



Dell™ PowerVault™ 725N NAS Systems

Upgrading Your 39160 SCSI Card Firmware



Notes, Notices, and Cautions

 **NOTE:** A NOTE indicates important information that helps you make better use of your computer.

 **NOTICE:** A NOTICE indicates either potential damage to hardware or loss of data and tells you how to avoid the problem.

 **CAUTION: A CAUTION indicates a potential for property damage, personal injury, or death.**

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Depending on your environment, you can use either of the following methods to update your firmware on the 39160 SCSI card.

- Use a dedicated system running the Microsoft® Windows® 2000 operating system (recommended).
- Use a system running Windows 2000 on the same network.

Disabling Console Redirection

Before you update your 39160 firmware, you must disable console redirection in the BIOS. To disable console redirection, perform the following steps:

- 1 Shut down your NAS system.
- 2 Attach a keyboard, mouse, and monitor to your NAS system.
- 3 Turn on your NAS system.
- 4 On the keyboard connected to the NAS system, press <F2> immediately after the following message appears:

Press <F2> to enter the Function Select menu.
- 5 From the **Function Select** menu, select 1.
- 6 In the BIOS Setup Utility, press the right-arrow key until **Advanced** is selected.
- 7 Press the down-arrow key until **Remote Access Configuration** is selected and press **Enter**.
- 8 Ensure that **Remote Access** is selected and press **Enter**.
- 9 Select **Disabled** and press **Enter**.
- 10 Press <F10> to exit the BIOS Setup Utility and select **OK** to save the changes.

To enable console redirection after the 39160 firmware is updated, perform step 1 through step 10, except select **Serial (ANSI)** instead of **Disabled** in step 9.

Using a Dedicated System Running Windows 2000

Requirements

- Crossover cable included with your NAS system
- Client system running Windows 2000 (Professional or Server Family)
- *Resource* CD included with your NAS system

Procedure

To restore your NAS system to the Dell default settings, perform the following steps:


- 1** Connect a client system running Windows 2000 to the NAS system.
 - a** Shut down the NAS system, and do not turn it back on until instructed.
 - b** Turn off the client system, if it is running.
 - c** Connect the crossover cable (labeled "Cross Over Ethernet Cable") to the Ethernet port labeled "LAN 1" on the NAS system and the Ethernet port on the client system.
- 2** Connect a keyboard, monitor, and mouse to the NAS system.

For information about system connectors, see your *User's Guide*.
- 3** Turn on the client system running Windows 2000.
- 4** Log in to the client system with an account that has administrator privileges.
- 5** Create a new user with the name pv725 and the password set to password:
 - a** From the desktop of your client system, right-click **My Computer**, and then select **Manage**.
 - b** On the left side of the **Computer Management** window, double-click **Local Users and Groups**.
 - c** Right-click **Users** and select **New User**.
 - d** In the **New User** window, type pv725 as the user name.
 - e** Type password for the password, and type it again in the **Confirm password** field.
 - f** Clear the **User must change password at next logon** check box.
 - g** Click **Create** and then click **Close**.
- 6** Change the name of the client system running Windows 2000 to pv725rec:
 - a** From the desktop of your client system, right-click **My Computer**, and then select **Properties**.
 - b** In the **System Properties** window, click **Network Identification**.
 - c** Click **Properties**.
 - d** In the **Identification Changes** window, type pv725rec for the system name.
 - e** Click **OK**, but do not reboot when prompted.
 - f** Click **OK** to close the **Properties** window.

- 7 Change the IP address on the network adapter of the client system to 10.40.10.1, the subnet mask to 255.255.255.0, and the gateway to 10.40.10.1:
 - a From the desktop of the client system, right-click **My Network Places** and select **Properties**.
 - b In the **Network and Dial-up Connections** window, right-click the network interface controller that you connected to the NAS system with the crossover cable in step 1.
 - c Click **Properties**.
 - d In the **Local Area Connection Properties** window, click **Internet Protocol (TCP/IP)**, and then click **Properties**.
 - e Click **Use the following IP address**.
 - f For **IP address**, type 10 . 40 . 10 . 1.
 - g For **Subnet mask**, type 255 . 255 . 255 . 0.
 - h For **Default Gateway**, type 10 . 40 . 10 . 1.
 - i Click **OK**, and then click **OK** to close the **Local Area Connection Properties** window.
 - j If you are prompted to reboot the client system, click **No**.
- 8 Create a share for the SCSI firmware:
 - a If you are not already logged in, log in to the client system with an account that has administrator privileges.
 - b Download the new SCSI firmware and utilities from support.dell.com and place them in a directory on your client system.
Ensure that both **39160.rom** and **flash4.exe** are downloaded to this directory.
 - c Double-click **My Computer** and browse to the directory where you downloaded the firmware.
 - d Right-click this directory, and select **Sharing**.
 - e Click **Share this folder**.
 - f Type **SCSI** for the name of the share, and then click **OK** to confirm the share settings.
- 9 Install the Dell Reinstallation Console from the *Resource* CD:
 - a Insert the *Resource* CD into the CD drive of your client system.
The **Dell PowerVault 725N Resource CD** window displays in a browser window.



NOTE: If the CD does not run automatically, double-click the **start.bat** file on the CD.

- b** Click **Resources**.
 - c** Click **Install Reinstallation Console**.
 - d** When the **File Download** window displays, click **Open this file from its current location**, and then click **OK**.
 - e** Click **Next** and follow the instructions on the screen.
 - f** When prompted to reboot the client system, click **Yes**.
- 10** Create a reinstallation diskette from the *Resource* CD:
 - a** Ensure that the *Resource* CD is in the CD drive of your client system.
 -  **NOTE:** If the CD does not run automatically, double-click the **start.bat** file on the CD.
 - b** In the *Resource* CD **Main Menu** window, click **Resources**.
 - c** In the **Resources** window, click **Firmware Update Diskette**.
 - d** When the **File Download** window displays, click **Run this program from its current location**, and then click **OK**.
 - e** Click **Yes** if you receive a security warning.

A DOS screen appears and prompts you to insert a diskette into the diskette drive of the client system.
 - f** Insert a formatted diskette into the diskette drive of your client system, and then press <Enter>.

The DOS screen closes after the reinstallation diskette is made.
- 11** Update the boot image:
 - a** If it is not still in the diskette drive, insert the reinstallation diskette that you created in step 10 into the diskette drive of the networked client system running Windows 2000.
 - b** Click the **Start** button and point to **Programs**→ **Dell Reinstallation Console**→ **Update boot image**.

A DOS window opens.
 - c** After the DOS window closes, remove the diskette from the diskette drive.
 - d** Reboot the client system.

- 12** Enable the Dell OpenManage™ Kick-Start utility and manually create your DHCP settings:
 - a** If it is not on, turn on the NAS system.
The NAS system must be turned on to set the IP address using the Kick-Start utility.
 - b** Click the **Start** button and point to **Programs→Dell Reinstallation Console→Dell OpenManage Kick-Start**.
 - c** When asked if you want to run the program, click **Yes**.
 - d** At the bottom of the **Dell OpenManage Kick-Start** window, click **Setup**.
 - e** Click **Add**.
 - f** In the **Add Scope** window, enter the following information, and then click **OK**.
 - **Starting IP Address:** 10 . 40 . 10 . 10
 - **Ending IP Address:** 10 . 40 . 10 . 20
 - **Subnet Mask:** 255 . 255 . 255 . 0
 - **Gateway IP Address:** 10 . 40 . 10 . 1
 - g** Click **OK** to close the **Add Scope** window.
 - h** Click **Interfaces for DHCP Server** so that it is checked.
 - i** Click **OK** to close the **Setup** window.
 - j** Click **Enabled** at the bottom of the **Dell OpenManage Kick-Start** window to start the integrated DHCP server.
- 13** Start the Intel® PXE server and verify that the services are running:
 - a** Click the **Start** button and point to **Programs→Dell Reinstallation Console→Intel PXE Server**.
 - b** In the **PXE Configuration Utility** window, right-click the server name, **PV725REC**, and then select **Start/Stop Services**.
 - c** Verify that the proxy DHCP/Boot PXE and M/TFTP services are installed and running correctly by selecting **Stop** and then selecting **Start**.
If the services are running, the indicator displays **Running** after you click **Start** and displays **Stopped** after you click **Stop**.
 - d** Click **OK**.
- 14** Reboot your NAS system by pressing the power button.

- 15 On the keyboard connected to the NAS system, press <F2> immediately after you see the following message:

Press <F2> to enter the Function Select menu.

- 16 From the menu, select option 4, **Reinstallation**, and then type *y* to confirm the selection.

This setup process might take several minutes.

- 17 When the screen warns that you are going to update the firmware, type *y*.

- 18 Press *y* again to confirm the selection.

- 19 When the screen prompts you to reboot your NAS system, do so.

The SCSI firmware update is complete.

Using a Client System Running Windows 2000 on the Same Network

If you have a client system running Windows 2000 on the same network, you can update the SCSI firmware whether the network does or does not have a DHCP server.


Requirements


- Client system running Windows 2000 (Professional or Server Family) with a diskette drive and a CD drive on the same subnet as the NAS system
- *Resource* CD included with your NAS system
- Range of available IP addresses

Procedure

To update your firmware, perform the following steps:

- 1 Shut down the NAS system, and do not turn it back on until instructed.
- 2 Turn off the client system running Windows 2000, if it is running.
- 3 Connect a keyboard, monitor, and mouse to the NAS system.
For information about system connectors, see your *User's Guide*.
- 4 Turn on the client system running Windows 2000.
- 5 Log in to the client system with an account that has administrator privileges.

- 6 Create a new user with the name pv725 and the password set to password:
 - a From the desktop of your client system, right-click **My Computer**, and then select **Manage**.
 - b On the left side of the **Computer Management** window, double-click **Local Users and Groups**.
 - c Right-click **Users** and select **New User**.
 - d In the **New User** window, type pv725 as the user name.
 - e Type password in **Password**, and type it again in **Confirm password**.
 - f Click **User must change password at next logon** to clear the check box.
 - g Click **Create**, and then click **Close**.
- 7 Create a share for the SCSI firmware on the client system:
 - a If not already logged in, log in to the client system with an account that has administrator privileges.
 - b Download the new SCSI firmware and utilities from support.dell.com and place them in a directory on your client system.
Ensure that both **39160.rom** and **flash4.exe** are downloaded into this directory.
 - c Double-click **My Computer** and browse to the directory where you downloaded the firmware.
 - d Right-click this directory, and select **Sharing**.
 - e Click **Share this folder**.
 - f Type SCSI for the name of the share, and then click **OK** to confirm the share settings.
- 8 Install the Dell Reinstallation Console from the *Resource* CD:
 - a Insert the *Resource* CD into the CD drive of your client system.
The **Dell PowerVault 725N Resource CD** screen displays in a browser window.
 **NOTE:** If the CD does not run automatically, double-click the **start.bat** file on the CD.
 - b Click **Resources**.
 - c Click **Install Reinstallation Console**.
 - d When the **File Download** window displays, click **Open this file from its current location**, and then click **OK**.
 - e Click **Next** and follow the instructions on the screen.
 - f When prompted to reboot the client system, click **Yes**.

- 9 Create a reinstallation diskette from the *Resource* CD:
 - a Ensure that the *Resource* CD is in the CD drive of your client system.
 -  **NOTE:** If the CD does not run automatically, double-click the `start.bat` file on the CD.
 - b In the *Resource* CD Main Menu window displays, click **Resources**.
 - c In the **Resources** window, click **Firmware Update Diskette**.
 - d When the **File Download** window displays, click **Run this program from its current location**, and then click **OK**.
 - e Click **Yes** if you receive a security warning.


A DOS screen appears and prompts you to insert a diskette into the diskette drive of the client system.
 - f Insert a formatted diskette into the diskette drive of your client system, and then press <Enter>.

The DOS screen closes after the reinstallation diskette is made.
- 10 Edit the `go.bat` file for the renamed client system and CD drive:
 - a In Windows Explorer, right-click the `go.bat` file on the diskette, and then select **Edit** to edit the file to the following variable value for your environment:


`\\server_name\share_name`, where *server_name* is the name of the client system and *share_name* is the name of the SCSI share (for example, `\\PV725\SCSI`).
 - b Save and exit the `go.bat` file.
- 11 Update the boot image:
 - a If it is not still in the diskette drive, insert the firmware reinstallation diskette that you created in step 9 into the diskette drive of the networked client system running Windows 2000.
 - b Click the **Start** button and point to **Programs**→ **Dell Reinstallation Console**→ **Update boot image**.

A DOS window displays.
 - c After the DOS window closes, remove the diskette from the diskette drive.
 - d Reboot the client system.
- 12 If the *Resource* CD is still in the CD drive, remove it.

- 13 If a DHCP server is not on the network, enable the Kick-Start utility and manually create the DHCP settings. Otherwise, if a DHCP server is on the network, go to step 14.

 **NOTE:** If you do not have a DHCP server, you must perform the following steps to create the DHCP settings for the NAS server.

- a Turn on your NAS system.
- b Click the **Start** button and point to **Programs**→ **Dell Reinstallation Console**→ **Dell OpenManage Kick-Start**.
- c When asked if you want to run the program, click **Yes**.
- d At the bottom of the **Dell OpenManage Kick-Start** window, click **Setup**.
- e Click **Add**.
- f In the **Add Scope** window, enter the IP network and subnet mask information.
If you are not sure about the information you need to enter in these fields, contact your network administrator.

 **NOTE:** If you run the Kick-Start utility in a non-DHCP environment, you must enter a gateway IP address.

- g Click **OK** to close the **Add Scope** window.
- h Click **Interfaces for DHCP Server** so that it is checked.
- i Click **OK** to close the **Setup** window.
- j Click **Enabled** at the bottom of the **Dell OpenManage Kick-Start** window to start the integrated DHCP server.

- 14 Start the Intel PXE server and verify that the services are running.

- a Click the **Start** button and point to **Programs**→ **Dell Reinstallation Console**→ **Intel PXE Server**.
- b In the **PXE Configuration Utility** window, right-click the server name, **PV725REC**, and then select **Start/Stop Services**.
- c Verify that the proxy DHCP/Boot PXE and M/TFTP services are installed and running correctly by selecting **Stop** and then selecting **Start**.
If the services are running, the indicator displays **Running** after you click **Start** and displays **Stopped** after you click **Stop**.
- d Click **OK**.

- 15 If it is off, turn on your NAS system. If it is already on, reboot your system.

- 16** On the keyboard connected to the NAS system, press <F2> immediately after you see the following message:

Press <F2> to enter the Function Select menu.

- 17** From the menu, select option 4, **Reinstallation**, and then type **y** to confirm the selection.

This setup process might take several minutes.

- 18** When the screen warns that you are going to update your firmware, type **y**.

- 19** Press **y** again to confirm the selection.

- 20** When the screen prompts you to reboot your system, reboot the system.

The SCSI firmware update is complete.