

Step-By-Step: Migrating a Windows Server 2003 file server, NTFS and Share Rights to Windows Server 2012 R2

Anthony Bartolo 29 Oct 2014 9:20 PM 2

Windows Server 2003 Support Ends July 14th, 2015



With time ticking in regards to end of support on Windows Server 2003, most IT professionals are in the midst of planning their migration. While most are focusing on migrating Active Directory and DHCP, some have expressed interest in migrating file services as well. Windows Server 2012 R2 provides a robust solution in terms of file services for organizations to take advantage of. Hence the creation of this Step-By-Step to further assist the process.

Step 1: Prepping the new Windows Server 2012 R2 machine

- 1. Via Server Manager, navigate to Manage > Add Roles and Features
- Click Next until the Select Features screen is visible
- 3. Ensure PowerShell 4.0 and ISE are installed

4. Select Windows Server Migration Tools and click Next

Select features	Select one or more features to install on the selected server.	DESTINATION SERVER Challenger	
Installation Type Server Selection Server Roles Features Confirmation Russian	Features Description Image: Second state of the	Description Windows Server Migration Tools includes Windows PowerShell cmdlets that facilitate migration of server roles, operating system settings, files, and shares from computers that are running earlier versions of Windows Server or Windows Server 2012 to computers that are running Windows Server 2012.	
	Windows Server Migration Tools Windows Standards-Based Storage Management Windows TIFF IFilter WinRM IIS Extension WINS Server		
	< III >		

Note: The Windows Server Migration Tools include additional cmdlets that assist in the migration of server roles, OS settings files and shares from legacy Windows Servers

5. Click Install

Note: A reboot of this server might be required

Step 2: Generating the necessary PowerShell files for Windows Server 2003

1. On the Windows Server 2012 R2 machine, open PowerShell in Administrator mode and type the following:

SmigDeploy.exe /package /architecture X86 /os WS03 /path <deployment folder path>

Note: Insert your desired path replacing deployment folder path in the script above

- 2. Create the C:\MigratingTools folder on the Windows Server 2003 machine
- 3. Copy the content from Windows Server 2012 R2 folder <deployment folder path> to the Windows Server folder C:\MigratingTools\
- 4. On the Windows Server 2003 machine in the C:\MigratingTools folder, run SMIGDEPLOY.EXE

5. On the Windows Server 2003 machine in the C:\MigratingTools\SMT_ws03_x86\ folder, click & run ServerMigration.pcs1

Step 3: Completing the migration

1. On the Windows Server 2012 R2 machine, still running **PowerShell** in Administrator mode and type the following:

Add-PSSnapin Microsoft.Windows.ServerManager.Migration Get-Command -Module Microsoft.Windows.ServerManager.Migration Receive-SmigServerData

- 2. Enter a desired migration password when prompted
- 3. On the Windows Server 2003 machine, open **PowerShell** in Administrator mode and type the following:

Send-SmigServerData -ComputerName "Computer Name" -DestinationPath "X:\Users" -Include All -SourcePath "F:\users" -Recurse

Note: Insert your Windows Server 2012 R2's name replacing **Computer Name** in the script above

- 4. On the Windows Server 2003 machine, open the registry editor and navigate to HKEY_LOCAL_MACHINE>SYSTEM>CurrentControlSet>Services>LanmanServer>Shares
- 5. Right-click on the Share Key and select Export
- 6. Save the exported key to a folder accessible by the Windows Server 2012 R2 machine
- 7. On the Windows Server 2012 R2 machine, right-click the saved registry file exported from the Windows Server 2003 machine and select **Merge**
- 8. Restart the Windows Server 2012 R2 machine

Note: If your new server uses different drive allocations than the Windows 2003 Server, run the registry editor on the Windows Server 2012 R2 machine > navigate to HKEY_LOCAL_MACHINE>SYSTEM>CurrentControlSet>Services>LanmanServer>Shares and click on the share in question. Edit the Multi-String Path value to refect the new drive allocation

Comments

Jarrod

3 Nov 2014 4:02 PM

I am surprised when I see blogs about moving file shares and I see no mention Windows file server migration toolkit 1.2? Works great, lets you move multiple shares at once (Including DFS), cleans up ACLs, does a Finalize phase which takes down old share copies any data that changes during initial copy, and has the ability to pause a "project" to open and pick up at a later date remebering all the settings. Oh and its a Microsoft tool:

http://www.microsoft.com/en-us/download/details.aspx?id=10268

6 Nov 2014 5:20 AM

Any reason no mention here?

Anthony Bartolo

Hi Jarrod,

Great topic suggestion :)

http://blogs.technet.com/b/canitpro/archive/2014/11/06/step-by-step-migrating-a-2003-file-serverwith-microsoft-file-server-migration-toolkit.aspx

Some system administrators do enjoy utilizing PowerShell to schedule and complete tasks in line with other task required for their migration too. In the end IT professionals are provided choice.