

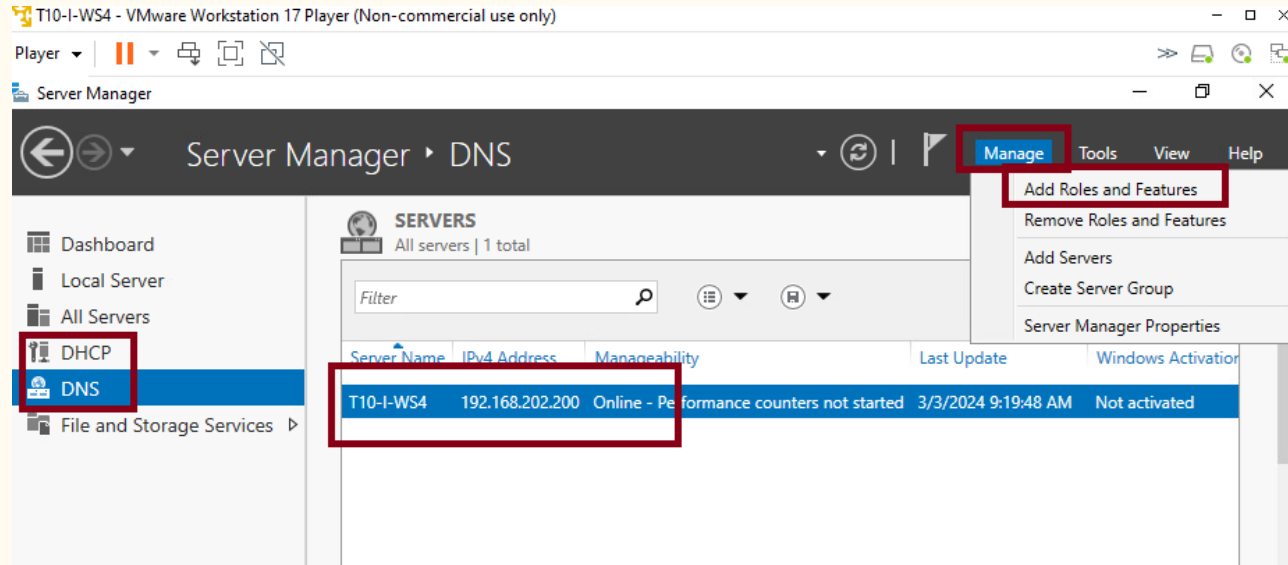
Active Directory

Setting of a failover Domain Control for a domain.

Carlos Gerez

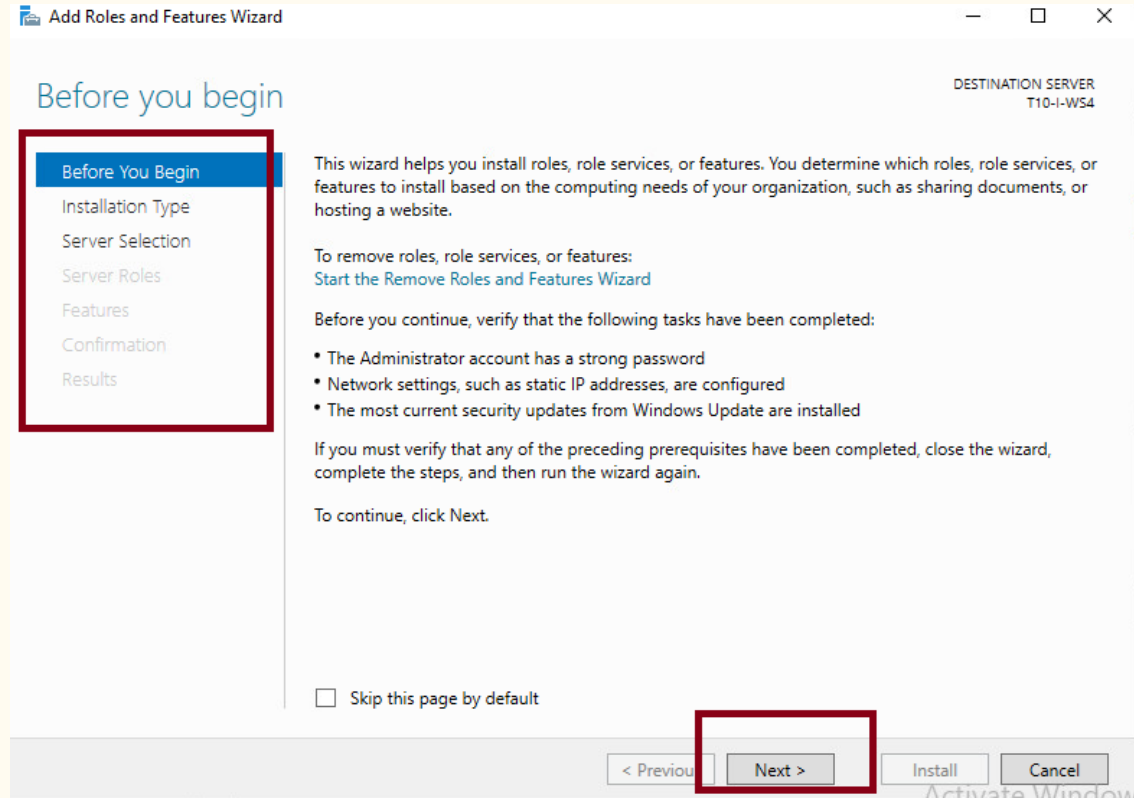
Active Directory Installation.

On the server I will install this domain control, are already installed DNS and DHCP. First go to Manage and chose Add Roles and Features.



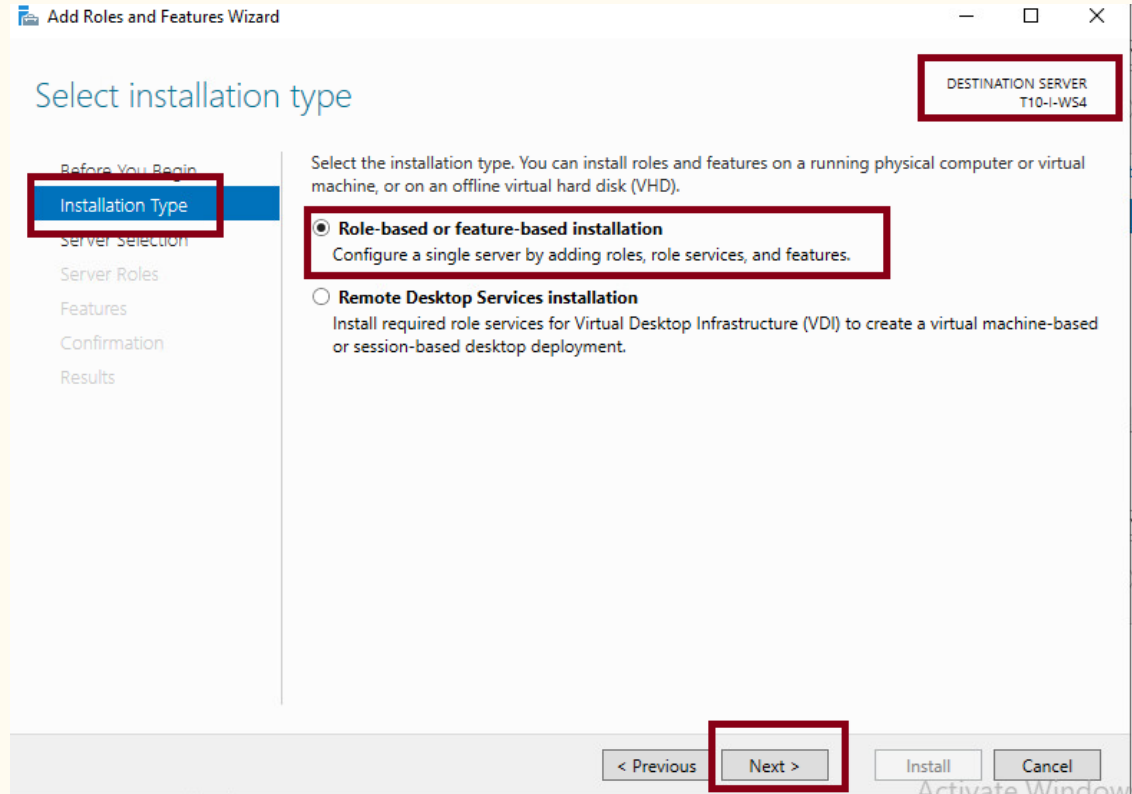
Active Directory Installation.

Follow the directions of the wizard. This is the first screen, click next.



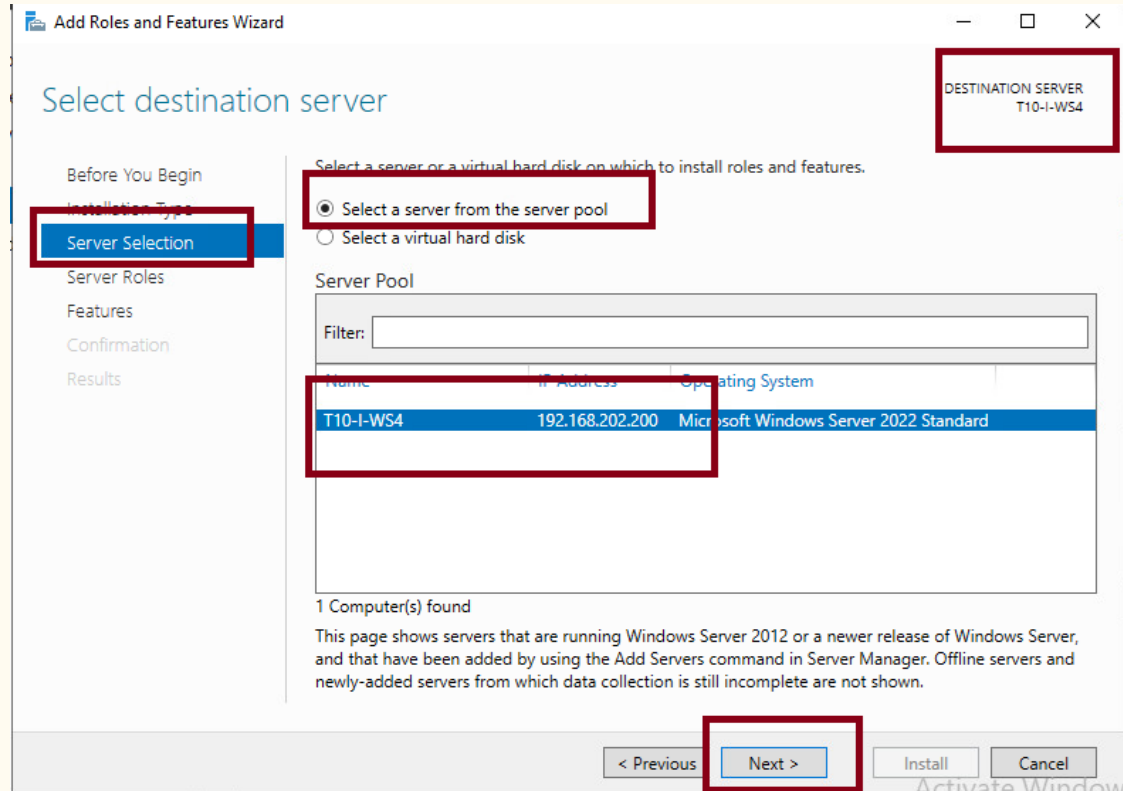
Active Directory Installation.

Select role based or feature based installation and click next.



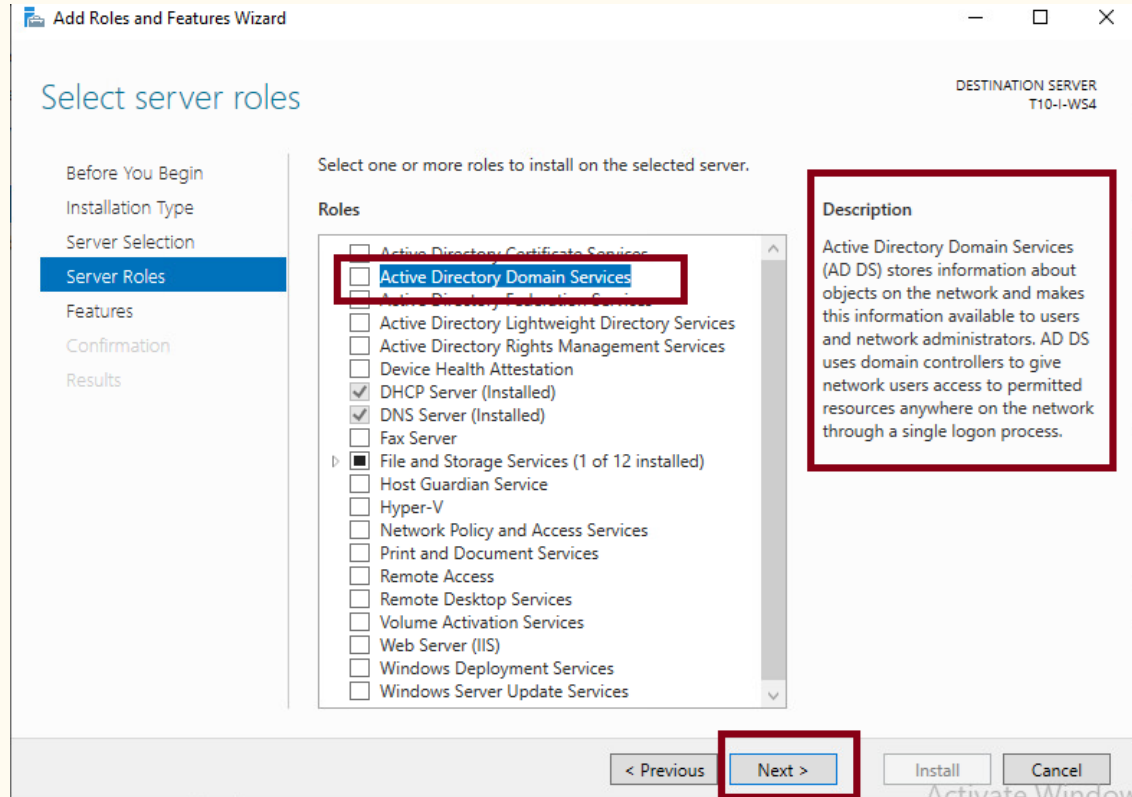
Active Directory Installation.

On Server Selection
select the server , we
have just one then
select next.



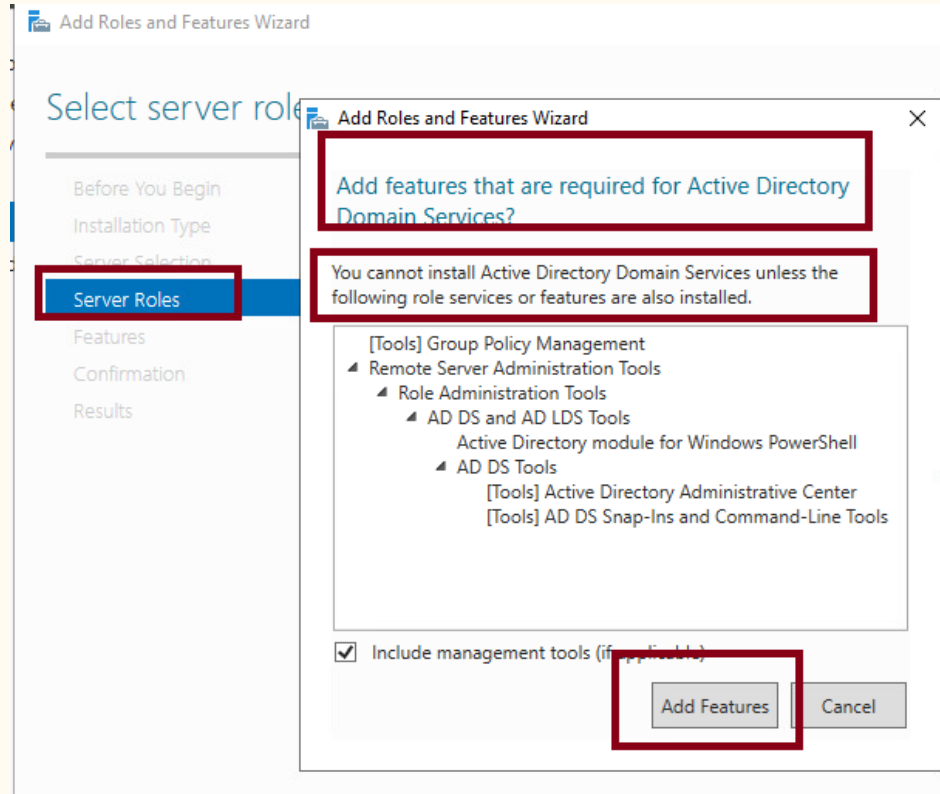
Active Directory Installation.

Select in server roles, Active Directory. You can read the description to get more information about the role.



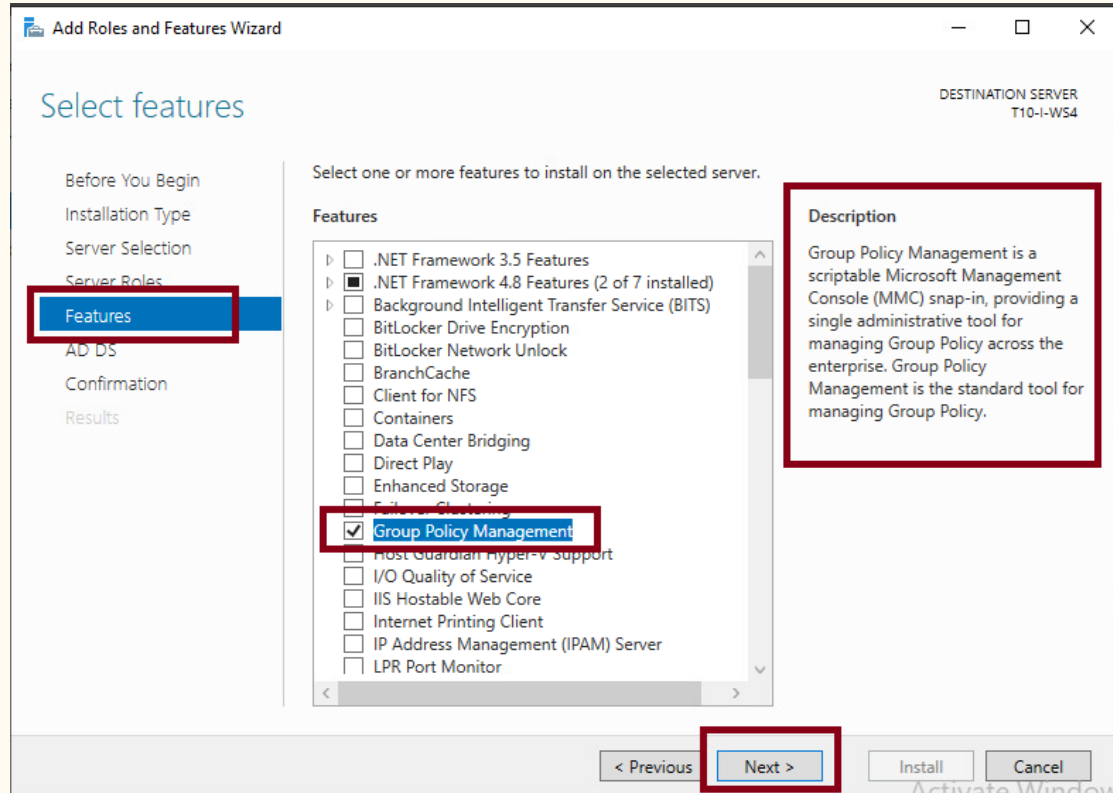
Active Directory Installation.

On server roles add the features asked as necessary for this installation.



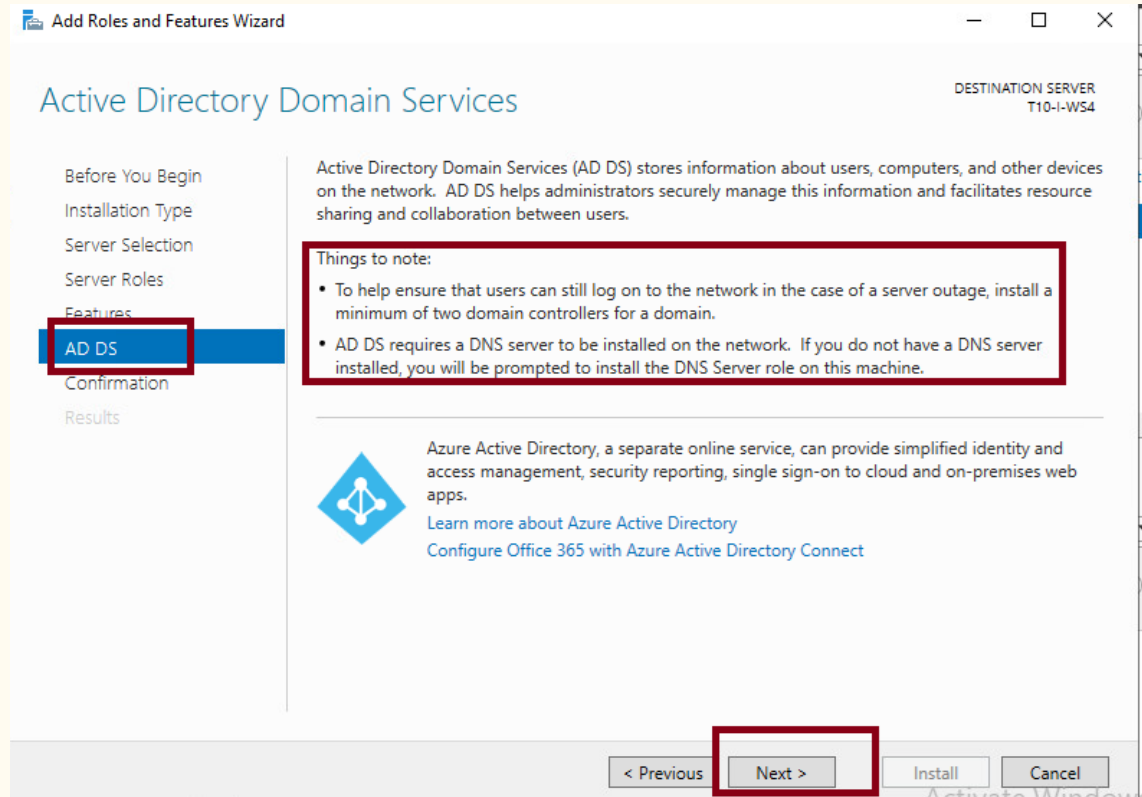
Active Directory Installation.

On features be sure at the group policy management is selected.



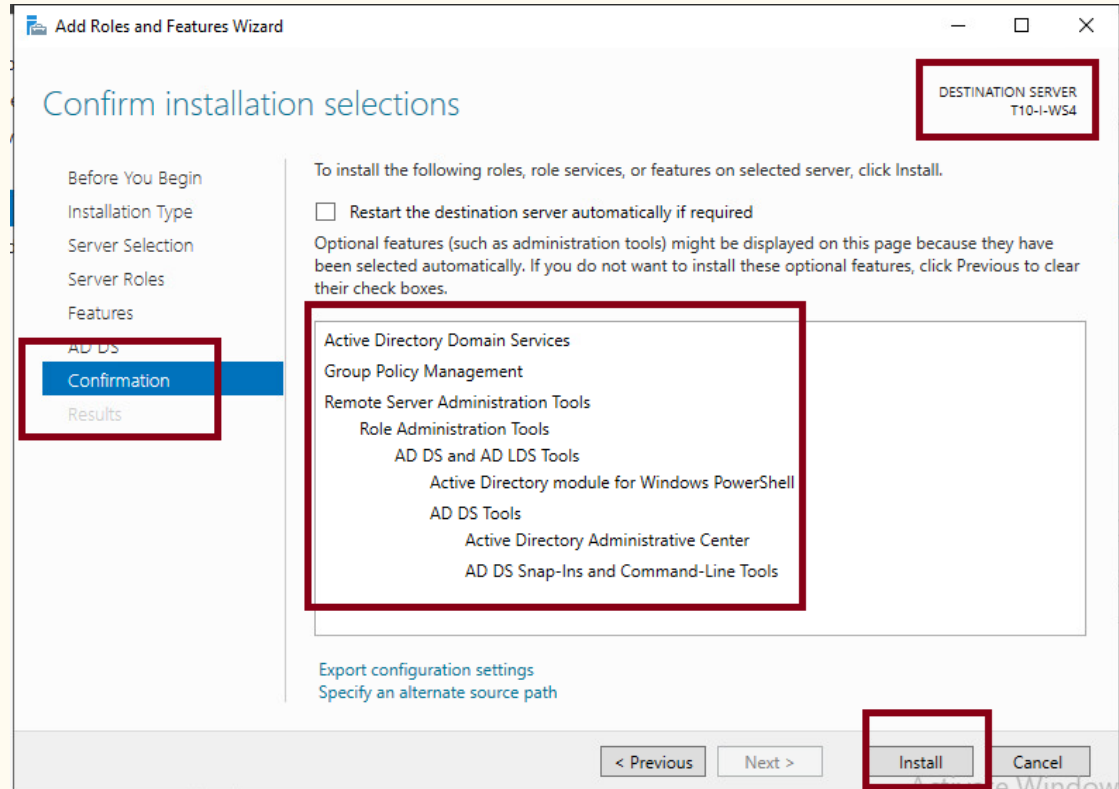
Active Directory Installation.

This is just informative, but notice that is recommended to have a minimum of 2 domain controllers on the domain.



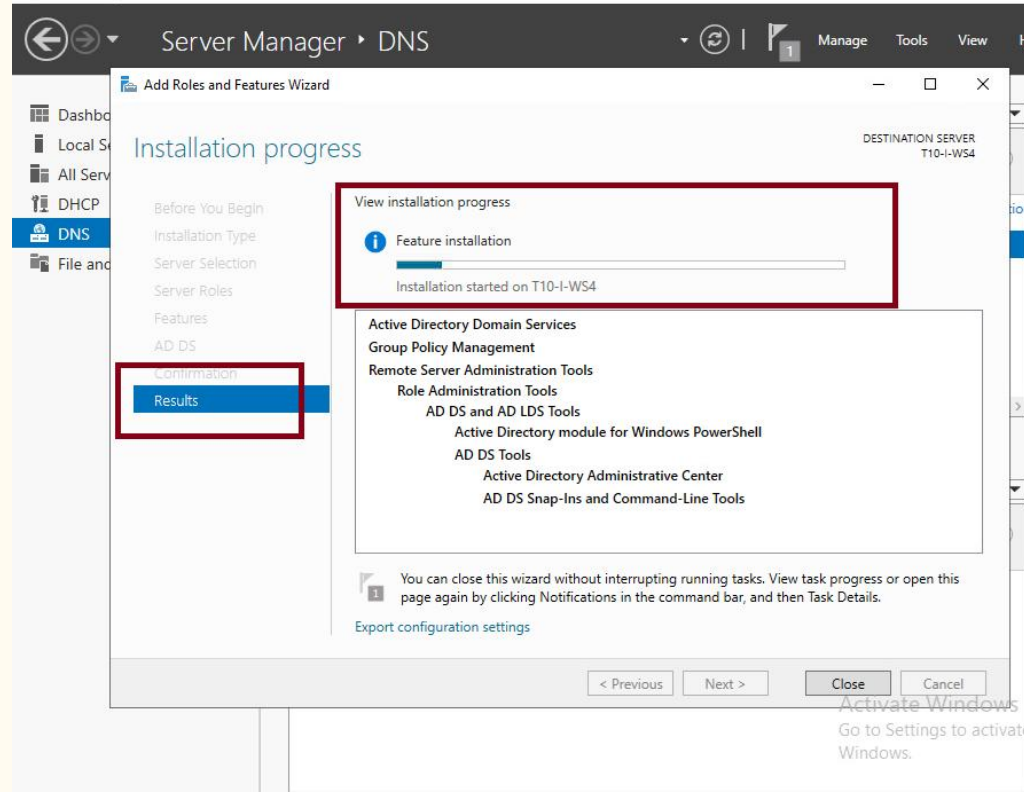
Active Directory Installation.

The last screen shows a resume of the selected items to install.



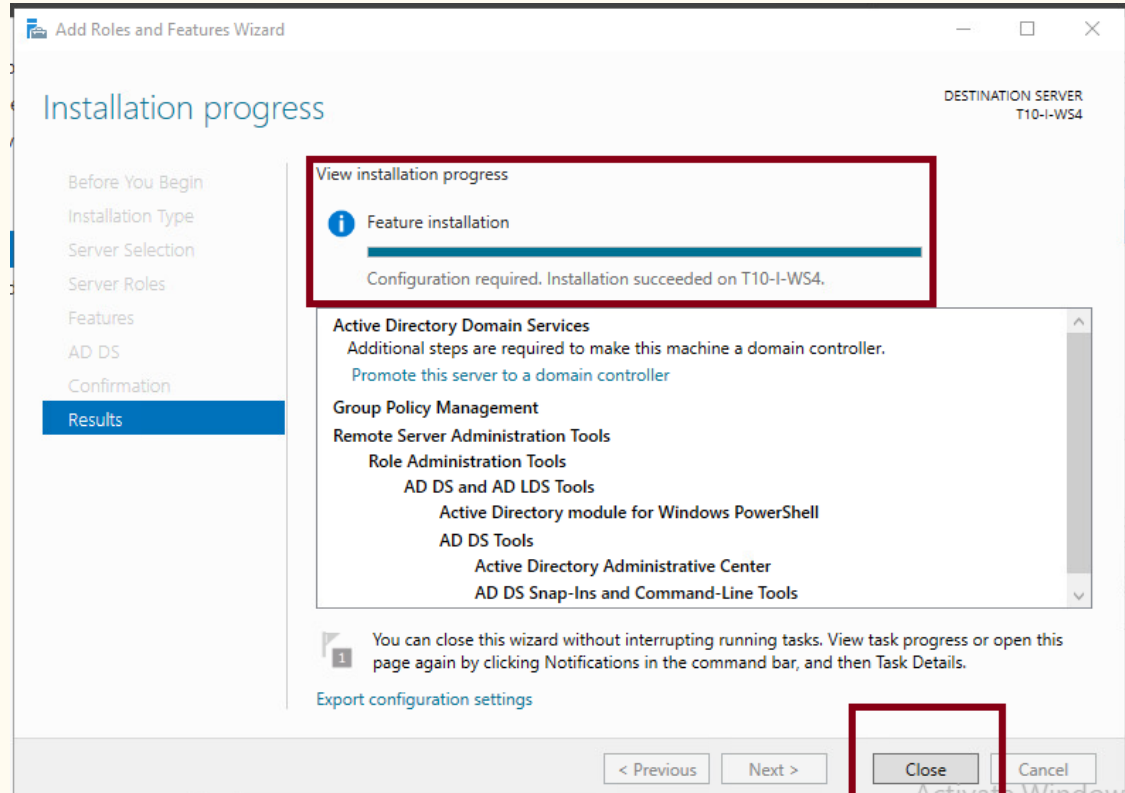
Active Directory Installation.

After click install the installation process will take several minutes.



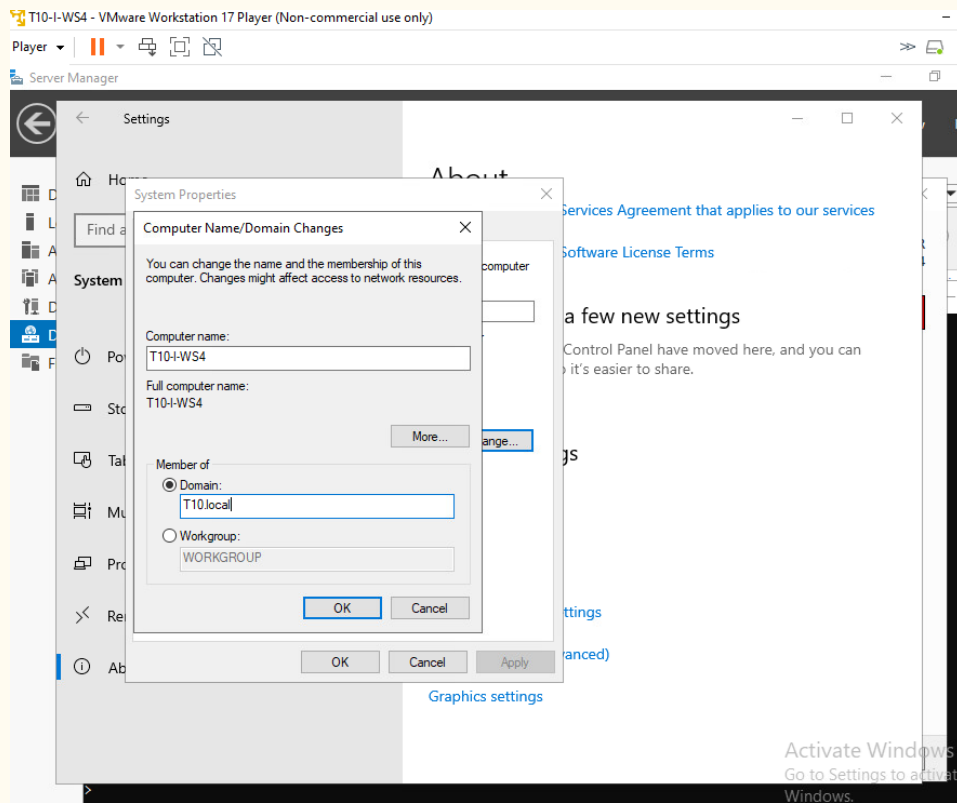
Active Directory Installation.

Once finished, close the wizard.



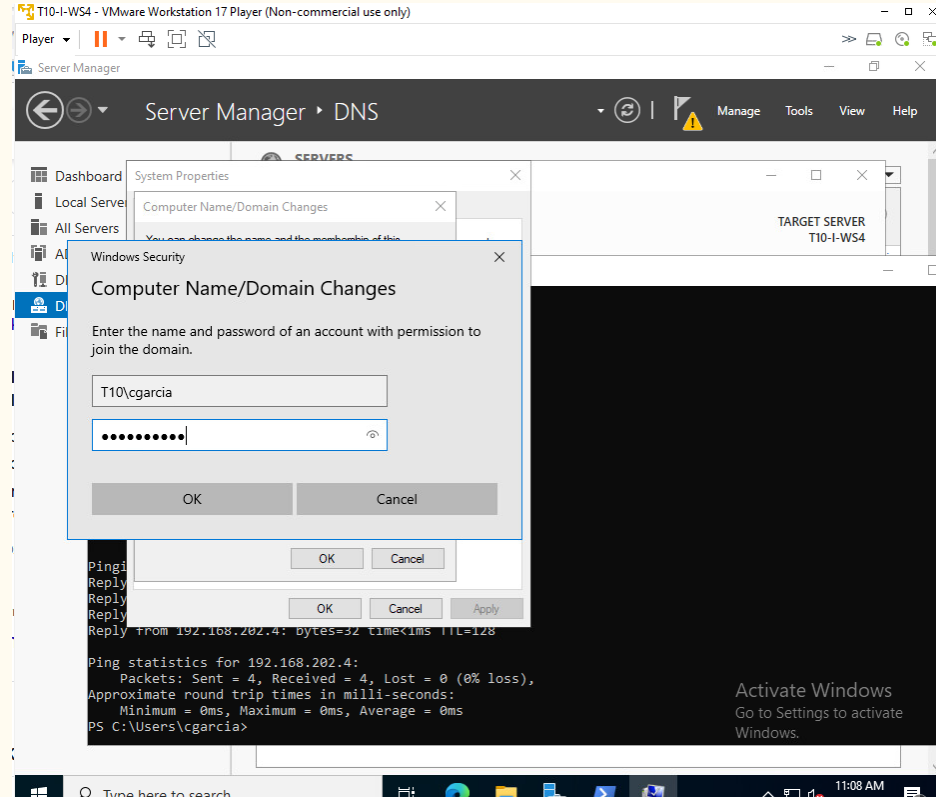
Active Directory Configuration as a secondary Domain Controller for T10.local domain.

Is better to enroll this machine to the domain to get access to the primary Domain controller to configure the second domain in this machine.



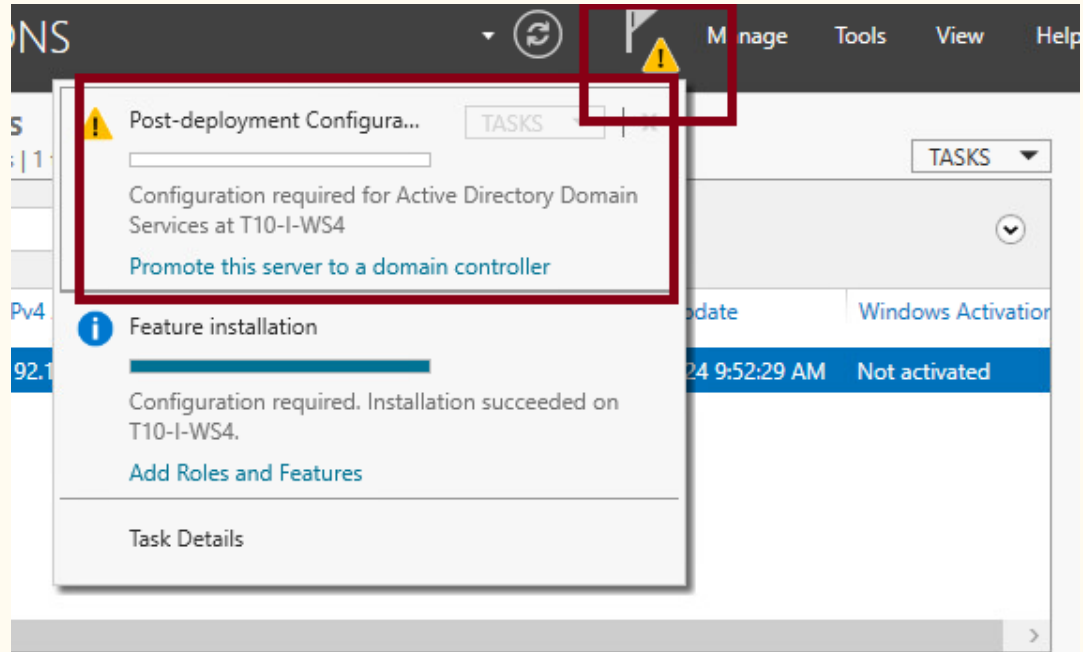
Active Directory Configuration as a secondary Domain Controller for T10.local domain.

Confirm with
credentials to allow
this machine into the
domain T10.local



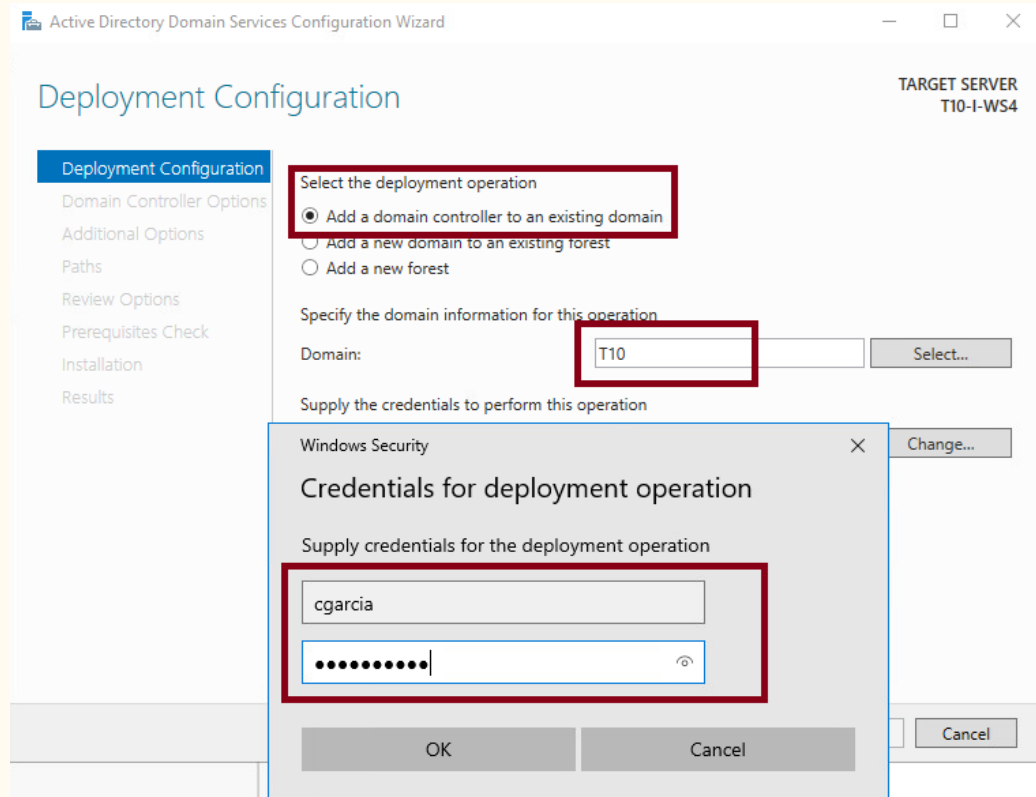
Active Directory Configuration as a secondary Domain Controller for T10.local domain.

Go to the warning sign in the dashboard to start the post deployment configuration. Select promote this server to a domain controller.



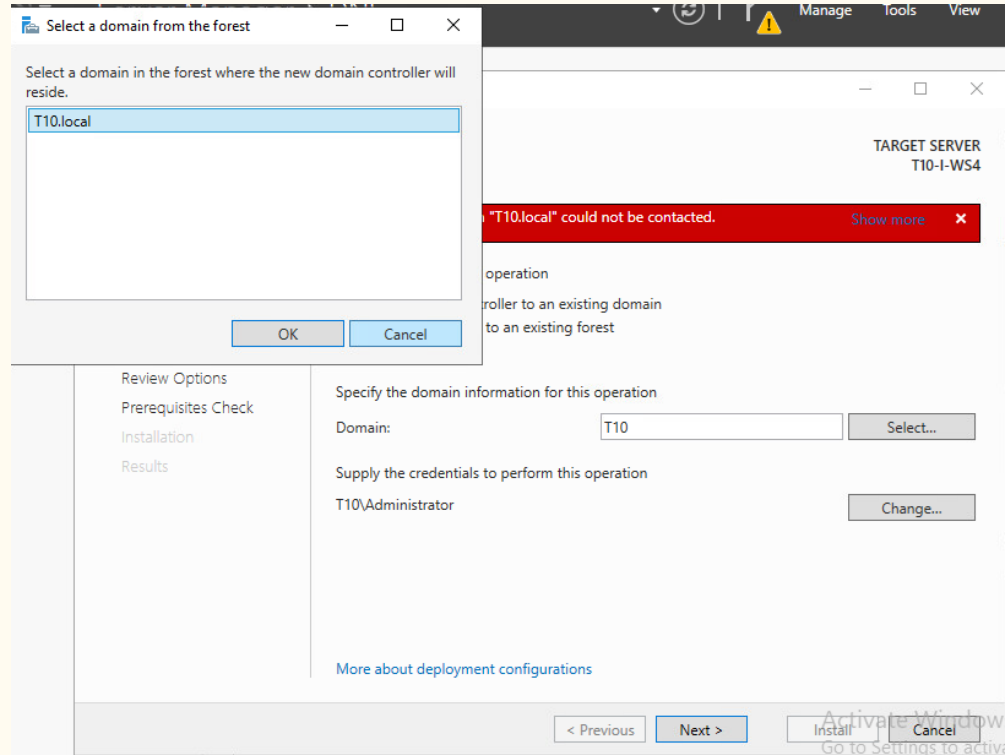
Active Directory Configuration as a secondary Domain Controller for T10.local domain.

In the new wizard that will open start by selecting Add a domain controller to an existing domain and set the domain name. After pressing select you will be asked for credentials to confirm. Use your credentials in the domain T10.local.



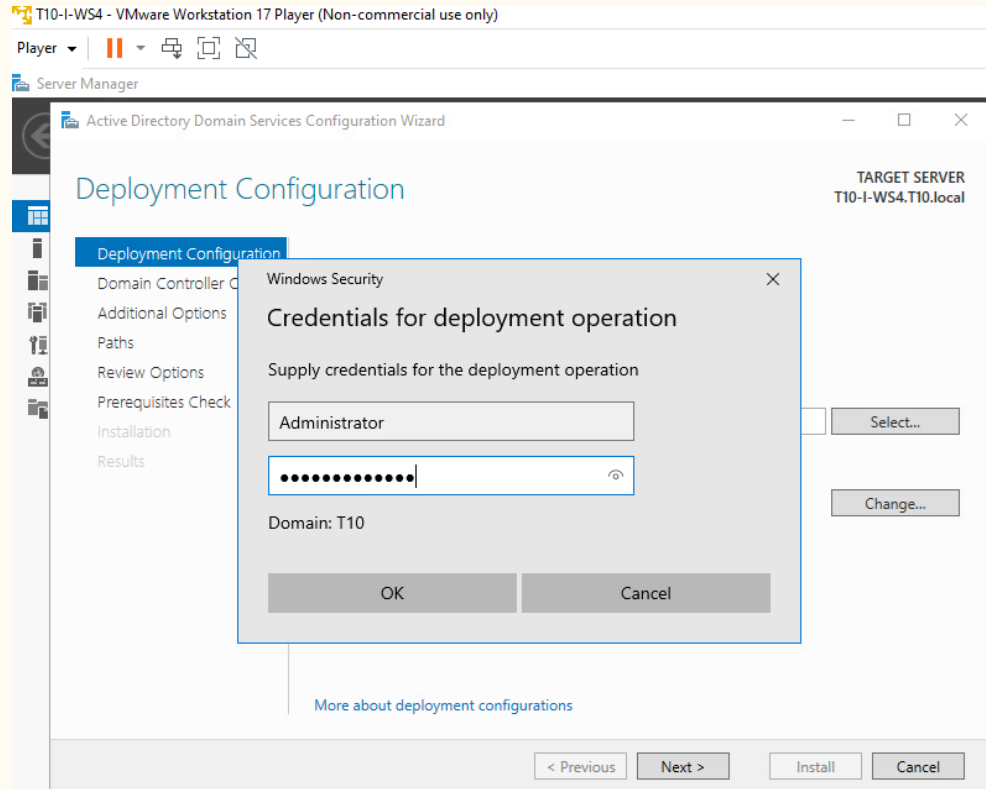
Active Directory Configuration as a secondary Domain Controller for T10.local domain.

You will be asked to select a domain from the forest in case that your domain have more than one forest.



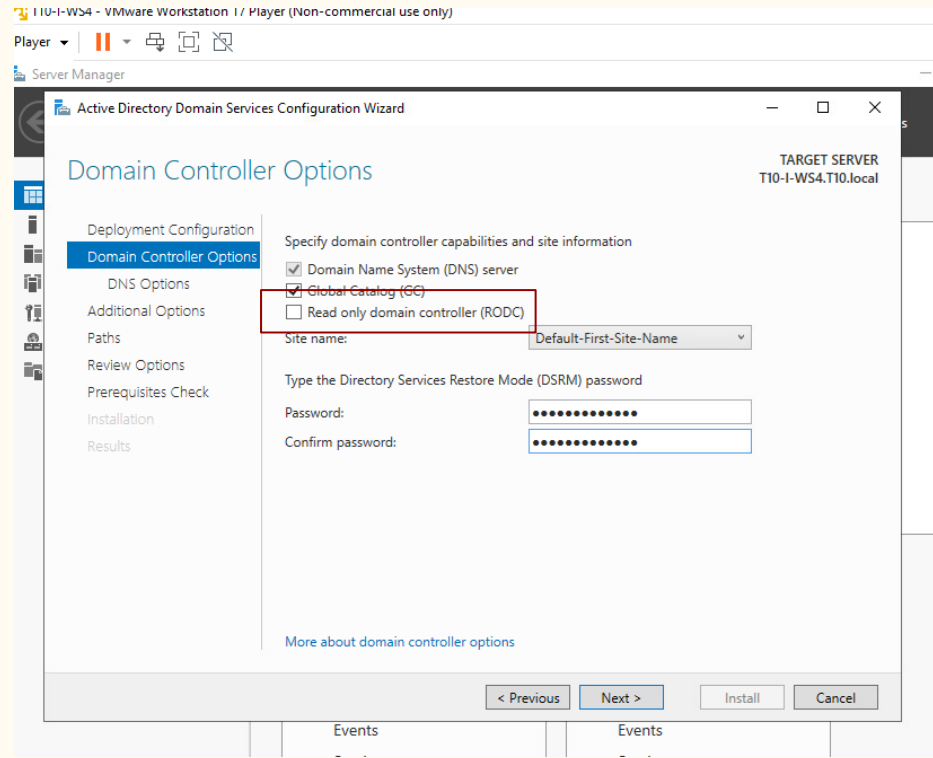
Active Directory Configuration as a secondary Domain Controller for T10.local domain.

When asked use Administrator privileges for credentials to perform the task.



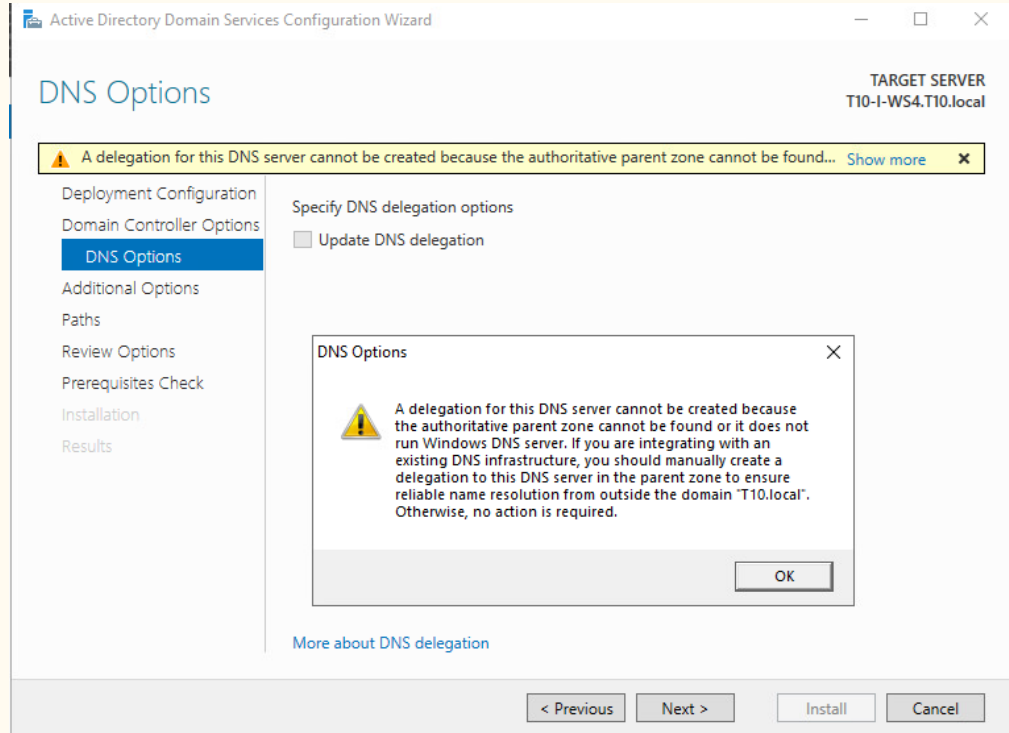
Active Directory Configuration as a secondary Domain Controller for T10.local domain.

On Domain control options select read only domain controller(RODC) leave the rest as default and set credentials for DSRM, that are in case you need to restore your domain controller.



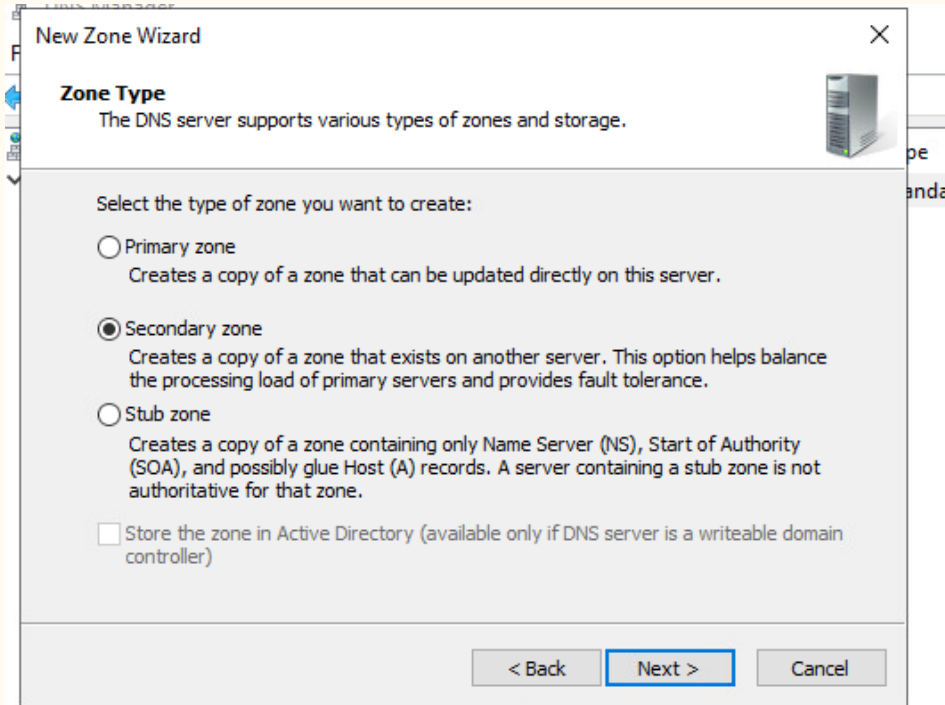
Active Directory Configuration as a secondary Domain Controller for T10.local domain.

This is a warning about DNS. We need to create a secondary Zone in this DNS server to allocate the information that will receive from the primary controller. We can do this before to finish this wizard by open the DNS management and create a secondary zone.



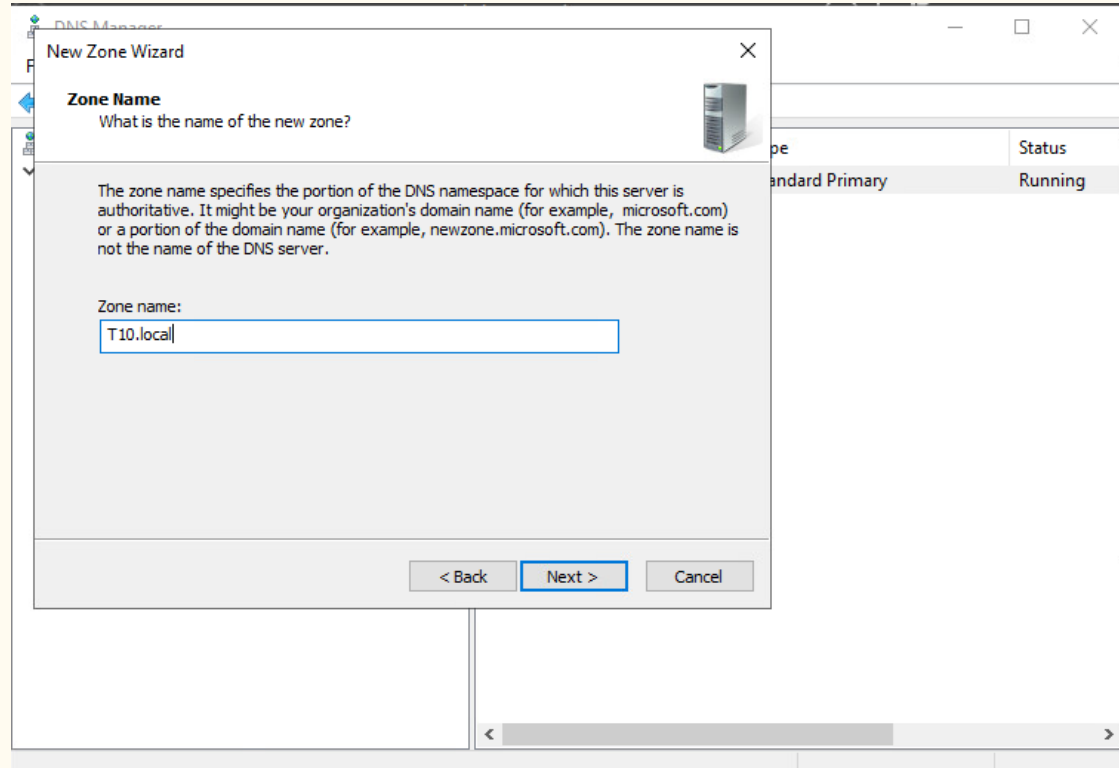
Active Directory Configuration as a secondary Domain Controller for T10.local domain.

On DNS management click to create a secondary zone and follow this wizard. The zone will be secondary, a copy from the primary server.



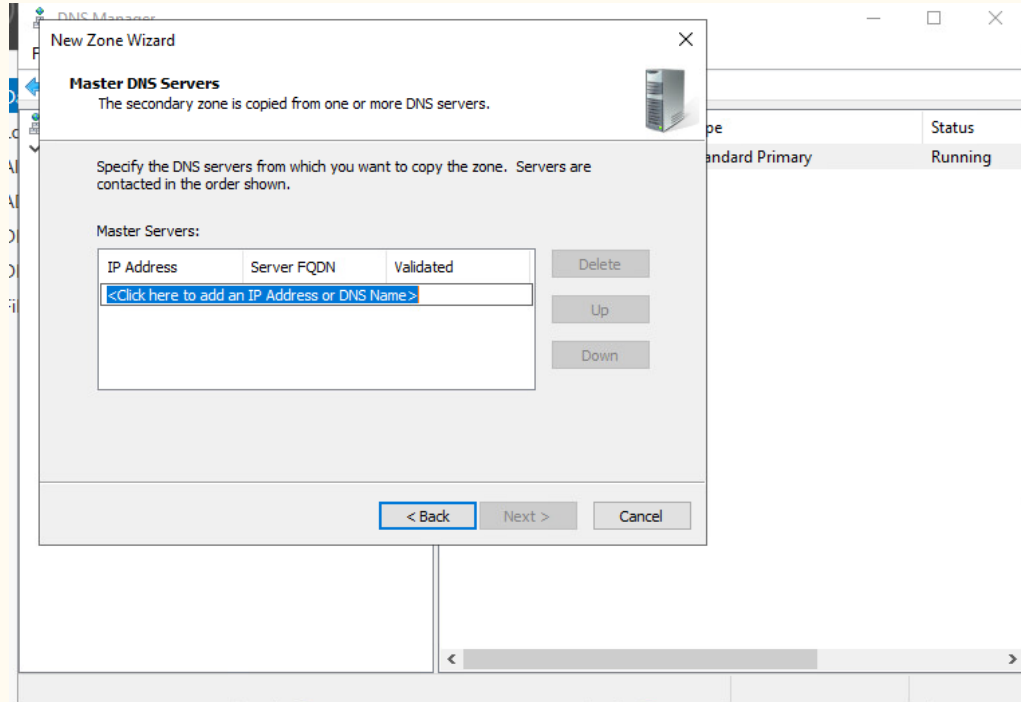
Active Directory Configuration as a secondary Domain Controller for T10.local domain.

Give the local domain name to the zone.



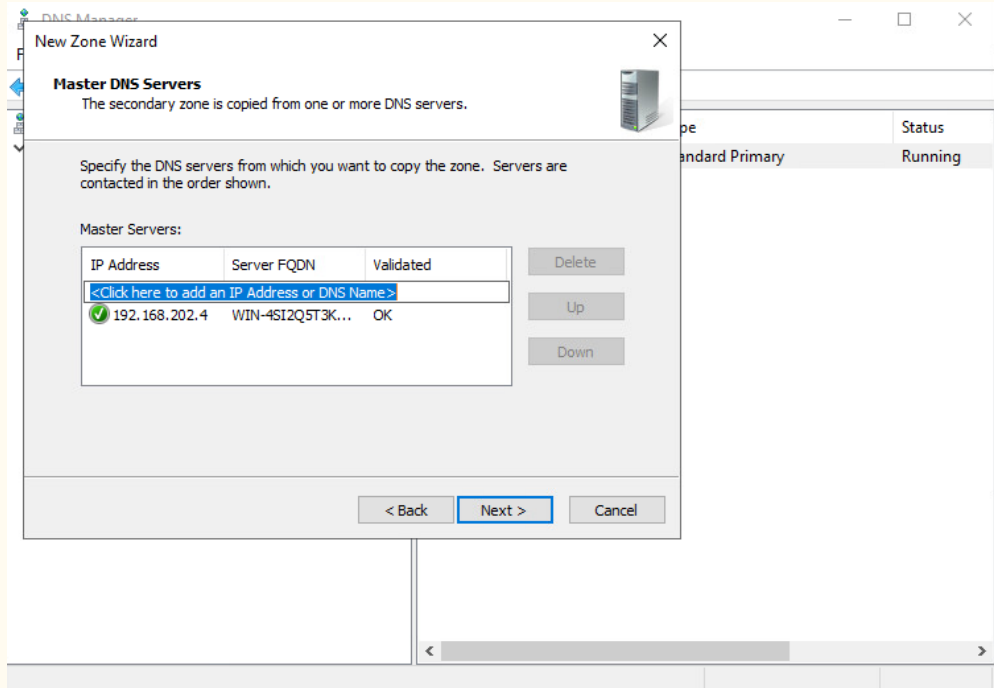
Active Directory Configuration as a secondary Domain Controller for T10.local domain.

Here you will set from which server this DNS will receive copies.



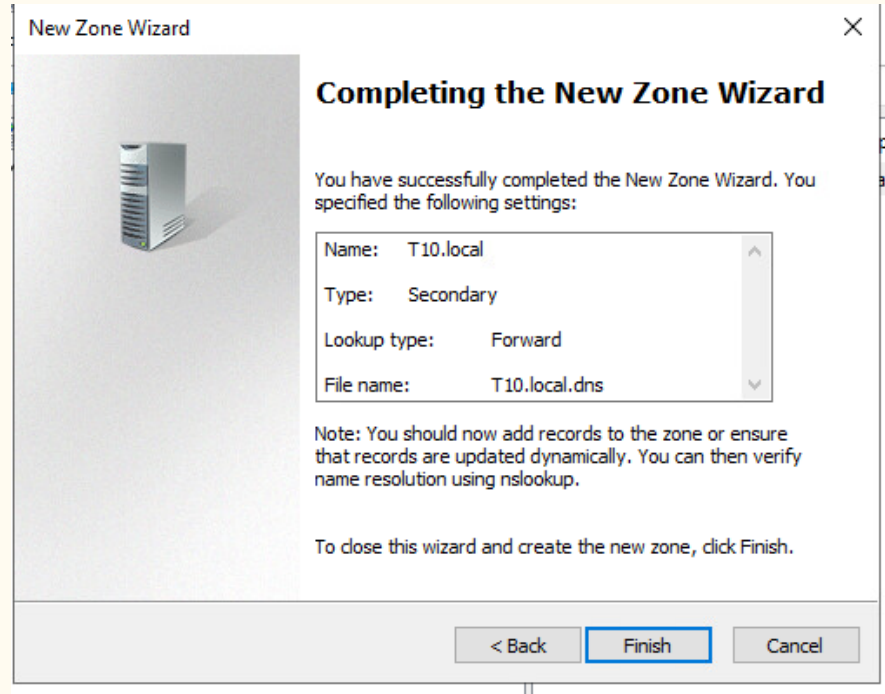
Active Directory Configuration as a secondary Domain Controller for T10.local domain.

Set the ip address or name of the primary server.



Active Directory Configuration as a secondary Domain Controller for T10.local domain.

Finish the wizard,
now you have a
secondary zone to
receive copies from
the master DNS.



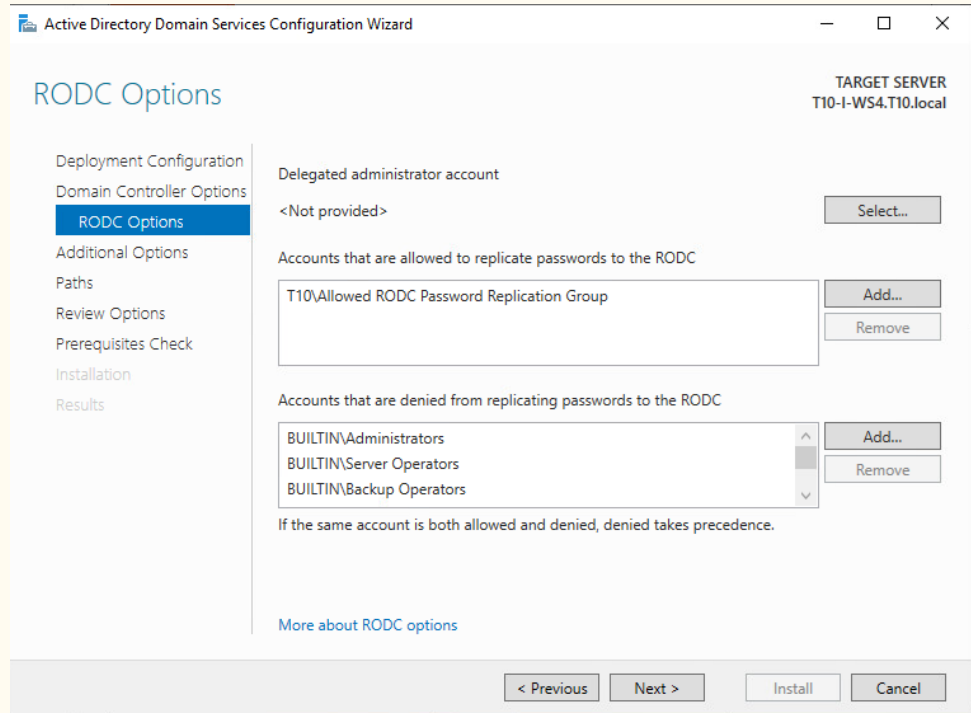
Active Directory Configuration as a secondary Domain Controller for T10.local domain.

Get to the previous step and reintroduce all the information. Continue with the settings as before.

The screenshot shows the 'Active Directory Domain Services Configuration Wizard' window. The title bar reads 'Active Directory Domain Services Configuration Wizard'. The main heading is 'Domain Controller Options'. In the top right corner, it says 'TARGET SERVER T10-I-WS4.T10.local'. On the left, a navigation pane lists the steps: 'Deployment Configuration', 'Domain Controller Options' (which is highlighted with a blue bar), 'RODC Options', 'Additional Options', 'Paths', 'Review Options', 'Prerequisites Check', 'Installation', and 'Results'. The main area is titled 'Specify domain controller capabilities and site information'. It contains three checked checkboxes: 'Domain Name System (DNS) server', 'Global Catalog (GC)', and 'Read only domain controller (RODC)'. Below these is a 'Site name:' label followed by a dropdown menu showing 'Default-First-Site-Name'. Further down is the instruction 'Type the Directory Services Restore Mode (DSRM) password', followed by two password input fields labeled 'Password:' and 'Confirm password:', both containing masked characters (dots). At the bottom right of the main area is a link that says 'More about domain controller options'. At the very bottom of the window, there are four buttons: '< Previous', 'Next >', 'Install', and 'Cancel'.

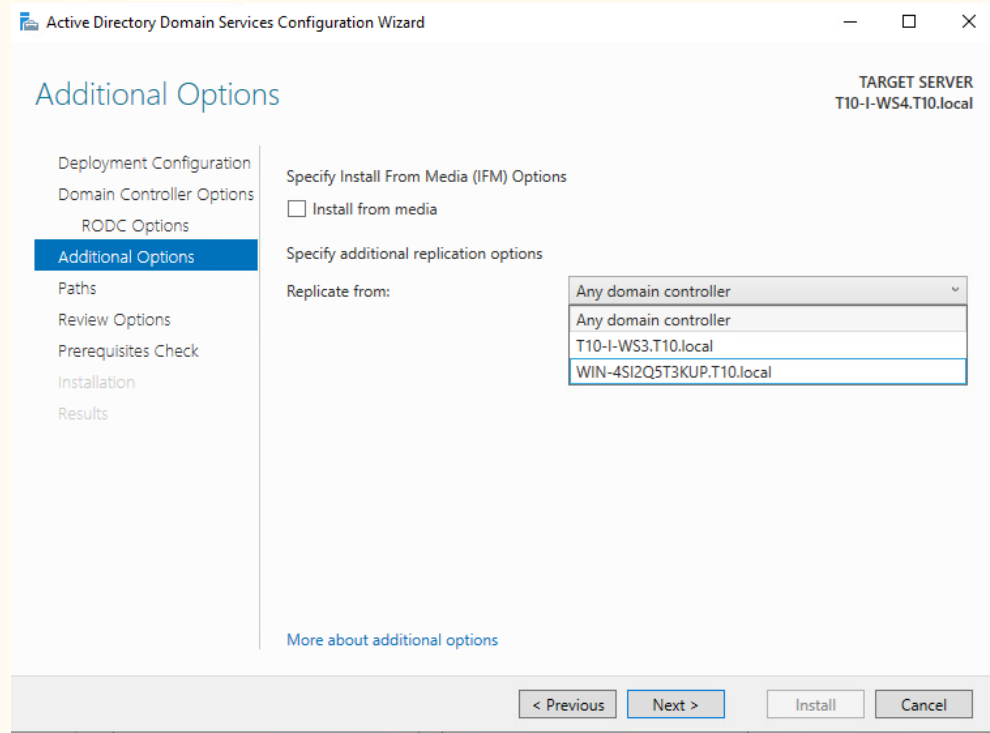
Active Directory Configuration as a secondary Domain Controller for T10.local domain.

On RODC options
leave the defaults.



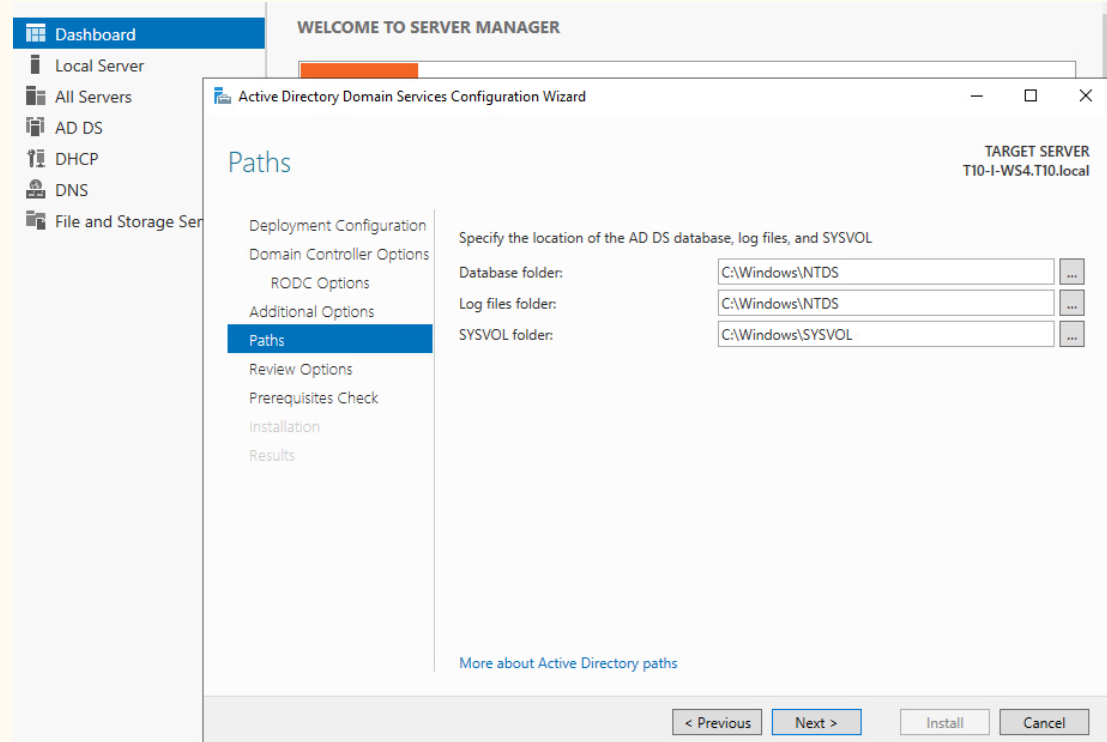
Active Directory Configuration as a secondary Domain Controller for T10.local domain.

Here you can select from where replicate information. We have a domain controller with the main DHCP and a second with a failover DHCP. You can choose any of them, but is recommended to replicate from the second DHCP since if the primary server fails, still all the network will receive ip addresses from the failover and you will need replications from that one.



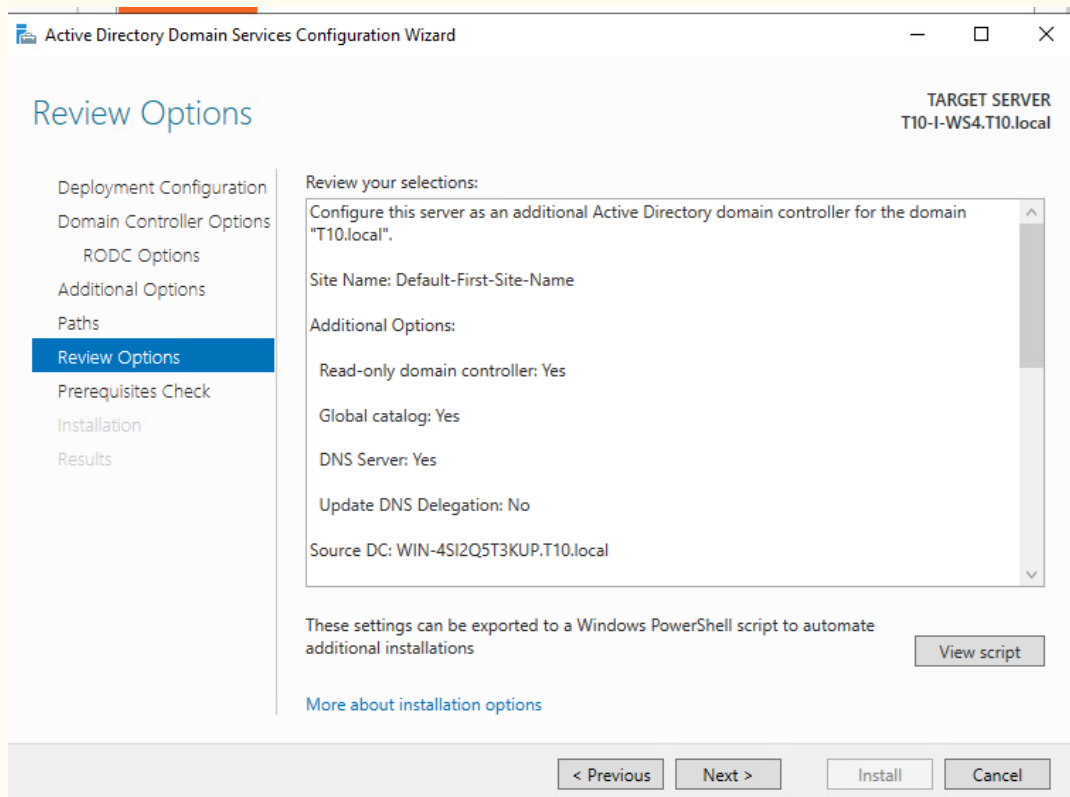
Active Directory Configuration as a secondary Domain Controller for T10.local domain.

Leave paths as default
and continue with
next.



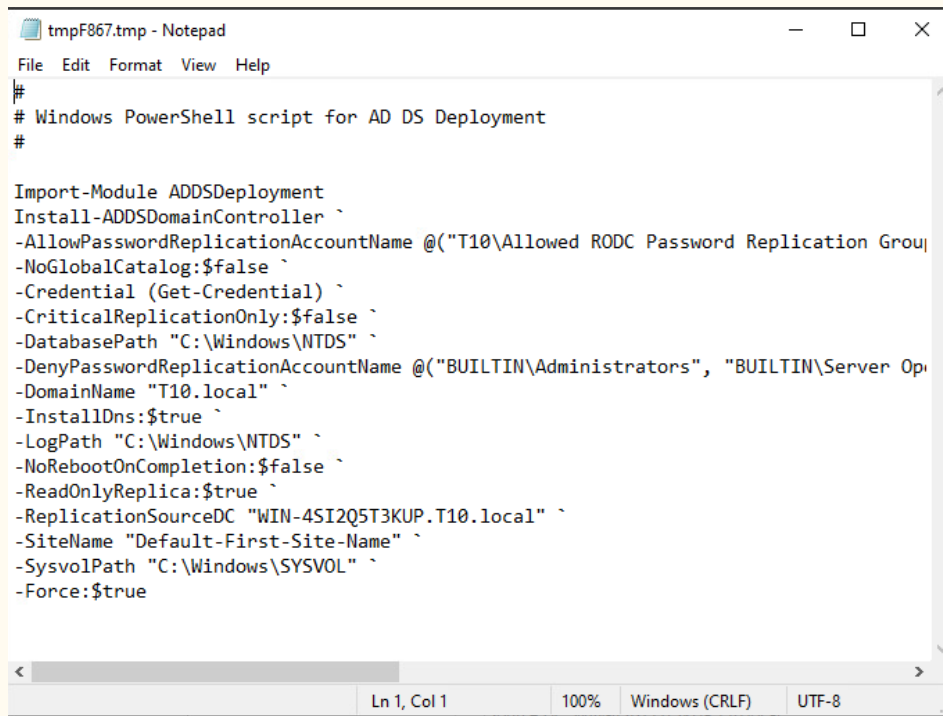
Active Directory Configuration as a secondary Domain Controller for T10.local domain.

The last screen allow to check the configuration before installation.



Active Directory Configuration as a secondary Domain Controller for T10.local domain.

The view script allow to see the commands that will be executed on installation.

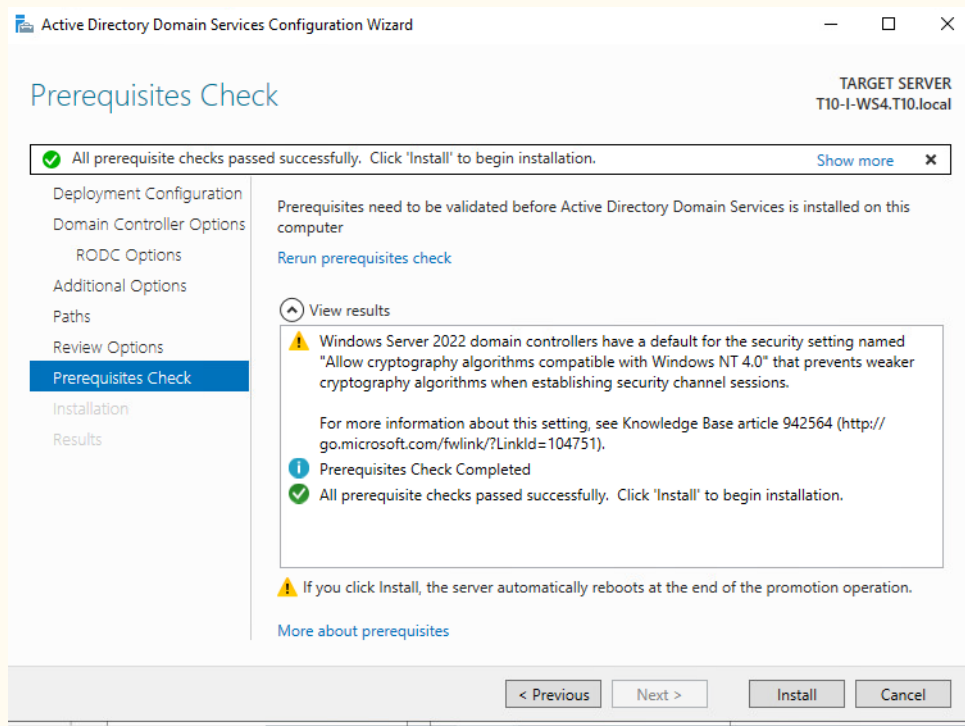


```
tmpF867.tmp - Notepad
File Edit Format View Help
#
# Windows PowerShell script for AD DS Deployment
#

Import-Module ADDSDeployment
Install-ADDSDomainController `
-AllowPasswordReplicationAccountName @"T10\Allowed RODC Password Replication Group" `
-NoGlobalCatalog:$false `
-Credential (Get-Credential) `
-CriticalReplicationOnly:$false `
-DatabasePath "C:\Windows\NTDS" `
-DenyPasswordReplicationAccountName @"BUILTIN\Administrators", "BUILTIN\Server Operators" `
-DomainName "T10.local" `
-InstallDns:$true `
-LogPath "C:\Windows\NTDS" `
-NoRebootOnCompletion:$false `
-ReadOnlyReplica:$true `
-ReplicationSourceDC "WIN-4SI2Q5T3KUP.T10.local" `
-SiteName "Default-First-Site-Name" `
-SysvolPath "C:\Windows\SYSVOL" `
-Force:$true
```

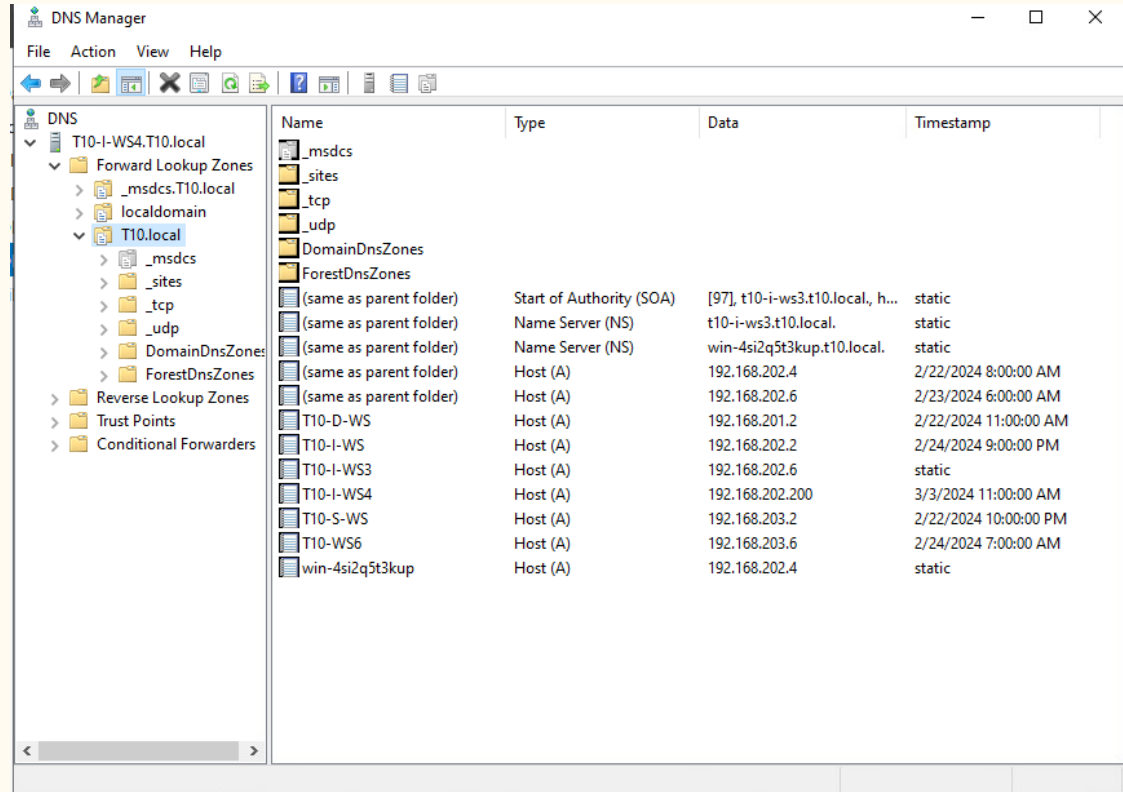
Active Directory Configuration as a secondary Domain Controller for T10.local domain.

After finished it will show that all it was ok and that this is a replica of the primary controller and will work as a failover in case the other fails, click install.



DNS Replication in the failover AD.

Once installation finished we can check that all the informations is replicated on this new Active Directory from the original.

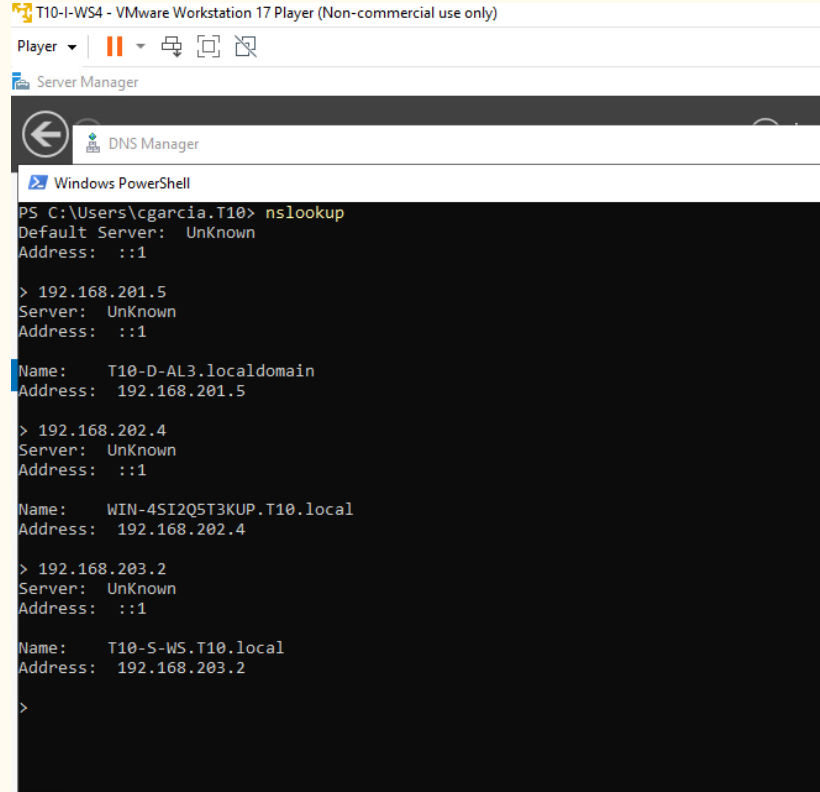


The screenshot shows the Windows DNS Manager console. The left pane displays the hierarchy: DNS > T10-I-WS4.T10.local > Forward Lookup Zones > T10.local. The right pane shows a list of DNS records with columns: Name, Type, Data, and Timestamp.

Name	Type	Data	Timestamp
_msdcs			
_sites			
_tcp			
_udp			
DomainDnsZones			
ForestDnsZones			
(same as parent folder)	Start of Authority (SOA)	[97], t10-i-ws3.t10.local, h...	static
(same as parent folder)	Name Server (NS)	t10-i-ws3.t10.local.	static
(same as parent folder)	Name Server (NS)	win-4si2q5t3kup.t10.local.	static
(same as parent folder)	Host (A)	192.168.202.4	2/22/2024 8:00:00 AM
(same as parent folder)	Host (A)	192.168.202.6	2/23/2024 6:00:00 AM
T10-D-WS	Host (A)	192.168.201.2	2/22/2024 11:00:00 AM
T10-I-WS	Host (A)	192.168.202.2	2/24/2024 9:00:00 PM
T10-I-WS3	Host (A)	192.168.202.6	static
T10-I-WS4	Host (A)	192.168.202.200	3/3/2024 11:00:00 AM
T10-S-WS	Host (A)	192.168.203.2	2/22/2024 10:00:00 PM
T10-WS6	Host (A)	192.168.203.6	2/24/2024 7:00:00 AM
win-4si2q5t3kup	Host (A)	192.168.202.4	static

DNS resolution from the new DNS.

On the same machine
we can check that
DNS can resolve now
any address on the
domain T10.local.



```
T10-I-WS4 - VMware Workstation 17 Player (Non-commercial use only)
Player
Server Manager
DNS Manager
Windows PowerShell
PS C:\Users\cgarcia.T10> nslookup
Default Server: UnKnown
Address: ::1

> 192.168.201.5
Server: UnKnown
Address: ::1
Name: T10-D-AL3.localdomain
Address: 192.168.201.5

> 192.168.202.4
Server: UnKnown
Address: ::1
Name: WIN-4SI2Q5T3KUP.T10.local
Address: 192.168.202.4

> 192.168.203.2
Server: UnKnown
Address: ::1
Name: T10-S-WS.T10.local
Address: 192.168.203.2

>
```