

COMPAQ

Migrating to Microsoft Windows NT Server 3.51 on Compaq Servers

Compaq TechNote

Includes information on:

- New features and enhancements for Windows NT Server 3.51
- Migration considerations
- Six test migration scenarios from Compaq

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Migrating to Microsoft Windows NT Server 3.51 on Compaq Servers

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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 and Microsoft Windows NT Server Version 3.5 to Windows NT Server Version 3.51. This TechNote presumes that you have a knowledge of Compaq server products and the Microsoft Windows NT operating system.

TechNote Organization

The TechNote organization includes the following:

- A brief summary of new features and enhancements for Windows NT Server 3.51
- Migration considerations that could affect your configuration
- Six test migration scenarios from Compaq

A brief summary of each chapter follows:

Chapter 1 -- Introduces the TechNote with a brief summary of each chapter, general information about the conventions used, and a bibliography you can use to find more information on Enterprise management platforms.

Chapter 2 -- Provides an overview of Windows NT Server 3.51 features, considerations that affect the migration method, and a summary of the hardware and software Compaq used to develop its migration scenarios.

Chapter 3 -- Provides information and procedures on migrating from Windows NT Advanced Server 3.1 (installed from Compaq SmartStart, August 1994 release).

Chapter 4 -- Provides information and procedures on migrating from Windows NT Advanced Server 3.1 (installed from Microsoft software).

Chapter 5 -- Provides information and procedures on migrating from Windows NT Advanced Server 3.5 (installed from Compaq SmartStart, Release 2.10).

Chapter 6 -- Provides information and procedures on migrating from Windows NT Advanced Server 3.1 (installed from Compaq SmartStart, August 1994 release).

Chapter 7 -- Provides information and procedures on migrating from Windows NT Advanced Server 3.1 (installed from Microsoft software).

Chapter 8 -- Provides information and procedures on migrating from Windows NT Advanced Server 3.5 (installed from Compaq SmartStart, Release 2.10).

Appendix A -- Provides information on how to order individual Compaq TechNotes, including pricing information, 1(800) telephone numbers, obtaining TechNotes from the Internet, and a list of available TechNotes.

Other Resources to Use

Compaq also recommends the following reference material:

- *Compaq SmartStart CD-ROMs* for:
 - *Microsoft Windows NT Server 3.51* 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 2.50 or later (software and Help files)
 - *Compaq Support Software for Microsoft Windows NT 3.5x* diskettes (version 1.16b or greater)
 - *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:

Table 1-1
Notational Conventions

Convention	Use
Set, Get	Screen button labels appear in bold initial caps.
Enter	Keys on your keyboard appear in boldface.
Enter	When instructed to enter information, type the information and press the Enter key.
"new terms" and "prompts"	The first occurrence of a technical term, prompts, and references to a word other than a command appears in quotes.
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.
<i>file names and directories</i>	These items appear in lowercase italics in the UNIX environment.
user input, screen display	Information you type exactly as it appears, and information that displays on the screen displays in lowercase and in a different typeface in the UNIX environment.
USER INPUT	Information you type exactly as it appears is shown in uppercase and in a different typeface in the DOS and Windows NT environments.
<i>FILENAMES</i>	Names of files appear in uppercase italic in the DOS and Windows NT environments.
PROGRAMS, COMMANDS, DIRECTORY NAMES, and DRIVE NAMES	These items appear in uppercase in the DOS and Windows NT environments.
! IMPORTANT	Presents clarifying or specific points of information.
NOTE	Presents commentary, sidelines, or interesting points of information.

Chapter 2

Overview

There are many reasons for migrating to Windows NT Server 3.51. The enhancements and new features of Windows NT Server 3.51 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 in Windows 3.51
- Simplified management with Dynamic Host Configuration Protocol (DHCP) in Windows 3.51
- Remote Boot (RIPL) 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 3.51 operating system now provides better wide-area networking tools, a powerful client-server platform, and reduced memory requirements compared to Windows NT Advanced Server 3.1. Refer to the Microsoft Windows NT Server 3.51 reference documentation for more detailed information.

NOTE: This TechNote does not cover upgrading from Windows NT Workstation 3.1 to 3.51.

Windows NT Features Not Affected by the Migration

Windows NT Server 3.51 upgrades the following features of Windows NT Advanced Server 3.1 and Windows NT Server 3.5 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 affects the procedures you must 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 3.51, be aware that you must:
 - Maintain the data integrity in current file systems and partitions.
 - Run the *UPDATE.EXE* program during Setup to maintain FAT and NTFS 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 3.51 software.

NOTE: Refer to the section, "Running the *UPDATE.EXE* Program" later in this chapter for important Setup information. You *must* run the *UPDATE.EXE* program before installing Windows NT Server 3.51 to maintain the structure of the Windows NT Advanced Server 3.1 files in FAT and NTFS partitions.

- If your installation consists of Domain and multiple servers, you may 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 3.51 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 3.51 is 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 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 3.51 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 3.51 migration process using either installation method.

Upgrade Method	Space Required
Migrating Windows NT Server 3.51 source files from a network directory	Approximately 100 MB
Migrating using the Windows NT Server 3.51 installation CD from Microsoft	Approximately 10 MB

NOTE: Windows NT Server 3.51 displays a warning message if the server does not have sufficient hard drive space.

Running the *UPDATE.EXE* Program

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

! **IMPORTANT:** You must run the *UPDATE.EXE* program *before* you run Windows NT Server 3.51 Setup.

If you are installing Windows NT Server 3.51 from the Microsoft CD, *UPDATE.EXE* is located in the \FS31UPD\I386 directory.

NOTE: License requirements and terms are not addressed in this TechNote. Compaq presumes that you have the proper licenses and rights to perform these upgrades.

Hardware and Software Equipment Configuration

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

Hardware Configuration

Compaq ProLiant 1500 and ProLiant 4500 with 32 megabytes RAM, which includes:

- Pentium 100-Mhz system processor board
- Two 4.3-Gigabyte SCSI hard drives configured for no fault tolerance
- Compaq NetFlex-3 Controller
- Compaq Integrated 32-Bit Fast-Wide 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: All of the systems were configured as either primary or backup Domain controllers.

Software Configuration

Each of the following software configurations was installed on a Compaq server:

- Windows NT Advanced Server 3.1 from Compaq SmartStart (August 1994)
- Windows NT Server 3.51 from Compaq SmartStart (Release 2.40)
- Windows NT Advanced Server 3.1 from Microsoft with:
 - Compaq SSD for Windows NT 1.04c
 - Compaq Insight Management Agents for Windows NT 2.20
- Windows NT Server 3.5 from Compaq SmartStart (Release 2.10)
- Windows NT Server 3.5 from Microsoft with:
 - Compaq SSD for Windows NT 3.5x Version 1.16b
 - Compaq Insight Management Agents for Windows NT 2.50
- Windows NT Server 3.51 from Microsoft with:
 - Compaq SSD for Windows NT 3.5x Version 1.16b
 - Compaq Insight Management Agents for Windows NT 2.50

Compaq Migration Scenarios

Compaq tested six migration scenarios. Table 2-2 outlines each migration method. Each migration scenario was performed as an in-place upgrade. The Windows NT Server 3.51 installation copied over the Windows NT Advanced Server 3.1 and Windows NT Server 3.5 installation.

NOTE: If you want to maintain dual installations, Compaq recommends that you refer to the documentation set provided with the Windows NT Server 3.51 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)	Compaq SmartStart Windows NT Server 3.51 (Release 2.40) See Chapter 3, "Migration Scenario 1."
Scenario 2: 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 <input type="checkbox"/> Compaq Insight Management Agents 2.20 for Microsoft Windows NT 	Compaq SmartStart Windows NT Server 3.51 (Release 2.40) See Chapter 4, "Migration Scenario 2."
Scenario 3: Windows NT Server 3.5 from Compaq SmartStart (Release 2.10)	Compaq SmartStart Windows NT Server 3.51 (Release 2.40) See Chapter 5, "Migration Scenario 3."

continued

Compaq Migration Scenarios continued

Scenario 4:

Compaq SmartStart Windows NT Advanced Server 3.1 (August 1994 Release)

Windows NT Server 3.51 from Microsoft with:

- Compaq SSD for Windows NT 1.16b
- Compaq Insight Management Agents 2.50 for Microsoft Windows NT

See Chapter 6, "Migration Scenario 4."

Scenario 5:

Windows NT Advanced Server 3.1 from Microsoft with:

- Compaq SSD for Windows NT 1.04c
- Compaq Insight Management Agents 2.20 for Microsoft Windows NT

Windows NT Server 3.51 from Microsoft with:

- Compaq SSD for Windows NT 1.16b
- Compaq Insight Management Agents 2.50 for Microsoft Windows NT

See Chapter 7, "Migration Scenario 5."

Scenario 6:

Compaq SmartStart Windows NT Server 3.5 (Release 2.10)

Windows NT Server 3.51 from Microsoft with:

- Compaq SSD for Windows NT 1.16b
- Compaq Insight Management Agents 2.50 for Microsoft Windows NT

See Chapter 8, "Migration Scenario 6."

Chapter 3

Migration Scenario 1

In this migration scenario, the Compaq server was originally configured with Windows NT Advanced Server 3.1 using Compaq SmartStart (August 1994 release). The server migration to Windows NT Server 3.51 was performed using the Compaq SmartStart Windows NT Server 3.51 CD (release 2.40).

NOTE: Before you migrate your server to Windows NT Server 3.51, read the "Considerations Before Migrating" section in Chapter 2, "Overview." It contains important information that affects 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 3.51 CD from Compaq:

1. Shutdown the server running Windows NT Advanced Server 3.1 and restart the server with the Compaq SmartStart Windows NT Server 3.51 CD in the appropriate drive.

The "Windows NT Version 3.51 from Compaq" screen displays.

2. Select the appropriate language version and press **Enter** to continue.
3. Select the correct keyboard version, when you are prompted, and press **Enter** to continue.

The Windows NT 3.51 from Compaq "Welcome to Setup" screen displays.

4. Press **Enter** when you are prompted; this installs Windows NT Server 3.51.
5. The next screen prompts you to insert the diskette labeled "SmartStart 2.40 Program License diskette" into drive A and press **Enter** when ready.

6. Enter the activation key when prompted and press **Enter** to continue.
7. The next Setup screen appears, press **Enter** to select the *Express Setup* option.

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

8. 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 depend on your particular installation requirements.

9. Specify the device media you are using to install Windows NT Server.
10. 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 new 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 an existing copy of Windows NT.

Setup copies the required files to your local hard drive.

11. When this process is completed you are prompted to 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 3.51 CD and diskettes:

1. Select a *Licensing mode* when you are prompted.

NOTE: You have the choice of the *Per Server mode* or *Per Seat mode*. For a further discussion, refer to the Microsoft documentation. *Per Server* is the default selection. However, you may choose the *Per Seat mode*.

2. Enter the number of concurrent connections for the license you have and select *Continue*.
3. You are then prompted to Check a box that says, "I agree that: I have read and agree to be bound by the license agreements for this product." After you check the box, select *OK*.
4. Setup asks if you want to use the DHCP to configure your IP address.

Select *Yes* to configure your IP address using DHCP if your installation has a DHCP Server.

NOTE: If you do not know or do not have a DHCP Server available on your network, select *No*. Setup uses 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.

5. Setup prompts you to enter a Windows NT product ID. This is not a required field for Compaq SmartStart and may be left blank. Select *Continue* to go to the next screen and then select *Continue* again.

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

.....

3-4 Migration Scenario 1

6. Setup prompts you to create an Emergency Repair Diskette at this time. Insert a blank, formatted diskette in drive A and select *OK*.

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

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

The Windows NT Server 3.51 migration is complete. The SmartStart process upgrades the Windows NT 3.51 support software from Compaq and the Compaq Insight Management Agents for Windows NT Server.

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 Compaq Support Software for Windows NT 1.04c and the Compaq Insight Management Agents 2.20 were added to the server using support software diskettes from Compaq. The server migration to Windows NT Server 3.51 was performed using the Compaq SmartStart Windows NT Server 3.51 CD (Release 2.40).

NOTE: Before you migrate your server to Windows NT Server 3.51, read the "Considerations Before Migrating" section in Chapter 2, "Overview." It contains important information that affects 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 3.51 CD from Compaq:

1. Shutdown the Windows NT Server 3.1 server and restart the server with the Compaq SmartStart Windows NT Server 3.51 CD in the appropriate drive.

The "Windows NT Version 3.51 from Compaq" screen displays.

2. Select the appropriate language version and press **Enter** to continue.
3. Select the correct keyboard version when you are prompted, and press **Enter** to continue.

The Windows NT 3.51 from Compaq "Welcome to Setup" screen displays.

4. Press **Enter** when prompted; this installs Windows NT Server 3.51.
5. The next screen prompts you to insert the diskette labeled "SmartStart 2.40 Program License diskette" into drive A and press **Enter** when ready.
6. Enter the activation key when you are prompted, and press **Enter** to continue.

The next Setup screen appears.

7. Press **Enter** to select the *Express Setup* option.

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

8. 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 depend on your particular installation requirements.

9. Specify the device media you are using to install Windows NT Server.
10. 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 copies the required files to your local hard drive.

11. When this process is completed you are prompted to 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 3.51 CD and diskettes:

1. Select *Licensing mode* when you are prompted.

NOTE: You have the choice of the *Per Server mode* or *Per Seat mode*. For a further discussion, refer to the Microsoft documentation. *Per Server* is the default selection. However, you may choose the *Per Seat mode*.

2. Enter the number of concurrent connections for the license you have and select *Continue*.
3. You are then prompted to Check a box that says, "I agree that: I have read and agree to be bound by the license agreements for this product". After you check the box, select *OK*.
4. Setup asks if you want to use the DHCP to configure your IP address.

Select *Yes* to configure your IP address if your installation has a DHCP Service.

NOTE: If you do not know or do not have a DHCP Server available on your network, select *No*. Setup uses 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.

5. Setup prompts you to enter a Windows NT product ID. This is not a required field for Compaq SmartStart and may be left blank. Select *Continue* to go to the next screen and then select *Continue* again.

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

.....

4-4 Migration Scenario 2

6. Setup prompts you to create an Emergency Repair Diskette at this time. Insert a blank, formatted diskette in drive A and select *OK*.

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

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

The Windows NT Server 3.51 migration is complete. The SmartStart process upgrades the Windows NT 3.51 support software from Compaq and the Compaq Insight Management Agents for Windows NT Server.

Chapter 5

Migration Scenario 3

In this migration scenario, the Compaq server was originally configured with Windows NT Server 3.5 using Compaq SmartStart (Release 2.10). The server migration to Windows NT Server 3.51 was performed using Compaq SmartStart Windows NT Server 3.51 CD (Release 2.40).

NOTE: Before you migrate your server to Windows NT Server 3.51, read the "Considerations Before Migrating" section in Chapter 2, "Overview." It contains important information that affects 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 3.51 CD from Compaq:

1. Shutdown the Windows NT Server 3.5 server and restart the server with the Compaq SmartStart Windows NT Server 3.51 CD in the appropriate drive.

The "Windows NT Version 3.51 from Compaq" screen displays.

2. Select the appropriate language version and press **Enter** to continue.
3. The next screen prompts the user to select the correct keyboard version. Press **Enter** to continue.

The Windows NT 3.51 from Compaq "Welcome to Setup" screen displays.

4. Press **Enter** when prompted; this installs Windows NT Server 3.51.
5. The next screen prompts you to insert the diskette labeled "SmartStart 2.40 Program License diskette" into drive A and press **Enter** when ready.
6. Enter the activation key when prompted and press enter to continue.

The next Setup screen appears.

7. Press **Enter** to select the *Express Setup* option.

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

8. 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 depend on your particular installation requirements.

9. Specify the device media you are using to install Windows NT Server.
10. A message displays the directory path where Windows NT Server 3.5 exists on your hard drive. Select one of the following options:

- Press **Enter** to Upgrade the existing copy of Windows NT Server 3.5 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 Server 3.5 installation.

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

Setup copies the required files to your local hard drive.

11. When this process is completed you are prompted to 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 3.51 CD and diskettes:

1. Select *Licensing mode* when you are prompted.

NOTE: You have the choice of the *Per Server mode* or *Per Seat mode*. For a further discussion, refer to the Microsoft documentation. *Per Server* is the default selection. However, you may choose the *Per Seat mode*.

2. Enter the number of concurrent connections for the license you have and select *Continue*.
3. You are then prompted to Check a box that says, "I agree that: I have read and agree to be bound by the license agreements for this product". After you check the box, select *OK*.
4. Setup asks if you want to use the DHCP to configure your IP address.

Select *Yes* to configure your IP address if your installation has a DHCP Server.

NOTE: If you do not know or do not have a DHCP Server available on your network, select *No*. Setup uses 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.

5. Setup prompts you to enter a Windows NT product ID. This is not a required field for Compaq SmartStart and may be left blank. Select *Continue* to go to the next screen and then select *Continue* again.

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

.....

5-4 *Migration Scenario 3*

6. Setup prompts you to create an Emergency Repair Diskette at this time. Insert a blank, formatted diskette in drive A and select *OK*.

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

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

The Windows NT Server 3.51 migration is complete. The SmartStart process upgrades the Windows NT 3.51 support software from Compaq and the Compaq Insight Management Agents for Windows NT Server.

Chapter 6

Migration Scenario 4

In this migration scenario, the Compaq server was originally configured with Compaq SmartStart Windows NT Advanced Server 3.1 (August 1994 Release). The server migration to Windows NT Server 3.51 was performed using Windows NT Server 3.51 from Microsoft. After the Microsoft upgrade was installed on the server, the Compaq Support Software for Microsoft Windows NT and the Compaq Insight Management Agents were upgraded with support software diskettes from Compaq.

NOTE: Before you begin migrating your server to Windows NT Server 3.51, read the "Considerations Before Migrating" section in Chapter 2, "Overview". It contains important information that affects 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 3.51 migration. This eliminates warnings similar to the following 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 displays during the upgrade process, ignore the message and select *OK* to continue with the installation. You can return to the Event Viewer later to view the Event Log and make any necessary modifications.

Disabling Services Setting

To disable the Compaq Insight Management Agents startup setting, perform the following steps:

1. Select the *Services* applet from the Windows NT Server Control Panel.
2. Select *Services*→*Insight Agents*→*Startup*.
The Insight Agent dialog screen displays.
3. Select *Disabled* as the Insight Agent Startup Type.
4. Select *OK* to accept the setting.
5. Select *Close* to exit the Services applet or select the next item you want to disable.

Disabling Devices Setting

You must also 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 dialog screen displays.
2. Select *Disabled* as the Startup Type.
3. Select *OK* to accept the setting.

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.

4. Select *Yes* to confirm the selection.

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 dialog screen displays.
2. Select *Disabled* as the Startup Type.
3. Select *OK* to accept the setting.

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.

4. Select *Yes* to confirm the selection.
5. Select *Close* to exit the Devices applet.

NOTE: You must 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 3.51 CD and diskettes:

1. Shutdown the server running Windows NT Advanced Server 3.1 and restart the server with the Windows NT Server 3.51 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; this installs Windows NT Server.
3. The next Setup screen appears, press **Enter** to select the *Express Setup* option.

NOTE: Both Compaq and Microsoft recommend the Express Setup 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 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 an existing copy of Windows NT.

Setup copies the required files to your local hard drive.

7. When this process is completed you are prompted to remove the diskette from drive A and press **Enter** to restart the server.

NOTE: A message might display, similar to the following, indicating that Windows NT Server Setup has determined certain files did not originate from Microsoft:

hal.dll

8. To allow Setup to replace the file(s), press **Enter**.

Configuring the Server

The following message might appear at this point:

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 displays during the upgrade process, ignore the message and select *OK* to continue with the installation. You can return to the Event Viewer later to view the Event Log and make any necessary modifications.

The following steps outline the server configuration process using the Setup program included with the Microsoft Windows NT Server 3.51 CD and diskettes:

1. Select a *Licensing mode* when you are prompted.

NOTE: You have the choice of the *Per Server mode* or *Per Seat mode*. For a further discussion, refer to the Microsoft documentation. *Per Server* is the default selection. However, you may choose the *Per Seat mode*.

2. Enter the number of concurrent connections for the license you have and select *Continue*.
3. You are then prompted to check a box that says, "I agree that: I have read and agree to be bound by the license agreements for this product". After you check the box, select *OK*.
4. Setup asks if you want to use the 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 uses 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.

5. 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.

6. Windows NT Setup prompts you to enable the Floating-point work-around if you are using Pentium processors in your server. Check the appropriate box to continue.
7. 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.

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

The Windows NT Server 3.51 migration is complete. To upgrade the Windows NT Server 3.51 support software from Compaq, perform the upgrade procedure found in the following sections.

Disabling Old SCSI (CPQC710) Device Driver

Compaq recommends that you disable certain startup settings before upgrading the Compaq support software. This eliminates 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 displays during the upgrade process, ignore the message and select *OK* to continue with the installation. 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 3.51 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.
3. Select *OK* to accept the setting.

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.

4. Select *Yes* to confirm the selection.
5. Select *Close* to exit the Devices applet.

Upgrading with the Compaq Support Software for Microsoft Windows NT 3.5x (Version 1.16b or later)

The procedures that follow outline the steps to upgrade the server with Compaq Support Software for Microsoft Windows NT 3.5x.

NOTE: The Windows NT SSD Version 1.16b or later diskette also contains installation instructions specific to the software you are installing. Refer to the appropriate Help information provided on the Windows NT SSD Version 1.16b in the *README.BAT* before you begin.

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

1. Insert the Windows NT SSD Version 1.16b 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 Windows NT SSD Version 1.16b or later diskette. During the Compaq SCSI Adapter Setup process remove the *NCR53C710* driver and replace it with the Compaq 32-Bit SCSI-2 Controllers driver. However, *do not* restart the computer before enabling the following startup settings.

Enable Startup Settings

You must enable the following startup settings to allow the Windows NT Setup program to install the Compaq Insight Management Agents.

Enabling Services Setting

To enable the Compaq System Shutdown Service startup setting, perform the following steps:

1. Select *Control Panel Services*.
2. Select *Services*→*Compaq Systems Shutdown*→*Startup*.
The Systems Shutdown dialog screen displays.
3. Select *Automatic* as the Startup Type. Select *OK* to accept the setting and select *Yes* to confirm the selection.
4. Select *Close* to exit the Devices applet.

Enabling Devices Setting

To enable the Compaq System Management startup setting, perform the following steps:

1. Select *Control Panel Devices*.
2. Select *Compaq Systems Management*→*Startup*.
The Systems Management dialog screen displays.
3. Select *System* as the Startup Type. Select *OK* to accept the setting.
4. Select *Yes* to confirm the selection.
5. Select *Close* to exit the Devices applet.

Remove the diskette from drive A and restart the server.

The Compaq support software for Windows NT Server 3.51 upgrade is complete. To upgrade the Compaq Insight Management Agents for Windows NT Server 2.50 or later, perform the procedure listed on the next section.

Upgrading the Compaq Insight Management Agents

The following procedures outline the steps to upgrade your system with the Compaq Insight Management Agents for Windows NT Server 2.50 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 3.51.
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 Destinations.Select *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.

NOTE: Review the settings for the Compaq SCSI Device Monitor. If all your hard drives are on the Compaq Array Controller, reset the Compaq SCSI Device Monitor to *disabled*. The Compaq SCSI Device Monitor is set to *restart* during the installation process even if you previously disabled it.

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

7. Select *Devices* → *Compaq SCSI Device Monitor* → *Startup*.
The Compaq SCSI Device Monitor dialog screen displays.
8. Select *Disabled* as the Startup Type. Select *OK* to accept the setting.

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.

9. Select *Yes* to confirm the selection.

The Compaq Insight Management Agents for Windows NT Server 3.51 upgrade is complete. Restart the computer to enable the changes.

Chapter 7

Migration Scenario 5

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 using 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 Windows NT SSD Version 1.16b or later diskette in the *README.BAT* before you begin.

NOTE: The "Considerations Before Migrating" section provided in Chapter 2, "Overview" contains important information that affects your installation, regardless of the installation method you choose. Refer to this section before you start migrating your server to Windows NT Server 3.51.

! **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 causes 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 3.51 migration. This eliminates 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 displays during the upgrade process, ignore the message and select *OK* to continue with the installation. You can return to the Event Viewer later to view the Event Log and make any necessary modifications.

Disabling Services Setting

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 dialog screen displays.
2. Select *Disabled* as the Insight Agent Startup Type.
3. 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 dialog screen displays.
 2. Select *Disabled* as the Compaq System Shutdown Startup Type.
 3. Select *OK* to accept the setting.
 4. Select *Close* to exit the Services applet.
-

Disabling Devices Setting

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 dialog screen displays.
2. Select *Disabled* as the Startup Type.
3. Select *OK* to accept the setting.

NOTE: A message displays warning you that changing these settings might cause the system to become unstable.

4. Select *Yes* to confirm the selection.

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 dialog screen displays.
2. Select *Disabled* as the Startup Type.
3. Select *OK* to accept the setting.

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.

4. Select *Yes* to confirm the selection.
5. 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 3.51 CD and the Windows NT Startup diskettes.

1. Shutdown the server running Windows NT Advanced Server 3.1 and restart the server with the Windows NT Server 3.51 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 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 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 3.51 CD and Windows NT Startup diskettes.

1. Setup prompts you to choose a *Licensing mode*. You have the choice of the *Per Server mode* or *Per Seat mode*. For a further discussion, refer to the Microsoft documentation. The *Per Server mode* for the number of concurrent connections is the default response, but you may choose the *Per Seat mode*. Enter the number of concurrent connections for the license you have and press *Continue*.
2. Setup asks if you want to use the 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.

3. Windows NT Setup prompts you to enable the Floating-point work-around if you are using Pentium processors in your server. Check the appropriate box to continue.
4. 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 3.51* and select *Continue*.
At this point, Setup saves the configuration selections you chose.
5. 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.

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

The Windows NT upgrade is complete. To upgrade the Windows NT Server 3.51 support software from Compaq, perform the upgrade procedure found in the following sections.

Upgrading with the Compaq Support Software for Microsoft Windows NT 3.5x (Version 1.16b or later)

The following procedures outline the steps to upgrade the server with Compaq support software for Windows NT Server 3.51.

NOTE: The Windows NT SSD Version 1.16b or later diskette also contains installation instructions specific to the software you are installing. Refer to the appropriate Help information provided on the Windows NT SSD Version 1.16b 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 Version 1.16b 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 3.51 SSD 1.16b or later diskette from Compaq. During the Compaq SCSI Adapter Setup process you are instructed to replace the Compaq 32-Bit Fast-SCSI-2 Controller driver (*CPQC710*) with the Compaq 32-Bit SCSI-2 Controllers driver (*CPQ32FS2*). The names are similar. Read the screen carefully to ensure that you make the appropriate selection. However, *do not* restart the computer before enabling the following startup settings.

Enable Startup Settings

You must enable the following startup settings to allow the Windows NT Setup program to install the Compaq Insight Management Agents.

Enabling Services Setting

To enable the Compaq System Shutdown Service startup setting, perform the following steps:

1. Select *Control Panel* → *Services*.
2. Select *Services* → *Compaq Systems Shutdown* → *Startup*.
The Systems Shutdown dialog screen displays.
3. Select *Automatic* as the Startup Type. Select *OK* to accept the setting and select *Yes* to confirm the selection.
4. Select *Close* to exit the Devices applet.

Enabling Devices Setting

To enable the Compaq System Management startup setting, perform the following steps:

1. Select *Control Panel* → *Devices*.
2. Select *Compaq Systems Management* → *Startup*.
The Systems Management dialog screen displays.
3. Select *System* as the Startup Type. Select *OK* to accept the setting.
4. Select *Yes* to confirm the selection.
5. Select *Close* to exit the Devices applet.

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

The Compaq support software for Windows NT Server 3.51 upgrade is complete. To upgrade the Compaq Insight Management Agents for Windows NT Server 2.50 or later, perform the procedure listed in the following section.

Upgrading the Compaq Insight Management Agents

The following procedures outline the steps to upgrade your system with the Compaq Insight Management Agents for Windows NT Server 2.50 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.
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 3.51.
5. 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.
6. Select *Exit to Windows NT*.
7. 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 3.51 Insight Agent upgrade is complete.

Chapter 8

Migration Scenario 6

In this migration scenario, the Compaq server was originally set up with Compaq SmartStart Windows NT Server 3.5 (Release 2.10). The server migration to Windows NT Server 3.51 was performed using Windows NT Server 3.51 from Microsoft. After the Microsoft upgrade was installed on the server, the Compaq support software for Windows NT 1.16b and the Compaq Insight Management Agents 2.50 were upgraded with support software diskettes from Compaq.

NOTE: Before you migrate your server to Windows NT Server 3.51, read the section, "Considerations Before Migrating" in Chapter 2, "Overview." It contains important information that affects your installation regardless of the method you choose.

Copying Microsoft Boot Diskettes

Compaq recommends that you make a copy of the Microsoft Windows NT 3.51 boot diskettes. You must modify the *TESTSETUP.SIF* file before you can install support for the Compaq 32-Bit SCSI-2 Controller driver.

! **IMPORTANT:** If you are upgrading a Compaq Server using the Compaq 32-Bit SCSI-2 Controllers driver, you *must* perform the following steps. Failure to perform these steps could make the system inoperable.

To copy the Microsoft boot diskettes, follow this procedure:

1. Make a copy of the first install diskette for Microsoft Windows NT Server 3.51.
2. Change the attribute on the file *TEXSETUP.SIF* from read only.
3. Edit the file using a text editor.
4. Under the [KeysToDelete] section remove the following line:
"ControlSet, "Services\CPQ32FS2""
5. Save the file to the diskette.
6. Use this diskette as your first boot diskette.

Disabling Startup Settings

Compaq recommends that you disable certain Service and Device Startup settings before beginning a Windows NT Server 3.51 migration. This eliminates 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 displays during the upgrade process, ignore the message and select *OK* to continue with the installation. You can return to the Event Viewer later to view the Event Log and make any necessary modifications.

Disabling Services Setting

To disable the Compaq Insight Management Agents startup setting, perform the following steps:

1. From the Windows NT Server Control Panel, select the Services applet.
2. Select *Services*→*Insight Agents*→*Startup*.
The Insight Agent dialog screen displays.
3. Select *Disabled* as the Insight Agent Startup Type.
4. Select *OK* to accept the setting.
5. Select *Close* to exit the Services applet or select the next item you want to disable.

Disabling Devices Setting

You must also 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 dialog screen displays.
2. Select *Disabled* as the Startup Type.
3. Select *OK* to accept the setting.

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.

4. Select *Yes* to confirm the selection.

Compaq Systems Management

Select the next item you want to disable in the Devices applet *Compaq Systems Management* and perform the following:

1. Select *Compaq Systems Management*→*Startup*.
The Systems Management dialog screen displays.
2. Select *Disabled* as the Startup Type.
3. Select *OK* to accept the setting.

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.

4. Select *Yes* to confirm the selection.
5. Select *Close* to exit the Devices applet.

NOTE: You must 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 3.51 CD and diskettes.

1. Shutdown the server running Windows NT Server 3.5 and restart the server with the Windows NT Server 3.51 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. To use the Custom Setup, press the **C** key.
 4. To skip the Mass Storage Device section, press the **S** key.
 5. To specify additional devices, such as SCSI Adapters, CD-ROM drives, or special disk controllers for use with Windows NT, press the **S** key.
 6. Select *Other* (requires disk provided by a hardware manufacturer).
 7. Insert the Windows NT SSD diskette, Version 1.16b or later, into the drive.
 8. Press **Enter**.
 9. Select *Compaq 32-Bit SCSI-2 Controllers*.
Repeat steps 5 through 8 for all other disk controllers such as the Compaq Drive Array.
 10. When all devices have been selected, press **Enter** to continue.
 11. You are prompted to insert the diskette labeled: "Windows NT Server Setup Disk #3".
 12. Press **Enter** to continue.
 13. The selections you choose depend on your particular installation requirements.
-

14. Specify the device media you are using to install Windows NT Server.
15. A message displays the directory path where Windows NT Server 3.5 exists on your hard drive. Select one of the following options:
- Press **Enter** to Upgrade the existing copy of Windows NT Server 3.5 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 Server 3.5 installation.
 - You are prompted to insert the diskette labeled: "Compaq Windows NT SSD". Insert the diskette and press **Enter** to continue.

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

Setup copies the required files to your local hard drive.

NOTE: A message might display that Windows NT Server Setup has determined certain files did not originate from Microsoft.

hal.dll

16. To allow Setup to replace the file press **Enter**.
17. You may see a similar message for more files. Press **Enter** to allow setup to replace these files.

This portion of Setup is complete. Remove any disk and CD from the drives and press **Enter** to restart the computer.

Configuring the Server

The following message might appear at this point:

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 displays 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 following steps outline the server configuration process using the Setup program included with the Microsoft Windows NT Server 3.51 CD and diskettes.

1. Setup prompts you to choose a *Licensing mode*. You have the choice of the *Per Server mode* or *Per Seat mode*. For a further discussion refer to the Microsoft documentation. The *Per Server mode* for the number of concurrent connections is the default response but you may choose the *Per Seat mode*. Enter the number of concurrent connections for the license you have and select *Continue*.
2. You are prompted to *Check* a box that says "I agree to the licensing and copyright provisions". After you check the box, select *OK*.
3. If you have not used DHCP on your previous configuration, setup asks if you want to use the 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 uses 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.

4. 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*.

Setup saves the configuration selections you chose.

5. Windows NT Setup prompts you to enable the Floating-point work-around if you are using Pentium processors in your server. Check the appropriate box to continue.
6. 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.

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

The Windows NT Server 3.51 migration is complete. To upgrade the Windows NT Server 3.51 support software from Compaq, perform the upgrade procedure found on the following sections.

Upgrading with the Compaq Support Software for Microsoft Windows NT 3.5x (Version 1.16b or later)

The following procedures outline the steps to upgrade the server with Compaq support software for Windows NT Server 3.51.

NOTE: The Windows NT SSD Version 1.16b or later diskette also contains installation instructions specific to the software you are installing. Refer to the appropriate Help information provided on the Windows NT SSD Version 1.16b in the *README.BAT* before you begin.

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

1. Insert the Windows NT SSD Version 1.16b 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*.
5. Exit to Windows NT.

Enable Startup Settings

You must enable the following startup settings to allow the Windows NT Setup program to install the Compaq Insight Management Agents.

Enabling Services Setting

To enable the Compaq System Shutdown Service startup setting, perform the following steps:

1. Select *Control Panel Services*.
2. Select *Services*→*Compaq Systems Shutdown*→*Startup*.
The Systems Shutdown dialog screen displays.
3. Select *Automatic* as the Startup Type.
4. Select *OK* to accept the setting and select *Yes* to confirm the selection.
5. Select *Close* to exit the Devices applet.

Enabling Devices Setting

To enable the Compaq System Management startup setting, perform the following steps:

1. Select *Control Panel Devices*.
 2. Select *Compaq Systems Management*→*Startup*.
The Systems Management dialog screen displays.
 3. Select *System* as the Startup Type. Select *OK* to accept the setting.
 4. Select *Yes* to confirm the selection.
-

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

NOTE: Review the settings for the Compaq SCSI Device Monitor, if all your hard drives are on the Compaq Array Controller and your server is not using a SCSI drive, reset the Compaq SCSI Device Monitor to *disabled*. If you have hard drives on the Imbedded SCSI Controller, leave the setting enabled. The Compaq SCSI Device Monitor is reset to *boot* during the installation process even if you have previously disabled it. A message displays warning you that changing these settings might cause the system to become unstable. Ignore the message and select *Yes* to continue.

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

1. Select *Devices* → *Compaq SCSI Device Monitor* → *Startup*.
The Compaq SCSI Device Monitor dialog screen displays.
2. Select *Disabled* as the Startup Type. Select *OK* to accept the setting.

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 *Yes* to confirm the selection.

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

The Compaq Support Software for Windows NT Server 3.51 migration is complete. To upgrade the Compaq Insight Management Agents for Windows NT Server 2.50 or later perform the procedure in the next section.

Upgrading the Compaq Insight Management Agents

The following procedures outline the steps to upgrade your system with the Compaq Insight Management Agents for Windows NT Server 2.50 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 3.51.
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 Destinations.Select *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.
7. After you return to the Windows NT Program Manager, restart the server to implement the Insight Agent upgrade.

The Compaq Insight Management Agents for Windows NT Server 3.51 upgrade is complete. Restart the computer to enable the changes.

Appendix A **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.

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A-2 Multivendor Integration from Compaq

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Current TechNotes

The current TechNotes available are listed in the following tables.

Table A-1 Compaq TechNotes		
TechNote Name	Available on SmartStart	Part Number
Compaq Insight Management		
Integrating Compaq Insight Manager with Enterprise Management Platforms (8/95)	√	145806-003
Integrating Compaq Insight Manager with Microsoft Systems Management Server (8/95)	√	184720-001
Integrating Compaq Insight Manager with ManageWise (8/95)	√	182074-001
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

A-4 *Multivendor Integration from Compaq*

Compaq TechNotes *continued*

TechNote Name	Available on SmartStart	Part Number
<i>NetWare (continued)</i>		
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 (11/94)	√	Not available in bound format
<i>Microsoft</i>		
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 (7/94)		184207-001
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	Available on SmartStart	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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A-6 *Multivendor Integration from Compaq*

Compaq TechNotes *continued*

TechNote Name	Available on SmartStart	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>		
Configuring Compaq RAID Technology for Database Servers (7/94)	√	184206-001

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