

Dell™ PowerVault™ Data Protection Solution Quick Start Guide

www.dell.com | support.dell.com

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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Getting Started

Introduction

Your Dell™ PowerVault™ Data Protection Solution is preconfigured for quick and simple deployment. Some configuration settings are unique to your IT environment and must be entered upon initial use. This document provides the information needed to configure the system for your specific IT environment.

 **NOTE:** Prior to deploying your system, review the *Dell PowerVault Data Protection Solution Information Update* for the latest information.

 **NOTE:** For documents referenced in this guide, see the *Dell PowerVault Data Protection Solution Quick Reference Guide* at support.dell.com.

Supported Systems Information

The PowerVault Data Protection Solution is based on Microsoft® System Center Data Protection Manager (DPM) 2007, which is preconfigured to run on a Dell PowerVault system. It is important to know your PowerVault system model when you require support from Dell, install additional hardware, or reinstall the PowerVault Data Protection Solution software. Dell OpenManage™ system management applications recognize and report your system model information.

Table 1-1. PowerVault Data Protection Solutions and System Models

Data Protection Solution	System Model
PowerVault DP100	PowerVault 100
PowerVault DP500	PowerVault 500
PowerVault DP600	PowerVault 600

The PowerVault Data Protection Solution name is located on the front of your system.

Figure 1-1. PowerVault Data Protection Solution Tower System



Figure 1-2. PowerVault Data Protection Solution Rack System

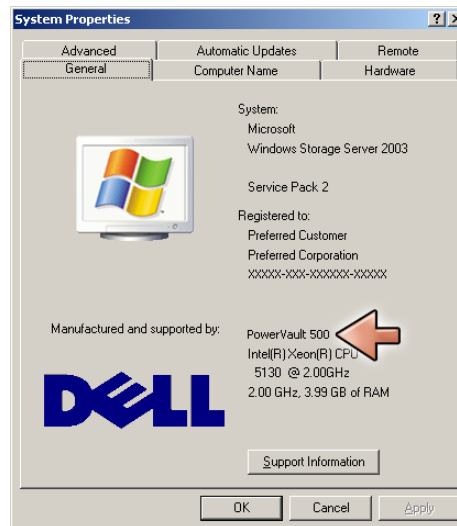


Locating the PowerVault System Model

The PowerVault system model is available from the following locations:

- BIOS boot and configurations screens
- OpenManage™ Server Administrator
- OpenManage™ IT Assistant
- operating system **System Properties** window (see Figure 1-3)

Figure 1-3. PowerVault System Model Identification on the System Properties Window



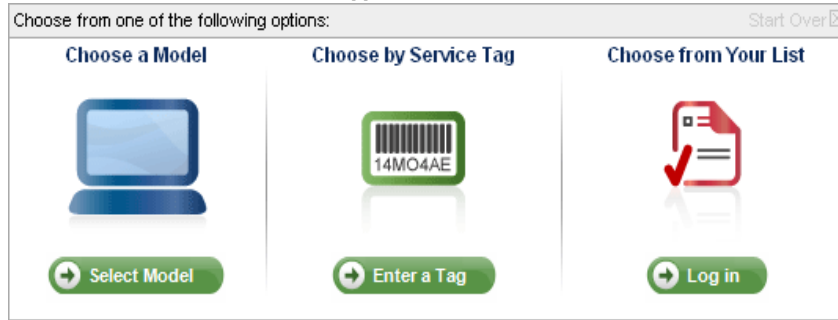
Obtaining Support Documents and Software Updates

Visit support.dell.com to obtain additional documentation or software updates for your PowerVault system, including:

- BIOS updates
- firmware updates to the PowerVault system and internal peripherals
- device drivers

Locate the documents and software updates that apply to your system by selecting your PowerVault system model (for example, PowerVault 500). Then, choose your system model by either model, service tag, or from your customized system list.


Figure 1-4. Model Selection via support.dell.com




Choose by Model

- 1 Click on **Select Model**.
- 2 Under **Product Family**, click **Select Servers, Storage and Networking**.
- 3 Under **Product Line**, click on **PowerVault Storage**.
- 4 Choose your system model.

Choose by Service Tag

 **NOTE:** The service tag is a label attached to the side or back of your system that includes a bar code and alpha numerics. When you enter your system's service tag, the system model is determined automatically.

 **NOTE:** Dell recommends using this method when using support.dell.com.

- 1 Click on **Enter a Tag**.
- 2 Enter your service tag, then click **Go**.

Choose from Your List

You can maintain a list of systems you have purchased from Dell using the **Your List** feature on support.dell.com. Once you have created an account and entered the service tags for the systems that you own, you can choose your model from that list.

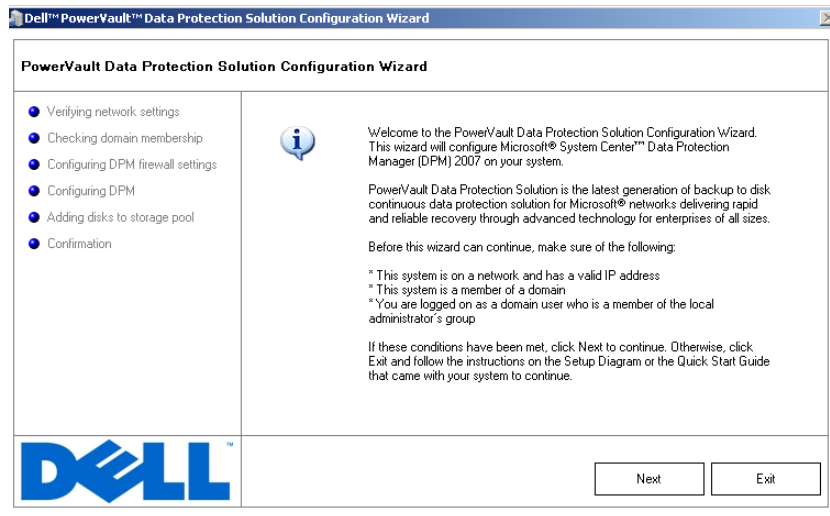
DPM Prerequisites

Before you run Microsoft® System Center Data Protection Manager (DPM) 2007 for the first time, these prerequisites apply:

- The system must be on a network and have a valid IP address.
- The system must be a member of a domain.
- The user must be logged on as a domain user, and that domain user must be a member of the local administrator group.

At initial login, the PowerVault Data Protection Solution Configuration Wizard starts up automatically. Exit the wizard to configure your system to meet the prerequisites above. The following sections in this document guide help you complete these tasks.

Figure 1-5. PowerVault Data Protection Solution Configuration Wizard Welcome Screen



Rack Installation

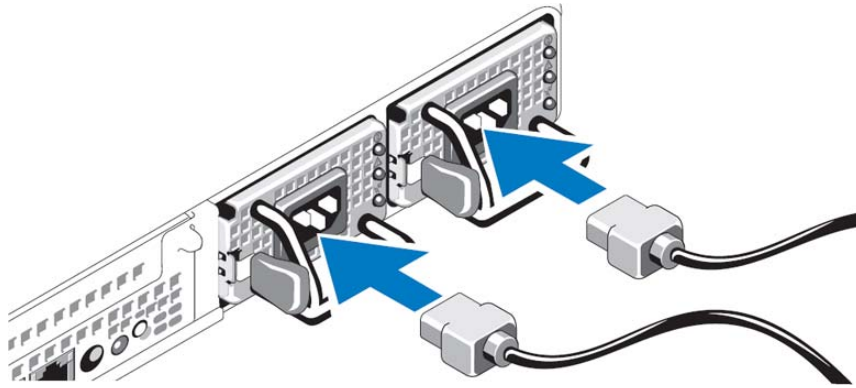
For rack mountable systems, see the *Rack Installation Instructions* or *Rack Installation Guide* included with your rack solution for information on how to install your system into a rack.

Connecting and Powering on the System

NOTE: For maximum reliability and availability of your PowerVault Data Protection Solution, connect your system to an Uninterrupted Power Supply (UPS).

Connect the system's power cable(s) to the system. Plug the other end of the cable into a grounded electrical outlet or a separate power source, such as an uninterruptible power supply (UPS) or a power distribution unit (PDU). For information about system connectors, see your system's *Hardware Owner's Manual*.

Figure 1-6. Power Connectors

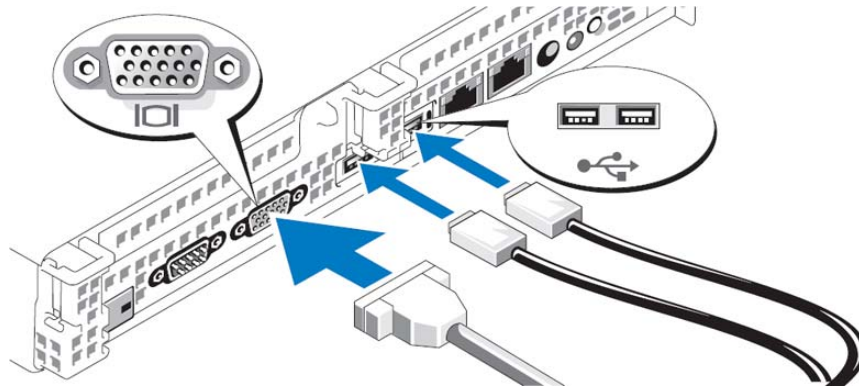


Configuring Your System Using a Keyboard, Video Monitor and Mouse

- 1 Connect your keyboard, video monitor, and mouse to the system.
For information about system connectors, see your system's *Hardware Owner's Manual*.
- 2 Push the power button to turn on the system.
- 3 Log on to the system.


NOTE: If you plan to complete the system setup remotely, refer to "Configuring Your System Remotely" on page 21. Then, return to this section and complete the following steps.

Figure 1-7. Connecting a Keyboard, Video Monitor and Mouse to the System



Entering the Default Administrator Username and Password

When logging into the system for the first time, you must enter an administrator user name and password. The default administrator user name for your system is **administrator**; the default password is **storageserver**.

 **NOTE:** Change the default password immediately to keep your system secure.

Changing the Administrator Password

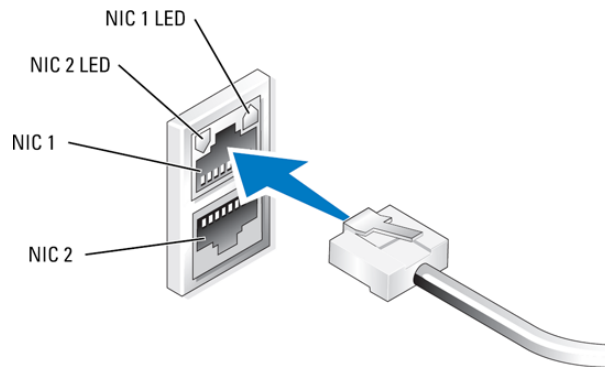
- 1 Click Start and select Administrative Tools → Computer Management.
- 2 In the Computer Management window in the Computer Management (Local) tree, expand Local Users and Groups, then select Users.
- 3 In the right window, right-click Administrator and select Set Password.
- 4 In the Set Password for Administrator window, click Proceed.
- 5 Enter and confirm your password in the appropriate fields, then click OK.
- 6 Close the Computer Management window.

Network Configuration

Cabling and Configuring Your Network Connection

- 1 Connect one end of an Ethernet cable into one of the RJ-45 network interface connectors (NIC) (see Figure 1-8) on the back of your system. See the *Hardware Owner's Manual* for the NIC locations.
- 2 Connect the other end of the Ethernet cable to a functioning Ethernet jack.
- 3 Verify that the NIC connector LED is lit (see Figure 1-8). If the LED is steady green, the connection is good. If the LED is flashing amber, data is successfully being transferred.
- 4 If the LED is not lit, make sure that each end of the Ethernet cable is seated properly in the NIC connector and Ethernet jack.


Figure 1-8. NIC Connector



NOTE: The NIC connector's physical orientation may vary depending on your system. See your system's *Hardware Owner's Manual* for more information.

Configuring TCP/IP Using DHCP (Default Setting)


Dynamic Host Configuration Protocol (DHCP) is enabled by default on your system. If your network is not configured with a DHCP server, proceed to "Configuring TCP/IP Using a Static IP Address" on page 15 to configure a static IP address on your system. Use the following procedure to verify your system's DHCP configuration.

 **NOTE:** To perform this procedure, you must be a member of the Administrator group or the Network Configuration Operator group on the local computer.

- 1 Click **Start** and select **Settings**→ **Control Panel**→ **Network Connections**.
- 2 Right-click the network connection you want to configure, then click **Properties**.
- 3 On the **General** tab (for a local area connection) or the **Networking** tab (for all other connections), click **Internet Protocol (TCP/IP)**. Then, click **Properties**.
- 4 Verify that **Obtain an IP address automatically** is selected, then click **OK**. Proceed to "Changing the Computer Name" on page 16.

Configuring TCP/IP Using a Static IP Address

The following procedure is required if DHCP is not configured on the network, or if a static IP address is desired.

 **NOTE:** To perform this procedure, you must be a member of the Administrator group or the Network Configuration Operator group on the local computer.

- 1 Click **Start** and select **Settings**→ **Control Panel**→ **Network Connections**.
- 2 Right-click the network connection that you want to configure, then click **Properties**.
- 3 On the **General** tab (for a local area connection) or the **Networking** tab (for all other connections), click **Internet Protocol (TCP/IP)**. Then, click **Properties**.
- 4 Click **Use the following IP address**.
- 5 If you are configuring a local area connection, enter the appropriate information in the **IP address**, **Subnet mask**, and **Default gateway** fields. If you are configuring an ad hoc connection, enter the IP address in the **IP address** field.
- 6 Click **Use the following DNS server addresses**.
- 7 In the **Preferred DNS server** and **Alternate DNS server** fields, type the primary and secondary DNS server addresses.

- 8 Configure additional IP addresses, if required. Otherwise, go to the next step.
 - a Click **Advanced**.
 - b On the **IP Settings** tab under **IP addresses**, click **Add**.
 - c Under **TCP/IP Address**, enter an IP address and subnet mask in the appropriate fields, then click **Add**.
 - d Repeat step b and step c for each additional IP address.
- 9 Configure additional default gateways, if required. Otherwise, go to the next step.
 - a On the **IP Settings** tab under **Default gateways**, click **Add**.
 - b Under **TCP/IP Gateway Address** in the **Gateway** field, enter the IP address of the default gateway.
 - c To manually configure a default route metric, clear the **Automatic metric** check box and enter a metric in the **Metric** field.
 - d Click **Add**.
 - e Repeat step b through step d for each default gateway (if required).
- 10 Configure a custom metric for this connection, if required. Otherwise, go to step 11.
- 11 Clear the **Automatic metric** check box.
- 12 In the **Interface metric** field, type the appropriate metric.
- 13 Click **OK**.

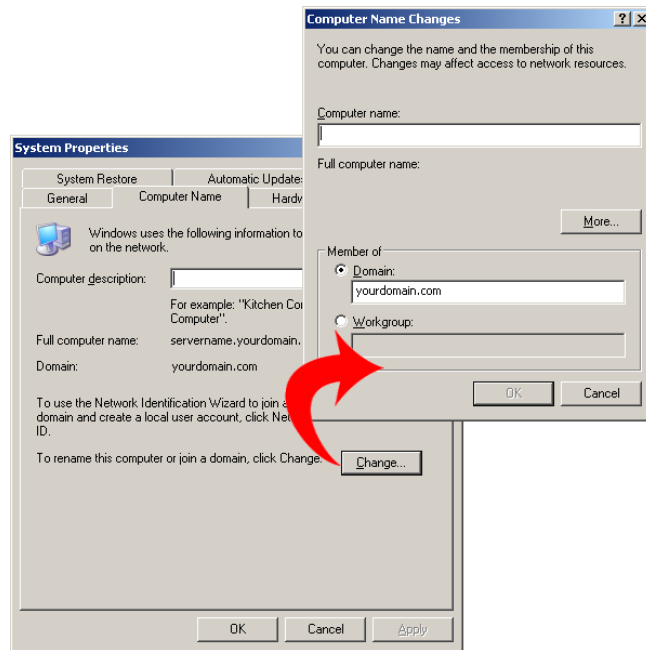
Changing the Computer Name

- 1 Right-click **My Computer**, then click **Properties**. The **System Properties** dialog box is displayed.
- 2 On the **Computer Name** tab, click **Change**. On the **Computer Name Changes** dialog box, in the **Computer name** field, enter the name you want to assign to your system. Then, click **OK**.
- 3 Click **OK** to close the **System Properties** window.
- 4 When prompted, restart your system.

Domain Membership

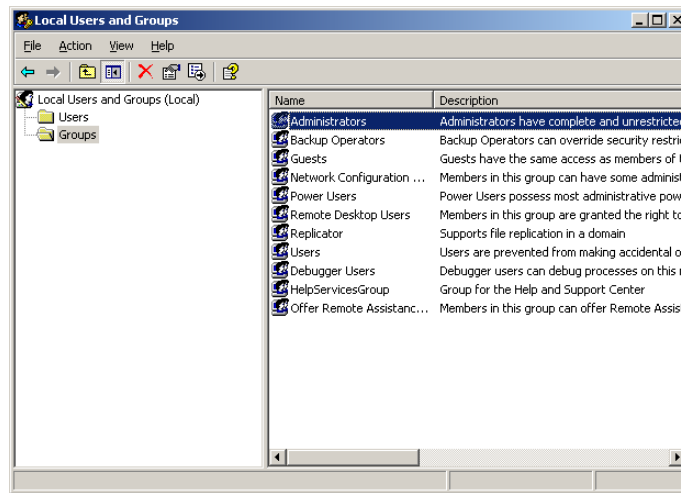
- 1** Right-click **My Computer**, then click **Properties**. The **System Properties** dialog box is displayed.
- 2** On the **Computer Name** tab, click **Change**. In the **Computer Name Changes** dialog box, select **Domain**, enter the name of the domain in the text box, and click **OK** (see Figure 1-9).
- 3** Provide a domain user name and password (contact your network administrator to obtain permissions to join the domain).
- 4** The changes take effect upon system restart. However, defer the restart until you complete the following steps. If the account used in step 3 has administrative privileges, proceed directly to step 8. Otherwise, complete the following steps to add the domain user to the local administrator group on the system.
- 5** Click **Start**→**Run**, then type `lusrmgr.msc` and click **OK**
- 6** Click **Groups**, then double-click **Administrators**. Then, click **Add** (see Figure 1-10).

Figure 1-9. Joining a Domain



- 7 Type the username in `DOMAIN\username` format and follow the instructions to add the domain user to the Administrators group.
- 8 Restart your system.

Figure 1-10. Adding a User to the Local Administrator's Group



Localizing Your System Using MUI

The Multilanguage User Interface (MUI) allows the system to display operating systems menus, dialogs, and help files in multiple languages.

Your system is preconfigured with Windows Storage Server 2003 R2 x64 Edition with SP2 and the MUI is preconfigured with the language selected at the time of purchase. No action is required unless you want to configure the system to use a different language. To change the language to another Dell-supported language, you must install the MUI system files for that language. Refer to “Localizing the Operating System” in the *PowerVault Data Protection Solution Recovery Guide*.

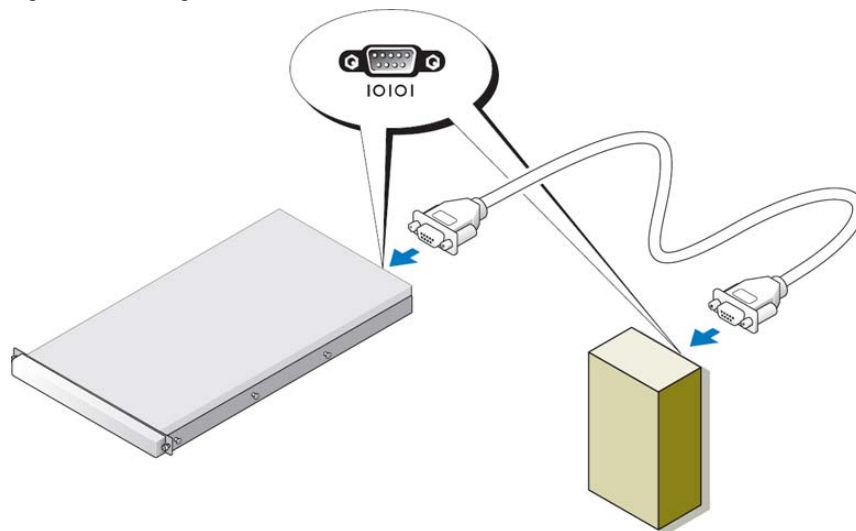
2

Configuring Your System Remotely

Special Administration Console (SAC)

NOTE: Using SAC requires a female-to-female serial console cable to connect directly from a client system to the PowerVault storage system's serial port, as shown in Figure 2-1.

Figure 2-1. Using the Console Cable to Connect to SAC



NOTE: Ensure that the terminal emulation software settings on the client system are set to 115200 baud, 8 data bits, No parity, and 1 stop bit.

In a non-DHCP environment, use command-line interface (CLI) support in SAC to connect (through a serial port) to a system running Windows Storage Server 2003. Then, configure network settings. After you configure the

network using SAC, you can remotely access the graphical user interface (GUI) to configure and manage Windows Storage Server using the IP address. To do this, you need to:


- 1 Access the SAC command prompt.
- 2 Configure the system's IP addresses and the Domain Name System (DNS).

Accessing the SAC Command Prompt

SAC is the primary emergency management system (EMS) CLI environment hosted by Windows Storage Server 2003 operating systems. It is separate from the CLI environment and provides different functionality.


SAC is available immediately after you power on the system. You can use SAC to manage the server during normal system operation and to configure most of the Windows Storage Server 2003 operating system components. You can also use SAC when the system is in Safe Mode or during GUI-mode setup. When EMS is enabled, SAC remains active as long as the kernel is running.

You can access SAC using a serial cable between the system and a portable system using a terminal emulation program, such as HyperTerminal.

 **NOTE:** To access EMS remotely, ensure that you are using compatible client software for terminal emulation. For more information, see "Selecting client terminal software for Emergency Management Services" on www.microsoft.com (<http://go.microsoft.com/fwlink/?LinkId=66418>.)

To Access the SAC Command Prompt:

- 1 Start the terminal emulation program and connect to the serial port.
- 2 Power on the system.
- 3 After EMS starts, from the SAC prompt type `cmd` and press **Enter** to create a command prompt window.
- 4 To switch the channel window to view the output of the command prompt, type `ch -sn cmd0001` and press **Enter**.
- 5 Log on as Administrator.

 **NOTE:** The default password for your system is **storageserver**.

For more information about using SAC, see "Using Emergency Management Services" at www.microsoft.com, or see the Windows Storage Server 2003 Help.

Configuring IP Addresses and DNS

After connecting to the SAC command prompt, you can use **netsh** to configure network addresses, default gateways, and DNS for a system. Once you have configured those settings, you can connect remotely to the server and use the GUI to complete other initial configuration and management tasks.

To set the static IP address, you must know the IP address, subnet mask, and gateway address.

- 1 Obtain the list of available interfaces:

```
netsh interface ip show interface
```

- 2 Identify the interface(s) that are displayed as **Connected**.
- 3 Set the IP address for the desired interface by entering the following command (on a single line):

```
netsh interface ip set address name=interface  
source=static addr=IP_address mask=subnet_mask  
gateway=gateway_address
```

- 4 Set the DNS address by entering the following command (on a single line):

```
netsh interface ip set dns name=interface  
source=static addr=dns_address
```



NOTE: If you are using an interface name that includes spaces, place the text in quotation marks. For example, "local area connection".

For more information about the **netsh** command, see "Scripting Tools" on www.microsoft.com (<http://go.microsoft.com/fwlink/?LinkId=66414>), or see the Windows Storage Server 2003 Help.

Remote Desktop Connection

After an IP address has been configured, you can access systems running Windows Storage Server 2003 from another Windows-based system by using Remote Desktop Connection.

To set up access from the management station, create a remote desktop connection and save it to your desktop using these steps:

- 1 Click **Start**→**Run**.
- 2 In the **Run** dialog box, enter `mstsc` and click **OK**.
- 3 In the **Remote Desktop Connection** dialog box, enter the system name or the IP address of the system, then click **Options**.
- 4 In the **Connection Settings** window, click **Save As**.
- 5 In the **Save As** dialog box, enter the file name you would like to use for the connection. Leave the extension as `.rdp`.
- 6 In the **Save in** drop-down menu, select **Desktop**, then **Save**.

For more information about configuring your Remote Desktop Connection, see "Remote Desktop Connection" on at www.microsoft.com (<http://go.microsoft.com/fwlink/?LinkId=69058>), or see the Windows Storage Server 2003 Help.

Remote Web Administration

You can remotely access a server running Windows Storage Server 2003 from a client system by using a web browser. For systems running a Windows operating system and Internet Explorer 6 (or later), use the Remote RDP Client ActiveX control. The ActiveX control is synonymous to the Remote Desktop Connection, MSTSC.

Dell Remote Access Controller (DRAC)

The Dell Remote Access Controller 5 (DRAC 5) is a systems management hardware and software solution designed to provide remote management capabilities, crashed system recovery, and power control functions for Dell systems. By communicating with the system's baseboard management controller (BMC), DRAC 5 (when installed) can be configured to send e-mail alerts for warnings or errors related to voltages, temperatures, intrusion, and fan speed. DRAC 5 also logs event data and the most recent crash screen (for systems running Windows operating system only) to help you diagnose the cause of a system crash. DRAC 5 contains its own microprocessor and memory, and is powered by the system in which it is installed. DRAC 5 may be pre-installed on your system, or available separately in a kit.

To get started with DRAC 5, refer to "Installing and Setting up the DRAC 5" in the *Dell Remote Access Controller 5 (DRAC 5) User's Guide*.

Baseboard Management Controller (BMC)

The baseboard management controller (BMC) monitors the system for critical events using various sensors on the system board and sends alerts and logs events when certain parameters exceed preset thresholds. BMC supports the industry-standard Intelligent Platform Management Interface (IPMI) specification, enabling you to configure, monitor, and recover systems remotely.

For more information, refer to the *Baseboard Management Controller Utilities User's Guide*.

3

Configuring DPM

Running the Configuration Wizard

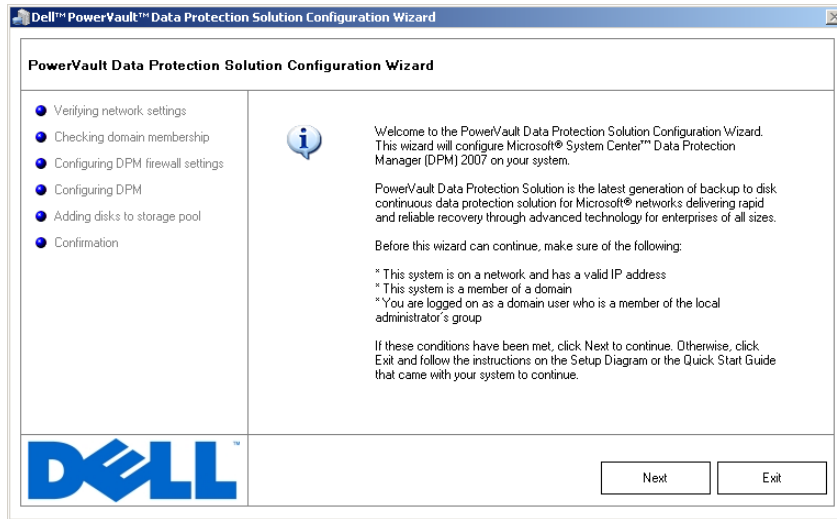
The PowerVault Data Protection Solution (DPS) Configuration Wizard is used to configure your system to run DPM. It is launched automatically when you log on to the system. It can also be launched by double-clicking the **PowerVault DPS Wizard** icon on your desktop.

The wizard performs the following:

- verifies system, software, and network prerequisites
- verifies user account settings
- configures the system firewall
- launches DPM Mini-Setup
- adds available disks to the DPM storage pool

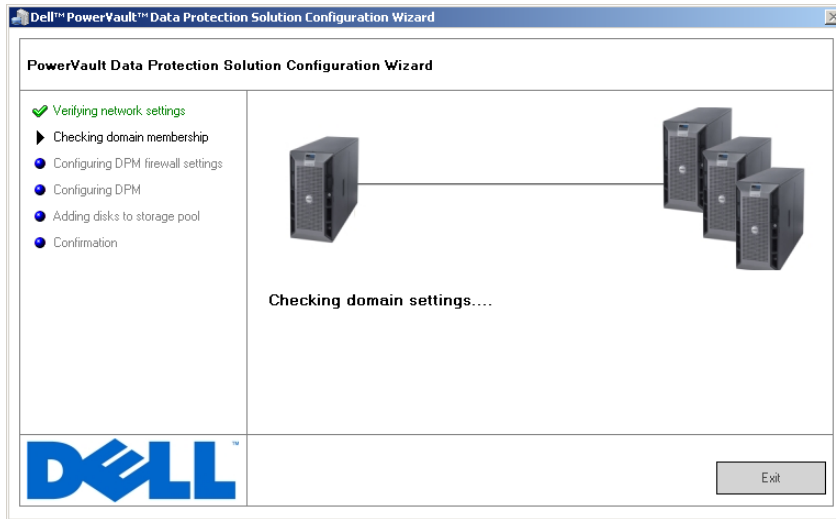
Log on to the system with the domain user account used in step 3 in "Domain Membership" on page 17. The wizard will run automatically and display a welcome screen that lists the prerequisites covered in "DPM Prerequisites" on page 11.

Figure 3-1. PowerVault DPS Configuration Wizard Welcome Screen



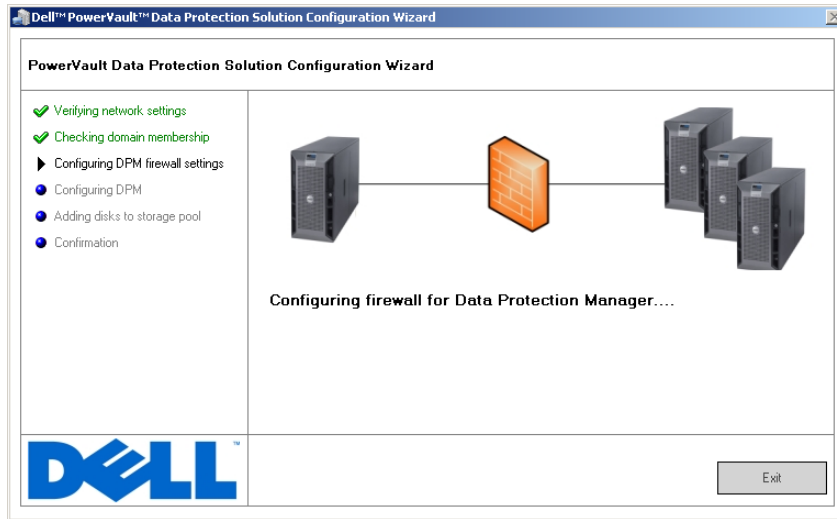
After ensuring that the prerequisites have been met, click **Next** to proceed. The wizard will then verify the network, domain and user account settings for DPM.

Figure 3-2. Verifying Prerequisites



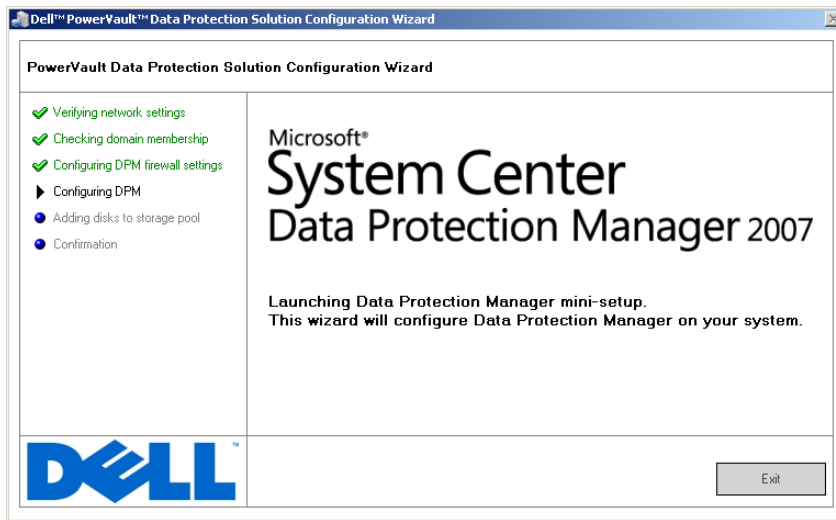
After the wizard verifies your settings, it configures the Windows firewall for DPM. In this step, the wizard will create firewall exceptions for the DPM executables and open the TCP port for Windows Remote Procedure Call (RPC) and Distributed COM (DCOM) (port 135). If the firewall service is not running, this step will be skipped.

Figure 3-3. Configuring the Windows Firewall



After firewall configuration, the wizard launches the Microsoft Data Protection Manager Mini-Setup Wizard. This wizard is required to complete setup of DPM on your system. Click **Next** to continue. The PowerVault Data Protection Solution Configuration Wizard will wait in the background until the DPM Mini-Setup wizard completes.

Figure 3-4. Launching Microsoft Data Protection Manager Mini-setup Wizard



Microsoft Data Protection Manager Mini-Setup

Figure 3-5. Microsoft Data Protection Manager Mini-Setup Wizard

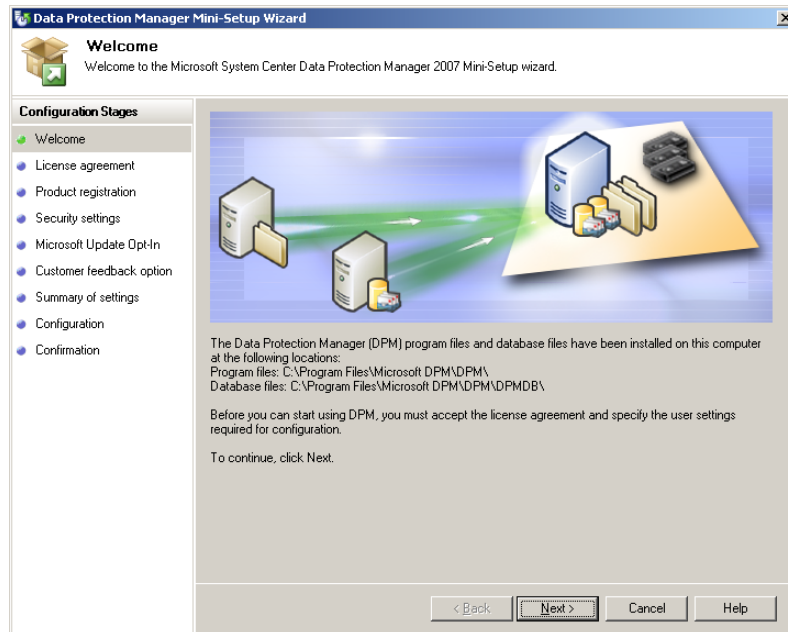
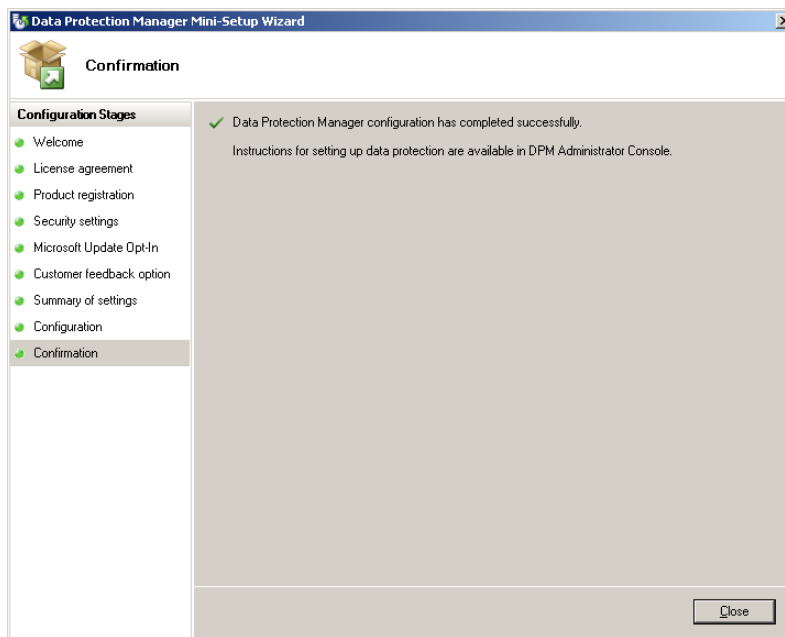


Figure 3-5 shows the DPM Mini-Setup wizard. Click **Next** to continue. The wizard guides you through these steps:

- **Welcome**
- **License agreement:** This step displays the DPM license agreement. The license agreement must be accepted to continue.
- **Product registration:** This step prompts for username and company associated with the DPM installation.
- **Security settings:** This step prompts for a password for the SQL service accounts.
- **Microsoft update opt in:** Dell recommends enabling automatic updates for the latest patches, security fixes and updates.
- **Customer feedback option:** This step prompts the user to participate in the Microsoft Customer Experience Improvement Program.

- Summary of settings
- Configuration: After collecting information from the user, the configuration is performed.
- Confirmation

Figure 3-6. Microsoft Data Protection Manager Mini-Setup Wizard Confirmation Screen



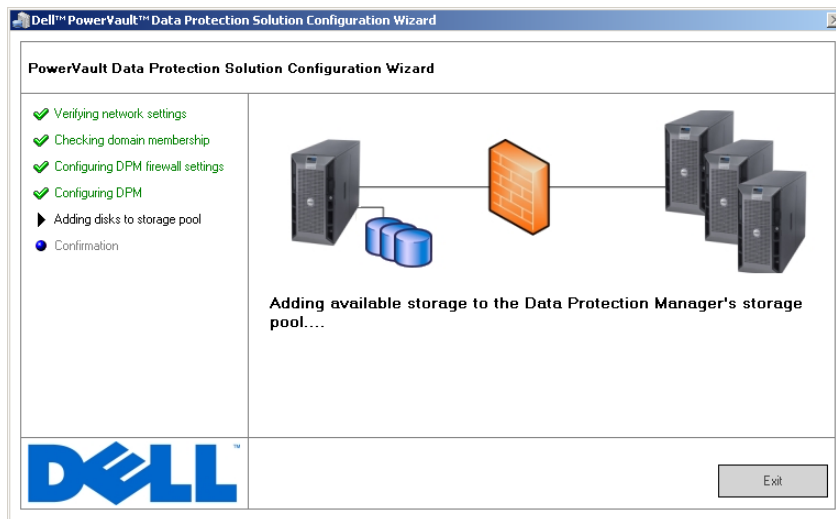
After successfully answering all questions and completing the DPM Mini-Setup wizard, click **Close** to return to the PowerVault Data Protection Solution Configuration Wizard.

DPM Storage Pool Configuration

After the DPM Mini-Setup Wizard has completed successfully, the PowerVault Data Protection Solution Configuration Wizard resumes and adds the available storage to the DPM Storage Pool. The DPM Storage Pool is

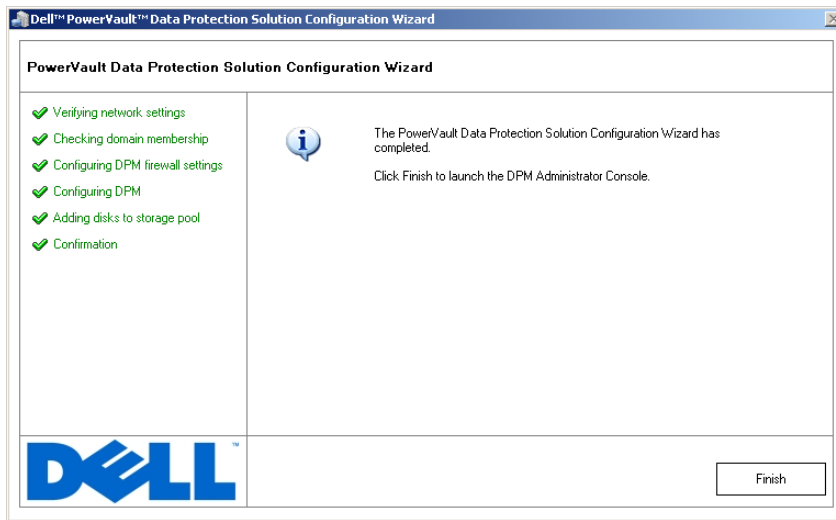
a collection of storage that DPM uses to protect the managed servers in your network. For more information about storage pool, refer to “Adding Disks to the Storage Pool” in *Deploying System Center Data Protection Manager 2007*.

Figure 3-7. Configuring the DPM Storage Pool



After the storage pool is successfully configured, the wizard displays a message showing the completed steps. When **Finish** is chosen, the DPM 2007 Administrator Console is launched. Use the DPM Administrator Console to add servers from your network. Refer to ““DPM Deployment” on page 39” for more information.

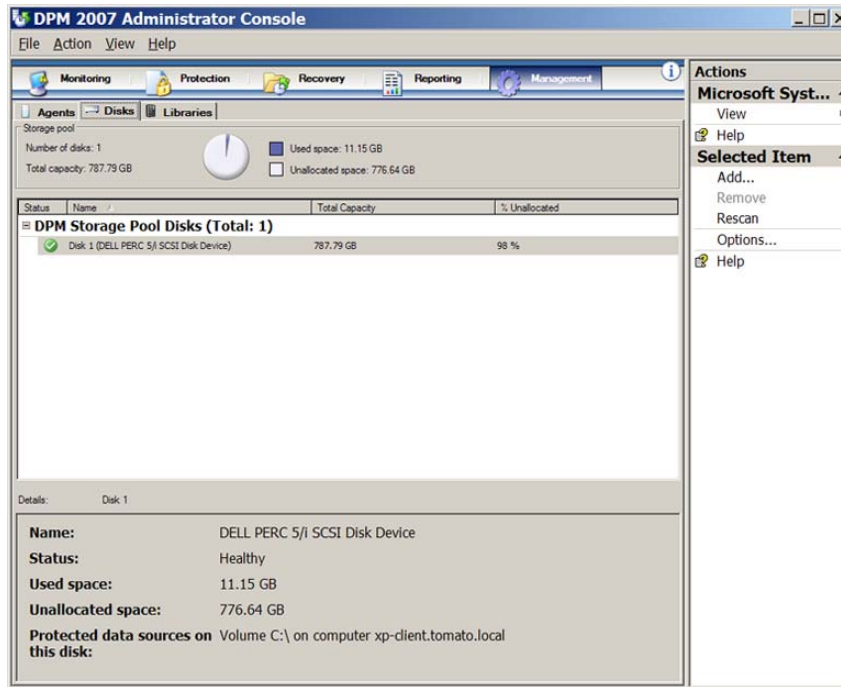
Figure 3-8. Wizard Completion Screen



Verification

To verify that the configuration process has completed successfully, click the **Management** tab in the DPM Administrator Console. Then, select the **Disks** tab. Depending on the system configuration, the appropriate number of the disks should be added to the storage pool.

Figure 3-9. DPM 2007 Administrator Console



Licensing

DPM Licenses

Figure 4-1. Certificate of Authenticity (COA) Example



The product key for DPM 2007 is factory-installed on your system. The product key can be found on the Certificate of Authenticity (COA) included with the installation media that shipped with your system. The product key on this COA is required if you ever need to reinstall DPM 2007.

DPM 2007 requires a Data Protection Management License (DPML) for each protected (managed) server. Two types of DPMLs are available for: **Standard** (S-DPML), which offers standard file protection, and **Enterprise** (E-DPML), which offers application and file protection on the protected server.

Your system purchase includes one DPML. Contact your Dell sales representative for additional licenses to protect additional systems in your IT environment.

For more information on DPM licensing see “DPM Licensing” in *Planning a System Center Data Protection Manager 2007 Deployment*.

Windows Storage Server 2003 R2 x64 License

Figure 4-2. Example of the Windows COA Applied to the System



The product key for Windows Storage Server 2003 x64 R2 with SP2 is factory-installed on your system. The key is located on a COA applied to the top or side panel of the system. Record this product key and keep it in a safe place. You may need the product key should you need to reinstall your operating system.

DPM Deployment

Before DPM can begin protecting the data and applications on the systems in your network, you must do the following:

- Install prerequisite software on each server system you want to protect.
- Deploy the DPM Protection Agent to each system you want to protect. You must own one DPM Agent License for each system you protect using DPM. Refer to the "DPM Licenses" on page 37.
- Create one or more protection groups to define which systems, data, and applications on those systems DPM will back up, as well as how often DPM backs up those systems.
- Set advanced DPM configuration settings (optional).

Installing Protected System Prerequisite Software

Prior to installing a DPM Protection Agent on a protected server in your network, install Microsoft Update for Windows Storage Server 2003 x64 Edition KB940349. This update is available on support.microsoft.com. The update is also on the *Microsoft® System Center Data Protection Manager 2007* reinstallation media that shipped with your system. It is located in the \prereqs directory. To install the update, double-click on the KB940349 executable (.exe) from the system administrator account.

Deploying Agents

A *protection agent* is software installed on a server that tracks changes to protected data and transfers those changes from the protected server to the DPM server. Refer to "Installing Protection Agents" in *Deploying System Center Data Protection Manager 2007* for information on deploying the agents to systems in your network.

Protecting Servers

You must create a *protection group* to protect one or more servers in your network. A protection group is a collection of data sources that share the same protection configuration. Refer to “Creating Protection Groups” in *Deploying System Center Data Protection Manager 2007*.

Advanced Configuration

Refer to *Deploying System Center Data Protection Manager 2007* and *System Center Data Protection Manager 2007 Operations Guide* for advanced configuration topics, such as managing protection of virtual servers and enabling end-user recovery.

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DPM and Tape Devices

The PowerVault Data Protection Solution supports disk-to-tape backup of the protected systems and disk-to-disk-to-tape archival for long-term protection. Refer to “Backup Solutions Combining Disk and Tape” in *Planning a System Center Data Protection Manager 2007 Deployment*. To use these features, you need to attach a supported tape drive or a tape library to your system.

Refer to the *PowerVault Data Protection Solution Support Matrix* for a list of supported tape drives, autoloaders and libraries.

Installing Tape Drives and Tape Libraries

Refer to the tape drive or the tape library documentation to install and attach these components to your system. Install the necessary drivers and update device firmware, if necessary. Refer to the *PowerVault Data Protection Solution Support Matrix* for required driver and firmware versions.

Using DPM with Tape Drives and Tape Libraries

Refer to “Configuring Tape Libraries” in *Deploying System Center Data Protection Manager 2007* to add tape drives and libraries to DPM.

Refer to “Managing Tape Libraries” in *System Center Data Protection Manager 2007 Operations Guide* for detailed information on how to manage tape libraries and stand-alone tape drives attached to the Microsoft System Center Data Protection Manager 2007 server. This document also contains information on routine maintenance tasks.

Installing Dell OpenManage™ Server Administrator

Overview

Dell OpenManage™ Server Administrator (OMSA) provides a comprehensive, one-to-one systems management solution in two forms: (1) an integrated, browser-based graphical user interface (GUI) and (2) a command-line interface (CLI) through the operating system. It is designed to allow system administrators to manage systems both locally and remotely on a network.

A *managed* system is a system that has supported instrumentation or agents installed that allow the system to be discovered and polled for status. A *management station* is used to remotely manage one or more managed systems from a central location.

OMSA provides systems and storage management for your PowerVault Data Protection Solution. OMSA monitors the system hardware and peripherals for fault conditions and provides advance warning of potential system failures. Additionally, OMSA provides a graphical user interface from which the administrator can configure the storage subsystem, including virtual disks and RAID.

Installing Server Administrator

You can install Server Administrator using several different methods. The *Dell™ Systems Console and Agent CD* included with your system provides a setup program to install, upgrade, and uninstall Server Administrator and other *managed system software* components on both your managed system and management station.

Refer to the "Setup and Administration" section of the *Dell™ OpenManage Installation and Security User's Guide* for detailed information.



NOTE: During installation of OMSA, make sure the **Storage Services** option is checked.

Updating Software

Updating Your PowerVault System

Using the Server Update Utility

Dell™ OpenManage™ Server Update Utility (SUU) is a CD-based application for identifying and applying updates to your system. SUU compares the versions of components currently installed on your system with update components packaged on the server update CDs available on support.dell.com. SUU then displays a comparison report of the versions and provides the option of updating the components, such as the BIOS, drivers, and firmware.

See the *Dell™ OpenManage™ Server Update Utility User's Guide* for more information about using SUU.

Using Dell Update Packages

A Dell Update Package (DUP) is a self-contained executable in a standard package format. Each update package is designed to update a single software component (such as a specific driver) on your system. DUPs are available on support.dell.com. Refer to the *Dell™ Update Packages for Microsoft Windows User's Guide* for more information on updating your system using DUPs.

Updating Your Operating System

Visit update.microsoft.com for the latest security patches, fixes, and updates for Windows Storage Server. All updates to Windows Server™ 2003 R2 x64 SP2 Editions apply to Windows Storage Server 2003 R2 x64 SP2.

Updating DPM

Visit update.microsoft.com for DPM 2007 updates.

Getting Help

Dell Support

For more information and troubleshooting information for the PowerVault Data Protection Solution, visit support.dell.com.

Hardware Issues

For help with your hardware, refer to the PowerVault hardware manuals that shipped with your system. You can also access all hardware documents at support.dell.com.

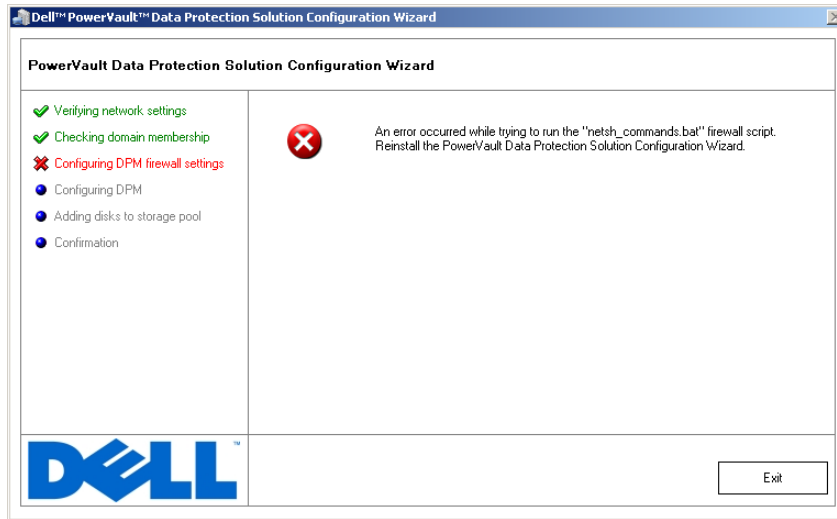
Software/DPM Issues

For more DPM information and troubleshooting information, refer to the *System Center Data Protection Manager 2007 Troubleshooting Guide*.

Troubleshooting the PowerVault Data Protection Solution Wizard

If an error occurs while running the PowerVault Data Protection Solution Configuration Wizard, an error message with appropriate steps needed to resolve the error will appear. Follow those instructions, then restart the wizard by double-clicking the wizard icon on the system desktop to continue the configuration process.

Figure 9-1. PowerVault Data Protection Solution Configuration Wizard Error Screen



Other Documents and Resources You May Need

Refer to the *PowerVault Data Protection Solution Quick Reference Guide* available at support.dell.com to locate the following documents and resources:

Microsoft Information

- *Planning a System Center Data Protection Manager 2007 Deployment*
- *Deploying System Center Data Protection Manager 2007*
- *System Center Data Protection Manager 2007 Operations Guide*

Dell Hardware

- *Baseboard Management Controller Utilities User's Guide*
- *Remote Access Controller 5 (DRAC 5) User's Guide*
- *PowerVault Systems Hardware Owner's Manual*
- *PowerVault Getting Started Guide*

Dell Software

- *PowerVault™ Data Protection Solution Support Matrix*
- *OpenManage Installation and Security User's Guide*
- *OpenManage™ Server Administrator User's Guide*
- *OpenManage™ Server Update Utility User's Guide*
- *Dell Update Packages for Microsoft Windows User's Guide*
- *Dell Systems Console and Agent CD*
- *Dell Systems Build and Update Utility CD*
- *Dell Systems Documentation CD*

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