

# APPLY UPDATES TO WINDOWS 7 IMAGE USING DISM

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## Image

In our case we will be working on the default Windows 7 image that we have copied from Windows 7 DVD, called **install.wim**. It is located in the **[DVD drive]:\sources\** folder and we will copy it to our **c:\images\** folder. We also have **c:\images\mount\** folder which we will use to mount our image. We have also installed The Windows Automated Installation Kit (**WAIK**) for Windows 7. This is necessary because we need to use the DISM command line tool. So, the first thing we will do is run **Deployment Tools Command Prompt** with elevated privileges. To do that go to **Start > All Programs > Microsoft Windows AIK > Deployment Tools Command Prompt** (right-click > Run as administrator).

## Mount Image

We have to mount our **install.wim** image so we can work on it in offline mode. To mount our image we will use the following command: **dism /mount-wim /wimfile:c:\images\install.wim /index:4 /mountdir:c:\images\mount**.

```
Administrator: Deployment Tools Command Prompt - dism /mount-wim /wimfile:c:\images\instal...
Updating path to include dism, oscdimg, imagex
C:\Program Files\Windows AIK\Tools\PETools\
C:\Program Files\Windows AIK\Tools\PETools\.\x86
C:\Program Files\Windows AIK\Tools\PETools\.\x86\Serviceicing;

C:\Program Files\Windows AIK\Tools\PETools>dism /mount-wim /wimfile:c:\images\in
tall.wim /index:4 /mountdir:c:\images\mount
Deployment Image Servicing and Management tool
Version: 6.1.7600.16385
Mounting image
[=====87.0%=====]
```

Image 203.1 - Mounting Image

## Current Packages

When the mounting is complete, we can see what packages does it currently contain. To do that we will enter the following command (against our mounted image this time): **dism /image:c:\images\mount /get-packages**.

```
Administrator: Deployment Tools Command Prompt
C:\Program Files\Windows AIK\Tools\PETools>dism /image:c:\images\mount /get-pack
ages
Deployment Image Servicing and Management tool
Version: 6.1.7600.16385
Image Version: 6.1.7600.16385
Packages listing:
Package Identity : Microsoft-Windows-Client-LanguagePack-Package~31bf3856ad364e3
5~x86~en-US~6.1.7600.16385
State : Installed
Release Type : Language Pack
Install Time : 7/14/2009 4:46 AM
Package Identity : Microsoft-Windows-Foundation-Package~31bf3856ad364e35~x86~6.
1.7600.16385
State : Installed
Release Type : Foundation
Install Time : 7/14/2009 4:46 AM
Package Identity : Microsoft-Windows-LocalPack-AU-Package~31bf3856ad364e35~x86~
6.1.7600.16385
State : Install Pending
```

Image 203.2 - Get-packages Command

The **/get-packages** option shows us all installed packages on our image. The benefit of using DISM is that we can have an image which we can frequently update so we don't have to worry about that image becoming out of date.

This way, we don't have to install our image, then apply updates on live machine, and then capture the new image. We can always work on our existing image which saves a lot of precious time.

We can only install packages which are in **.cab or .msu** format. In our case we will install an update package that we downloaded from Microsoft website. We will put that file in **c:\images\packages** folder. The update file in our case is Windows6.1-KB2533623-x86.msu.



Image 203.3 - Update File

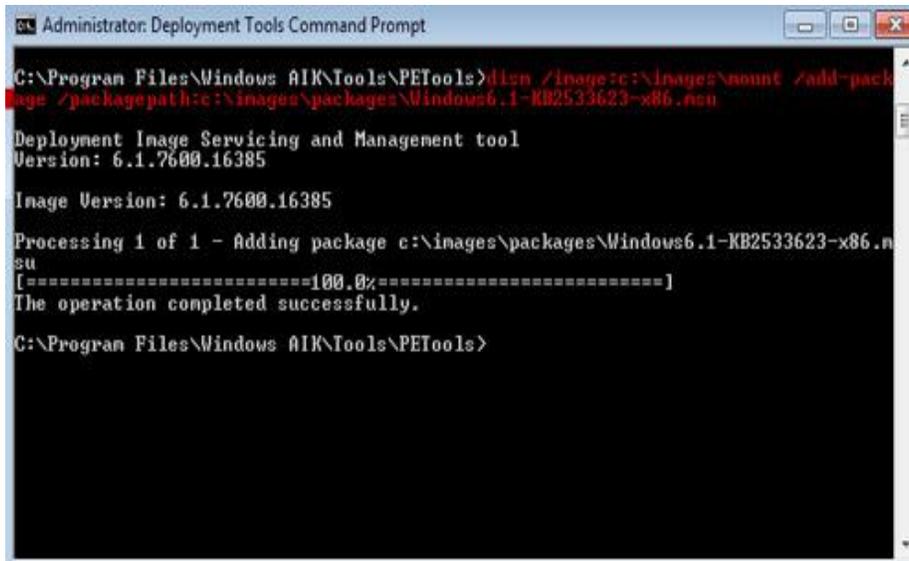
## Adding Packages

To add that package we will enter the following command: **dism**

**/image:c:\images\mount /add-package**

**/packagepath:c:\images\packages\Windows6.1-KB2533623-x86.msu**. To add

packages we use the **/add-package** option, but we also have to specify the package path with the **/packagepath** parameter.



```
Administrator: Deployment Tools Command Prompt
C:\Program Files\Windows AIK\Tools\PETools>dism /image:c:\images\mount /add-package /packagepath:c:\images\packages\Windows6.1-KB2533623-x86.msu
Deployment Image Servicing and Management tool
Version: 6.1.7600.16385
Image Version: 6.1.7600.16385
Processing 1 of 1 - Adding package c:\images\packages\Windows6.1-KB2533623-x86.msu
[=====100.0%=====]
The operation completed successfully.
C:\Program Files\Windows AIK\Tools\PETools>
```

Image 203.4 - Adding Package

We can verify that our package is installed by using the **dism /image:c:\images\mount /get-packages** command. Our package will be last on the list because it is the newest installed package. The status is **Install Pending** because the actual installation of our package will happen when the image is being applied to the machine.

### Unmounting and Saving Changes

Once we are done we can unmount our image, but we have to save our changes with the **/commit** option. The whole command is: **dism /unmount-wim /mountdir:c:\images\mount /commit**.

```
Administrator: Deployment Tools Command Prompt
C:\Program Files\Windows AIK\Tools\PETools>dism /unmount-wim /mountdir:c:\images
/mount /commit
Deployment Image Servicing and Management tool
Version: 6.1.7600.16385

Image File : c:\images\install.wim
Image Index : 4
Saving image
[=====100.0%=====]
Unmounting image
[=====100.0%=====]
The operation completed successfully.

C:\Program Files\Windows AIK\Tools\PETools>_
```

Image 203.5 - Unmounting

## Remember

We can use DISM to service our existing image. This way we will always have updated Windows image. We can install any update or application which is in the Cabinet format (.cab extension) or Microsoft Standalone Update format (.msu).

### Commands that are mentioned in this article

- **dism /mount-wim /wimfile:c:\images\install.wim /index:4**  
**/mountdir:c:\images\mount** - mount install.wim image edition 4, which is located in c:\images\ folder, to the c:\images\mount\ folder
- **dism /image:c:\images\mount /get-packages** - get all packages contained on mounted image which is located in c:\images\mount folder

- **dism /image:c:\images\mount /add-package /packagepath:c:\images\packages\Windows6.1-KB2533623-x86.msu** - add Windows6.1-KB2533623-x86.msu package to the mounted image which is located in c:\images\mount folder
- **dism /unmount-wim /mountdir:c:\images\mount /commit** - unmount image from the c:\images\mount folder and save all changes (commit)

#### Paths that are mentioned in this article

- **[DVD drive]:\sources\install.wim** - location of the Windows 7 image on the Windows 7 DVD, which we copied to our Hard Drive
- **c:\images\** - folder in which we have copied install.wim image
- **c:\images\mount\** - folder which we used to mount install.wim image
- **c:\images\packages** - folder which we used to save packages before adding them to the mounted image
- **Start > All Programs > Microsoft Windows AIK > Deployment Tools Command Prompt** - location of the Deployment Tools Command Prompt.

Source: <http://www.utilizewindows.com/7/deployment/203-apply-updates-to-windows-7-image-using-dism>