

Instructions for installing Microsoft Windows Small Business Server 2003 with Service Pack 1 on HP ProLiant and tc servers

integration note



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Abstract

This integration note provides instructions for installing the Standard and Premium Editions of the Microsoft Windows Small Business Server (SBS) 2003 core operating system with Service Pack 1 (SP1) on specified HP ProLiant servers and on the tc2120 server.

 **NOTE:** Instructions for installing the SBS applications included in the supported editions are not covered in this paper. Refer to Microsoft documentation for assistance in this area: www.microsoft.com/windowsserver2003/sbs/techinfo/productdoc/default.aspx.

The instructions provided in this paper should be used guidelines to help identify and install HP drivers required for a successful installation of the Microsoft Windows SBS 2003 SP1 core operating system.

Installation requirements

The tables in this section identify the hardware and software requirements for installing the Microsoft Windows SBS 2003 SP1 operating system on HP ProLiant and tc2120 servers.

Table 1. Requirements for HP ProLiant 300 series servers

<input type="checkbox"/>	One of the following servers: <ul style="list-style-type: none">– ProLiant ML310 G1/G2– ProLiant ML330 G1/G2/G3– ProLiant ML350 G1/G2/G3/G4p– ProLiant ML370 G1/G2/G3/G4
<input type="checkbox"/>	256-MB RAM minimum (384 or more RAM recommended)
<input type="checkbox"/>	Computer monitor, keyboard, and mouse (resolution of 800 x 600 or more recommended)
<input type="checkbox"/>	Two network interface controllers (NICs) or one NIC and one modem
<input type="checkbox"/>	Hard drive with at least 6 GB free space (formatted as NTFS)
<input type="checkbox"/>	CD-ROM drive
<input type="checkbox"/>	Microsoft Windows SBS 2003 SP1 Standard operating system
<input type="checkbox"/>	ProLiant Support Pack (PSP) for Microsoft Windows Server 2003
<input type="checkbox"/>	SmartStart CD Version 7.00 or higher (included with the server or downloadable from www.hp.com/servers/smartstart)

Table 2. Requirements for HP tc2120 servers and ProLiant 100 series servers

<input type="checkbox"/>	One of the following servers: <ul style="list-style-type: none">– ProLiant ML110 G1/G2/G3– ProLiant ML150 G1/G2– tc2120
<input type="checkbox"/>	1.44-MB diskette drive ¹
<input type="checkbox"/>	At least 1 blank diskette ¹
<input type="checkbox"/>	Server Support and Documentation CD (included with the server)

NOTE 1: For servers without a diskette drive option, substitute a USB disk.

Table 3. Additional requirements for installing Microsoft Windows SBS 2003 SP1

<input type="checkbox"/>	Name of licensee for the Microsoft Windows Small Business Server 2003 SP1 operating system
<input type="checkbox"/>	Name of your organization
<input type="checkbox"/>	Name of server
<input type="checkbox"/>	Name of domain
<input type="checkbox"/>	Product ID for the Microsoft Windows SBS 2003 SP1 (see software packaging)

If you plan to install Microsoft Windows SBS 2003 SP1 on a server configured with a modem, review Table 4 for additional minimum requirements. Refer to the Microsoft Windows SBS 2003 SP1 user documentation for the services that will be available with various modem types.

Table 4. Additional requirements for servers with modems

<input type="checkbox"/>	Driver for modem (supplied by the modem manufacturer)
<input type="checkbox"/>	Area code and phone number for telephone line(s) connected to modem(s)


Installation process for ProLiant 300 series servers

The installation process includes two parts: (1) installing the operating system with the ProLiant Support Pack and (2) installing and configuring a modem.

Part 1: Installing the operating system with the ProLiant Support Pack


This section guides you through the SmartStart Assisted Install Path to install the Microsoft Windows SBS 2003 operating system or Microsoft Windows SBS 2003 with SP1. The following instructions are applicable for both the Microsoft Windows SBS 2003 base media and for the Microsoft Windows SBS 2003 SP1 media. The operating system (OS) installed is dependent upon the OS media inserted into the CD-ROM drive in Step 11.


1. Insert the SmartStart CD into the CD-ROM drive and power on the server.

 **NOTE:** A SmartStart CD ships in the box of every ProLiant server. A newer version of the SmartStart CD image may be downloaded from here: www.hp.com/servers/smartstart.

2. Select the language to use during the SmartStart process by clicking the appropriate radio button. Also, select the keyboard language to be used with this system by choosing the appropriate language from the drop-down menu. Then, click the **Continue** button.
3. Review the Licensing Agreement, and click the **Agree** button if you agree.
4. Click the **Deploy Server** button, and click the **Continue** button.
5. On the Server Deployment — Hardware Configuration screen, there are options available that allow for the configuration of additional hardware. For instance, if the server contains a logical drive, you may choose to launch the ACU to perform the configuration. To accept the default hardware configuration, click the **Continue** button.
6. Select the specific operating system version by expanding the tree lists. Expand the **Microsoft Windows 2003** list, click the **Microsoft Windows 2003 Small Business Server** entry to select it, and click the **Continue** button.
7. Select the Boot Partition size, and click the **Continue** button.

8. Enter the Operating System Configuration Information in the window boxes, and click the **Continue** button.
9. Perform the SNMP configuration steps below to enable support for the HP Insight Management Agents:
 - Select the Install SNMP radio box.
 - Enter the community strings and IP address information into the appropriate window boxes.
 - Click the **Continue** button.

 **NOTE:** For the HP Insight Management Agents to function properly, SNMP installation and configuration is required before installing the PSP. The SNMP Service default security is set to no community string and no community rights. With these settings, the Insight Management Agents Version 6.1 (or earlier) will be unable to display the Version Control inventory on the Version Control Agents Home Page. SNMP is not installed by default.

 **CAUTION:** A potential security risk exists due to SNMP messages being sent in clear text. These clear text messages are easily intercepted and decoded by network analyzers, such as Microsoft Network Monitor. Community names can be captured and used by unauthorized personnel to gain valuable information about network resources.


10. After receiving a warning that the drives will be erased, click the **Continue** button. At this point, the drivers and the PSP will be installed.
11. Upon the automatic ejection of the SmartStart CD and the prompt to insert the operating system (OS) CD, insert the Microsoft Windows Small Business Server 2003 SP1 CD, and click the **Continue** button. Once the OS data files are copied, the OS CD will be ejected and the server will be rebooted automatically. This step marks the beginning of the OS installation.
12. Follow the on-screen instructions to complete the OS installation.

Part 2: Installing and configuring a modem

The Microsoft Windows SBS 2003 SP1 operating system may not contain the correct drivers for the server's modem. If a modem is installed after Microsoft Windows SBS 2003 SP1 installation completes, the Hardware Wizard runs automatically.

1. When the Welcome to the Found New Hardware Wizard window appears, click **Next**.
2. In the Install Hardware Device Drivers window, search for a suitable driver for the device, and click **Next**.
3. Select from the Optional search locations on the Locate Driver Files window. Provide the OEM driver if it is located on a diskette, and click **Next**.

After the wizard completes the search, it displays the driver it found for the modem.
4. Click **Next** to install the found driver.
5. Click **Finish** to complete the Found New Hardware Wizard. The modem should now be functional with Microsoft Windows SBS 2003 SP1.

 **NOTE:** If while running the Hardware Wizard you are unable to locate the appropriate driver for the modem, contact the modem manufacturer or visit their website to locate the driver.

Installation process for tc2120 and ProLiant ML100 series servers

The installation process includes three parts: (1) creating storage media for use during the installation, (2) installing the Microsoft Windows SBS 2003 SP1 operating system, and (3) installing and configuring modem and network interface controllers (NIC) with Microsoft Windows SBS 2003 SP1.

Part 1: Creating storage driver media for use during the installation

There are two methods for gathering the required storage drivers for use during the installation process. Choose either method to create the storage driver media.

Method 1: Downloading drivers from the HP website

Follow the procedures below to create the necessary storage component. Additionally, you may choose to extract the driver for the network interface controller (NIC), if Microsoft Windows SBS 2003 SP1 does not contain the drivers for it. NIC drivers are accessible through the Driver - Network category link presented in Step 2.

1. Go to the software and drivers website by accessing this URL:
<http://h18023.www1.hp.com/support/files/server/us/index.html>.
2. Select your server(s) from the Family drop-down list box, select **Microsoft Windows Server 2003** from the Operating System drop-down list box, and click the **locate software >>** button.

This procedure takes you to the Locate page, which lists the available software by categories.

3. Click the **Driver – Storage Controller** category link.
4. Select the Smart Component (driver) for the primary storage controller used in the server by clicking the software version link listed in the Current Version column next to the desired Smart Component.

This procedure takes you to the Download page, which lists the enhancements, fixes, and installation information.

5. Click the **download >>** button to download the file to a diskette or a USB disk. The website contains information that explains how to handle the downloaded package.

Method 2: Downloading drivers from the Server Support and Documentation CD

If the Microsoft Windows SBS 2003 SP1 media does not contain the base driver for the primary storage controller and the network interface controller (NIC), create a diskette or a USB disk containing the driver for use later in the installation process.

1. Insert the Server Support and Documentation CD into the CD-ROM drive on a system currently running Microsoft Windows.
2. Review the Licensing Agreement, and click the **Agree** button if you agree.
3. Select the **Microsoft Windows Standard Server 2003 SBS** link from the left navigational menu on the CD Home page. Then, follow the online instructions to create the driver media.
4. Set aside the storage driver media for use during the installation of Microsoft Windows SBS 2003 SP1.

Part 2: Installing Microsoft Windows SBS 2003 SP1

This section defines the steps you must perform to begin the Microsoft Windows SBS 2003 SP1 installation. If you did not create the storage driver media in the section titled [Part 1: Creating storage driver media for use during the installation](#) of this integration note, complete those procedures before proceeding with the installation.

Task 1: Starting the installation

On the ProLiant server affected by the Microsoft Windows SBS 2003 SP1 install, complete these steps:

 **NOTE:** A Server Support and Documentation CD ships with the tc2120 and ProLiant ML100 series servers. A later version of the drivers may be obtained from here: www.hp.com/servers.

1. Insert Microsoft Windows SBS 2003 SP1 CD-ROM #1 and turn the server on. Press **F6** to install a third-party storage driver. Press **S** to specify your controller.
2. When prompted for the manufacturer-supplied hardware support disk, insert the appropriate storage driver diskette or a USB disk created from the Windows Server 2003 Server Support and Documentation CD for the primary storage controller.
3. Press **Enter**.
4. Highlight the controller that is the primary boot controller, and then press **Enter**.
5. Press **Enter** to continue. (It is not necessary to install additional devices.)
6. Press **Enter** to load the Microsoft device drivers.
7. Press **Enter** to set up Windows Server 2003.
8. Press **C**.
9. Review the Microsoft Windows SBS 2003 SP1 Licensing Agreement, and press **F8** if you agree.

Task 2: Choosing disk carving options

1. When the partition screen appears, highlight the unpartitioned space and press the **C** key to create a partition.
2. Use the backspace key to delete the currently displayed number. Type at least **6000** (or greater).
3. Press **Enter** to create the partition.
4. Highlight the New (Unformatted) partition and press **Enter** to set up Windows Server 2003.
5. Select **Format the partition using NTFS file system**.
6. Press **Enter** to continue.


The setup process formats the partition. The setup program copies files to the hard drive.

7. Press **Enter** to restart your server after the copying process completes.


Task 3: Installing the operating system

After the system restarts, the Microsoft Windows Small Business Server 2003 SP1 operating system installation automatically starts.


1. Verify the settings on the Regional Settings window, and click **Next**.
2. In the Personalize Your Software window, type in the licensee name and organization, and click **Next**.

 **NOTE:** At this point, you can change the default computer (server) name and the default domain.

3. If desired, change the default computer (server) name and enter the administrator password.
4. Click **Next**.
5. Review the components pre-selected on the Windows Server 2003 Components window and click **Next**.
6. If your server contains a modem, enter your area code and telephone number, and click **Next**.

 **NOTE:** If your server configuration does not include a modem or the modem driver does not reside on the Microsoft Windows SBS 2003 SP1 CD, you will not receive a prompt for modem information. You can install the modem after the installation of Microsoft Windows SBS 2003 SP1 by referring to the first task in Part 3 (see [Task 1: Installing and configuring modems and the appropriate drivers](#)).

7. In the Date and Time Settings window, enter the Date, Time, and Time Zone, and then click **Next**.
8. When prompted with the Networking Settings windows, select Typical Settings or Custom Settings and click **Next**. If you select Custom Settings, refer to the Microsoft Windows SBS 2003 SP1 documentation to complete the Custom Settings interview options.

 **NOTE:** If you plan to add the network interface controller after Microsoft Windows SBS 2003 SP1 installation, refer to [Task 2: Installing and configuring network interface controllers and the appropriate drivers](#).

The installation of Microsoft Windows SBS 2003 SP1 continues until you are prompted with the Completing the Microsoft Windows SBS 2003 SP1 Setup Wizard.

9. Remove Microsoft Windows SBS 2003 SP1 CD-ROM #1, and click **Finish** to restart the server.
10. Login to the operating system and insert Microsoft Windows SBS 2003 SP1 CD-ROM #1. The Microsoft Small Business Server 2003 Setup Window prompt appears.
11. After developing a plan for the installation, highlight and click **Set Up Small Business Server** to begin the Post Operating System portion of the installation.

 **NOTE:** Refer to the Microsoft Windows SBS 2003 SP1 documentation for help on planning the installation.


12. Click **Next** on the Welcome to the Microsoft Windows SBS 2003 SP1 Setup Wizard window. The Suite Requirements window appears if your system meets all the requirements to install Microsoft Windows SBS 2003 SP1.
13. If the system meets all the requirements to install Microsoft Windows SBS 2003 SP1, the Suite Requirements window appears. Click **Next**, and the License Agreement appears.

However, if the system does not meet all the requirements, click **Cancel** to exit this portion of the setup. Take corrective action by adding required hardware and/or reconfigure your base operating system. To take corrective action, connect necessary components or make modifications, select **Back**, and select **Next** to re-evaluate system.

14. Review the License Agreement. If you agree, select the **I agree** radio button, and click **Next**.
15. Verify the Name, Organization, and Computer Name on the Product Identification window. Then enter the 25-digit key for the Microsoft Windows Small Business Server SP1 CD-ROM and the Microsoft Outlook CD-ROM. Click **Next**.

The Automatic Logon Information window prompts you for your password, if you would like Setup to log you on automatically after the system restarts.

16. Select your preference, and click **Next**.
17. Fill out your address information on the Company Information window, and click **Next**.
18. Fill out your telephone information on the Telephony Information window, and click **Next**.

 **NOTE:** Enter this information even if you do not have a modem installed.

19. On the Server Network Card Configuration window, verify/enter your IP Address, Subnet Mask, and Default Gateway; and click **Next**.
20. In the New Domain Information window, enter your Full DNS name for new domain and Domain NetBIOS name, and click **Next**.
21. On the Data Folders windows, select folders in which to store data for each component, and click **Next**. The Windows Server 2003 configuration folder choices include:
 - Networking configuration
 - Domain configuration
 - Terminal services
 - Network identification

Setup starts to copy files, automatically configures your Active Directory, and restarts the server.

22. On the Component Selection window, select and modify components to fit your custom solution, and click **Next**.
23. Choose whether you want to enable caching on the ISA Server Cache Drives window, and click **Next**.
24. Select IP address ranges to load into the Local Address Table on the ISA Server Construct Local Address Table window, and click **Next**.
25. On the ISA Server Local Address Table Configuration window, enter the IP address ranges, and click **Next**.

After a file copy, you are prompted for Microsoft Windows SBS 2003 SP1 CD-ROM #2.
26. Insert Microsoft Windows SBS 2003 SP1 CD-ROM #2, and click **OK**. File copy continues. You are prompted for Microsoft Windows SBS 2003 SP1 CD-ROM #3.
27. Insert Microsoft Windows SBS 2003 SP1 CD-ROM #3, and click **OK**. File copy continues. You are prompted for the Microsoft Outlook CD-ROM.
28. Insert CD-ROM #4, and click **OK**. File copy continues.

29. Review the messages on the Component Messages window, which appears if you received any errors during the installation process, and click **Next**.

The Completing the Microsoft Windows Small Business Server 2003 SP1 Wizard window appears.

30. Click **Finish** and then you are prompted to restart the operating system to complete the installation. The To do list appears.
31. Select the tasks you wish to complete at this time.

Task 4: Updating the system drivers

1. Once Microsoft Windows SBS 2003 SP1 installation completes, identify devices with missing drivers. If any devices are missing drivers, insert the Server Support and Documentation CD into the CD-ROM drive.
2. Review the Licensing Agreement, and press the **Agree** button if you agree.
3. Select the device drivers needed and save them either to a diskette, a USB disk, or the hard drive.
4. For any device that requires a driver update, right click on the device and select update or install driver.
5. Supply the location of the driver, and follow the installation steps.
6. Repeat this process for any device requiring a driver.

Part 3: Installing and configuring modem and network interface controllers

The Microsoft Windows SBS 2003 SP1 operating system may not contain the correct drivers for the modem and the network interface controllers (NIC). To install and configure any modems that are identified by Microsoft Windows SBS 2003 SP1, perform the steps in Task 1. To install and configure the NICs not identified by Microsoft Windows SBS 2003 SP1, perform the steps in Task 2.


Task 1: Installing and configuring modems and the appropriate drivers

If a modem is installed after Microsoft Windows SBS 2003 SP1 installation completes, the Hardware Wizard runs automatically.

1. When the Welcome to the Found New Hardware Wizard window appears, click **Next**.
2. In the Install Hardware Device Drivers window, search for a suitable driver for the device, and click **Next**.
3. Select from the Optional search locations on the Locate Driver Files window. Provide the OEM driver if it is located on a diskette, and click **Next**.

After the wizard completes the search, it displays the driver it found for the modem.

4. Click **Next** to install the found driver.
5. Click **Finish** to complete the Found New Hardware Wizard. You should now be able to use the modem with Microsoft Windows SBS 2003 SP1.

 **NOTE:** If while running the Hardware Wizard you are unable to locate the appropriate driver for the modem, contact the modem manufacturer or visit their website to locate the driver.

Task 2: Installing and configuring network interface controllers and the appropriate drivers

If a network interface controller is installed after Microsoft Windows SBS 2003 SP1 installation completes, the Hardware Wizard runs automatically.

1. When the Welcome to the Found New Hardware Wizard window appears, click **Next**.
2. In the Install Hardware Device Drivers window, search for a suitable driver for the device, and click **Next**.
3. Select from the Optional search locations on the Locate Driver Files window. Provide the OEM driver if it is located on a diskette, and click **Next**.

After the wizard completes the search, it displays the driver it found for the NIC.

4. Click **Next** to install the found driver.
5. Click **Finish** to complete the Found New Hardware Wizard. You should now be able to use the NIC with Microsoft Windows SBS 2003 SP1.



NOTE: If you are unable to locate the appropriate driver for the NIC, contact the NIC manufacturer or visit their website.

Upgrade considerations

Microsoft does not support upgrades from Microsoft Windows SBS 4.5 to Microsoft Windows SBS 2003 or to Microsoft Windows SBS 2003 SP1.

Troubleshooting

This section details the known issues with running Microsoft Windows SBS 2003 SP1 on ProLiant servers and provides information about resolving them.

Table 5. Known issues

Issue 1	System will not hibernate
Description	The system appears to not go into hibernation, if user waits long enough the system will go into hibernation, but the system will not return from a hibernated state.
Workaround	Do not use system hibernation. The system does hibernate but will not return from a hibernated state.
Solution	HP engineers are working with Microsoft to resolve this issue.
Issue 2	Network Interface Card Configuration Utility invokes Microsoft SQL Server Desktop Engine
Description	The NIC Config utility causes the installer for Microsoft SQL Server Desktop Engine to come up.
Workaround	Close the Microsoft SQL Server Desktop Engine
Solution	HP engineers are working to resolve this issue.

Issue 3	Must force re-installation of NIC Teaming Component
Description	After upgrading from Windows SBS 2000 to Windows SBS 2003 SP1, it is necessary to force re-installation of NIC Teaming Component.
Workaround	<p>To re-install the NIC Teaming Component after upgrading from Small Business Server 2000 (or Windows 2000 Standard Server) to Microsoft Windows Small Business Server 2003 SP1:</p> <ol style="list-style-type: none"> 1. Download the latest PSP (available from the HP website) for Windows 2003 to a temporary directory on the server. 2. Once the PSP download has completed, navigate to the directory containing the files and click to run SETUP.EXE. This will start the HP Remote Deployment Utility. By default the HP Remote Deployment Utility will not auto populate the software to be installed; the selected components to be installed must be manually selected. If the proper software bundle was downloaded, the Operating System listed under the Available Software tree will be in Boldface type. 3. Expand the Microsoft Windows Server 2003 tree. While pressing the left mouse button, click to select the driver - network folder and drag the driver - network folder to the right side of the HP remote deployment utility dialog box. If done properly, the components for the NIC drivers should populate and the Installed Version and New Version numbers should be listed. 4. To install the component, click the Install button on the menu bar. The Software Installation dialog box will appear and will prompt to confirm if you want to proceed with the installation. By default the Allow components to overwrite newer or up-to-date versions check box will be unchecked. 5. Check the Allow components to overwrite newer or up-to-date versions check box. Once checked, click Next to continue the installation. Once the installation is complete, click the Reboot button on the menu bar to reboot the server.
Solution	HP engineers are working to resolve this issue.

For more information

For additional information, refer to the resources listed below.

Table 6. Web resources

Resource description	Web address
HP software and drivers website	http://h18023.www1.hp.com/support/files/server/us/index.html
HP and Microsoft Frontline Partnership site	www.hp.com/partners/microsoft
Microsoft Windows Small Business Server 2003 SP1 website	www.microsoft.com/windowsserver2003/sbs/default.aspx

Call to action

To help us better understand and meet your needs for ISS technology information, please send comments about this paper to: TechCom@HP.com.

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