

SERVICE WINDOWS 7 IMAGE USING DISM

Image

For the purpose of this demo, we will be working on image which we will get from the Windows 7 installation DVD. In our case we have copied **install.wim** image from the Windows 7 installation DVD ([**DVD drive**]:\sources\install.wim) to the **C:\images** folder. In that folder we have also created the '**mount**' folder which we will use to mount our image.

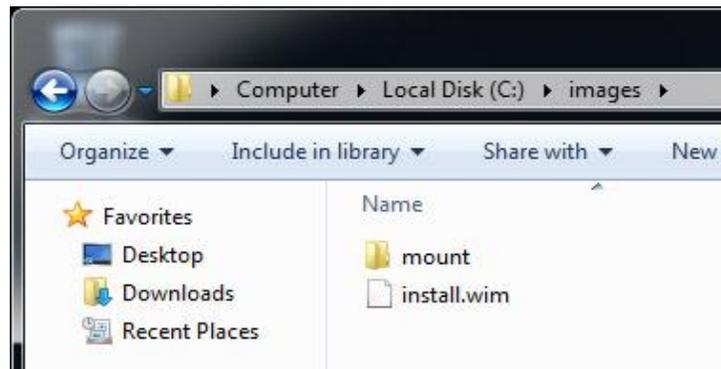


Image 204.1 - Folders

Next we need to open Deployment Tools Command Prompt with elevated privileges. To do that go to **Start > All Programs > Microsoft Windows AIK > Deployment Tools Command Prompt** (Deployment Tools Command Prompt comes with WAIK for Windows 7).

Mounting

Next we will mount our image. To do that we will enter the following

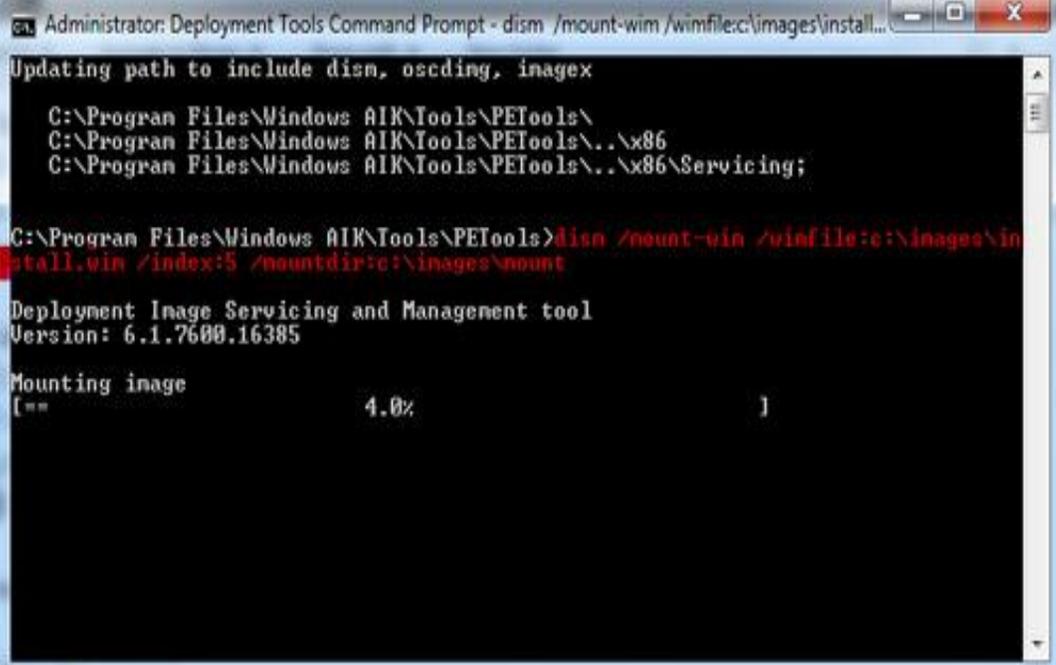
command: **dism /mount-wim /wimfile:c:\images\install.wim /index:5**

/mountdir:c:\images\mount. 'DISM' means that we are using DISM to mount our

image. **/mount-wim** parameter means that we want to mount existing image.

With **/wimfile** parameter we specify the location of our image.

With **/index** parameter we specify which edition we want to mount (Ultimate in our case). With **/mountdir** parameter we specify where do we want to mount our image.



```
Administrator: Deployment Tools Command Prompt - dism /mount-wim /wimfile:c:\images\install...
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\Service;

C:\Program Files\Windows AIK\Tools\PETools>dism /mount-wim /wimfile:c:\images\install.wim /index:5 /mountdir:c:\images\mount

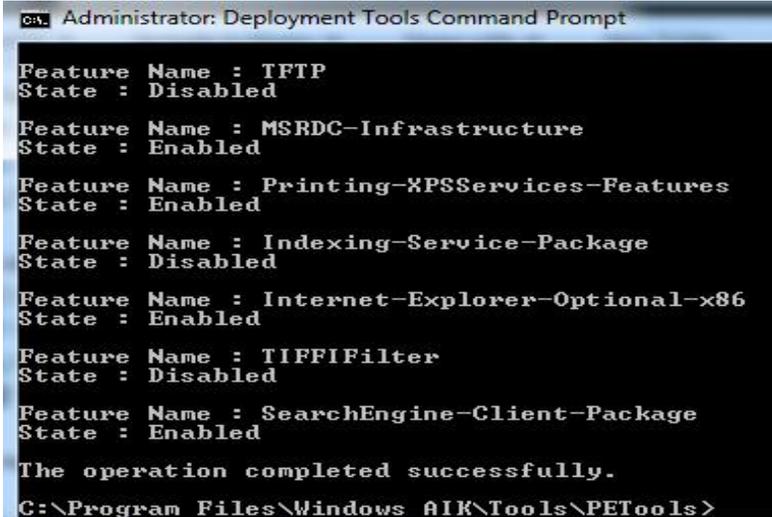
Deployment Image Servicing and Management tool
Version: 6.1.7600.16385

Mounting image
[==          4.0%          ]
```

Image 204.2 - Mounting in Progress

Working with Features

Once our image is mounted we will check features that are available on our mounted image. To do that we will use the following command: **dism /image:c:\images\mount /get-features**. The **/image** parameter is used to specify the location of our mounted image. The **/get-features** parameter is used to check for available features.



```
C:\Program Files\Windows AIK\Tools\PETools> dism /image:c:\images\mount /get-features
Feature Name : TFTP
State : Disabled
Feature Name : MSRDC-Infrastructure
State : Enabled
Feature Name : Printing-XPSServices-Features
State : Enabled
Feature Name : Indexing-Service-Package
State : Disabled
Feature Name : Internet-Explorer-Optional-x86
State : Enabled
Feature Name : TIFFIFilter
State : Disabled
Feature Name : SearchEngine-Client-Package
State : Enabled
The operation completed successfully.
C:\Program Files\Windows AIK\Tools\PETools>
```

Image 204.3 - Available Features List

Different editions of Windows will have different features available. Among other things we have a feature that is called Minesweeper. This is a game that is available for free in Windows and it is currently enabled. Let's gather more information about that feature. We will use the following command: **dism /image:c:\images\mount /get-featureinfo /featurename:Minesweeper**. Remember that feature names are case-sensitive.

```
Administrator: Deployment Tools Command Prompt
C:\Program Files\Windows AIK\Tools\PETools>dism /image:c:\images\mount /get-featureinfo /featurename:Minesweeper
Deployment Image Servicing and Management tool
Version: 6.1.7600.16385
Image Version: 6.1.7600.16385
Feature Information:
Feature Name : Minesweeper
Display Name : Minesweeper
Description : Minesweeper
Restart Required : Possible
State : Enabled
Custom Properties:
<No custom properties found>
The operation completed successfully.
C:\Program Files\Windows AIK\Tools\PETools>
C:\Program Files\Windows AIK\Tools\PETools>
```

Image 204.4 - Minesweeper Feature

Now we will disable that feature. To do that we will enter the following command: **dism /image:c:\images\mount /disable-feature /featurename:Minesweeper.**

```
Administrator: Deployment Tools Command Prompt
C:\Program Files\Windows AIK\Tools\PETools>dism /image:c:\images\mount /disable-feature /featurename:Minesweeper
Deployment Image Servicing and Management tool
Version: 6.1.7600.16385
Image Version: 6.1.7600.16385
Disabling feature(s)
[=====100.0%=====]
The operation completed successfully.
```

Image 205.5 - Feature Disabled

If we want to enable some feature we can use the **/enable-feature** option. In our case Minesweeper is disabled on our mounted image so it will not be available by default once we install our Windows 7 Ultimate edition. We can run the **dism /image:c:\images\mount /get-features** command to check for available features again. Notice that the status of the Minesweeper feature is now 'Disable Pending'.

```
ca: Administrator: Deployment Tools Command Prompt
Feature Name : SpiderSolitaire
State : Enabled
Feature Name : Hearts
State : Enabled
Feature Name : FreeCell
State : Enabled
Feature Name : Minesweeper
State : Disable Pending
Feature Name : PurplePlace
State : Enabled
Feature Name : Chess
State : Enable Pending
Feature Name : Shanghai
State : Enable Pending
Feature Name : Internet Games
State : Enable Pending
Feature Name : Internet Checkers
```

Image 204.6 - Feature Status

Changing the Time Zone

We will change our time zone to the Central European Standard Time. To set the time zone we will use the following command: **dism /image:c:\images\mount /set-timezone:"Central European Standard Time"**. For a complete list of time-zone strings see the Unattend Setup Reference or use the **tzutil** command with the **/I** parameter on a running Windows 7 machine.

```
ca: Administrator: Deployment Tools Command Prompt
C:\Program Files\Windows AIK\Tools\PETools>tzutil /I
<UTC-12:00> International Date Line West
Dateline Standard Time
<UTC-11:00> Coordinated Universal Time-11
UTC-11
<UTC-11:00> Samoa
Samoa Standard Time
<UTC-10:00> Hawaii
Hawaiian Standard Time
<UTC-09:00> Alaska
Alaskan Standard Time
<UTC-08:00> Baja California
Pacific Standard Time (Mexico)
<UTC-08:00> Pacific Time (US & Canada)
Pacific Standard Time
<UTC-07:00> Arizona
US Mountain Standard Time
```

Image 204.7 - TZUTIL

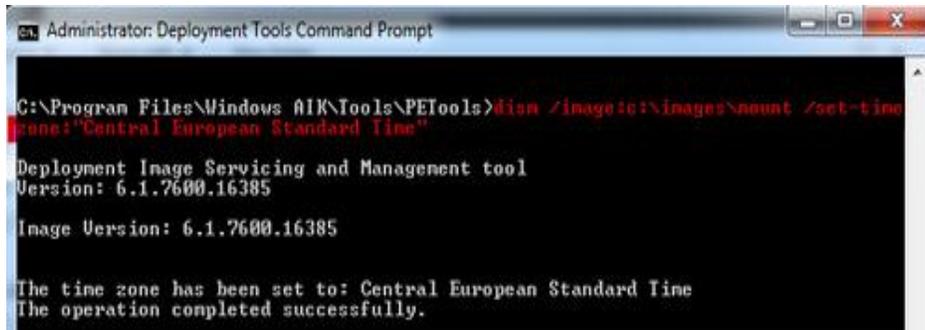


Image 204.8 - Time Zone Changed

Adding Drivers

We have added a new folder called 'addons' to the C:\images\ folder. Here we have copied the driver that we want to add to the image driver store. In our case we want to add drivers for Samsung ML1640 printer.

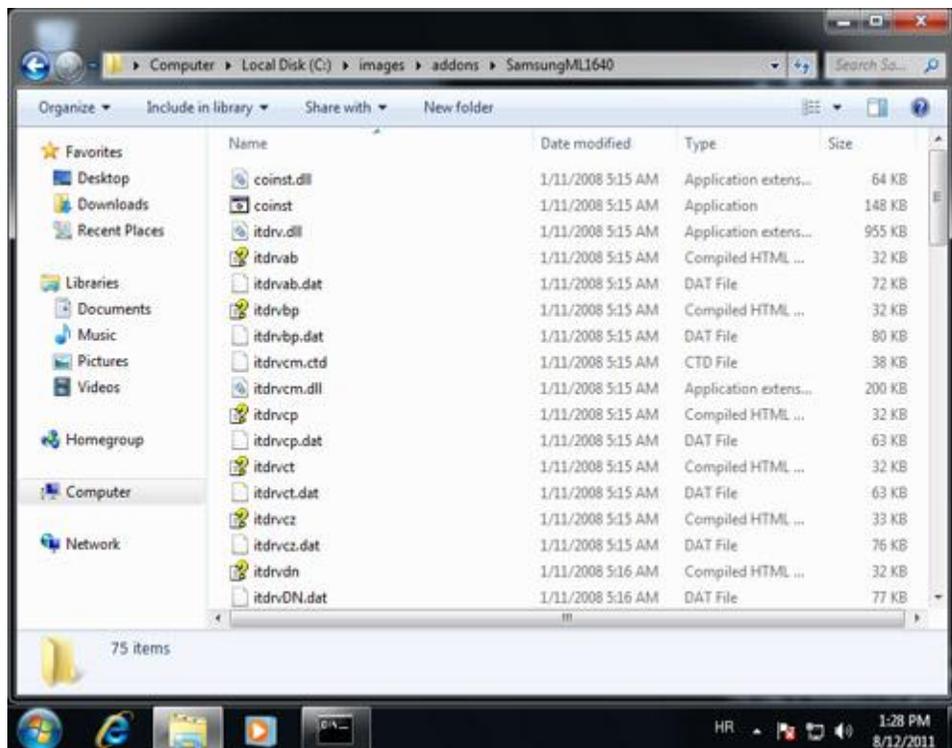
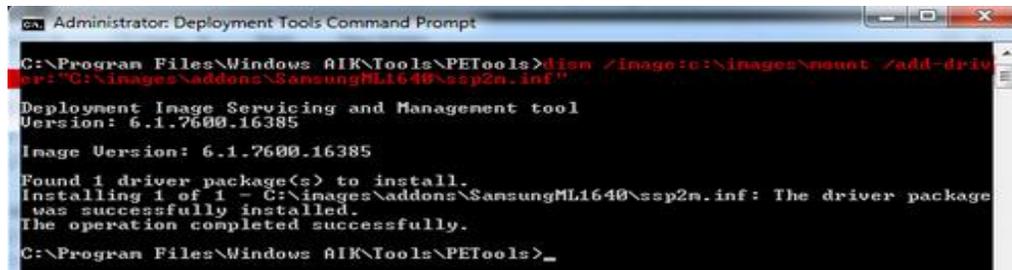


Image 204.9 - Samsung Drivers

To add our driver we will run the following command: **dism**

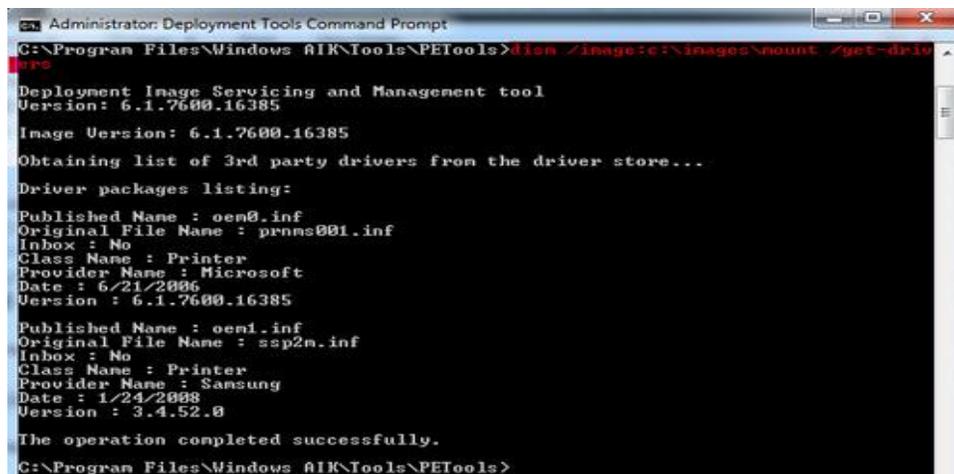
/image:c:\images\mount\adddriver:"C:\images\addons\SamsungML1640\ssp2m.inf". Notice when specifying the path to our drivers, we also specified the Setup Information file (.inf extension). In our case that file is **ssp2m.inf**.



```
Administrator: Deployment Tools Command Prompt
C:\Program Files\Windows AIK\Tools\PETools>dism /image:c:\images\mount /add-driver:"C:\images\addons\SamsungML1640\ssp2m.inf"
Deployment Image Servicing and Management tool
Version: 6.1.7600.16385
Image Version: 6.1.7600.16385
Found 1 driver package(s) to install.
Installing 1 of 1 - C:\images\addons\SamsungML1640\ssp2m.inf: The driver package
was successfully installed.
The operation completed successfully.
C:\Program Files\Windows AIK\Tools\PETools>_
```

Image 204.10 - Driver Installed

Driver content has been copied to the driver store successfully. If we enter the command **dism /image:c:\images\mount /get-drivers**, we can see all third party drivers installed in our image.



```
Administrator: Deployment Tools Command Prompt
C:\Program Files\Windows AIK\Tools\PETools>dism /image:c:\images\mount /get-drivers
Deployment Image Servicing and Management tool
Version: 6.1.7600.16385
Image Version: 6.1.7600.16385
Obtaining list of 3rd party drivers from the driver store...
Driver packages listing:
Published Name : oem0.inf
Original File Name : prnms001.inf
Inbox : No
Class Name : Printer
Provider Name : Microsoft
Date : 6/21/2006
Version : 6.1.7600.16385
Published Name : oem1.inf
Original File Name : ssp2m.inf
Inbox : No
Class Name : Printer
Provider Name : Samsung
Date : 1/24/2008
Version : 3.4.52.0
The operation completed successfully.
C:\Program Files\Windows AIK\Tools\PETools>
```

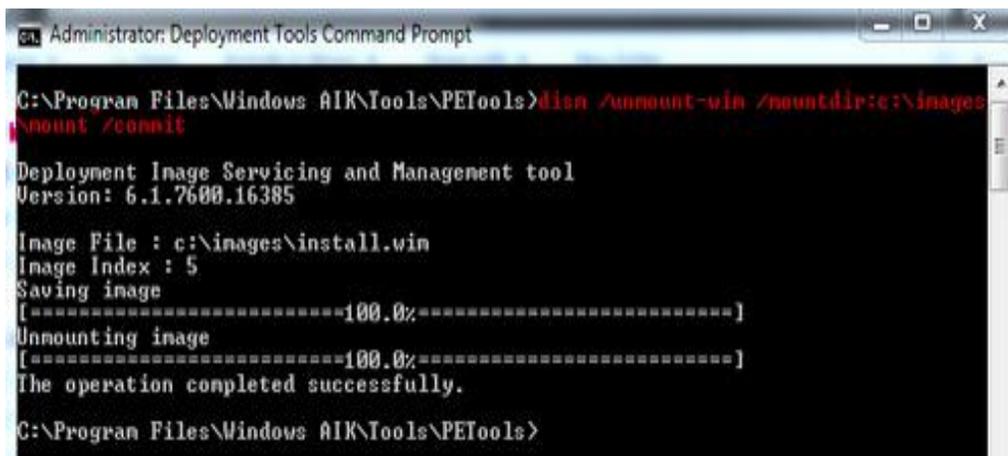
Image 204.11 - List of Drivers

Notice that our new driver now has a published name: **oem1.inf**. Below that we can see the original file name (sspm.inf), class name (Printer), provider name (Samsung), date and version.

Unmounting Image

We have made all changes that we wanted so we are ready to unmount our image.

To do that we will enter the following command: **dism /unmount-wim /mountdir:c:\images\mount /commit**. Be sure to exit folder that is used for mounting in Explorer.



```
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.win
Image Index : 5
Saving image
[=====100.0%=====]
Unmounting image
[=====100.0%=====]
The operation completed successfully.
C:\Program Files\Windows AIK\Tools\PETools>
```

Image 204.12 - Unmounting Successfull

Notice the **/commit** parameter. It is used to save all changes that we made to our image. If we don't want to save changes can use the **/discard** parameter.

Remember

Using DISM we can service existing images. Before we can do anything we have to mount our image. After that we can work with features, drivers, etc. DISM commands are not case sensitive, but feature names are.

Commands that are mentioned in this article

- **dism /mount-wim /wimfile:c:\images\install.wim /index:5**
/mountdir:c:\images\mount - mount 'install.wim' image which is located in 'c:\images\' folder, edition with index number 5 (which is Ultimate), to the 'c:\images\mount' folder
- **dism /image:c:\images\mount /get-features** - check features on mounted image located in 'c:\images\mount' folder
- **dism /image:c:\images\mount /get-featureinfo /featurename:Minesweeper** - get detailed information about 'Minesweeper' feature on mounted image located in 'c:\images\mount' folder
- **dism /image:c:\images\mount /disable-feature /featurename:Minesweeper** - disable 'Minesweeper' feature on mounted image which is located in 'c:\images\mount' folder

- **dism /image:c:\images\mount /set-timezone:"Central European Standard Time"** - change the time zone of the mounted image located in 'c:\images\mount\' folder to the 'Central European Standard Time'
- **tzutil /l** - see a complete list of time-zone strings (enter in Command Prompt)
- **dism /image:c:\images\mount /add-driver:"C:\images\addons\SamsungML1640\ssp2m.inf"** - add 'ssp2m.inf' driver to the mounted image located in 'c:\images\mount' folder
- **dism /image:c:\images\mount /get-drivers** - see all third party drivers available on mounted image
- **dism /unmount-wim /mountdir:c:\images\mount /commit** - unmount image and commit all changes

Paths that are mentioned in this article

- **[DVD drive]:\sources\install.wim** - image location on the Windows 7 installation DVD
- **C:\images** - folder in which we have copied install.wim image
- **C:\images\mount** - folder which we used to mount our image

Source: <http://www.utilizewindows.com/7/deployment/204-service-windows-7-image-using-dism>