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Operating System Support Notes for Windows 2000 Advanced Server on the HP Carrier Grade Server cc3310

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Related Documents. The *HP Server cc3310 User Information Diagnostics and Utilities Resource CD-ROM* has been provided with your server. It contains a complete documentation set for the server. Included on the CD-ROM is the *hp Carrier-Grade Server cc3310 Product Guide*, which contains in-depth troubleshooting, installation, and repair information.

In addition, the latest versions of all cc3310 documents, and any product updates to these documents, are posted under the appropriate server at: http://docs.hp.com. Search keyword cc3310.

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Announcement

You must have a service partition set up for your HP Carrier Grade Server cc3310 to be supported. The service partition should come pre-loaded. If there is no service partition, set one up using the *HP Server cc3310 User Information Diagnostics and Utilities Resource* CD before installing your Windows Operating System. Refer to "Preparing to Install Windows 2000 AS on your HP Carrier Grade Server cc3310" on page 7 for instructions.

NOTE	Refer to the *HP Carrier-Grade Server cc3310 Product Guide* for timesaving hardware configuration and installation information you should consider before installing your operating system.

Hewlett-Packard has certified Windows 2000 AS and current errata (Service Pack 3 or greater) on the HP Carrier Grade Server cc3310.

Support Note Contents

System Requirements

The system requirements for Windows 2000 AS (Service Pack 3 or greater) on HP Carrier Grade Server cc3310 are:

- BIOS P11 or greater

- Firmware
    - BMC: 1.19 or greater
    - FRUSDR: 5.6.A or greater
    - HSBP: 1.05 or greater
    - ISM: 5.5.4 or greater

- *HP Server cc3310 User Information Diagnostics and Utilities Resource* CD

Distributions Supported on HP Carrier Grade Server cc3310

Hewlett-Packard has certified Windows 2000 AS and current errata (Service Pack 3 and greater) on the HP Carrier Grade Server cc3310 independently from your server. Microsoft provides its own operating system documentation.

NOTE	Do not discard the Windows 2000 AS registration card packaged with the Operating system CDs. Microsoft requires the card to support Windows 2000 AS.

This Support Note is also available on the *HP Server cc3310 User Information Diagnostics and Utilities Resource* CD and at http:/www.docs.hp.com/. Search keyword cc3310.

Preparing to Install Windows 2000 AS on your HP Carrier Grade Server cc3310

Before you install the Windows 2000 AS operating system on your HP Carrier Grade Server cc3310, you must create a custom install CD and prepare the server for OS installation. The custom install CD can be created on any system that includes CD read and write capabilities, and is running a supported Windows operating system.

The following steps must be completed to successfully install Windows 2000 AS with Service Pack 3 (SP3) (or greater) on your HP Carrier Grade Server cc3310, and are described in detail within this document:

1. Creating and writing the custom Install CD.

2. Setting up a service partition (if no service partition is present on the server hard drive).

3. Installing or updating drivers and configuring network hardware (NIC ports).

The procedures in this document must be performed in order.

Requirements

To create a custom Install CD you will need the following:

*   Windows 2000 Advanced Server master CD

*   Windows 2000 AS Service Pack 3 (or greater) CD

NOTE	The Windows 2000 AS (with SP3 and greater) software can be found at the following URL: http://www.microsoft.com/windows/downloads/service packs/.

*   *HP Server cc3310 User Information Diagnostics and Utilities Resource* CD (HP part number A9862-91002)

*   A system running Microsoft® Windows 98, 2000, or XP

*   At least 80 MBs of free disk space on the system

*   A CD-RW or DVD+RW drive in the system

*   A CD writing application that supports the creation of bootable CDs using a boot image file

Creating and Writing the Custom Bootable CD:

The custom install CD can be created on any system that includes CD read and write capabilities, and is running a supported Windows operating system.

1. Insert the Windows 2000 Server CD master into the CD drive.

2. Select the **My Computer** icon on the desktop and select **C:\.**

3.   Under the File menu select **New/Folder** and create the folder: **C:\cd-root**.

NOTE   You must have a minimum of 80 MBs of free disk space on the system.

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4.   Double-click on **My Computer** and open the CD drive that contains the Windows 2000 CD by right-clicking the drive letter and selecting **Open**.

5.   Under the Edit menu select **Select all**. Under the Edit menu select **Copy to folder**. Then select **C:\CD-root** as the destination. It will take approximately 5 minutes to copy the files from the CD.

6.   Remove the Windows 2000 CD and insert the *HP Server cc3310 User Information Diagnostics and Utilities Resource* CD. Using the file browser, select and copy the following files from the resource CD, to the newly created C:\CD-root\I386 folder:

- **UTILITY/U320 /ADPU320.SY_**

- **UTILITY/U320 /raidsrc.sys**

- **UTILITY/U320 /a320raid.sys**

- **UTILITY/U320 /a320raid.cat.**

   For Windows 2000 Advanced Server (without any service packs on your master), copy the TXTSETUP.SIF file from the CD's UTILITY/U320/w2k_as folder to the C:\CD-root\I386 folder. Enter **yes** when asked about overwriting the existing TXTSETUP.SIF file.

   For Windows 2000 Advanced Server (with SP3 on your master), copy the TXTSETUP.SIF file from the CD's UTILITY/U320/w2k_as_sp3 folder to the C:\CD-root\I386 folder. Enter **yes** when asked about overwriting the existing TXTSETUP.SIF file.

   For other versions (Service packs) of Windows 2000, the existing TXTSETUP.SIF can be edited to include the following lines. Insert these lines in the locations where you find similar entries for "adpu160":

- adpu320.sys = 1,,,,,,5_,4,1:\CD-root,,,1,4

- raidsrc.sys = 1,,,,,,5_,4,1,,,1,4

- PCI\VEN_9005&DEV_8011 = "adpu320"

- PCI\VEN_9005&DEV_801F = "adpu320"

- PCI\VEN_8086&DEV_0600 = "raidsrc"

- adpu320 = adpu320.sys,4

- raidsrc = raidsrc.sys,4

- adpu320 = "Adaptec Ultra320 Family SCSI Controller"

- raidsrc = "RAID Controller"

   The contents of "C:\CD-root" are now complete, and the custom Windows 2000 Advanced Server CD creation can begin.

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7. The CD writing application you select to build the custom CD must have the capability to create a bootable image. There are several such applications available that must be purchased separately. The following procedure is for Nero CD creation that is not included with this product. This procedure is provided for your convenience, and not intended as an application recommendation or endorsement.

8. Start the CD writing application and select bootable CD-ROM creation. Go to the boot settings.

   Insert the *HP Server cc3310 User Information Diagnostics and Utilities Resource* CD, which has the Adaptec U320 (7902) CD patch files. In the CD writing application, choose image file and browse to the w2kboot.bin file in the UTILITY/U320 folder on the Resource CD (in browse window set filter to all files *.*).

9. Set to **No Emulation** (do not use floppy disk emulation).

10. Set load segment to: **07C0.**

11. SET "Number of loaded sectors" to **4.**

12. Under the ISO settings:

- Select **ISO Level 2** (Maximum of 31 chars). Select **Format as Mode 1**. Select **Character set of ISO 9660**. Select **Joliet**.

- Select **Allow path depth of more than 8 directories** (if this option is available). Select **Allow more than 255 characters in path** (if this option is available).

- Set the **Do not add the ";1 ISO file version extension"** (if this option is available).

| NOTE | Newer versions of Nero do not have this ';1'ISO option and you must edit the Windows registry so that HKEY_CURRENT_USER\Software\ahead\Nero - Burning Rom\General\AddISOFileVersion is set to a value of 0 (zero). Failure to do this will cause the CD boot to fail with: "BOOT: Couldn't find NTLDR". |

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13. Under the Label settings, set Volume Label as you wish. You can, also, leave it the same as your original CD. The MSDN win2k CD's have these labels.

- Professional   W2PFPP_EN

- Server   W2SFPP_EN

- Advanced Server   W2AFPP_EN

- DataCenter   W2DFPP_EN

14. Use the file browser in the CD writer application and go to C:\CD-root and select all the folders and files in it for writing.

15. When done press the **Write** button from within the CD writing application.

Setting Up a Service Partition

The service partition contains diagnostics and tools to allow for configuration modifications if problems occur. Your system should have a pre-loaded service partition. The service partition is present if the F4 key is visible at the bottom of the screen during initial boot of the system. If the service partition is present, you can proceed to Installing the Windows 2000 AS Operating System as documented later in this procedure.

If F4 is not visible on initial boot, set up a service partition as follows:

NOTE	These directions for setting up a service partition assume that the BIOS gives priority to the CD-ROM drives over the hard drive.

1. Power on your system and insert the *HP Server cc3310 User Information Diagnostics and Utilities Resource* CD into the CD-ROM drive. The server will boot from the CD and display the Server Configuration Wizard.

2. Click **Continue**.

3. Select **Server Configuration Utilities**.

4. Click **Continue**.

5. Press **3** on the Service Partition Administration Menu to create a service partition.

6. When prompted: On which drive should a service partition be installed, press the number for the appropriate drive.

NOTE	The service partition is installed on a DOS (FAT) file system and must therefore exist in the first 8 GB of the disk drive. A disk drive must be empty to create a service partition. If the disk drive is not empty, the service partition utility cannot create the partition in the first 8 GB.

7. When the following message is displayed, press the **Enter** key.

   "The service was created successfully. The system will now be rebooted. After the reboot, return to this utility and choose the option to format and install software. The service partition will not operate correctly until it is formatted and software has been installed onto it. Strike a key when ready . . ."

8. After rebooting, the *HP Server cc3310 User Information Diagnostics and Utilities Resource* CD software runs again from the CD, displaying the Server Configuration Wizard. Press **Continue**.

9. Select **Server Configuration Utilities** and click **Continue**.

10. Select **Run Partition Administrator** and click **Continue.**

11. Press **4** to format the service partition and install software.

12. When prompted with: "Proceed with FORMAT?" press **y**.

13. When software installation is complete, the following message is displayed:
    ”The service partition has been installed successfully. Strike a key when ready . . .”

14. On the Service Partition Administration Menu, press the **ESC** key.

15. Click **Exit**.

16. Click **OK** in the pop-up box. Ignore the warning that exiting the Service Configuration Wizard will cause changes to be lost.

17. At the DOS prompt, enter **Ctrl+Alt+Del,** remove the *HP Server cc3310 User Information Diagnostics and Utilities Resource* CD from the drive, and proceed with installation of the operating system.

Installing the Windows 2000 AS Operating System

Install Windows 2000 Advanced Server onto your HP Carrier Grade Server cc3310, using the custom Windows 2000 Advanced Server CD created earlier in this procedure. Follow the normal installation procedures for Windows 2000 Advanced Server.

Registering Windows 2000 AS

Register Windows 2000 Advanced Server using normal processes.

Driver Updates

After proper installation of Windows 2000 Advanced Server using the Custom CD there are several drivers that need to be installed manually.

Getting to Device Manager

Right-click on **My Computer**, select **Properties**, then click on the **Hardware** tab. Next, click on **Device Manager**, then go to "Other Devices" listing. At this point you will see all the devices that have problems with their current drivers, as follows:

NOTE	You may see other items on this list, depending on your I/O configuration. However, the list following includes the minimum number of devices that have driver dependencies.

1. ? ESG-TSD SCA HSBP M23 SCSI Processor Device

2. ? Ethernet Controller

3. ? Ethernet Controller

4. ? PCI Device

5. ? PCI Device

6. ? PCI Device

7. ? System Interrupt Controller

8. ? System Interrupt Controller

Updating Drivers for Items 4 Through 8 from Above List

Installing support for the chipset.

1. Insert *HP Server cc3310 User Information Diagnostics and Utilities Resource* CD into your CD drive.

2. Double-click on **My Computer**, then right-click and open the file system for the CD drive that contains the resource CD.

3. Double-click on the file **/drivers/e750x/infinst_enu_5.1.0.1008.exe.** After execution, items 4 through 8 will no longer be displayed on the above list.

Updating the Rest of the Drivers

The list above will now have three items remaining that need to have drivers installed. Right-click on any item remaining on the list that needs a driver, and then select properties.

Select the **Driver** tab, then select the **Update Driver** button. Click **next**, then **next** again. Make sure the CDROM is the only selected source for a driver search, then click on **next** again. A search will begin which looks for the right driver to install, based on the device you selected. When the driver is discovered, the path for that driver will be displayed. Click on **next**, then finally click on **finish**, then select **close**.

The process is the same for each of the devices that need to have a driver installed.

After you are done installing the last driver you must reboot your server.

This completes the Windows 2000 Advanced Server custom CD creation, Service Partition installation (if applicable), Windows 2000 Advanced Server installation, and manual driver installation. The HP Carrier Grade Server cc3310 should now be ready for basic operation.