Installing Distributed File System (DFS) on a 2012 Server

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The Distributed File System

We use the Distributed File System to replicate our files from the shared folders holding the data for our organization to the secondary server.



Setup Security Policies

To add a new role such as Distributed File Services on the Windows 2012 Standard Server, we select the Server Manager button from the Task Bar and select Manage from the Dashboard. From the list we choose Add Roles and Features.



Before You Begin

Before we add a role to the Windows 2012 Standard Server, we will want to have a smart password on our administrator account. to configure our network connections with a static IP address and we want to have the most current Service Packs and Windows Updates loaded. If this is done, then we can go ahead press the and Next command button.

B	Add Roles and Features Wizard	
Before you begin	DESTINATION SERVER charm2.charm.local	
Before You Begin Installation Type Server Salaction	This wizard helps you install roles, role services, or features. You determine which roles, role services, or features to install based on the computing needs of your organization, such as sharing documents, or hosting a website.	
Server Roles	To remove roles, role services, or features: Start the Remove Roles and Features Wizard	
Features Confirmation Results	Start the Remove Roles and reatures wizard Before you continue, verify that the following tasks have been completed: • The Administrator account has a strong password • Network settings, such as static IP addresses, are configured • The most current security updates from Windows Update are installed If you must verify that any of the preceding prerequisites have been completed, close the wizard, complete the steps, and then run the wizard again. To continue, click Next.	
	Skip this page by default	
	< <u>P</u> revious <u>Next</u> <u>Install</u> Cancel	

Installation Type

Then we opt for the installation type which is either Role based or Remote Desktop Services Installation. For a stand alone server, we will choose the Role based option.

Press the Next button to continue.

b	Add Roles and Features Wizard
Select installation	on type Destination server charm2.charm.local
Before You Begin Installation Type	Select the installation type. You can install roles and features on a running physical computer or virtual machine, or on an offline virtual hard disk (VHD).
Server Selection	Role-based or feature-based installation Configure a single server by adding roles, role services, and features.
Features Confirmation	 Remote Desktop Services installation Install required role services for Virtual Desktop Infrastructure (VDI) to create a virtual machine-based or session-based desktop deployment.
Results	
	< Previous Next > Install Cancel

Select Destination Server

Now we will select a server from the server pool. This can be a physical or virtual server. We opt to choose a server from the server pool and we highlight our server name from the list.

Press the Next button to advance.

-4	Add Roles and Features Wizard		
Select destination	DESTINATION SERVER Charm2.charm.local		
Before You Begin	Select a server or a virtual hard disk on which to install roles and features.		
Server Selection	●: Select a server from the server pool ○ Select a virtual hard disk		
Server Roles Features	Server Pool		
Results	Name IP Address Operating System		
	charm2.charm.local 192.168.10.231 Microsoft Windows Server 2012 Standard 1 Computer(s) found 1 Computer(s) found This page shows servers that are running Windows Server 2012, and that have been added by using the Add Servers command in Server Manager. Offline servers and newly-added servers from which data collection is still incomplete are not shown.		
	< <u>Previous</u> <u>N</u> ext > <u>Install</u> Cancel		

Select Server Role

The bbA Roles and Features Wizard window shows the multitude of functions a 2012 server can provide. We see the File and Storage Devices is installed. Double click it to the selection. expand Annotate the DFS Namespace.

A smaller dialogue box will appear and we then press the Add Features button on that pop up window.

a	Add Roles and Features Wizard	
Select server roles		DESTINATION SERVER charm2.charm.local
Before You Begin Installation Type Server Selection Server Roles Features Confirmation	Select one or more roles to install on the selected ser Roles File And Storage Services (Installed) File Server (Installed) File Server (Installed) BranchCache for Network Files	Normal Control Services Description Image: Service of the servi
Results Add Roles and F	Data Deduplication DFS Namespaces DFS Replication DFS Replication Service	node, and share files by using the NFS protocol.
Add features that are required The following tools are required to m have to be installed on the same ser Remote Server Administration T Role Administration Tools File Services Tools [Tools] DFS Managen	d for DFS Namespaces? hanage this feature, but do not ver. iools hent Tools	nd VSS
✓ Include management tools (if a)	oplicable)	

Select Role Services

On the Select Role Services window, annotate the Distributed File Services, DFS Namespaces and DFS Replication checkboxes.

B	Add Roles and Features Wizard	_ D X	
Before You Begin Installation Type Server Selection Server Roles Features Confirmation Results	Add Roles and Features Wizard Select one or more roles to install on the selected server. Roles	Description DFS Replication is a multimaster replication engine that enables you to synchronize folders on multiple servers across local or wide area network (WAN) network connections. It uses the Remote Differential Compression (RDC) protocol to update only the portions of files that have changed since the last replication. DFS Replication can be used in conjunction with DFS Namespaces, or by itself.	
< <u>P</u> revious <u>Next</u> > <u>Install</u> Cancel			

Features Window

Next, the Features window comes up and we will not add any features at this time.

Press the Next button to go on.

B	Add Roles and Features Wizard	_ D X
Select features		DESTINATION SERVER Charm
Before You Begin	Select one or more features to install on the selected server.	
Installation Type	Features	Description
Server Selection Server Roles	INET Framework 3.5 Features INET Framework 4.5 Features (Installed)	.NET Framework 3.5 combines the power of the .NET Framework 2.0 APIs with new technologies for
AD DS	Background Intelligent Transfer Service (BITS) BitLocker Drive Encryption	building applications that offer appealing user interfaces, protect your customers' personal identity
Confirmation Results	BitLocker Network Unlock BranchCache Client for NFS	information, enable seamless and secure communication, and provide the ability to model a range of
	Data Center Bridging Enhanced Storage	business processes.
	Fallover Clustering Group Policy Management Ink and Handwriting Services	
	Internet Printing Client IP Address Management (IPAM) Server	
	< III >	
	< <u>P</u> revious <u>N</u> ext	>Install Cancel

Confirm Installation Selections

We confirm that we want to set the machine up as a Distributed File Services, so we pick the Install button to proceed.

B	Add Roles and Features Wizard	_ 🗆 X
Confirm installation	on selections	DESTINATION SERVER charm2.charm.local
Before You Begin	To install the following roles, role services, or features on selected server, click install.	
Installation Type	Restart the destination server automatically if required	
Server Selection	Optional features (such as administration tools) might be displayed on this page because they have been selected automatically. If you do not want to install these optional features, click Previous to clear their check haves.	
Server Roles		
Features		
Confirmation Results	File And Storage Services File and iSCSI Services DFS Namespaces DFS Replication Remote Server Administration Tools Role Administration Tools File Services Tools DFS Management Tools	
	Export configuration settings Specify an alternate source path	
	< Previous Next > Install	Cancel

Installation Results

Finally, the server File Distribution Services role installation is completed. We can close the window.



DFS Management

In the Server Manager window, select Tools and then choose DFS Management.



DFS Management Window

In the next lesson, we will replicate between two servers.

