

MIGRATE TO WINDOWS 7 USING USMT

Running USMT on Source Computer

USMT is a part of Windows AIK, but it can also be downloaded from Microsoft website as a standalone application. The thing is, since we will migrate users from XP, we have to have USMT on XP machine. There are two ways to put USMT on XP. First would be to download UMST from Microsoft site and install it. During te installation you can choose the installation folder, which you have to remember.

The second way implies that you have Windows AIK installed on your Windows 7 machine. USMT will be located in **C:\Program Files\Windows**

AIK\Tools\USMT\x86 folder (if you have x64 system you have to use x64

version) which contains all the files needed for user migration. We can copy this

folder to a network share to make it always available. For this demonstration we

will simply copy USMT folder to the C: drive of our Windows XP machine. Tools

that we are going to use (**scanstate** and **loadstate**) are command line tools, so the

first thing we need to do is run Command Prompt (CMD) on our XP machine. In

CMD we have to go to our newly created USMT folder, so we will enter the

command: **cd c:\usmt\x86**

```
C:\WINDOWS\system32\cmd.exe
Microsoft Windows XP [Version 5.1.2600]
(C) Copyright 1985-2001 Microsoft Corp.

C:\Documents and Settings\Administrator>cd c:\usmt\x86
C:\USMT\x86>
```

Image 170.1 - USMT Folder in CMD

Now, we want to copy all users from Windows XP to Windows 7. To do that, first we need to run **scanstate** tool on the Windows XP. To check which parameters must be provided to the scanstate tool simply enter **scanstate** in CMD.

```
C:\WINDOWS\system32\cmd.exe
C:\USMT\x86>scanstate
Log messages are being sent to 'C:\USMT\x86\scanstate.log'

SCANSTATE.EXE:
ScanState.exe collects files and settings into a migration store to be restored
using LoadState.exe. You must specify the same .xml files on both the
ScanState and LoadState command-lines.

See the USMT.chm for more information and details.

Syntax: scanstate <StorePath> [Options]

StorePath          Path where Scanstate saves the files and settings.
                   StorePath is the path to the upper level directory,
                   not the migration file.

                   For example, if you specify scanstate C:\store,
                   the resulting StorePath is C:\store\usmt\usmt.nig.
                   Do not specify the full path on the Scanstate.exe
                   command-line, or the migration will fail.
```

Image 170.2 - Scanstate Syntax

We can see that the syntax is: **scanstate <StorePath> [Options]**. In this demo we will save all data locally in **c:\usmt\users** folder, so lets create a migration store by entering the following command: **scanstate c:\usmt\users**. This command will gather information about all user accounts on this machine and save it in the **c:\usmt\users** folder. It is possible to modify this command to select which account to include or exclude. In our case it gathered information about 8 users.

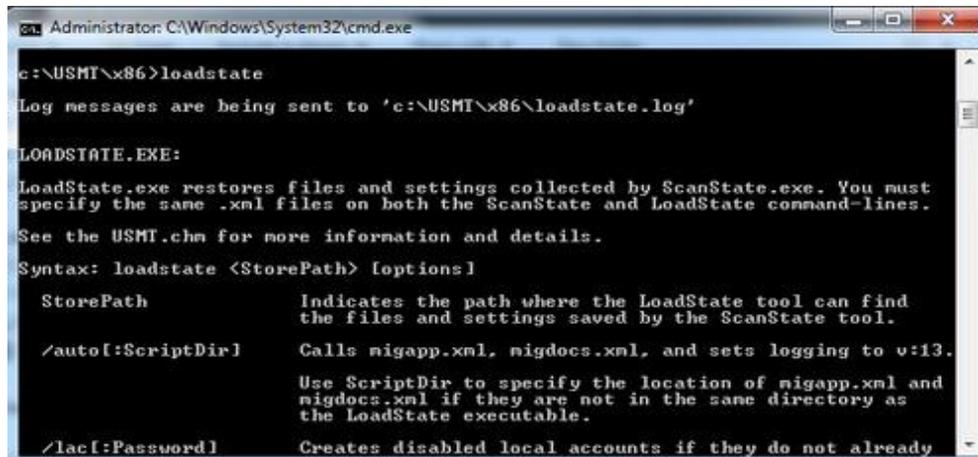
```
C:\WINDOWS\system32\cmd.exe
ScanState return code: 1
C:\USMT\x86>scanstate c:\usmt\users
Log messages are being sent to 'C:\USMT\x86\scanstate.log'
Starting the migration process
Processing the settings store
Examining the system to discover the migration units
ADMIN-8268F4658\Brian Robinson (1 of 8): 100% done
ADMIN-8268F4658\anderson (2 of 8): 100% done
ADMIN-8268F4658\Kim Uerson (3 of 8): 100% done
ADMIN-8268F4658\Administrator (4 of 8): 100% done
ADMIN-8268F4658\IMadruga (5 of 8): 100% done
ADMIN-8268F4658\Students (6 of 8): 100% done
ADMIN-8268F4658\wdeImonte (7 of 8): 100% done
This Computer (8 of 8): 100% done
Selecting migration units
Gathering data
ADMIN-8268F4658\Brian Robinson (1 of 8): 100% done
ADMIN-8268F4658\anderson (2 of 8): 100% done
ADMIN-8268F4658\Kim Uerson (3 of 8): 100% done
ADMIN-8268F4658\Administrator (4 of 8): 100% done
ADMIN-8268F4658\IMadruga (5 of 8): 100% done
ADMIN-8268F4658\Students (6 of 8): 100% done
ADMIN-8268F4658\wdeImonte (7 of 8): 100% done
This Computer (8 of 8): 100% done
Commit
Success.
ScanState return code: 0
C:\USMT\x86>
```

Image 170.3 - Scanstate Success

Destination Computer

Once the **scanstate** is complete we can switch to the destination computer which is Windows 7 in our case. Now, we need to remember where we saved users from the source machine. The best thing would be to use a network share so we can access those resources from any computer on the network. For the purpose of this demonstration we have copied gathered user profiles which were exported to the **c:\usmt\users** folder on the Windows XP machine, to the **c:\usmt\users** folder on the Windows 7 machine. Also, we have copied **x86** folder which contains USMT, to the **c:\usmt** folder on Windows 7 machine. The first thing we need to do on destination computer is to run elevated CMD.

To do that, right-click CMD and select 'Run as administrator'. Next, we need to get to the `c:\usmt\x86` folder, so we will enter the command: `cd c:\usmt\x86`. Next, to load users that we exported from Windows XP, we will use that **loadstate** tool. Let's enter **loadstate** in CMD.



```
Administrator: C:\Windows\System32\cmd.exe
c:\USMT\x86>loadstate
Log messages are being sent to 'c:\USMT\x86\loadstate.log'

LOADSTATE.EXE:
LoadState.exe restores files and settings collected by ScanState.exe. You must
specify the same .xml files on both the ScanState and LoadState command-lines.
See the USMT.chm for more information and details.
Syntax: loadstate <StorePath> [options]

  StorePath           Indicates the path where the LoadState tool can find
                      the files and settings saved by the ScanState tool.

  /auto[:ScriptDir]  Calls migapp.xml, migdocs.xml, and sets logging to v:13.
                      Use ScriptDir to specify the location of migapp.xml and
                      migdocs.xml if they are not in the same directory as
                      the LoadState executable.

  /lac[:Password]    Creates disabled local accounts if they do not already
```

Image 170.4 - Loadstate Syntax

We can see that the syntax for the loadstate command is **loadstate <StorePath> [options]**. To load user accounts we will enter the command: **loadstate c:\usmt\users /lac**. The **/lac** option means that we want to create local accounts that do not exist on our destination computer. If accounts already existed we would not have to use the **/lac** switch because the information would be migrated to existing accounts. Now, because we did not provide passwords for accounts that were migrated, they will be created as disabled. Once all accounts are created, the migration data is copied.

```
Administrator: C:\Windows\System32\cmd.exe

c:\USMT\x86>loadstate c:\usmt\users /lac
Log messages are being sent to 'c:\USMT\x86\loadstate.log'
Starting the migration process
Processing the settings store
Selecting migration units
Examining the system to discover the migration units
WIN-F398FK5U8G1\Administrator (1 of 8): 100% done
WIN-F398FK5U8G1\IMadruga (2 of 8): 100% done
WIN-F398FK5U8G1\Kim Verson (3 of 8): 100% done
WIN-F398FK5U8G1\anderson (4 of 8): 100% done
WIN-F398FK5U8G1\Brian Robinson (5 of 8): 100% done
WIN-F398FK5U8G1\wdelmonte (6 of 8): 100% done
WIN-F398FK5U8G1\Students (7 of 8): 100% done
This Computer (8 of 8): 100% done
Applying data
ADMIN-8268F4658\Brian Robinson (1 of 8): 100% done
ADMIN-8268F4658\anderson (2 of 8): 100% done
ADMIN-8268F4658\Kim Verson (3 of 8): 100% done
ADMIN-8268F4658\Administrator (4 of 8): 100% done
ADMIN-8268F4658\IMadruga (5 of 8): 100% done
ADMIN-8268F4658\Students (6 of 8): 100% done
ADMIN-8268F4658\wdelmonte (7 of 8): 100% done
This Computer (8 of 8): 100% done
Success.
LoadState return code: 0
c:\USMT\x86>_
```

Image 170.5 - Loadstate Success

Some often used options for the **scanstate** and **loadstate** commands are:

- /i - includes the specified XML-formatted configuration file to control the migration
- /ui - migrates specified users data
- /ue - excludes the specified users data from migration
- /lac - creates a user account if the user account is local and does not exist on the destination computer
- /lae - enables the user account created with the '/lac' option
- /p /nocompress - generates a space-estimate file called Usmtsized.txt

Once the migration is complete we can go to the Computer Management to verify new accounts.

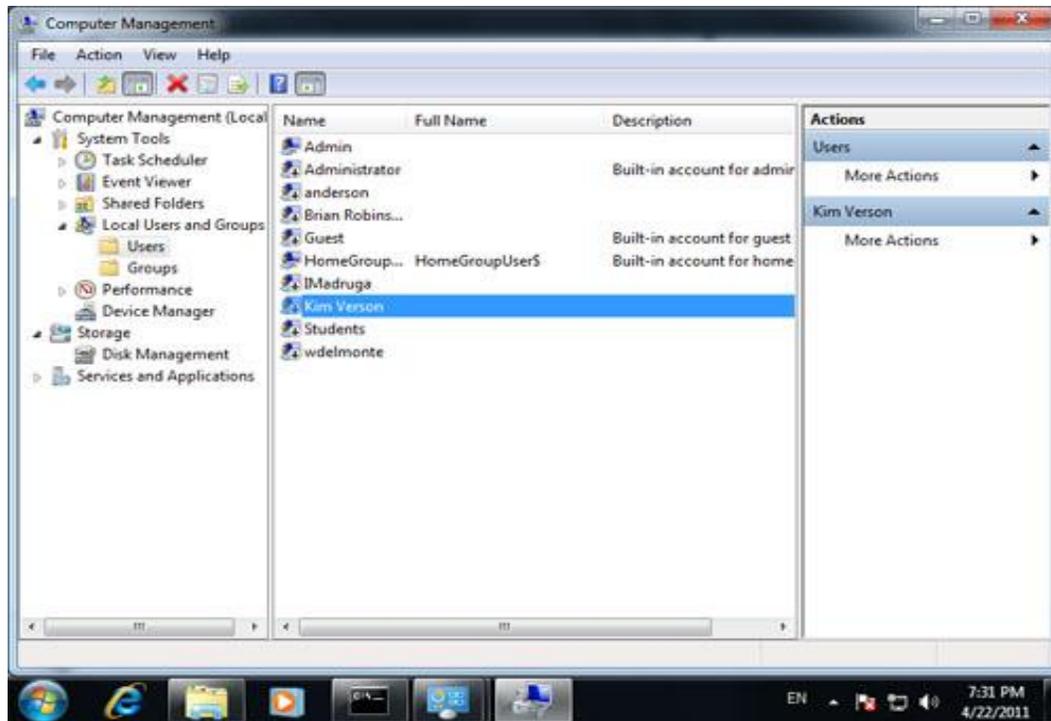


Image 170.6 - New Accounts

As we can see, new accounts were created but they are disabled. Disabled accounts have an icon with an arrow pointing down. To enable an account right-click it, go to Properties, in General tab uncheck the 'Account is disabled' option and then click Apply.

Remember

USMT is a part of Windows AIK, but it can also be downloaded from Microsoft website as a standalone application.

Command Line tools that are part of USMT are Scanstate and Loadstate. Scanstate gathers information about users. Syntax for Scanstate is: scanstate <StorePaht> [Options]. Loadstate applies gathered information to new installation. Syntax for loadstate is loadstate <StorePaht> [options].

Commands that are mentioned in this article

All commands are entered in Command Line:

- **cd c:\usmt\x86** - change directory to c:\usmt\x86
- **scanstate c:\usmt\users** - gather information about user accounts and save it in the c:\usmt\users folder
- **loadstate c:\usmt\users /lac** - load user accounts from c:\usmt\users folder. /lac is used to create local accounts that do not exist on our destination computer.

Paths that are mentioned in this article

- **C:\Program Files\Windows AIK\Tools\USMT\x86** - USMT location when we have installed Windows Automated Installation Kit (WAIK)
- **c:\usmt\x86** - folder where we have copied USMT tools on both source and destination installation.

Source: <http://www.utilizewindows.com/7/basics/170-migrate-to-windows-7-using-usmt>