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](image)

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.

![Image of DISM command in progress]

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.

![Available Features List](image204.3.png)

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

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'. 
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 '/l' parameter on a running Windows 7 machine.
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.
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`.

![Image 204.10 - Driver Installed](image)

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.

![Image 204.11 - List of Drivers](image)
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.

![Image of command prompt showing successful unmounting](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. DIMS 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