# HP Factory-Installed Operating System Software for Microsoft® Windows 2000 Server User Guide




October 2003 (Seventh Edition)
Part Number 280154-007

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User Guide

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**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® 2000 Server software operating system. The operating system is preloaded on the server disk drive before the server is shipped to you. The latest drivers are also loaded 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 20 to 25 minutes, compared to the normal CD installation time of an hour and a half. You are required to enter user-specific information, such as the server name, IP address, and regional settings.

The HP factory-installed software for Windows 2000 Server 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 2000 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 HP Insight Manager 7.

  **NOTE:** Windows 2000 Server requires TCP/IP services to be installed. The server must be connected to an active network connection if a dynamically obtained IP address is desired. An active network connection is not required if a static IP address is supplied during the installation.

- Capable of out-of-the-box management of the server by the installation of 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 2000 setup completes.
- Preconfigured with the New Technology File System (NTFS) and the CHKDSK Utility. Many new features in Windows 2000 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 Microsoft documentation for Windows 2000 software to properly configure the server and to understand how to use NTFS with Windows 2000 software, while concurrently using previous versions of Microsoft Windows NT® in a network infrastructure.
- Preconfigured with Microsoft Service Pack 3 as a part of the operating system. The Service Pack includes updates, components, and tools that enhance the operation of the operating system. The operating system does not allow the Service Pack to be uninstalled.
- Preconfigured with Microsoft Internet Explorer 6, Microsoft Internet Explorer 6 Service Pack 1, and the Security Rollup Package for Internet Explorer 6.

For additional information about Microsoft Windows 2000 Server software, go to the following websites:

http://h18001.www1.hp.com/partners/microsoft/windows2000

http://www.microsoft.com/windows2000

**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:\I386` for the original files. If prompted for HP driver files, supply the path `C:\HPDRVRS`. 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:

- Complete the installation of the factory-installed operating system
- 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. The 25-character product key located on the COA label is required to complete the installation of the operating system and reinstall the operating system at any time in the future.

A Microsoft COA label is illustrated in Figure 1.

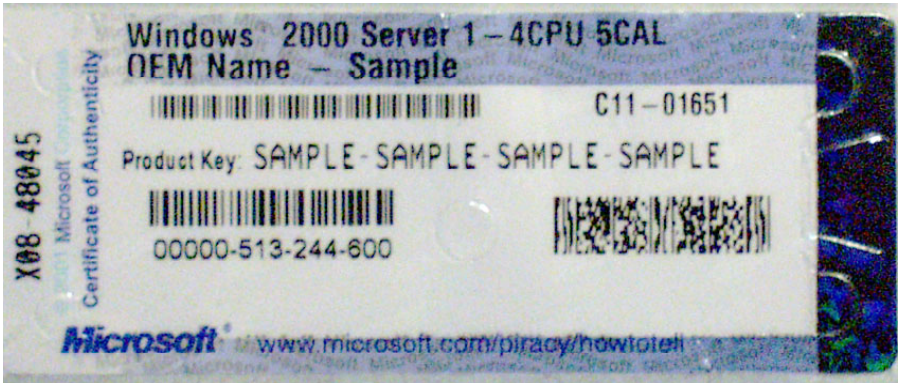


**Figure 1: COA label**

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 2000 Server 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 **Start>Programs>Pre-Install Features>End User License Agreement.**

## 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 the user 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 into 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 Management Agents" section to install the HP Management Agents.

## Signed Drivers for Windows 2000

During the installation of the operating system, caution messages might appear concerning unsigned software drivers. The caution message states "`Digital Signature is Not Found`" as 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 http://www.hp.com/support/files.

## Found New Hardware Wizard

The Found New Hardware Wizard might appear during the operating system installation. Click **Cancel** when the Found New Hardware Wizard begins. 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,** 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:\HPDRVRS`
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 Configure 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-seat. To change the licensing mode to per-server after the initial operating system installation completes, refer to the "Changing Licensing Mode" section in this document.

If additional licenses were purchased, apply the additional licenses after the initial operating system installation completes. If the server is set to per-seat mode, refer to the "Adding Licenses in Per-Seat Mode" section in this document. For information about adding licenses if the server is set to per-server mode, refer to the online Help or the operating system documentation.

### Administrator Password

This password has been intentionally left blank. Change 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 information about changing the Administrator password after the installation has been completed, refer to the "Changing the Administrator Password" section.

### 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

To change the Administrator password:

1. Click **Start>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. Enter the new password in the New Password field, then re-enter it in the Confirm Password field.



**CAUTION:** Do **not** lose or forget the Administrator password. This password is required to reconfigure the server.

6. 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>Settings>Control Panel>Regional Options.**
2. Select the **General** tab at the Regional Options window.
3. Select the correct locale from the dropdown list.
4. Select the checkbox next to the correct language setting.
5. Select the **Input Locales** tab in the Regional Options window.
6. Click **Add** to select another input language.
7. Highlight the correct input locale and keyboard layout, and then click **Set as Default.**

## Installing the HP Management Agents

To install the HP Management 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 http://h18013.www1.hp.com/products/servers/management/agents.html.

1. Click **Start>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 **hp Management Agents for Windows 2000/Server 2003.**

   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 Management 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 Management Agents install using the password you have set.

For more information about the Management 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

To change the server licensing mode from per-seat to per-server:

1. Click **Start>Settings>Control Panel>Licensing.** The Choose Licensing Mode window appears.
2. Click **Per Server.** A warning message appears, stating `You have requested a change that violates the license agreement. The license for this product only allows for a one-time change from a Per Seat to a Per Server configuration. Do you want to cancel this request?`
3. Click **No** to change the licensing mode to per-server.

   **IMPORTANT:** After the licensing mode is changed to per-server, it cannot be changed back to per-seat.

4. Click **OK.** The Per Server Licensing window appears.
5. To confirm the per-server licensing mode selection, click **I Agree>OK.**

The Per Server Licensing window closes, and the licensing mode is now set to per-server.

### Adding Licenses in Per-Seat Mode

To add additional licenses:

1. Click **Start>Settings>Control Panel>Licensing.** The Choose Licensing Mode window appears.
2. Click **Add Licenses.** The New Client License window appears.
3. Enter the quantity of additional client access licenses that have been purchased, and then click **OK.**
4. The Per Seat Licensing window appears. Select **I Agree>OK.**
5. Click **OK** to close the licensing application.

## Installing Internet Information Service

To install Microsoft Internet Information Service:

1. Click **Start>Settings>Control Panel>Add/Remove Programs.**
2. Click **Add/Remove Windows Components** to launch the Windows Components Wizard.
3. Select **Internet Information Services>Next** to begin the installation.
4. Click **Finish** to complete the installation, and then close the Add/Remove Programs window.
5. Double-click the link on the desktop to install the Microsoft Security Toolkit Utility. This utility provides links to patches available on the local drive and to tools that are helpful in determining if the system has the latest available patches installed.

## Installing Lights-Out Management Features

If either a Remote Insight Lights-Out Edition (RILOE) or RILOE II board was purchased for the server or the server was purchased with an Integrated Lights-Out (iLO) controller installed, use these procedures to complete the installation. Do not attempt to install the device driver until the operating system installation completes.

**IMPORTANT:** The Microsoft Hardware Wizard detects the RILOE or RILOE II 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>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:\HPDRVRS
   ```

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

## Error Messages

After the Lights-Out Management 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 the Lights-Out Management device 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:** 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>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 http://h18004.www1.hp.com/products/servers/proliantstorage/software-management/acumatrix/index.html.

## 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>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 **Write Signature.**
5. Select **Disk 1,** and then click **OK** at the Write Signature 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," to the right of **Disk 1.** Click **Create Partition** from the pop-up window.
7. Click **Next** at the Create 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 Formatting Partition screen appears.
11. Select the appropriate Allocation Unit Size, then enter the Volume Label or accept the default label. Select either the default NTFS format or the Fat32 file system format.
12. Select **Perform a Quick Format** or **Format,** and click **Next.**
13. Click **Finish** at the Completing the Create 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 ProLiant Network Teaming and Configuration Utility

The ProLiant Network Teaming and Configuration (CPQTEAM) Utility allows 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 **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 "Paging File" section of the Help file, which can be accessed by clicking **Start>Help.**

## Installing Tape Drives

If a tape drive was purchased for the server, support for the tape drive might require manual installation. To install the tape device:

1. Right-click **My Computer>Manage.**
2. Select **Device Manager** from the left side of the Computer Management screen. This action 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.

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:\HPDRVRS`

   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 under 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 "Installing Printer Drivers" section of the Help file, which can be accessed by clicking **Start>Help.**

## 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 #Q257760 on Microsoft website.`

## Backing Up the Server

After you complete the Windows 2000 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 2000 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 2000 Help section, which is located on the dropdown menu when the application is launched.

To run the ProLiant Support Pack for Windows 2000 software:

1. Click **Start>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 launches.

## 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 2000 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>Settings>Control Panel>Network.**
2. Double-click **Dial-up Connections>Make a New Connection.**
3. 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 http://h18013.www1.hp.com/products/servers/management/agents.html.

# 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 http:/www.hp.com/hps

Free online resources are available for obtaining services and information on your product. Refer to http://www.hp.com/support.

The length of Software Support Services might 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 HP SmartStart CD, Management CD, and the HP-branded version of the Microsoft Windows 2000 Server CD.

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

**NOTE:** For information on using the SmartStart Assisted installation, 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 2000 Server kit.
2. At the Multi-Language OS Install/Restore CD for Windows 2000 Server 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 http://www.hp.com.

### Telephone Numbers

For technical support:

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