Dell™ Backup and Recovery Manager V1.1



Users Guide

Notes and Cautions

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

\triangle	CAUTION: A CAUTION indicates potential damage to hardware or loss of
	data if instructions are not followed.

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1 Dell™ Backup and Recovery Manager V1.1 Overview

Dell™ Backup and Recovery Manager V1.1 is a basic and easy to use tool that helps you create and manage your file and system backups, and recover your computer and data in the event of a failure. Using the program, you will also be able to:

 Create a bootable <u>Recovery DVD</u> or external storage device that includes the <u>Windows Recovery Environment</u> and can include your Dell Factory Image (user choice). Your Dell Factory Image includes your operating system, and any drivers and applications installed when your system was built in the Dell factory (Microsoft Windows Vista and Windows 7 only - not available in Windows XP).

How does this benefit me? The Windows Recovery Environment allows you to automatically fix problems that are preventing Windows from starting. It also allows you to restore Windows to an earlier point in time, access a command prompt and among other things, launch Dell Backup and Recovery Manager and restore your system from a previously saved system backup image, all without having to be in Windows.

- NOTE: It is strongly recommended that you include your Dell Factory Image on your Recovery disk.
- 2. Create a bootable Dell Hardware Diagnostic CD.

How does this benefit me? The Dell Hardware Diagnostic CD contains a variety of hardware component troubleshooting tools that assist you in isolating your hardware problem.

Create a single legal backup copy of your <u>Microsoft Windows</u>
 <u>Operating System</u> on a DVD (all OS versions), or an external storage device (Microsoft Windows Vista and Windows 7 only). The copy also includes your Dell factory-installed drivers.

How does this benefit me? This allows you to create a one-time DVD backup copy of your original Microsoft Windows operating system. DBRM also includes all your Dell system drivers separately in their own Drivers folder on the DVD or external storage device. This allows you to get back to your original Windows operating system state and re-install your factory-installed Dell system drivers. It's another tool great in your arsenal.

- △ CAUTION: Reformatting your primary hard drive or deleting its Recovery partition will delete your the Dell Factory Image. As a result, the image will no longer be available as a Restore option.
- △ CAUTION: For desktops and notebooks, it is recommended that you temporarily disable your Power Management settings to avoid potential interruption to the backup and recovery process. Interrupting the backup and recovery process can result in potential data loss.

2 Overview Screen

The **System Backup Status** screen is the first screen displayed when you launch Dell Backup and Recovery Manager. You can also access it from other screens in the Dell Backup and Recovery Manager by clicking the **Overview** button.

The **System Backup Status** screen displays information about the last system backup image made. For Microsoft Windows Vista and Windows 7 systems that include a copy of your Dell Factory Image on the Recovery partition, it will be your initial system backup image shown until you back up your system.

For Windows XP systems that do not have a Recovery partition and a Dell Factory Image, the backup status information is replaced with a message informing you that a backup has not been made and advises you to create a backup now by clicking Backup System Now For more information, go to 2.2 If you have not created a system backup.



NOTE: It is recommended that you make frequent and regular system backups as a safeguard against possible future software or hardware failures that may occur unexpectedly. For more information, go to 13 Why do I need to back up?

NOTE: It is recommended that you backup your system before and after downloading any security updates and installing any applications.

2.1 If you have created a system backup

If you have created a system backup, the **System Backup Status** screen displays the following information about the last successful backup:

- Name of the backup, which you choose when creating a backup (for example,
 Dell Factory Image)
- Date and time the backup occurred



The screen also provides the link **Backup System Now** For information about backing up the system, go to **4 Backing up your system**.

To back up specified files on a system, go to <u>3 File Backup and Restore</u>.

NOTE: For Microsoft Windows Vista and Windows 7 systems, your Dell Factory Image is your initial system backup.

2.2 If you have not created a system backup

If you have a Windows XP system and have not created a backup, or if your Dell Factory Image was removed, the **System Backup Status** screen displays the following message:

You have not created a backup. It is recommended that you create at least one backup to use to enable your recovery in the event of catastrophic failure.

The screen also provides the link **Backup System Now ...**. For information about backing up your system, go to **4 Backing up your system**.

To back up specified files on a system, go to 3 File Backup and Restore.



3 File Backup and Restore

The **File Backup and Restore** screen provides links that execute Microsoft[®] Windows data backup and recovery functions for specific file types.

You can access the **File Backup and Restore** screen from other screens in the Dell Backup and Recovery Manager by clicking the **File Backup and Restore** button.

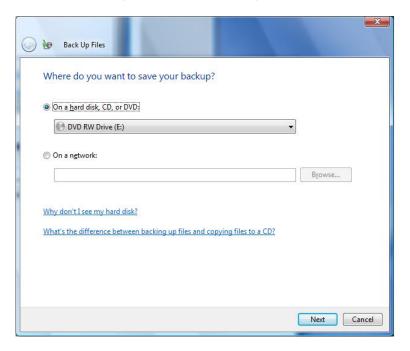
If you need additional help with the following screens, refer to Microsoft's Help system regarding backing up and restoring files.



3.1 Backing up your data files

- △ CAUTION: If you are using a notebook computer for backup or recovery, it is strongly recommended that you run the computer on AC power rather than battery power to avoid potential interruption to the backup and recovery process. Interrupting a backup and recovery process can result in potential data loss.
 - 1. Click Backup files....

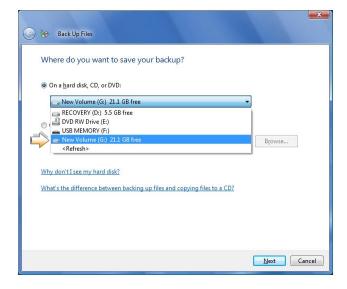
The Where do you want to save your backup? screen appears.



2. Specify the location where you want to save the backup file.

You can save the backup to a hard drive, CD, DVD, or network location.

3. Click Next.

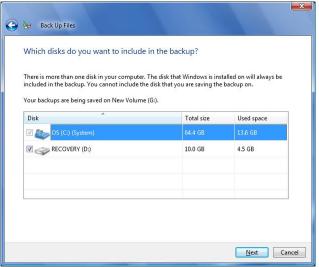


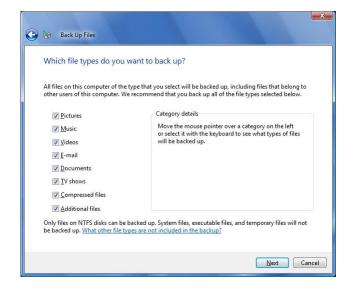
The Which disks do you want to include in the backup? screen appears, displaying a list of disks.

- 4. Select all of the disks you want to back up by selecting the check box beside each disk.
- NOTE: The disk on which the Windows operating system is installed is always automatically included in the backup. However you cannot include the disk where the backup image will be stored.
- 5. Click Next.

The Which type of files do you want to back up? screen appears, displaying a list of file types.

- 6. Select the check box for each file type you want to back up.
- 7. Click Next.

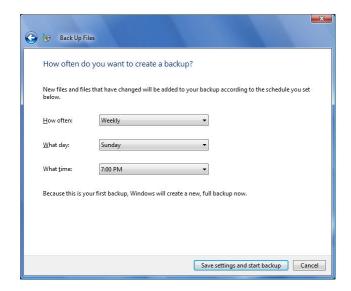


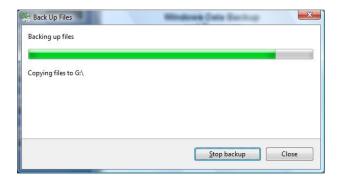


The How often do you want to create a backup? screen appears.

- 8. Using the drop-down menus, select the time increment, day of the week, and the time of day you want to run the backup.
- Click Save settings and start backup to begin the backup process.

A progress bar displays as Windows creates the backup. When the backup is complete, Windows displays a balloon message above the system tray indicating the backup was successful.





3.2 Restoring your data files

- △ CAUTION: If you are using a notebook computer for backup or recovery, it is strongly recommended that you run the computer on AC power rather than battery power to avoid potential interruption to the backup and recovery process. Interrupting a backup and recovery process can result in potential data loss.
- NOTE: The Restore files... link will be inactive if you have not previously backed up any files.

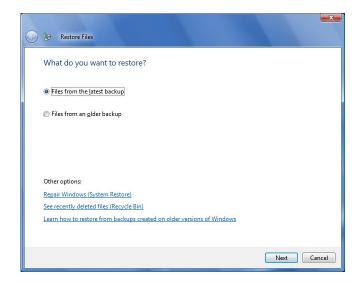
- 1. Click Restore files....
- 2. Select the backup from which you want to restore files: Files from the latest backup, or Files from an older backup.
- 3. Click Next.

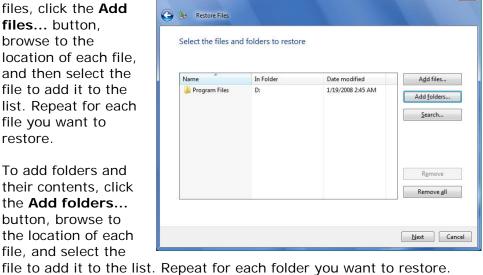
The Select the files and folders to restore screen appears.

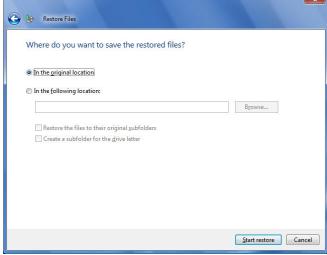
- 4. Select files and folders to restore:
 - a. To add individual files, click the Add files... button, browse to the location of each file, and then select the file to add it to the list. Repeat for each file you want to restore.
 - b. To add folders and their contents, click the Add folders... button, browse to the location of each file, and select the
 - c. To search rather than browse for files and folders, click Search....
- 5. Click Next.

The Where do you want to save the restored files? screen appears.

- 6. Select where you want the files restored.
- 7. Click Start restore.
- 8. When complete, click Finish.



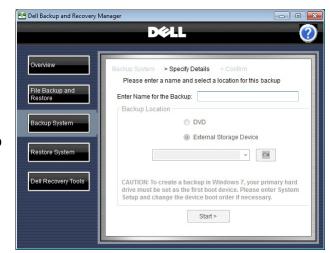




4 Backing up your system

- △ CAUTION: If you are using a notebook computer for backup or recovery, it is strongly recommended that you run computer on AC power rather than battery power to avoid the potential interruption to the backup and recovery process. Interrupting a backup and recovery process can result in potential data loss.
- **NOTE:** To use the Dell Backup and Recovery Manager, you must have Administrator log-in rights or be listed in the Windows[®] Administrators Group.
- NOTE: When you perform a system backup, only your primary partition where your operating system is stored (commonly labeled C:) will be backed up. Other content that resides on this partition will also be included in the system backup. However if you have information stored on external drives, other internal drives, or on other hard disk partitions, you must use the File Backup and Restore tool in the Dell Backup and Recovery Manager to back up this information. This tool is accessed by clicking the File Backup and Restore button.
- NOTE: Store your DVD backup media in a cool dark place and handle it with care using protective sleeves or cases. USB Flash media is not recommended for long term storage. External hard drives offer the greatest ease of use, best performance, stability, and value. However they are subject to damage from heat, physical shock, electromagnetic pulse, and files can be deleted by other users in a non-secure environment.
- △ CAUTION: To create a backup in Windows 7, your primary hard drive must be set as the first boot device. Please enter your BIOS System Setup and change the device boot order if necessary.
 - 1. Click Backup System.
 - The **Specify Details** screen appears.
 - 2. Type a name for the backup.
 - Select the location where you want to save the backup (DVD or External Storage Device) and then select the device from the drop-down menu.

Use the Refresh button adjacent to the drop-down menu to clear your selection



or to add a new external storage device attached after the drop-down was populated.

NOTE: For external storage devices, clicking Refresh will de-select a device from the drop-down menu and refresh the list of available devices. If the Start button was enabled, it will be disabled until you select a new device.

If you select a DVD RW device from the drop-down menu and a blank disk was found in the device, the Start button will be enabled. Otherwise you will be asked to insert a blank DVD in the drive. Click **Refresh** after the drive spins up to enable the Start > button.

Click Start >.

If you select DVD or insert a small USB flash drive, the backup will automatically be made bootable and you will go straight to the **Confirm** screen shown in step 4. If you select a large External Storage Device and it is *not* already bootable, a new screen with a check box labeled **Make Backup Bootable?** will appear.

△ CAUTION: The process of making a bootable backup will erase all content on the external storage device.

The default state of this check box is unchecked because the drive may contain content you do not want erased.

Select the Make Backup Bootable? check box only if you want to make the External Storage Device bootable. (This is strongly recommended. A bootable backup is necessary to restore to a new or replacement hard drive in the event of a primary hard drive failure.)

When you select the Make Backup Bootable? check box, a Caution statement will appear. Read it carefully and then select the Remove all my data and reformat my External Storage Device check box.







The **Confirm** screen appears.

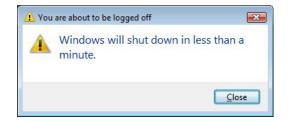
△ CAUTION: The following step starts the process of creating the backup. When you start the process, your system automatically reboots into the Windows Recovery Environment to create the backup. When the process is complete, your system automatically reboots the Windows operating system, after which you may resume



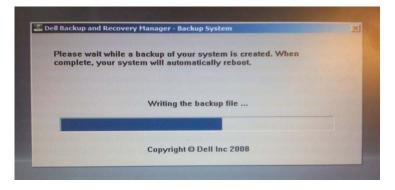
your normal activities. To avoid potential data loss, close any open files and applications before proceeding to the next step.

5. Click Start.

You will be logged off and your system will reboot into the Windows Recovery Environment (Microsoft Windows Vista and Windows 7 only). Windows XP will boot directly into its backup system executable.



A window appears displaying a progress bar during the backup creation process. If you selected your external storage device as the location for your backup, the backup will be written directly to the drive and when finished, your system will reboot automatically into

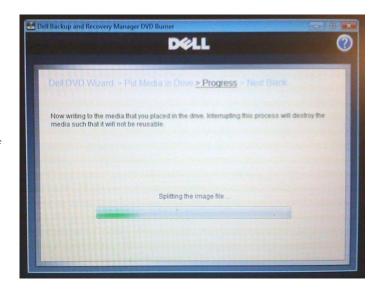


Windows to your desktop. You're done!

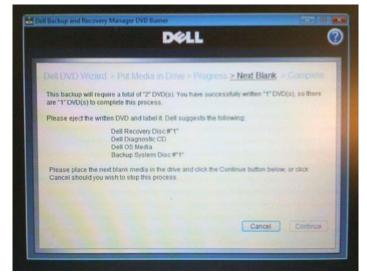
If you selected DVD for your backup, the backup file image will be created on your primary hard drive. When finished, your system will automatically reboot into Windows to a **Dell Backup and Recovery Manager** DVD Burner screen. If blank media was already in the DVD drive, the process will begin automatically. Otherwise you will be asked to insert a blank disk into the DVD drive and click **Continue**.

NOTE: If your DVD is blank and the correct type, the drive will automatically spin up and the burn process will begin or continue on its own. It will not be necessary to click **Continue**.

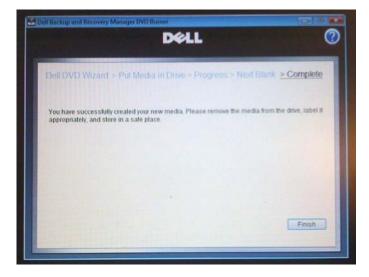
If the backup image size exceeds the size of a single DVD, the image file will be split up so it can span multiple DVDs. The message **Splitting the image file** ... will be displayed above the progress bar until this part of the process completes. Once complete, the message **Writing data to your drive** ... will be displayed.



Dell Backup and Recovery Manager will tell you how many disks you will need for your backup set. Usually this information will be displayed on the screen after the 1st
DVD is written and ejected.



When the final DVD is written and ejected, click **Finish** and you will be returned directly to your Windows desktop. You're done!



5 Restoring your system

5.1 Restoring from within Windows

NOTE: To use Dell Backup and Recovery Manager, you must have Administrator log-in rights or be listed in the Windows[®] Administrators Group.

From the **Restore System** screen, you can restore your system using a saved backup file.

You can access the **Restore System** screen from other screens in the Dell Backup and Recovery Manager by clicking the **Restore System** button.

- △ CAUTION: To avoid losing the ability to create your OS Media backup, it is strongly recommended that you create your OS Media backup before your first attempt to restore from a system backup. Once you restore from a system backup, the OS Media option will no longer be available on the Dell Recovery Tools screen.
- NOTE: When you perform a system restore, only your primary partition where your operating system is stored (commonly labeled C:) will be overwritten. Other partitions you may have created on the primary drive will not be overwritten or changed in any way.
- NOTE: If you backed up your system using the Backup System tool, and your files from other drives and/or partitions using the File Backup and Restore tool, you will be able to restore your system to the exact state when your backups were made, even after a catastrophic hard disk failure. System backups made on an external storage device are bootable and can be used to completely restore your primary partition including your applications and data that are stored there. Once restored, use your file backup to restore your applications and data to other drives and partitions.
- △ CAUTION: Restoring your system using a previously created backup, your system and its data will be overwritten. It is strongly recommended that you back up current data that you want to keep before proceeding with the restore process.
- △ CAUTION: If you are using a notebook computer for backup or recovery, it is strongly recommended that you run the computer on AC power rather than battery power to avoid potential interruption to the backup and recovery process. Interrupting a backup and recovery process can result in potential data loss.

- 1. Click Restore System.
- Select the backup file (also called "backup image") you want to use to restore your system from the drop-down menu.
- NOTE: The drop-down menu retains the names of previously created backup images even though they may not be currently available on your system. This is normal. If their names



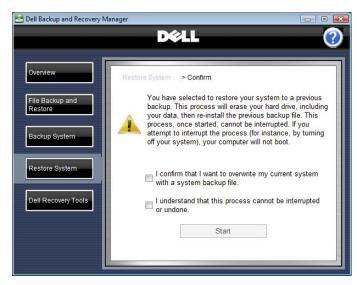
were not retained, you would not be able to restore from a backup image that resides on DVD or an external storage device that may not be presently attached to your system. By retaining their names, you will not lose your ability to restore them in the future.

3. Click Next >.

The **Confirm** screen appears.

- △ CAUTION: The following step starts the process of restoring your system. This process reboots your system into the Windows Recovery Environment, erases your hard drive, and then installs data from the selected backup file. Once you start this process, it cannot be stopped or interrupted. If you attempt to interrupt the restore process by turning off the system, the system will not reboot.
 - 4. Read the Caution on the screen, and then select the check boxes to confirm that you want to overwrite your system with the selected backup file and that you understand that the restore process cannot be interrupted or undone.
 - 5. Click Start.

A window appears displaying a progress bar as the restore operation completes.



6. The congratulatory screen appears when the process completes.

Click Finish.



5.2 Restoring from a bootable backup

- △ CAUTION: It is strongly recommended that you review the NOTE and CAUTIONS in the preceding section before continuing in this section.
- 1. You may boot from either DVD or an external storage device, depending on which media you used to make your system backup.

Insert DVD #1 of your set into your DVD drive *or* attach your external storage device, and boot your system. If you primary hard drive is the first boot drive in your system BIOS, press **F12** during boot to bring up the **Boot Options** screen and select either your optical disk drive (e.g. CD/DVD/CD-RW Drive) or your external storage device (e.g. USB Storage Device).

If you selected your optical drive as the drive to boot from, you will be asked to **Press any key to boot from CD or DVD** If you do not press a key, your system will skip your optical drive and attempt to boot from your internal hard drive. Should this happen, immediately press **CTRL** + **ALT** + **DELETE** to reboot and during the boot, press **F12**. Select your optical drive and when the message appears, press a key to boot from your optical drive.

When your system boots from the bootable backup image, you will boot into the Windows Recovery Environment (Microsoft Windows Vista and Windows 7 only). Since Windows XP does not have a Windows Recovery Environment, it will boot directly into its restore system executable and display a screen similar to the one shown in step 5 below.

- 2. Within the Windows Recovery Environment, a screen appears listing the operating system language and keyboard layout. These should be your defaults. Click **Next**.
- 3. The tool begins searching your system for the Windows installation to repair. When the search completes, it typically highlights your operating system on your internal hard drive. For restore purposes, this is irrelevant. Click **Next**.

4. The Choose a recovery tool screen appears listing all the available tools you can use to recover your system. These options are provided to allow you to troubleshoot and repair your operating system on your primary hard drive.

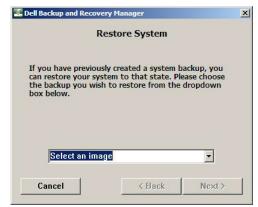
To restore your system from a system backup created using Dell Backup and Recovery Manager, click **Dell Backup and Recovery Manager** at the bottom of the menu.



System Recovery Options

 A Dell Backup and Recovery Manager Restore System screen appears with a drop-down menu listing the backups currently available on your system. Select the backup you want to restore and click Next >.

If you do not see the backup you want to restore, verify that you have the correct external storage device attached or the correct DVD inserted in the drive.



6. A Restore System screen appears with a Warning message. Read the message carefully and then click the check box to confirm you want to restore and click Next > to begin the restoration process.

If you are restoring from a multiple DVD set, you will be asked at some point to insert DVD #2 and so on in sequence until the restoration is complete.



7. When the restoration process completes, a Congratulations screen will appear.

Click Finish.



5.3 Restoring your system from the Windows Recovery Environment

- In Microsoft Windows Vista or Windows 7, initiate a reboot of your system and press F8 during the boot to bring up the Advanced Boot Options screen.
- The first highlighted menuitem is Repair Your
 Computer. Press Enter to select it. This launches the Windows Recovery Environment.
- At the first System Recovery
 Options screen, click **Next** to
 select the default keyboard choice
 shown.
- 4. A log-on screen may appear. After you log on, the System Recovery Options **Choose a recovery tool** screen appears.

Click the **Dell Backup and Recovery Manager** link at the bottom of the screen.

5. From here, the steps to restore a system image are identical to those in the preceding section

beginning at step 5. Refer to steps 5 through 7 the preceding section to restore your system.





6 Managing your system backups

6.1 Exporting a system backup

- From the Backup System screen, click Manage backups
- 2. Select the backup you want to export from the drop-down menu, and then click **Export**.
- NOTE: You cannot export an image to DVD that is larger than the capacity of a single DVD. Nor can you export an image from a DVD that spans more than one DVD.

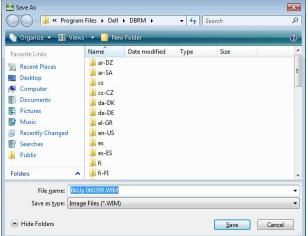
A Windows **Save As** dialog box appears. Select the location where you want to save the exported image if other than the default DBRM folder.

- 3. Type a new file name or select an existing file to export, and then click **Save**.
 - If you typed a new file name, the Export Backup screen appears. Proceed to step 4.
 - If you selected an existing file, the
 Append to File
 Confirm dialog box appears. Click Add to append the exported file to the existing file.

The **Export Backup** screen appears.

4. Type a **Friendly name** and then click **Save**.







A Friendly name is just an alternate name you can give an image when you export it. You should make it descriptive for easy identification.

A progress bar appears at the bottom of the **Export Backup** screen. When this function completes, the **Manage Backups** screen appears.

6.2 Deleting a system backup

- From the Backup System screen, click Manage backups
- Select the backup you want to delete from the drop-down menu, and then click **Delete**.



The **Delete Backup** screen appears, displaying in red the name of the file you want to delete.

- 3. To confirm deletion, select the check box by Yes, I want to delete the above system backup. I understand this action is permanent and cannot be undone.
- △ CAUTION: Backup deletion cannot be undone. Before proceeding to the next step, ensure that you have selected the correct backup for deletion.
 - 4. Click **Delete Backup**.

A progress bar appears at the bottom of the **Delete Backup** screen. When this function completes, the **Manage Backups** screen appears.



6.3 Renaming a system backup

- 1. From the Backup System screen, click Manage backups
- 2. Select the backup you want to rename from the dropdown menu, and then click Rename.



> Rename Backup

Type the new name for the backup in the space provided then click

060209E6400A

The **Rename Backup** screen appears, displaying in red the name of the file you want to rename.

- 3. Type a new name for the backup.
- 4. Click Save.

When this function completes, the Manage Backups screen

appears. **NOTE:** Your original Dell



New Name

Dell Backup and Recovery Manager

Restore System

Dell Factory Image copies on your Recovery DVD or external storage device.

7 Dell Recovery Tools

NOTE: To use the Dell Backup and Recovery Manager, you must have Administrator log-in rights or be listed in the Windows® Administrators Group.

The **Dell Recovery Tools** provides the following recovery tools for creating bootable media:

Dell Recovery Media (Microsoft Windows Vista and Windows 7 only): Use this tool to create a bootable recovery DVD or External Storage Device that includes the Windows Recovery Environment, and can include your Dell factoryinstalled image. The recovery disk is used to restore a backup, including your Dell factory image (if included), or repair your operating system. For information on recovering



in Windows XP, see **8 Windows Recovery Environment**.

- NOTE: Dell Recovery Media does not contain any drivers, applications, files or folders, or settings you have added since receiving your system from the Dell factory.
 - **Dell Diagnostics:** Use this tool to create a bootable Dell Hardware Diagnostics CD.
- NOTE: This option appears only if Dell Diagnostics is installed on your system.
 - **OS Media:** Use this Windows tool to create a bootable DVD or a bootable External Storage Device (Windows Vista and Windows 7 only) for reinstalling the operating system and Dell factory-installed drivers.
- **NOTE:** This option appears only if the OS Media directory is installed on your system and you have not already created your one-time OS Media backup copy.

You can access the **Dell Recovery Tools** screen from other screens in the Dell Backup and Recovery Manager by clicking the **Dell Recovery Tools** button.

7.1 Dell Recovery Media (Not available in Windows XP)

△ CAUTION: If you are using a notebook computer for backup or recovery, it is strongly recommended that you run the computer on AC power rather than battery power to avoid potential interruption to the backup and recovery process. Interrupting a backup and recovery process can result in potential data loss.

Marcovery Disk

1. Click Create a recovery disk or device....

The **Choose Media** screen appears.

Select the type of media (DVD or External Storage Device) where you want to save your backup.

Options for using a factory image appear on the screen.

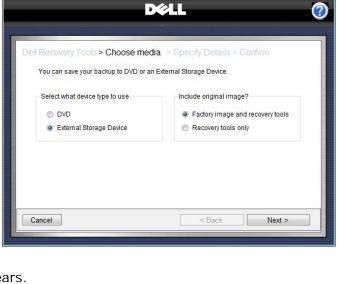
- 3. Select whether you want to include the factory image (recommended).
- 4. Click Next >.

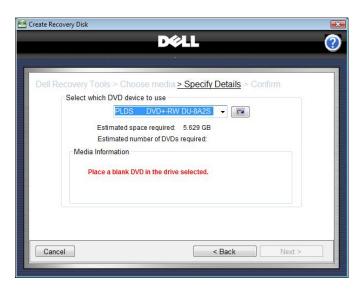
The **Specify Details** screen appears.

- 5. If you selected **DVD** in step 2:
 - a. Select the recording device from the drop-down menu.
 - b. If there is no disk in the recording device, insert a blank DVD in the selected drive and click Refresh.

The **Specify Details** screen refreshes, displaying the media capacity of the DVD and the number of DVDs required.

c. Click Next >.





The **Progress** screen appears displaying a progress bar. If necessary, you will be asked to insert the next DVD.

When the recording is complete, a message appears indicating that your recovery media has been created.

d. Click Finish.

Label your DVD and store it in a safe place.

- NOTE: The Dell Factory Image stored on your Recovery DVD will be automatically named **Dell Factory Image DVD** for Microsoft Windows Vista systems, or **Recovery DVD xxxxxxxxxxxxxxx** for Windows 7 systems where a date and time code will be substituted for "xxxx ...".
- 6. If you selected an **External Storage Device** in step 2:
 - a. Select the External Storage Device you want to use from the drop-down menu. If only one device is attached to your system, you may also select it by clicking the **Refresh** button.

If you attach a 2nd External Storage Device after the drop-down menu is



populated, click the **Refresh** button to add it to the menu. Clicking Refresh will also clear any previous selection. Select the new device from the drop-down menu you want to use.

The **Specify Details** screen refreshes, displaying the capacity of the selected External Storage Device.

NOTE: If the selected device has insufficient total space, insufficient free space, or if the device is not of the required NTFS format, a message will display indicating the problem.

If the device has insufficient total space, you must select another device.

If the device has insufficient free space, you may select another device or choose to reformat the current device. Reformatting the device erases all existing data on the device. To reformat the device, click **Reformat my device...** On the next screen, confirm by selecting the **Remove all my data and reformat my External Storage Device** check box, and click **Next** >.

If the device is not of the required NTFS format, you may select another

device or choose to reformat the device to the required NFTS format. Reformatting the device erases all existing data on the device. To reformat the device, click **Reformat My External Storage Device to NTFS...**, confirm by selecting the **Remove all my data and reformat my External Storage Device** check box, and click **Next** >.

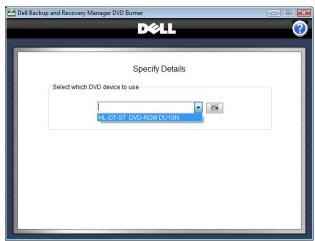
b. Click **Next** >.

The **Progress** screen appears, displaying a progress bar. When the recording is complete, a message appears indicating that your recovery media has been created.

- c. Click Finish.
- NOTE: The Dell Factory Image stored on your External Storage Device will be automatically named **Dell Factory Image Ext** for Microsoft Windows Vista systems, **or Recovery External xxxxxxxxxxxxxx** for Windows 7 systems where a date and time code will be substituted for "xxx ...".

7.2 Dell Diagnostics (Available only if installed on your system)

- △ CAUTION: If you are using a notebook computer for backup or recovery, it is strongly recommended that you run the computer on AC power rather than battery power to avoid potential interruption to the backup and recovery process. Interrupting a backup and recovery process can result in potential data loss.
 - 1. Click Create Diagnostic CD....
 - 2. The **Specify Details** screen appears.
 - 3. Select the recording device you want to use from the drop-down menu.

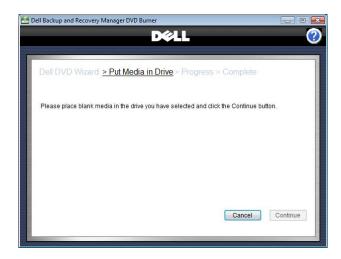


- 4. Place blank media in the selected drive.
- 5. Click Continue.

The **Progress** screen appears, displaying a progress bar. If an additional disk is required, the screen will prompt you to place a new blank disk into the recording device.

When the recording is complete, a message appears indicating that your recovery media has been created.

6. Click **Finish**. Label your media and store it in a safe place.





7.3 OS Media (Available only if installed on your system)

- △ CAUTION: In accordance with your Microsoft® End User Licensing Agreement, you can make only <u>one</u> legal backup copy of the operating system media. When you create a backup copy of the operating system media following the steps below, the OS Media option is no longer available on the Dell Recovery Tools screen.
- △ CAUTION: To avoid losing the ability to create an OS Media backup, it is strongly recommended that you create your OS Media backup before your first attempt to restore from a system backup. Once you restore from a system backup including a Dell Factory or Recovery I mage, the OS Media option will no longer be available.

△ CAUTION: If you are using a notebook computer for this operation, it is strongly recommended that you run the computer on AC power rather than battery power to avoid potential interruption to the backup and recovery process. Interrupting a backup and recovery process can result

🛃 Dell Backup and Recovery Manager

Backup Syster

Restore System

Dell Recovery Tools

in potential data loss.

△ CAUTION: To avoid losing the ability to create an operating system media backup copy, it is strongly recommended that you do not abort or interrupt the operating system media backup process once it has started.

1. Click Create OS Media....

The **OS Media** screen appears.

 Select the type of media (DVD or External Storage Device) to which you want to save your backup and then select the device from the drop-down menu.

■ NOTE: Windows XP is only able to create OS Media on DVD. Only Microsoft Windows Vista and Windows 7 are able create OS Media on an external storage device

If you selected DVD, place a blank DVD in the drive selected.

3. Click Create your OS Media...

The **Create Image** screen appears.

A **Progress** bar is displayed along the bottom of the screen.



DOLL

DVD

Device Selection

Do you want to store your OS media on an External Storage Device (must be at least 4 gigabytes in size) or on a DVD. If you choose an

External Storage Device, make sure you have connected the device you intend to use. If you choose the DVD option, insert a blank DVD in your DVD burner drive. Click on the Create Your OS Media link when it

External Storage Device

Place a blank DVD in the drive selected.

Create your OS Media ...

→

When the recording is complete, a message appears indicating that your OS media has been created.

4. Click Finish.

Label your OS Media and store it in a safe place.

NOTE: The operating system on the OS Media disk is the backup copy of your original licensed Microsoft operating system. It will not automatically install your Dell system drivers. Your Dell system drivers are located in a separate folder named **Drivers** on your OS Media disk and must be installed manually following the instructions for your particular version of Windows.



8 Windows Recovery Environment

Microsoft Windows Vista and Windows 7 operating systems include a Recovery Environment to assist users in troubleshooting their system. A user can access the Windows Recovery Environment by pressing function key F8 during boot. F8 will display the Advanced Boot Options screen. This is a different screen than the Boot Options screen where you select the desired boot device after pressing F12.

The Advanced Boot Options screen displays a list of available troubleshooting options. The first item listed is Repair Your Computer. When you select Repair Your Computer, you will enter the Windows Recovery Environment.

After logging on, the **System Recovery Options** screen displays the various recovery tools available.

Listed at the bottom is **Dell Backup** and **Recovery Manager**. This tool allows you to restore your system using one of your saved backup images created using Dell Backup and Recovery Manager.

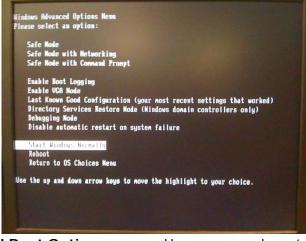
Windows XP Professional does not have a Windows Recovery Environment. However it does have a Windows Advanced Options Menu screen. To access the Windows Advanced Options Menu, press F8 during boot. This directs you to the Windows Boot Manager screen. From here, press the Enter key and repeatedly press F8 again to get to the Windows Advanced Options Menu screen.

This menu is very similar to the

Windows Vista or Windows 7 **Advanced Boot Options** screen. However you do *not* have the **Repair Your Computer** link in Windows XP.







Although Windows XP does not have a Windows Recovery Environment, you may still restore your Windows XP system using one or more of the following steps:

- Restore from a bootable system backup created using **Dell Backup and Recovery Manager** (this restores only your operating system partition, including **Dell Backup and Recovery Manager** and your files that you stored on that partition. Skip step 2 but you will need to perform step 3.
- 2. Reinstall your Microsoft Windows operating system from the OS Media disk you created using **Dell Backup and Recovery Manager** or the OS media that may have been provided in your system box (either of these will reinstall your original Microsoft Windows operating system).
 - a. Manually install your Dell factory-installed drivers. The drivers are located in the Drivers folder on your OS Media disk. If you received an RCD or RDVD with your system, you should also find your drivers there. (This step installs your Dell drivers.)

Perform step 3.

3. Reinstall your files and folders from a recent backup using the File restore... function in Dell Backup and Recovery Manager (this restores your files and folders, i.e. you data from other partitions or drives). You will need to perform this step after performing either step 1 or 2 above. For more information about restoring your data files, go to 3.2 Restoring your data files.

These same steps work equally well in Microsoft Windows Vista and Windows 7.

9 Operating Systems Supported

- Windows® 7 Ultimate 32-bit/64-bit
- Windows 7 Professional 32-bit/64-bit
- Windows 7 Home Premium 32-bit/64-bit
- Windows 7 Home Basic 32-bit/64-bit
- Microsoft® Windows Vista® Ultimate 32-bit/64-bit with SP1 (Service Pack 1)
- Windows Vista Business 32-bit/64-bit with SP1
- Windows Vista Home Premium 32-bit/64-bit with SP1
- Windows Vista Home Basic 32-bit with SP1
- Windows XP Professional 32-bit with SP3 (Service Pack 3)

10 Supported Optical Media

- Single-layer DVD media for creating system backup images (dual-layer media is not supported for this operation)
- Single and dual-layer DVD media for creating OS Media disk
- NOTE: Most Windows 32-bit operating system images can be created on single-layer DVD media except some images containing multiple language sets. Depending on the image, the program may ask for dual-layer media to be inserted.
 - Single-layer DVD media for creating Dell Recovery disk (dual-layer media is not supported for this operation)
 - CD or single-layer DVD media for creating Dell Diagnostics disk
 - Blu-Ray optical drives are not supported

11 Other information you need to know

- 1. When using Dell Recovery Tools to create a recovery disk, the close window icon (red button with white ×) in the upper right corner is disabled. This is intentional to prevent a user from inadvertently closing the window while performing a task and avoids potential data corruption. To exit, click the Cancel button.
- 2. The date and time stamp on the backup.WIM file differs from the actual time the backup was made. This occurs because the backup file is actually created in the Windows Recovery Environment, which does not use the same time zone information as the Windows user environment. This is normal behavior.
- 3. When restoring to a blank hard drive, there will be no factory utility partition on it from which to run the Diagnostic utilities.
- 4. When making a bootable backup from Microsoft Windows Vista or Windows 7 to an external storage device and the BIOS boot order is changed to boot from the external storage device first, the system will boot into the WinRE environment. To avoid booting into this environment, either unplug the external storage device after the backup completes before the next boot, or change the boot order in BIOS so the external storage device is not the first boot drive.
- 5. When making a bootable backup from Windows XP to an external storage device, and the BIOS boot order is changed to boot from the external storage device first, the .ini file on the drive will automatically initiate the process of creating the bootable backup. To avoid repeated attempts to make the backup, either unplug the external storage device after the backup completes before the next boot, or change the boot order in BIOS so the external storage device is not the first boot drive.
- 6. A bootable backup image is required to restore to a blank hard drive.
- 7. Upon restoring an image to a blank hard drive, at first boot the user will receive notification that the system needs to be restarted to make the changes they performed. This is normal and caused by the fact that the system volume information is included in the backup image. When restored to a blank HDD, the system volume information is no longer correct so a system restart is necessary. This restart will reset the System Volume Information. The system volume information is included in the backup images in order to maintain the system's restore points.
- 8. Although external FireWire (1394) drives are supported, the BIOS in Dell systems will not boot to FireWire drives. Use DVD, or an external USB or eSATA drive to make a bootable system backup image.
- 9. External eSATA drives should not be used for OS Media. The operating system image cannot be installed from the eSATA drive to the primary internal drive due to the way the eSATA drive enumerates at boot. Use DVD or an external USB drive for your OS Media backup.

- 10. A Windows XP system with Dell Backup and Recovery Manager installed will not have the Windows Recovery Environment containing your Dell Factory Image, or the Dell Recovery Media option on the Dell Recovery Tools screen. Go to <u>8 Windows Recovery Environment</u> for the restore options available for a Windows XP system.
- 11. When you restore a backup image from within Windows, you may notice that the names of previous backups are retained in the drop-down menu of backups available to restore. While this may seem strange at first, this is normal behavior. If you created backups previously on other media such as DVD or an external USB drive and we did not retain the names in the database for you, you would not be able to restore them. By retaining the names, you still have the option to restore them should you ever need to do so.

The behavior is different when you boot from a DVD or External Storage Device. The only backup images available will be those currently on the devices attached to your system.

12 Major differences between versions 1.1 and 1.0

The major differences between the two versions are:

- Dell Backup and Recovery Manager V1.1 adds support for Windows Vista 64-bit, and Microsoft Windows 7 32-bit and 64-bit operating systems. V1.0 only supported Windows XP SP3 32-bit and Microsoft Windows Vista SP1 32-bit. Windows XP 64-bit is not supported in either version.
- V1.1 can restore an image from a bootable backup to an unformatted hard drive. V1.0 did not support unformatted hard drives.
- When pressing F8 during boot on a system with Windows XP installed, the Windows Boot Manager screen no longer displays the operating system name as Windows Vista. This was a cosmetic issue in V1.0 that is fixed in V1.1.
- Minor screen formatting issues and localization issues have been corrected in V1.1.

13 Why do I need to back up?

Important files can be unexpectedly lost by accidentally erasing or replacing them. You can also be victimized by a virus or worm attack, or a software or hardware failure including a complete hard disk failure. While these events may be rare, they are unpredictable because they can occur anytime and usually at the worst time. That is why you need to make regular and frequent backups of your files, programs, system settings, etc.

It is strongly recommended that you follow these general guidelines:

- When you first get your system,
 - Create your OS Media backup copy.
 - Create your Dell Recovery media copy with your Dell Factory Image included.
 - Create your Dell Diagnostics media copy.
- ♦ Back up your business and/or personal files daily. Keep your last 5 backups.
- ❖ Back up your system weekly and again...
 - Before updating drivers, making any system registry changes, or installing a major service pack.
 - After any system security updates and patches are installed
 - Before you install any new software (in case the software misbehaves)
 - After you install any new software

Keep at least your last 3 system backup images.

- Keep your anti-virus software up to date
- ❖ Backup to an external drive or DVDs. External USB drives are reliable, convenient, commonly available, and a good value.
- ❖ Do not backup to the same drive or partition where your operating system resides in case your drive becomes infected by a virus or damaged.
- Set up regular restore points in Windows.

14 Backup Options Summary

What do you want to backup?	What do I use?	Notes:
Personal files, e.g. pictures, music, and documents from any hard drive partition	DBRM File Backup and Restore Windows XP Backup, or Microsoft Windows Vista or Windows 7 Back Up Files wizard	
Operating System Partition only including all programs and data stored there.	DBRM Backup System Windows XP Backup or Microsoft Windows Vista or Windows 7 Back Up Files wizard	
Entire computer including all hard disk partitions	Windows Complete PC Backup	Windows Complete PC Backup is not available in all OS versions.

15 Restore Options Summary

How do get back to these states?	What do I use?	Notes:
Dell Factory Image including OS, and all drivers and applications installed when your system was built in the Dell factory (Microsoft Windows Vista and Windows 7 only)	DBRM Restore System to restore Dell Factory Image DBRM Recovery Disk to restore Dell Factory Image DBRM WinRE to restore Dell Factory Image	Does not include any applications or data you may have added since your system was received from Dell.
Original Windows operating system image (does not install your Dell system drivers)	DBRM OS Media disk Original Windows OS Media (if provided in your system box)	
Original Windows operating system and Dell system drivers	DBRM OS Media disk and install Dell system drivers from Drivers folder also on DBRM OS Media disk	
Most recent backup state for OS partition	DBRM Restore System to restore most recent saved image. Then DBRM File Restore to restore most recent data file backup.	DBRM restore system options are also available from WinRE (Microsoft Windows Vista and Windows 7) if Windows is corrupted.
Most recent state of entire computer including all hard disk partitions	Microsoft's Complete PC Restore	Complete PC Restore is also available from WinRE (Microsoft Windows Vista and Windows 7) if Windows is corrupted.
An earlier point in time when my system was working well	Microsoft's Restore System	Uses restore points as a way to undo system changes that may have negatively impacted your system. It does not restore personal files or data. Also available from WinRE if Windows is corrupted.