How To: Windows Server 2016 – Add Additional Domain Controllers to a Domain

This document explains how to configure a standard Windows Server 2016 installation as an additional Domain Controller in your domain. You normally want at least two domain controllers for redundancy.

Join Server to Domain

1. Right-click the Start button, and click System.



2. Click Change settings.



3. Click the Change button.

Windows uses	the following information to identify your computer			2	- 🗆 ×	<
on the network	the following information to identify your compared	ecurity > Sy	stem 🗸 (5 Search Control P	anel 🔎	
Computer description:						0
	For example: "IIS Production Server" or "Accounting Server".	hformation	about your computer			
Full computer name:	erdc02	1				-
Workgroup:	WORKGROUP	rver 2016 Stand	dard 🗖	Mendaux Carrie		
To rename this computer workgroup, click Change	or change its domain or Change	osoft Corporat	tion. All rights	windows Serve	2016	6
			Intel(R) Xeon(R) CPU E5-2660	0 @ 2.20GHz 2.20 GHz	(2 processors)	
	N	mory (RAM):	8.00 GB			
	20		64-bit Operating System, x64	-based processor		
		ch:	No Pen or Touch Input is ava	ilable for this Display		
		, domain, and	workgroup settings			-
		ame:	erdc02		Change settings	
	OK Cancel Apply	er name:	erdc02			
	Compu	er description:	*******			
	Workgro	oup:	WORKGROUP			
	Windows ac	tivation				
	Window	s is not activated.	Read the Microsoft Software L	icense Terms		
	Product	ID: 00377-60000-0	0000-AA934	•	Activate Windows	
Sei	e diso					
Se	curry and maintenance					

4. In the Member of section, choose Domain, enter the name of the domain you want to join, and click OK.



5. Enter the Domain Administrator username and password and click OK.



6. On the Computer Name/Domain Changes dialog, click OK.



7. On the second Computer Name/Domain Changes dialog, click OK.

omputer Name/Domain Changes	×	Concernation and the second		
ou can change the name and the membership omputer. Changes might affect access to netv	o of this computer work resources.	ity > System ~	Search Control Panel P	
omputer name:				
rdc02		016 Standard		
ull computer name: rdc02	Computer Name/Do	main Changes	Windows Server [,] 2016	
Member of Domain: efab Jan O Workgroup: MADD/SCOOL ID	Pour must these cha Before resta programs.	restart your computer to apply nges ting, save any open files and close all	0 @ 2.20GHz 2.20 GHz (2 processors) based processor able for this Display	
WORKGROUP		nam, and workgroup settings	1	
OK	Cancel	erdc02 me: erdc02.erlab.lan	Change settings	
ОК	Cancel Apply	erlab.lan		
	Windows activati Windows is n	on ot activated. Read the Microsoft Software	e License Terms	
See also	Product ID: 0	0377-60000-00000-AA934	Sectivate Windows	
Security and Maintenance				

8. On the System Properties window, click Close.



9. On the Microsoft Windows dialog, click Restart Now.

$\leftrightarrow \rightarrow \neg \uparrow \blacksquare$ Control	Panel > System and Security > System	✓ Ö Search	Control Panel
Control Panel Home	View basic information about yo	ir computer	
😌 Device Manager	Windows edition		
Remote settings	Windows Server 2016 Standard		
Advanced system settings	Microsoft Windows	× Window	s Server 2016
	You must restart your computer to	apply these	
	cnanges	0 @ 2.20GH	z 2.20 GHz (2 processors)
	Before restarting, save any open files and clos	all programs.	
	Restart Now	Restart Later able for this	Display
	Computer name, domain, and workgroup	ettings	Character and Sources
	Full computer name: erdc02 erla	alan	Change settings
	Computer description:	Next Second	
	Workgroup: erlab.lan		
	Windows activation		
	Windows is not activated. Read the M	crosoft Software License Term	
	Product ID: 00377-60000-00000-AA934		Activate Windows
See also			
Security and Maintenance			
Security and Maintenance			



10. After the computer restarts, login as the Domain Administrator.

Add DNS Roles

Before you promote this server to a Domain Controller, recommend adding the DNS Server Role. You don't have to add any Forward or Reverse Lookup Zones like you did on the first server. The reason for that is once this server is promoted to a Domain Controller the DNS settings will get replicated.

Here is a screenshot of DNS on my second server that shows no Forward or Reverse Lookup Zones.



Add Active Directory Services Role

We are now ready to add the Active Directory Services Role. We will follow the same process to add the Role as we did on our first domain controller. The difference will be when we do the promotion. So I won't show any screenshots for adding the role, but will start with the promotion process so you can see the difference.

1. Once the Active Directory Services Role has been added, click Promote this server to a domain controller.



2. On the Deployment Configuration dialog, verify the information and click Next.

Dashbo	Serv Add Roles	ver Manager	s Configuration Wizard	• @	Manage	Tools View Help
御 AD DS 요 DNS 電 File and	Before Installa Server Server Feature AD DS Confirm Results	Deployment Configuration Demain Controller Options Additional Options Paths Review Options Prerequisites Check Installation Results	Select the deployment operation Add a domain controller to an existi Add a new domain to an existing for Add a new forest Specify the domain information for this Domain: Supply the credentials to perform this o ERLAB\administrator (Current user)	ng domain rest operation erlab.lan peration	TARGET erdc02.e Select. Change	SERVER rlab.lan Hide
			More about deployment configurations		3	
	ļ		< Pr	evious Next >	Install	ncel
م 🖪	(D) (ê 🔒 📥			^	

3. On the Domain Controller Options dialog, enter the password DSRM, and click Next.



4. On the DNS Options dialog, click Next.

🕋 Server Manag	ger						-	- 0	×
Θ	Ser	ver Manager 🔸 Dasl	nboard	• ③ I	r <u>í</u>	Manage	Tools	View	Help
	📥 Add Role	s and Features Wizard			_				^
🔢 Dashbo									
Local Se	Install	ation progress			DESTINATIO	N SERVER 2 erlab lan		_	
All Serv		📥 Active Directory Domain Service	s Configuration Wizard			- 🗆	×		
🖬 AD DS	Before								
🛱 DNS	Installa	DNS Options				TARGET erdc02.4	SERVER erlab.lan		
File and	Server					CIGCOLI			
	Server	A delegation for this DNS s	erver cannot be created because the autho	ritative parent zone cannot be	e found	Show more	×		
	Feature	Deployment Configuration	Specify DNS delegation options						
	AD DS	Domain Controller Options	Update DNS delegation						
	Rosults	DNS Options							
	Results	Additional Options						Hide	
		Paths Review Options							
		Prerequisites Check							
		Installation		Ν.					
				3					
			More about DNS delegation						
			< Pr	evious Next >	Instal	Ca	ancel		
								9:56 AM	
Q I	נ (- 🖻				^	루그 디 <mark>x</mark>	10/11/2017	2

5. On the Additional Options dialog, click Next.

Dashbo	Add Roles	and Features Wizard				X SERVER		
Local Se All Serv	Installa	Tion Drogress	s Configuration Wizard		erdr(1)2 e	erlah lan	×	1
AD DS DNS File and	Before Installa Server Server Feature AD DS Confirm	Additional Option Deployment Configuration Domain Controller Options DNS Options	S Specify Install From Media (IF Install from media	M) Options		TARGET S erdc02.er	ERVER lab.lan	
	Results	Paths Review Options Prerequisites Check Installation Results	Replicate from:	Any domain controller			v	Hide
				L3				
			More about additional optior	15				

6. On the Paths dialog, click Next.

Dashbo							
Local Se	Installa	ation progress			DESTINATION SERVER erdc02 erlab lan		
All Serv		Le Active Directory Domain Service	s Configuration Wizard		- 0	×	
AD DS	Before						
DNS	Installa	Paths			TARGET S erdc02.erl	ERVER ab.lan	
File and	Server						
	Server	Deployment Configuration	Specify the location of the 4	D DS database log files and SYSVOL			
	Feature	Domain Controller Options	Database folder	C:\Windows\NTDS			
	Confirm	DNS Options	Log files folder:	C:\Windows\NTDS			
	Results	Additional Options	SYSVOL folder:	C:\Windows\SYSVOL			
	-	Pauls Review Options					Hide
		Prerequisites Check					
		Installation					
				Ν			
				~			
			More about Active Director	/ paths			

7. On the Review Options dialog, click Next.



8. On the Prerequisites Check dialog, click Install.



9. The installation and promotion process begins. Once this is complete the server will automatically restart. Once the server has rebooted, you will only be able to use a domain account to login. The local administrator account will no longer work on this server.

DNS Server Check

In the screenshot below, you can now see that the Forward and Reverse Lookup Zones have been replicated to this server via Active Directory.



Now that Active Directory is replicating DNS Server settings, make sure to update the DNS Server settings on your network adapter so that this server is pointing to itself.

Ne Ne	twork and Sharing Center	- 🗆 X
← 9	Network Connections	- 🗆 X
		Search Network Connections 🔎
	Ornanize	» 🖹 🔻 🔳 😧
	Content Internet Protocol Version 4 (TCP/IPv4) Properties X General You can get IP settings assigned automatically if your network supports this capability. Otherwise, you need to ask your network administrator for the appropriate IP settings. O Obtain an IP address automatically Image: Obtain an IP address: IP address: I72 . 16 . 0 . 12 Subnet mask: 255 . 255 . 0 Default gateway: I72 . 16 . 0 . 1 Obtain DNS server address automatically Image: Obtain DNS server: IP2 . 16 . 0 . 12 Alternate DNS server: IP2 . 16 . 0 . 12	
	Validate settings upon exit Advanced	
	item	