Deployment Image Servicing and Management

If you received your MCTS certification for Windows Server 2008 before the release of Windows Server 2008 R2, you might have missed hearing about the Deployment Image

Servicing and Management (DISM) utility. DISM is an image configuration tool that first appeared in Windows 7 and Windows Server 2008 R2, and its functionality has expanded in Windows Server 2012. DISM replaces several deployment tools that were used in Windows Server 2008 and Windows Vista, including PEimg, Intlcfg, ImageX, and Package Manager.

In Windows 8 and Windows Server 2012, DISM helps you service WIM, VHD, and the new VHDX file types.

You can use DISM with .wim files to do the following:

- Capture and apply Windows images
- Append and delete images in a .wim file
- Split a .wim file into several smaller files

You can use DISM with .wim, .vhd, or .vhdx files to do the following:

- Add, remove, and enumerate packages
- Add, remove, and enumerate drivers
- Enable or disable Windows features
- Upgrade a Windows image to a different edition
- Prepare a Windows PE image

An important thing to know about DISM is that you can use it to service online images and offline images. *Servicing online images is essentially the same as configuring the local running installation of Windows.*
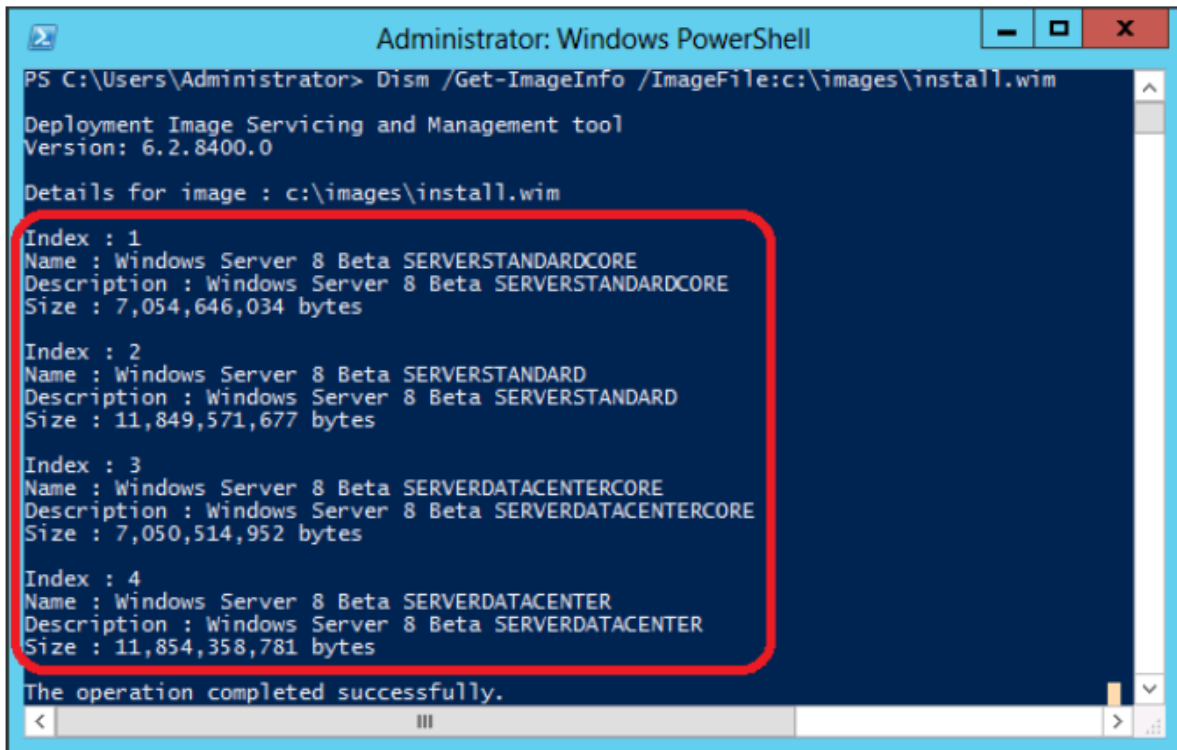
> **WINDOWS POWERSHELL AND DISM**   Windows PowerShell in Windows 8 and Windows Server 2012 includes a new module for DISM. You can review the cmdlets in this new module by typing the command **Get-Command -Module Dism** at a command prompt. For more information about the new DISM module in Windows 8 and Windows Server 2012, visit *http://technet.microsoft.com/en-us/library/hh852126.*

Add features to and remove features from an offline image with DISM

Before you can service an offline image, you need to mount the image in the file structure, specifying the image by index or name. In Windows Server 2012, you can find the image names and indexes within an image file by using DISM with the /Get-ImageInfo switch. For example, to see the images within an image file named Install.wim that is stored in C:\images, type the following:

```
Dism /Get-ImageInfo /ImageFile:C:\images\install.wim
```

The output of this command is shown in Figure 1-7.

FIGURE 1-7 Obtaining image information from an image file.

Once you know the name or index of the desired image, you can mount it in a specified directory. For example, use the following command to mount the image with index 2 in the C:\images\offline directory:

```
Dism /Mount-Image /ImageFile:C:\images\install.wim /index:2 /MountDir:C:\images\offline
```

At this point, you can use the /Get-Features switch if necessary to determine the command name of the relevant features or to determine which features are enabled on the image:

```
Dism /Image:C:\images\offline /Get-Features
```

Finally, you can use DISM to point to the mounted image and enable a desired feature. You can use the /All argument to enable all the parent features in the same command. For example, to enable the Remote-Desktop-Services role and all parent features, type the following:

```
Dism /Image:C:\images\offline /Enable-Feature /FeatureName:Remote-Desktop-Services /All
```

If you want to remove a feature from or disable a feature on an offline image, use the /Disable-Feature switch. For example:

```
Dism /Image:C:\images\offline /Disable-Feature /FeatureName:Remote-Desktop-Services
```

MORE INFO   For more information on DISM in Windows Server 2012, visit *http://technet.microsoft.com/en-us/library/hh825236.aspx.*