

COMPAQ

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Migrating from Microsoft Windows NT Advanced Server 3.1 to Microsoft Windows NT Server 3.5

Compaq TechNote

Includes information on:

- Benefits of Windows NT Server 3.5
- Points to consider before migrating
- Four tested migration scenarios

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Migrating from Microsoft Windows NT Advanced Server 3.1 to Microsoft Windows NT Server 3.5 TechNote

First Edition (February 1995)
Part Number 184669-001

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Chapter 1

About This TechNote

The information presented in this Compaq TechNote provides guidelines and requirements to migrate Compaq servers running Microsoft Windows NT Advanced Server Version 3.1 to Microsoft Windows NT Server Version 3.5. This TechNote assumes that you have a knowledge of Compaq server products and the Microsoft Windows NT operating system.

NOTE: The migration information included in this TechNote is only valid for English language versions of Microsoft Windows NT Server 3.5.

TechNote Organization

This TechNote organization includes the following:

- A brief summary of new features and enhancements for Windows NT Server 3.5
- Migration considerations that could affect your configuration
- Four tested migration scenarios from Compaq

Other Resources to Use

Compaq also recommends the following reference material:

- *Compaq SmartStart CD-ROMs* for:
 - *Microsoft Windows NT Server 3.5 from Compaq* (software and Help files)
 - *Compaq Insight Manager 2.30* or later (software and Help files)
 - *Compaq Insight Management Agents for Microsoft Windows NT, Version 2.30* or later (software and Help files)
- *Compaq Software Support for Windows NT Server 3.5* diskettes
- *Microsoft Windows NT Server Installation Guide Version 3.5*
- Compaq TechPaq

- Compaq QuickFind
- World Wide Web (WWW.COMPAQ.COM)

Notational Conventions

This TechNote uses the following conventions to distinguish elements of text found within this document:

Table 1-1
Notational Conventions

Convention	Use
Enter	Keys on your keyboard appear in boldface not a sequence of keys to press.
Enter	When instructed to enter information, type the information and press the Enter key.
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 to press the CTRL key while you simultaneously press and release the Z key.
Select <i>item</i> → <i>item</i>	Items separated by arrows indicate items you select in a sequence.
<i>screen selections and variables</i>	These items appear in italics in all chapters of this TechNote.

continued

Notational Conventions Continued

user input, screen display	Information you type exactly as it appears on the screen.
<i>FILENAMES</i>	Names of files appear in uppercase italic in the DOS and other environments.
PROGRAMS, COMMANDS, UTILITIES, DIRECTORY NAMES, and DRIVE NAMES	These items appear in uppercase in the DOS and other environments.
! IMPORTANT	Presents clarifying or specific points of information.
NOTE:	Presents commentary, sidelines, or interesting points of information.
Windows NT Advanced Server 3.1 from Microsoft Windows NT Server 3.5 from Microsoft	Names used to describe packaged product purchased from Microsoft

Chapter 2

Overview

There are many reasons for migrating from Windows NT Advanced Server 3.1 to Windows NT Server 3.5. The enhancements and new features of Windows NT Server 3.5 provide an ideal platform to support client-server computing.

New features and enhancements include:

- Simplified Setup capabilities with in-place upgrade from Windows NT Advanced Server 3.1
- Better performance and ease-of-use in TCP/IP networks
- Simplified management with Dynamic Host Configuration Protocol (DHCP)
- Remote Boot (RIPPL) support for diskless Windows and DOS clients
- Improved support for remote clients with Remote Access Services (RAS)
- Improved interoperability with NetWare servers through Gateway Services for NetWare
- Expanded support for graphics and multimedia
- Better networking and security management
- New application and file system support
- Expanded printing and font capabilities

The Windows NT Server 3.5 operating system now provides better wide-area networking tools, a powerful client-server platform, and reduced memory requirements in comparison to Windows NT Advanced Server 3.1. Refer to the Microsoft Windows NT Server 3.5 reference documentation for more detailed information.

NOTE: This TechNote does not cover upgrading from Windows NT Workstation 3.1 to 3.5.

Windows NT Features Not Affected by the Migration

Windows NT Server 3.5 upgrades the following features of Windows NT Advanced Server 3.1 without affecting the operating system:

- Local security accounts
- Custom settings in the registry
- Preferences set for administrative tools and accessories
- Network adapter settings
- Network protocol and service configuration settings

You are not required to perform any special preparation to maintain these features.

Considerations Before Migrating

Before you begin the migration, decide what you want to accomplish and what method you want to use. The method you choose will affect the procedures you need to perform to accomplish your goals. Compaq has identified some considerations that might affect your configuration and migration method. These considerations are as follows:

- If you intend to keep a copy of Windows NT Advanced Server 3.1 on the server with Windows NT Server 3.5, be aware you will need to:
 - Maintain the data integrity in current file systems and partitions
 - Run the *UPDATE.EXE* program during Setup to maintain FAT partitions

This TechNote does not cover running dual versions of Windows NT on your server. However, if you decide to maintain dual versions, Compaq recommends that you refer to the documentation set provided with the Microsoft Windows NT Server 3.5 software.

NOTE: Refer to the "Running the *UPDATE.EXE* Program" discussion later in this section for important Setup information. You must run the *UPDATE.EXE* program before installing Windows NT Server 3.5 to maintain the structure of the Windows NT Advanced Server 3.1 files in FAT partitions.

- If your installation consists of Domain and multiple servers, you might need to perform a sequence of upgrades. Microsoft recommends that you upgrade the Primary Domain Controller (PDC) on a Windows NT Advanced Server 3.1 network to Windows NT Server 3.5 before upgrading the Backup Domain Controller(s) (BDC). If you upgrade a server that is not the PDC first, all the new security information installed for Windows NT Server 3.5 will be replaced when the server restarts. The server automatically replicates all information from the Windows NT Advanced Server 3.1 Domain controller. You can eliminate this problem from occurring by first upgrading the primary Domain controller.
- If you are upgrading without Compaq SmartStart, you must install the Compaq Insight Manager software, Compaq Insight Management Agents, and any optional Compaq drivers after installing the Windows NT Server operating system.

Space Requirements for Setup

The Windows NT Server 3.5 Setup program requires that you reserve temporary hard drive space on the server to perform the upgrade from Windows NT 3.1. The amount of temporary space you need depends on the Setup method you choose. Installing from a network requires more space than installing from CD-ROM.

The following table provides an estimate of the temporary hard drive space required by the Windows NT Server 3.5 migration process using either installation method:

Table 2-1
Windows NT Server 3.5 Setup Hard Drive Space Requirements

Upgrade Method	Space Required
Migrating Windows NT Server 3.5 source files from a network directory	Approximately 100 Mbytes hard drive space for setup
Migrating using the Windows NT Server 3.5 from Compaq SmartStart installation CD or the Windows NT Server 3.5 installation CD from Microsoft	Approximately 10 Mbytes hard drive space for setup

NOTE: Windows NT Server 3.5 displays a warning message if the server does not have sufficient hard drive space available.

Running the UPDATE.EXE Program

Whatever migration method you choose, run the *UPDATE.EXE* program first. This will allow you to maintain the integrity of the FAT partitions in the Windows NT Advanced Server 3.1 installation so that you will have continued access to the data.

! **IMPORTANT:** You must run the *UPDATE.EXE* program before you run Windows NT Server 3.5 Setup.

If you are installing Windows NT Server 3.5 from the Microsoft CD, *UPDATE.EXE* is located in the \FS31UPD\I386 directory.

If you are installing Windows NT Server 3.5 from the Compaq SmartStart CD, *UPDATE.EXE* is located in the \SUPPORT.ENG\FS31UPD\I386 directory.

! **IMPORTANT:** License requirements and terms are not addressed in this TechNote. It is assumed that you have the proper licenses and rights to perform these upgrades.

Hardware and Software Equipment Configuration

Compaq set up four hardware and software configurations. The following list identifies the hardware and software that Compaq used to create the four tested migration scenarios outlined in Table 2-2.

Hardware Configuration

Compaq ProLiant 1000 with 32 Megabytes RAM, which includes:

- 486 DX2/66 system processor board
- Three 1-Gigabyte SCSI hard drives configured for distributed data guarding
- Compaq SMART SCSI Array Controller
- Compaq NetFlex-2 ENET-TR Controller
- Compaq Integrated 32-Bit Fast-SCSI-2 Controller

Compaq ProLiant 2000 with 64 Megabytes RAM, which includes:

- Two Pentium 66-MHz system processor boards
- Five 1-Gigabyte SCSI hard drives configured for distributed data guarding
- Compaq SMART SCSI Array Controller
- Compaq NetFlex-2 ENET-TR Controller
- Compaq Integrated 32-Bit Fast-SCSI-2 Controller

NOTE: Both systems were configured as either primary or backup Domain Controllers.

Software Configuration

Each software configuration was installed on a Compaq server:

- Windows NT Advanced Server 3.1 from Compaq SmartStart (August 1994)
- Windows NT Advanced Server 3.1 from Microsoft with:
 - Compaq SSD for Windows NT Advanced Server 1.04c or later
 - Compaq Insight Management Agents for Windows NT 2.20 or later
- Windows NT Server 3.5 from Compaq SmartStart (November 1994)
- Windows NT Server 3.5 from Microsoft with:
 - Compaq SSD for Windows NT Server 3.5 Version 1.12 or later
 - Compaq Insight Management Agents for Windows NT 2.30 or later

Compaq Migration Scenarios

Compaq tested four migration scenarios, Table 2-2 outlines each migration method. Each of the migration scenarios tested in this TechNote were performed as an in-place upgrade. The Windows NT Server 3.5 installation copied over the Windows NT Advanced Server 3.1 installation.

NOTE: If you want to maintain dual installations, Compaq recommends that you refer to the documentation set provided with the Microsoft Windows NT Server 3.5 software.

Table 2-2
Compaq Migration Scenarios

Current Installation Method	Upgrade Installation Method
Scenario 1: Windows NT Advanced Server 3.1 from Compaq SmartStart (August 1994)	Windows NT Server 3.5 from Compaq SmartStart (November 1994)
Scenario 2: Windows NT Advanced Server 3.1 from Microsoft	Windows NT Server 3.5 from Compaq SmartStart (November 1994)
Scenario 3: Windows NT Advanced Server 3.1 from Compaq SmartStart (August 1994)	Windows NT Server 3.5 from Microsoft with: <ul style="list-style-type: none"> <input type="checkbox"/> Compaq SSD for Windows NT 1.12 or later <input type="checkbox"/> Compaq Insight Management Agents 2.30 for Microsoft Windows NT
Scenario 4: Windows NT Advanced Server 3.1 from Microsoft with: <ul style="list-style-type: none"> <input type="checkbox"/> Compaq SSD for Windows NT 1.04c or later <input type="checkbox"/> Compaq Insight Management Agents 2.20 for Microsoft Windows NT 	Windows NT Server 3.5 from Microsoft with: <ul style="list-style-type: none"> <input type="checkbox"/> Compaq SSD for Windows NT 1.12 or later <input type="checkbox"/> Compaq Insight Management Agents 2.30 for Microsoft Windows NT

Chapter 3

Migration Scenario 1

In this migration scenario, the Compaq server was originally set up with Windows NT Advanced Server 3.1 using Compaq SmartStart (August 1994 release). The server migration to Windows NT Server 3.5 was performed using Compaq SmartStart (November 1994 release).

NOTE: Before you begin migrating your server to Windows NT Server 3.5, read the "Considerations Before Migrating" section provided earlier in this TechNote. It contains important information that will affect your installation regardless of the method you choose.

Initializing the Server

The following steps outline the server initialization process using the Setup program included with the Windows NT Server 3.5 from Compaq CD.

1. Shutdown the Windows NT Advanced Server 3.1 server and restart it using Windows NT Server 3.5 from Compaq CD.
2. The Windows NT from Compaq Welcome to Setup screen displays, press **Enter** when prompted to install Windows NT.
3. The next Setup screen provides options to install Windows NT Workstation and Windows NT Server.

Press the **S** key on the next screen to select *Install the Server system*.

4. Insert the program license diskette and press **Enter**.
5. When prompted enter your Windows NT Activation Key and press **Enter**.

NOTE: This is the same SmartStart Activation Key that you used to install Windows NT Advanced Server 3.1. Activation Keys are case sensitive, be sure to enter the Activation Key as it appears on the *FAX Order Form* you received from Compaq.

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3-2 Migration Scenario 1

6. The next Setup screen displays, press **Enter** to select the *Express Setup* option.

NOTE: Both Compaq and Microsoft recommend this installation, unless your installation needs require you to perform a custom installation.

7. Setup displays the mass storage devices it detects on your server. If you want to specify any additional mass storage or SCSI devices, select one of the following options:

- Press the **S** key to view a list
- Press **Enter** to continue

The selections you choose will depend on your particular installation requirements.

8. A message displays the directory path where Windows NT Advanced Server 3.1 exists on your hard drive. Select one of the following options:

- Press **Enter** to Upgrade the existing copy of Windows NT Advanced Server 3.1 in the path displayed.
- Press the **N** key to Cancel and install a fresh copy in another directory, if you want to maintain the Windows NT Advanced Server 3.1 installation.

NOTE: This procedure assumes that you are upgrading the existing copy of Windows NT.

Setup then copies the required system files to your local hard drive and restarts the server upon completion. When the server restarts you can begin the configuration.

The Windows NT Service Control Manager might display a warning after the server restarts, similar to the following message:

At least one service or driver failed during system startup. Use the Event Viewer to examine the Event Log for details.

NOTE: If a warning message does display during the upgrade process, ignore the message and select *OK* to continue with the installation process. You can return to the Event Viewer later to view the Event Log and make any necessary modifications.

Configuring the Server

The following steps outline the server configuration process using the Setup program included with the Windows NT Server 3.5 from Compaq CD.

1. Setup asks if you want to use the Dynamic Host Configuration Protocol (DHCP) to configure your IP address.

Select *Yes* to install DHCP if your installation requires a DHCP Server.

NOTE: If you do not know or do not have a DHCP Server available on your network, select *No*. Setup will use the existing IP address for this server. If you want to know more about DHCP, select the *Help* button. You can install DHCP services later.

2. Setup prompts you to enter a Windows NT product ID. Leave this field blank and select *Continue* twice. The Microsoft product ID is not applicable to this installation with Compaq SmartStart.

NOTE: If you need to call Compaq Customer Support, provide them with your SmartStart Activation Key. You do not need the Microsoft product ID when you install with Compaq SmartStart.

At this point, Setup saves the configuration selections you chose.

3. Setup asks if you want to create an Emergency Repair Diskette at this time. Insert a blank formatted diskette in drive A and select *Yes*.

! **IMPORTANT:** Compaq and Microsoft recommend that you create the Emergency Repair Diskette.

Upgrading Compaq Insight Management Agents

The following steps outline the Compaq Insight Management Agents for Microsoft Windows NT 2.30 installation process using the Setup program included with the Windows NT Server 3.5 from Compaq CD.

1. When the server restarts, Setup asks you if want to install the Insight Agents on this server.
Select *Continue* to install the Insight Agents.
2. Setup prompts that it detects a copy of the Insight Agents on your system.
Select *Update* on this screen to upgrade the Insight Agents to Windows NT Server 3.5.

The SmartStart installation will also update the Compaq device drivers, the Compaq system management drivers, and the Compaq Hardware Abstraction Layer (HAL).
3. The next screen displays a list of Manage Agents and Remote Event Log Destinations. You have the option to:
 - Add or Remove *Agents*
 - Add or Remove *Remote Event Log Destinations*Select *OK* when complete to accept changes.
4. Select *Exit to Windows NT*, remove the diskette from drive A, remove the CD from the CD-ROM drive, and restart the server.

The server upgrade process is complete.

Chapter 4

Migration Scenario 2

In this migration scenario, the Compaq server was originally installed with Windows NT Advanced Server 3.1 from Microsoft. The server migration to Windows NT Server 3.5 was performed using Compaq SmartStart (November 1994 release). This scenario also assumes the Windows NT Advanced Server 3.1 installation included support for the TCP/IP and SNMP protocols. You must have TCP/IP and SNMP support on the server before you can install Compaq Insight Management Agents.

NOTE: Before you begin migrating your server to Windows NT Server 3.5, read the "Considerations Before Migrating" section provided earlier in this TechNote. It contains important information that will affect your installation regardless of the method you choose.

Initializing the Server

The following steps outline the server initialization process using the Setup program included with the Windows NT Server 3.5 from Compaq CD.

1. Shutdown the Windows NT Advanced Server 3.1 server and restart it using Windows NT Server 3.5 from Compaq CD.
2. The Windows NT from Compaq Welcome to Setup screen displays, press **Enter** when prompted to install Windows NT.
3. The next Setup screen provides options to install Windows NT Workstation and Windows NT Server.

Press the **S** key on the next screen to *Install the Server* system.

4. Insert the program license diskette and press **Enter**.
5. When prompted, enter your Windows NT Activation Key and press **Enter**.

NOTE: Activation Keys are case sensitive, be sure to enter the Activation Key as it appears on the *FAX Order Form* you received from Compaq.

6. The next Setup screen displays, press **Enter** to select the *Express Setup* option.

NOTE: Both Compaq and Microsoft recommend this installation, unless your installation needs require you to perform a custom installation.

7. Setup displays the mass storage devices it detects on your server. If you want to specify any additional mass storage or SCSI devices, select one of the following options:

- Press the **S** key to view a list
- Press **Enter** to continue

The selections you choose will depend on your particular installation requirements.

8. A message displays the directory path where Windows NT Advanced Server 3.1 exists on your hard drive. Select one of the following options:

- Press **Enter** to Upgrade the existing copy of Windows NT Advanced Server 3.1 in the path displayed.
- Press the **N** key to Cancel and install a fresh copy in another directory, if you want to maintain the Windows NT Advanced Server 3.1 installation.

NOTE: This procedure assumes that you are upgrading the existing copy of Windows NT.

Setup then copies the required files to your local hard drive and restarts the server upon completion. When the server restarts you can begin configuring your server.

Configuring the Server

The following steps outline the server configuration process using the Setup program included with the Windows NT Server 3.5 from Compaq CD.

1. Setup asks if you want to use the Dynamic Host Configuration Protocol (DHCP) to configure your IP address.

Select *Yes* to install *DHCP* if your installation requires a DHCP Server.

NOTE: If you do not know or do not have a DHCP Server available on your network, select *No*. Setup will use the existing IP address for this server. If you want to know more about DHCP, select the *Help* button. You can install DHCP services later.

2. Setup prompts you to enter a Windows NT product ID. Leave this field blank and select *Continue* twice. The Microsoft product ID is not applicable to this installation with Compaq SmartStart.

NOTE: If you need to call Compaq Customer Support, provide them with your SmartStart Activation Key. You do not need the Microsoft product ID when you install with Compaq SmartStart.

At this point, Setup saves the configuration selections you chose.

3. Setup asks if you want to create an Emergency Repair Diskette at this time. Insert a blank formatted diskette in drive A and select *Yes*.

! **IMPORTANT:** Compaq and Microsoft recommend that you create the Emergency Repair Diskette.

4. When the Insight Agent Setup screen displays, select *Exit*.

5. When the Exit Setup screen displays, you will receive a message that the Insight Agents are not correctly installed. You will be asked:

Are you sure you want to exit Setup?

Select *Yes* and continue.

The following message displays:

Compaq Insight Management Agents version 2.30 for Microsoft Windows NT has not been installed. Please choose to exit back to the Windows NT system.

Select *Exit to Windows NT* to continue.

If you receive a Setup error message, select *OK*. When the screen displays the following message:

Windows NT is now installed

Remove the diskette from drive A and the CD from the CD-ROM drive. Select *Restart Computer* to continue.

Installing the Compaq Support Software for Microsoft Windows NT Server 3.5 (Version 1.12 or later)

The procedures that follow outline the steps necessary to install the server with Compaq support software using the Windows NT Server 3.5 from Compaq CD.

NOTE: The Windows NT Server 3.5 from Compaq CD contains installation instructions specific to the software you are installing. Refer to the appropriate Help information provided on the Windows NT Server 3.5 from Compaq installation CD in the *README.BAT* before you begin. This information is essential to this installation.

From the Windows NT Program Manager File menu, perform the following steps:

1. Insert the Windows NT from Compaq CD in the CD-ROM drive.
 2. Open the *File Manager* in the Main Program Group and select the CD-ROM drive.
 3. Enter the following directory path:
UPDATE.ENG\SSD
 4. Select *SETUP.CMD* to start the Setup Program for the Compaq support software and select *OK*.
 5. Select *Continue* at the Welcome screen.
 6. Review the list of drivers that display on the screen and select any additional drivers you need that Setup did not automatically detect and select *Continue*.
- NOTE:** At this point, refer to the installation instructions provided in the support software *README.TXT*.
7. When the support software installation is complete, return to the Windows NT Program Manager.

Disabling Startup Settings

The Compaq SSD for Windows NT includes the Compaq 32-Bit SCSI-2 Controllers device driver, CPQ32FS2. This driver is required if you want Insight Agent support for Windows NT Server 3.5 for the Integrated Fast-SCSI-2 Controller.

NOTE: Before you can install the Compaq SCSI device driver that supports the Insight Management Agents you must disable the NCRC710 device driver currently installed on the server.

From the Windows NT Server Control Panel perform the following steps:

1. Select *Devices* → *NCRC710* and select *Startup*.
2. Select *Disabled* as the Startup Type. Select *OK* to accept the setting and select *Yes* to confirm the selection.

NOTE: If a message displays warning you that changing these settings might cause the system to become unstable, ignore the message and select *Yes* to continue.

3. Select *Close* to exit the Devices applet.
4. Remove the CD and restart the server.

The Windows NT Server 3.5 install for Compaq support software is complete.

Installing the Compaq Insight Management Agents

The following steps outline the Compaq Insight Management Agents for Microsoft Windows NT 2.30 or later installation process using the Setup program included with the Windows NT Server 3.5 from Compaq CD.

1. Select *File Manager* in the Main Program Group and select the CD-ROM drive.
 2. Enter the following directory path:
UPDATE.ENG\SYSTEMGMT
 3. Select *SETUP.COMD* to start the Setup Program for the Windows NT Insight Agents.
 4. At the Welcome screen, select *Continue* to install the Insight Agents.
-

5. The next screen displays a list of Manage Agents and Remote Event Log Destinations. You have the option to:
 - Add or Remove Agents
 - Add or Remove Remote Event Log DestinationsSelect *OK* when complete to accept changes.
6. Select *Exit to Windows NT*, remove the CD from the CD-ROM drive and restart the server.

The server upgrade process is complete.

Chapter 5

Migration Scenario 3

In this migration scenario, the Compaq server was originally set up with Windows NT Advanced Server 3.1 using Compaq SmartStart (August 1994 release). The server migration to Windows NT Server 3.5 was performed using Windows NT Server 3.5 from Microsoft. After the Microsoft upgrade was installed on the server, the Compaq support software for Windows NT 1.12 and the Compaq Insight Management Agents 2.30 were upgraded with support software diskettes from Compaq.

NOTE: Before you begin migrating your server to Windows NT Server 3.5, read the "Considerations Before Migrating" section provided earlier in this TechNote. It contains important information that will affect your installation regardless of the method you choose.

Disabling Startup Settings

Compaq recommends that you disable certain Service and Device Startup settings before beginning a Windows NT Server 3.5 migration. This will eliminate warnings similar to the following message from displaying during the installation process.

At least one service or driver failed during system startup. Use the Event Viewer to examine the Event Log for details.

NOTE: If a warning message does display during the upgrade process, ignore the message and select *OK* to continue with the installation process. You can return to the Event Viewer later to view the Event Log and make any necessary modifications.

Services

From the Windows NT Server Control Panel open the Services applet and look for the Insight Management Agents startup setting by performing the following steps:

1. Select *Services* → *Insight Agents* → *Startup*. The Insight Agent dialogue screen is displayed.
2. Select *Disabled* as the Insight Agent Startup Type. Select *OK* to accept the setting.
3. Select *Close* to exit the Services applet.

Devices

You will also need to disable the Compaq SCSI Device Monitor setting before you upgrade the Compaq Insight Management Agents to avoid the following warning message:

Service failed to load CPOSDM

NOTE: If you plan on maintaining both versions of Windows NT on your server do not disable the Compaq SCSI Device Monitor.

Compaq SCSI Device Monitor

From the Windows NT Server Control Panel perform the following steps:

1. Select *Devices* → *Compaq SCSI Device Monitor* → *Startup*. The Compaq SCSI Device Monitor dialogue screen is displayed.
2. Select *Disabled* as the Startup Type. Select *OK* to accept the setting and select *Yes* to confirm the selection.

NOTE: A message displays warning you that changing these settings might cause the system to become unstable. Ignore the message and select *Yes* to continue.

Select the next item you want to disable in the Devices applet.

Compaq Systems Management

From the Devices applet:

1. Select *Compaq Systems Management* → *Startup*. The Systems Management dialogue screen is displayed.

2. Select *Disabled* as the Startup Type. Select *OK* to accept the setting and select *Yes* to confirm the selection.

NOTE: A message displays warning you that changing these settings might cause the system to become unstable. Ignore the message and select *Yes* to continue.

3. Select *Close* to exit the Devices applet.

It is necessary to disable both the Devices and the Services startup settings to prevent error messages from displaying.

Initializing the Server

The following steps outline the server initialization process using the Setup program included with the Windows NT Server 3.5 CD and diskettes.

1. Shutdown the Windows NT Advanced Server 3.1 server and restart the server with the Windows NT Server 3.5 CD and the Windows NT Startup diskettes inserted in the appropriate server drives.
2. The Windows NT Server Welcome to Setup screen displays, press **Enter** when prompted to install Windows NT Server.
3. The next Setup screen appears, press **Enter** to select the *Express Setup* option.

NOTE: Both Compaq and Microsoft recommend this installation, unless your installation needs require you to perform a custom installation.

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5-4 Migration Scenario 3

4. Setup displays the mass storage devices it detects on your server. If you want to specify any additional mass storage or SCSI devices, select one of the following options:

- Press the **S** key to specify additional devices
- Press **Enter** to continue

The selections you choose will depend on your particular installation requirements.

5. Specify the device media you are using to install Windows NT Server.
6. A message displays the directory path where Windows NT Advanced Server 3.1 exists on your hard drive. Select one of the following options:

- Press **Enter** to Upgrade the existing copy of Windows NT Advanced Server 3.1 in the path displayed.
- Press the **N** key to Cancel and install a fresh copy in another directory, if you want to maintain the Windows NT Advanced Server 3.1 installation.

NOTE: This procedure assumes that you are upgrading the existing copy of Windows NT.

7. Setup then copies the required files to your local hard drive. When prompted, remove the diskette from drive A and press **Enter** to restart the server.
-

Configuring the Server

The following steps outline the server configuration process using the Setup program included with the Microsoft Windows NT Server 3.5 CD and diskettes.

1. Setup asks if you want to use the Dynamic Host Configuration Protocol (DHCP) to configure your IP address.

Select *Yes* to install *DHCP* if your installation requires a DHCP Service.

NOTE: If you do not know or do not have a DHCP Server available on your network, select *No*. Setup will use the existing IP address for this server. If you want to know more about DHCP, select the *Help* button. You can install DHCP services later.

2. Setup prompts you to enter a Windows NT product ID. Enter the product ID found on the registration card or inside the back cover of the *Microsoft Windows NT Server Installation Guide* and then select *Continue*.

At this point, Setup saves the configuration selections you chose.

3. Setup asks if you want to create an Emergency Repair Diskette at this time. Insert a blank formatted diskette in drive A and select *Yes*.

! **IMPORTANT:** Compaq and Microsoft recommend that you create the Emergency Repair Diskette.

4. When prompted, remove the diskette from drive A and restart the server.

The Windows NT Server 3.5 migration is complete.

Disabling Old SCSI (CPQC710) Device Driver

Compaq recommends that you disable certain startup settings before upgrading the Compaq support software. This will eliminate warnings similar to the following message from displaying during the installation process.

At least one service or driver failed during system startup. Use the Event Viewer to examine the Event Log for details.

NOTE: If a warning message does display during the upgrade process, ignore the message and select *OK* to continue with the installation process. You can return to the Event Viewer later to view the Event Log and make any necessary modifications.

The Compaq SSD for Windows NT includes the Compaq 32-Bit SCSI-2 Controllers device driver, CPQ32FS2. This driver is required if you want Insight Agent support for Windows NT Server 3.5 for the Integrated Fast-SCSI-2 Controller.

NOTE: Before you can install the new driver you must disable the Compaq 32-Bit Fast-SCSI-2 Controller (CPQC710) device driver currently installed on the server.

From the Windows NT Server Control Panel perform the following steps:

1. Select *Devices* → *CPQC710* and select *Startup*.
2. Select *Disabled* as the Startup Type. Select *OK* to accept the setting and select *Yes* to confirm the selection.
3. Select *Close* to exit the Devices applet.

NOTE: A message displays warning you that changing these settings might cause the system to become unstable. Ignore the message and select *Yes* to continue.

Upgrading with the Compaq Support Software for Microsoft Windows NT Server 3.5 (Version 1.12 or later)

The procedures that follow outline the steps necessary to upgrade the server with Compaq support software for Windows NT Server 3.5.

NOTE: The Compaq SSD for Windows NT Server 1.12 or later diskette also contains installation instructions specific to the software you are installing. Refer to the appropriate Help information provided on the Compaq SSD for Windows NT Server 1.12 in the *README.BAT* before you begin.

From the Windows NT File menu, perform the following steps:

1. Insert the Compaq SSD for Windows NT 1.12 or later diskette in drive A.
2. Select *Run* and enter:
a:setup
3. Select *OK* and then select *Continue* at the Welcome screen.
4. Review the list of drivers that appear on the screen, select any additional drivers that Setup did not automatically detect and select *Continue*.

NOTE: At this point, refer to the installation instructions provided on the Compaq SSD for Windows NT 1.12 or later diskette.

5. When the installation is complete, remove the diskette from drive A and restart the server.

The Compaq support software for Windows NT Server 3.5 migration is complete. To upgrade the Compaq Insight Management Agents for Windows NT Server 2.30 or later perform the following procedure.

Upgrading the Compaq Insight Management Agents

The procedures that follow outline the necessary steps to upgrade your system with the Compaq Insight Management Agents for Windows NT Server 2.30 or later software diskettes.

From the Windows NT Program Manager File menu, perform the following steps:

1. Insert the Insight Agent Setup diskette in drive A.
2. Select *Run* and enter:
a:setup
3. Select *OK* and then select *Continue* at the Insight Agents Setup screen.
4. Setup prompts that it detects a copy of the Insight Agents on your system.
Select *Update* on this screen to upgrade the Insight Agents to Windows NT Server 3.5.
5. The next screen displays a list of Manage Agents and Remote Log Destinations. You have the option to:
 - Add or Remove Agents
 - Add or Remove Remote Event Log DestinationsSelect *OK* when complete to accept changes.
6. Select *Exit to Windows NT*, remove the diskette from drive A and the CD from the CD-ROM drive. Restart the server to implement the upgrade.

The Compaq Insight Management Agents for Windows NT Server 3.5 upgrade is complete.

Chapter 6

Migration Scenario 4

In this migration scenario, the Compaq server was originally installed with Windows NT Advanced Server 3.1 from Microsoft. The Compaq support software for Windows NT 1.04c and the Compaq Insight Management Agents 2.20 were added to the server with support software diskettes from Compaq. To migrate this server, the same installation process was performed as an upgrade. Refer to the appropriate Help information provided on the Compaq SSD for Windows NT 1.12 or later diskette in the *README.BAT* before you begin.

NOTE: The "Considerations Before Migrating" section provided earlier in this TechNote contains important information that will affect your installation regardless of the installation method you choose. Refer to this section before you start migrating your server to Windows NT Server 3.5.

! **IMPORTANT:** If your server contains multiple processors, you must disable the Compaq System Management Device driver before you begin the migration. Failure to do so will cause the server to hang during the installation process or erroneously reboot the server.

Disabling Startup Settings

Compaq recommends that you disable certain Service and Device Startup settings before beginning a Windows NT Server 3.5 migration. This will eliminate warnings similar to the following message from displaying during the installation process.

At least one service or driver failed during system startup. Use the Event Viewer to examine the Event Log for details.

NOTE: If a warning message does display during the upgrade process, ignore the message and select *OK* to continue with the installation process. You can return to the Event Viewer later to view the Event Log and make any necessary modifications.

Services

From the Windows NT Server Control Panel open the Services applet and disable the following settings.

Insight Agents

From the Services applet:

1. Select *Services* → *Insight Agents* → *Startup*. The Insight Agent dialogue screen is displayed.
2. Select *Disabled* as the Insight Agent Startup Type. Select *OK* to accept the setting.

Select the next item you want to disable in the Services applet.

Compaq System Shutdown

From the Services applet:

1. Select *Services* → *Compaq System Shutdown* → *Startup*. The Insight Agent dialogue screen is displayed.
2. Select *Disabled* as the Insight Agent Startup Type. Select *OK* to accept the setting.
3. Select *Close* to exit the Services applet.

Devices

Disable the Compaq SCSI Device Monitor setting before you upgrade the Compaq Insight Management Agents to avoid the following warning message:

Service failed to load CPQSDM

NOTE: If you plan on maintaining both versions of Windows NT on your server do not disable the Compaq SCSI Device Monitor.

Compaq SCSI Device Monitor

From the Windows NT Server Control Panel perform the following steps:

1. Select *Devices* → *Compaq SCSI Device Monitor* → *Startup*. The Compaq SCSI Device Monitor dialogue screen is displayed.
2. Select *Disabled* as the Startup Type. Select *OK* to accept the setting and select *Yes* to confirm the selection.

NOTE: A message displays warning you that changing these settings might cause the system to become unstable. Ignore the message and select *Yes* to continue.

Select the next item you want to disable in the Devices applet.

Compaq Systems Management

From the Devices applet:

1. Select *Compaq Systems Management* → *Startup*. The Systems Management dialogue screen is displayed.
2. Select *Disabled* as the Startup Type. Select *OK* to accept the setting and select *Yes* to confirm the selection.

NOTE: A message displays warning you that changing these settings might cause the system to become unstable. Ignore the message and select *Yes* to continue.

3. Select *Close* to exit the Devices applet.

Initializing the Server

The following steps outline the server initialization process using the Setup program included with the Microsoft Windows NT Server 3.5 CD and the Windows NT Startup diskettes.

1. Shutdown the Windows NT Advanced Server 3.1 server and restart the server with the Windows NT Server 3.5 CD and the Windows NT Startup diskettes inserted in the appropriate server drives.
2. The Windows NT Server Welcome to Setup screen displays, press **Enter** when prompted to install Windows NT.
3. The next Setup screen appears, press **Enter** to select the *Express Setup* option.

NOTE: Both Compaq and Microsoft recommend this installation, unless your installation needs require you to perform a custom installation.

4. Setup displays the mass storage devices it detects on your server. If you want to specify any additional mass storage or SCSI devices, select one of the following options:
 - Press the **S** key to specify additional devices
 - Press **Enter** to continue

The selections you choose will depend on your particular installation requirements.

5. Specify the device media you are using to install Windows NT Server.
-

6. A message displays the directory path where Windows NT Advanced Server 3.1 exists on your hard drive. Select one of the following options:
 - Press **Enter** to Upgrade the existing copy of Windows NT Advanced Server 3.1 in the path displayed.
 - Press the **N** key to Cancel and install a fresh copy in another directory, if you want to maintain the Windows NT Advanced Server 3.1 installation.
- NOTE:** This procedure assumes that you are upgrading the existing copy of Windows NT.
- Setup then copies the required files to your local hard drive.
7. When prompted, remove the diskette from drive A and press **Enter** to restart the server.

Configuring the Server

The following steps outline the server configuration process using the Setup program included with the Windows NT Server 3.5 CD and Windows NT Startup diskettes.

1. Setup asks if you want to use the Dynamic Host Configuration Protocol (DHCP) to configure your IP address.

Select *Yes* to install *DHCP* if your installation requires a DHCP Service.

NOTE: If you do not know or do not have a DHCP Server available on your network, select *No*. Setup will use the existing IP address for this server. If you want to know more about DHCP, select *Help*. You can install DHCP services later.

2. Setup prompts you to enter a Windows NT product ID. Enter the product ID found on the registration card or inside the back cover of the *Microsoft Windows NT Server Installation Guide Version 3.5* and select *Continue*.

At this point, Setup saves the configuration selections you chose.

3. Setup asks you if you want to create an Emergency Repair Diskette at this time. Insert a blank formatted diskette in drive A and select *Yes*.

! **IMPORTANT:** Compaq and Microsoft recommend that you create the Emergency Repair Diskette.

4. When prompted, remove the diskette from drive A and restart the server.

The Windows NT upgrade is complete. To upgrade the Windows NT Server 3.5 support software from Compaq perform the following upgrade procedure.

Upgrading with the Compaq Support Software for Microsoft Windows NT Server 3.5 (Version 1.12 or later)

The procedures that follow outline the steps necessary to upgrade the server with Compaq support software for Windows NT Server 3.5.

NOTE: The Compaq SSD for Windows NT Server 1.12 or later diskette also contains installation instructions specific to the software you are installing. Refer to the appropriate Help information provided on the Compaq SSD for Windows NT Server 1.12 in the *README.BAT* before you begin. This information is essential to this installation.

From the Windows NT Program Manager File menu, perform the following steps:

1. Insert the Windows NT SSD 1.12 or later diskette in drive A.
2. Select *Run* and enter:

a:setup

Select *OK* and then select *Continue* at the Welcome screen.

3. Review the list of drivers that appear on the screen, select any additional drivers you need that Setup did not automatically detect and select *Continue*.

NOTE: At this point, refer to the installation instructions provided on the Windows NT Server 3.5 SSD 1.12 or later diskette from Compaq. During the Compaq SCSI Adapter Setup process you will be instructed to replace the Compaq 32-Bit Fast-SCSI-2 Controller driver (CPQC710) with the Compaq 32-Bit SCSI-2 Controller driver (CPO32FS2). The names are similar, read the screen carefully to ensure that you make the appropriate selection.

4. When prompted, remove the diskette from drive A and restart the server.

The Windows NT Server 3.5 upgrade for Compaq support software is complete. To upgrade the Compaq Insight Management Agents perform the following procedure.

Upgrading the Compaq Insight Management Agents

The procedures that follow outline the necessary steps to upgrade your system with the Compaq Insight Management Agents for Windows NT Server 2.30 or later software diskettes.

From the Windows NT Program Manager File menu, perform the following steps when the server restarts:

1. Insert the Insight Agent Setup diskette in drive A.
2. Select *Run* and enter:
a:setup
3. Select *OK* and then select *Continue* at the Insight Agents Setup screen.

Setup prompts that it detects a copy of the Insight Agents on your system. Select *Update* on this screen to upgrade the Insight Agents to Windows NT Server 3.5.

.....

6-8 Migration Scenario 4

4. The next screen displays a list of Manage Agents and Remote Log Destinations. You have the option to:

- Add or Remove Agents
- Remove Remote Event Log Destinations

Select *OK* when complete to accept changes.

5. Select *Exit to Windows NT*.

6. Before you restart the server, edit the path that contains the Compaq SCSI Device Monitor driver *CPQSDM.SYS* using the Registry Editor.

From the Program Manager, select *File* → *Run* and enter:

```
REGEDT32
```

Select *OK*, a cascade of registry windows displays.

7. Select the *HKEY_LOCAL_MACHINE onLocalMachine* window and select the registry path as follows:

```
SYSTEM → CurrentControlSet → Services → CPQSDM
```

at this point you should see:

```
ImagePath:REG_EXPAND_SZ:\SystemRoot\SYSTEM32\DRIVERS\CPQSDM.SYS
```

8. Select *Edit* → *String*. The String Editor dialogue screen displays.

9. Delete *\SystemRoot* from the string and select *OK*. The directory path should then look like:

```
ImagePath:REG_EXPAND_SZ:SYSTEM32\DRIVERS\CPQSDM.SYS
```

10. Select *Registry* → *Exit*.

NOTE: You must edit this path for the Insight Agents to locate the Compaq SCSI Device Monitor device driver CPQSDM.

11. After you return to the Windows NT Program Manager, remove the diskette from drive A and restart the server to implement the Insight Agent upgrade.

The Windows NT Server 3.5 Insight Agent upgrade is complete.

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