## Install and Setup Active Directory

444 Nesvin KN August 8, 2024 Installation 3872

## How to install and setup active directory

**Overview:** This article provides a comprehensive guide on installing and setting up Active Directory on Windows Server 2012, 2016, or 2019. It includes step-by-step instructions for adding roles and features, promoting the server to a domain controller, and managing Active Directory using the Administrative Center.

Pre-requisites : Windows server 2012/2016/2019

## Step 1. From the Server Manager Dashboard, click on Add roles and features.



Step 2. Select Role-based or feature-based installation and click Next.

🔁 Server Manager		-	- 0 X
	Server Manager • D	Dashboard 🔹 🕄 Manage Tools	View Help
Dashboard	WELCOME TO	SERVER MANAGER	^
Local Server	📥 Add Roles and Features Wizard	- 🗆 X	
All Servers			
🖥 File and Storage	Select installation	type Destination server WIN-221V819RVIA	
	Before You Begin	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.	
	Server Roles	○ Remote Desktop Services installation	
	Confirmation	Install required role services for Virtual Desktop Infrastructure (VDI) to create a virtual machine-based	
		or session-based desktop deployment.	Hide
		< Previous Next > Install Cancel	

**Step 3.** Select the server by highlighting the row and select **Next**.

🚡 Server Manager				_	- 0 ×
Server Manager •	Dashboard		• 🕲   🖡	Manage Tools	View Help
Dashboard     WELCOME T	O SERVER MANAGER				^
Local Server 🖧 Add Roles and Features Wizar	d			– 🗆 ×	
All Servers					
File and Storage Select destinatio	n server			DESTINATION SERVER WIN-22IV8I9RVIA	
Before You Begin	Select a server or a virt	ual hard disk on which	to install roles and features.		
Installation Type	<ul> <li>Select a server from</li> </ul>	the server pool			
Server Selection	<ul> <li>Select a virtual hard</li> </ul>	disk			
Server Roles	Server Pool				
Features					
Confirmation	Filter:				
Results	Name	IP Address	Operating System		Hide
	WIN-22IV8I9RVIA	192.168.1.40	Microsoft Windows Server 20	)19 Standard Evaluation	
	1 Computer(s) found				
	This page shows server	s that are running Win	dows Server 2012 or a newer rel	ease of Windows Server,	
	newly-added servers fro	om which data collecti	on is still incomplete are not sho	wn.	
		< Pre	evious Next >	Install Cancel	

Step 4. Select Active Directory Domain Services and then select Next.

🔁 Server Manager			_	o ×
	Server Manager • D	ashboard	🛛 🕄   🚩 Manage Tools V	iew Help
🛄 Dashboard	WELCOME TO	SERVER MANAGER		^
Local Server	📥 Add Roles and Features Wizard		– 🗆 X	
All Servers				
File and Storage	Select server roles		DESTINATION SERVER WIN-22IV8I9RVIA	
	Before You Begin	Select one or more roles to install on the selected server.		
	Installation Type	Roles	Description	
	Server Selection Server Roles Features Confirmation Results	<ul> <li>Active Directory Certificate Services</li> <li>Active Directory Pederation Services</li> <li>Active Directory Lightweight Directory Services</li> <li>Active Directory Rights Management Services</li> <li>Device Health Attestation</li> <li>DHCP Server</li> <li>DNS Server</li> <li>File and Storage Services (1 of 12 installed)</li> <li>Host Guardian Service</li> <li>Hyper-V</li> <li>Network Policy and Access Services</li> <li>Print and Document Services</li> <li>Remote Desktop Services</li> <li>Volume Activation Services</li> <li>Windows Server Update Services</li> </ul>	Active Directory Domain Services (AD DS) stores information about objects on the network and makes this information available to users and network administrators. AD DS uses domain controllers to give network users access to permitted resources anywhere on the network through a single logon process.	Hide
			Current	

Step 5. Click Add Features.

Server Manager	Server Manager 🕨 I	Dashboard • (a	छ । 🗗	Manage Tools	□ × View Help
Dashboard	WELCOME T	O SERVER MANAGER			^
<ul> <li>Local Server</li> <li>All Servers</li> <li>File and Storage</li> </ul>	Add Roles and Features Wizar Select server role Before You Begin Installation Type Server Selection Server Roles Features Confirmation Results	Add Roles and Features Wizard Add features that are required for Active Directory Domain Services? You cannot install Active Directory Domain Services unless the following role services or features are also installed. [Tools] Group Policy Management Remote Server Administration Tools A Role Administration Tools AD DS and AD LDS Tools Active Directory module for Windows PowerShell AD DS Tools [Tools] Active Directory Administrative Center [Tools] AD DS Snap-Ins and Command-Line Tools	X Direc ) stor corma twori pmain k use zes ar h a si	DESTINATION SERVER WIN-22IVBIGRVIA     Services tory Domain Services res information about he network and makes tion available to users k administrators. AD DS n controllers to give res access to permitted nywhere on the network ingle logon process.	Hide
		Include management tools (if applicable)  Add Features Cancel <previous next=""></previous>		Install	

Step 6. You shouldn't have to select anything at the Select Features, so just select Next.



Step 7. Click Next in the AD DS section.



Step 8. On the confirmation window, review everything and then click Install.

📥 Server Manager		-	- 0 ×
	Server Manager 🕨 D	ashboard 🔹 🕄   🏲 Manage Tools	View Help
Dashboard	WELCOME TO	SERVER MANAGER	^
Local Server	📥 Add Roles and Features Wizard	- 🗆 X	
Acservers	Confirm installatic	on selections Destination server WIN-221V819RVIA	
	Before You Begin Installation Type Server Selection Server Roles Features	To install the following roles, role services, or features on selected server, click Install.  Restart the destination server automatically if required 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 boxes.  Active Directory Domain Services	
	AD DS Confirmation Results	Group Policy Management Remote Server Administration Tools Role Administration Tools AD DS and AD LDS Tools Active Directory module for Windows PowerShell AD DS Tools Active Directory Administrative Center AD DS Snap-Ins and Command-Line Tools	Hide
		Export configuration settings Specify an alternate source path	

- The installation will begin.
- When the installation is complete, you need to now promote the server to a domain controller.
- Click **Promote this server to a domain controller** (small hyperlink in the results window). Refer the below screenshot.

**Step 9.** Select **Add a new forest**, type in a **domain name** that you want to use (pro-tip: use something like example.com), then click **Next**.

📥 Server	Manager						_	D	$\times$
$\mathbf{E}$	Active Directory Domain Service	es Configuration Wizard			₩ ×	age To	ols	View	Help
III Da:	Deployment Conf	figuration		TARGET WIN-22IV	t server V819rvia				~
🖬 All	Deployment Configuration Domain Controller Options Additional Options Paths Review Options Prerequisites Check Installation Results	Select the deployment operation <ul> <li>Add a domain controller to an existin</li> <li>Add a new domain to an existing for</li> <li>Add a new forest</li> </ul> Specify the domain information for this of Root domain name:	ng domain est operation ezldap.com						
	ß	More about deployment configurations						Hide	
		< Pre	evious Next >	Install	Cancel				
		Services Performance BPA results	Performance BPA results						

Step 10. Type in a password you want to use for DSRM, then click Next.

📥 Server	Manager					- 0	$\times$
$\mathbf{E}$	Active Directory Domain Servic	es Configuration Wizard			age Tools	s View	Help
Das Loc All All File	Domain Controlle Deployment Configuration Domain Controller Options DNS Options Additional Options Paths	Select functional level of the new forest Forest functional level: Domain functional level:	and root domain          Windows Server 2016       ×         Windows Server 2016       ×	TARGET SERVER WIN-22IV8I9RVIA			~
	Review Options Prerequisites Check Installation Results	Specity domain controller capabilities ✓ Domain Name System (DNS) server ✓ Global Catalog (GC) Read only domain controller (RODC Type the Directory Services Restore Mo Password: Confirm password:	c) de (DSRM) password ••••••			Hide	
		More about domain controller options          Image: Services         Performance         BPA results	revious Next > Inst Performance BPA results	tall Cancel			

Step 11. Click Next on the DNS Options page.



Step 12. Click Next on the Additional Options page.

📥 Server I	Manager								- 0	$\times$
$\mathbf{E}$	Active Directory Domain Servic	es Configuration Wizard			6		× age	Tools	View	Help
E Loc	Additional Optior	าร			TAF WIN-	RGET SERVE 22IV8I9RVI	ER IA			^
AII	Deployment Configuration Domain Controller Options DNS Options Additional Options Paths Review Options Prerequisites Check	Verify the NetBIOS name assigned The NetBIOS domain name:	to the	domain and change it if necessary EZLDAP	]					
	installation Results								Hide	
		More about additional options	< Pre	vious Next > Inst	all	Cancel				
3		Services Performance BPA results		Performance BPA results						

Step 13. Click Next on the Paths sections.

Server	Manager	es Configuration Wizard		→ I I	age Tool	- 🗇 s View	× Help
Da Lou T All All T All File	Paths Deployment Configuration Domain Controller Options DNS Options Additional Options Paths Review Options Prerequisites Check Installation Results	Specify the location of the AD DS dat Database folder: Log files folder: SYSVOL folder:	abase, log files, and SYSVOL C:\Windows\NTDS C:\Windows\SYSVOL C:\Windows\SYSVOL	TARGET SERVER WIN-22IV8I9RVIA		Hide	
		More about Active Directory paths              Services           Performance           BPA results	Previous Next > Performance BPA results	Install Cancel			

Step 14. Click Next on the Review Options screen, then click Install on the prerequisites check page.

📥 Server	Manager						-	- 0	$\times$
$\mathbf{E}$	Active Directory Domain Service	es Configuration Wizard			×	age	Tools	View	Help
E Das	Prerequisites Che	ck		TARGET WIN-22IV	SERVER 819RVIA				_
	All prerequisite checks pass	sed successfully. Click 'Install' to begin inst	tallation.	Show more	×				
🖬 AD	Deployment Configuration Domain Controller Options	Prerequisites need to be validated befo computer	ore Active Directory Domain Services is	installed on th	nis				
	DNS Options	Rerun prerequisites check							
	Additional Options Paths Review Options Prerequisites Check Installation Results	<ul> <li>View results</li> <li>Windows Server 2019 domain co "Allow cryptography algorithms in cryptography algorithms when e For more information about this go.microsoft.com/fwlink/?Linkld:</li> <li>This computer has at least one p address(es) assigned to its IP Pro adapter, both IPv4 and IPv6 stati IPv6 Properties of the physical ne should be done to all the physical for unclosed to its IP pro adapter, both IPv4 and IPv6 stati IPv6 Properties of the physical ne should be done to all the physical ne should b</li></ul>	ontrollers have a default for the security compatible with Windows NT 4.0" that stablishing security channel sessions. setting, see Knowledge Base article 94 = 104751). hysical network adapter that does not operties. If both IPv4 and IPv6 are enable c IP addresses should be assigned to b etwork adapter. Such static IP address( al network adapters for reliable Domain latically reboots at the end of the prom	/ setting name prevents weak 2564 (http:// have static IP led for a netwo oth IPv4 and s) assignment n Name System notion operatic	d ^ ker n v on.			Hide	:
		< P	revious Next > Inst	tall Ca	incel				
		Services Performance BPA results	Performance BPA results						

- The installation (promotion process) will begin. The server will reboot during this process.
- When the installation is complete, log back in (this time you will be logging into the server with domain credentials)

Step 15. From Server Manager, click Tools then Active Directory Administrative Center

📥 Server Manager			2	– o ×
Server M	anager • Dashbc	ard		
Dashboard	WELCOME TO SERVER	MANAGER		Active Directory Administrative Center Active Directory Domains and Trusts Active Directory Module for Windows PowerShell
All Server		1 Configu	ure this local ser	Active Directory Sites and Services Active Directory Users and Computers ADSI Edit Component Services
<ul> <li>DNS</li> <li>File and Storage Services</li> </ul>		2 Add r 3 Add c	oles and features other servers to man	Computer Management Defragment and Optimize Drives Disk Cleanup
	WHAT'S NEW	4 Create	e a server group ect this server to clou	DNS Event Viewer Group Policy Management iSCSI Initiator
	LEARN MORE			Local Security Policy Microsoft Azure Services ODBC Data Sources (32-bit)
	ROLES AND SERVER GR Roles: 3   Server groups: 1	COUPS		ODBC Data Sources (64-bit) Performance Monitor Recovery Drive
	AD DS	1	🖀 DNS	Registry Editor Resource Monitor
	Manageability     Events     Services     Performance     BPA results		<ul> <li>Manageability</li> <li>Events</li> <li>Services</li> <li>Performance</li> <li>BPA results</li> </ul>	Services System Configuration System Information Task Scheduler Windows Defender Firewall with Advanced Security Windows Memory Diagnostic Windows PowerShell

Step 16. There you can add new AD Users, Organizational Unit and Groups

🔁 Server Manage				– 0 X
Server Manager • [	Dashboard		• 🕄   🚩 Manage	Tools View Help
				^
Dashboard Active Directory Administrative	Center		- □ >	<
All Server	ap1 (local) 🔸		🕶 🗭   Manage Help	
AD DS	ezidap1 (local) (14)		Tasks	
File and Storage	Filter	✓ (ii) ✓ (v)		
Cverview Cverview Class ezidap1 (local) develop Users	Name Builtin Computers	Type Descrip	New Delete Search under this node Properties	
Dynamic Access Control	develop	Organizati 🗸	ezidap1 (local)	- -
Authentication	< Builtin	> •	Change domain controller	Hide
🔎 Global Search	Object class: builtinDomain Description:	Modified: 8/8/2024 8:08 .	Raise the forest functional I Raise the domain functiona	
			Enable Recycle Bin	
		$ \longrightarrow $	New 🕨	Organizational Unit
			Search under this node	InetOrgPerson
	Summary		Properties	Group
WINDOWS POWERSHELL HI	STORY			User
Servic	es	Services		Computer
Perfor BPA re	mance	Performance BPA results		

Step 17. You will be able to find the DN of the Organizational unit by clicking on the title bar

🚘 Server Manager	ß					- 0 ×	
€⊛∙	Server Manager • D	ashboard		• ③   🖡	Manage Tools	View Help	
						^	
Dashboard	Active Directory Administrative (	· 🗆 X					
Local Server     All Servers	Image: OU=develop,DC=ezidap1,DC=com         Image: Help						
	Active Directory <	develop (0)		Tasks			
File and Storad	, ■ 'E	Filter	ρ 🗐 🖌 🖓				
	Overview	1000	-	develop	^		
	ezidap1 (local)	Name	Type Descriptio	New	•		
	develop			Delete			
	Users			Move			
	Dynamic Access Control			Search under th	nis node		
	Authentication			Properties		Hide	
	Global Search		~	_			
	WINDOWS POWERSHELL HIS	TORY	Services				
	Denferm		Barformere				
	Periori	Performance					
	BPA res	uits	BPA results				
						~	

**Step 18.** You can find the DN of a user by Right button click on a User -> Properties ->Extensions -> Attribute Editor.

🔁 Serv 🖓 Manager					– 0 ×
€⊛-	Server Manager • D	ashboard		- 🕝   🚩 Manage Ta	ools View Help
					^
🔛 Dashboard	Active Directory Administrative	Center	- 🗆 X		
Local Server     All Servers	وَالعَانِينَ بِنَافَ اللهُ	ap1 (local <b>)</b> •	- 🕄   Manage Ilelp		
	Active Directory <	Users (23)		Tasks	
📸 DNS	E <sup>™</sup> E Overview C ezldap1 (local)	Filter	♪   (ii) ▼ ⊙     Type   Descrip	Administrator       Reset password	^
	Users	💄 Administra	Denset an annual	View resultant password se	
	develop	Allowed R	View resultant password settings	Add to group	
	Dynamic Access Control	💁 Cert Publis	Add to group Disable	Disable Delete	Hide
	Authentication	Administrator —			
🔎 Global Search		User logon: Ac		Nove	
		E-mail:	Properties		-
		Modified:	account for administering the	New +	
			uter/domain	Delete	
				Search under this node	
		Summary		Dronarties	~
	WINDOWS POWERSHELL HISTORY			(	0
Perform BPA res		Services			
		nance	Performance		
		sults	BPA results		
					~



## Related Articles

Configure Ezeelogin to authenticate using Windows\_AD(Pam-Ldap) in ubuntu?

How do I configure Ezeelogin to authenticate using Windows\_AD(Pam-LDAP) in CentOS?

How do I configure Ezeelogin to authenticate using OpenLdap or Window AD server?

Online URL: https://www.ezeelogin.com/kb/article/install-and-setup-active-directory-444.html