Installation instructions for manual installation of Microsoft Windows Server 2008

First Edition

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NOTE: Before using this information and the product it supports, read the general information in Section 5.0 Notices this document.

Follow the network operating system (NOS) installation instructions provided in this document in sequential order unless these instructions advise you otherwise. Windows and messages might differ from those in this document.

1.0 What you will need

You must have the following software and hardware for the installation:

> A licensed copy of Microsoft® Windows® Server 2008 Enterprise Edition.
> An external DVD reader device might be required. (to create the DVD).
> Supported hard disk drives. Go to http://www.lenovo.com/thinkserver/ for the
> Lenovo® ThinkServer® Proven list of supported options and part numbers for the
> server.

2.0 Where to download device drivers and files

You can download the device drivers from the Device Drivers matrix on the Lenovo Support Web site: http://www.lenovo.com/support

3.0 Installation instructions for Microsoft Windows Server 2008

You must first download the RAID device driver onto a diskette.

3.1 Creating a RAID device driver diskette

To create the RAID device driver diskette, complete the following steps:

1. From an Internet-connected system with a diskette drive, go to:
   http://www.lenovo.com/support and select **Driver matrices** from the Quick links.

2. Click **ThinkServer** and then click your machine type to view the Drivers and software list.
3. Locate and click the link for the controller driver, and then click the executable file link.
4. Click **I agree** to accept the license agreement.
5. Insert a blank, formatted diskette, and click **OK**. The device driver files are then extracted to the diskette.

Note: Adaptec drivers must be in the root directory of the diskette to install properly.

6. When prompted, click **Quit**.

3.2 Creating a logical array

To create a logical array, complete the following steps:
1. Switch on the server. While the server is starting, press **Ctrl + A**.
2. Select **Array Configuration Utility** and press Enter.
3. Select **Initialize drives**.
4. Press the space bar to select the drives that you want to include in the array and press Enter.
5. Select **Yes**.
6. Press the space bar to select the drive.
7. For the Array Type, select **Volume** and press Enter.
8. Type an Array Label and press Enter.
9. Select **Manage array** to verify that the array was created successfully.
10. Press **Esc**, and then press **Esc** again.
11. Select **Yes**.
12. The server reboots.
13. Press F12 to open the Boot menu and select and select **CD Drive** to set the server to boot from the Windows Server 2008 Setup CD.

3.3 Installing Windows Server 2008

To install Microsoft Windows Server 2008, complete the following steps:

1. Connect the server to a network as required.
2. Depending on your server, you might need to attach an external DVD reader device.
3. Turn on the server and insert the Windows Server 2008 Setup DVD into the DVD drive.
4. When you are prompted with the message "press any key to boot from cd or dvd", press any key. Windows Server 2008 Setup copies the files from the Setup DVD. Windows load the files (this process takes several minutes).
5. In the Windows Server 2008 window, select the following:
    a. For **Language to install**, select **English**.
    b. For **Time and currency format**, select **English (United States)**.

      c.   For **Keyboard or input method**, select **US**.
6. Click **Next**.
7. Click **Install Now**.
8. Type your product key.
      a.   Check the **Automatically activate Windows when I'm online** check box and click **Next**.
      b.   Scroll down and read the license agreement.
      c.   Click **I accept the license terms** and click **Next**.
9. Select **Custom (advanced)**.
10. When Windows Server 2008 Setup displays all hard disk storage that is available on the server, select one of the following options to choose or create a drive partition in which to install Windows Server 2008:
      o   Allow Setup to create a partition: To partition the entire hard disk as one primary partition, highlight **Disk0 unallocated space** for the hard disk drive on which you want to install Windows Server 2008 and press **Next**.
      o   Create a partition: To create a partition, highlight **Disk0 unallocated space** for the hard disk drive on which you want to install Windows Server 2008, click **Drive options (advanced)**; then, click **New**. You are prompted to indicate how much available space to allocate from the nonpartitioned drive. Type the amount of space (in MB), click **Apply**; then, click **Next**.
      o   Delete a partition.
11. Setup formats the selected partition and copies the applicable files to the drive partition. This process takes several minutes.

When Windows Server 2008 Setup has completed installation, the server automatically restarts.

12. After Windows Server 2008 restarts, you will be prompted to change the administrator password before you can log on.
13. After you are logged on as the Administrator, a configuration wizard window is displayed. Use the wizard for naming and basic networking setup.
14. Next, use the Microsoft Server 2008 Roles and Features functions to setup the server to your specific needs.

4.0 Post installation instructions: Installing and updating device drivers

After the installation is complete, make sure that you have the latest device drivers and firmware for the server. To install the device drivers and to identify hardware that is not functioning, open Device Manager. In Device Manager, non-functioning devices are usually listed under Other Devices and are indicated by a yellow exclamation point. To open Device Manager, complete the following steps:

1. Click **Start**.

2. Right-click **Computer**.
3. Select **Manage** and then click **Continue**; then, select **Device Manager** in the left pane.

The following sections include instructions for installing some device drivers. More device drivers might be available in the Driver matrices on the Lenovo Support Web site.

4.1 Installing the Intel chipset device driver

To install the Broadcom NetXtreme Gigabit Ethernet device driver, complete the following steps:

1. From an Internet-connected system with a diskette drive, go to: http://www.lenovo.com/support and select **Driver matrices** from the Quick links.
2. Click **ThinkServer** and then click your machine type to view the Drivers and software list.
3. Locate and click the link for the controller driver, and then click the executable file link.
4. Type `c:\drivers\nic` for the folder where the files are to be saved. Click **Finish**.
5. Click **Yes** to create the folder.
6. When the message "The package has been delivered successfully" is displayed, click **OK**.
7. Navigate to `c:\drivers\nic`, and open **launch.exe**.
8. Click **Driver Installer**.
9. In the Welcome window, click **Next**.
10. In the License Agreement window, read the agreement, then select **I accept the terms in the license agreement**, and click **Next** to continue.
11. Click **Install** to begin the installation.
12. When prompted to restart the server, select **No**, and click **Finish**.

To configure the network, click: **Start -> Control Panel -> Network Connections**, and select **New Connection Wizard** to set up the network connection.

To configure network protocols, right-click **Local Area Connection** in the Network connections window, and click **Properties**.

To join a domain, click **Start**, **Control Panel**, **System**, click the **Computer Name** tab, and then click **Change**.

4.2 Installing the ATI video device driver

To install the ATI RN50/ ES1000 video device driver, complete the following steps:

1. From an Internet-connected system, go to: http://www.lenovo.com/support and select **Driver matrices** from the Quick links.

2. Click **ThinkServer** and then click your machine type to view the Drivers and software list.
3. Locate and click the link for the controller driver, and then click the executable file link.
4. Locate and right-click the .zip file, and then select **Extract All**.
5. Click **Next**, select a location to extract the device driver; then click **Next**.
6. Leave "Show extracted files" checked, and click **Finish**. A window will open showing the extracted files.
7. Click **Setup.exe** to run the downloaded executable file.
8. In the Welcome window, click **Next**.
9. In the License Agreement window, read the license agreement, and then click **Yes**.
10. Click **Express**.
11. Select **No, I will restart my computer later**, and click **Finish**.

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