

**Instalación y Configuración del Dominio****Resultats de l'aprenentatge:**

RA1. Administració de la Informació

COM CREAR UN DOMINI?

Per crear un domini cal un sistema operatiu Windows Server ja sigui 2019, 2022... Nosaltres utilitzem Windows Server 2019 i per als usuaris Windows 10 Pro.

Un cop iniciat el sistema Windows Server se'n obrirà el programa Active Directory on serà el nostre centre d'operacions i manejarem el servidor des d'aquí. Primer entrem a "Server Manager" i fem clic a "Add Roles and Features"

The screenshot shows the Windows Server Manager dashboard. On the left, there's a sidebar with 'Services' listed. The main area has a 'WELCOME TO SERVER MANAGER' header. To the right of the sidebar is a vertical orange menu bar with 'QUICK START', 'WHAT'S NEW', and 'LEARN MORE'. To the right of the menu bar, a numbered list of steps is displayed: 1. Configure this local server, 2. Add roles and features, 3. Add other servers to manage (with a cursor icon pointing to it), 4. Create a server group, and 5. Connect this server to cloud services. Below this list, under 'ROLES AND SERVER GROUPS', it shows 'Roles: 3 | Server groups: 1 | Servers total: 1'. There are two boxes: one for 'AD DS' with 1 role and one for 'DNS' with 1 role. Both boxes list 'Manageability', 'Events', 'Services', 'Performance', and 'BPA results'.

Se'n obrirà un menú força intuïtiu on haurem de seguir els passos que deixem en aquestes captures de pantalla.

Before you begin

DESTINATION SERVER
Arman-Ali.Arman.local

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

Si no està seleccionat de manera automàtica, seleccionem l'opció de “Role-bases or feature basesinstallation”

Select installation type

DESTINATION SERVER
Arman-Ali.Arman.local

Before You Begin

Installation type

Server Selection

Server Roles

Features

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.

< Previous

Next >

Install

Cancel

Seleccionem el servidor desitjat en el nostre cas WINSERVER01 i cliquem a Next

The screenshot shows the 'Select destination server' step of the 'Add Roles and Features Wizard'. On the left, a navigation pane lists steps: 'Before You Begin', 'Installation Type', 'Server Selection' (which is highlighted in blue), 'Server Roles', 'Features', 'Confirmation', and 'Results'. The main area has a title 'Select a server or a virtual hard disk on which to install roles and features.' Below this is a list of two options: 'Select a server from the server pool' (which is selected) and 'Select a virtual hard disk'. A 'Server Pool' section follows, containing a 'Filter' input field and a table with one row. The table columns are 'Name', 'IP Address', and 'Operating System'. The single entry is 'Arman-Ali.Arman.local' with IP '192.168.111.1' and 'Microsoft Windows Server 2019 Standard Evaluation'. Below the table, a message states '1 Computer(s) found'. A note explains that the page shows servers running Windows Server 2012 or newer, added via the 'Add Servers' command in Server Manager. It also mentions offline servers and newly-added servers with incomplete data collection. At the bottom are buttons for '< Previous', 'Next >', 'Install', and 'Cancel'.

Seleccionem "Serveis de domini d'Active Directory" perquè el servidor ens permeti crear el domini

The screenshot shows the 'Select server roles' step of the 'Add Roles and Features Wizard'. The left navigation pane shows steps: 'Before You Begin', 'Installation Type', 'Server Selection', 'Server Roles' (highlighted in blue), 'Features', 'Confirmation', and 'Results'. The main area has a title 'Select one or more roles to install on the selected server.' Below this is a 'Roles' table. The first column contains checkboxes for various services, and the second column contains their descriptions. Services listed include 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 Policy and Access Services, Print and Document Services, Remote Access, Remote Desktop Services, Volume Activation Services, Web Server (IIS), Windows Deployment Services, and Windows Server Update Services. The 'File and Storage Services' section is expanded. At the bottom are buttons for '< Previous', 'Next >', 'Install', and 'Cancel'.

Es mostrarà un resum de l'anterior i si estem satisfets cliquem a "Install".

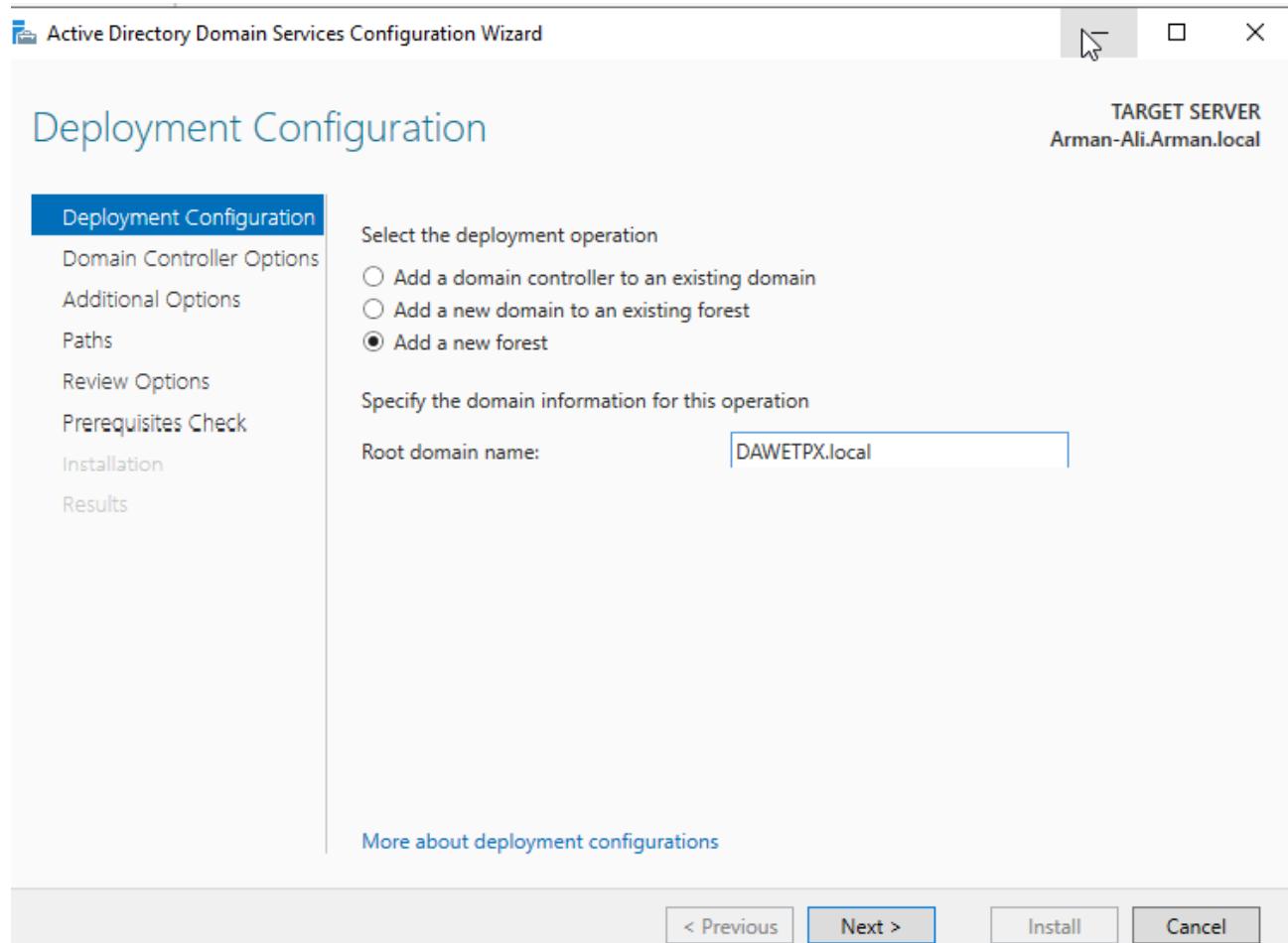
The screenshot shows the "Installation progress" window for a server named "Arman-Ali". The left sidebar lists steps: Before You Begin, Installation Type, Server Selection, Server Roles, Features, AD DS, Confirmation, and Results. The "Results" step is selected. The main pane shows "Feature installation" is completed with a green bar. It also lists "Active Directory Domain Services" tools: Group Policy Management, Remote Server Administration Tools, Role Administration Tools, AD DS and AD LDS Tools, AD DS Tools, Active Directory Administrative Center, and AD DS Snap-Ins and Command-Line Tools. A note says "Configuration required. Installation succeeded on Arman-Ali." A tip at the bottom says "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." An "Export configuration settings" button is at the bottom.

Se'ns demanarà reiniciar el sistema

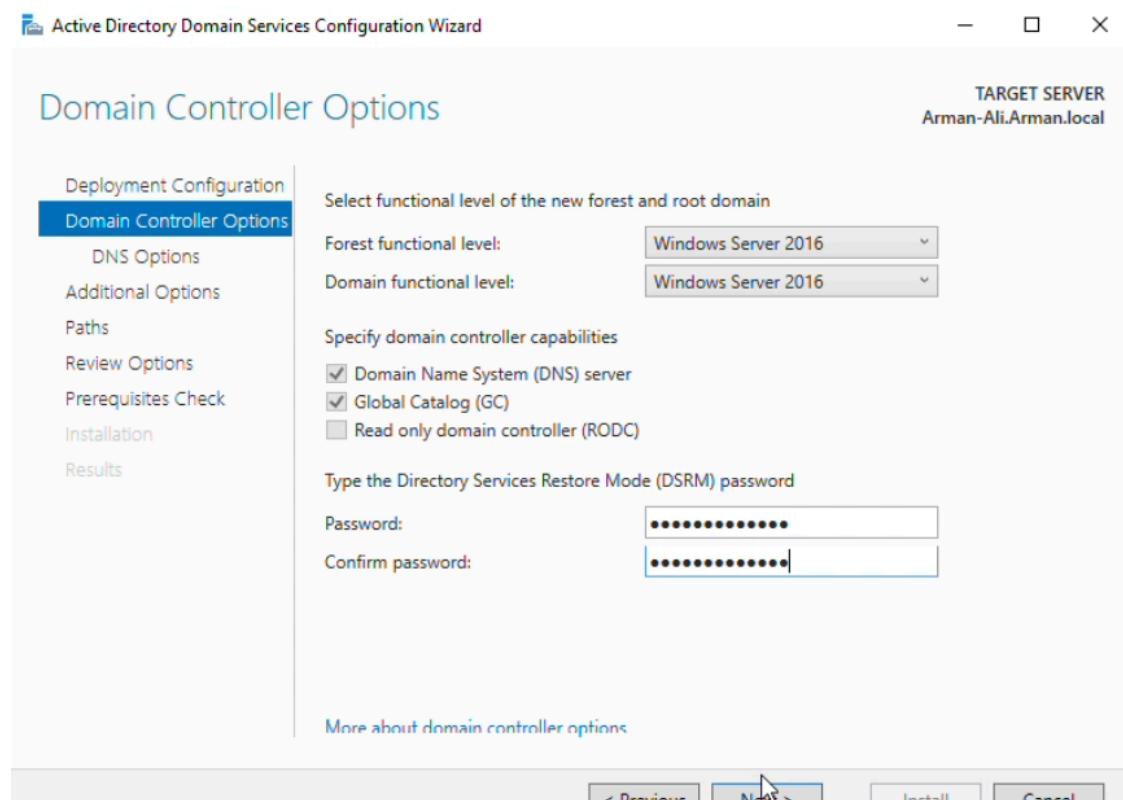
Un cop reiniciat el sistema a Active Directory se'ns mostrarà una alerta on es mostrarà que hem deconfigurar el Serveis de domini. Cliquem en aquesta alerta

The screenshot shows a Windows taskbar with a notification icon for "Post-deployment Configuration". The notification window says "Configuration required for Active Directory Domain Services at ARMAN-ALI" and "Promote this server to a domain controller". Below the taskbar, the "Feature installation" step is shown as completed in the "Installation progress" window. A link "Add Roles and Features" is visible. At the bottom, there's a "Task Details" section.

Afegim el nom del domini arrel sent DAWETPX



Establim el nivell de funcionalitats del domini amb Windows Server 2019 seleccionem les capacitats DNS i Global Catalog i finalment establim una contrasenya per al domini.



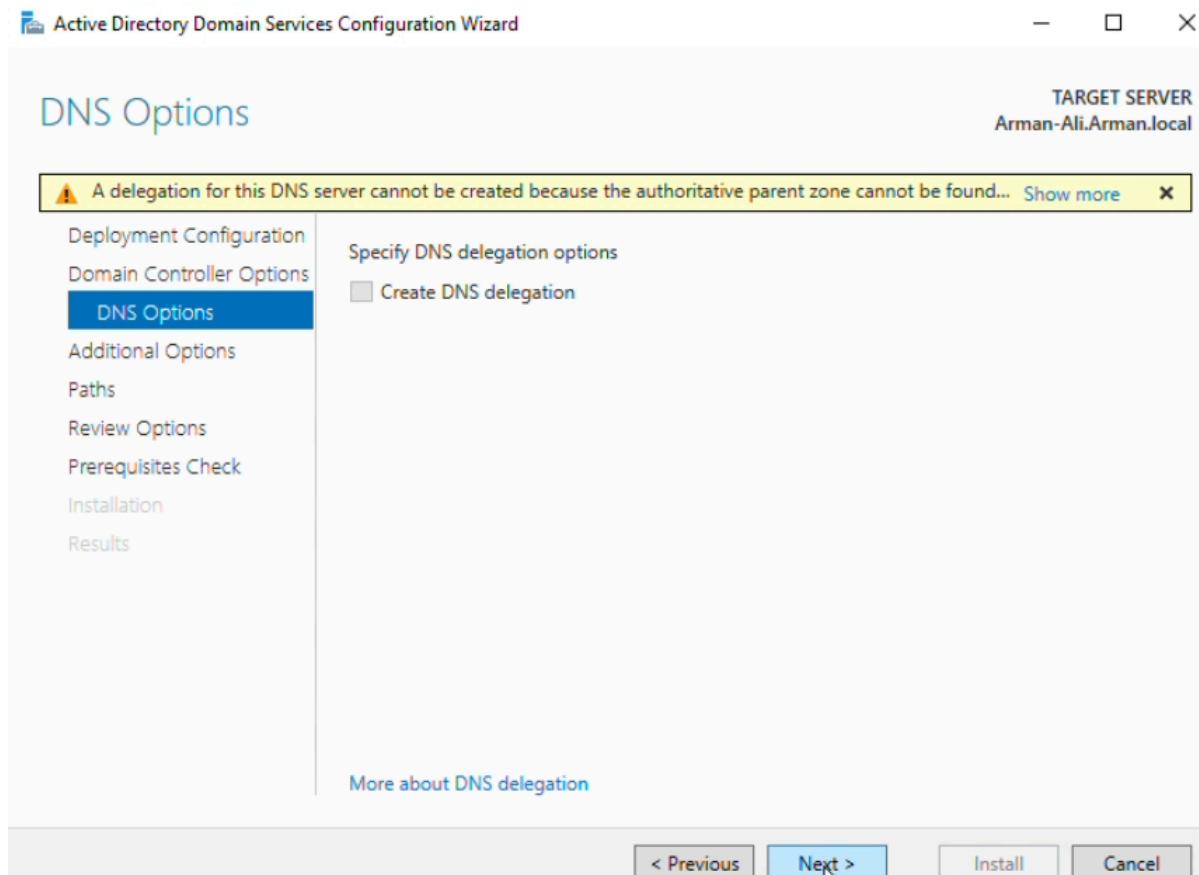
Global Catalog permet als usuaris i les aplicacions trobar objectes a un arbre de domini, proporcionant un o més atributs de l'objecte. Conté una còpia de cada objecte d'AD però només amb un petit nombre d'atributs.

Deshabilitem l'opció de DNS delegations. Aquesta opció permet expandir l'espai de noms

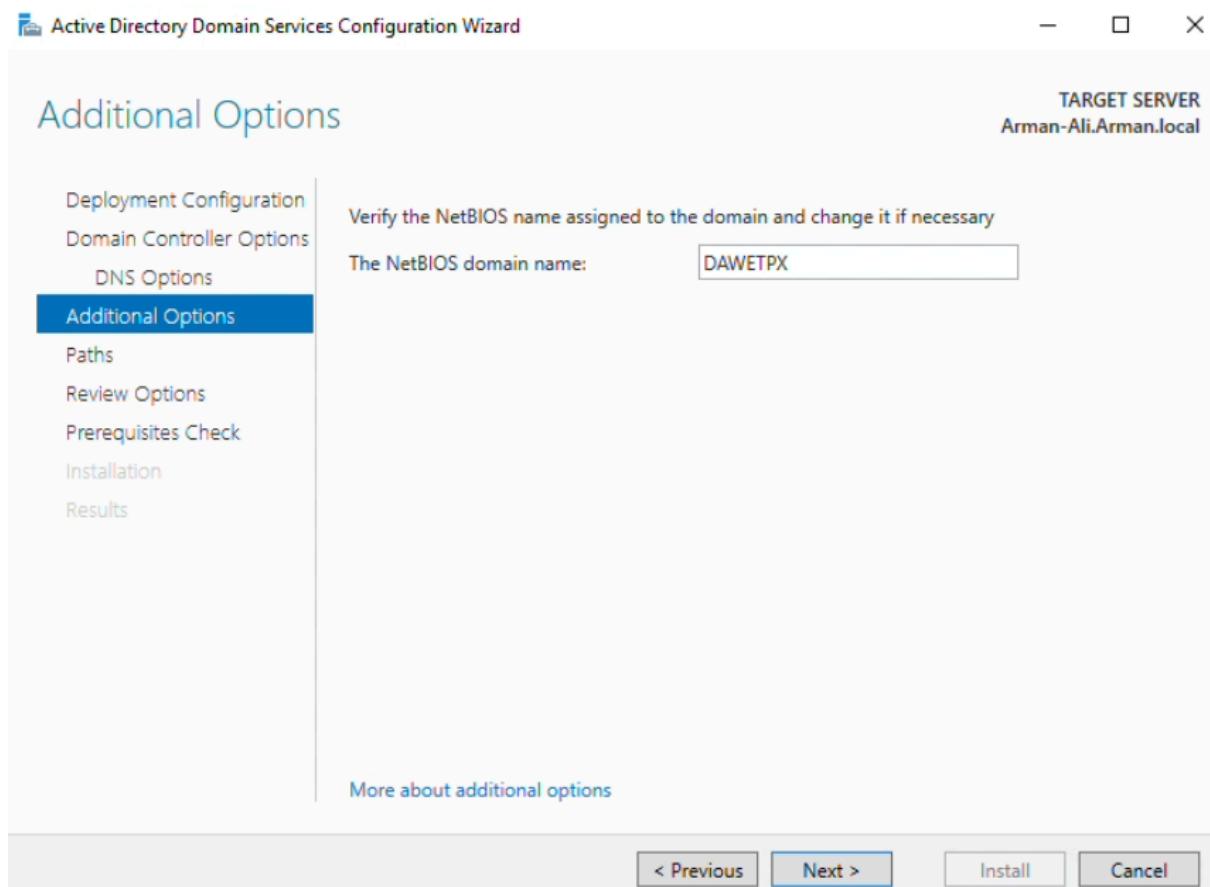
DNS. Per exemple, es poden crear subdominis addicionals com aquest i oest.

Després, aquests

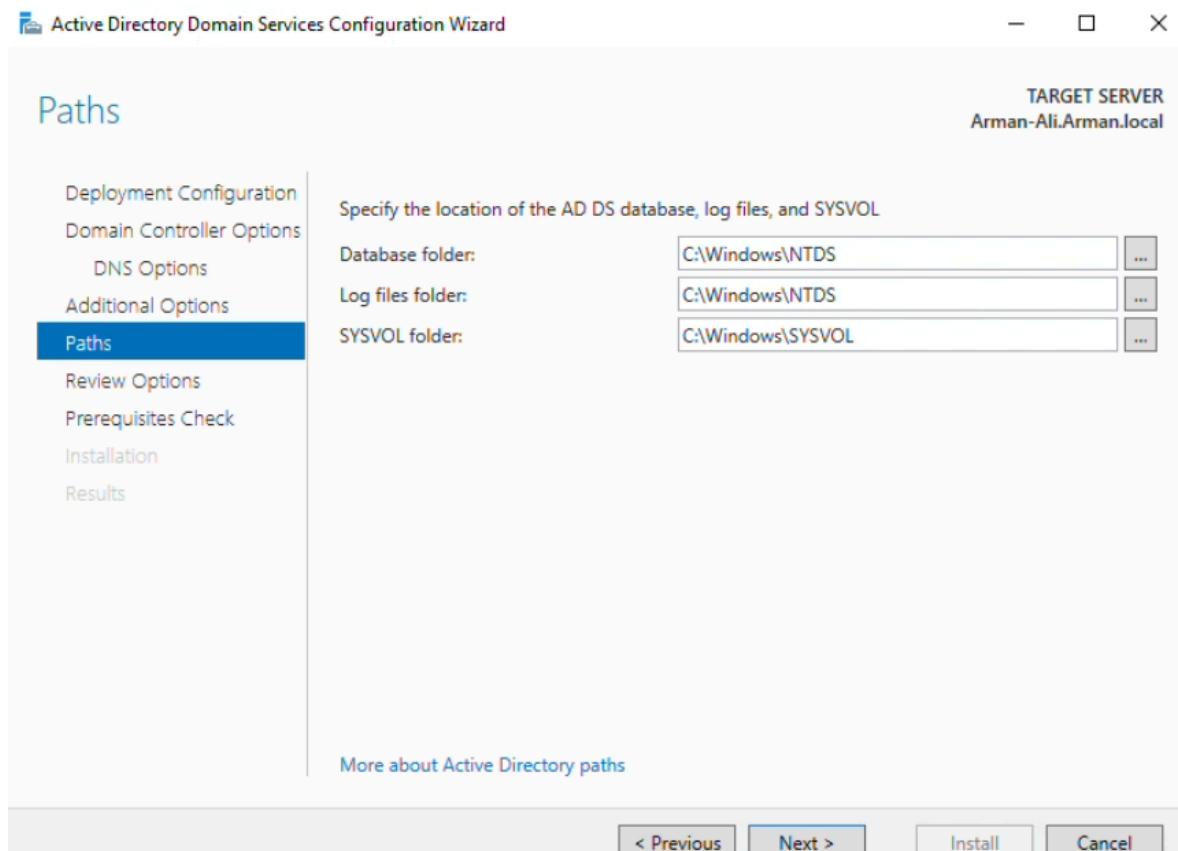
es poden emmagatzemar a diferents servidors DNS. Això permet que aquesta part de l'espai de noms DNS sigui administrada per diferents persones, per exemple, per diferents administradors de TI. Cosa que en el nostre cas no necessitarem.



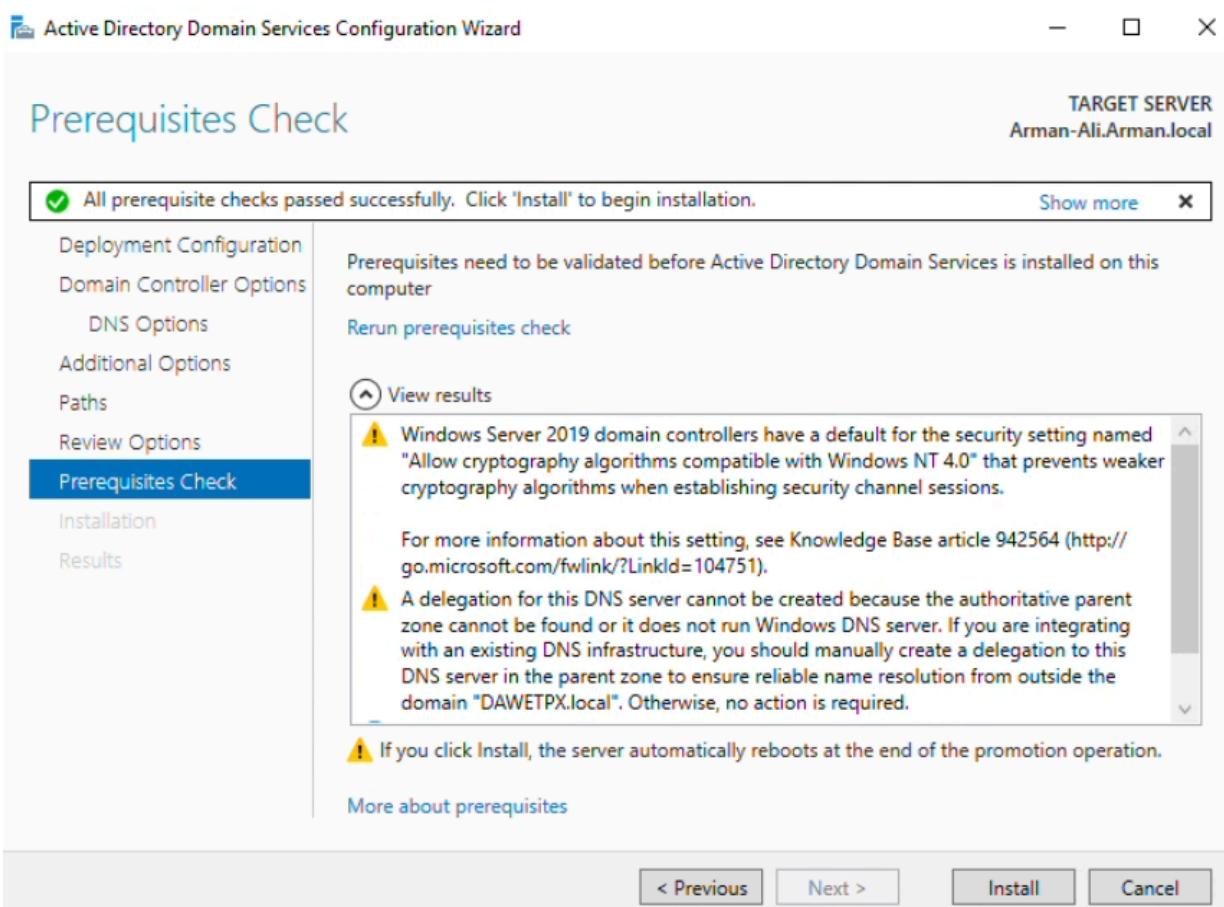
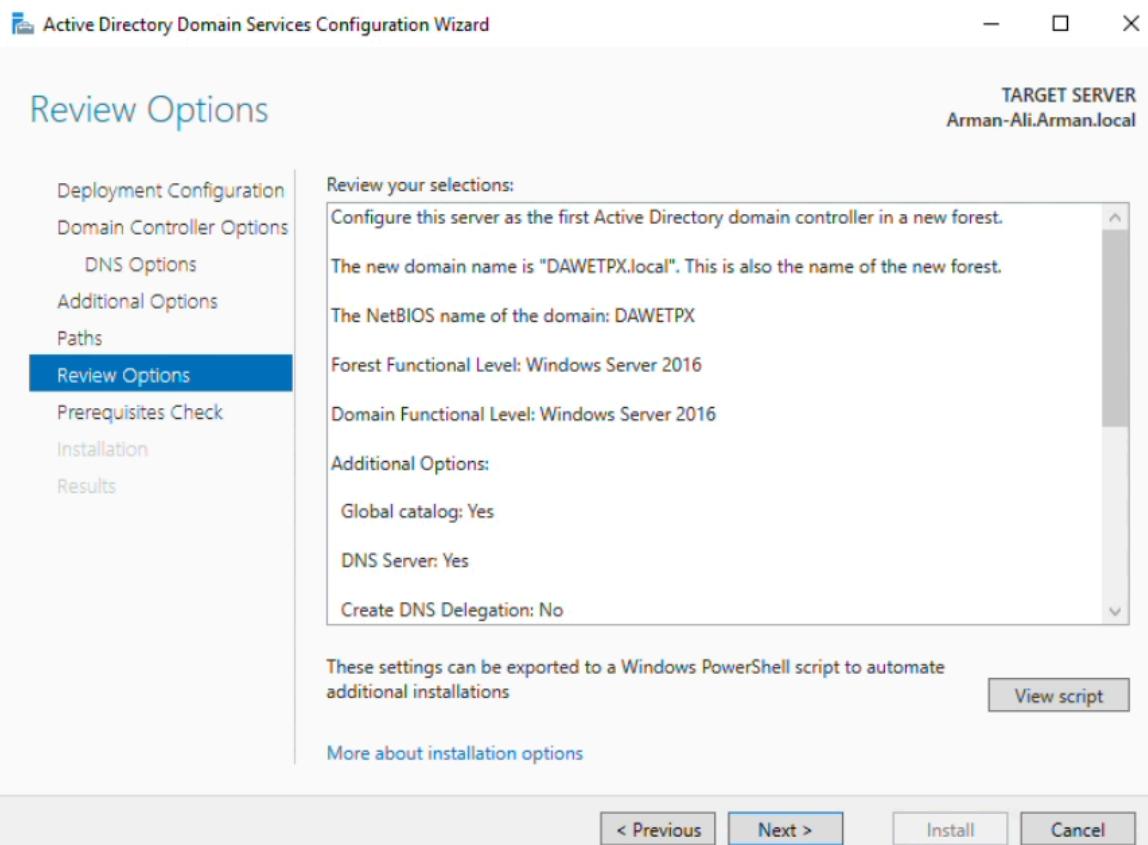
Verifiquem el nom NetBIOS.



Seleccionem la ruta on guardarem els diferents arxius del domini. Nosaltres les deixem per defecte.



Aquesta pantalla ens presenta un resum de l'anterior si està tot correcte donem a "next" i "install".



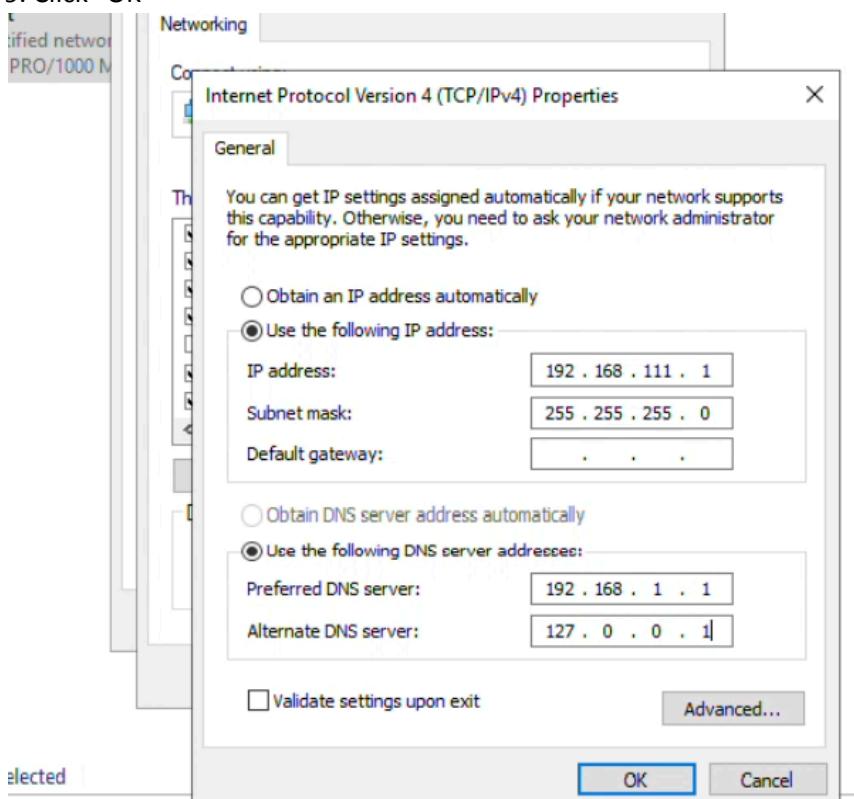
Comprovem que el nostre domini està correctament configurat amb això.

The screenshot shows the 'Properties' window for a local server named 'Arman-Ali'. The 'Computer name' is 'Arman-Ali' and the 'Domain' is 'DAWETPX.local'. Under 'Windows Defender Firewall', 'Public' is set to 'On' and 'Enabled'. Under 'Operating system version', it's listed as 'Microsoft Windows Server 2019 Standard Evaluation'. Under 'Hardware information', it shows 'innotek GmbH VirtualBox' as the manufacturer. Other details include 'Processor' (13th Gen Intel), 'Installed memory (RAM)' (4.95 GB), and 'Total disk space' (49.46 GB). The 'Tasks' bar at the top right has options like 'Download updates' and 'Never'.

ASSIGNAR IPS ESTÀTIQUES:

Un cop creat el domini, cal assignar a Windows Server una IP estàtica perquè els usuaris puguin accedir-hi per això seguim els passos següents:

1. Click "Start Menu" > "Control Panell" > "Network and Sharing Center" o "Network and Internet" > "Network and Sharing Center".
2. Click "Change adapter settings".
3. Click dret a "Wi-Fi" o "Local Area Connection".
4. Click "Properties".
5. Select "Internet Protocol Version 4 (TCP/IPv4)".
6. Click "Properties".
7. Select "Use the following IP address".
8. Introduïm la "IP address", "Subnet mask".
9. Click "OK"



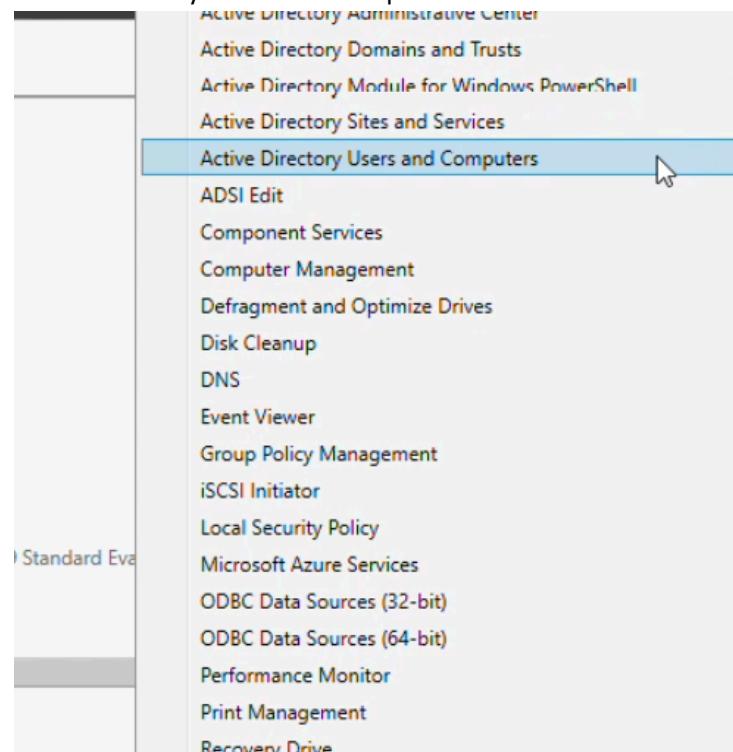
CREACIÓ D'USUARIS I GRUPS EN ACTIVE DIRECTORY PER AL DOMINI:

Abans de poder accedir amb el nostre sistema operatiu Windows a un domini, l'administrador d'aquest domini ens ha de crear un compte. A continuació, es mostren unes captures amb 2 mètodes per fer la tasca:

Active Directory Users and Computers

Comencem a Active Directory a la secció de Server Manager, seleccionem Tools i

Active Directory Users and Computers



Se'ns obrirà aquesta pestanya on tenim el nostre domini, en aquest cas asodomain.com, en el fitxer d' Users podem crear els comptes per als usuaris.

The screenshot shows the 'Active Directory Users and Computers' console. In the left navigation pane, under 'DAMETOM', a context menu is open with 'New' selected. A secondary dropdown menu shows various object types, with 'User' highlighted and selected.

Name	Type	Description
Builtin	builtinDomain	Default container for up...
Delegate Control...	Container	Default container for up...
Find...	Organizational...	Default container for do...
Change Domain...	Container	Default container for sec...
Change Domain Controller...	Container	Default container for ma...
Raise domain functional level...	Container	Default container for up...
Operations Masters...		

Establir el nom de l'usuari i una contrasenya. La contrasenya pots fer que l'usuari la canviï a l'inici de sessió següent, que no la pugui canviar, que mai expira i deshabilitar el compte. En el nostre cas seleccioem que mai expira

New Object - User X

Create in: DAWETPX.local/

First name: usu1 Initials:

Last name:

Full name: usu1

User logon name: usu1@DAWETPX.local

User logon name (pre-Windows 2000): DAWETPX\usu1

[< Back](#) Next > [Cancel](#)

New Object - User X

Create in: DAWETPX.local/

Password:

Confirm password:

User must change password at next logon

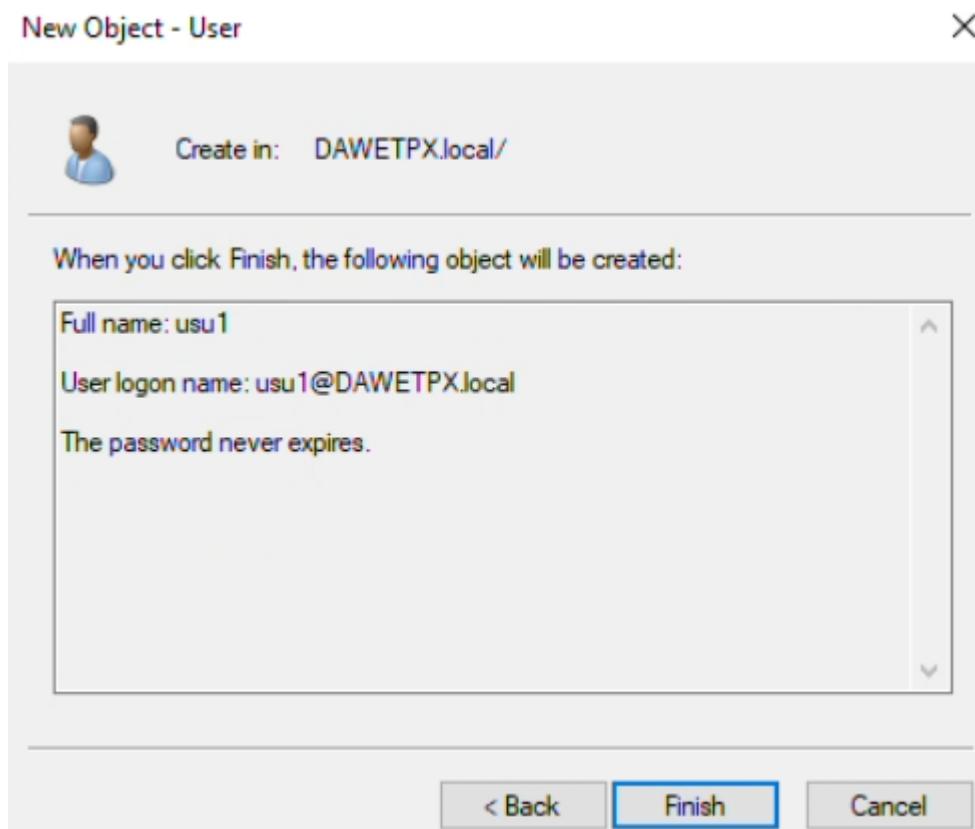
User cannot change password

Password never expires

Account is disabled

[< Back](#) Next > [Cancel](#)

Pantalla resum amb la configuració final.



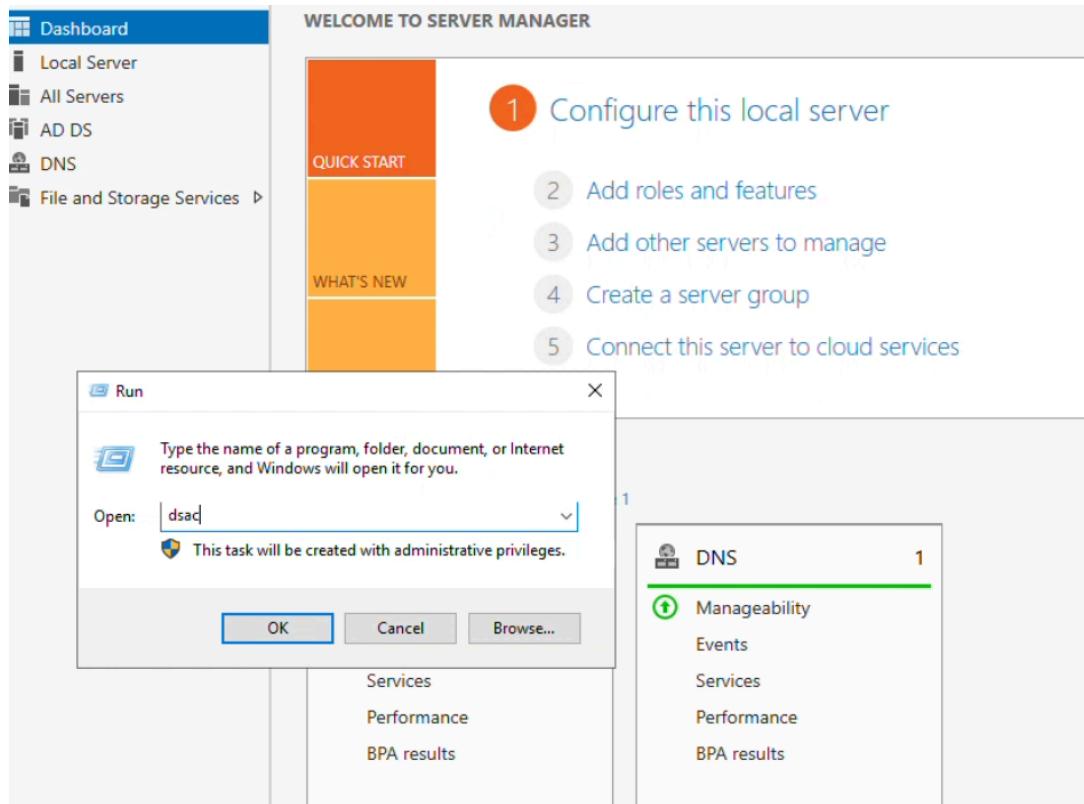
Podem veure que l'usuari s'ha creat correctament.

The screenshot shows the 'Active Directory Users and Computers' console. The left pane displays the navigation tree under 'DAWETPX.local' with the 'Users' folder selected. The right pane is a table listing users and groups, with the newly created user 'usu1' highlighted at the bottom.

Name	Type	Description
Cloneable D...	Security Group...	Members of this group t...
Denied ROD...	Security Group...	Members in this group c...
DnsAdmins	Security Group...	DNS Administrators Gro...
DnsUpdateP...	Security Group...	DNS clients who are per...
Domain Ad...	Security Group...	Designated administrato...
Domain Co...	Security Group...	All workstations and ser...
Domain Con...	Security Group...	All domain controllers i...
Domain Gue...	Security Group...	All domain guests
Domain Users	Security Group...	All domain users
Enterprise A...	Security Group...	Designated administrato...
Enterprise K...	Security Group...	Members of this group ...
Enterprise R...	Security Group...	Members of this group ...
Group Polic...	Security Group...	Members in this group c...
Guest	User	Built-in account for gue...
Key Admins	Security Group...	Members of this group ...
Protected Us...	Security Group...	Members of this group ...
RAS and IAS ...	Security Group...	Servers in this group can...
Read-only D...	Security Group...	Members of this group ...
Schema Ad...	Security Group...	Designated administrato...
usu1	User	

DSAC(Centre administratiu de directori actiu)

Obrim l'eina dsac(Centre administratiu de directori actiu)



The screenshot shows the 'Active Directory Administrative Center' interface. The left sidebar includes 'Active Directory...', 'Overview', 'DAWETPX (local)' (which is selected), 'Dynamic Access Control', 'Authentication', and 'Global Search'. The main pane displays the 'DAWETPX (local) (13)' container with a table of objects. The table has columns for 'Name', 'Type', and 'Description'. The 'Builtin' object is selected, showing its details: Object class: builtinDomain, Description: (empty), Modified: 13/02/2025 9:03. The right side features a 'Tasks' pane with options like 'New', 'Delete', 'Search under this node', 'Properties', 'DAWETPX (local)', 'Change domain controller', 'Raise the forest functional level...', 'Raise the domain functional level...', 'Enable Recycle Bin ...', and 'New', 'Search under this node', 'Properties' again. The top navigation bar includes back, forward, and search icons, along with 'Manage' and 'Help' links.

Per crear usuari seleccionem new -> user

The screenshot shows the Active Directory Administrative Center interface for the domain DAWETPX (local). The left navigation pane shows 'DAWETPX (local)' selected under 'Active Directory...'. The main pane displays a list of containers, with 'Users' highlighted. The 'Tasks' pane on the right shows options like 'New', 'Delete', and 'Properties' for 'Users'.

Seleccionem el domini

Especificem les dades que considerem oportunes de l'usuari.
(Posem que mai expiri perquè estem en una manera de demostració, a més s'hauria de fer quel'usuari la canviés la primera vegada que es llogués)

The screenshot shows the 'Create User' dialog box for a user named 'usu2'. The 'Account' tab is selected. The 'Organization' tab is also visible at the bottom. The 'Account' tab fields include:

- First name: [empty]
- Middle initials: [empty]
- Last name: [empty]
- Full name: *usu2
- User UPN logon: usu2 @ DAWETPX.local
- User SamAccountName: DAWETPX *usu2
- Password: [redacted]
- Confirm password: [redacted]
- Create in: CN=Users,DC=DAWETPX,DC=local
- Checkboxes: Protect from accidental deletion, Log on hours..., Log on to...

The 'Organization' tab fields include:

- Display name: [empty]
- Office: [empty]
- E-mail: [empty]
- Web page: [empty]
- Job title: [empty]
- Department: [empty]
- Company: [empty]
- Manager: [empty]
- Other web pages: [empty]
- Direct reports: [empty]

On the right side of the dialog, there are sections for Account expires (radio buttons for Never or End of), Password options (radio buttons for User must change password at next log on or Other password options, with checkboxes for Microsoft Passport or smart card required and Password never expires), and Encryption options.

Aquí podeu veure l'usuari

The screenshot shows the Windows Active Directory Users and Computers snap-in. The left pane displays a navigation tree with 'Active Directory...', 'Overview', 'DAWETPX (local)' (which is selected), 'Users', 'Dynamic Access Control', 'Authentication', and 'Global Search'. The right pane shows a table titled 'Users (25)' with columns: Name, Type, and Description. The table lists several groups and users, including 'Key Admins' (Group), 'krbtgt' (User), 'Protected Users' (Group), 'RAS and IAS Servers' (Group), 'Read-only Domain Control...' (Group), 'Schema Admins' (Group), and two user accounts named 'usu1' and 'usu2'. Below the table, there is a section for the 'Administrator' account with details like User logon: Administrator, Expiration: <Never>, E-mail:, Last log on: 13/02/2025 9:11, Modified: 13/02/2025 9:19, and Description: Built-in account for administering the computer/domain.

Name	Type	Description
Key Admins	Group	Members of this group ca...
krbtgt	User	Key Distribution Center Se...
Protected Users	Group	Members of this group ar...
RAS and IAS Servers	Group	Servers in this group can a...
Read-only Domain Control...	Group	Members of this group ar...
Schema Admins	Group	Designated administrators...
usu1	User	
usu2	User	

Per crear grup seleccionem new i després grup

The screenshot shows the Active Directory Administrative Center. The left pane displays a navigation tree with 'Category...', 'Control', and 'DAWETPX (local) (13)'. The right pane shows a table with columns: Name, Type, Description, and InetOrgPerson. The table lists several containers and objects, including 'Keys' (Container), 'LostAndFound' (Container), 'Managed Service Accounts' (Container), 'NTDS Quotas' (msDS-Quo...), 'Program Data' (Container), 'System' (Container), 'TPM Devices' (msTPM-Inf...), and 'Users' (Container). A context menu is open over the 'Group' entry in the 'InetOrgPerson' column for the 'Managed Service Accounts' object. The menu options include 'New', 'Delete', 'Search under this node', 'Properties', 'DAWETPX (local)', 'Change domain controller', 'Raise the forest functional level...', 'Raise the domain functional level...', 'Enable Recycle Bin ...', 'New', 'Search under this node', and 'Properties'. The 'New' option is highlighted.

Us indiquem les dades de l'usuari, us indiquem que l'abast del grup sigui global perquè puguin accedir a tota la zona del domini.

Create Group: greengroup

Group

Managed By

Member Of

Members

Password Settings

Group

Group name: **greengroup**

Group (SamAcc...): **greengroup**

Group type: Security Distribution

Group scope: Domain local Global Universal

Protect from accidental deletion

E-mail:

Create in: CN=Users,DC=DAWETPX,DC=local

Change...

Description:

Notes:

Managed By

Managed by:

Manager can update membership list

Phone numbers:

Main:

Mobile:

Fax:

Address:

Street

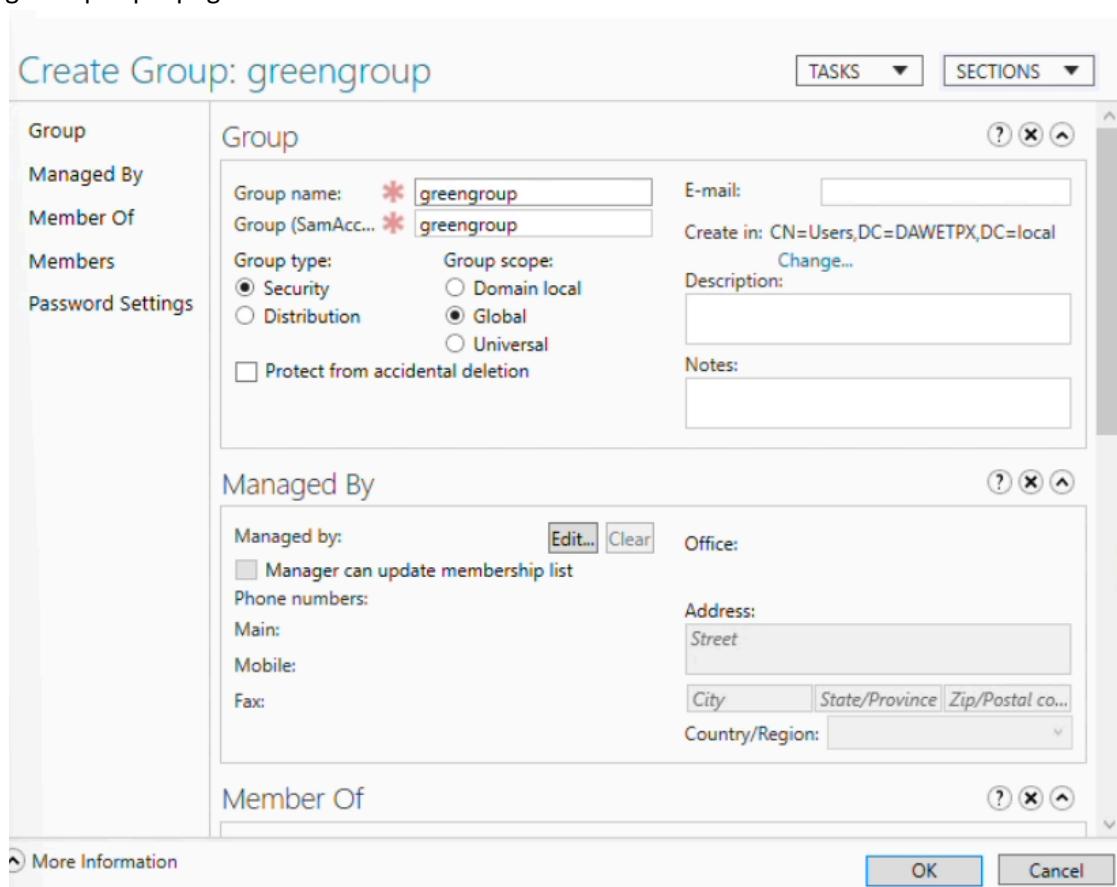
City State/Province Zip/Postal co...

Country/Region:

Member Of

OK Cancel

More Information



Afegim l'usuari creat prèviament al grup

greengroup

Group

Managed By

Member Of

Members

Password Settings

Extensions

Member Of

Filter

Name Active Director...

Add... Remove

Members

Filter

Name Active Director...

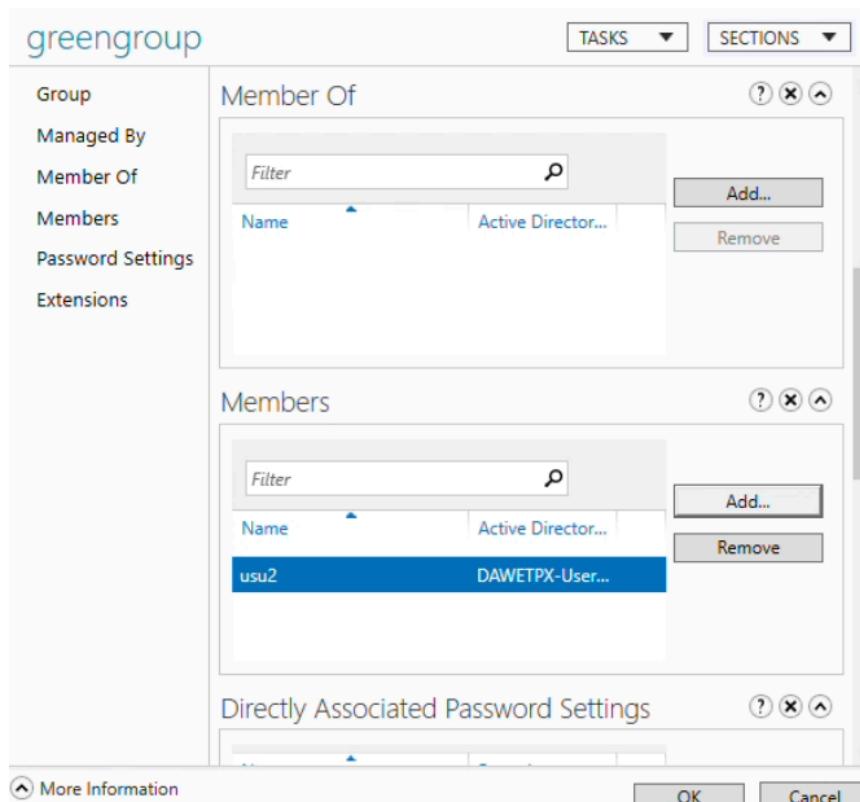
Add... Remove

usu2 DAWETPX-User...

Directly Associated Password Settings

OK Cancel

More Information



◀ ▶ DAWETPX (local) ▶ Users

Manage Help

Active Directory... Overview DAWETPX (local)

Users Dynamic Access Control Authentication Global Search

Users (26)

Filter

Name	Type	Description
Domain Computers	Group	All workstations and serve...
Domain Controllers	Group	All domain controllers in t...
Domain Guests	Group	All domain guests
Domain Users	Group	All domain users
Enterprise Admins	Group	Designated administrators...
Enterprise Key Admins	Group	Members of this group ca...
Enterprise Read-only Dom...	Group	Members of this group ar...
greengroup	Group	
Group Policy Creator Own...	Group	Members in this group ca...

Tasks

greengroup

Add to another group...

Delete Move... Properties

Users

New Delete

Search under this node Properties

E-mail: Type: Security
Managed by: Scope: Global
Modified: 13/02/2025 9:35
Description: