaq Survey Utility for Windows NT. Make sure the Use UNC Names Only box is checked.

6. Press the *OK* button, then press the *OK* button to end.

The job is now ready for distribution. The next time the Norton Administrator for Networks Distribution Agent is run, the Compaq Survey utility will be installed or upgraded on that server.

Distributing ELSA Display Driver Using a Distribution Server

The source files will be found on a distribution server under the sharename specified in step 7 of the section, “*Distributing the Source Files to a Distribution Server*.”

To distribute the software via Norton Administrator for Networks, follow these steps:

1. Open the Software Distribution window from the NAN console and press the *Add* button to add a new job.
 2. Give the job a title, such as ELSA File Copy.
 3. Press the *Add/Delete* button to add the specific Windows NT systems to the list. See the *Norton Administrator for Networks User's Guide* for information on how to use queries to specify target machines.
 4. Press the *OK* button to return to the Distribution Job window. From here, press the *Add* button under the Actions to Perform box.
-

5. Select Execute File. Press the *Specify File To Execute* button and enter the following command line:

```
\\<servername>\<sharename>\install.cmd
```

```
\\<servername>\<sharename>
```

Where: <servername> is the name of the distribution server

<sharename> is the Windows NT file share without the dollar sign (\$) created by step 7 in the section, "Distributing the Source Files to a Distribution Server."

This copies the ELSA Video Driver files to the target NT machine. Make sure the Use UNC Names Only box is checked.

6. Press the *OK* button, then press the *OK* button to end.

The job is now ready for distribution. The next time the Norton Administrator for Networks Distribution Agent is run, the ELSA Display Driver files will be copied to that system.

NOTE: For information on how to install the ELSA Drivers, see the *README.TXT* file located on the Compaq SmartStart for Workstation CD in the \CPQDRV\ELSA\<ntversion>\DISPDRV directory.

Distributing ESS Audio Drivers Using a Distribution Server

The source files will be found on a distribution server under the sharename specified in step 7 of the section, "Distributing the Source Files to a Distribution Server."

To distribute the software via Norton Administrator for Networks, follow these steps:

1. Open the Software Distribution window from the NAN console and press the *Add* button to add a new job.
2. Give the job a title, such as ESS File Copy.

3. Press the *Add/Delete* button to add the specific Windows NT system to the list. See the *Norton Administrator for Networks User's Guide* for information on how to use queries to specify target machines.
4. Press the *OK* button to return to the Distribution Job window. From here, press the *Add* button under the Actions to Perform box.
5. Select Execute File. Press the *Specify File To Execute* button and enter the following command line:

```
\\<servername>\<sharename>\install.cmd
```

```
\\<servername>\<sharename>
```

Where: <servername> is the name of the distribution server

<sharename> is the Windows NT file share without the dollar sign (\$) created by step 7 in the section, "Distributing the Source Files to a Distribution Server."

This copies the ESS Audio Driver files to the target NT machine. Make sure the Use UNC Names Only box is checked.

6. Press the *OK* button, then press the *OK* button to end.

The job is now ready for distribution. The next time the Norton Administrator for Networks Distribution Agent is run, the ESS Audio Files will be copied to that system.

NOTE: For information on how to install the ESS Drivers, see the *README.TXT* file located on the Compaq SmartStart for Workstation CD in the \CPQDRV\ESSAUDIO\<ntversion> \DISPDRV directory.

Distributing MATROX Display Drivers Using a Distribution Server

The source files will be found on a distribution server under the sharename specified in step 7 of the section, "Distributing the Source Files to a Distribution Server."

To distribute the software via Norton Administrator for Networks, follow these steps:

1. Open the Software Distribution window from the NAN console and select the *Add* button to add a new job.
2. Give the job a title, such as MATROX File Copy.
3. Use the *Add/Delete* button to add the specific Windows NT systems to the list. For information on how to use queries to specify target machines, consult the *Norton Administrator for Networks User's Guide*.
4. Select the *OK* button to return to the Distribution Job window. From here, select the *Add* button under the Actions to Perform box.
5. Select Execute File. Press the *Specify File To Execute* button and enter the following command line:

```
\\<servername>\<sharename>\install.cmd
```

```
\\<servername>\<sharename>
```

Where: <servername> is the name of the distribution server

<sharename> is the Windows NT file share without the dollar sign (\$) created by step 7 in the section, "Distributing the Source Files to a Distribution Server."

This copies the MATROX Driver files to the target Windows NT machine. Make sure the Use UNC Names Only box is checked.

6. Select the *OK* button, then select the *OK* button to end.

The job is now ready for distribution. The next time the Norton Administrator for Networks Distribution Agent is run, the MATROX Files will be copied to that system.

NOTE: For information on how to install the MATROX Drivers, see the *README.TXT* file located on the Compaq SmartStart for Workstation CD in the \CPQDRV\MATROX\<ntversion> \DISPDRV directory.

Using the RESTORE.COMD File

The *RESTORE.COMD* restores the previous version of software. This file only restores from the previous backup files, not the Windows NT Registry. If the registry is corrupted, you must restore your Windows NT system from a backup.

To use the RESTORE.CMD file, use the following steps:

1. From the Norton Administrator Console, open the Software Distribution window and select the *Add* button to add a new job.
2. Give the job a title and Press the *Add/Delete* button to select the target Windows NT systems.
3. Use the *Add* button to add specific servers to the distribution list. Select *OK* to return to the previous window.
4. In the *Actions to Perform* box, Press the *Add* button, select *Execute File*, and enter one of the following lines:

\\<servername>\<sharename>\restore.cmd

(if you are using a distribution server)

Where: <servername> is the name of an distribution server

<sharename> is the Windows NT file share without the dollar sign (\$) created in step 6 in the section, "Distributing the Source Files to a Distribution Server."

\\<servername>\<sharename>\ restore.cmd

(if you are using a SmartStart for Workstation CD)

Where: <servername> is the name of the Norton Administrator for Networks console machine

<sharename> is the name of the share specified in step 2 of the sections for distributing drivers from the SmartStart for Workstation CD

Make sure the *Use UNC Name Only* box is marked.

5. Select *OK* twice.

The job is now ready to run. The next time the Distribution Agent runs on one of the target Windows NT servers, *RESTORE.CMD* will be run.

Chapter 4

Updating Compaq Software on NetWare Servers

This chapter describes three ways to update a NetWare server from an Integration Server:

- Locally
- Remote attended
- Remote unattended

Updating a NetWare Server Locally

Compaq has created a program called the Compaq Integration Maintenance Utility to assist in the process of updating Compaq software on a NetWare server. This utility presents a list of available software and updates the server from software stored on a Compaq Integration Server. This method of updating a Compaq NetWare server calls for using the local copy of the Integration Maintenance utility on a server-by-server basis.

Using the Compaq Integration Maintenance Utility on a NetWare Server

The following table lists the prerequisites necessary for the Integration Maintenance Utility for NetWare running on NetWare version 3.12 or 4.1x.

Filename	Description
<i>CPQMAINT.NLM</i>	Integration Maintenance Utility 3.0
<i>NWSNUT.NLM</i>	NetWare NLM Utility User Interface 4.11

The following images are supported by the Integration Maintenance utility for NetWare on an Integration Server operating in a Novell NetWare 3.12 and 4.1x environment:

- NetWare Programs from Compaq (for English and Japanese)
- Compaq Insight Management Agents for NetWare
- NetWare additive licenses (4.1 only)
- Cheyenne ARCserve 6 for NetWare
- Cheyenne JETserve 3.3 for NetWare
- Compaq Survey Utility for NetWare
- NetWare 4.1 or later (for English and Japanese)
- Novell Web Server 2.0 (for English and Japanese)
- Compaq Insight Asynchronous Management for NetWare

The Integration Maintenance utility is automatically loaded on the server during the initial SmartStart process or you may manually install it by loading CPQMAINT.NLM from the \INSTALL\CPQMAINT directory on the NetWare Operating System CD. See the *Compaq Integration Server and Integration Maintenance Utilities User Guide* for more information on Integration Maintenance utility.

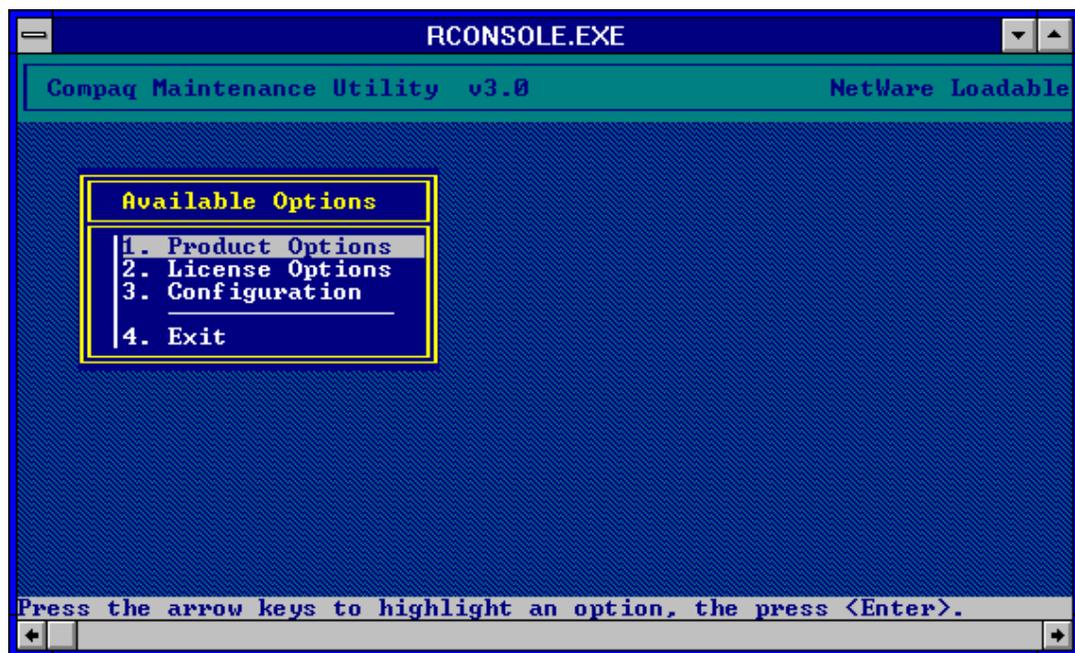


Figure 4-1. Compaq Maintenance Utility Screen

To update an existing server from an Integration Server, follow these steps:

1. From the Available Options screen, select *Product Options*. A list of available products for updating is then displayed.
2. Confirm the location of your *SERVER.EXE*. You will be prompted for this later. SmartStart places this file in the \NWSERVER directory on the boot drive of the server.
3. Select one of the products for updating from the list.

4-4 Updating Compaq Software on NetWare Servers

4. If an Activation Key is required, you will be asked for it now.
5. Select the source for the update (either Integration Server or CD-ROM). Once you have made the selection, the update is performed.

Repeat steps 3, 4 and 5 for each update you want to perform.

Updating a NetWare Server with the Remote Attended Method

A Compaq NetWare server can be updated using a remote attended method. This method uses RCONSOLE to remotely access a server's console, to launch the Integration Maintenance Utility to perform the software update.

This section describes how to use RCONSOLE and the Integration Maintenance utility to perform software updates. It will cover how to use RCONSOLE from Compaq Insight Manager 3.0 and later, and from an icon under Windows.

NOTE: RCONSOLE is not the only means to run the Integration Maintenance utility using the remote attended method. Insight Manager allows for a remote attended session to NetWare servers running TCP/IP and *XCONSOLE.NLM*. Additionally, the Compaq Remote Insight Board also allows a remote attended session to be established. See the *Compaq Insight Manager User Guide* for more information on these methods for accessing a remote NetWare console.

Adding an RCONSOLE Button to the Insight Manager Button Bar

The easiest way to access RCONSOLE from inside Compaq Insight Manager is by adding a button that launches RCONSOLE to the Insight Manager button bar.

To add an RCONSOLE button, follow these steps:

1. Map a drive to a NetWare server's SYS volume.
2. Locate the [BUTTONBAR] entry in the *CIM20.INI* file located in the Windows root directory (default: \WINDOWS or \WINNT35).
3. Add the following command line under this section:

```
Button<x>=<k>:\public\rconsole.exe
```

Where: <x> is the next number between 1-9

<k> is the drive mapped to the NetWare SYS volume

See the *CIM20.TXT* file located in the Insight Manager directory (default: \INSIGHT) for more information on adding buttons and other entries in *CIM20.INI*. For example:

```
Button1=d:\public\rconsole.exe
```

4. Start Insight Manager.

You should now see a button called RCONSOLE on the button bar. If you do not see this button, close Insight Manager and re-start it. Also check to see that the path is listed correctly in *CIM20.INI* and that the line is spelled correctly.

Adding an RCONSOLE Icon to a Windows Program Group

You can add RCONSOLE as an icon to a program group to all versions of Windows. This allows you to launch RCONSOLE without using Insight Manager.

To add an RCONSOLE icon, follow these steps:

1. Map a drive to a NetWare server's SYS volume.
2. Select the program group where you want to add the RCONSOLE icon.
3. Add a new icon to this group that points to the *RCONSOLE.EXE* file located in the PUBLIC directory of the drive mapped in step 1.

The icon should now be visible in the program group.

Using RCONSOLE to Update a NetWare Server

You can use the Integration Maintenance utility for NetWare to update a NetWare server with the latest versions of the Insight Agents and the NetWare Programs from Compaq.

To access this utility, follow these steps:

1. Press the RCONSOLE button if you have added a button to Insight Manager. Otherwise, double-click on the RCONSOLE icon.

This will launch RCONSOLE.

2. Choose between ASYNCHRONOUS and SPX servers if you launched RCONSOLE from a NetWare 4.x server (3.x server users can skip this step). The next screen presents a list of available servers. Only those servers running *RSPX.NLM* and *REMOTE.NLM* are shown.
 3. Select the server to be updated. You can use the arrow keys or type the first letter of the server name to jump to the first server with that letter. In other words, pressing **S** jumps to the first server that starts with the letter "S".
-

4. Press the **Enter** key and type the RCONSOLE password for this server. The server's console screen displays.

If you launched RCONSOLE from a NetWare 3.1x server, the gray + and - keys cycle through the available console screens, the gray * key displays a list of available options and **Shift+Esc** ends the session. If you launch RCONSOLE from a NetWare 4.x server, the **Alt+F1** keys show a list of available options, **Alt+F3** and **Alt+F4** cycle through the available screens and **Alt+F2** ends the session.

You are now ready to use the Integration Maintenance Utility. See the section, "Using the Integration Maintenance Utility on a NetWare Server" for information on how to use the Integration Maintenance utility.

Updating a NetWare Server with the Remote Unattended Method

The remote unattended method relies on using third-party distribution packages to update multiple remote Compaq servers for NetWare servers. Compaq does not recommend using this method for the following reasons.

Currently, both Microsoft Systems Management Server and Norton Administrator for Networks support NetWare servers to some degree. Systems Management Server can inventory a NetWare server and uses the NetWare server as a distribution server. Systems Management Server does not provide an easy way for users to copy files to a NetWare machine in a user specified directory. Norton Administrator for Networks will inventory a NetWare server, and it allows users to copy files to a NetWare server in a user-specified directory. However, neither product allows a distribution job access to the NetWare console.

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4-8 *Updating Compaq Software on NetWare Servers*

This access is necessary to the updating of a NetWare machine. Once the new files have been copied to a NetWare server, the server must be either rebooted or the old NLMs must be unloaded, and the new NLMs loaded. Either action allows the changes made by the new software to take effect. NetWare does not allow remote access to a server's console except through a remote console application. For security reasons, these applications do not accept command line arguments to send to a server's console. In addition, remote console applications only work on one server at a time.

For these reasons, neither Systems Management Server nor Norton Administrator for Networks can update multiple NetWare servers with a distribution job. Compaq is continuing to research the capabilities of various packages to distribute software to NetWare servers and will update our recommendations as capabilities improve.

Chapter 5

Using Other Software Distribution Applications

This chapter describes how to distribute Compaq system software using distribution applications other than Microsoft Systems Management Server or Norton Administrator for Networks. Although applications differ, they all require the information presented in this chapter:

- Server and workstation system software available from Compaq
- Source file location for Compaq system software
- System software installation commands

Also provided are suggested steps for configuring your distribution application.

Compaq System Software Available for Distribution

Compaq Servers and Professional Workstations come shipped with system software that can be distributed to target machines using a distribution application. The source file locations are required as input to the distribution application. This section lists the system software available from Compaq and their source file locations.

! **IMPORTANT:** Some applications require you to copy source files to another location before beginning the configuration process. Be sure to use this new location as the source file path for input to the distribution application.

Source File Locations for Server Software

- Compaq Insight Management Agents for NT. Located on the CPQIS1 share of an Integration Server in directory:

`\CPQIS\AGENTS\WIN-NT\ENG\`

where <version> is the CIM Agents for NT version number.

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- Compaq Supplemental Software Diskette (SSD) for NT. Located on the CPQIS1 share of an Integration Server in directory:

`\CPQIS\CPQSUPSW\NTSSD\`

where <version> is the SSD for NT version number.

- Compaq Survey Utility for NT. Located on the CPQIS1 share of an Integration Server in directory:

`\CPQIS\SURVEY\WIN-NT\ENG\`

where <version> is the Survey Utility for NT version number.

Source File Locations for Workstation Software

- ELSA Display Driver for NT. Located on the Compaq SmartStart for Workstations CD in directory:

`\CPQDRV\ELSA\`

where <ntversion> is the ELSA Display Driver for NT version number.

- INSTALL.CMD. A Compaq-provided installation script located on the CPQIS1 share of an Integration File in directory:

`\CPQIS\TOOLKIT\SMS\PDF\ELSA\DISPDRV\`

where <ntversion> is the ELSA Display Driver for NT version number.

- ESS Audio Driver for NT. Located on the Compaq SmartStart for Workstations CD in directory:

`\CPQDRV\ESSAUDIO\`

where <ntversion> is the ESS Audio Driver for NT version number.

- INSTALL.CMD. A Compaq-provided installation script located on the CPQIS1 share of an Integration File in directory:

`\CPQIS\TOOLKIT\SMS\PDF\ESS1868\`

where <ntversion> is the ESS Audio Driver for NT version number.

- Matrox Display Drivers for NT. Located on the Compaq SmartStart for Workstations CD in directory:

\CPQDRV\MATROX\

where <ntversion> is the Matrox Display Drivers for NT version number.

- INSTALL.CMD. A Compaq-provided installation script located on the CPQIS1 share of an Integration File in directory:

\CPQIS\TOOLKIT\SMS\PDF\MATROX\

where <ntversion> is the Matrox Display Drivers for NT version number.

Configuring the Distribution Application

Distribution applications use different methods for creating and distributing jobs. This section gives Compaq-specific information that must be used for a distribution job to be successful. The two key items needed are source file location, given in the previous section, and the command line needed for installation, given in this section.

Installation Command Lines

The distribution application requires the specific command line to run in order to install the application on target machines. These command lines are usually part of the install script that performs the software installation. The following sections detail the command lines for each application.

Insight Agents

The Compaq Insight Management Agents have two sets of command lines: one for automatic installation and another for manual installation.

- Automatic Install. Software is installed with no user interaction. The command line is:

setup auto

.....

5-4 Using Other Software Distribution Applications

- Manual Install. Software requires user interaction. The command line is:
setup

Installation Considerations

- The agents require a drive mapping to the source files before the command line is run. The install executable cannot be run using a UNC path (ex: "\\servername\sharename\source\setup" /auto). Therefore, an additional command that maps a drive to the source files must be added to any install script before one of the above command lines is run.
- The target machines must have at least read access to the source files in order for the install to be successful. This may necessitate a step to grant access to the target machines before the install routine is executed.

Note: The NT Agents installation must be run at the administrator level for security purposes. Therefore, make sure that either the distribution application is running with admin-level security rights or that the target user has admin-level security rights.

SSD

The NT SSD has four sets of command lines: Automated Install with Reboot, Automated Install no Reboot, Automated Refresh with Reboot, Automated Refresh no Reboot.

- Automated Install with Reboot. Scans the server for all manageable devices and installs the appropriate drivers. The command line is:
setup /SMS /REBOOT
 - Automated Install no Reboot. As above with no reboot. The command line is:
setup /SMS
 - Automated Refresh with Reboot. Updates existing drivers but does not look for new devices. The command line is:
setup /REFRESH /REBOOT
 - Automated Refresh no Reboot. As above with no reboot. The command line is:
-

setup /REFRESH

Installation Considerations

- The SSD files require a drive mapping to the source files before the command line is run. The install executable cannot be run using a UNC path (ex: "\\servername\sharename\source\setup"/SMS). Therefore, an additional command that maps a drive to the source files must be added to any install script before one of the above command lines is run.
- The target machines must have at least read access to the source files in order for the install to be successful. This may necessitate a step to grant access to the target machines before the install routine is executed.

Note: The SSD installation must be run at the administrator level for security purposes. Therefore, make sure that either the distribution application is running with admin-level security rights or that the target user has admin-level security rights.

Survey Utility

The Compaq Survey Utility has one command line: Automated Install.

- Automated Install. Automatically installs and configures the Survey Utility. The command line is:

```
survey -i
```

Installation Considerations

- The Survey files require a drive mapping to the source files before the command line is run. The install executable cannot be run using a UNC path (ex: "\\servername\sharename\source\setup" -i). Therefore, an additional command that maps a drive to the source files must be added to any install script before one of the above command lines is run.
- The target machines must have at least read access to the source files in order for the install to be successful. This may necessitate a step to grant access to the target machines before the install routine is executed.

Note: The Survey Utility installation must be run at the administrator level for security purposes. Therefore, make sure that either the distribution application is running with admin-level security rights or that the target user has admin-level security rights.

ELSA Display Drivers

The ELSA display drivers have one command line: File Copy.

- File Copy. Copies the ELSA drivers from their source location to directory:

`%SystemRoot\System32\ELSA\Display`

Installation Considerations

- Be sure to copy file INSTALL.CMD to the same directory as the ELSA source files before invoking INSTALL.CMD in a distribution job.
- This command only copies the source files to a target machine. Refer to the README files located in the source directory on the Workstation CD for instructions on how to install the software under NT.

ESS Audio Drivers

The ESS audio drivers have one command line: File Copy.

- File Copy. Copies the ESS drivers from their source location to directory:

`%SystemRoot\System32\ESS1868`

Installation Considerations

- Be sure to copy file INSTALL.CMD to the same directory as the ESS source files before invoking INSTALL.CMD in a distribution job.
 - This command only copies the source files to a target machine. Refer to the README files located in the source directory on the Workstation CD for instructions on how to install the software under NT.
-

MATROX Video Drivers

The Matrox video drivers have one command line: File Copy.

- File Copy. Copies the Matrox drivers from their source location to directory:

```
%SystemRoot\System32\Matrox
```

Installation Considerations

- Be sure to copy file INSTALL.CMD to the same directory as the Matrox source files before invoking INSTALL.CMD in a distribution job.
- This command only copies the source files to a target machine. Refer to the README files located in the source directory on the Workstation CD for instructions on how to install the software under NT.

Steps for Configuring the Application

The following steps are those generally needed to configure a distribution application to send a distribution job to target machines.

1. Copy the source files to a location accessible by the distribution application.

Note: This step is needed for the Workstation files since they require files located in two different directories: source files are on a CD, and the INSTALL.CMD file is located on an Integration Server.

2. Configure the application with the source location and command line to be executed. Use the information given in previous sections to configure the application.
3. Configure the application with the target machines to receive the files.
4. Determine the date and time the target machines will receive the installation command and whether it is mandatory or not.
5. Once everything is configured, start the distribution process.

Appendix A

Third-Party Distribution Tools Overview

This appendix gives a high-level overview of how the distribution process works for Microsoft Systems Management Server and Norton Administrator for Networks.

The distribution process differs between Systems Management Server and Norton Administrator for Networks. The basic difference lies in the way each application distributes software to target machines. This difference changes the access rights each target machine needs to access the distributed software.

Systems Management Server

The distribution process for Systems Management Server is as follows (see Figure A-1):

1. The Administrator creates a package, located anywhere the Systems Management Server machine has access, then creates a job to distribute this package.
2. Systems Management Server compresses the source files and sends them to distribution servers.
3. The distribution servers decompress the package and place the source files in the Systems Management Server share directory structure.
4. The Package Command Managers on the target machines detect a new job and start the job located on the target machine's distribution server.

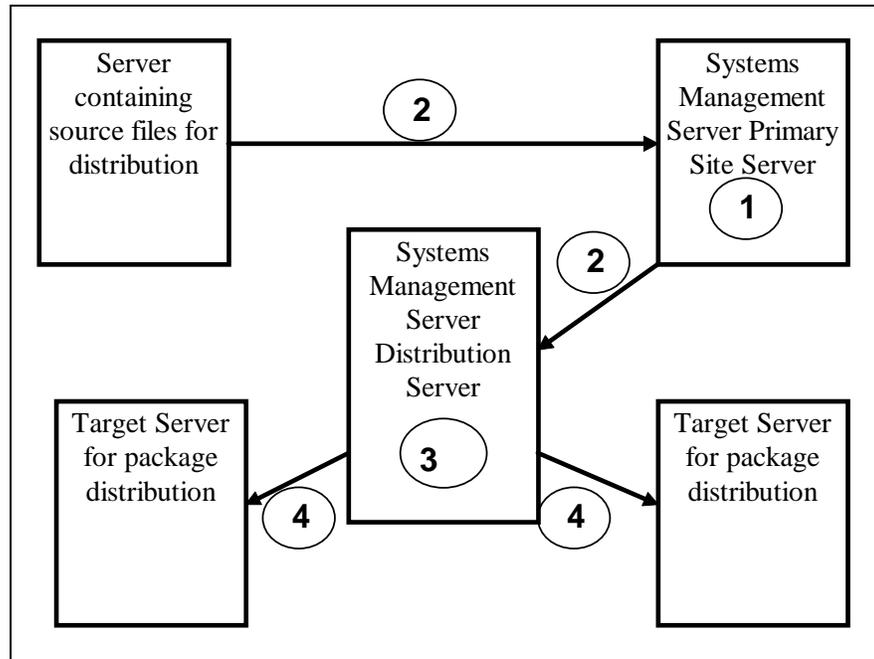


Figure A-1. Systems Management Server Distribution Process

Because Systems Management Server uses a distribution server as an intermediary location for the package, a target machine only needs access to the distribution server's Systems Management Server share. This configuration is automatically set up by Systems Management Server.

The key item to remember is this: the Systems Management Server Primary Site Server initiating the distribution must have access to the source files. These files can be located on any machine running any operating system to which Windows NT can connect as long as the access rights permit the Primary Site Server to access the files. These source machines can include an Integration Server running Windows NT or NetWare.

Norton Administrator for Networks

The distribution process for Norton Administrator for Networks 2.x (NAN) is as follows: (see Figure A-2):

1. The administrator creates an install script and then creates a job to send this script to target machines via the NAN console.
2. The target machine runs the script, which points to the machine where the source files reside. This machine can be an Integration Server.
3. The script installs the application on the target machine.
4. There is an exception in the case of distributing files to servers. In this case, the NAN console must have access to the source server and the files are copied directly to the target server. This process can be used to implement distribution servers and to copy files to NetWare servers.

Normally, Norton pushes the install commands to the target machine and requires the target machines to access the source files directly.

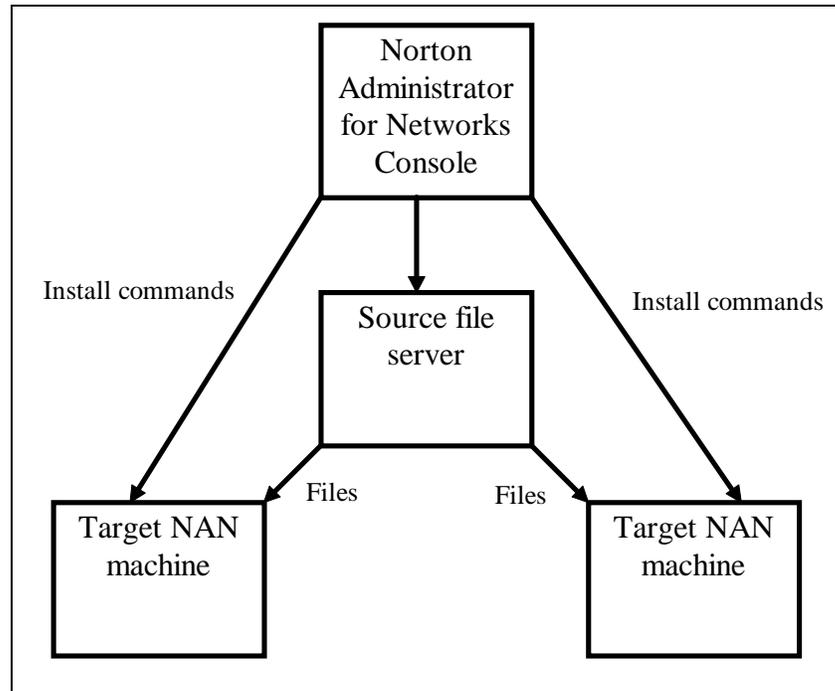


Figure A-2. Norton Administrator for Networks Distribution Process

The key item to remember for Norton Administrator for Networks is that each target machine (or user logged on to a target machine) must have access to the source files. In the case of copying files to a NetWare server, the user ID at the console must have access to the source files. The console allows a user ID to be specified to permit access to the NetWare server.

Because of the way NAN works, there might be difficulties in accessing files from a source server over a WAN link when the network is busy. Identify one machine in each domain where target machines reside and distribute the source files to these machines first. This effectively creates a source file server in that domain. Then create different jobs for each domain that pull the source files off of these distribution servers. This localizes the traffic to the network segments where the particular domain resides. This is the best course of action in WAN environments.

Appendix B

Multivendor Integration from Compaq

To help you successfully integrate and optimize your network or multivendor system, Compaq has developed a library of systems integration TechNotes for the NetWare, Microsoft Windows NT, SCO UNIX, and OS/2 operating system environments. TechNotes provide you with important information on topics such as network performance management, server management, and operating system interconnectivity.

To get a copy of a particular TechNote in electronic format, you can access:

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B-2 *Multivendor Integration from Compaq*

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Compaq Computer S.A.R.L.
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91959 LES ULIS Cedex
France

FAX: 1-331-64-46-51-81

Current TechNotes

The current TechNotes available are listed in Table B-1.

Table B-1
Compaq TechNotes

TechNote Name	Part Number
Compaq Insight Management	
Integrating Compaq Insight Manager with Enterprise Management Platforms (11/96)	145806-005
Integrating Compaq Insight Manager with Microsoft Systems Management Server (11/96)	184720-003
Integrating Compaq Insight Manager with ManageWise (6/96)	182074-002
NetWare	
Performance Management in a NetWare v3.1x Environment (4/93)	133399-002
NetWare Tape Backup Management Using ARCserve from Compaq (4/93)	137535-001
NetWare 4 Performance Management (7/94)	137989-001
ORACLE Server Planning in a NetWare v3.11 Environment (5/93)	145143-001
NetWare Server Management (9/92)	145231-001
Compaq IDA-2 Configuration for NetWare (12/92)	145536-001
Compaq ProSignia Configuration Guidelines for NetWare v3.x (12/92)	145537-001
Compaq Answers to Technical Support Questions for NetWare Environments (2/95)	145710-002
NetWare SFT III v3.11 Installation (9/93)	145905-001
NetWare Migration from 2.x to 3.12 (6/94)	181069-001

continued

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B-4 Multivendor Integration from Compaq

Compaq TechNotes *continued*

TechNote Name	Part Number
NetWare (continued)	
NetWare Migration from 3.12 to 4 (11/94)	181152-001
SYBASE SQL Server 4.2.2 for NetWare: Tuning and Performance (2/95)	184429-001
Performance of Lotus Notes 3.1 on Compaq ProLiant Servers with NetWare 3.1x (2/95)	184430-001
Configuration and Tuning of Oracle7 for NetWare on Compaq Servers (1/96)	185450-001
Microsoft	
Implementing Lotus Notes on Compaq Servers with Microsoft LAN Manager (9/92)	145201-001
Microsoft SQL Server and Novell NetWare Requester for OS/2 (9/92)	145376-001
Drive Subsystem Performance with Microsoft LAN Manager 2.1 (11/92)	145517-001
Configuration and Tuning of Microsoft SQL Server for Windows NT on Compaq Servers (4/96)	184207-002
Migrating from Microsoft Windows NT Advanced Server 3.1 to Microsoft Windows NT Server 3.5 (2/95)	184669-001
Compaq Backup and Recovery for Microsoft SQL Server (3/95)	184489-001
Configuration and Tuning of Oracle7 for Windows NT on Compaq Servers (7/95)	184853-001
Implementing Microsoft Windows NT Server RAS, DHCP, and WINS on Compaq Servers (9/95)	184488-001
Migrating to Microsoft Windows NT Server 3.51 on Compaq Servers (8/95)	185026-001

continued

Compaq TechNotes *continued*

TechNote Name	Part Number
UNIX	
SCO UNIX in an SNA Environment Using CLEO DataTalker U/X (5/92)	145081-001
SCO UNIX in an SNA Environment Using Computone LYNX (7/92)	145116-001
SCO UNIX Database Servers in Novell Networks (10/92)	145402-001
Printing in SCO UNIX and NetWare Integrated Environments (3/93)	145538-001
SCO UNIX Connectivity to SNA Environments Over X.25 Networks (1/93)	145583-001
Disk Mirroring with VERITAS VxMirror (12/93)	145656-001
SCO UNIX IP Routing Over X.25 Networks (4/93)	145711-001
Performance Tuning for SCO UNIX on Compaq Systems (5/93)	145730-001
Performance Tuning for ORACLE7 on Compaq Systems Running SCO UNIX (7/93)	145942-001
Configuration and Tuning of Oracle7 for SCO UNIX on Compaq Servers (11/94)	184329-001
Configuration and Tuning of Sybase System 10 for Novell UnixWare 2.0 on Compaq Servers (7/95)	184943-001
The Compaq, SCO UNIX, and ORACLE7 Database Server (9/93)	195818-001
Configuration and Tuning of Sybase System 10 for SCO UNIX Open Server 3.0 on Compaq Servers (9/95)	185111-001

continued

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B-6 *Multivendor Integration from Compaq*

Compaq TechNotes *continued*

TechNote Name	Part Number
<i>IBM</i>	
Compaq Answers to Technical Support Questions for OS/2 Environments (11/94)	Not available in bound format
Performance of Lotus Notes 3.1.5 on Compaq ProLiant Servers with OS/2 2.11 (3/95)	184655-001
<i>Technology Overview</i>	
Updating Compaq System Software from an Integration Server (11/96)	219467-002
Configuring Compaq RAID Technology for Database Servers (7/94)	184206-001
