Replicate Data Between Servers

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Backing Up a Primary Domain Controller (DC)

It is very necessary to backup data on a Primary Domain Controller (DC), so in this exercise we will use the Distributive File System to replicate a data folder from the Primary DC to the Secondary DC.



DFS Management Window

On the Start menu, we pick Administrative Tools and we choose DFS Management to open the Distributed File System Management console. On the left pane, we expand the folder and right click on Replication. We choose New Replication Group from the popup menu.



Replication Group Type

The Replication Group Type window will open and we opt for the Multipurpose replication group.

We choose the Next button to continue.

🍄 New Replication Group Wiz	zard	
Replication Gr	оир Туре	
Steps:	Select the type of replication group to create.	
Replication Group Type Name and Domain Replication Group Members Topology Selection Hub Members Hub and Spoke Connections Replication Group Schedule and Bandwidth Primary Member Folders to Replicate Review Settings and Create Replication Group Confirmation	 Multipurpose replication group This option configures replication between two or more servers for publication, content sharing, and other scenarios. Replication group for data collection This option configures two-way replication between two servers, such as a branch server and a hub (destination) server. This allows you to collect data at the hub server. You can then use backup software to back up the data on the hub server. 	
	< <u>Previous</u> Ca	ancel

Name and Domain

Next, the Name and Domain window will give us the chance to name the replication group, add a description, and to pick the domain. We will be replicating data from the Primary DC to the Secondary DC, so we will stay in the current domain.

New Replication Group Wi	zard	
Name and Dor	main	
Steps:	Type a name and domain for the replication group. The name of the replication	
Replication Group Type	group must be unique in the domain that hosts the replication group.	
Name and Domain	Name of replication group:	
Replication Group Members	2012 Networkers	
Topology Selection		
Hub Members	Optional description of replication group:	
Hub and Spoke Connections	Duplicates data files to secondary server	
Replication Group Schedule and Bandwidth		
Primary Member	Domain:	
Folders to Replicate	quark.local Browse	
Review Settings and Create Replication Group		
Confirmation		
	< Previous Next > C	ancel

Replication Group Members – First Server

We choose the Add button and on the select Computers window, and we type the name of the Primary DC. We select the name of the Primary DC from the list and push the OK button.

Multiple Names Found

Matching names: Name (RDN)

QUANTUM

NUCLEAR CONTRACT NOT CONTRACT



Replication Group Members – Second Server

Again we choose the Add button and this time	New Replication Group Wiz			
we select the name of the Secondary DC for our forest.	Steps: Replication Group Type Name and Domain Replication Group Members	replication group. <u>M</u> embers: <u>Server</u> QUANTUM	o or more servers that will become members of the Domain quark.local	Γ
Multiple Names Found More than one object matched the name "quantum". Select one or more names from this list, or, reenter the name. Matching names: Name (RDN) Description CUANTUM CUANTUM CUANTUM	In Folder quark.local/Domain Controllers quark.local/Domain Controllers	UANTUM2	quark.local	
	OK Cancel	Add Remove	< <u>P</u> revious	Next > Cancel

Topology Selection

On the Topology Selection window, we will choose the Full mesh option, so we can write the files from our Primary DC to the Secondary DC.

We push the Next button to continue.

🚰 New Replication Group Wiz	zard	
Topology Sele	ction	
Steps:	Select a topology of connections among members of the replication group.	
Replication Group Type Name and Domain Replication Group Members Topology Selection	C Hub and spoke This topology requires three or more members in the replication group. In this topology, spoke members are connected to one or two hub members. This topology works well in publication scenarios where data originates from the hub member and replicates out to the spoke members.	
Replication Group Schedule and Bandwidth	Eull mesh Eul Interview Eul Interview Interv	
Primary Member	In this topology, each member replicates with all other members of the replication	
Folders to Replicate	group. This topology works well when there are ten or fewer members in the replication group.	
Review Settings and Create Replication Group	C No topology	
Confirmation	Select this option if you want to create a custom topology after you finish this wizard. No replication will take place until you create the custom topology.	
	For more information about creating a namespace, see <u>DFS Management Help</u>	
	< <u>P</u> revious <u>N</u> ext > Ca	incel

Replication Group Schedule and Bandwidth

On the Replication Group Schedule and Bandwidth window, we will opt for using the full bandwidth and continuous replication.

We press the Next button to go on.

🐴 New Replication Group Wiz	zard	
Replication G	roup Schedule and Bandwidth	
Steps: Replication Group Type Name and Domain Replication Group Members Topology Selection Replication Group Schedule and Bandwidth Primary Member Folders to Replicate Review Settings and Create Replication Group Confirmation	Select the replication schedule and bandwidth to be used by default for all new connections in the replication group. Epplicate continuously using the specified bandwidth Use this option to enable replication 24 hours a day, seven days a week using the following bandwidth: Bandwidth: Full C Replicate during the gpecified days and times Use this option to specify the days and times at which replication occurs by default. The initial replication schedule has no replication intervals; you must create at least one replication interval before replication can occur. Edit: Schedule	
	< Previous Next >	Cancel

Primary Member

On the Primary Member window, we will choose the name of the Primary DC.

We indicate the Next button to advance.

ବ New Replication Group W	izard	
Primary Mem	ber	
Steps:	Select the server that contains the content you want to replicate to other members. This server is known as the primary member.	
Replication Group Type		
Name and Domain	Primary member:	
Replication Group Members	QUANTUM	
Topology Selection		
Replication Group Schedule and Bandwidth	If the folders to be replicated already exist on multiple servers, the folders and files on the primary member will be authoritative during initial replication.	
Primary Member		
Folders to Replicate		
Review Settings and Create Replication Group		
Confirmation		
	For more information about the primary member and authoritative content, see DFS Management Help	
	< <u>P</u> revious <u>N</u> ext > Ca	incel

Folders to Replicate

In the Folders to Replicate window we add the folder or folders we want to replicate.

Replication	g Group Type
Add Folder to Replicate	Domain
	Group Memb
Member:	election
QUANTUM	Group Scheo idth
Local path of folder to replicate:	mber
C:\Users\2012 networkers Browse	Replicate
Example: C:\Documents	of 2012 netw embers
	ttings and Cre Group
Select or type a name to represent this folder on all members of the replication group. This name is known as the replicated folder name.	n
2012 networkers	
© Use custom name: Example: Documents	
Permissions >> OK Cancel	Each

🐴 New Re	eplication Group Wi	zard			
Ų	Folders to Rep	blicate			
	n Group Type Domain	To select a folder on the prima members of the replication grou Replicated <u>fo</u> lders:	ry member that you want to re up, click Add.	plicate to other	
e	Group Members election Group Schedule idth mber Replicate of 2012 networkers embers	Local Path C:\Users\2012 networkers	Replicated Folder Name 2012 networkers	NTFS Permissions Use existing per	
the ame.	ttings and Create Group n	Add	Remove		
			l	< <u>P</u> revious <u>N</u> ext :	> Cancel

h time we press the Add button, the smaller dialog box opens and we can browse to the folder we want to replicate.

Secondary Member

On this window, we will see the name of the Secondary DC. We select the Edit button.

	Name and
Edit	×
General	
Member:	
QUANTUM2	
Select the initial status of the replicated folder on this member	er.
Membership status:	
O Disabled	
The replicated folder will not be stored on this member.	
 Enabled Keep the following folder synchronized with other member 	ers.
Local path of folder:	
C:\Users\2012 networkers	Browse
Example: C:\Data	
	·
ОК	Cancel

췁 New Re	eplication Group W	izard						
Ø	Local Path of	2012	networke	ers on Other Memb	pers			
Steps:		To er	nter the loca	l path where the replicat eplication group, click Ec	ed folder will be	stored on the other		
Name and	n Group Type Domain Group Members election	0	Primary m		QUA	NTUM sers\2012 networkers		
	Group Schedule dth nber eplicate of 2012 networkers embers ings and Create Group		nber ANTUM2	Local Path <disabled></disabled>				
····		<u> </u>	<u>E</u> dit			< Previous	lext >	Cancel
	11/0 60	.		the feld		a $uable$	· · · · · · · · · · ·	

We browse to the folder we want to write the data from the Primary DC.

Folders to Receive Replicate

We can see the name of the Secondary DC and the local path to where the data files will be written.

We choose the Next button to continue.

🍄 New Replication Group Wi	zard	
Local Path of:	2012 networkers on Other Members	
Steps:	To enter the local path where the replicated folder will be stored on the other members of the replication group, click Edit.	
Replication Group Type		
Name and Domain	Primary member: QUANTUM	
Replication Group Members	Primary member local path: C:\Users\2012 networkers	
Topology Selection	Member <u>d</u> etails:	
Replication Group Schedule	Member Local Path	
and Bandwidth	QUANTUM2 C:\Users\2012 networkers	
Primary Member		
Folders to Replicate		
Local Path of 2012 networkers on Other Members		
Review Settings and Create Replication Group		
Confirmation		
	<u>E</u> dit	
	< Previous Next > C	Cancel

Review Replication Settings

We now have the prospect to review all of the settings we made to replicate the files in the 2012 Networkers folder on the Primary DC to the Secondary DC. If we with the agree information, we should push the Create button.

New Replication Group Wi	zard	
Review Settin	gs and Create Replication Group	
Steps: Replication Group Type Name and Domain Replication Group Members Topology Selection Replication Group Schedule and Bandwidth Primary Member Folders to Replicate Local Path of 2012 networkers on Other Members Review Settings and Create Replication Group Confirmation	You selected the following settings for the new replication group. If the settings are correct, click Create to create the new replication group. To change a setting, click Previous, or select the appropriate page in the orientation pane. Replication group settings: Replication Group Name: 2012 Networkers Replication Group Description: Duplicates data files to secondary server Domain of Replication Group: quark local Replication Group Members (2): QUANTUM QUANTUM2 Topology type: Full mesh List of connections (2): QUANTUM2 Default Connection Schedule: Replicate continuously with Full bandwidth	
	< <u>P</u> revious Create C	ancel

Confirmation

When we setup a connection to another server, we always feel good when we see the green check marks that show a successful setup and connection with another machine. A message will appear when we close the confirmation to tell us to expect an initial replication delay.

Replication will not the replication group. The Services replication

Replication Delay

tup a	
another and the confirmation a	
Stens:	
see the Replication Group Type Vou have successfully completed the New Replication Group Wize	ard.
rks that Name and Domain	
CCESSful Replication Group Members Tasks Errors	
nection Topology Selection Task Status	
achine. Replication Group Schedule Create replication group. Success	
Primary Member Set permissions on replicated folders. Success	
appear Success Folders to Replicate Create replicated folder. Success	
Se the Local Path of 2012 networkers Oreate connections. Success	
tell us Review Settings and Create	
initial Replication Group	
Confirmation	
/.	
×	
begin until the configuration is picked up by the members of the The amount of time this takes depends on Active Directory Domain	
n latency as well as the polling interval.	
his again	
	Close
ОК	

DFS Management

We can see the new replication group.

After several minutes, we can check the hard drive on the Secondary DC and we will see that the data from the Primary Dc is written to it.

We can repeat the exercise for other data folders on the primary DC if we desire.

