

The background of the slide is a dark, textured surface with a complex, interconnected network of white lines and dots, resembling a molecular structure or a data network. The lines and dots are of varying sizes and are distributed across the entire frame, creating a sense of depth and complexity.

MCSA

SETUP ACTIVE DIRECTORY





Dashboard

Local Server

All Servers

AD DS

DNS

File and Storage Services ▸

WELCOME TO SERVER MANAGER

QUICK START

WHAT'S NEW

LEARN MORE

1 Configure this local server

2 Add roles and features

3 Add other servers to manage

4 Create a server group

5 Connect this server to cloud services

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ROLES AND SERVER GROUPS

Roles: 3 | Server groups: 1 | Servers total: 1



AD DS

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Recycle B

Add Roles and Features Wizard

Before you begin

DESTINATION SERVER
PDC1_2019.

Before You Begin

Installation Type

Server Selection

Server Roles

Features

Confirmation

Results

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.

To remove roles, role services, or features:
[Start the Remove Roles and Features 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

< Previous **Next >** Install Cancel

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Recycle B

Add Roles and Features Wizard

Select installation type

DESTINATION SERVER
PDC1_2019.

Before You Begin

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Server Selection

Server Roles

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Confirmation

Results

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).

☒ **Role-based or feature-based installation**
Configure a single server by adding roles, role services, and features.

☐ **Remote Desktop Services installation**
Install required role services for Virtual Desktop Infrastructure (VDI) to create a virtual machine-based or session-based desktop deployment.

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Select destination server

DESTINATION SERVER
PDC1_2019:

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Server Roles

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Results

Select a server or a virtual hard disk on which to install roles and features.

☒ Select a server from the server pool

☐ Select a virtual hard disk

Server Pool

Filter:

Name	IP Address	Operating System
PDC1_2019	192.168.1.3	Microsoft Windows Server 2019 Datacenter Evaluation

1 Computer(s) found

This page shows servers that are running Windows Server 2012 or a newer release of Windows Server, 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.

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DESTINATION SERVER
PDC1_2019.

Select one or more roles to install on the selected server.

Roles

Description

- ☐ Active Directory Certificate Services
- ☒ Active Directory Domain Services (Installed)
- ☐ Active Directory Federation Services
- ☐ Active Directory Lightweight Directory Services
- ☐ Active Directory Rights Management Services
- ☐ Device Health Attestation
- ☐ DHCP Server
- ☒ DNS Server (Installed)
- ☐ Fax Server
- ☒ File and Storage Services (2 of 12 installed)
- ☐ Host Guardian Service
- ☐ Hyper-V
- ☐ Network Controller
- ☐ Network Policy and Access Services
- ☐ Print and Document Services
- ☐ Remote Access
- ☐ Remote Desktop Services
- ☐ Volume Activation Services
- ☐ Web Server (IIS)
- ☐ Windows Deployment Services

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.

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Select server role

Before You Begin

Installation Type

Server Selection

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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

▾ 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

☒ Include management tools (if applicable)

Add Features

Cancel

DESTINATION SERVER
PDC19

Option

Directory Domain Services (DS) stores information about users and groups on the network and makes this information available to users and network administrators. AD DS enables domain controllers to give users access to permitted resources anywhere on the network through a single logon process.

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BPA results

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Add Roles and Features Wizard

Select server roles

Before You Begin

Installation Type

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DESTINATION SERVER
PDC1_2019.test.local

Select one or more roles to install on the selected server.

Roles	Description
<input type="checkbox"/> Active Directory Certificate Services	
<input checked="" type="checkbox"/> Active Directory Domain Services (Installed)	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.
<input type="checkbox"/> Active Directory Federation Services	
<input type="checkbox"/> Active Directory Lightweight Directory Services	
<input type="checkbox"/> Active Directory Rights Management Services	
<input type="checkbox"/> Device Health Attestation	
<input type="checkbox"/> DHCP Server	
<input checked="" type="checkbox"/> DNS Server (Installed)	
<input type="checkbox"/> Fax Server	
<input checked="" type="checkbox"/> File and Storage Services (2 of 12 installed)	
<input type="checkbox"/> Host Guardian Service	
<input type="checkbox"/> Hyper-V	
<input type="checkbox"/> Network Controller	
<input type="checkbox"/> Network Policy and Access Services	
<input type="checkbox"/> Print and Document Services	
<input type="checkbox"/> Remote Access	
<input type="checkbox"/> Remote Desktop Services	
<input type="checkbox"/> Volume Activation Services	
<input type="checkbox"/> Web Server (IIS)	
<input type="checkbox"/> Windows Deployment Services	

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Active Directory Domain Services

DESTINATION SERVER
PDC19

Before You Begin

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AD DS

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Results

Active Directory Domain Services (AD DS) stores information about users, computers, and other devices on the network. AD DS helps administrators securely manage this information and facilitates resource sharing and collaboration between users.

Things to note:

- To help ensure that users can still log on to the network in the case of a server outage, install a minimum of two domain controllers for a domain.
- AD DS requires a DNS server to be installed on the network. If you do not have a DNS server installed, you will be prompted to install the DNS Server role on this machine.



Azure Active Directory, a separate online service, can provide simplified identity and access management, security reporting, single sign-on to cloud and on-premises web apps.

[Learn more about Azure Active Directory](#)

[Configure Office 365 with Azure Active Directory Connect](#)

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Confirm installation selections

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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

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

[Export configuration settings](#)

[Specify an alternate source path](#)

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Installation progress

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View installation progress

Please Waiting Installing

 Starting installation

Active Directory Domain Services
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

 1 You can close this wizard without interrupting running tasks. View task progress or open this page again by clicking Notifications in the command bar, and then Task Details.

[Export configuration settings](#)

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 Feature installation



Configuration required. Installation succeeded on PDC19.

Active Directory Domain Services

Additional steps are required to make this machine a domain controller.

[Promote this server to a domain controller](#)

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



You can close this wizard without interrupting running tasks. View task progress or open this page again by clicking Notifications in the command bar, and then Task Details.

[Export configuration settings](#)

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Deployment Configuration

TARGET SERVER
PDC19

Deployment Configuration

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Select the deployment operation

- ☐ Add a domain controller to an existing domain
- ☐ Add a new domain to an existing forest
- ☒ Add a new forest

Specify the domain information for this operation

Root domain name:

test.local

test.local

[More about deployment configurations](#)

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Active Directory Domain Services Configuration Wizard

Domain Controller Options

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Select functional level of the new forest and root domain

Forest functional level: Windows Server 2016

Domain functional level: Windows Server 2016

Specify domain controller capabilities

☒ Domain Name System (DNS) server☒ Global Catalog (GC)☐ Read only domain controller (RODC)

Type the Directory Services Restore Mode (DSRM) password

Password:

Confirm password:

[More about domain controller options](#)

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Enter Complex password

Example

P@ssW0rd

P@\$sW0rd

PAS\$VV0rd

DNS Options

TARGET SERVER
PDC19

⚠ A delegation for this DNS server cannot be created because the authoritative parent zone cannot be found... [Show more](#) ×

Deployment Configuration

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Specify DNS delegation options

☐ Create DNS delegation[More about DNS delegation](#)

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Additional Options

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Verify the NetBIOS name assigned to the domain and change it if necessary

The NetBIOS domain name:

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[More about additional options](#)

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Specify the location of the AD DS database, log files, and SYSVOL.

Database folder: C:\Windows\NTDS ...

Log files folder: C:\Windows\NTDS ...

SYSVOL folder: C:\Windows\SYSVOL ...

[More about Active Directory paths](#)

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Review your selections:

Configure this server as the first Active Directory domain controller in a new forest.

The new domain name is "test.local". This is also the name of the new forest.

The NetBIOS name of the domain: TEST

Forest Functional Level: Windows Server 2016

Domain Functional Level: Windows Server 2016

Additional Options:

Global catalog: Yes

DNS Server: Yes

Create DNS Delegation: No

These settings can be exported to a Windows PowerShell script to automate additional installations

View script

[More about installation options](#)

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Prerequisites Check

TARGET SERVER
PDC19

✓ All prerequisite checks passed successfully. Click 'Install' to begin installation.

[Show more](#)[Deployment Configuration](#)[Domain Controller Options](#)[DNS Options](#)[Additional Options](#)[Paths](#)[Review Options](#)[Prerequisites Check](#)[Installation](#)[Results](#)

All prerequisite checks passed successfully. Click 'Install' to begin installation.

Prerequisites need to be validated before Active Directory Domain Services is installed on this computer

[Rerun prerequisites check](#)

⬆ View results

⚠ Windows Server 2019 domain controllers have a default for the security setting named "Allow cryptography algorithms compatible with Windows NT 4.0" that prevents weaker cryptography algorithms when establishing security channel sessions.

For more information about this setting, see Knowledge Base article 942564 (<http://go.microsoft.com/fwlink/?LinkId=104751>).

⚠ A delegation for this DNS server cannot be created because the authoritative parent zone cannot be found or it does not run Windows DNS server. If you are integrating with an existing DNS infrastructure, you should manually create a delegation to this DNS server in the parent zone to ensure reliable name resolution from outside the domain "test.local". Otherwise, no action is required.

⚠ If you click Install, the server automatically reboots at the end of the promotion operation.

[More about prerequisites](#)

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
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Results

TARGET SERVER
PDC19 This server was successfully configured as a domain controller[Show more](#)

Deployment Configuration

Domain Controller Options

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Prerequisites Check

Installation

Results

 View detailed operation results

Windows Server 2019 domain controllers have a default for the security setting named "Allow cryptography algorithms compatible with Windows NT 4.0" that prevents weaker cryptography algorithms when establishing security channel sessions.

You're about to be signed out

The computer is being restarted because Active Directory Domain Services was installed or removed.

[Close](#)[More about results](#)

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So can enter your server
Press Ctrl+Alt+Insert

Press Ctrl+Alt+Delete to unlock.

11:38
Monday, July 1





Enter Your Password and click

TEST\Administrator

A password input field with the placeholder text "Password" and a right-pointing arrow button. The entire input area is enclosed in a red rectangular border.

TEST\Administrator



Other user



Welcome to Windows Server
Active Directory is test.local
Password you choose any password

The background of the slide features a dark, textured surface with a network of glowing white nodes and connecting lines, resembling a molecular structure or a data network. The nodes are of varying sizes and are interconnected by thin, light-colored lines, creating a complex, web-like pattern that spans the entire frame.

THANK YOU

- Network Engineer: Ahmed Abou_Elmaged Shallan Allam