How To: Distributed File System

This document walks you through configuring Distributed File System (DFS). DFS allows you to setup a DFS Namespace so that all network SMB shares share the same path regardless of what server they are on. We will create some shares across two file servers.

We will be installing the DFS Role on our DC's. At some point we will enable DFS-R and move away from the SYSVOL. DFS shouldn't add much load to your DC's.

Install DFS Roll

1. On your Domain Controller, start Server Manager and click Add roles and features.

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2. On the Before you begin dialog, click Next.

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3. On the Select installation type dialog, click Next.



4. On the Select destination server dialog, click Next.

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5. On the Select server roles dialog, expand File and Storage Services and File and iSCSI Services. Check DFS Namespace.



6. On the Add features that are required for DFS Namespaces dialog, click Add Features.



- 7. On the Select server roles dialog, click Next.
- n, Rep Se Server Manager • Dashboard • 🕝 I Manage Tools View Help WELCOME TO SERVER MANAGER Dashboard Local Server Add Roles and Features Wizard × All Servers DESTINATION SERVER erdc01.erlab.lan AD DS Select server roles TE DHCP DNS Select one or more roles to install on the selected server. Before You Begin File and Storage Installation Type Roles Description Server Selection DFS Namespaces enables you to group shared folders located on Active Directory Certificate Services
 Active Directory Domain Services (Installed)
 Active Directory Federation Services
 Active Directory Right Directory Services
 Active Directory Right Management Services
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 DHCP Server (Installed) different servers into one or more logically structured namespaces. Each namespace appears to users as a single shared folder with a series Features Confirmation Hide Device Health Attestatic
 DHCP Server (Installed) of subfolders. However, the underlying structure of the namespace can consist of nume DNS Server (Installed) Fax Server File and Storage Services (2 of 12 installed) shared folders located on different servers and in multiple sites. ▲ ■ File and iSCSI Services (1 of 11 installed)
 File and ISCS Services (1 of 11 inst)

 ♥ File Server (Installed)

 BranchCache for Network Files

 Data Deduplication

 ♥ DFS Namespaces

 DFS Replication

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 2 File Server VSS Agent Service iSCSI Target Server < Previous Next > Install Cancel へ 臣 4:47 PM 10/28/2017 e Ħ

8. On the Select features dialog, click Next.



9. On the Confirm installation selections dialog, click Install.

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		Export configuration settings Specify an alternate source path	Install	

10. The DFS Namespace role begins the installation.

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11. Once the installation is complete, click Close and then close Server Manager.



12. Repeat this section on another Domain Controller so that you have high availability for your DFS setup.

Configure DFS Namespace

1. On your primary DC, click Start, Windows Administrative Tools, DFS Management.



2. In the right pane, click New Namespace...

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3. Enter the server name that will host the DFS Namespace, and click Next.

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- 4. Enter the name of the DFS Namespace, and click Next.

5. Make sure Domain-based namespace is selected, and click Next.



6. Review the settings, and click Create.



7. On the Confirmation dialog, click Close.

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8. You should now see the new DFS Namespace under Namespaces in the left pane.

9. Now add your second DC as a Namespace Server. Select the new Namespace in the left pain, click the Namespace Servers tab in the middle pane, and click Add Namespace Server

in the right pane.

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10. In the Namespace server box type the FQDN of your second DC, and click OK.

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11. It will now check for DFS on the second DC.

12. Once done, you will see the second DC listed as a DFS Namespace Server.

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13. Login to your second DC and start DFS Management.

14. Verify that you see the new DFS Namespace.

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Configure Folders under your DFS Namespace

1. Back on your primary DC, select the DFS Namespace in the left pane, click the Namespace tab in the middle pane, and then click New Folder... in the right pane.

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2. Enter a name for the folder, and then click the Add button.

3. Enter the path to full path to your shared server (Most likely this path will point to a share on a File Server.), then click OK.

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4. On the New Folder dialog, click OK.

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5. You will now see the new folder listed under your Namespace.

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6. Add additional Folders as needed.

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7. Now you can have file shares spread across multiple servers, but map them using a similar path and not have to remember what server a share is on.