# HP Factory-Installed Operating System Software for Microsoft® Windows Server 2003 User Guide



October 2003 (Third Edition) Part Number 324842-003 © Copyright 2003 Hewlett-Packard Development Company, L.P.

Confidential computer software. Valid license from HP required for possession, use or copying. Consistent with FAR 12.211 and 12.212, Commercial Computer Software, Computer Software Documentation, and Technical Data for Commercial Items are licensed to the U.S. Government under vendor's standard commercial license.

The information contained herein is subject to change without notice. The only warranties for HP products and services are set forth in the express warranty statements accompanying such products and services. Nothing herein should be construed as constituting an additional warranty. HP shall not be liable for technical or editorial errors or omissions contained herein.

Microsoft®, Windows®, and Windows NT® are U.S. registered marks of Microsoft Corporation. Java $^{TM}$  is a U.S. trademark of Sun Microsystems, Inc.

Printed in the U.S.A.

HP Factory-Installed Operating System Software for Microsoft Windows Server 2003 User Guide

October 2003 (Third Edition) Part Number 324842-003

# **Contents**

ntroduction	5
Gathering Information	7
Certificate of Authenticity	
Completing the Installation of the Factory-Installe	d Operating System 9
Multi-Language Operating System	
Operating System Installation	10
Operating System Partition Sizing	11
Web-Based Management Configuration Utility	11
Signed Drivers for Windows Server 2003	
Found New Hardware Wizard	
Automatic Configuration	
Licensing Mode	13
Administrator Password	
Dynamic Disk Upgrade	14
Post-installation Tasks	14
Logging On to the Server	
Changing the Administrator Password	
Altering Regional Settings	
Installing the HP Foundation Agents	
Changing Licensing Mode (Standard Edition Only)	
Removing Licenses in Per-Server Mode	
Installing Microsoft Internet Information Service	
Installing Lights-Out Management Features	
Error Messages	20
Configuring Array Controllers	21
Configuring the Disk Drives	22
Installing the Network Teaming and Configuration Utility	23
Creating an Additional Page File	
Installing Tape Drives	24
Medium Changer	25
Installing Client Printer Drivers	25

Ev	vent Log Errors	26
Ва	acking Up the Server	26
U	sing ProLiant Support Software	27
	onfiguring Network Protocols	
	Setting Up Remote Access Server	
U	sing Management Agents	
	stalling Java Virtual Machine	
Trou	bleshootingbleshooting	29
	bleshootingoftware Technical Support	
Sc	oftware Technical Support	29
Sc	oftware Technical Supporteinstalling the Operating System	29
So Re	oftware Technical Supporteinstalling the Operating System	29 30
So Re	oftware Technical Supporteinstalling the Operating System	29 30 31
So Re	oftware Technical Supporteinstalling the Operating System	29 30 31 31

**IMPORTANT:** This guide provides instructions to complete the installation of a factory-installed operating system. If your operating system has been factory-installed, do **not** boot the server from the HP SmartStart CD when powering up the server for the first time. The SmartStart CD should only be used to reinstall the operating system.

## Introduction

This guide provides instructions for completing the installation of the factory-installed Microsoft® Windows® Server 2003, Standard Edition operating system with five Client Access Licenses (CALs) or the Microsoft Windows Server 2003, Web Edition operating system with 10 CALs. The operating system is preloaded on the server disk drive before the server is shipped to you. The latest drivers are also downloaded on the server disk drive and integrated with the preloaded server operating system.

The normal server operating system installation process is shortened for a preloaded server operating system. This installation should require approximately 25 minutes, compared to the normal CD installation time of 90 minutes. The user-specific information, such as the server name, IP address, and regional settings, is required during installation.

The HP factory-installed software for Windows Server 2003 is:

- Ready to run. You are guided through a Mini-Setup wizard, after which any
  HP specific components are installed and, where possible, configured. After any
  required restarts of the operating system, the Windows Server 2003 installation
  is complete and ready to perform any required user configuration.
- Preconfigured with the networking protocols TCP/IP and the Simple Network Management Protocol (SNMP) service. These services are required for effective network management and allow the HP Management Agents for Servers to communicate with Insight Manager 7.

**NOTE:** Windows Server 2003 requires TCP/IP services to be installed and the server to be connected to an active network connection.

• Pre-activated. HP has configured the operating system so customer activation is not required.

- Capable of out-of-the-box management of the server by installing the HP Survey Utility and HP Management Agents for Servers. The Management Agents monitor server performance and configuration as well as the performance of the operating system. The Management Agents help prevent problems before users are affected by issuing alerts when faults occur. The Management Agents are installed during the setup process. The Survey Utility is available as an icon on the desktop to perform an inventory after the initial Windows Server 2003 setup completes.
- Preconfigured with the New Technology File System (NTFS) and the CHKDSK Utility. Many new features in Windows Server 2003 software require NTFS. One of these features promotes the server to a domain controller to use Microsoft Active Directory. NTFS also offers greater security. During the NTFS conversion, the CHKDSK Utility executes to verify that no sectors on the drive are damaged. Review the Windows Server 2003 software documentation to properly configure the server and to understand how to use NTFS with Windows Server 2003 software, while concurrently using previous versions of Microsoft Windows NT® in a network infrastructure.

For additional information about Windows Server 2003 software, go to the following websites:

http://h18000.www1.hp.com/products/servers/software/factory-installed.html http://www.microsoft.com/windowsserver2003

**IMPORTANT:** Complete the operating system installation before installing any additional hardware options.

**IMPORTANT:** If prompted for an installation path for files to be copied during the installation of additional hardware or software components, supply the path C:\\1386 for the original files. If prompted for HP driver files, supply the path C:\\DRIVERS. Driver files are located in subdirectories in this path. Click **Browse** to view the directory.

# **Gathering Information**

For details on information required during the software installation, refer to the operating system documentation provided with the server.

For complete hardware installation information, refer to the server documentation.

## **Certificate of Authenticity**

**IMPORTANT:** Note where the Certificate of Authenticity (COA) label is located on the server and record the product key for future reference.

The COA label is used to:

- Upgrade the factory-installed operating system using the Microsoft Upgrade program for license validation
- Reinstall the operating system because of a failure that has permanently disabled it

The COA label location varies by server model. On rack-mounted server models, the COA label is located either on the front section of the right panel or on the right front corner of the top panel. On tower models, the COA label is located toward the rear of the top panel of the server.

Refer to Figure 1 to identify the information on the COA label.



COA: P73-00622

COA END ITEM: Windows Svr Std 2003 COA ORY OEI PC 1-4 CPU 5 Ctt

Product Family Name: Windows Server Standard

Figure 1: COA label

**NOTE:** The product key is not needed at the time of the initial operating system installation because the server comes from the factory with a product key already installed.

Record the product key in the space provided when the server is initially installed and the COA label is most easily accessible.

Your Server's Product Key

# Completing the Installation of the Factory-Installed Operating System

**IMPORTANT:** Before powering up the server and configuring the operating system software, connect the server hardware as described in the server user guide. Do **not** install additional hardware devices until after the software installation is complete.

This section provides information to complete the installation of the factory-installed operating system.

If the server has a multi-language operating system image, complete the steps in the "Multi-Language Operating System" section. If the server does not have a multi-language operating system image, proceed to the "Operating System Installation" section.

## **Multi-Language Operating System**

To select a language in which to install the multi-language factory-installed operating system:

- 1. Power up the server.
- 2. At the Multi-Language OS Installation Tool for Windows Server 2003 screen, select the operating system language you want to install, and press the coordinating function key for that language.

**IMPORTANT:** After selecting an operating system language, the remaining operating system languages are erased from the server disk drive. This process could take up to one hour to complete.

3. Press the C key to confirm the operating system language selection, or press the **Esc** key to return to the previous screen to select a different language.

The languages not selected are removed from the server disk drive, and the server reboots. Complete the steps in the "Operating System Installation" section to complete the installation of the operating system.

## **Operating System Installation**

To complete the installation of the factory-installed operating system and configure the server:

- 1. Power up the server, if not already powered up.
- 2. Press the appropriate key to continue at the HP Welcome screen. The server software license screen appears.
- 3. Read all software license agreements provided with the server.
- 4. Press the appropriate key to accept the license agreements if you agree with all the terms and conditions of the license agreements to continue the installation.

Carefully follow the online prompts, making keyboard or mouse entries only when prompted by the system. Several status screens describing the process that is occurring appear during the software installation.



**CAUTION:** The server requires a reboot at the end of the installation. Do **not** power down the server at any time during the installation process. Any power interruption during the installation process could prevent proper completion of the installation and prevent the operating system from restarting.

**NOTE:** You can view and print the End-User License Agreement (EULA) after the installation is complete by clicking the **EULA** link under **Start>All Programs>Pre-Install Features.** 

## **Operating System Partition Sizing**

During the installation of the operating system, you are prompted to determine the size of the operating system partition.

- 1. At the OS Partition Sizing screen, select one of the following options:
  - **Default**—Sets the operating system partition size to the factory default
  - Custom—Enables you to specify a custom value up to the maximum size of the drive
  - Maximum—Sets the operating system partition size to the maximum size of the drive
- 2. Click OK.

## **Web-Based Management Configuration Utility**

During the driver installation phase of the factory-installed operating system installation, the HP ProLiant Express Deployment Utility launches the Web-Based Management Configuration utility. This Web utility enables you to enter various passwords for Web Management access.

NOTE: You are only required to establish a password for the administrator account.

To complete the Web-Based Management Configuration Utility:

- 1. Enter a password in the Administrator Password field.
- 2. Re-enter your password in the Confirm field, then click **Next.**
- 3. Click **Next** to continue the driver installation process.
- 4. After the driver installation process is completed, click **Finish.** The installation process completes, and the server reboots.
- 5. When prompted, log on to the server.
- 6. Refer to the "Installing the HP Foundation Agents" section to install the HP Foundation Agents.

## **Signed Drivers for Windows Server 2003**

During the installation of the operating system, caution messages might appear concerning unsigned software drivers. The caution message states, "Digital Signature is Not Found" when drivers are about to be installed. When prompted, click **Yes** to accept the drivers and continue the installation. If you are prompted to reboot the server, click **No.** After the operating system installation is complete, download digitally signed drivers from <a href="http://www.hp.com/support/files">http://www.hp.com/support/files</a>.

#### **Found New Hardware Wizard**

The Found New Hardware Wizard might appear during the operating system installation. Click **Cancel** at the Found New Hardware Wizard. Do **not** attempt to proceed with the installation of drivers until after the second logon when the operating system is fully installed.

**IMPORTANT:** Do **not** attempt to install the drivers during the operating system installation because the server might automatically reboot before the driver installation has been completed. This could result in incorrect installation of a device.

To install drivers after the operating system installation is complete:

- 1. Click **Next** at the Found New Hardware Wizard window.
- 2. Select Search for a Suitable Driver for My Device>Next.
- 3. Select **Specify a Location**, deselect **Floppy Drive** and **CD-ROM**, and then click **Next**.
- 4. Enter the following path in the text box, then click **OK:**

C:\DRTVERS

- 5. Click **Next** at the Driver Files Search Results screen.
- 6. Click **Finish** to complete the Found New Hardware Wizard.

The setup process begins. Allow the entire setup process to complete, including any requested restarts, before interrupting this process or powering down the server. After the initial setup is complete, the server can be configured to your individual needs.

**IMPORTANT:** Because of some driver installation needs, the system might complete the driver installation after the first required logon. Do **not** perform any actions on the Manage Your Server screen. If additional drivers are loaded, the system completes the driver installation and automatically reboots. The next time the system presents a logon prompt, log on normally and proceed to use the new operating system.

## **Automatic Configuration**

Some parts of the setup process are automatically configured, and these screens do not appear. In the future, for information about changing any preconfigured information, refer to the operating system online Help. Of the screens that are automatically configured, the following might require later changes.

#### **Licensing Mode**

The server licensing mode is set to per-device or per-user with a five device or user count. To change the licensing mode to per-server after the initial operating system installation is completed, refer to the "Changing Licensing Mode (Standard Edition Only)" section in this document.

If additional licenses were purchased, apply the additional licenses after the initial operating system installation completes. For information about adding licenses, refer to the online Help or the operating system documentation.

#### **Administrator Password**

The administrator password has been intentionally left blank. Set the password immediately after the software installation is complete. Do not change the administrator password during the initial setup when entering the computer name, because changing the password at this time can cause the automated installation process to abort. For procedures to change the administrator password after the installation has been completed, refer to the "Changing the Administrator Password" section in this guide.

#### **Dynamic Disk Upgrade**

The operating system is set to be installed on a minimum partition size of 6 GB. On an array controller, the logical drive size is set to the maximum size of the drive. Three to 7 MB of space are available on the logical drive of array controllers to support a dynamic disk upgrade.

**NOTE:** The dynamic disk upgrade is optional. For information about dynamic disk upgrades, refer to the operating system documentation. After upgrading to dynamic disk, the emergency repair disk must be updated.

## **Post-installation Tasks**

This section provides instructions for tasks required after the software installation is complete.

## Logging On to the Server

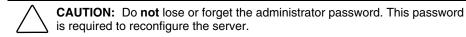
To log on to the server after completing the initial software installation:

- 1. Press the **Ctrl+Alt+Del** keys to display the logon screen. Enter the user name Administrator.
- 2. Leave the Password field blank, and click **OK.**

## **Changing the Administrator Password**

The administrator password can be changed by pressing the **Ctrl+Alt+Del** keys and clicking **Change Password** or by completing the following steps:

- 1. Click Start>All Programs>Administrative Tools>Computer Management.
- 2. Expand the **System Tools** directory, and then expand the **Local Users and Groups** directory.
- 3. Click the **Users** folder.
- 4. Right-click **Administrator**, which appears on the right side of the window, and select **Set Password**.
- 5. A warning message appears. Click **Proceed** to continue.
- 6. Enter the new password in the New Password field, re-enter it in the Confirm Password field, then click **OK**.



7. Click **OK** to complete the process.

For more information about changing the administrator password, refer to the operating system documentation.

## **Altering Regional Settings**

Alter the regional settings if the server is not operating under the default regional settings. The regional settings control the keyboard language and set the local format for sorting and displaying time, date, numbers, and currency for a specified region.

To alter the regional settings:

- 1. Click **Start**, and then expand the **Control Panel** directory.
- 2. Click **Regional and Language Options.**
- 3. Select the **Regional Options** tab.
- 4. Select the correct locale from the two dropdown lists.
- 5. Select the Languages tab, and then click Details.
- 6. Select the **Settings** tab at the Text Services and Input Languages window.
- 7. Select the checkbox next to the correct language setting.
- 8. Click **Add** to select another input language.
- 9. Select the correct Input Language and Keyboard Layout/IME at the Add Input Language window, then click **OK**.
- 10. Select the correct Default input language from the dropdown list.
- 11. Select  $\mathbf{OK}$  to exit the Text Services and Input Languages window.
- 12. Select **OK** to exit the Regional and Language Options window.

## **Installing the HP Foundation Agents**

To install the HP Foundation Agents:

**IMPORTANT:** For security reasons, first obtain a 64-bit encrypted password certificate to set your password. The password certificate can be obtained from an Insight Manager 7 Certificate Server. For information about how to set up and acquire the certificate, refer to the *HP Insight Management Agents User Guide*, located at <a href="http://h18013.www1.hp.com/products/servers/management/agents.html">http://h18013.www1.hp.com/products/servers/management/agents.html</a>.

- 1. Click Start>All Programs>Pre-Install Features>ProLiant Support Pack.
- 2. In the left column, expand the **All Configurable Components** directory.
- 3. If you require remote access to the Foundation Agents, set your password and determine your trust mode:
  - a. Right-click Foundation Agents for Windows.
  - b. Select **Configure** from the dropdown list.
  - c. Scroll to the **Administrator Password** section, and enter your password.
  - d. Re-enter your password.
  - e. At the Insight Manager 7 Trust Relationship screen, select the appropriate trust mode of your choice. Mode choices are All, Name, or Certificate. This step allows trusted relationships with Insight Manager 7 servers.
  - f. Depending on the mode selected, enter information consisting of trusted server names or the base64 encoded trust certificate.
  - g. Click Save.

4. To install only the Foundation Agents, deselect the other components by clicking the component and pressing the **Delete** key.

**NOTE:** Additional HP management tools can be installed at this time if you choose by leaving any of the components selected for installation.

5. Click **Install** to install the currently selected components. The Foundation Agents install using the password you have set.

For more information about the Foundation Agents, refer to the *HP Insight Management Agents User Guide*, located at http://h18013.www1.hp.com/products/servers/management/agents.html.

## **Changing Licensing Mode (Standard Edition Only)**

**IMPORTANT:** License Logging services must be started before the licensing mode can be changed. To start the License Logging services:

- 1. Click Start>All Programs>Administrative Tools>Services.
- 2. Right-click License Logging, then click Properties.
- 3. Select Manual at the Startup type field, and then click OK.

To change the server licensing mode from per device or per user to per server:

- 1. Click **Start**, and then expand the **Control Panel** directory.
- 2. Select Licensing. The Choose Licensing Mode window appears.
- 3. Click **Per Server.** Select **Windows Server** from the dropdown Product list.
- 4. Click **Add Licenses.** The New Client Access License window appears.
- 5. Enter the quantity of additional CALs that have been purchased, and then click **OK**.
- 6. The Per Server Licensing window appears. If you agree to the terms of the license agreement, select the **I agree that:** checkbox, then click **OK** to continue.
- 7. Click **OK** to exit the Choose Licensing Mode window.

#### Removing Licenses in Per-Server Mode

To remove licenses:

- 1. Click **Start**, and then expand the **Control Panel** directory.
- 2. Select **Licensing.** The Choose Licensing Mode window appears.
- 3. Click **Remove Licenses.** The Select Certificate to Remove Licenses window appears.
- 4. Enter the quantity of CALs to remove in the Number of Licenses to remove field, then click **Remove.**
- 5. Click **Yes** at the License System window.
- 6. Click **Close>OK** to exit the Choose Licensing Mode window.

## **Installing Microsoft Internet Information Service**

**IMPORTANT:** The server must be connected to an active network connection to complete the installation of networking components, such as Internet Information Service and Active Directory.

To install Microsoft Internet Information Service:

- 1. Click **Start**, and then expand the **Control Panel** directory.
- 2. Select Add or Remove Programs.
- 3. Click **Add/Remove Windows Components** to launch the Windows Components wizard.
- 4. Select **Application Server** to highlight, and then click **Details.**
- 5. Select Internet Information Services>OK.
- 6. Click **Next** to begin the Internet Information Services installation.
- 7. Click **Finish** to complete the installation, and then close the Add or Remove Programs window.

## **Installing Lights-Out Management Features**

If a Remote Insight Lights-Out Edition (RILOE) board has been purchased for the server or the server was purchased with an Integrated Lights-Out (iLO) controller installed, use the following procedure to complete the installation. Do not attempt to install the device driver until after the operating system installation is complete.

**IMPORTANT:** The Microsoft Hardware Wizard detects the RILOE board as a PCI Memory Controller and the iLO controller as a Base System Device. The Hardware Wizard continues to appear until the driver installation has been completed.

- 1. Click **Next** at the Found New Hardware Wizard window.
- 2. Select Search for a Suitable Driver for My Device, and then click Next.
- 3. Select **Specify a Location**, deselect **Floppy Drive** and **CD-ROM**, and then click **Next**.
- 4. Enter the following path in the text box, then click **OK**:

C:\DRIVERS

5. Click **Next** at the Driver Files Search Results screen, then click **Finish.** 

#### **Error Messages**

After the RILOE driver is installed, the following errors can occur:

- In the Device Manager screen, two entries appear for the ATI Video Controller.
   One of these entries has a yellow exclamation mark indicating that no driver is installed.
- In the Event Viewer, the following message appears:

Unable to map address range for graphics card

These errors result from RILOE and the server using the same video controller. The operation of the server is not affected by these error messages.

To disable one entry for the ATI Video Controller and prevent the error messages from occurring:

- 1. Right-click the Device Manager entry for the ATI Video Controller that has a yellow exclamation mark.
- 2 Click **Disable**.

After the ATI Video Controller entry is disabled or when the server is rebooted, a red X appears in place of the yellow exclamation mark. The red X indicates that the device is disabled. The disabled entry does not affect the operation of the server.

## **Configuring Array Controllers**

If an array controller has been purchased with the server, run the Array Configuration Utility XE (ACU-XE) to set up the remaining physical drives for use.

**IMPORTANT:** Microsoft Internet Explorer is required to run ACU-XE. Internet Explorer is used to interface with the array controller.

The utility can be run online, using the following steps:

- 1. Click Start>All Programs>Compaq System Tools>Compaq Array Configuration Utility XE.
- 2. Select if you want to enable remote administration when prompted, then click **OK**.
- 3. Enter your Web Management password when prompted.
- 4. Configure the remaining physical drives into logical drives, and run Disk Administrator to partition and format the additional drive space.

For more information on using ACU-XE, refer to the online help at <a href="http://h18004.www1.hp.com/products/servers/proliantstorage/software-management/acumatrix/index.html">http://h18004.www1.hp.com/products/servers/proliantstorage/software-management/acumatrix/index.html</a>.

## **Configuring the Disk Drives**

The primary logical drive, which contains the operating system, is the only drive on the server that is configured during the operating system installation. Additional space that is not partitioned is also located on the primary drive. This nonpartitioned space, and any additional disk drives on the server, must be partitioned and formatted before they can be available for use.

**IMPORTANT:** If an array controller has been purchased with the server, refer to the "Configuring Array Controllers" section in this guide for procedures to format and partition the nonpartitioned drive space and additional disk drives.

To configure any remaining nonpartitioned disk drives using Disk Administrator:

- 1. Click Start>All Programs>Administrative Tools>Computer Management.
- 2. Expand the **Storage** directory, and then click **Disk Management.** The disk and logical drive information appears on the right side of the window.
- 3. Click **Action**, and then click **Rescan Disks** if the new logical drive created by ACU-XE does not appear on the bottom right side of the Computer Management window as unallocated space.
- 4. Right-click **Disk 1** on the bottom right panel, which displays a small red circle on the disk icon, then click **Initialize Disk.**
- 5. Select **Disk 1**, and then click **OK** on the Initialize Disk screen. The small red circle is now gone, and the disk is identified as a "Basic" disk.
- 6. Right-click the box containing the disk size amount, which is labeled "Unallocated." Click **New Partition** from the pop-up window.
- 7. Click **Next** at the New Partition Wizard screen.
- 8. Select either **Primary** or **Extended Partition**, and then click **Next** at the Select Partition Type screen.

- 9. Click **Next** to use the maximum disk space, or enter the amount you want for the partition size at the Specify Partition Size screen.
- 10. Click **Next** to accept the drive letter assigned by default at the Assign Drive Letter or Path screen. The Format Partition screen appears.
- 11. To format the drive, select the file system format (the default selection is NTFS), the appropriate Allocation Unit Size, and then either enter the Volume Label or accept the default label.
- 12. If desired, select **Perform a quick format** and **Enable file and folder compression.**
- 13. If the drive will not be formatted, select **Do not format this partition.**
- 14. Click **Next**, and then click **Finish** at the Completing the New Partition Wizard screen.

The partition is formatted to the file system that was selected and is labeled "Healthy" at the completion of the format.

For more information on configuring the new disk drives and upgrading to dynamic disks, refer to the operating system documentation.

## Installing the Network Teaming and Configuration Utility

The Network Teaming and Configuration (CPQTEAM) Utility enables multiple network interface controllers (NICs) to be teamed together. You must run the ProLiant Support Pack to install the CPQTEAM software. For information on running the ProLiant Support Pack, refer to the "Using ProLiant Support Software" section in this guide.

**IMPORTANT:** During the CPQTEAM software installation process, a message might appear stating that The file CPQTEAM.DLL is needed. A default path appears in the message box. Click  $\mathbf{OK}$  to accept the path and continue with the installation.

## **Creating an Additional Page File**

When additional memory or software applications are installed on the server, errors can occur in the event log indicating that the C drive is nearing capacity. To solve this problem, you can either move applications located on the C drive to another partition or create a page file. Creating the page file on a separate partition to support the amount of memory in the server is the most efficient solution. After an additional page file has been created, set the page file on the boot partition to one times the amount of memory. For additional information on creating page files, refer to the Help file, which can be accessed by clicking **Start>Help and Support.** 

## **Installing Tape Drives**

If a tape drive was purchased for the server, support for the tape drive might need to be installed manually. To install the tape device:

Click Start>All Programs>Administrative Tools>Computer
 Management>Device Manager. Device Manager displays all of the devices on the right side of the screen.

**IMPORTANT:** The tape drive is listed in the **Other Devices** category under the ? (question mark) icon, which indicates an unknown device, until the correct driver is installed.

- 2. Select the tape device to highlight.
- 3. Right-click the tape device, then select Properties.
- 4. Select the **Driver** tab, and then click **Update Driver**. The Update Device Driver Wizard begins.
- 5. Click **Next** to continue.
- 6. Select Search for a suitable driver for my device>Next.
- 7. Select **Specify a location,** and deselect all other options. Click **Next.**

8. Enter the following path in the Device Driver Wizard field, then click **OK**:

C:\DRIVERS

The driver search results should display the appropriate device.

**IMPORTANT:** If an incorrect device appears, click **Back** and reselect the correct device.

- 9 Click **Next** to install the driver.
- 10. Click **Finish>Close** to return to the Computer Management screen.

The tape driver installation is complete. The tape device now appears in the **Tape Drive** category on the Computer Management screen.

#### **Medium Changer**

If the tape drive has a medium changer, the driver for the medium changer must be installed.

**IMPORTANT:** The medium changer is listed on the Computer Management screen as an **Unknown Medium Changer** until the correct driver is installed.

To install the medium changer driver:

- 1. Select **Unknown Medium Changer** from the **Medium Changers** category in the Computer Management screen device list.
- 2. Follow the procedure described in the previous section, "Installing Tape Drives," to install the medium changer.

## **Installing Client Printer Drivers**

The client printer drivers are preinstalled in the Printers directory located on the disk drive. When installing printer support for client operating systems, supply the path C:\PRINTERS. For additional information on installing drivers for network shared printers, refer to the "Printers and Faxes" section of the Help file, which can be accessed by clicking **Start>Help and Support.** 

## **Event Log Errors**

After the ProLiant Installation Utility is complete, event log error messages related to certain controller drivers might appear. These messages are expected at this time and do not affect the performance of the server or the operating system. Possible messages include:

- Driver detected an internal error in its data structures for \Device\Scsi\Cpq32fs21.
- Driver detected a controller error on \Device\Scsi\Cpq32fs21.
- The device, \Device\scsi\adpul60ml, did not respond within the timeout period.
- The device, \Device\scsi\cpqfcalm1, did not respond within the timeout period.
- Unable to read IO control information from NBT device. See article #0257760 on Microsoft website.

## **Backing Up the Server**

After you complete the Windows Server 2003 installation and the server is operational, back up the server using a tape backup system in conjunction with approved tape backup software.

## **Using ProLiant Support Software**

The ProLiant Support Pack for Microsoft Windows Server 2003 software is automatically installed when the server software is installed. This software contains device drivers and utilities that take advantage of specific capabilities offered with ProLiant server products. These drivers are provided for use with ProLiant hardware only. For more information, refer to the ProLiant Support Pack for Microsoft Windows Server 2003 located on the disk drive in the C:\PSP directory.

To run the ProLiant Support Pack for Microsoft Windows Server 2003:

- 1. Click Start>All Programs>Pre-Install Features>ProLiant Support Pack.
- 2. Follow the on-screen instructions when the setup program is launched.

If this link does not launch the setup program:

- 1. Click Start>Run.
- 2. Enter the following path in the text box, then click **OK:**

C:\PSP\SETUP.EXE

3. Follow the on-screen instructions when the setup program is launched.

### **Configuring Network Protocols**

The TCP/IP and SNMP services are automatically installed. The Management Agents for Servers require TCP/IP and SNMP services to communicate with Insight Manager 7. To disable the SNMP service, refer to the operating system documentation. Windows Server 2003 requires TCP/IP to be enabled.

#### **Setting Up Remote Access Server**

To use the Remote Access Server (RAS) service with an installed modem:

- 1. Click **Start**, and then expand the **Control Panel** directory.
- 2. Select **Network Connections**.
- 3. Double-click Dial-up Connections>Make a New Connection.
- 4. Select the network connection type, and complete the rest of the setup as prompted.

For more information on required networking parameters, refer to the operating system documentation.

## **Using Management Agents**

The Management Agents for Servers are installed during the setup process. For more information about the Management Agents, refer to the *HP Insight Management Agents User Guide*. This guide is located at <a href="http://h18013.www1.hp.com/products/servers/management/agents.html">http://h18013.www1.hp.com/products/servers/management/agents.html</a>.

## **Installing Java Virtual Machine**

The 32-bit version of Java<sup>TM</sup> Virtual Machine might need to be installed on your server to completely and properly view some Web pages using Internet Explorer 6.0. For example, when viewing the Web Agent Help from the System Management Homepage, text that appears in the left column of the Help screen is not displayed properly if Java Virtual Machine is not installed.

The Java Virtual Machine utility can be downloaded from http://www.java.com.

# **Troubleshooting**

If you experience problems with the factory-installed operating system software, refer to the information in the following sections.

## **Software Technical Support**

Technical support for HP preinstalled third-party software and third-party software purchased from HP is available from the Internet or by telephone for 90 days from the date of purchase.

Telephone support (Software Support Services) includes assistance with:

- Answering installation questions (how-to, first steps, and prerequisites)
- Setting up and configuring the software (how-to and first steps; excludes system optimization, customization, and network configuration)
- Interpreting system error messages
- Isolating system problems to software usage problems
- Obtaining SoftPaq information or updates

Additional services such as Start-up and Installation Services can be purchased for an additional fee. For information on service upgrades, refer to <a href="http://www.hp.com/hps">http://www.hp.com/hps</a>.

Free online resources are available for obtaining services and information on your product. For more information, refer to <a href="http://www.hp.com/support">http://www.hp.com/support</a>.

This length of Software Support Services can change depending on local country legal requirements. After the first 90 days, Software Support Services are available for a fee on all operating software and bundled software provided by HP.

**IMPORTANT:** Support applies only to the original HP hardware and software configuration shipped.

## **Reinstalling the Operating System**

If the server operating system becomes corrupted, reinstall it using the SmartStart CD, the Management CD, and the HP-branded version of either the Windows Server 2003, Standard Edition CD or the Windows Server 2003, Web Edition CD.

To reinstall the operating system, boot the server from the SmartStart CD and follow the on-screen installation path instructions.

**NOTE:** For information on using SmartStart, refer to the ProLiant Essentials Foundation Pack provided with the server.

#### Reinstalling from Multi-Language Operating System Restore CDs

To restore the operating system image using the Multi-Language operating system install/restore CDs:

- 1. Power up the server, and insert CD #1 of the Multi-Language OS Install/Restore CD for Windows Server 2003 kit.
- 2. At the Multi-Language OS Install/Restore CD for Windows Server 2003 screen, select the operating system language you want to install, and press the coordinating function key for that language.
- 3. At the Notice screen, read the CD requirements for the operating system you selected. Make note of the CDs required during the restore process because the installation program might not specify which CD to enter.
- 4. At the Warning screen, press the C key to continue the restore process or press the Esc key to abort.
- 5. Follow the online prompts to complete the operating system installation.

## **Getting Help**

You can find more information and other help in the following locations.

#### **HP Website**

To access the HP website, log on to the Internet at <a href="http://www.hp.com">http://www.hp.com</a>.

## **Telephone Numbers**

For technical support:

- In the United States and Canada, call 1-800-652-6672. For continuous quality improvement, calls might be recorded or monitored.
- Outside the United States and Canada, go to the HP website for additional support information at <a href="http://www.hp.com">http://www.hp.com</a>.