

DELL™ PowerVault™ DL Backup-to-Disk Appliance Powered by Symantec™ Backup Exec™

Upgrading from Windows Server 2008 x64 to Windows Server 2008 R2

A Dell Technical White Paper

by

Dell Engineering



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Introduction

This document explains how to upgrade a Dell™ PowerVault™ DL Backup-to-Disk Appliance Powered by Symantec™ Backup Exec™ from Windows Server 2008 x64 to Windows Server 2008 R2. It details the various prerequisites that must be met prior to the upgrade of the operating system, as well as procedures to be completed after the OS upgrade to get the appliance back to a working state.

NOTE : Dell strongly recommends that you engage Dell Support for assistance during the upgrade of the operating system. If the required steps for the OS upgrade are not followed properly, the DL Backup-to-Disk Appliance could become unusable

Technical Resources

The following table lists additional documentation available for reference.

Vendor	Document or Resource Title	Location
Symantec	Symantec Backup Exec 2010 Administrator's Guide	backupexec.com/compatibility/
Dell	Dell PowerVault DL Backup to Disk Appliance Powered by Symantec Backup Exec User Guide	support.dell.com/manuals

Prerequisites

This white paper assumes that the DL Backup to Disk Appliance has already been configured. The following prerequisites must be met before initiating an upgrade of the operating system

- Windows Server 2008 x64 - Service Pack 2 (SP2)
- Backup Exec 2010 R3 (See [TechNote159346](#) for steps to download and install BE2010 R3)
- All Live Updates have been applied

Note: Dell recommends that all disk storage should be provisioned prior to the upgrade.



IMPORTANT: Upgrading the operating system on the DL Backup to Disk Appliance to Windows 2008 R2 before meeting the specified prerequisites can potentially lead to data loss.

Marking the Backup Exec Deduplication Storage Folder

The steps in this section are required if the Deduplication Storage Folder has been automatically provisioned via the Storage Provisioning Option (SPO). If the DSF has been created manually, then proceed to the next section.

During the upgrade to Windows Server 2008 R2, Windows removes the mount path for the Deduplication Storage Folder (DSF). In order to locate the DSF after the Windows R2 upgrade, follow the steps below to add a Windows drive letter.

1. Using an account with system administrator privileges, launch a command window:
Start -> Run "cmd"
2. Type DISKPART and issue the following commands:
 - a. LIST VOLUME (locate the DSF volume # based on the volume with the mount path of "C:\Program Files\Symantec\Backup Exec\PDDE_Volume"

- b. SELECT VOLUME # (where # is the number 0-n of the DSF volume)
- c. ASSIGN LETTER=<letter> (choose an unused drive letter, e.g. "K")

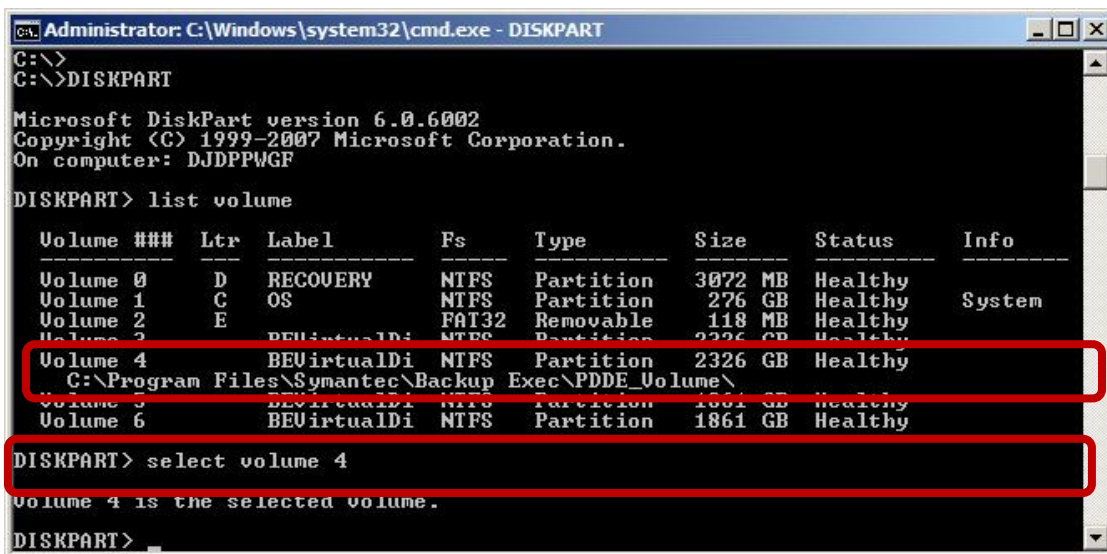


Figure 1: Detecting the Backup Exec DSF

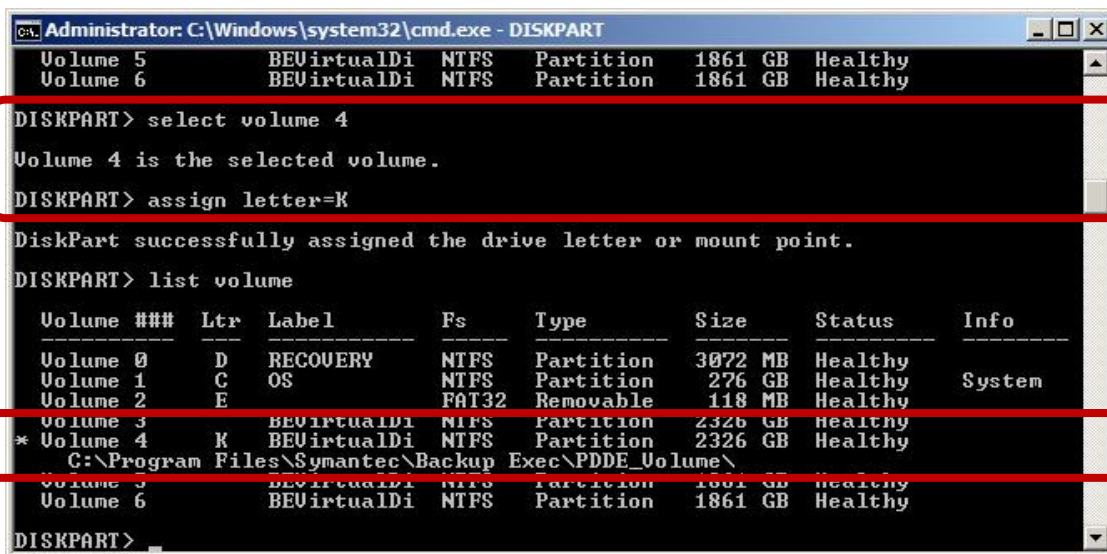


Figure 2: Assigning a Drive Letter to the Backup Exec DSF

Pre-Upgrade Steps

The following section lists the steps that need to be completed prior to initiating the upgrade of the operating system.

1. Navigate to the Job Monitor tab and Hold the job queue.

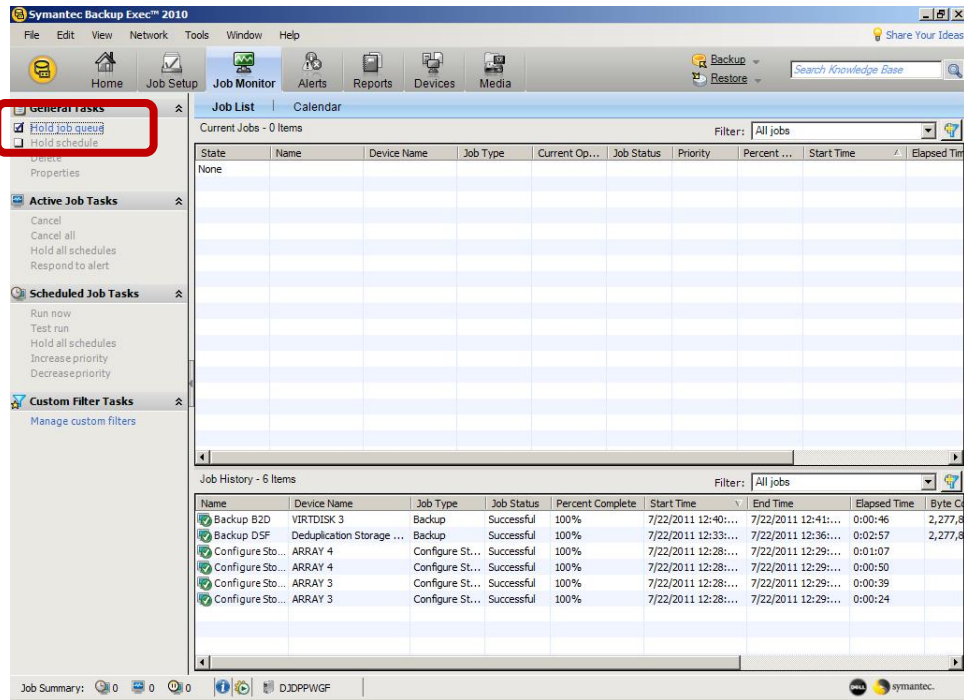


Figure 3: Holding the Job Queue

2. Uninstall Dell Server Administrator
 - a. Click Start -> Control Panel -> Programs and Features

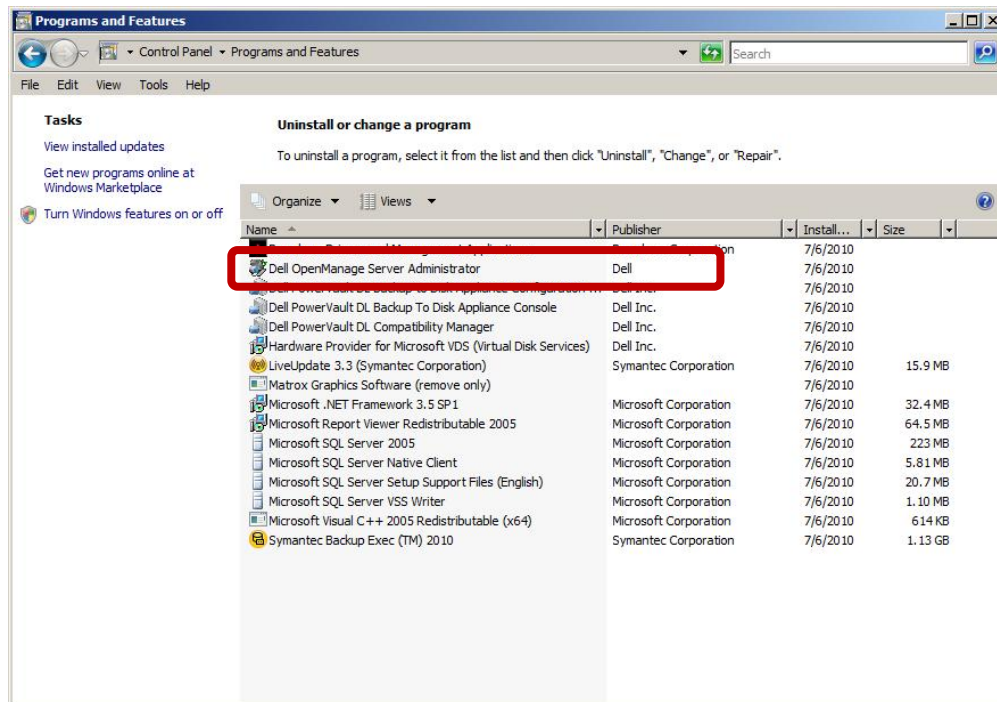


Figure 4: Uninstalling OMSA

- b. If this uninstallation procedure appears to hang, start the task manager.
- c. Locate the SNMP Service.

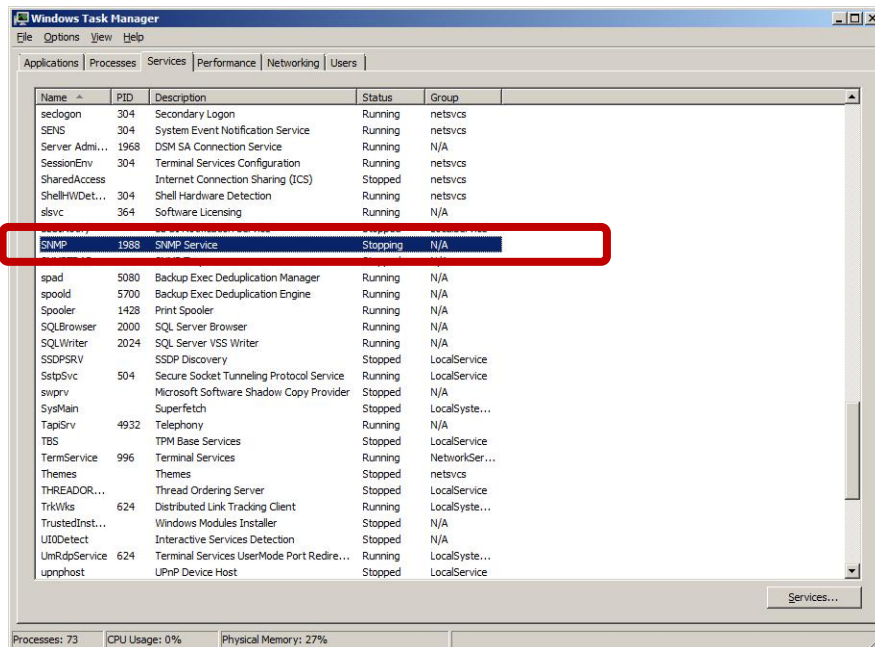


Figure 5: SNMP Service

- d. If the SNMP Service is in a Stopping state then Right-Click and select Go To Process.

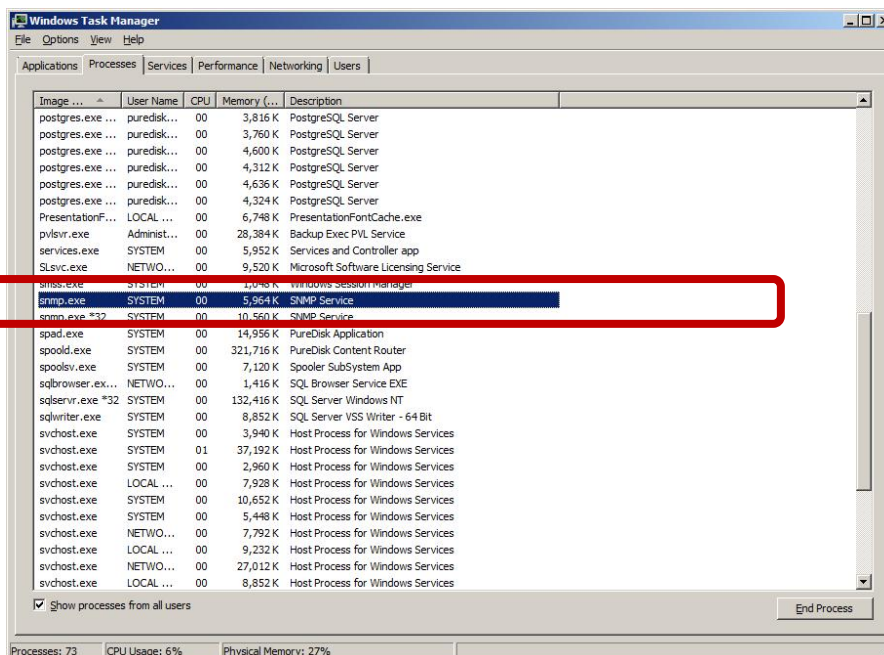


Figure 6: SNMP Process

- e. Locate the snmp.exe process, right click and select End Process. This step allows the OMSA uninstallation to complete.

3. **Note:** Before continuing, verify all running backup jobs have completed.
4. Reboot the system to complete the uninstallation of the Dell Server Administrator.

Windows R2 Upgrade

The following section details the steps you need to perform to upgrade the operating system to Windows Server 2008 R2.

1. Begin the Windows Server 2008 R2 Upgrade by running the **Setup.exe** on the Windows Server 2008 R2 media.
2. Select the **Full Server Installation** (not the Server Core).

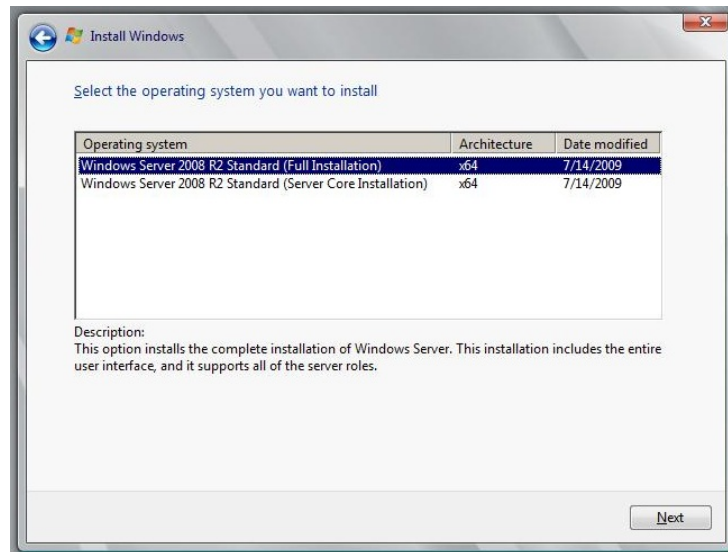


Figure 7: Full Installation vs Server Core

3. Select the option to **Upgrade**. The system will reboot several times during the upgrade.

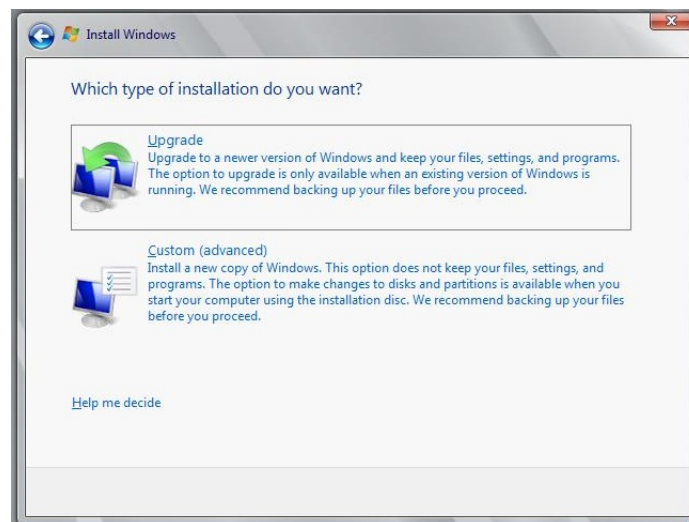


Figure 8: Upgrade vs Custom Install

Post OS-Upgrade Steps

The following section details the steps that you must run once the upgrade to Windows Server 2008 R2 is complete and before the DL Backup to Disk Appliance is ready to be used.

1. Download the Recovery and Update Utility (RUU) for your platform to a folder on the C:\ drive from <http://support.dell.com/support/downloads/> Depending on the hardware platform, the appropriate RUU can be downloaded by following the steps below
 - a. If you are performing the OS upgrade on a DL2000, Windows Server 2008 x64 is the only OS available in the Operating System drop-down list. Select the RUU download available under the IDM drop-down.
 - b. If you are performing the OS upgrade on a DL2100, Windows Server 2008 x64 is the only OS available in the Operating System drop-down list. There are two RUU downloads under the IDM drop-down. Make sure you select the RUU download for Windows Server 2008 R2.

Drivers & Downloads for PowerVault DL2100

Support Options

- Support Home Page

Drivers and Downloads

- Drivers Home
- Drivers Help
- Dell Supported Operating Systems

Product Support

- Warranty Status
- Support History & Status
- My Products and Services
- Software Support
- Global Recycling Options
- Boomi
- Compellent
- EqualLogic

Order Support

- Order Status
- Ownership Transfers
- Delivery
- FAQs
- Missing, Wrong or Damaged
- Returns

Contact Us

- Contact Technical Support
- Contact Order Support
- Contact Dell Sales
- International Support

Change Your Product

Help with Drivers and Downloads

Download Manager FAQ

Refine Your Results

Operating System: Windows Server 2008 x64

Category: All

More Filter Options

All PowerVault DL2100 (57 files)

- Applications (1)
- Bios (1)
- CD/DVD (2)
- Chipset (1)
- Diagnostics (3)
- Embedded Server Management (2)
- IDM (2)**

File Title(s)	Importance	Release Date	Version	Download & Options
Dell - Application Applies to: - PowerVault DL2100 Recovery and Update Utility	Recommended	6/9/2011	3.3.0.0_A00	Download Add To Download Lis

Download List

0 Items selected
(Add items from results belc)

Download

Save/Edit List

Email List

Windows 7 Compatib
More Details

Subscribe to

Figure 9: Downloading appropriate RUU for DL2100

- c. If you are performing the OS upgrade on a DL2200, there are two OS options available in the Operating System drop-down list. Make sure you select **Windows Server 2008 R2** as the Operating System. Only one IDM listing is displayed because the appropriate OS has already been selected.

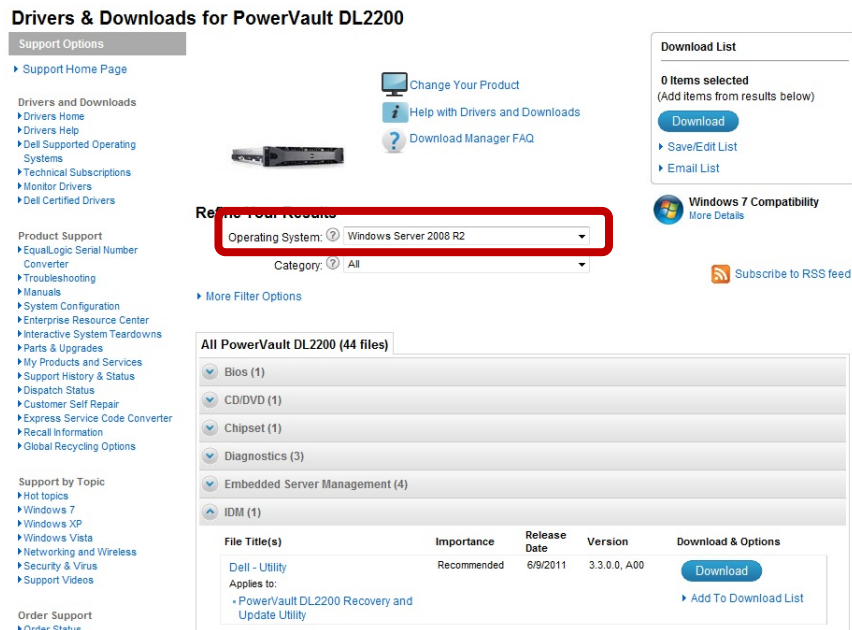


Figure 10: Downloading appropriate RUU for DL2200

- If you are performing the OS upgrade on a DL2100 or DL2200, download and install the OS Driver Pack available present under Lifecycle Controller drop-down.

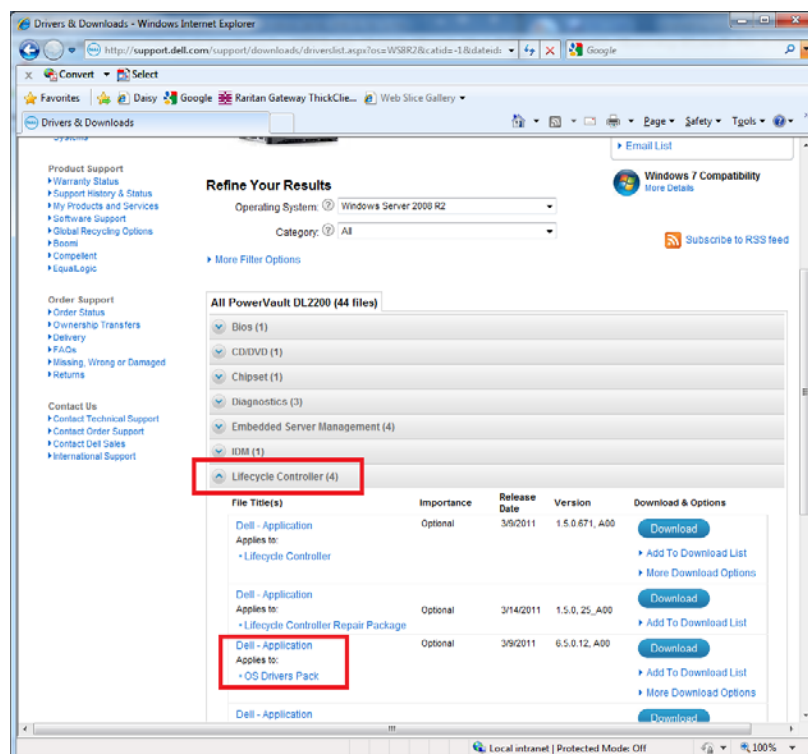


Figure 11: Downloading the OS Driver pack

3. Download Dell Server Administrator and unzip to a folder on the C:\ drive.

NOTE : The default folder location is C:\OpenManage



Figure 12: Unzipping the OpenManage WebPack

4. Run RUU to update the Dell applications and re-install OMSA. When prompted for the location of OMSA, choose the location specified in step 3.

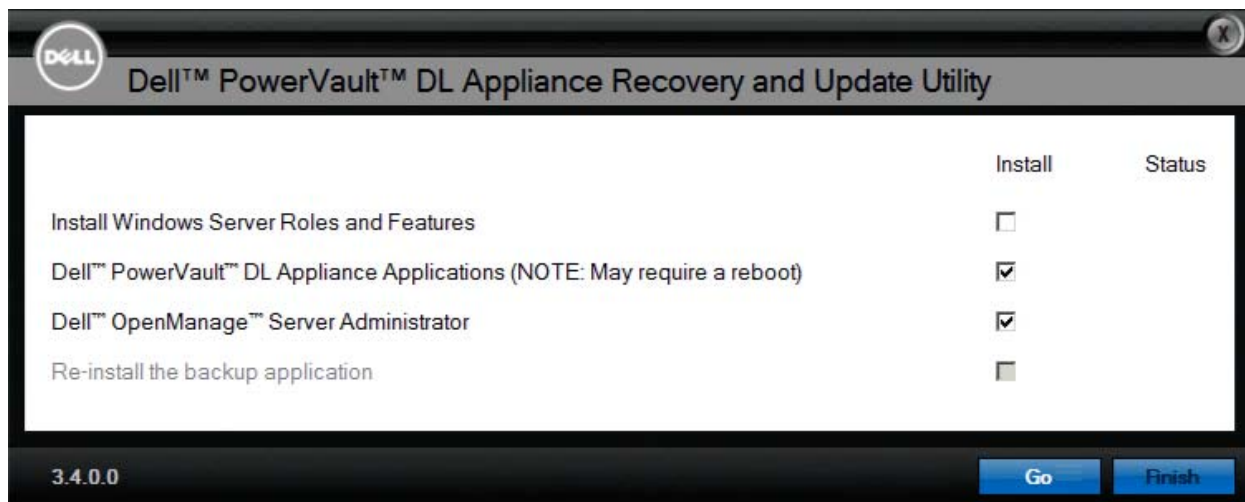


Figure 13: Running RUU

5. For the DL2100 and DL2200 appliances, view the Compatibility tab in the Appliance Console for any required software updates (BIOS, drivers, firmware).

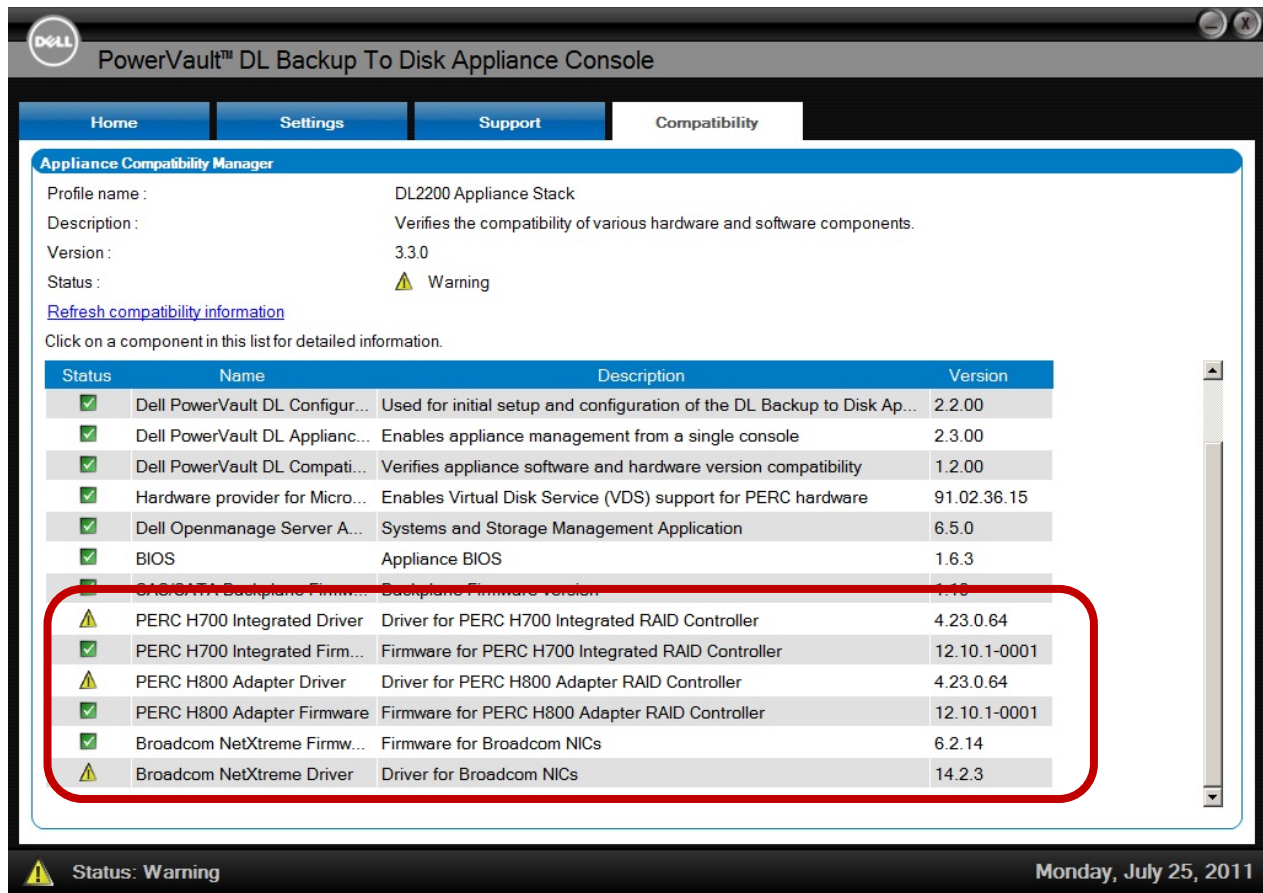


Figure 14: Compatibility Tab

- Download the required software updates from support.dell.com/support/downloads by navigating to the appropriate platform page as listed below.

PowerVault Appliance Version	Platform to download software updates
PowerVault DL2000	PowerEdge 2950
PowerVault DL2100	PowerEdge R710
PowerVault DL2200	PowerEdge DL2200

Note: Select **Windows Server 2008 R2** as the operating system before selecting and downloading any updates. Also, select the **Update Package for Microsoft Windows** format (if available).

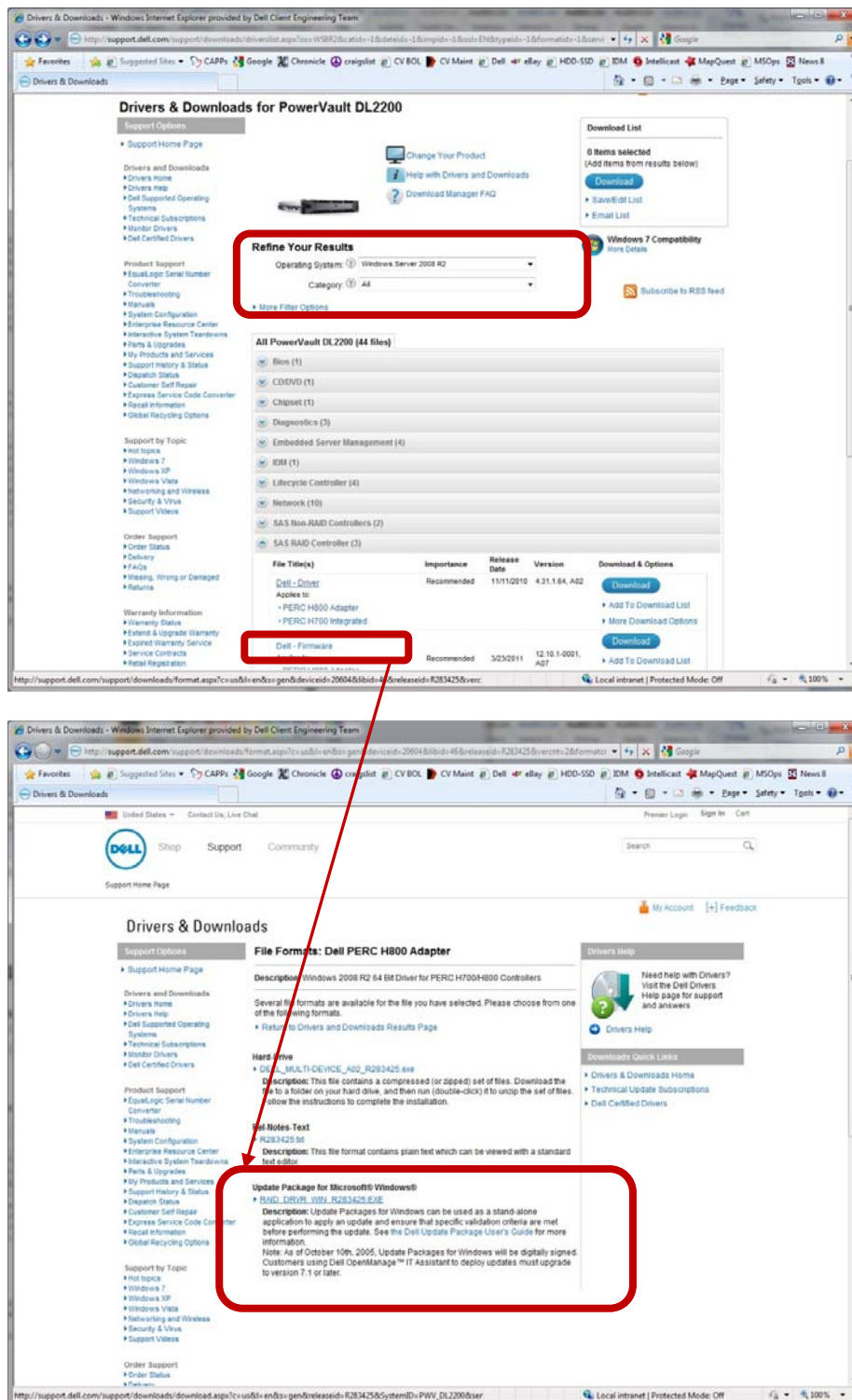


Figure 15: Windows Update Package Format

7. If your system does not include a Deduplication Storage Folder (DSF), start the job queue and skip the next section.

Backup Exec Deduplication Storage Folder Recovery

The following section details the steps required to bring the Deduplication Storage Folder back online after the post-OS Upgrade steps are completed.

1. If the DSF had been created manually, then proceed to step 8.
2. During the Windows Server 2008 R2 Upgrade, Windows removes the mount path for the automatically provisioned Deduplication Storage Folder (DSF).
3. Backup Exec indicates that the DSF is offline and the DSF will remain in that state until the DSF mount path has been restored.

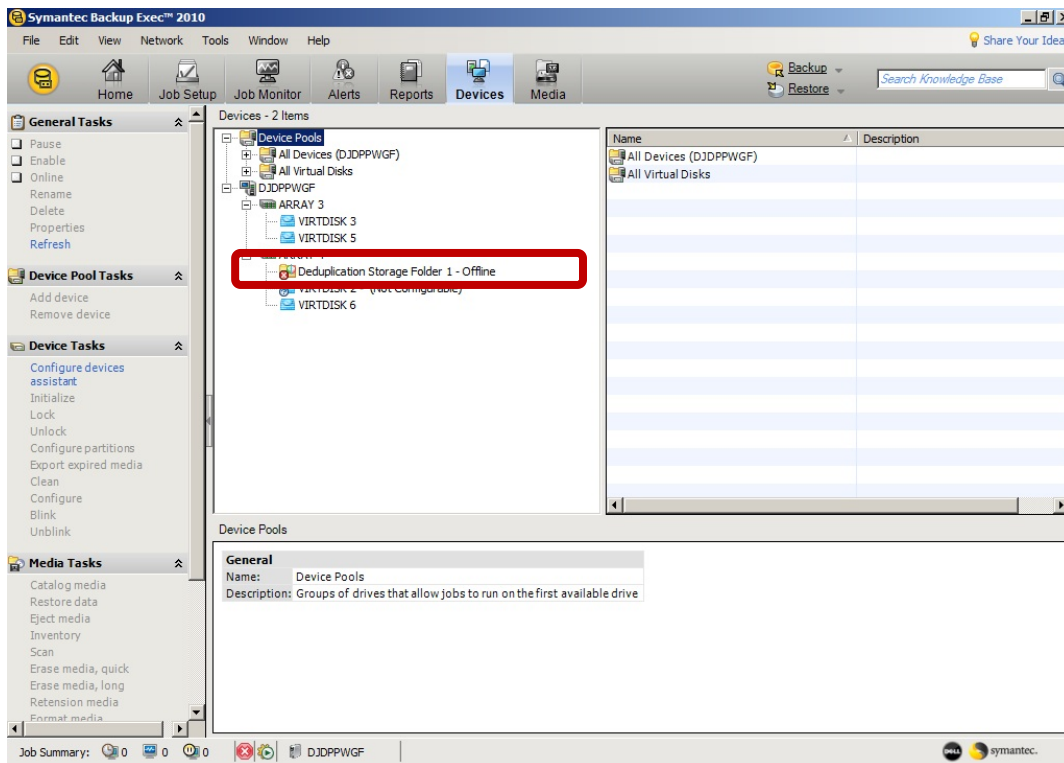


Figure 16: DSF Folder initially offline

4. Using an account with system administrator privileges, launch a command window:
Start -> Run "cmd"
5. Create the PDDE_Volume folder in the Backup Exec folder with the following command:
MKDIR "C:\Program Files\Symantec\Backup Exec\PDDE_Volume"
6. Run DISKPART and issue the following commands:
 - a. LIST VOLUME
 - b. Locate the DSF volume by the drive letter you assigned prior to the OS upgrade, e.g. "K". (See step 2c in the *Marking the Backup Exec Deduplication Storage Folder* section)

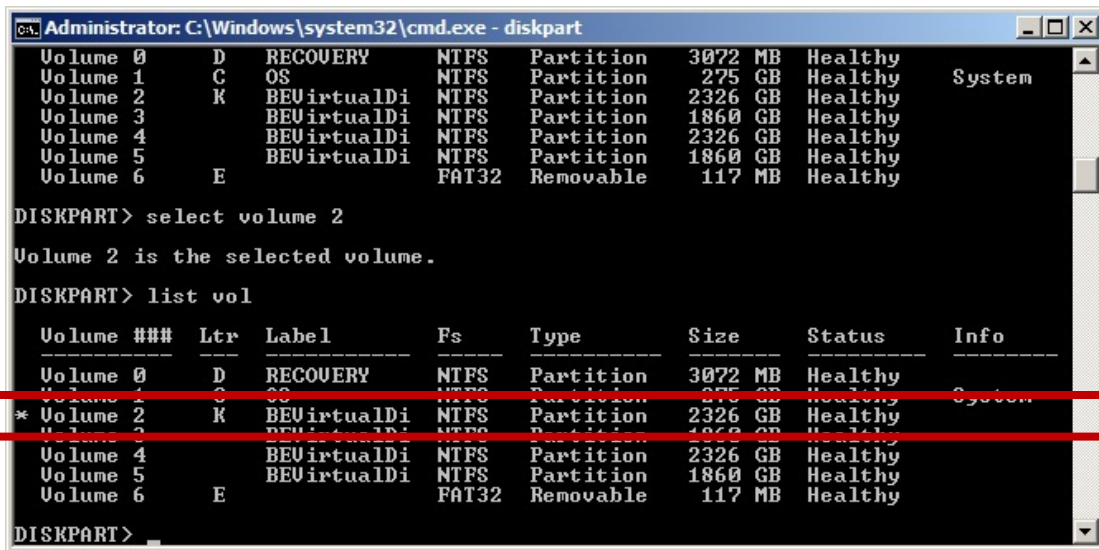


Figure 17: Detecting the Backup Exec DSF

- c. SELECT VOLUME # (where # is the number 0-n of the DSF volume)
- d. ASSIGN MOUNT "C:\Program Files\Symantec\Backup Exec\PDDE_Volume" (NOTE that the double quotes are required)
- e. REMOVE LETTER=<letter>

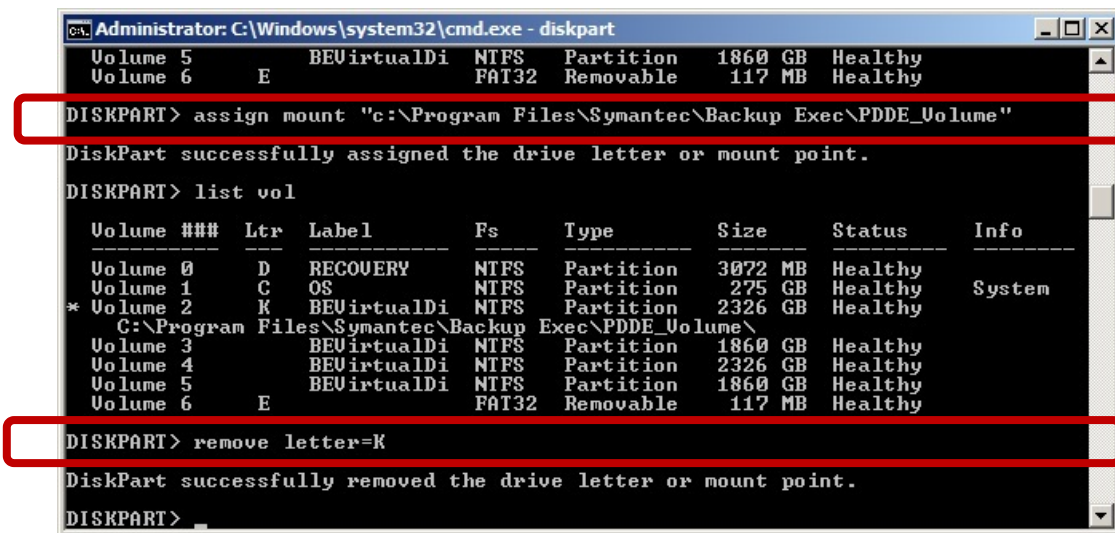


Figure 18: Removing the assigned drive letter from the Backup Exec DSF

7. Reboot the system.
8. Un-pause the Job Queue on the Job Monitor tab.
9. If the DSF remains offline, restart the BE Services.
10. Once the BE devices are back on line, Dell recommends that you run a Verify job on at least one DSF backup and one non-DSF backup.

11. If the verify job indicates the media cannot be found, then Inventory the virtual disk and Catalog all of the media (with the exception of the OST scratch media). Then reattempt the verification job.

Restoring the Dell Wallpaper

1. Open a windows file explorer.
2. Navigate to the C:\Windows\Web\Wallpaper folder.
3. Right-click on the file picador.jpg and select Set as desktop background.

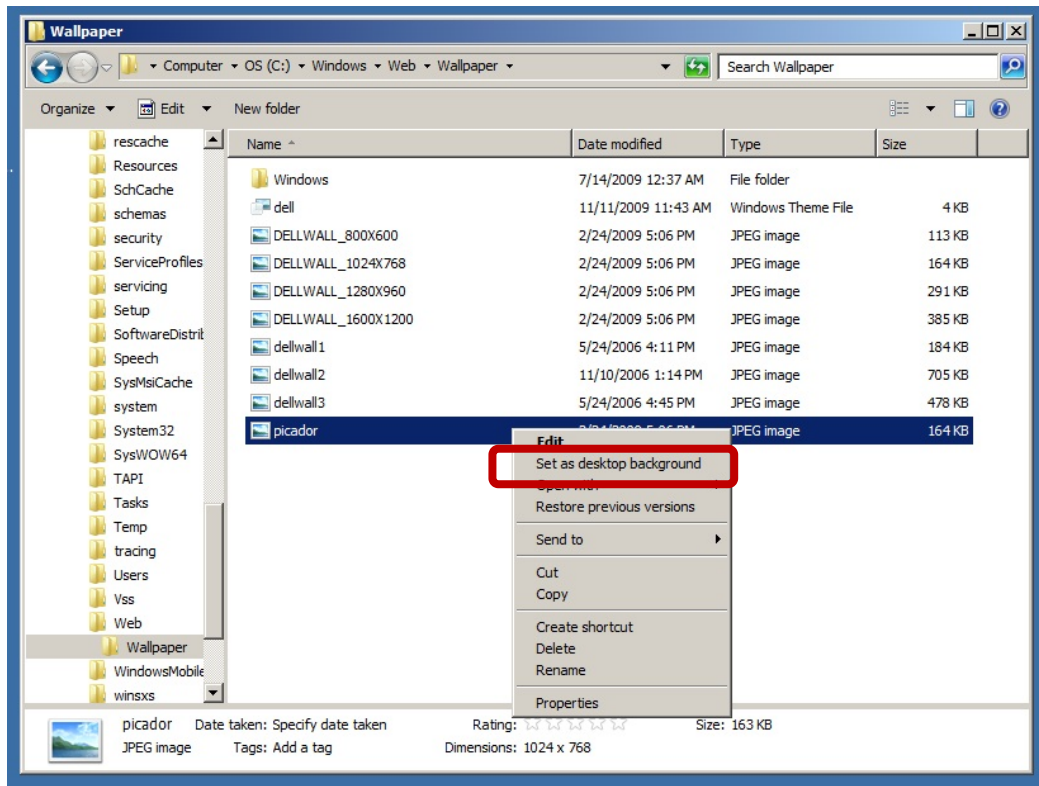


Figure 19: Restoring the Dell Wallpaper