

Quest Sales Engineering

Imaging with KACE SDA (K2000) and using Tranxition Migration Manager for User Profile Migrations

Automating User State migrations

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The Quest logo is displayed in a bold, orange, sans-serif font. The word "Quest" is followed by a small trademark symbol (TM).

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Introduction

In this document we will explore how to utilize the SDA (K2000) series appliances to backup and restore user profiles using Tranxition Migration Manager product.

Tranxition has partnered with Quest to offer a robust platform to migrate and restore user data from one system to another. The Migration Manager tool allows administrators the flexibility to backup profile data and application settings from different versions of Windows operating systems, including Office settings, and easily migrate them to another system. This can be done regardless of the version of OS and includes the ability to migrate settings from Office 2003 up through Office 2013 among many other applications seamlessly. Using this tool, Administrators can:

- Simplify their OS Migration strategies
- Ensure continuity of data and settings throughout a complete OS migration
- Minimize user downtime due to migrations

After completing this document, you should be able to:

- Understand how to use the SDA (K2000) Pre-Installation tasks to automate profile backups
- Utilize Migration Manager as a Post Install script to inject backed up profiles
- Customize profile backups to ensure data consistency during an OS migration

Overview of Tranxition Migration Manager

The Tranxition Migration Manager tool is designed to provide robust profile backup and restoration for Windows computers. Traditional tools like Microsoft's User State Migration Tool (USMT), while functional, do not provide the level of detail and compatibility that are often required when performing profile backup and restoration.

Using Migration Manager will not only allow for a simple automated backup and restore of user profile data, but will allow that profile to carry more information and be able to translate it to the new system. As an example, a user running Windows XP 32 bit with Microsoft Office 2010 could be migrated seamlessly to a new machine running Windows 10 x64 and Microsoft Office 2013 while retaining application specific settings for Office, Firefox, Chrome and Adobe Acrobat as well as other common applications.

We cannot go into the full details of the capabilities of the Migration Manager tool in this document, Details can be found on the Tranxition website:

<http://tranxition.com/product/migration-manager>

Migration Manager Profile Backup/Restore with the SDA (K2000)

This section will cover how to use Migration Manager automated scripting capabilities with the SDA (K2000) Deployment appliance. In order to utilize Migration Manager in a scripted mode, it should be installed on a member server that will have access to sufficient storage for profile backups.

Note:

Migration Manager uses the term “personality” in place of the standard user profile since the tool can back up more than what exists in the standard user profile directories. This document however will refer to the common term of profiles.

Setting up the Migration Manager Installation

Dell and Tranxition have partnered to offer Migration Manager to KACE customers to work within the KACE Boot environment (Windows PE) to backup user profiles. Beginning in February 2016, Quest customers will have a special offer to download and utilize 50 migrations. Once you have downloaded the software from Tranxition, install the application on a server in the network. By using the defaults, it will create a directory on the root of C: called Migration Manager. The application files will live here. **This should be shared so that everyone can have read access.** Once installed, create a directory to store the profile backup data. **This should be shared with READ/WRITE access.** This example will refer to 2 shares: **C:\MigrationManager** for application files, and **C:\MigrationData** for profile backup storage.

Using the Unattended Command Lines

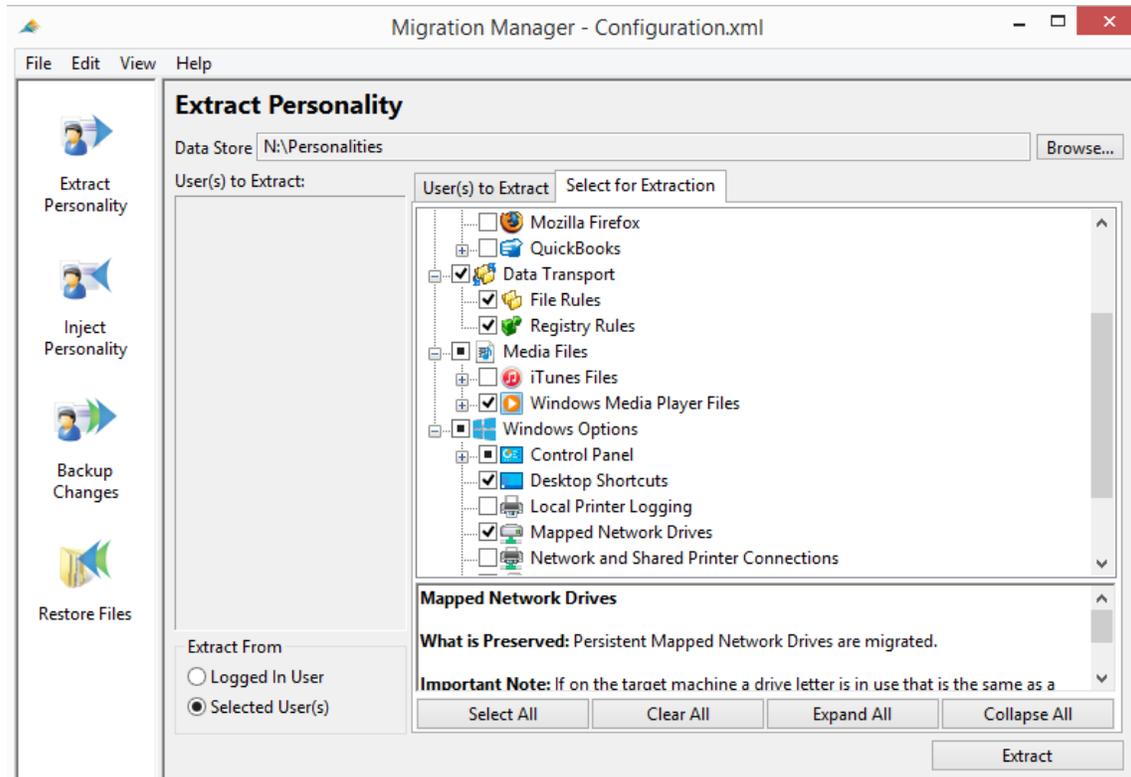
Migration Manager comes with detailed documentation about using command line arguments to automate profile backups. Full list of automation commands can be found here:

[Automating Migration Manager](#)

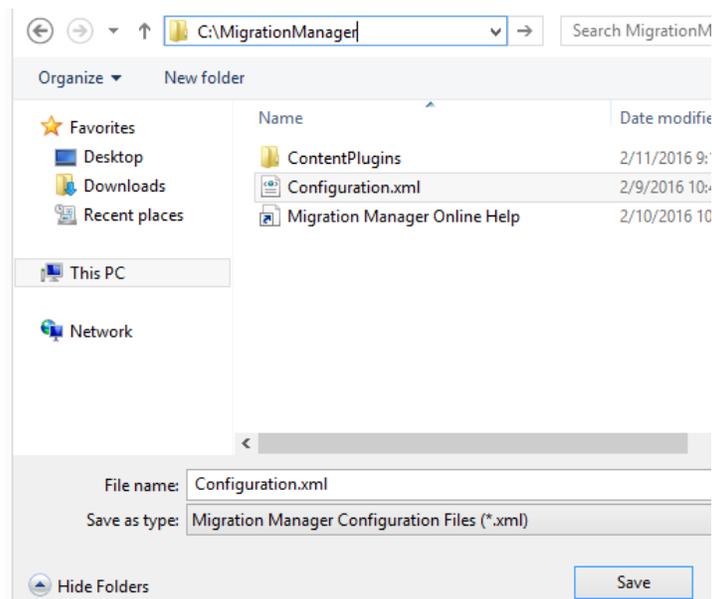
In this example we will back up all profiles except local users.

Once Migration Manager is installed, a configuration file should be created which allows the administrator to choose the specific elements of the user profile that should be backed up. These settings will be saved in an XML file and should be placed in a directory that is accessible with at least read access. In this example we will store the XML file in the same directory as the data.

Open the Migration Manager application by running the MigrationManager.exe file in the Migration Manager Installation directory.



Choose the Save As feature once you have selected the appropriate options. Name the file and directory to store the XML file.



Next we need to develop the KACE script that will call the profile extraction tool and backup the profiles to the server.

Creating the KACE Script to Backup Profiles

Using a Pre-Installation task within the SDA (K2000), we can call the Migration Manager executables and run profile extraction on targeted Windows systems.

SDA (K2000) Pre Installation Script

Create a new SDA (K2000) Pre Install batch script and configure the script with the following parameters:

```
net use M: \\192.168.253.102\MigrationManager /user:demo\administrator Admin123
```

```
net use N: \\192.168.253.102\MigrationData /user:demo\administrator Admin123
```

```
M:\MigrationManager.cmd /autoextract /ALLUSERS /EXCLUDELOCAL /config  
"M:\configuration.xml"
```

In this example, the user name we are using to authenticate with is **Administrator**, the domain is **DEMO** and the password for this account is **Admin123**

For ease of use we have mapped two drives in the SDA (K2000) for our application. The first drive (M:) will contain the EXE files needed. The second drive (N:) will contain the data directory to store the profile backups.

Note:

Before testing the Pre-Install task, open a command prompt on a PC that is booted to the KACE Boot Environment (KBE). Verify that the NET USE commands work and you can see the files in the M: and N: drives. Verify you can create a directory in the N: drive as well to ensure that the application will be able to write profiles here.

The Windows PE component needs to be called from the MigrationManager.cmd batch file and we are passing parameters to that CMD file that will extract all domain users and utilize the configuration file we have stored in the Migration Manager EXE directory.

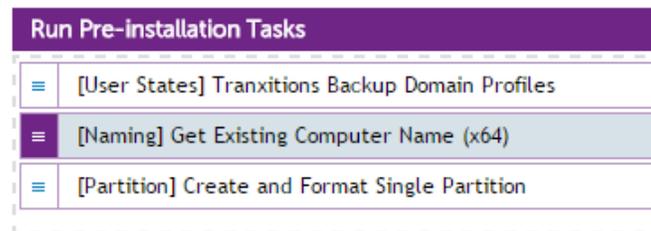
Your Pre-Install task will look something like this:

Pre-installation Task Detail

Created:	Modified:
Thu, Jan 7 2016 09:08:39	Thu, Feb 11 2016 09:24:26
Version:	
4	
Name:	
<input type="text" value="[User States] Tranxitions Backup Dom"/>	
Type:	
BAT Script	
Runtime Environment:	
<input checked="" type="radio"/> K2000 Boot Environment (Windows)	
BAT Script:	
<pre>net use M: \\192.168.253.102\MigrationManager /user:demo\administrator Admin123 net use N: \\192.168.253.102\MigrationData /user:demo\administrator Admin123 M:\MigrationManager.cmd /autoextract /ALLUSERS /EXCLUDELOCAL /config "M:\configuration.xml"</pre>	

Save the Pre-Install task. Drag the Pre-Install task into a test image deployment.

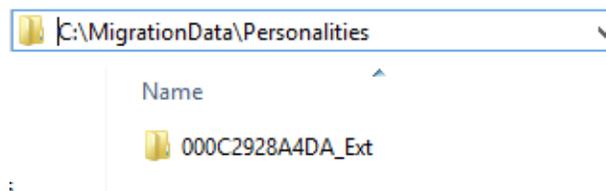
Installation Plan



Make sure that the profile backup task runs BEFORE any formatting or partitioning task.

Save the image deployment. Next we will need to setup the Post Install task that will inject the backed up profiles.

When executed, this backup script will create a directory based on MAC address which will be used when we inject the profiles back after image deployment.



Creating the Post Install Profile Injection Script

Create a new SDA (K2000) Post Install Windows script and configure the script with the following parameters:

```
net use M: \\192.168.253.102\MigrationManager /user:demo\administrator Admin123  
net use N: \\192.168.253.102\MigrationData /user:demo\administrator Admin123  
M:\MigrationManager.exe /autoinject /ALLUSERS /config "M:\configuration.xml" /source:macid
```

We will map drive letters as in the Pre-Install task so the script can execute the files from the M: drive and access the profiles from the N: drive.

This task will utilize MigrationManager.exe however since this is the executable that should be called from within a full version of Windows. Note that we are injecting all the users backed up, we use the same configuration file as the backup, and using the /source:macID parameter will search the data directory for the MAC address of the current machine, and only inject the profiles associated with that MAC address.

Note:

Migration Manager documentation fully outlines parameters that can be used in profile injection. Please refer to Migration Manager docs for full usage parameters.

Drag the Post Install task into the Image Deployment and save the deployment. Note that if there are applications that are not in the base image and are installed as post install tasks, we suggest running the profile restoration as the last post-install task.

Run Post-installation Tasks	
≡	[Application] Google Chrome(x64)
≡	[Application] Firefox 43.0.4 64-Bit
≡	[Application] Adobe Reader DC 15.010.20056
≡	[Application] Notepad++ 6.8.8
≡	[User States] Transitions Restore Domain Profiles

This sequence of tasks should enable you to do an in-place reimaging of an existing Windows computer and retain all the necessary profile data required.

Other Profile Capture and Deployment Scenarios

As with any type of migration there will be times where you want to backup profiles from an old machine, and restore them to a new machine that is replacing old hardware. This can be problematic since the source and destination PCs have different MAC addresses. Another consideration would be that you would probably not want to PXE boot the old machine to capture the profiles before deploying the new system and restoring the profiles to the new system.

This is where we might use the K1000 and scripting to perform the initial backup of the profiles from the old system. This can be pre-staged and can be run even while the user is logged into that profile. We could then alter the directory name in the profile backup directory to match using the MAC address of the new system and simply run a restore of the profiles using a SDA (K2000) Post installation task. There is a more detailed discussion of this functionality in the K1000/Tranxition whitepaper.

Another option would be to pre-stage the profile backups using a K1000 script, then during the post install script, launch the Migration Manager tool and have the administrator interactively select the profile(s) to restore to the newly imaged system.

The team at Tranxition will be able to assist you with understanding the best method based on your requirements.

Conclusion

When used in conjunction with the SDA (K2000) appliance, Migration Manager is a powerful profile backup and restoration tool that will enhance your ability to perform OS migrations keeping important user data and application settings intact.