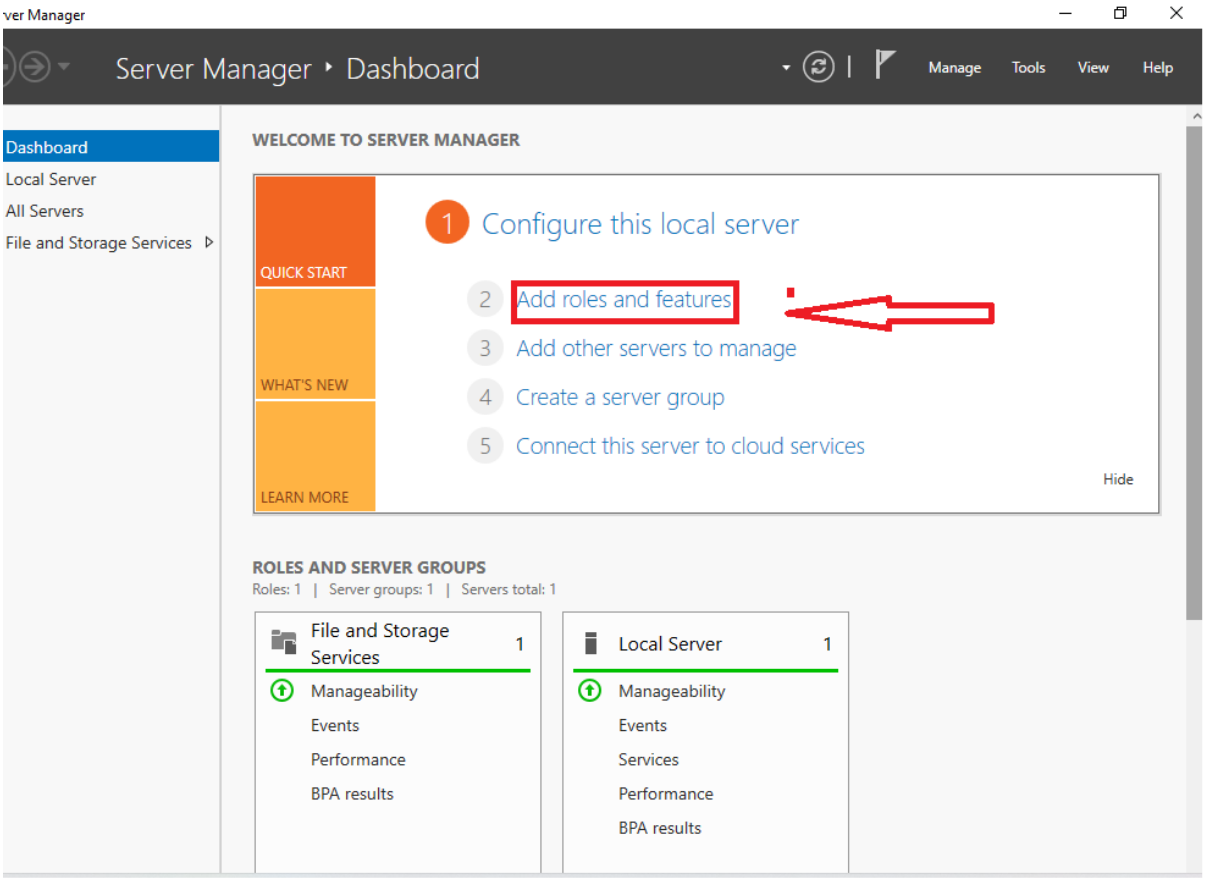
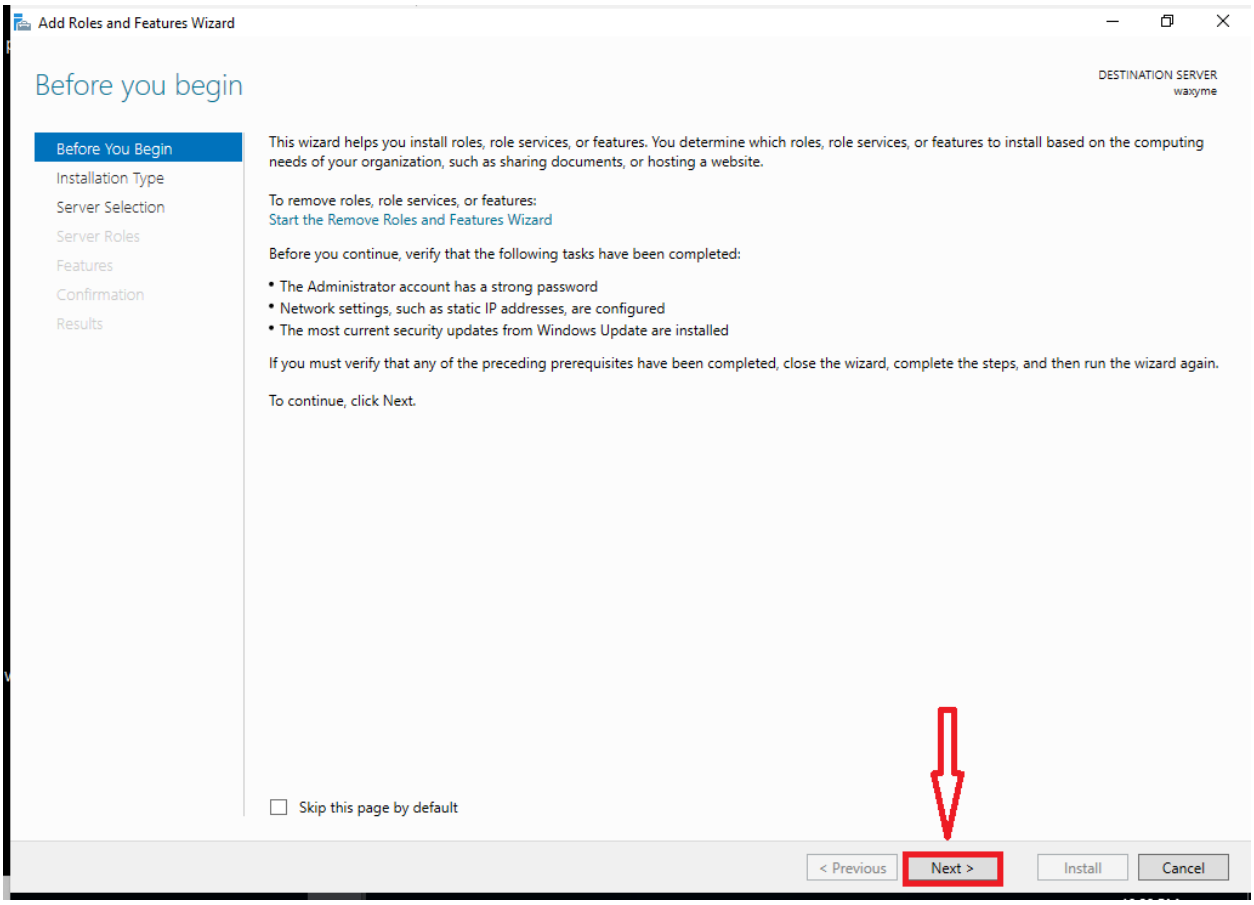
Step-by-Step Technical Guide: Deploying Active Directory Domain Services (AD DS) on Windows Server 2019

Using Hyper-v Lab

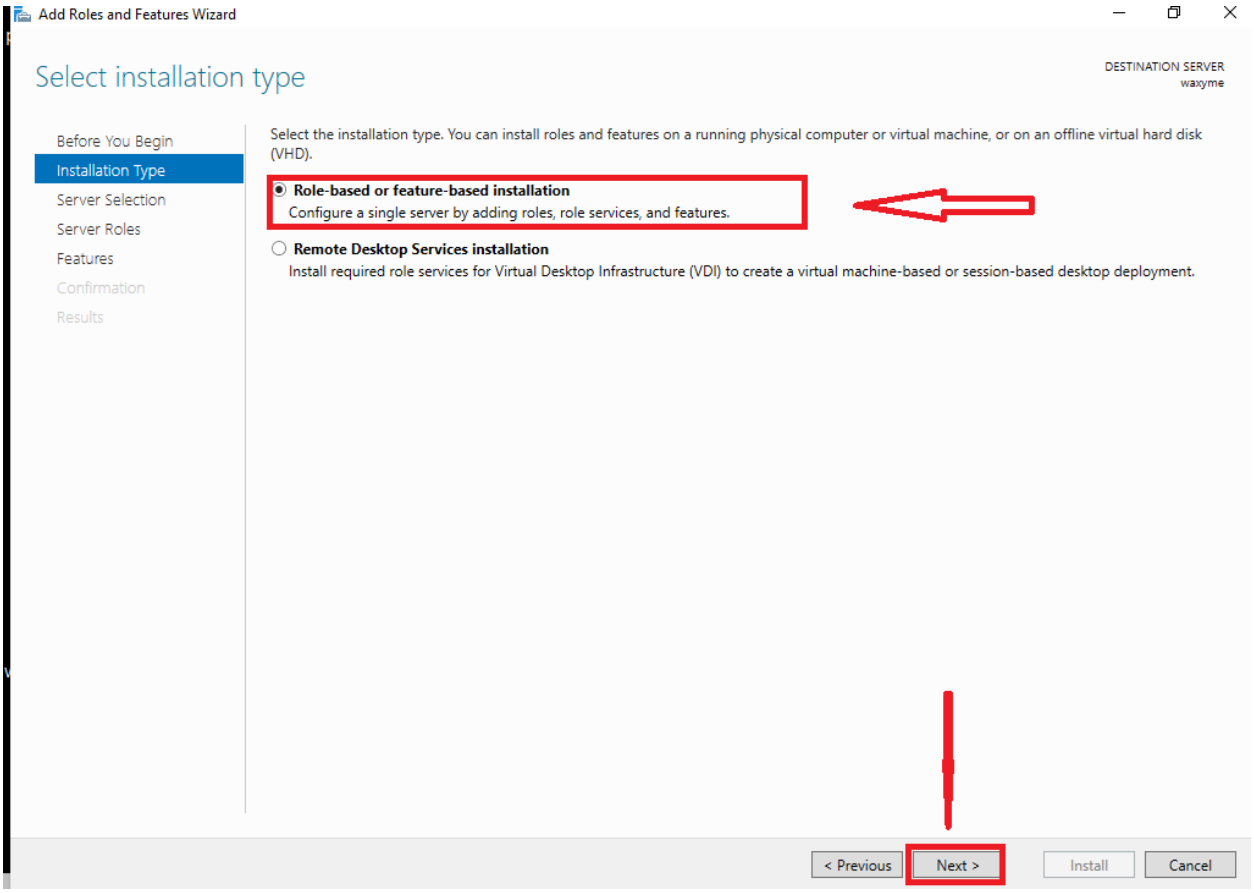
1. **Installing the AD DS Role:**
   →open your server manager
   →select - Add Roles and Features



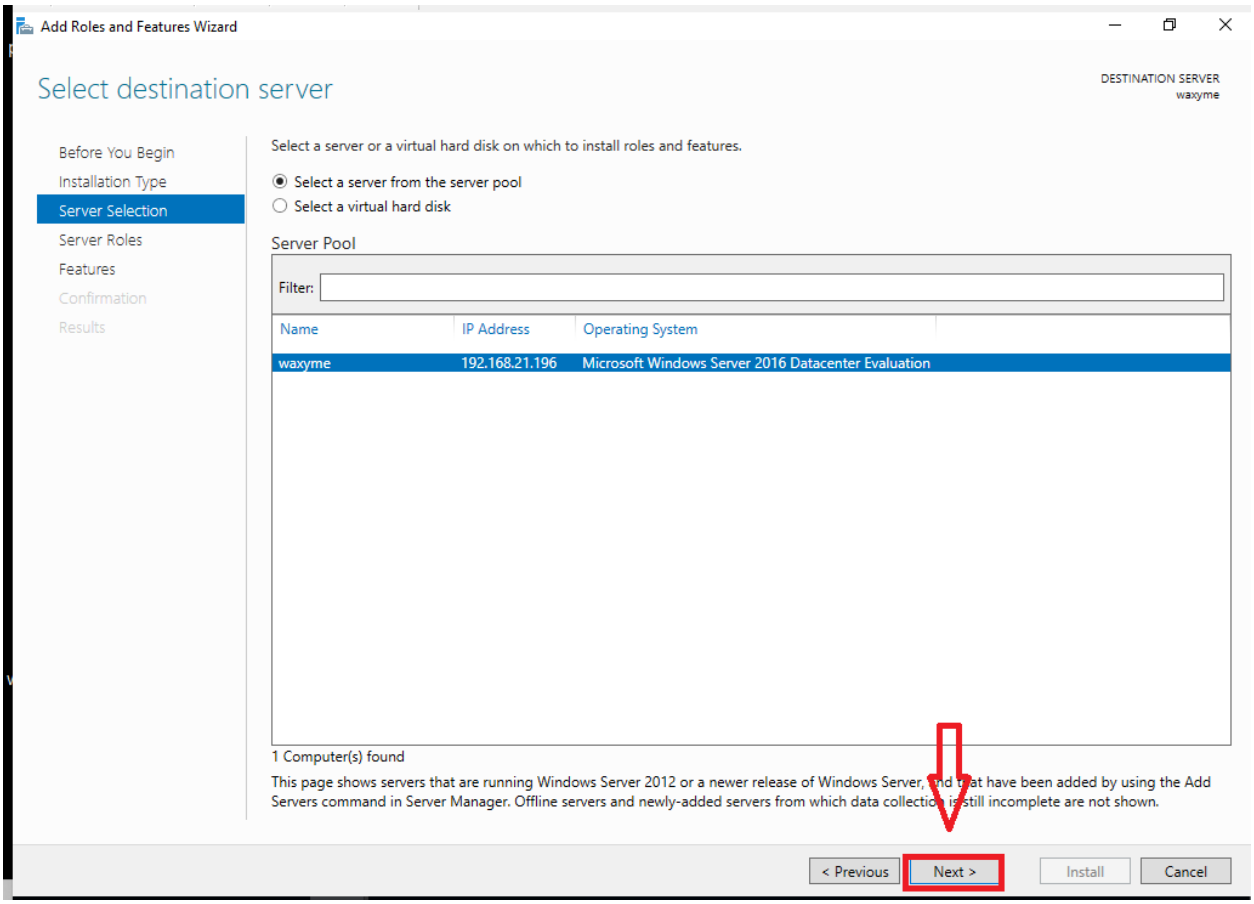
→ In the Wizard- click **Next**



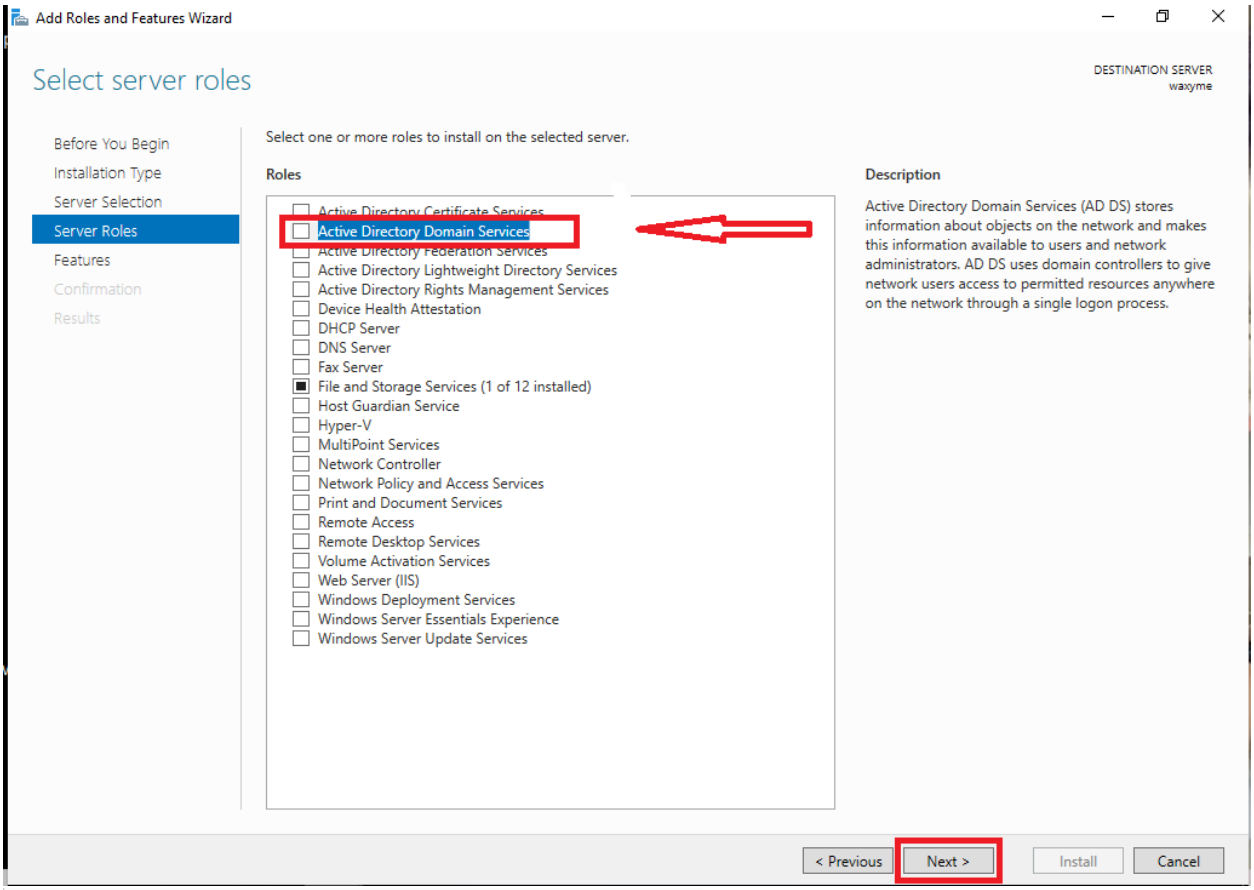
→ select **Role-based** or **Feature-based** and click **Next**

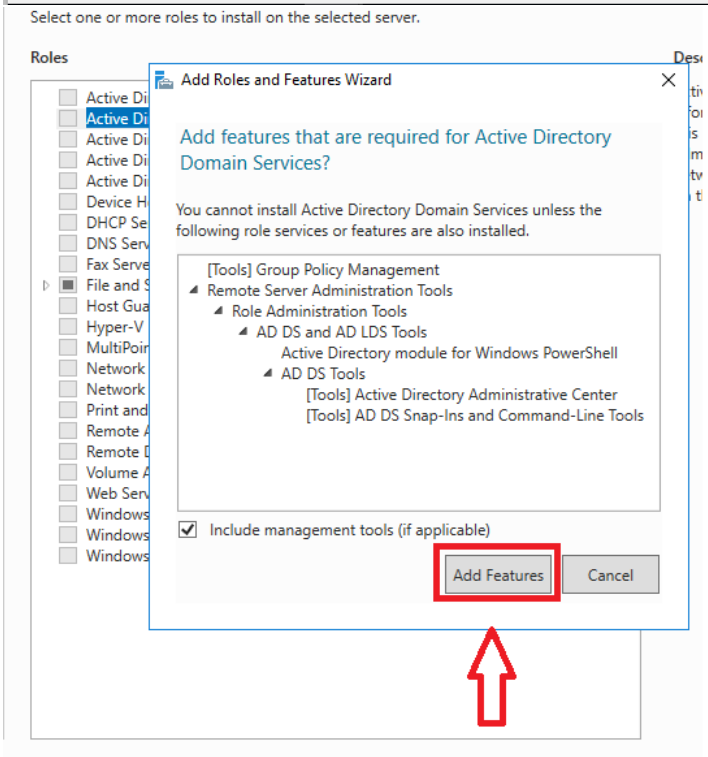


→ choose your **local server** and click **Next**

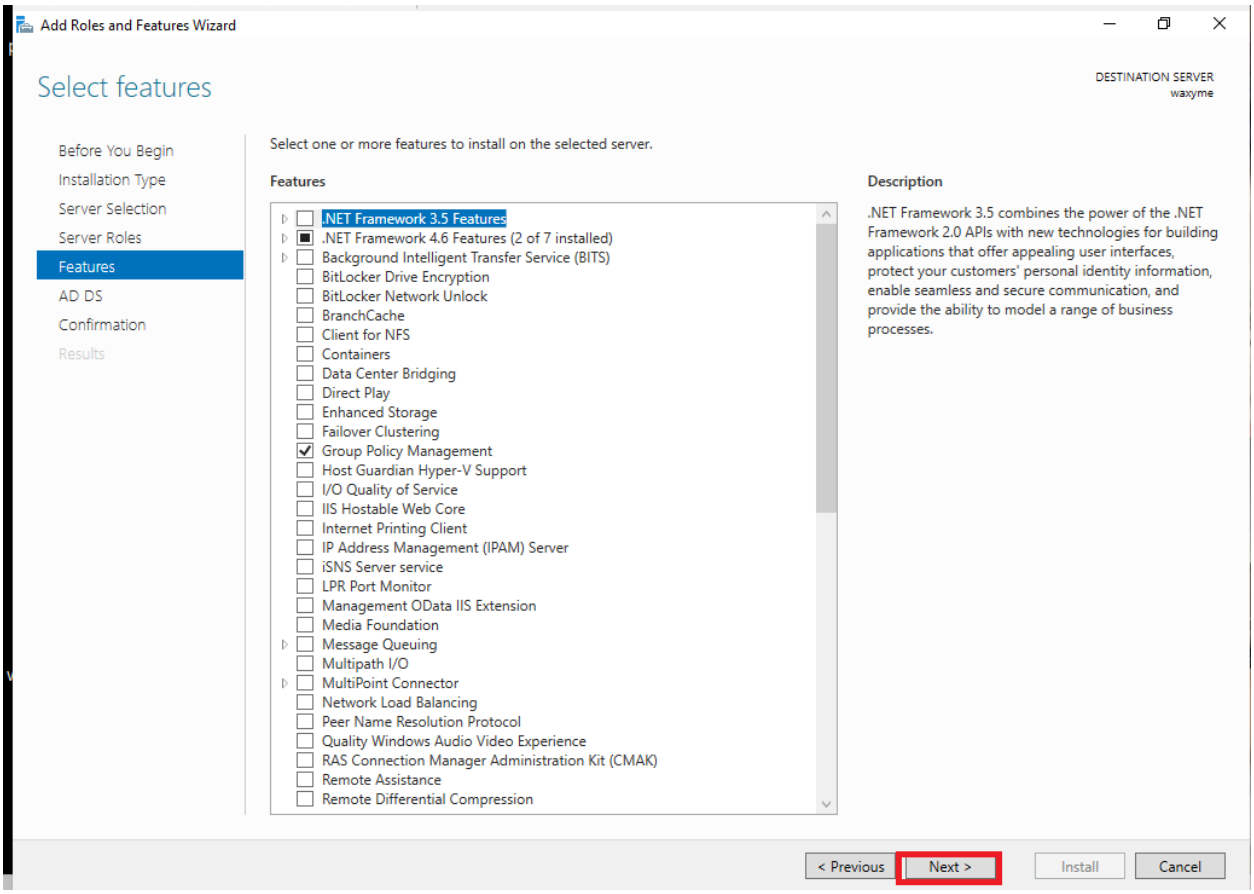


→ select **Active Directory Domain Services** and click the **Add features** console, after which you click **Next**

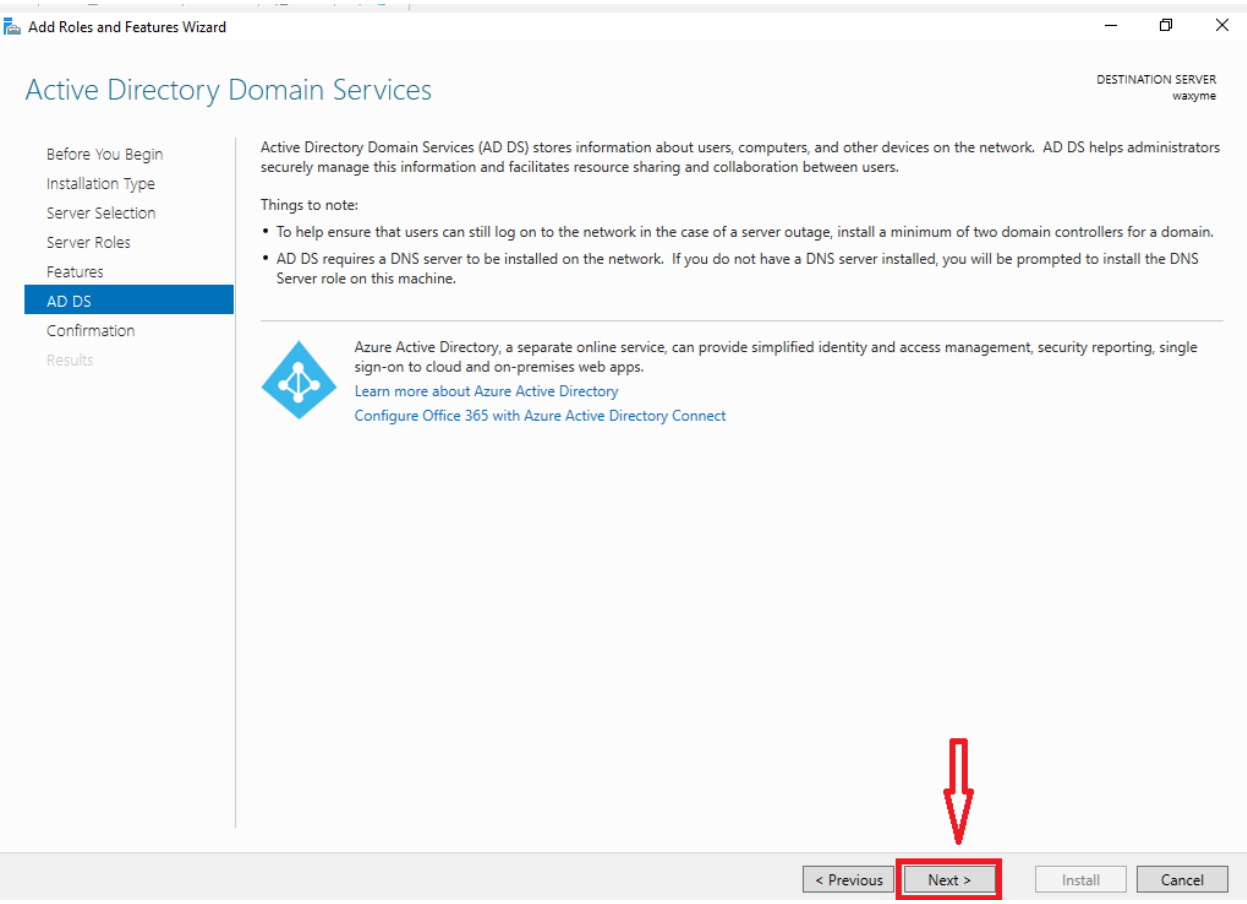

Add Roles and Features Wizard
Select server roles
DESTINATION SERVER
waxyme
Before You Begin
Installation Type
Server Selection
Server Roles
Features
Confirmation
Results
Select one or more roles to install on the selected server.
Roles
Active Directory Certificate Services
Active Directory Domain Services
Active Directory Federation Services
Active Directory Lightweight Directory Services
Active Directory Rights Management Services
Device Health Attestation
DHCP Server
DNS Server
Fax Server
File and Storage Services (1 of 12 installed)
Host Guardian Service
Hyper-V
MultiPoint Services
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
Windows Server Essentials Experience
Windows Server Update Services
Description
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.
< Previous
Next >
Install
Cancel


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

→ Accept defaults, ensure **Group policy management** is included, and click **next**

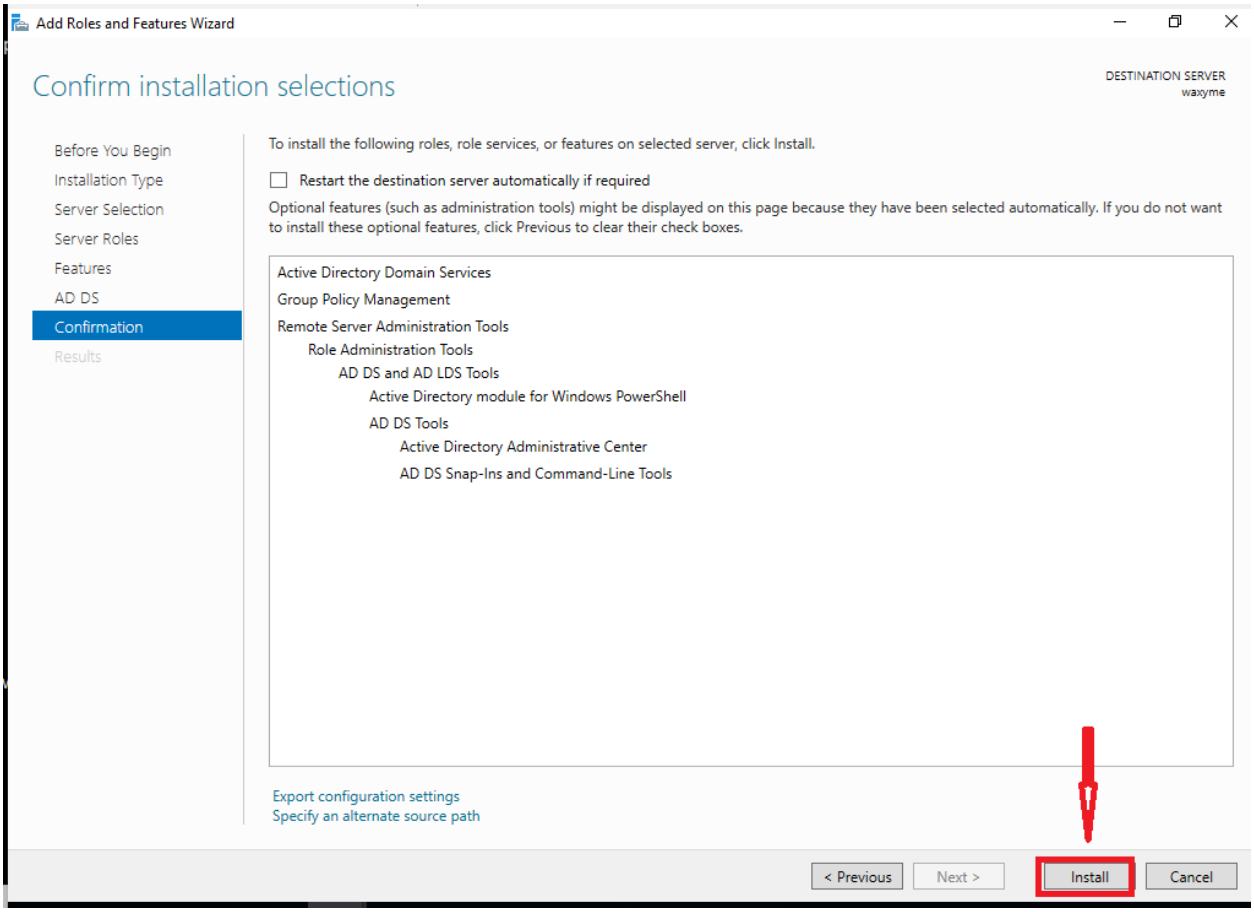


→ Click **Next**



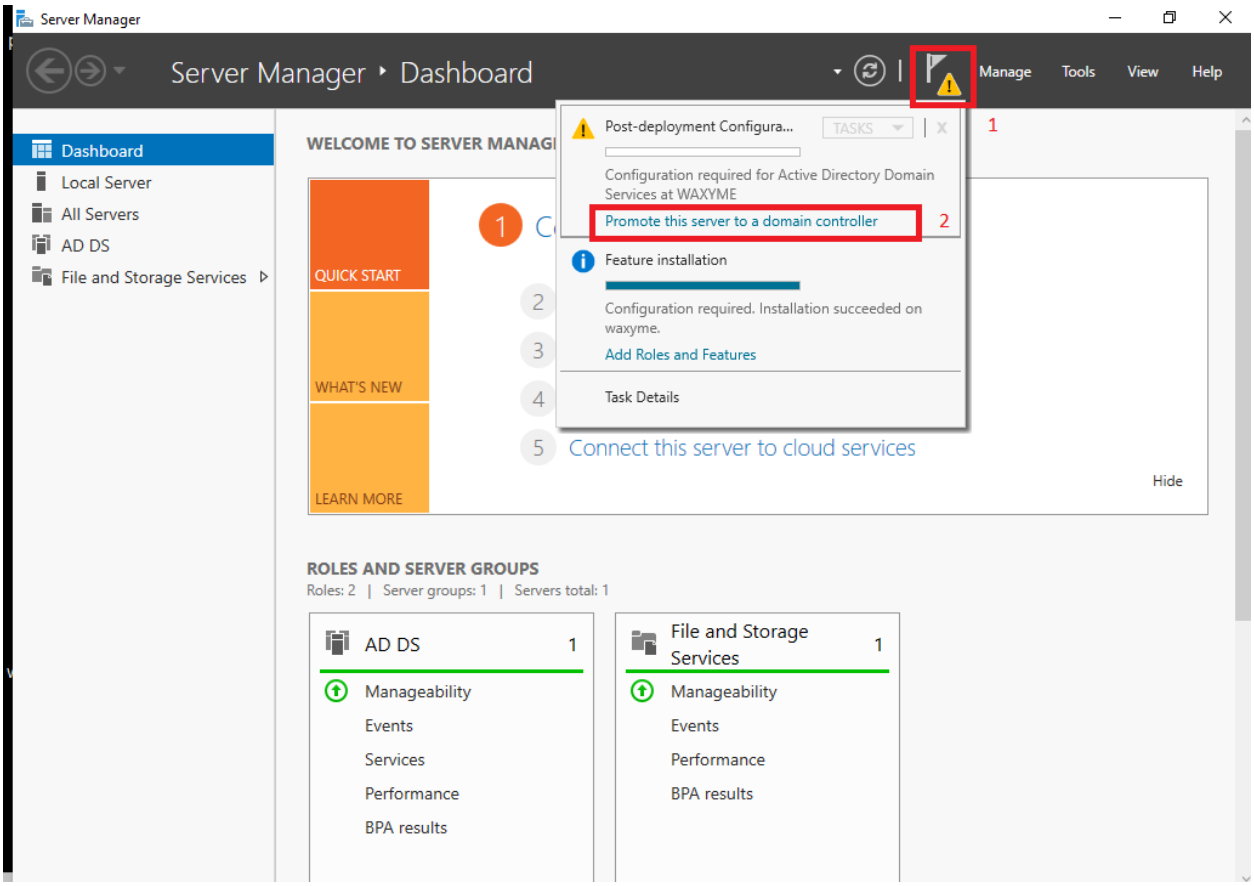
→ Click **Install**

This Installs only the AD DS binaries but doesn't configure the domain yet.

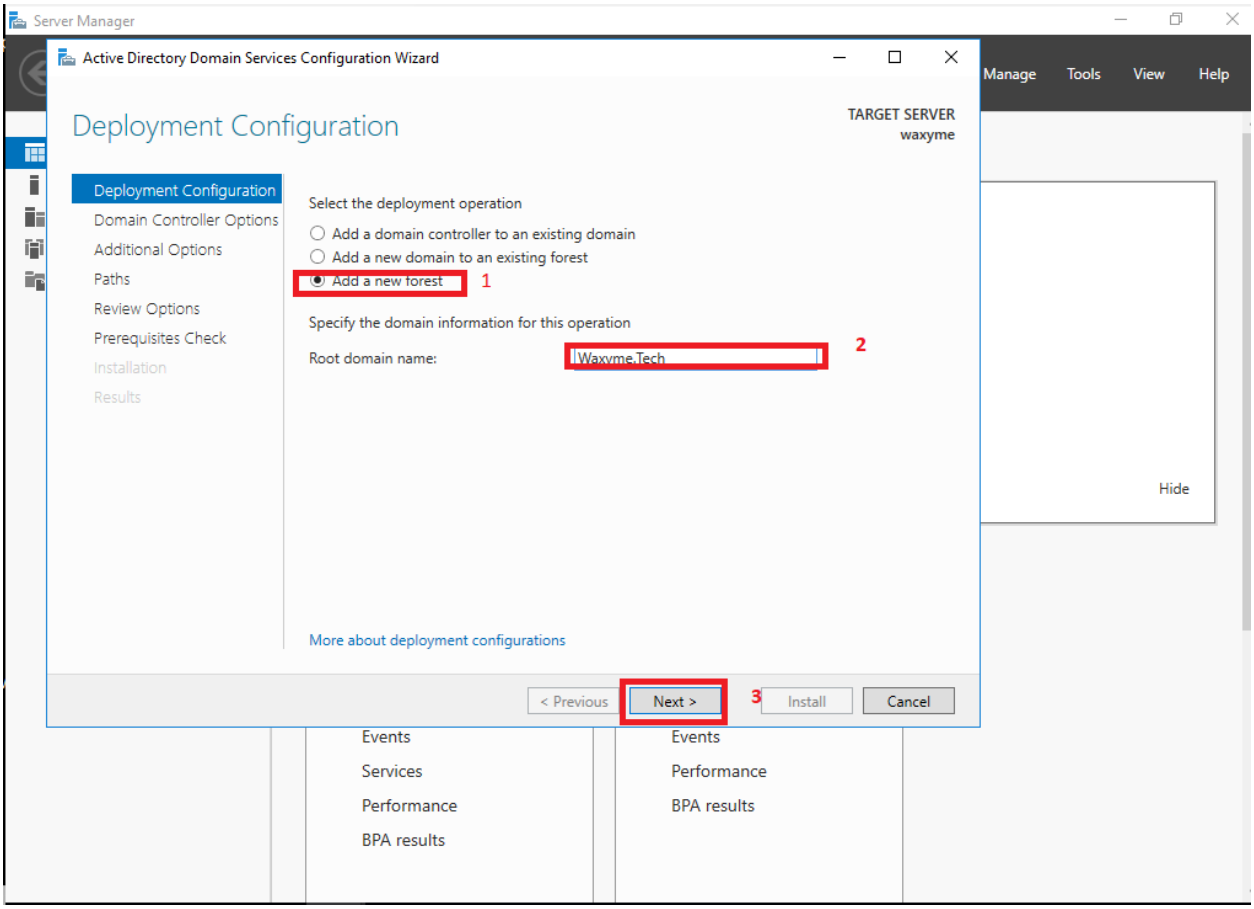


2. Configuring the Domain:

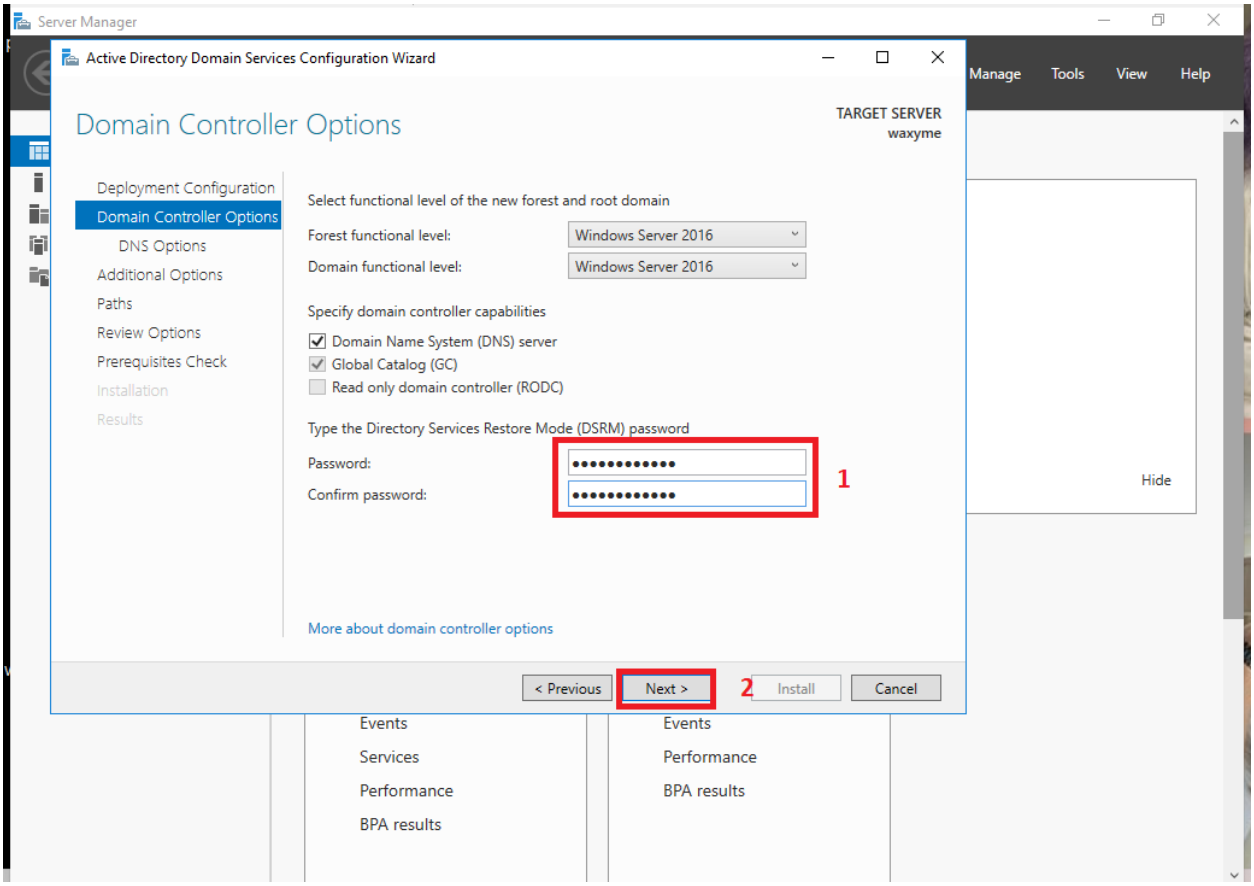
→ In the Server manager, click **promote this server to a domain controller** at the top right side of your server manager where you have the flag sign.

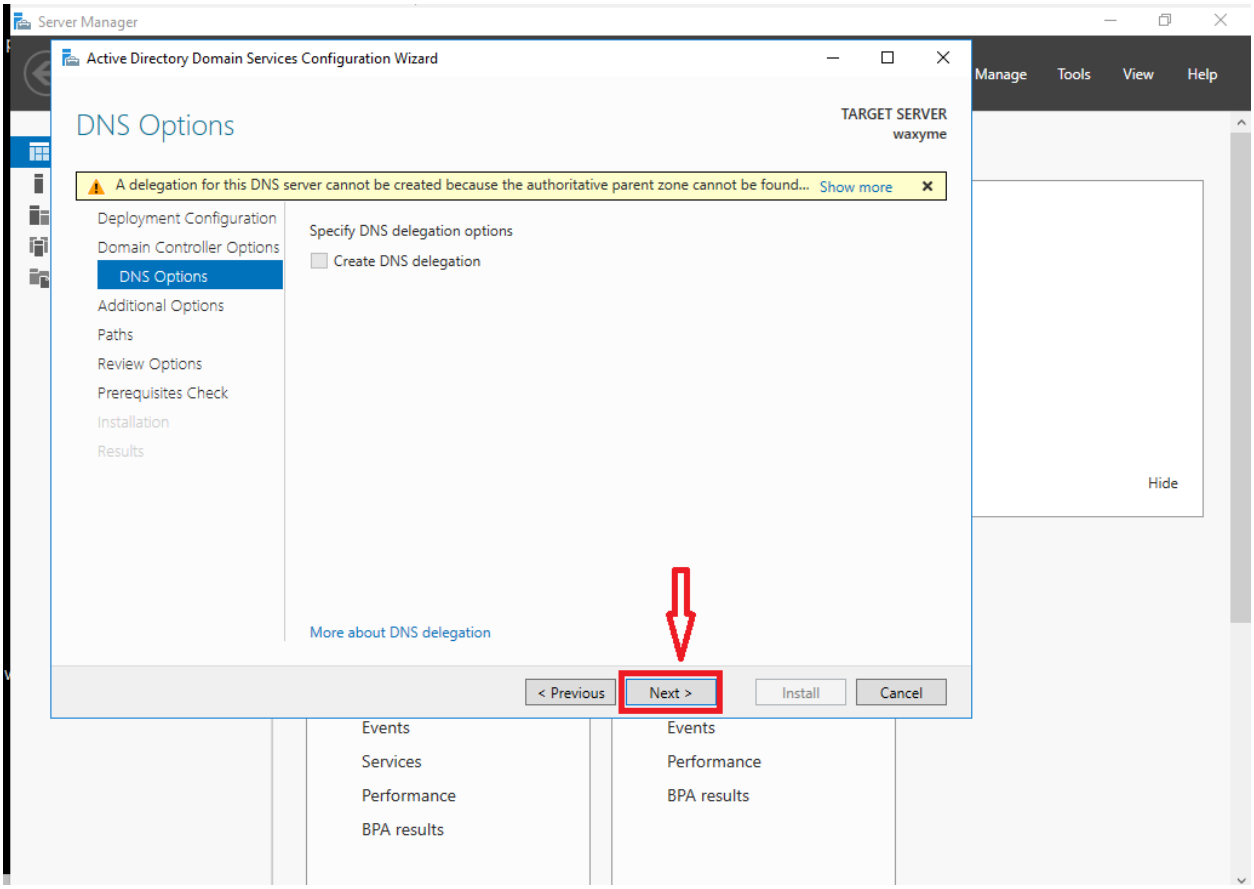


→ Create a new forest**: Waxyme.Tech**

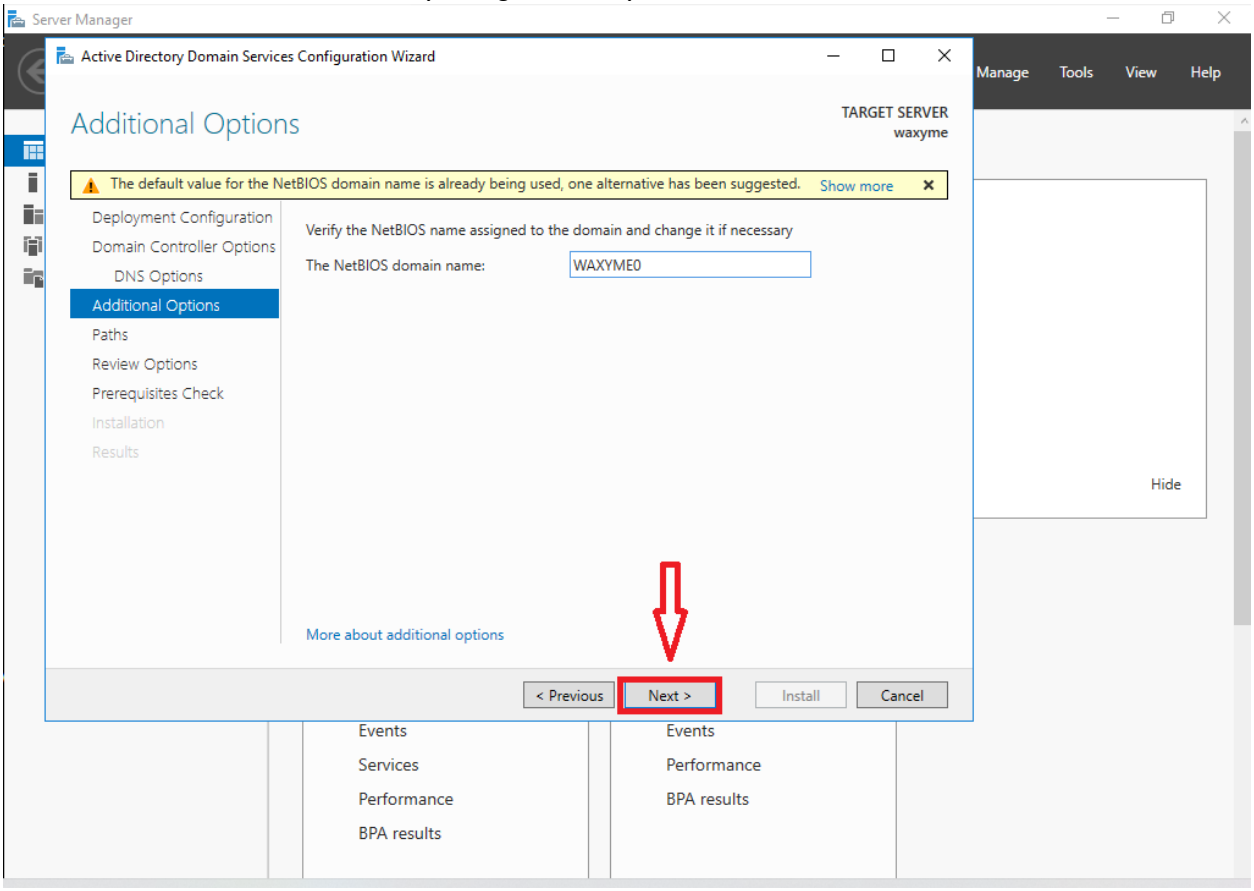


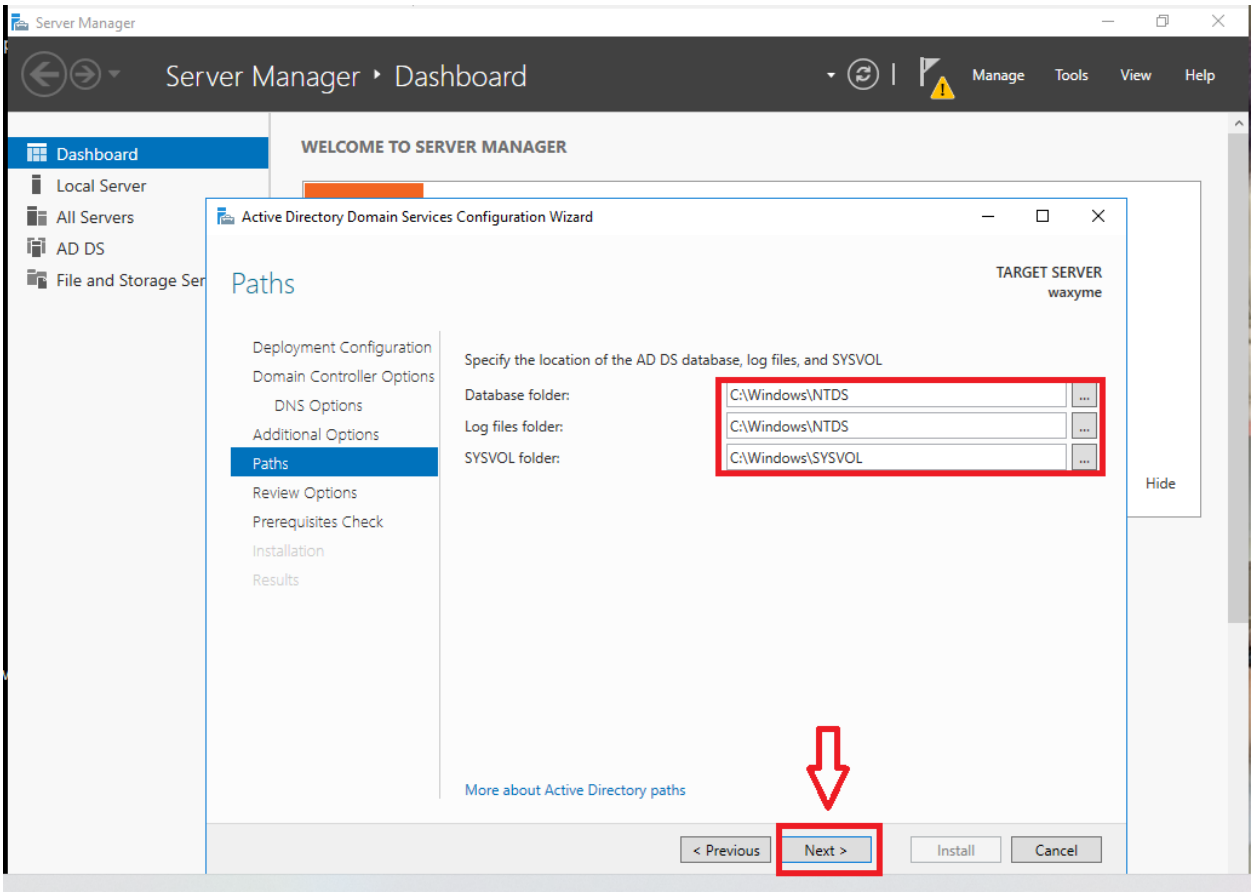
→ set **DSRM** password for recovery


Server Manager
Active Directory Domain Services Configuration Wizard
Domain Controller Options
TARGET SERVER
waxyme
Deployment Configuration
Domain Controller Options
DNS Options
Additional Options
Paths
Review Options
Prerequisites Check
Installation
Results
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:
1
More about domain controller options
< Previous
Next >
2
Install
Cancel
Manage
Tools
View
Help
Hide
Events
Services
Performance
BPA results
Events
Performance
BPA results

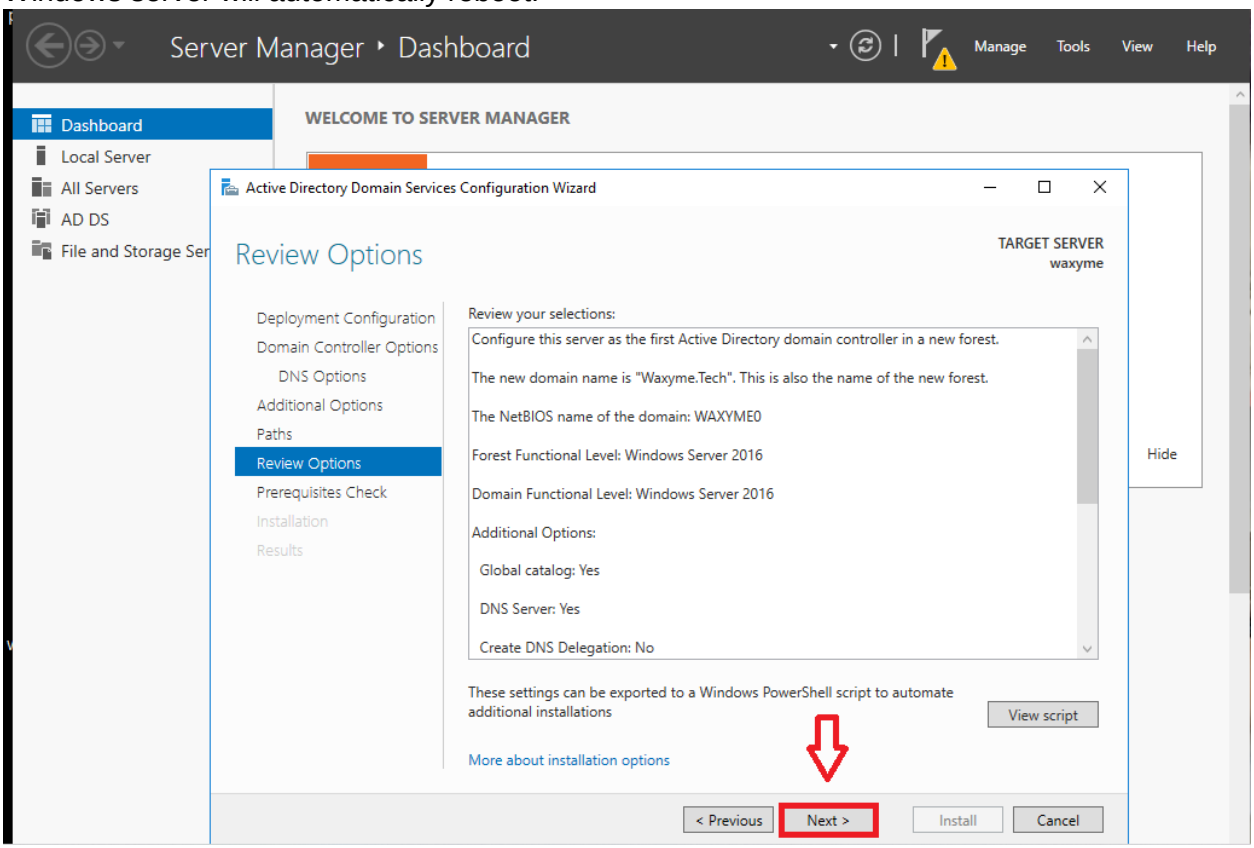

Server Manager
Manage
Tools
View
Help
Active Directory Domain Services Configuration Wizard
DNS Options
TARGET SERVER
waxyme
A delegation for this DNS server cannot be created because the authoritative parent zone cannot be found...
Show more
Deployment Configuration
Domain Controller Options
DNS Options
Additional Options
Paths
Review Options
Prerequisites Check
Installation
Results
Specify DNS delegation options
Create DNS delegation
More about DNS delegation
< Previous
Next >
Install
Cancel
Hide
Events
Services
Performance
BPA results
Events
Performance
BPA results

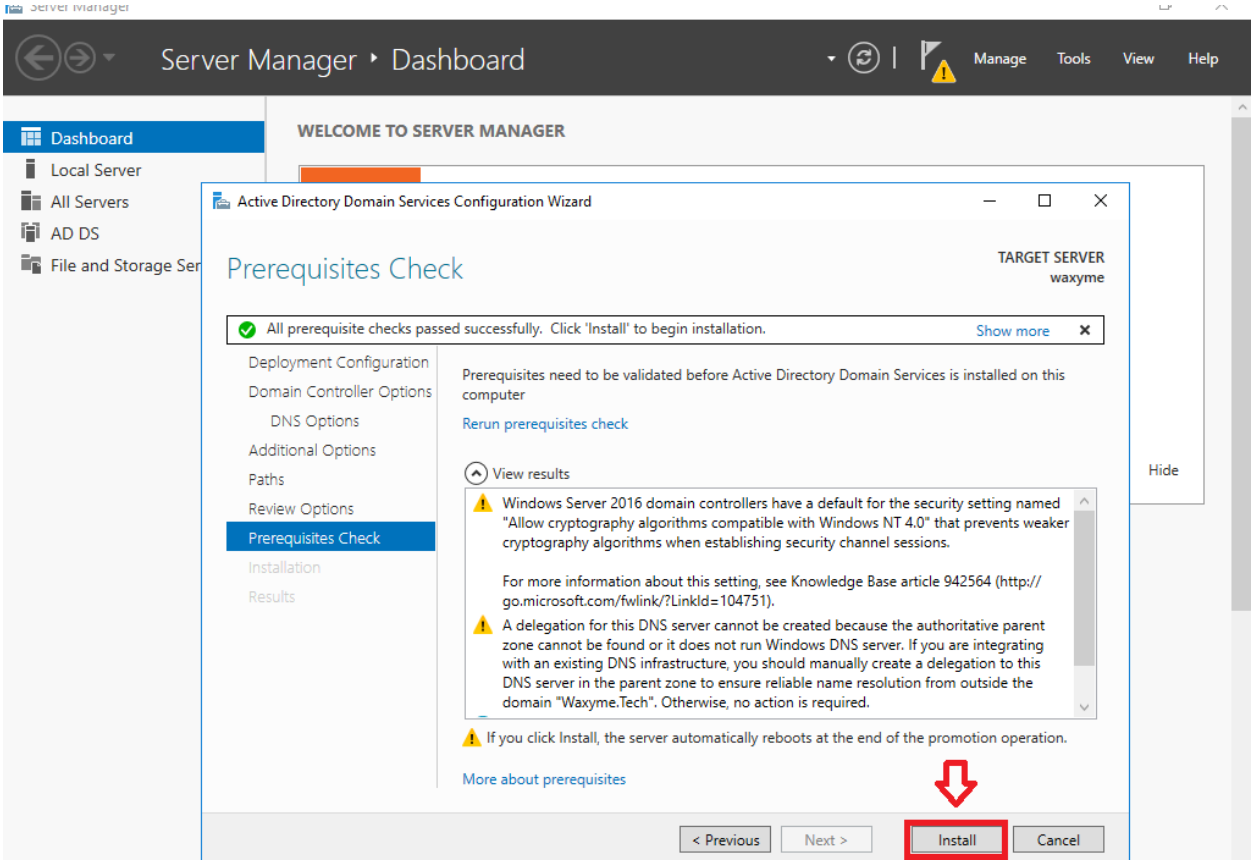
→ **NetBIOS** name: **WAXYMEO** (auto generated)




Server Manager
Server Manager ‣ Dashboard
Manage
Tools
View
Help
Dashboard
Local Server
All Servers
AD DS
File and Storage Ser
WELCOME TO SERVER MANAGER
Active Directory Domain Services Configuration Wizard
Paths
TARGET SERVER
waxyme
Deployment Configuration
Domain Controller Options
DNS Options
Additional Options
Paths
Review Options
Prerequisites Check
Installation
Results
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
Hide
More about Active Directory paths
< Previous
Next >
Install
Cancel

→ Select Next and Next to Review Prerequisites Check, and then select Install, and the Windows server will automatically reboot.



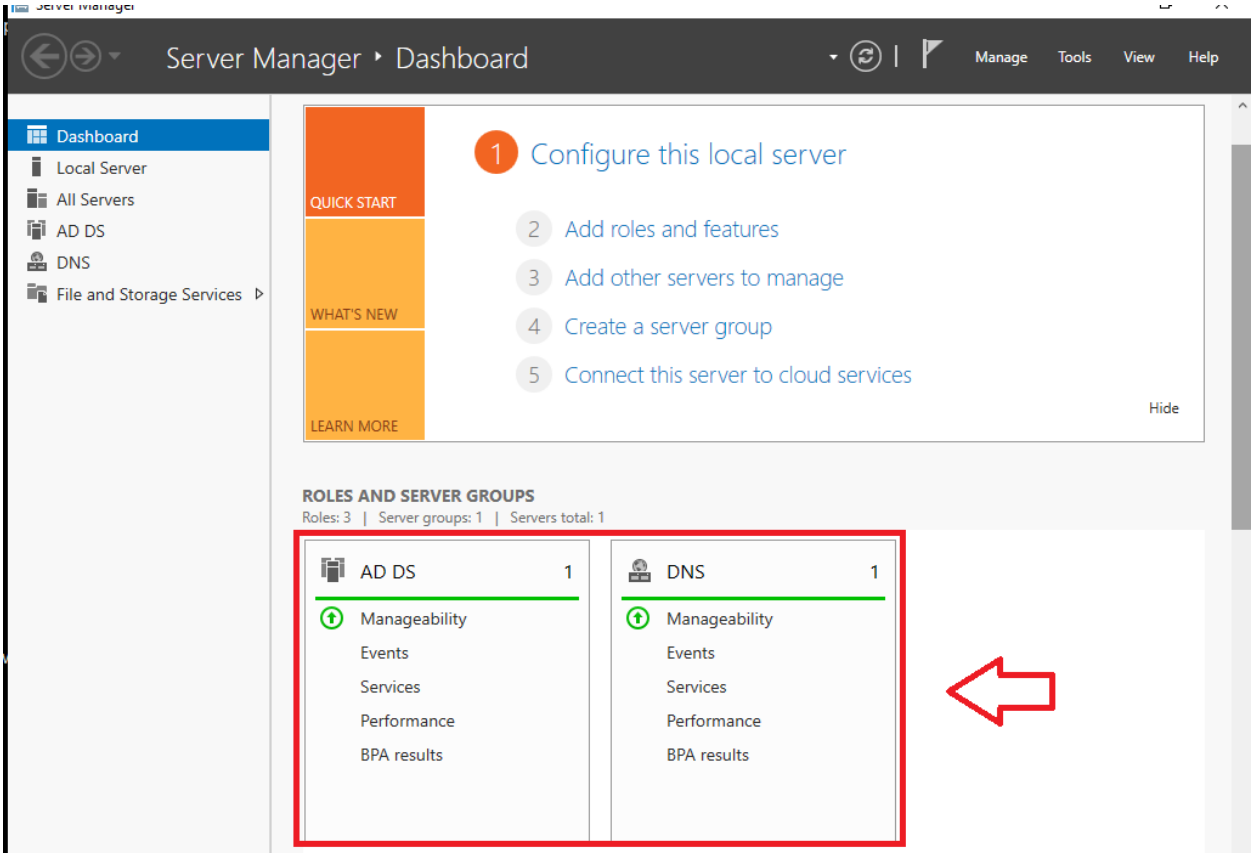


3. **Check and Verify Configuration:**

   → Login using Domain Credentials

   → Open Active Directory Users and Computers to verify Domain Setup

   → Verify DNS Registration


Server Manager ‣ Dashboard
Manage
Tools
View
Help
Dashboard
Local Server
All Servers
AD DS
DNS
File and Storage Services
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
Hide
ROLES AND SERVER GROUPS
Roles: 3 | Server groups: 1 | Servers total: 1
AD DS 1
Manageability
Events
Services
Performance
BPA results
DNS 1
Manageability
Events
Services
Performance
BPA results