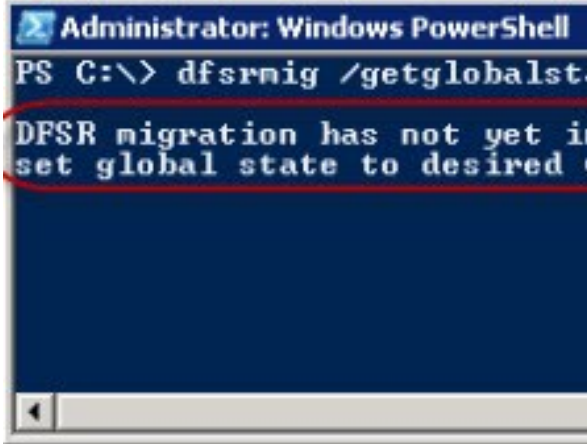# Step-by-Step Fix DFSR Replication Issues

Step-by-Step Fix DFSR Replication Issues

This article is a step-by-step FRS to DFSR migration guide from FRS replication of domain controllers to the newer DFSR replication.

Step #	Task	Screenshot
Method 1		
1	Open a PowerShell command and run the following cmdlet. If you are running FRS yet, you should get a warning that the migration has not been started yet. If you are running on DFSR you should get a return that the migration state is in the 'Eliminated" step. > dfsrmig/getglobalstate Since we have not performed the migration steps, we will get the following error:1	
Method 2		
1	Log on to a domain controller and examine under c:\Windows whether a **SYSVOL_DFSR** folder exists. If it exists, it means you are already replicating	

using DFSR. In any other case, you should have a **SYSVOL** folder and replicate using **FRS**.	
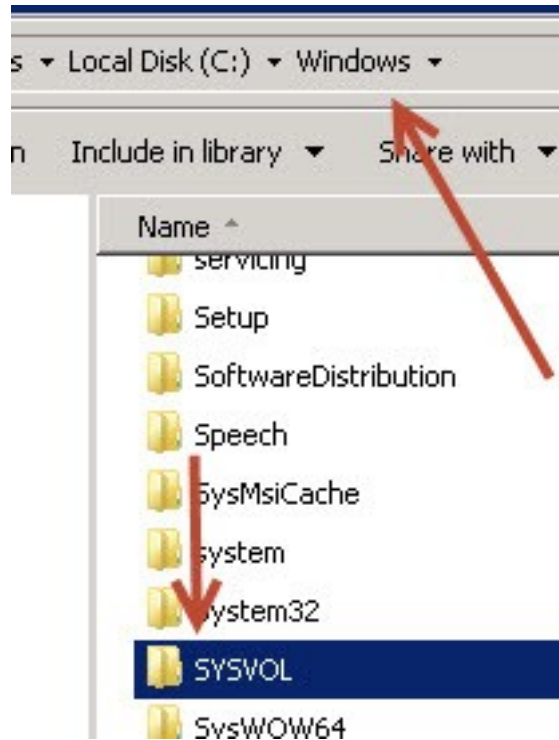
Method 3

You may notice "File Replication Service" service running under services snap-in. This service will be disabled once the migration is complete.

Migrating to the Prepared State

The first step of the migration state is to get into the "Prepared" state. However, before actually triggering the process, we should make sure that the active directory is in a healthy state.

1	On each domain controller in your domain you wish to migrate, open up a command prompt and type **net share** to verify that SYSVOL

| | folder is shared and maps to the correct folder. The output should be something similar to the following: | ```
Share name    Resource                          Remark
-----------------------------------------------------------------------
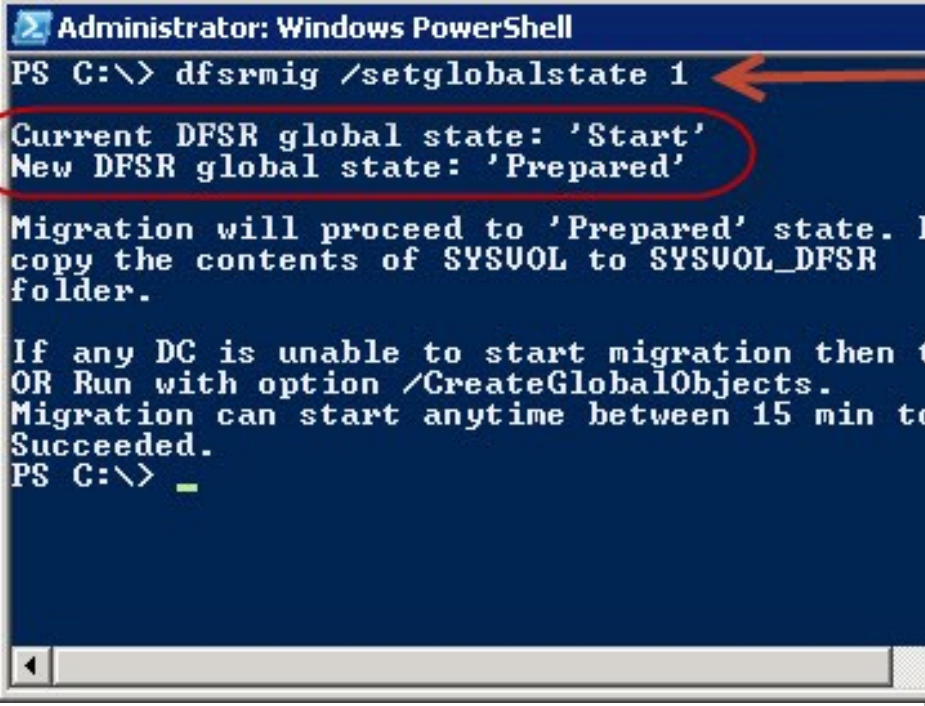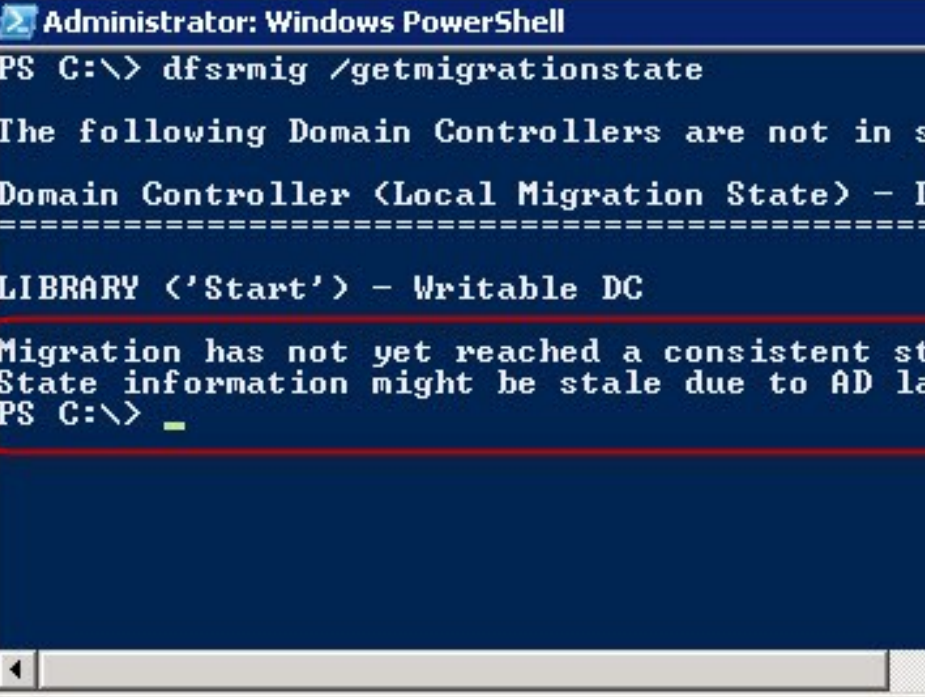[...]
NETLOGON       C:\Windows\SYSVOL\sysvol\showmehowtodoit.com\SCRIPTS
                                                Logon server share
SYSVOL         C:\Windows\SYSVOL\sysvol          Logon server share
``` |
2	Use Registry Editor on each domain controller in the domain to navigate to HKEY_LOCAL_MACHINE\System\CurrentControlSet\Services\Netlogon\Parameters and verify that the value of the SysVol registry entry is [*drive*:\] *Windows_folder*\SYSVOL\sysvol, and that the value of the SysvolReady registry entry is 1.	
3	Verify that the DFS Replication service is listed with the values of **Started** in the **Status** column and **Automatic** in the **Startup Type** column.	
4	Open up a command	

	prompt and type **repadmin/ReplSum** to get a status of replication between domain controllers.	
5	While having the command prompt window open, run **dcdiag** tool and examine the output for possible error.	
Once you are confident that your active directory health is good, we may trigger the migration process. Log on to your primary domain controller (PDC).		
1	Open up a PowerShell or command prompt window and type	

	dfsrmig/setglobalstate 1. You should get informed that the new global migration state is now set to "prepared."	**Administrator: Windows PowerShell** PS C:\> dfsrmig /setglobalstate 1 ← Current DFSR global state: 'Start' New DFSR global state: 'Prepared' Migration will proceed to 'Prepared' state. copy the contents of SYSVOL to SYSVOL_DFSR folder. If any DC is unable to start migration then OR Run with option /CreateGlobalObjects. Migration can start anytime between 15 min to Succeeded. PS C:\> _
2	Type **dfsrmig/GetMigrationState**. You will probably receive a warning that the global migration state has not reached a consistent state (yet). This is normal since domain controllers now have to perform various tasks related to the migration. Try re-running the command after some time.	**Administrator: Windows PowerShell** PS C:\> dfsrmig /getmigrationstate The following Domain Controllers are not in s Domain Controller (Local Migration State) - I === LIBRARY ('Start') - Writable DC Migration has not yet reached a consistent st State information might be stale due to AD la PS C:\> _
3	Check on your domain controllers under c:\windows if a new SYSVOL_DFSR folder has been created.	

		s ▾ Local Disk (C:) ▾ Windows ▾ ▾ 🔄 Search V n Include in library ▾ Share with ▾ New folder Name ▴ Date mo 📁 Speech 14-Jul-09 📁 SysMsiCache 14-Jul-09 📁 system 14-Jul-09 📁 System32 17-May- 📁 SYSVOL 02-Nov- 📁 SYSVOL_DFSR 23-May- 📁 SysWOW64 12-May- 📁 TAPI 14-Jul-09 📁 Tasks 12-May- 📁 Temp 23-May- 📁 tracing 14-Jul-09
4	Type **dfsrmig/GetMigratio nState** to verify that the global state replication has reached a consistent level between domain controllers.	**Administrator: Windows PowerShell** PS C:\> dfsrmig /getmigrationstate ◄ All Domain Controllers have migrated successi Migration has reached a consistent state on a Succeeded. PS C:\> _
5	Now we are ready to proceed to the next step, migrating to the	

| | "Redirected" state. Type **dfsrmig/setglobalstate 2** to go from the "Prepared" state to the "Redirected" state. Your output should be similar to: | ```
Administrator: Windows PowerShell
PS C:\> dfsrmig /setglobalstate 2

Current DFSR global state: 'Prepared'
New DFSR global state: 'Redirected'

Migration will proceed to 'Redirected' state
will be changed to SYSVOL_DFSR folder,
which is replicated using DFSR.

Succeeded.
PS C:\> _
``` |
| 6 | Examine the migration process by typing **dfsrmig/GetMigrationState**. Once the domain controllers have reached a consistent state, proceed to the next step. | |
| 7 | We are now ready to get to the final stage of the migration process. Once the migration process is set to the next 'ELIMINATED' state, it cannot be reverted under any circumstances. Therefore, ensure that SYSVOL replication using the DFS | |

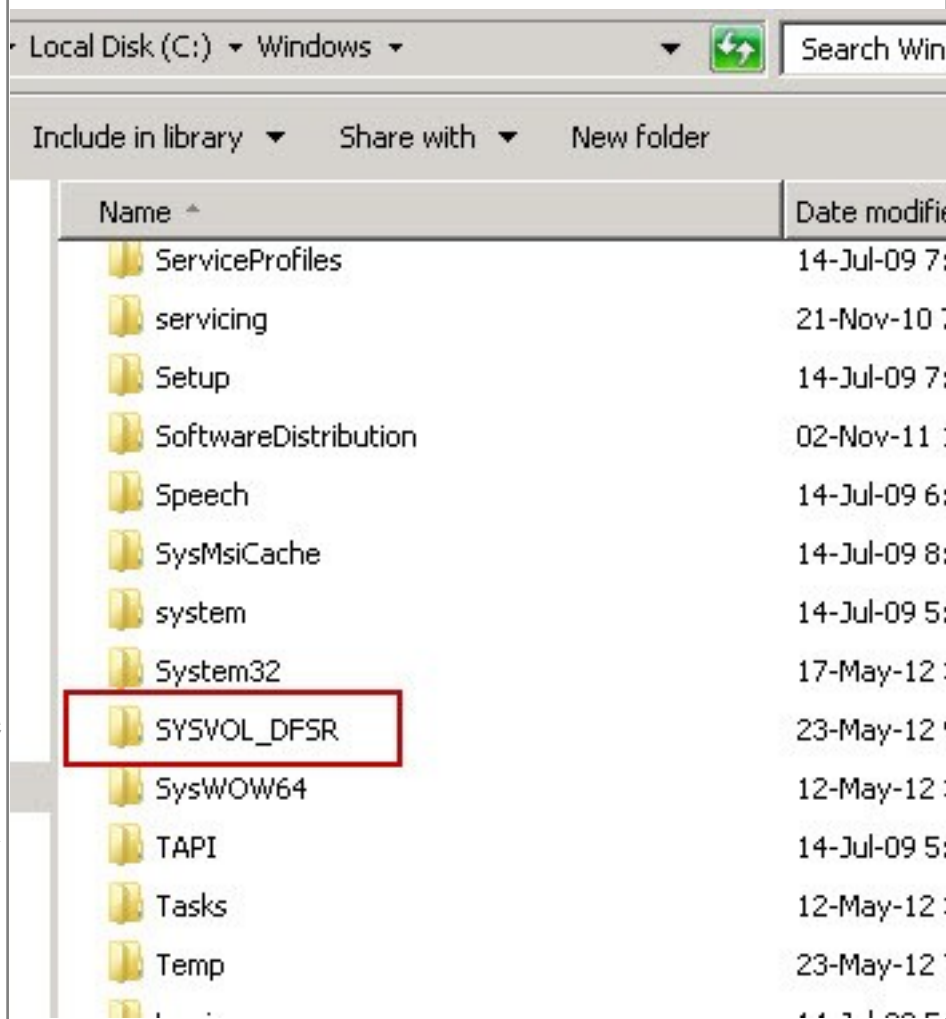|		
	Replication service healthy, before committing entirely to finalizing the migration process and re-run the diagnostic commands shown earlier to verify active directory health. The most important precaution is to ensure that all domain controllers have successfully migrated to the 'REDIRECTED' state before changing the global migration state to the 'ELIMINATED' state. This can be achieved by typing **dfsrmig/getmigration state**.	
8	Once you ensured that the replication health is good, type **dfsrmig/setGlobalSt ate 3**. There will be a series tasks that now will be performed in the background such as: If the FRS service is running on the	You may notice that the SYSVOL folder is deleted.

domain controller, it is then stopped. It deletes the Active Directory configuration settings required for the FRS service to replicate the SYSVOL share between domain controllers. Thus, all global settings of the FRS service that pertain to the SYSVOL content set are deleted. The 'SYSVOL' folder which was being replicated by the FRS service is now deleted. Note that if you have Windows Explorer or the command shell open on the domain controller and if the current directory corresponds to the 'SYSVOL' folder location, the DFS Replication service will be unable to delete this folder owing to sharing violations. You should have a similar result as to the right.

```
Administrator: Windows PowerShell
PS C:\> dfsrmig /getmigrationstate  ⟵

All Domain Controllers have migrated successfully to
Migration has reached a consistent state on all Doma
Succeeded.
PS C:\> _
```

Instead, SYSVOL_DFSR is present.

Local Disk (C:) ▾ Windows ▾   ▾ 🔄   Search Win

Include in library ▾   Share with ▾   New folder

Name ▲	Date modifie
ServiceProfiles	14-Jul-09 7:
servicing	21-Nov-10 7
Setup	14-Jul-09 7:
SoftwareDistribution	02-Nov-11
Speech	14-Jul-09 6:
SysMsiCache	14-Jul-09 8:
system	14-Jul-09 5:
System32	17-May-12
SYSVOL_DFSR	23-May-12
SysWOW64	12-May-12
TAPI	14-Jul-09 5:
Tasks	12-May-12
Temp	23-May-12

		FRS service is disabled under services.