

Dell™ PowerVault™ Data Protection Solution System Recovery Guide

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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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Contents


1	Introduction	5
2	Recovery Solution Map	7
3	Recovering from Disk Failures	9
	Detecting and Monitoring Disk Failures	9
	RAID Adapter Audible Alarm	9
	OpenManage™ Server Administrator	9
	Dell OpenManage™ IT Assistant.	10
	Replacing Disks	10
	Replacing Internal Disks	11
	Replacing Disks in an External Storage Enclosure.	11
	Recovering After a Disk Failure	11
	Single Disk Failure Recovery	11
	Multiple Disk Failure Recovery	13
4	Operating System Reinstallation	15
	Using the Dell Systems Build and Update Utility	15
	BIOS, Firmware and Driver Updates	24
	OS Updates Using Windows Update	24
	Localizing the Operating System	24


	Installing Multilingual User Interface Pack	24
	Applying the MUI Language:	25
5	OMSA Reinstallation	27
6	DPM Reinstallation	29
	Prerequisite Software and Network Configuration Requirements	29
	Virtual Disk Configuration for the DPM Storage Pool	31
	DPM Installation	31
	DPM Updates	34
7	PowerVault Data Protection Solution Configuration Wizard Reinstallation	35
	Installing the Wizard	35
	Running the Wizard	35
8	Recovering DPM Databases and Replicas	37
9	Other Documents and Resources	39
	Microsoft Information	39
	Dell Hardware Information	39
	Dell Software Information	39

Introduction

This document describes the steps necessary to recover your Dell™ PowerVault™ Data Protection Solution from a number of hardware or software failures. Depending on the type of failure, you experience, you may need to:

- Recover from disk failures
- Reinstall the operating system
- Reinstall Dell™ OpenManage™ system management applications
- Reinstall the Data Protection Solution Configuration Wizard
- Reinstall Microsoft® System Center Data Protection Manager (DPM) 2007
- Recover the DPM server's recovery point data

 **NOTE:** Prior to performing the recovery steps in this document, review the *Dell PowerVault Data Protection Solution Information Update* for the latest information.

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

2

Recovery Solution Map

This document is comprised of sections describing specific recovery topics and procedures. Table 2-1 shows how each failure type potentially affects the various DPM components, and which section in this document is applicable to the specific failure type.

As you explore different failure/recovery scenarios, keep the following guidelines in mind:

- Re-installation of the operating system usually requires you to reinstall all of the applications on your system.
- A non-recoverable failure of the RAID group containing the operating system will require reinstallation of the operating system and all applications
- A non-recoverable failure of the RAID group containing one or more DPM replicas requires restoration of the replicas on that RAID group from tape, or a secondary DPM server.

Table 2-1. Recovery Solution Map

Failure Type	Potentially Affected System Components						Use the following sections to resolve these issues. (See the section titles below Table 2-1.)
	RAID Group	Operating System	OMSA	DPM Application	Wizard	DPM DB or Replicas	
Operating System		X	X	X	X	X	4, 5, 6, 7, 8
OMSA Application			X				5
DPM Application				X		X	6, 8
Data Protection Solution Configuration Wizard					X		7
DPM DB or Replicas						X	8
OS/DPM Application RAID Group	X	X	X	X	X	X	3, 4, 5, 6, 7, 8
DPM Replica RAID Group	X					X	3, 8

Section	Title
3	<i>Recovering from Disk Failures</i>
4	<i>Operating System Reinstallation</i>
5	<i>OpenManage Server Administrator Reinstallation</i>
6	<i>Data Protection Manager Reinstallation</i>
7	<i>Dell PowerVault Data Protection Solution Configuration Wizard Reinstallation</i>
8	<i>Recovering DPM Databases and Replicas</i>

Recovering from Disk Failures

Your system's internal disk storage has been pre-configured as RAID 5. Additionally, as described in the *Dell PowerVault Data Protection Solution Storage Expansion Guide*, any additional disks you add to your system will be configured as RAID 5.

RAID 5 provides uninterrupted operation of your system in the event a single disk drive in the group fails. However, until the failed disk drive has been replaced, your system will operate in degraded state. During this degraded state, another disk failure within the same RAID group will cause loss of all data in that RAID group. Therefore, it is extremely important to monitor the status of your system's disks and to replace any failed disk within the same RAID group as quickly as possible.

Detecting and Monitoring Disk Failures

To optimize the protection of RAID 5-configured storage on your system, it is essential that you are able to detect hard drive failures immediately as they occur. Replacing failed disks as soon as possible reduces the risk of unplanned downtime and loss of critical data.

The following methods can be used to monitor the health of your system's physical disks.

RAID Adapter Audible Alarm

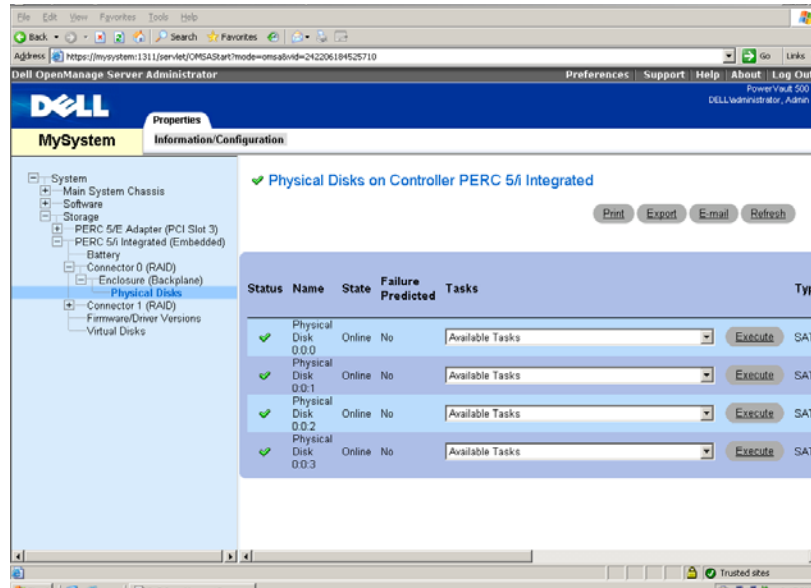
Refer to the "Enabling the Alarm to Alert in Case of Physical Disk Failures" section of the *Dell™ PowerEdge™ Expandable RAID Controller (PERC) User's Guide* for more information on how to configure the audible alarm. Note that this feature is not available on all PERC adapters. Refer to your specific PERC adapter documentation to determine whether this feature is supported.

OpenManage™ Server Administrator

Dell™ OpenManage™ Server Administrator (OMSA) can monitor the health of both internal and external disks. Refer to "Replacing Disks" in this chapter for more information.

Figure 3-1 shows how disk status is reported in OMSA.

Figure 3-1. Physical disk status



Dell OpenManage™ IT Assistant

Dell OpenManage™ IT Assistant is a central monitoring console, which can be used to monitor the status of your Dell systems running OMSA. Refer to the *Dell OpenManage™ IT Assistant User's Guide* for more information on installing and using IT Assistant.

Replacing Disks

When replacing hard drives, only use hard drives included in the *Dell PowerVault Data Protection Solution Support Matrix*. Be sure to replace the failed disk drive with a new disk of the same capacity. Refer to the "Disk Size Selection and Considerations" section of the *Dell PowerVault Data Protection Solution Storage Expansion Guide* for additional details.

Replacing Internal Disks

To replace your system's internal disks, refer to the "Hard Drives" and "Replacing a Hard-Drive Carrier" sections of your system's *Hardware Owner's Manual*.

Replacing Disks in an External Storage Enclosure

To replace disk drives in an external Dell storage enclosure, refer to your storage enclosure's *Hardware Owner's Manual*.

Recovering After a Disk Failure

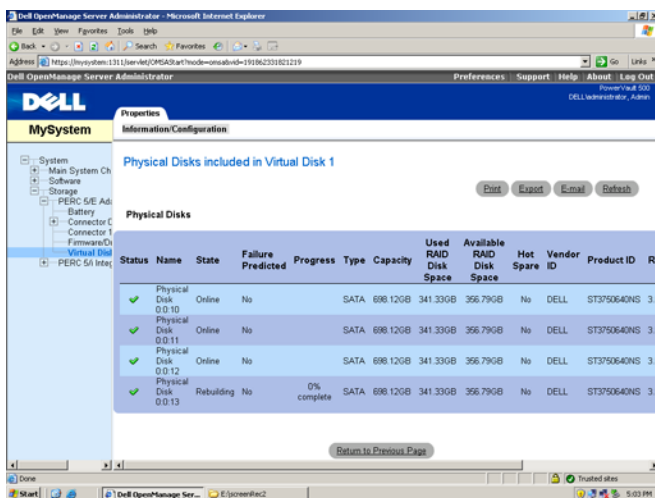
This section describes steps you must follow, as well as procedures the system will automatically perform, after you replace a failed disk. As mentioned previously, your system will continue to operate if a single disk drive within a RAID 5 group fails. However, if your system experiences two or more disk failures in the same RAID group, data loss may result.

Single Disk Failure Recovery

After you replace a failed disk drive within a RAID 5 group, the system will begin an automatic rebuild of the RAID group. The data on the virtual disks that reside on the RAID group are still available to your operating system and your system should run without interruption. Until the rebuild operation completes, the RAID 5 virtual disks will be running in *degraded* mode and are at risk of data loss should an additional disk fail. Using OMSA, you can monitor the progress and status of the RAID 5 rebuild. If the rebuild does not begin automatically, refer to the "Rebuild a Failed Physical Disk" section of the *OpenManage™ Server Administrator User's Guide* to initiate the rebuild manually.

Figure 3-2 shows how OMSA reports the status of a rebuilding RAID group.

Figure 3-2. Rebuilding a RAID 5 disk group



If you had installed a global hot spare allocated to the same PERC adapter of the failed disk, the RAID group will automatically switch the role of the failed disk with the hot-spare disk, and begin the rebuild operation automatically. In this case, you would need to replace the failed disk and assign it as the new global hot spare for that PERC adapter. Refer to the "Assign and Unassign Hot Spares" section of the *OpenManage™ Server Administrator's User's Guide* for more information on global hot spares.

About RAID 5 Degraded Mode

When a failed hard drive is replaced, the RAID group begins an automatic rebuild operation. During this operation, data and parity information is reallocated across all hard drives in the RAID group. Until the rebuild completes, performance of the RAID group is degraded. You should continue to monitor the status of the rebuild to ensure it completes successfully.

NOTE: If another hard drive fails while the RAID group is rebuilding, all data on that RAID group may be lost.


Multiple Disk Failure Recovery

If your system experiences multiple disk failures within the same RAID group *and* the RAID group contained your operating system and DPM application, you must reinstall the operating system and DPM application. If the RAID group contained the DPM replicas, you can restore the replicas from your tape archive. Replicas also can be restored from a secondary DPM server, protecting your primary DPM server. Refer to the "Disaster Recovery" section of the *System Center Data Protection Manager 2007 Operations Guide* for more information on disaster planning DPM recovery procedures.

4

Operating System Reinstallation


This section describes the process of reinstalling the operating system on your PowerVault system.

 **NOTE:** Your operating system was pre-installed when you purchased your system. Only perform the steps in this section if required to repair a non-functioning operating system.

Using the Dell Systems Build and Update Utility

Use the *Dell Systems Build and Update Utility* CD that came with your solution to reinstall the operating system. The Systems Build and Update Utility installs the operating system software, device drivers, and OpenManage™ Server Administrator (OMSA) software.

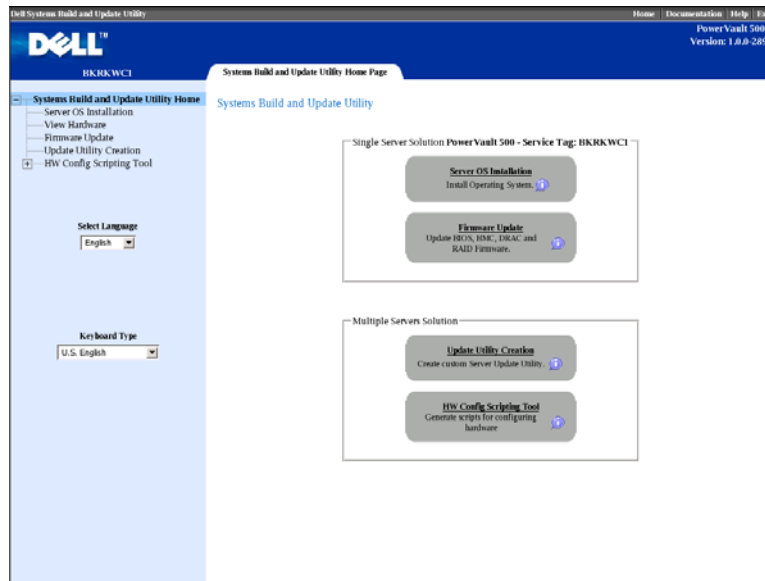
Your system is factory-installed with Microsoft® Windows® Storage Server® 2003 R2 X64 with SP2. The Dell Systems Build and Update Utility will need the original Microsoft installation media in order to install the operating system.

 **NOTE:** Using the Dell Systems Build and Update Utility erases all data from the virtual disk where you are installing the operating system.

To reinstall the operating system, perform the following steps:

- 1 Connect a keyboard, mouse, and monitor to your system.
- 2 Power on your system.
- 3 Insert the *Dell Systems Build and Update Utility* CD into the system's optical drive and configure the BIOS setting to boot off that drive.
- 4 Reboot the system.
- 5 After the system boots from the CD, the **System Build and Update Utility** screen appears (see Figure 4-1).
- 6 Select the appropriate language and keyboard type on the left side of the screen and select the **Server OS Installation** option under the **Single Server Solution** section.

Figure 4-1. System Build and Update Utility




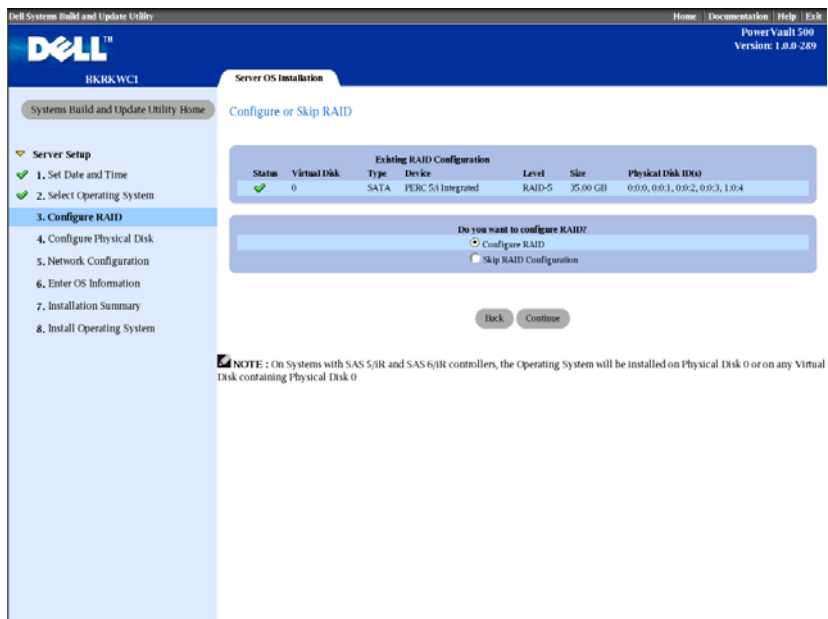
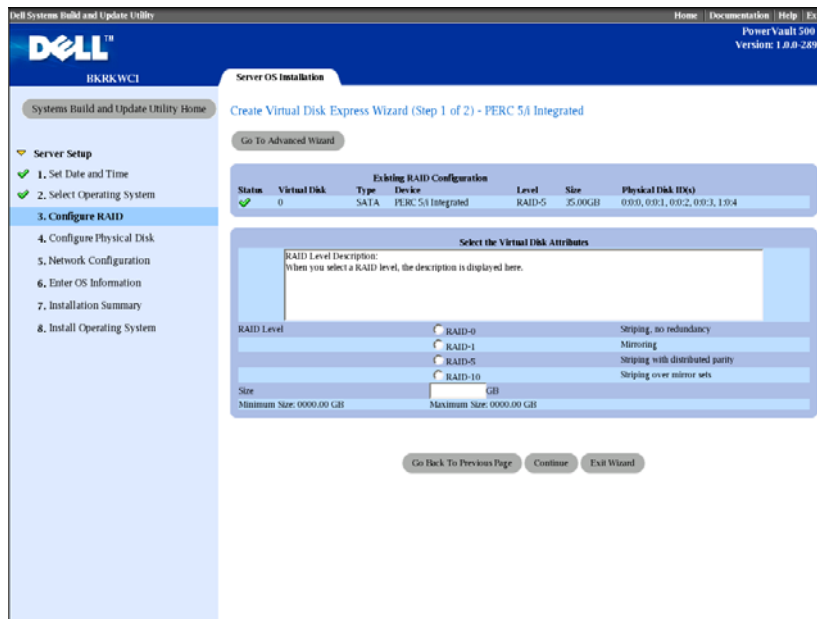
- 7 Select the date and time, then click **Continue**.
 - 8 At the **Select an Operating System** screen, select **Microsoft Windows Server 2003 Service Pack 2 x64 Edition**.
 - 9 Set the **Create Utility Partition** option to yes, then click **Continue**.
-  **NOTE:** Although you selected Windows Server 2003 in this step, the System Build and Update Utility will install Windows Storage Server 2003 based on the operating system media you provide in the following steps.
- 10 The **Configure or Skip RAID** window appears. This option will configure the virtual disk on which the operating system and applications, such as OMSA and DPM, are installed. Perform the following steps:
 - a Select **Configure RAID**, then click **Continue** (see Figure 4-2).

Figure 4-2. Configure or Skip RAID Screen



- b** On the Create Virtual Disk Express Wizard (Step 1 of 2) screen (see Figure 4-3), click Go To Advanced Wizard at the top left corner of the screen.

Figure 4-3. Create Virtual Disk Express Wizard (Step 1 of 2)




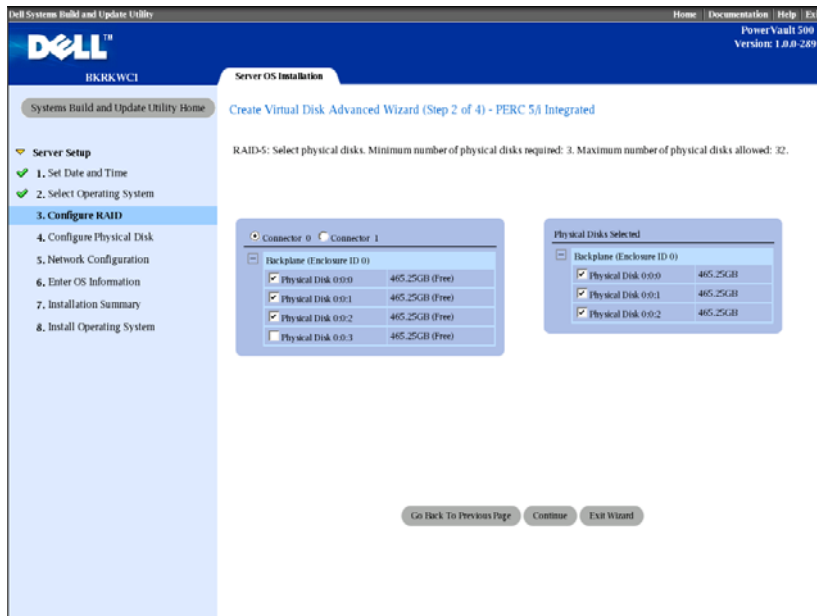

- c When the **Create Virtual Disk Advanced Wizard (Step 1 of 4)** screen appears, select the **RAID-5** option and click **Continue**.
 - d In the **Create Virtual Disk Advanced Wizard (Step 2 of 4)** screen (see Figure 4-4), select *all* the physical disks displayed for Connector 0 by the internal PERC adapter. Click **Continue**.
 - e Select the **Connector 1** button and select all the physical disks displayed by the PERC adapter. Click **Continue**.
-  **NOTE:** If you plan to allocate a global hot spare, leave one disk de-selected for that purpose.

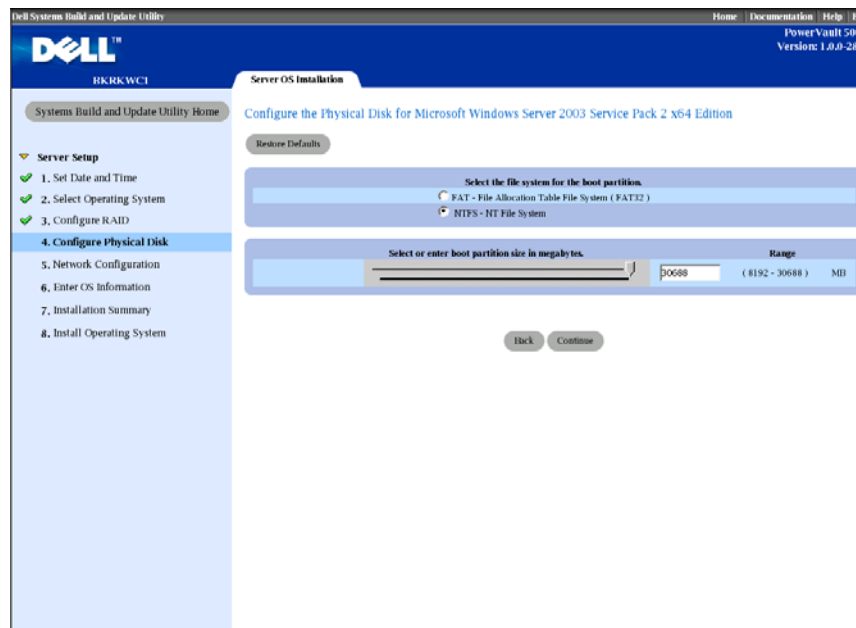
Figure 4-4. Create Virtual Disk Advanced Wizard (Step 2 of 4)



- f In the **Create Virtual Disk Advanced Wizard (Step 3 of 4)** screen, select **50 GB** as the size of the virtual disk. Leave all other settings unchanged and click **Continue**.
 - g When the **Create Virtual Disk Advanced Wizard (Step 4 of 4)** summary screen is displayed, verify the information shown and click **Continue**.
-  **NOTE:** While this screen allows you to assign any unconfigured disks as dedicated hot spares, assigning dedicated hot spares is not recommended. Instead, global hot spares are recommended. To learn more about allocating global hot spares, refer to the "Assign and Unassign Hot Spares" section of the OpenManage™ Server Administrator's User's Guide.
- h When the pop-up warning is displayed, click **OK**.
- All existing virtual disks on this controller will be deleted at the end of the interview process and all data will be lost.

- i At the **Configure the Physical Disk for Microsoft Windows Server 2003 Service Pack 2 x64 Edition** screen (see Figure 4-5), select **NTFS** as the file system for the boot partition.
- j Under **Select or enter boot partition size in megabytes**, move the slider to the right *as far as possible* to utilize the entire disk for boot partition. Click **Continue**.

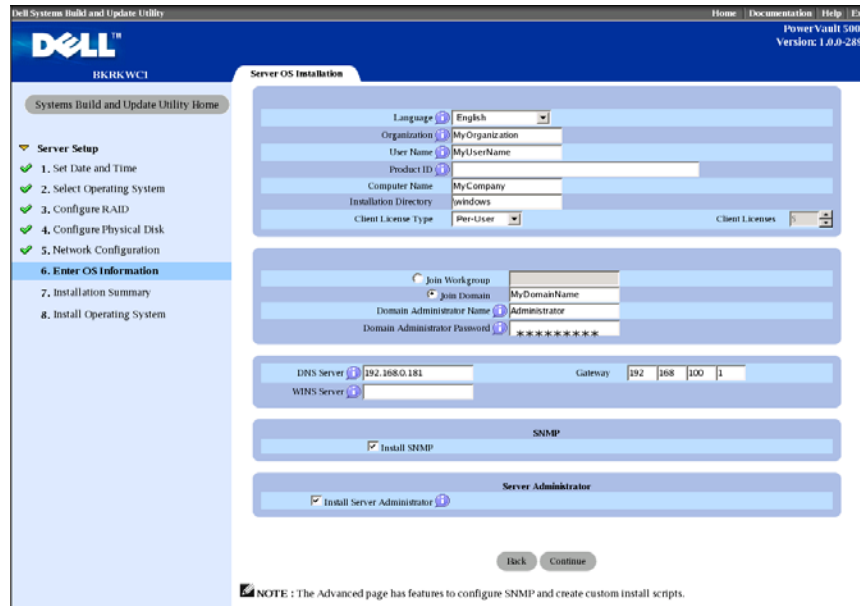
Figure 4-5. Configure the Physical Disk for Microsoft Windows Server 2003 Service Pack 2 x64 Edition



- 11 At the **Network Adapter(s) configuration** screen, specify your IP addresses and netmasks and click **Continue**. (Contact your network administrator for assistance in determining appropriate values to enter.)
- 12 At the **Enter OS Information** screen (see Figure 4-6), enter the following system information:
 - **Product ID:** Leave blank, since the System Build and Update Utility will automatically use the product identification (PID) included on the operating system CD.

- **Join Domain, Domain Administrator Name and Domain Administrator Password:** Being a member of a domain is a prerequisite for DPM installation. Enter the appropriate domain information for your network, or contact your network administrator for assistance.
 - **Install SNMP:** Select the check box.
 - **Install Server Administrator:** Select the check box.
- Click **Continue**.

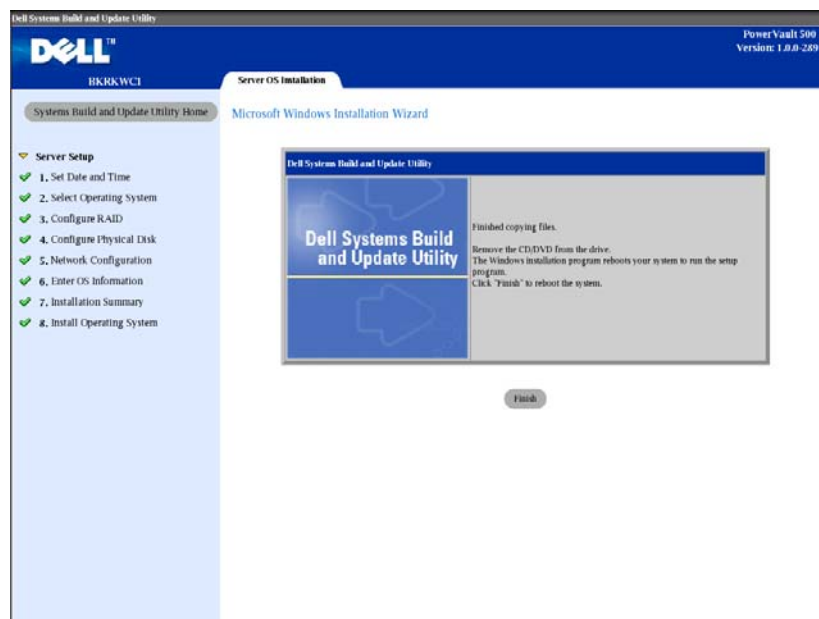
Figure 4-6. Enter OS Information Screen




- 13 When the **Operating System Installation Summary** screen appears, review the information displayed to ensure it is correct, then click **Continue**.
- 14 The **Microsoft Windows Server 2003 Service Pack 2 x64 Edition Installation Wizard** appears and the file copy process begins.
- 15 When prompted, insert the *Dell Systems Management Console* CD for OpenManage™ Server Administrator.

- 16 When prompted, remove the CD you inserted in the previous step and insert the *Microsoft Windows Storage Server 2003 R2 SP2 x64 Disk 1 of 2* CD.
- 17 When prompted, remove the CD from the drive and click **Finish**

Figure 4-7. Finish Screen



- 18 After you click **Finish**, the system automatically reboots and the operating system installation continues.

 **NOTE:** The automatic reboot and installation may take a few minutes to complete. Your system may reboot several times during the process.

- 19 Once the setup and reboot is complete, you will be prompted for an administrator password. Leave the password field blank and click **OK** to log on to the system.

- 20** When prompted for the *Windows Server CD 2*, insert the *Microsoft Windows Storage Server 2003 R2 x64 with SP2 Disk 2 of 2* CD that shipped with your system. If necessary, navigate to the appropriate drive and click **OK**.
- 21** The **Windows Server 2003 R2 Setup Wizard** appears. Click **Next**.
- 22** The **End-User License Agreement** screen appears. Read the agreement carefully, then select **Next**.
- 23** At the **Setup Summary** screen, click **Next**.
- 24** Once the Windows Server 2003 R2 Setup is complete, remove the CD from the drive and click **Finish**.
- 25** Click **yes** on the restart pop-up.
- 26** Again, you will be prompted for an administrator password. However, since there is still no password for the administrator account yet, leave the password field blank and click **OK**.
- 27** When prompted to insert the Service Pack 2 CD, insert the *Microsoft Windows Storage Server 2003 R2 x64 with SP2 Disk 1 of 2* CD that shipped with your system.
- 28** When prompted to insert the *Windows Server R2 Disk 2* CD, insert the *Microsoft Windows Storage Server 2003 R2 x64 with SP2 Disk 2 of 2* CD that shipped with your system.
- 29** After the Windows R2 additional components are installed and the system has rebooted, log in as administrator (with no password).
- 30** When the **Windows Server Management Window** appears, click **Close**.
- 31** If a **Windows Post-Setup Security Updates** screen appears and your system is connected to the internet, you may elect to update your system with the latest Microsoft security patches, and configure your system for automatic updates.
- 32** When the operating system installation is complete, set your administrator password.


The operating system reinstallation is complete.

BIOS, Firmware and Driver Updates

Before you install additional software on your system, such as the DPM application, refer to the *PowerVault Data Protection Solution Support Matrix* to determine the required BIOS, firmware and driver versions for your system. Updates to these components are available at support.dell.com.

Refer to the "Using the Server Update Utility (SUU)" and "Using the Dell Update Packages (DUP)" sections of the *PowerVault Data Protection Solution Quick Start Guide* for more information.

OS Updates Using Windows Update

 **NOTE:** Do not run Windows Update on this system until you have successfully completed all steps of the Dell PowerVault Data Protection Solution Configuration Wizard available at support.dell.com.

The Windows Update website at www.update.microsoft.com contains the latest security patches, fixes and updates for Windows Storage Server™. Updates to Windows Server 2003 R2 x64 Editions typically apply to Windows Storage Server 2003 R2 x64. Dell recommends keeping your system current with all updates available from www.update.microsoft.com.

Localizing the Operating System

This section describes how to localize the language settings on your PowerVault Data Protection Solution by installing and configuring the Multilingual User Interface (MUI) Pack. If you plan to use English only, you do not need to complete the steps in this section.

Installing Multilingual User Interface Pack

The PowerVault Data Protection Solution is shipped with a set of Multilingual Support CDs included with the Windows Storage Server 2003 R2 x64 with SP2 media. Locate the CD with the language you want to use. Refer to the *readme.txt* on that CD before proceeding with the following steps:

- 1 Insert your selected Multilingual Support CD into your system and locate the *muisetup.exe* file in the top level directory of the CD.
- 2 Run the *muisetup.exe* file by double-clicking on it.

- 3 In the installer window, accept the license agreement and then select the language(s) to be installed.
- 4 At the bottom of the window, select the language to be used when creating new accounts on this system.
- 5 Click **OK** to begin the installation.
- 6 After the installation is complete, run the R2 MUI pack installer(s) for the selected languages. The R2 MUI pack installer is named:

languageID_R2.msi

For example, the R2 MUI pack installer filename for Spanish is *0c0a_R2.msi*.

See Table 4-1 below for a list of language IDs. Language IDs are also contained in the **readme.txt** file on the Multilingual Support CD.

Table 4-1. Language ID Information

Language	ID
French	040c
German	0407
Japanese	0411
Korean	0412
Simplified Chinese	0804
Spanish	0c0a
Traditional Chinese	0404

Applying the MUI Language:

To apply the MUI language:

- 1 Click **Start**→ **Control Panel**→ **Regional and Language Options**.
- 2 On the **Regional Options** tab, select the appropriate region under **Standards and Formats** and click **OK**.
- 3 Update your browser default language and character encoding in one of the following ways.

If you are using Internet Explorer:

- a** Open a browser window.
- b** Select **Tools**→ **Internet Options**.
- c** In the **Internet Options** window, click **Languages**. If the language is not on the list, go to the **General** tab in the **Language Preference** window and, click **Add**.
- d** In the **Add Language** window, select a language and click **OK**.
- e** In the **Language** box, verify that the correct language appears.
- f** To remove a language, select the language and click **Remove**.
- g** Click **OK**.
- h** Close the **Internet Options** window.

If you are using Mozilla Firefox:

- a** Open a browser window.
- b** Select **Tools**→ **Options**.
- c** Under the **General** tab, in the **Options** window, click **Languages**.
- d** In the **Languages and Character Encoding** window, make the appropriate selections and then click **OK**.
- e** Close the **Options** window.
- f** Log off the system and log back in to enable the new MUI language.

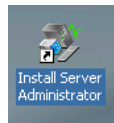
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OMSA Reinstallation

OpenManage™ Server Administrator (OMSA) must be installed on your system to monitor and configure virtual RAID 5 disks for use with PowerVault Data Protection Manager (DPM). Refer to the "Installing Dell OpenManage Server Administrator" section of the *Dell PowerVault Data Protection Solution Quick Start Guide* for OMSA installation details.

If you have completed the operation system reinstallation using the *Dell Systems Build and Update Utility* CD, the OMSA installer icon will be located on the desktop of your system (see Figure 5-1). Double-click the installer icon to begin OMSA installation.

Figure 5-1. Server Administrator Installer Icon



DPM Reinstallation

This section describes how to reinstall DPM on your PowerVault Data Protection Solution. Locate the *Microsoft System Center Data Protection Manager 2007* reinstallation DVD that came with your system (see Figure 6-1).

Figure 6-1. DPM Reinstallation DVD



Prerequisite Software and Network Configuration Requirements

Installing DPM requires certain prerequisite software and network configuration requirements.

Required Software

You must install the following software on your system before installing DPM. This required software is available on the DPM reinstallation DVD.


Table 6-1. DPM Prerequisite Software

Prerequisite hotfixes	Location on the DPM reinstallation media
PowerShell 1.0	\prereqs\KB926139-x64-ENU.exe
PowerShell MUI pack	\prereqs\KB926141-x64-ENU.exe
Hotfix KB940349	\prereqs\KB940349-v3-x64-ENU.exe

Run each software component shown in Table 6-1 by double-clicking each executable file, in the order shown.

Installing Windows Deployment Services (WDS) on PowerVault Systems Running Windows Storage Server 2003 R2 Workgroup x64 Edition

Windows Deployment Services (WDS) must be installed on Microsoft Windows Storage Server 2003 R2, Workgroup x64 Edition prior to installing DPM.

 **NOTE:** If Microsoft Windows Storage Server 2003 R2 Standard x64 Edition is installed, these steps are not required.

- 1 Click **Start** → **Control Panel** → **Add or Remove Programs** → **Add/Remove Windows Components**.
- 2 Select **Windows Deployment Services** and click **Next**.
- 3 When prompted to insert the Service Pack 2 CD, insert the *Microsoft Windows Storage Server 2003 R2, Workgroup Edition x64 with SP2 Disk 1 of 2 CD* and point to the appropriate drive.
- 4 When prompted to insert the Windows Server 2003 Standard x64 Edition CD, insert the *Microsoft Windows Storage Server 2003 R2, Workgroup Edition x64 with SP2 Disk 1 of 2 CD*.
- 5 When prompted to restart the computer, remove the CD and click **Yes**.

Prerequisite Network Configuration

To install DPM, the following network configuration requirements must be met. Contact your network administrator if you need assistance meeting these requirements.

- Your system must be on a network and have a valid IP address.
- Your system must be a member of a domain.
- All users must be logged on as domain users and be a member of the local administrators group.


To configure your system to meet these requirements, refer to the following sections in the *Dell PowerVault Data Protection Solution Quick Start Guide*:

- "Network Configuration"
- "Changing the Computer Name"
- "Joining a Domain and Adding the Domain User to Local Administrator's Group"

Virtual Disk Configuration for the DPM Storage Pool

The DPM application requires dedicated disk storage to store the replicas from the protected systems. You must create one or more RAID 5 virtual disks for this purpose.

Use OMSA to create the virtual disks to be used by DPM. Refer to the "Configuring Virtual Disks for DPM" section of the *PowerVault Data Protection Solution Storage Expansion Guide*.


 **NOTE:** Do not add available or free disks to the DPM Storage pool at this time. That task will be performed automatically when you run the PowerVault Data Protection Solution Configuration Wizard after installing the DPM application.

DPM Installation

To install DPM, use the *Reinstallation DVD with Multilingual Support - Microsoft System Center Data Protection Manager 2007* media that shipped with your system. Installation steps are below.

- 1 Log on to the system using a domain user account that is a member of the local administrators group.

- 2 Insert the *Reinstallation DVD with Multilingual Support - Microsoft System Center Data Protection Manager 2007* media. If the DPM Setup Wizard does not start automatically, double-click **Setup.exe** in the root folder of the DVD.
- 3 At the **Microsoft System Center Data Protection Manager 2007** screen, click **Install Data Protection Manager**.
- 4 On the **Microsoft Software License Terms** page, review the license agreement and accept the terms.


 **NOTE:** Once the installation completes, you can access the license agreement from the DPM Administrator Console by clicking the product information icon on the navigation bar.

- 5 On the **Welcome** page, click **Next**.
DPM begins a prerequisites check on all required hardware and software.
- 6 On the **Prerequisites Check** page, the setup installer displays whether your system meets all DPM software and hardware requirements.
 - a If all required components are present, a confirmation is displayed. Click **Next** to continue.
 - b If one or more required/recommended components are missing or noncompliant, a warning or error message is displayed.

A **warning** indicates that a recommended component is missing or noncompliant. If you choose to continue with the installation, you should plan to resolve the issue as soon as possible.


An **error** indicates that a required component is missing or noncompliant. You must resolve this type of error before you can continue with DPM installation.

- 7 On the **Product Registration** page, enter your registration information. A Certificate of Authenticity (COA) containing the DPM product key is included with your system.


 **NOTE:** Be sure to enter the DPM product key, not the product key for Windows Storage Server 2003 R2 x64 with SP2.

- 8 In the **Protection agent licenses** section:
 - a In the **Standard licenses** box, enter the number of licenses you purchased to authorize protection of file resources and system state. This refers to the number of S-DPMLs that you have purchased.

- b In the **Enterprise licenses** box, enter the number of licenses you purchased to authorize protection of both file, application and database resources. This refers to the number of E-DPMLs that you have purchased

 **NOTE:** Refer to the "DPM Licenses" section of the *PowerVault Data Protection Solution Quick Start Guide* for more information on DPM product keys and DPMLs. If you purchase additional licenses after you initially set up DPM, or reallocate licenses from one DPM server to another, you can update the number of available licenses in the DPM Administrator Console. For more information, see the DPM Administrator Console help.

- 9 On the **Installation Settings** page in the **DPM Program Files** section, accept the default folder.
- 10 In the **SQL Server settings** section, choose the option to install the **MS\$DPM2007\$** instance of Microsoft SQL Server, or provide the information to use an existing SQL Server instance on a remote system.
In the **Space requirements** section, space availability on the specified destination drives is shown.
- 11 If you choose to use an existing instance of SQL Server instead of installing it from the DPM reinstallation media, the **SQL Server Settings** page appears. In the **Instance of SQL Server** box, enter the name of the existing instance of SQL Server that you want to use (for example, **MS\$DPM2007\$**) and the appropriate administrator credentials.
Click Next.
- 12 On the **Security Settings** page, specify and confirm a secure password for the restricted **MICROSOFT\$DPM\$Acct** and **DPMR\$computer_name** local user accounts.
Click Next.

 **NOTE:** For security purposes, DPM runs SQL Server and the SQL Server Agent service under the **MICROSOFT\$DPM\$Acct** account. DPM sets up this account during installation. To securely generate reports, DPM creates the **DPMR\$computer_name** account. The password that you specify for these accounts does not expire.

- 13** On the **Microsoft Update Opt-In** page, select whether you want to sign up for the Microsoft Update service, then click **Next**.
You can change your Microsoft Update opt-in decision at any time after you install DPM 2007 at www.update.microsoft.com.
- 14** On the **Customer Experience Improvement Program** page, select whether you want to participate in the Customer Experience Improvement Program (CEIP), then click **Next**.
- 15** On the **Summary of Settings** page, review the summary information. To install DPM using the displayed settings, click **Install**. To make changes, select **Back**.
After the installation is complete, the installation status is displayed.
- 16** If prompted to insert the Windows Server 2003 SP2 media, insert the *Microsoft Windows Storage Server 2003 R2 x64 with SP2 Disk 1 of 2 CD*.
- 17** If prompted to insert DPM CD 2, insert the DPM reinstallation DVD.
- 18** Select **Close**. Then, restart your system.
- 19** Invoke the PowerVault Data Protection Solution Configuration Wizard. This will configure your system's firewall settings and add all available virtual disks to DPM storage pool.
Refer to the "PowerVault Data Protection Solution Configuration Wizard Reinstallation" for more information.

DPM Updates

For the latest updates to DPM, refer to www.update.microsoft.com.

PowerVault Data Protection Solution Configuration Wizard Reinstallation

Use the PowerVault Data Protection Solution Configuration Wizard to verify DPM prerequisites, configure the system's firewall, and add all available virtual disks to the DPM storage pool. The wizard is available for download from support.dell.com.

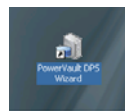
Installing the Wizard

To install the wizard:

- 1 Download the PowerVault Data Protection Solution Configuration Wizard application from support.dell.com to your system.
- 2 Double-click the wizard.
- 3 When the install panel appears, click **Next**.
- 4 Leave all the default options for the installer you selected.


The wizard icon will appear on the desktop as **PowerVault DPS Wizard**.

Figure 7-1. PowerVault DPS Wizard icon



Running the Wizard

Run the wizard by double-clicking the **PowerVault DPS Wizard** icon on your desktop. Select all defaults and click through until the wizard completes.

 **NOTE:** Since DPM is already installed, the mini-setup portion of the wizard will be skipped.

Recovering DPM Databases and Replicas

Advance planning is critical to being able to recover DPM configuration information, as well as data protected by DPM. The following are two ways to protect data:

- Use a secondary DPM server to back up the primary DPM server
- Back up DPM databases and replicas regularly to tape archives

The "Disaster Recovery" section of the *Microsoft System Center Data Protection Manager 2007 Operations Guide* contains more information on how to effectively plan for unexpected critical failure.

To restore data from a DPM database or tape archive, see the "Recovering DPM Server" section of the *Microsoft System Center Data Protection Manager 2007 Operations Guide*.

Other Documents and Resources

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

Microsoft Information

- *System Center Data Protection Manager 2007 Troubleshooting Guide.*
- *Deploying System Center Data Protection Manager 2007*
- *Microsoft System Center Data Protection Manager 2007 Operations Guide*

Dell Hardware Information

- *Dell PowerVault Systems Hardware Owner's Manual*
- *Dell PowerVault Data Protection Solution Support Matrix*
- *Dell PowerEdge™ Expandable Raid Controller 5/i and 5/E User's Guide*
- *Dell PowerEdge Expandable Raid Controller 6/i and 6/E User's Guide*
- *Dell PowerVault MD1000 Storage Enclosure Hardware Owner's Manual*
- *Dell PowerVault MD1000 Getting Started Guide*
- *Dell Systems Documentation CD*

Dell Software Information

- *Dell Systems Build and Update Utility CD*
- *Dell Systems Console and Agent CD*
- *Dell PowerVault Data Protection Solution Support Matrix*
- *Dell OpenManage™ Server Administrator User's Guide*
- *Dell PowerVault Data Protection Solution Quick Start Guide*
- *Dell PowerVault Data Protection Solution Storage Expansion Guide*
- *Dell™ OpenManage Server Administrator User's Guide*
- *Dell™ OpenManage IT Assistant User's Guide*

