

Drift

English Edition

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Enable Hyper-V

How to enable Hyper-V on your pc

Step 1

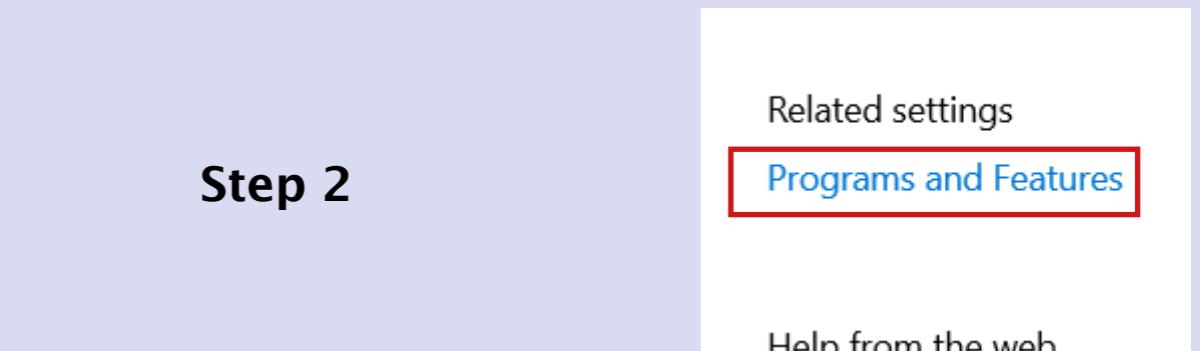
- Click on the windows button and search 'Apps and Features'

Step 2

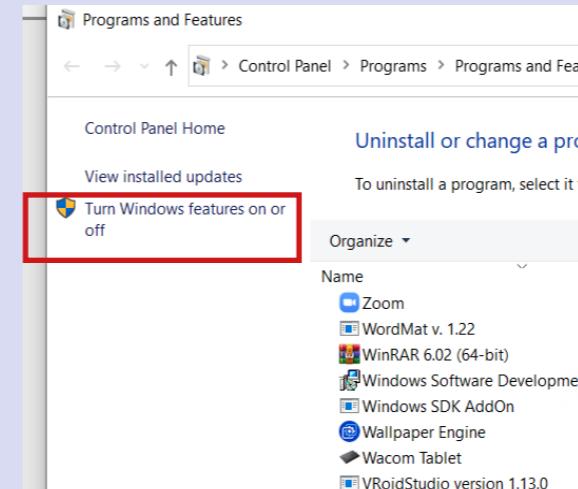
- Select 'Programs and Features' on the right under related settings.

Step 3

- Select Turn Windows Features on or off.



Step 2

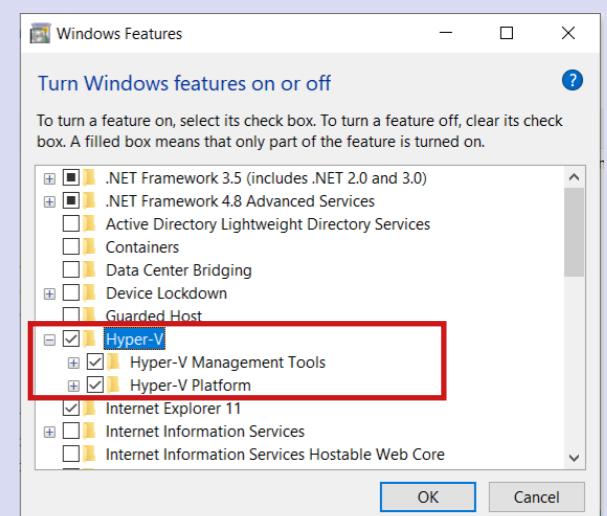


Step 3

Step 4

- Check Hyper-V and click OK

Step 4



Home

Find Windows Server ISO

To find the Windows server files:

Step 1

- Go to <https://portal.azure.com/#home>

Step 2

- Search for Education at the top and then on the left click on Software

Step 3

- Search for Windows server 2019 and choose Windows Server 2019 Essentials

Step 4

- Click download at the bottom

Home

Step 2

The screenshot shows the Microsoft Azure portal interface. At the top, there's a navigation bar with 'Home', 'Education', 'Services (2)', 'Marketplace (28)', 'Documentation (99+)', 'Azure Active Directory (7)', and 'Resources (0)'. Below the navigation bar, there's a sidebar with 'Overview', 'Learning resources', 'Roles', 'Software' (which is highlighted with a red box), 'Learning', 'Templates', and 'Need help?'. To the right of the sidebar, there's a main content area titled 'Education' with sections for 'Services', 'Marketplace', and 'Documentation'. A red box highlights the 'Education' link in the top navigation bar.

Step 3

The screenshot shows the Microsoft Azure Marketplace search results for 'windows server 2019'. The search bar at the top contains 'windows server 2019'. Below it, there are three filter buttons: 'Product category : All', 'Operating System : A', and 'Operating System : Windows'. The results table has columns for 'Name', 'Product category', and 'Operating System'. There are five items listed: 'Windows Server 2019 Datacenter (updated Sept 2019)', 'Windows Server 2019 Essentials (updated Sept 2019)' (which is highlighted with a red box), 'Windows Server 2019 Features on Demand (updated Sept 2019)', 'Windows Server 2019 Language Pack (updated Sept 2019)', and 'Windows Server 2019 Standard (updated Sept 2019)'. At the bottom of the page, there's a link 'Help improve this page'.

Step 4

The screenshot shows the product page for 'Windows Server 2019 Essentials (updated Sept 2019)'. The page includes a large Windows logo, a brief description, and details about the operating system (Windows, English, 64 bit). At the bottom, there's a 'View Key' button and a 'Download' button (which is highlighted with a red box). There's also a link 'Help improve this page'.

Home

Virtual Switch

!! This part is Norwegian on the images!!

To set up a new virtual switch:

Step 1

- Go to Actions → Virtual Switch Manager

Step 2

- Click on New virtual network switch

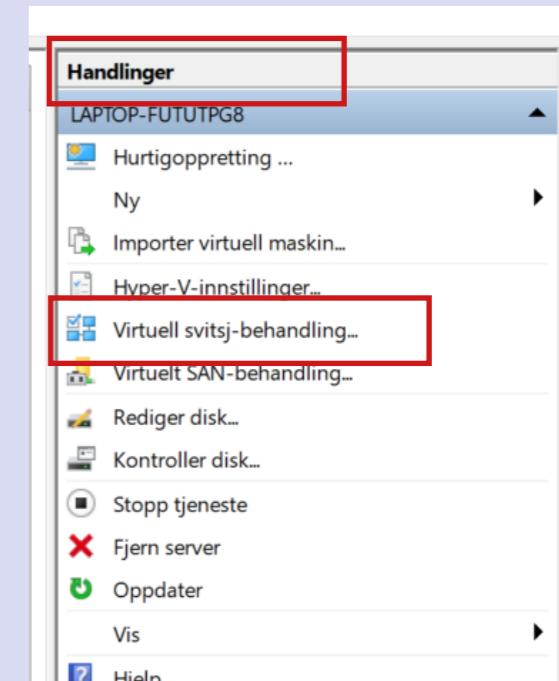
Step 3

In this case we will be making an external switch

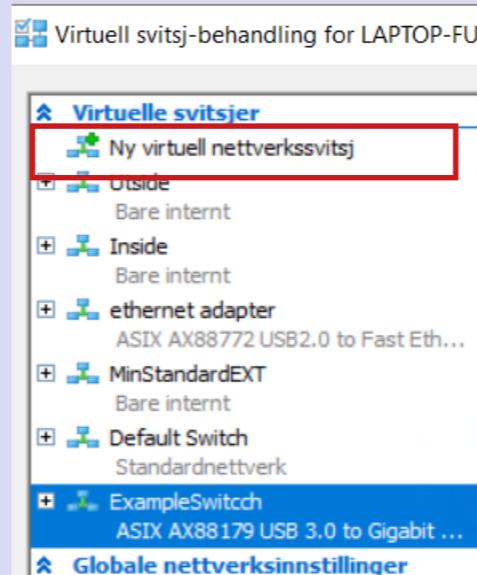
- Choose a name, and set the External network to your ethernet

Home

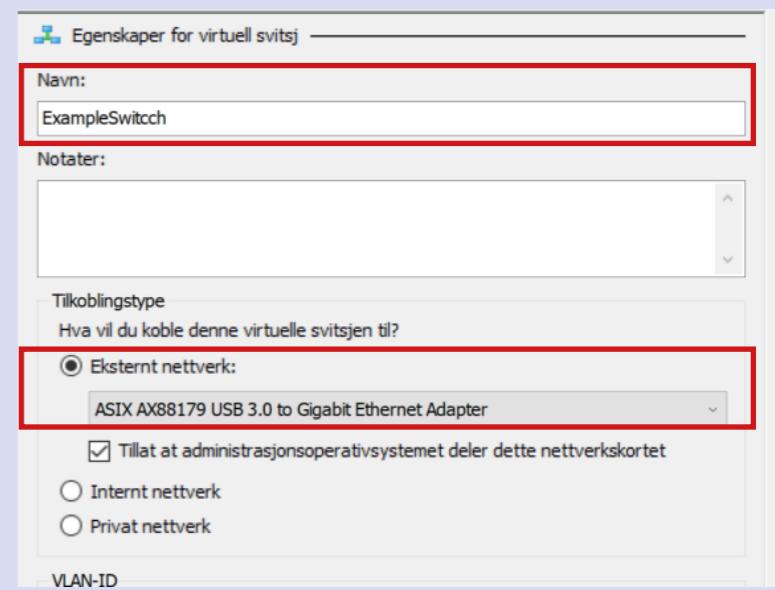
Step 1



Step 2



Step 3



Home

Create New VM

How to create a new virtual machine on Hyper-v

Step 1

- Click on 'New' and select 'Virtual machine...'

Step 2

- In the popup window: click next once, choose a name and 'Next'

Step 3

- Select 'Generation 2' and click 'Next'

Step 4

- Type the amount of ram for the vm, we set it to 4096 MB, and then click 'Next'

Step 5

- Choose a virtual switch for the connection, and 'Next'

Step 6

- You can either leave this page as is or configure to your liking, we changed the storage to 50gb

Step 7

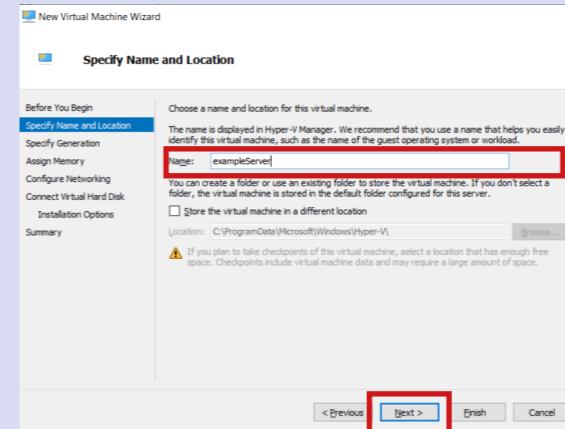
- Choose the .iso file you have previously downloaded, Click 'Next'

Step 8:

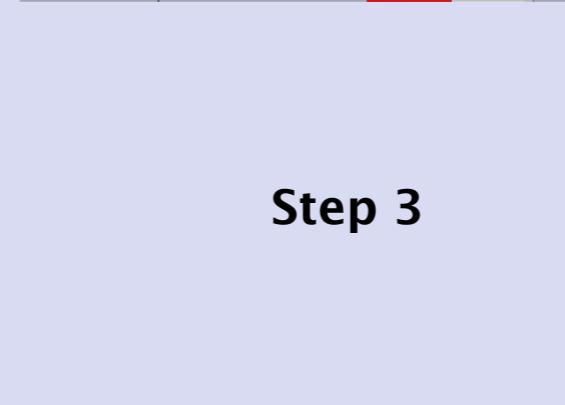
- Make sure that all the info is correct and click 'Finish'

Home

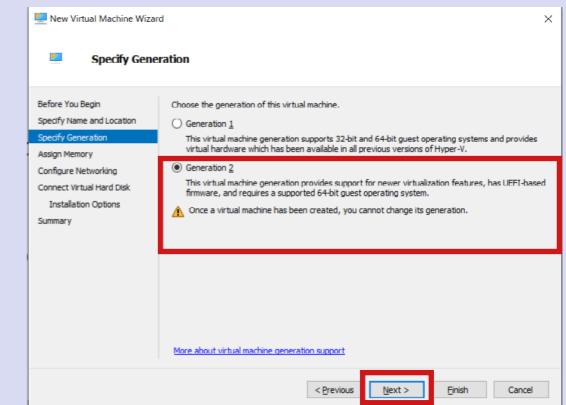
Step 1



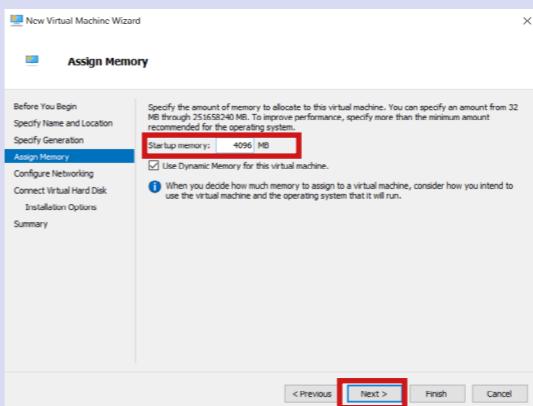
Step 2



Step 3



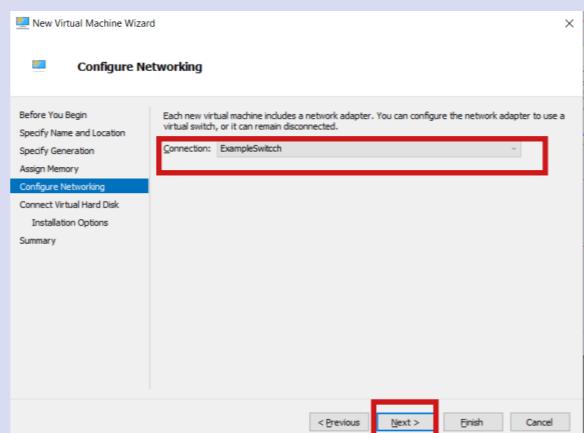
Step 4



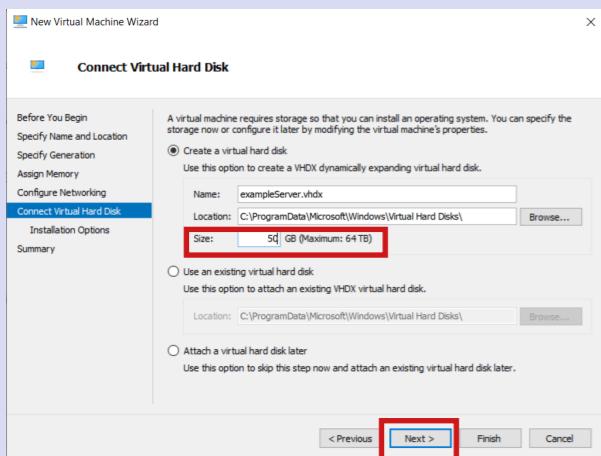
Home

Home

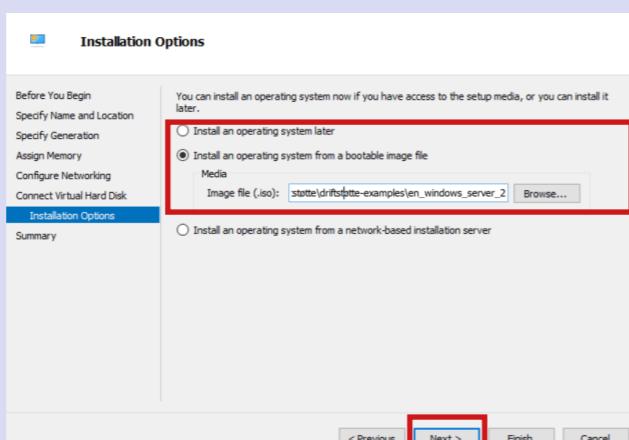
Step 5



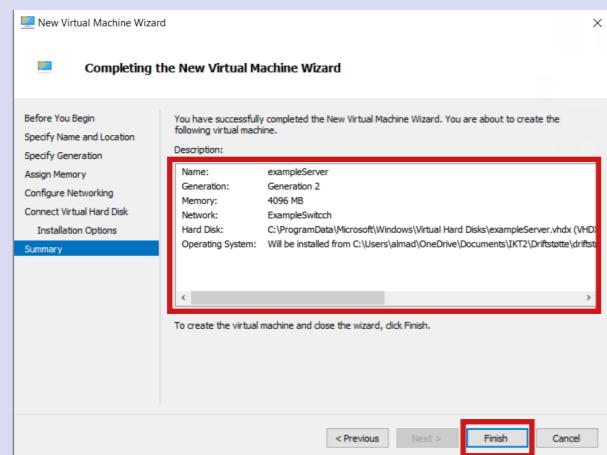
Step 6



Step 7



Step 8



Home

Windows Server Setup

What to do when booting up your Windows server on Hyper-V for the first time

Step 1

- Right click on you VM you have created, select 'Start' and double click on the VM to open the window

Step 2

- At the top you want to press the three little squares, once pressed press any key fast until you see 'Hyper-V'

Step 3

- Change keyboard language depnding on what language your keyborad is in, then click 'Next' and 'Install Now'

Step 4

- Select 'I don't have a product key' at the bottom right

Step 5

- Accept the terms and conditions and click 'Next'

Step 6

- Choose the installation called 'Custom: Install windows only '

Step 7

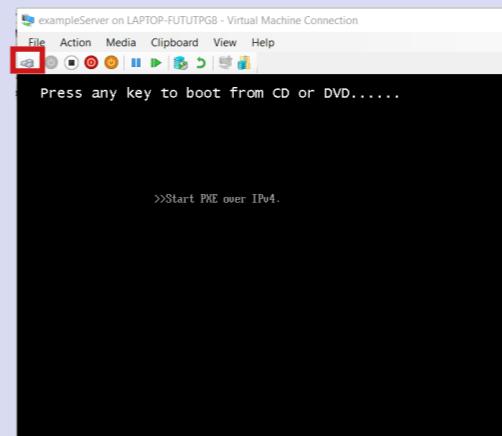
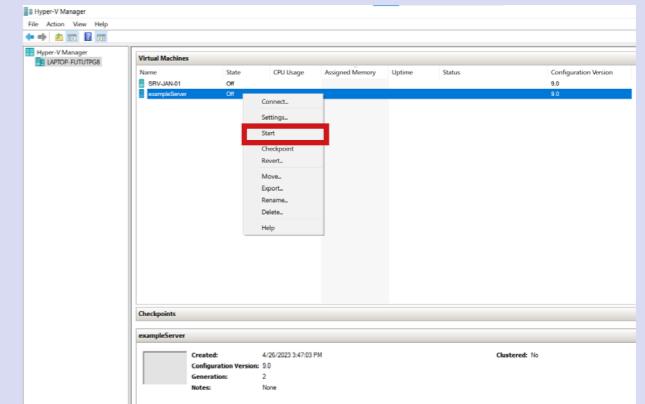
- Choose the drive you created ealier (just click 'Next')

Home

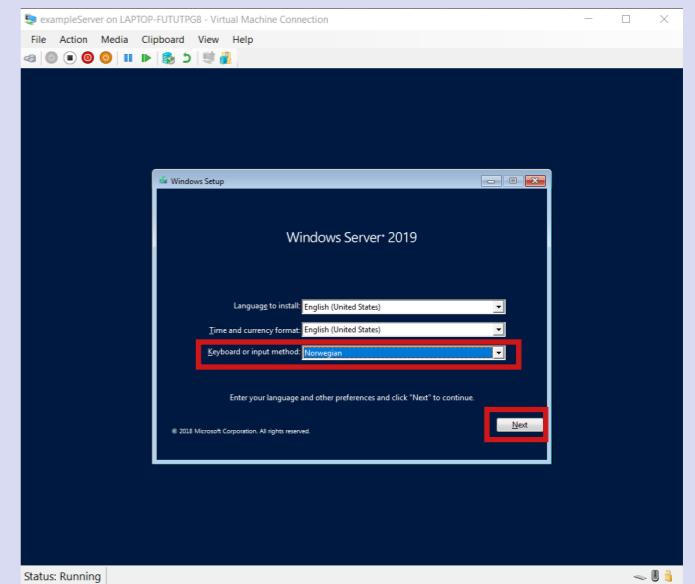
Step 8

- Choose a password for the admin account

Step 1



Step 2

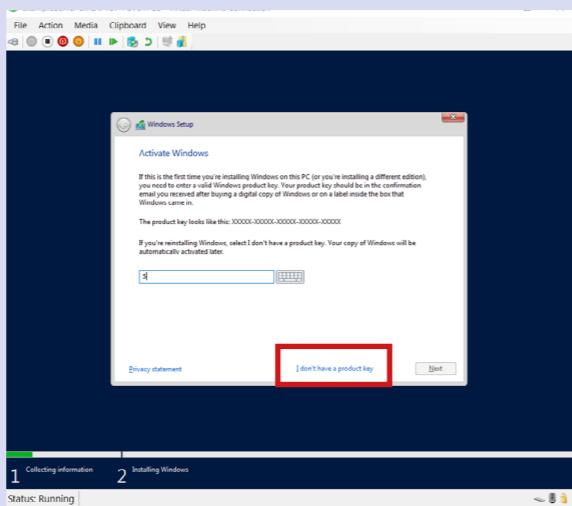


Step 3

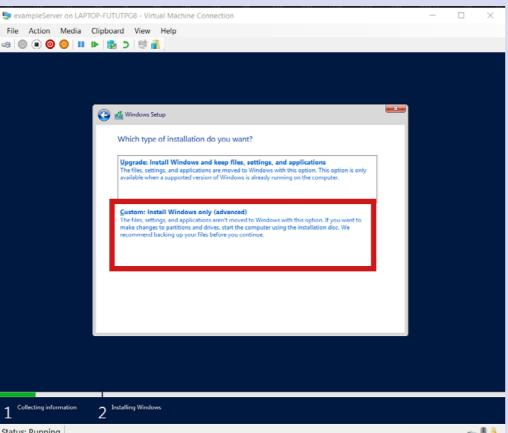
Home

Home

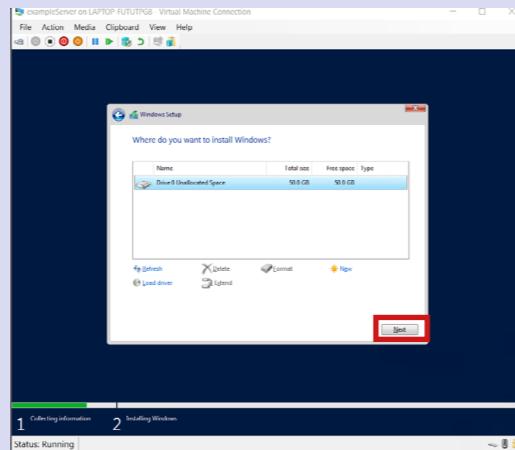
Step 4



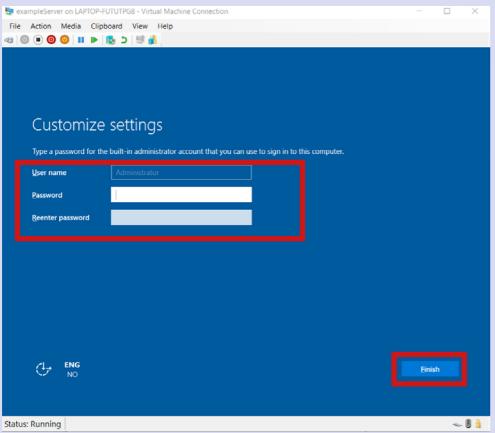
Step 6



Step 7



Step 8



Static IP-address

Setting a static Ip address for the server

Step 1

- Open 'server manager' and click 'Local server'

Step 2

- Select IPv4 address assigned by DHCP

Step 3

- Right click on your Ethernet and select 'Properties'

Step 4

- Select 'Internet Protocol Version 4(TCP/IPv4)' and then press 'Properties'

Step 5

- Check 'Use the following IP address' and input any desired IP example:

IP-address: 192.168.1.2

Subnet mask: 255.255.255.0

Deafault gateway: 192.168.1.1

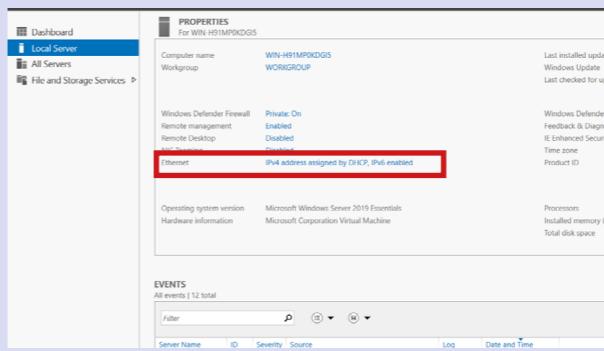
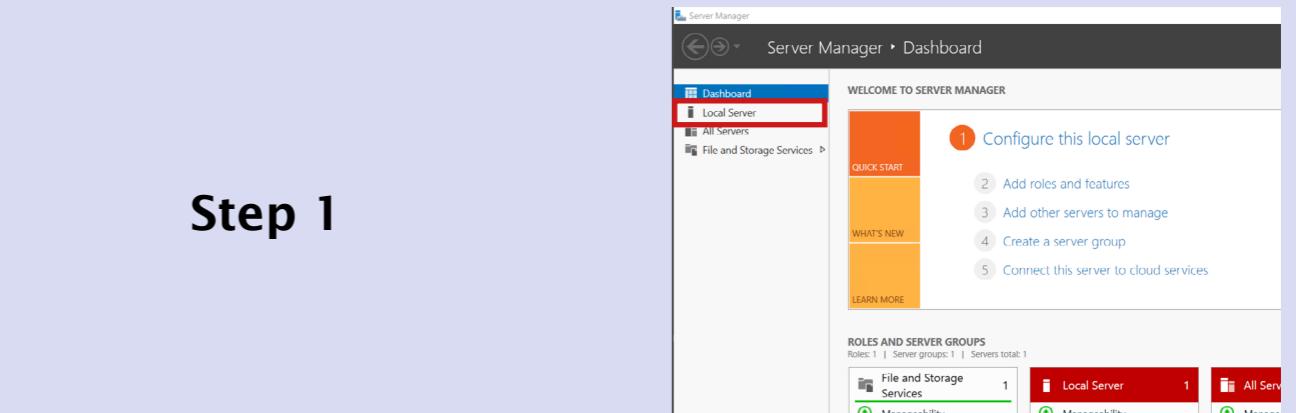
Prefffered DNS server: 1.1.1.1

Alternate DNS server: 8.8.8.8

Home

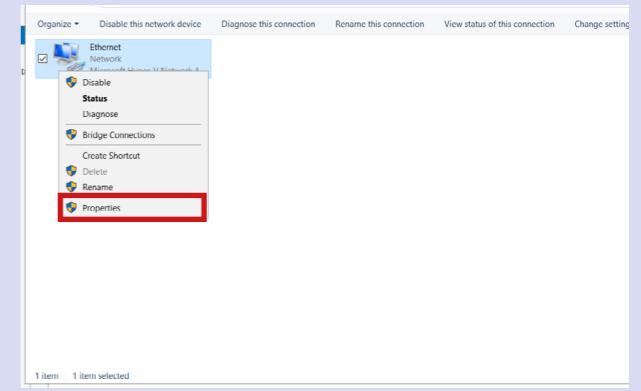
Home

Step 1

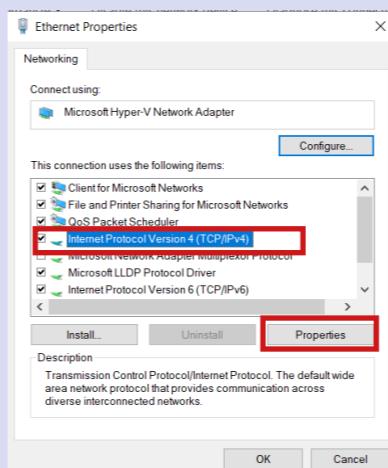


Step 2

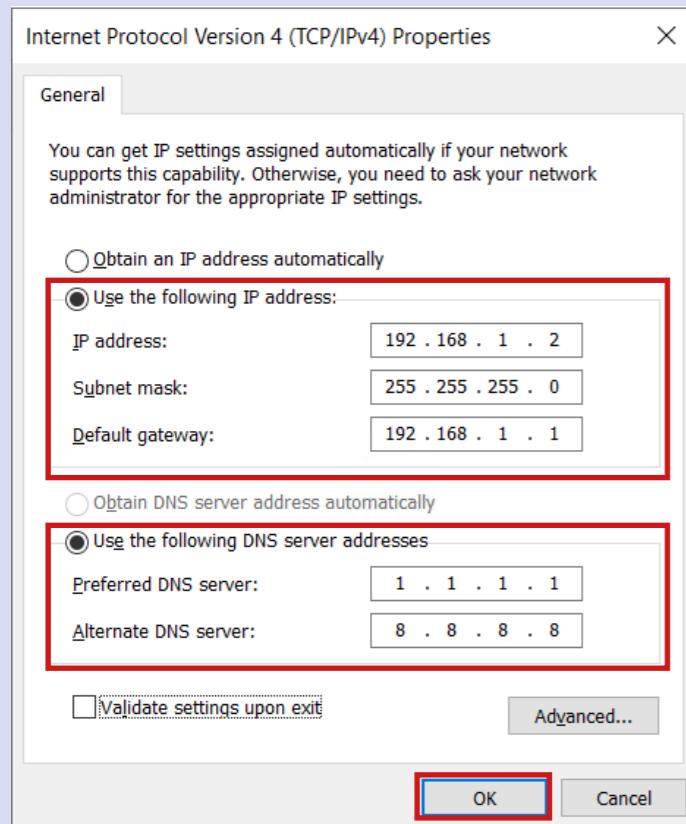
Step 3



Step 4



Home



Step 5

Home

Home

Change Server Name

Change the name of the server

Step 1

- Open 'Server manager' and click on 'Local Server'

Step 2

- Click on the name next to 'Computer Name'

Step 3

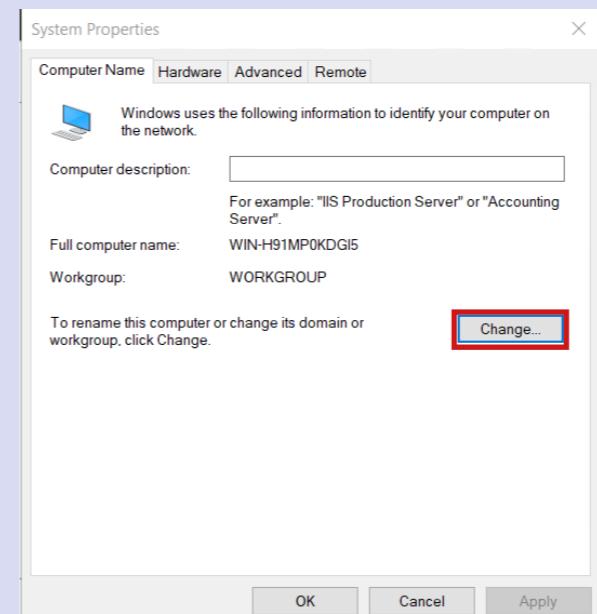
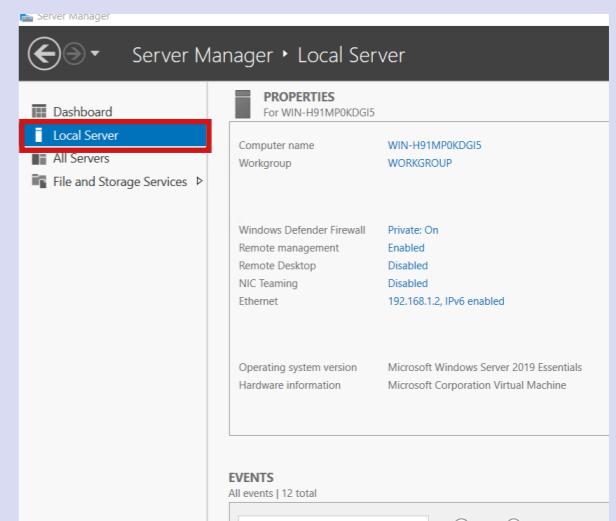
- Press the button named 'Change...'

Step 4

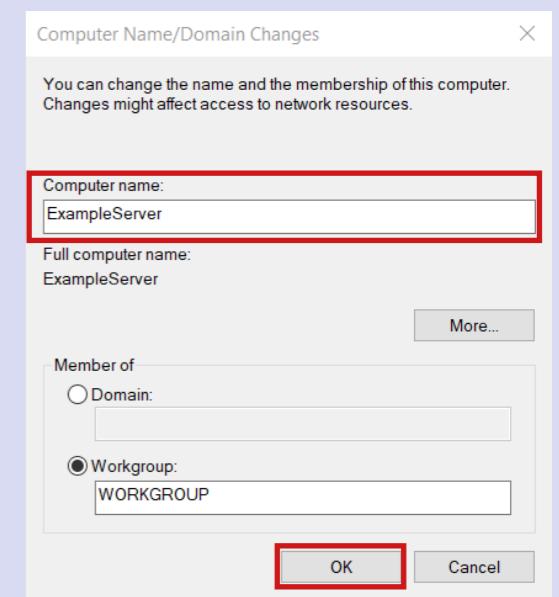
- Write the servers name in 'Computer name' and then the server will have to restart

Home

Step 1 & 2



Step 3



Step 4

Active Directory

In this section you'll learn the basics of Active Directory

this will include:

- Installation
- Home folder + Shares
- Organizational Unit

Home

Install AD

How to install AD to your server

Step 1

- Inside 'Server manager' select 'Manage' and press 'Add roles and Features'

Step 2

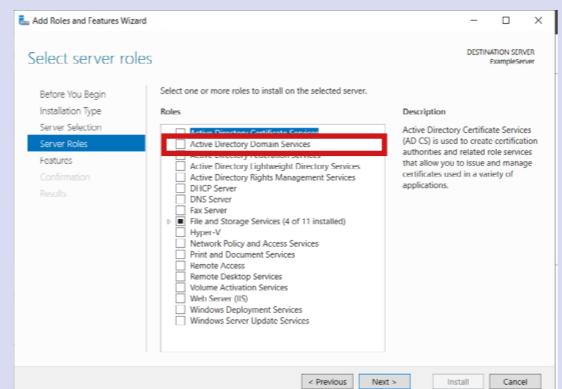
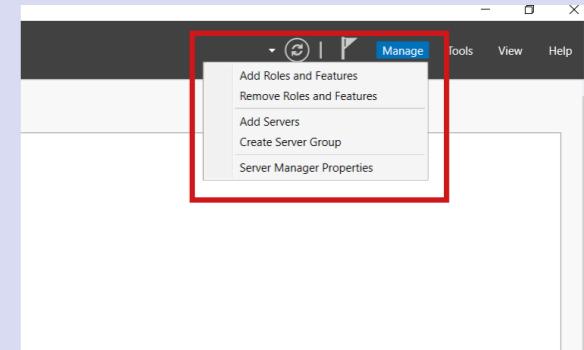
- Press 'Next' until you see the 'Server Roles' tab, select 'Active Directory Domain Services' and in the popup press 'Add Feature'

Step 3

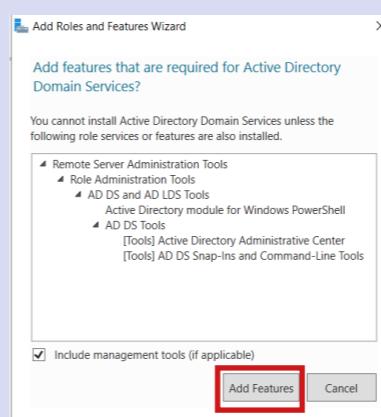
- Press 'Next' until you see 'Confirmation' and then press 'Install', you can now close the panel

Home

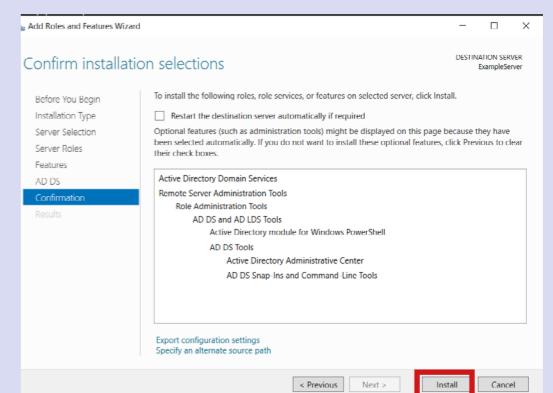
Step 1



Step 2



Step 3



Home

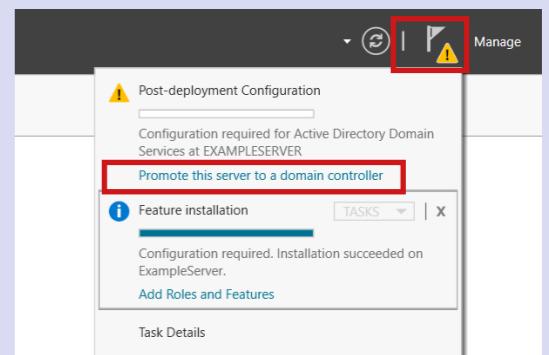
Post deployment / new Forest

When AD has been installed it will want you to make this server into the main domain controller

Step 1

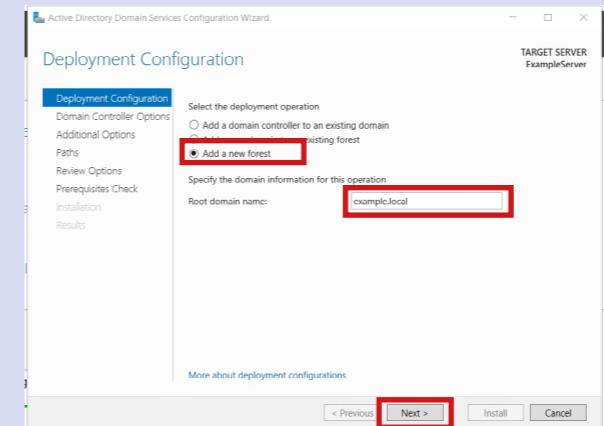
- Press on the flag icon and press 'Promote this server to a domain controller'

Step 1



Step 2

- Select 'Add a new forest' and write any domain name, i recommend using .local for this tutorial and press 'Next'

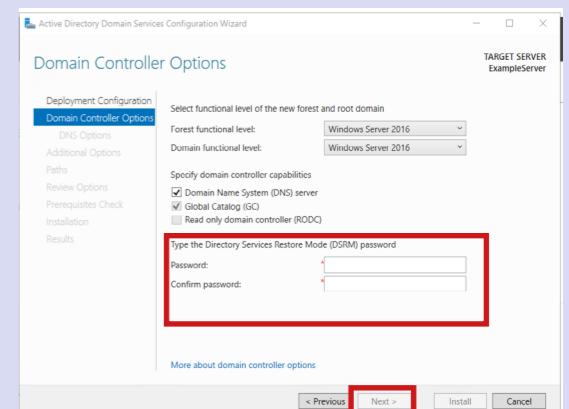


Step 2

Step 3

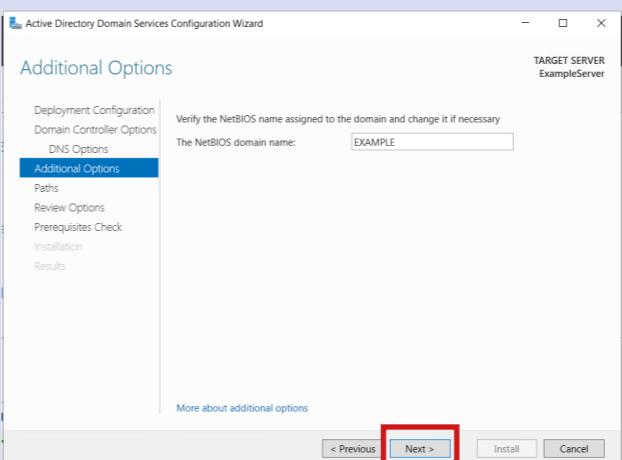
- Write a memorable password for DSRM and press 'Next'

Step 3



Step 4

- Press 'Next' until you see 'Additional Options', wait until it has found the netBios name and press 'Next'

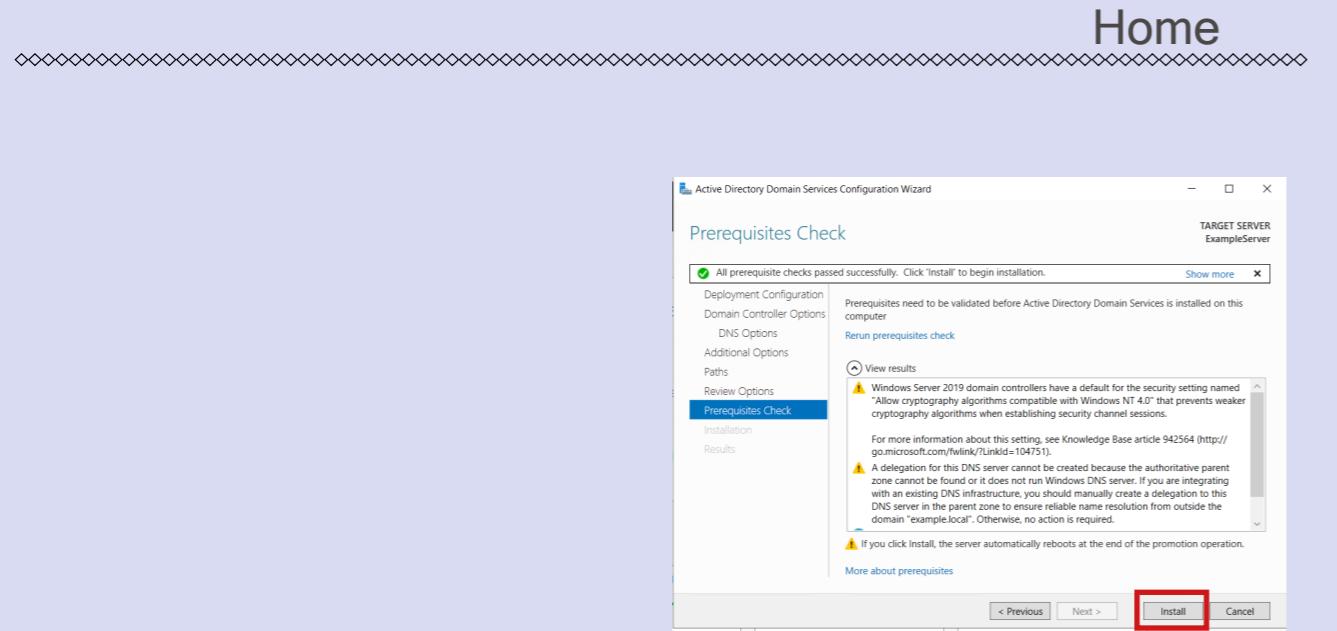


Step 4

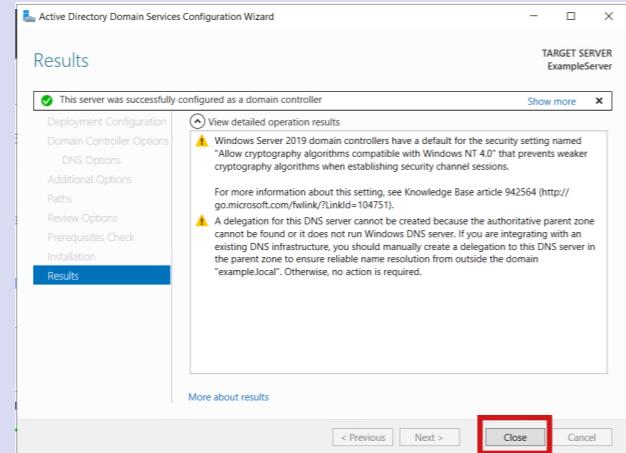
Step 5

- Press 'Next' until you see 'Prerequisites Check' wait until it has loaded and Press 'Install'

Once installed the server will restart!



Step 5



Home

Home folder + Shares

You will see how to correctly give out permissions for the home and shares folder

Step 1

- Open file explorer, press 'This PC' and 'Local Disk', create a new folder called Shares

- Step 2

- Inside Shares, create a new folder called 'HomeFolders' Right click on it and press 'Properties'

Step 3

- Select the 'Sharing' tab and press 'Advanced Sharing...'

Step 4

- Select 'Share this folder', the 'Share name' should be 'home\$', press 'Apply' and then press 'Permissions'

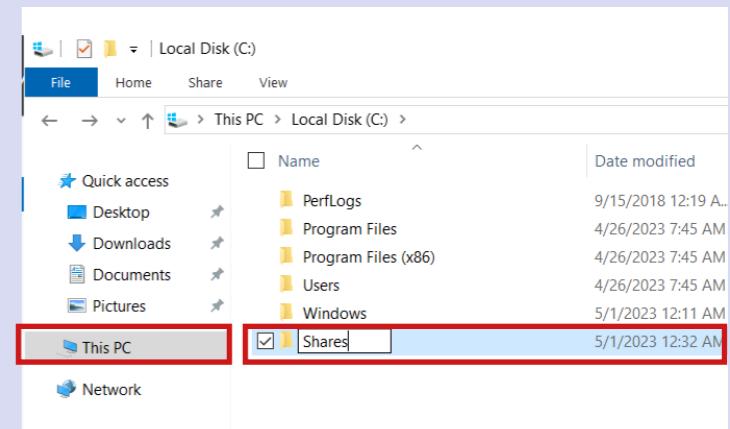
Step 5

- First remove 'Everyone' and add the following permissions:

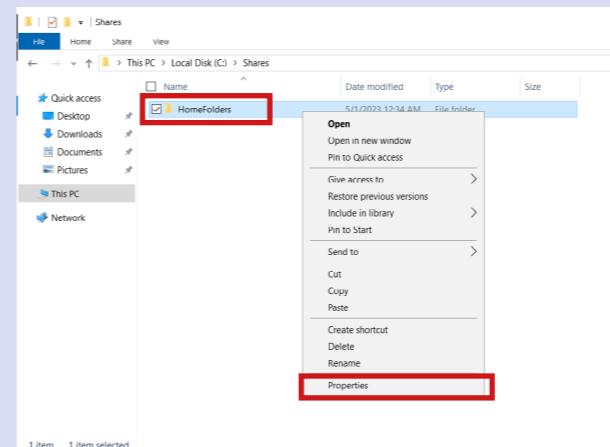
- Administrators (Full control)
- SYSTEM (Full control)
- Authenticated Users (Full control)

Home

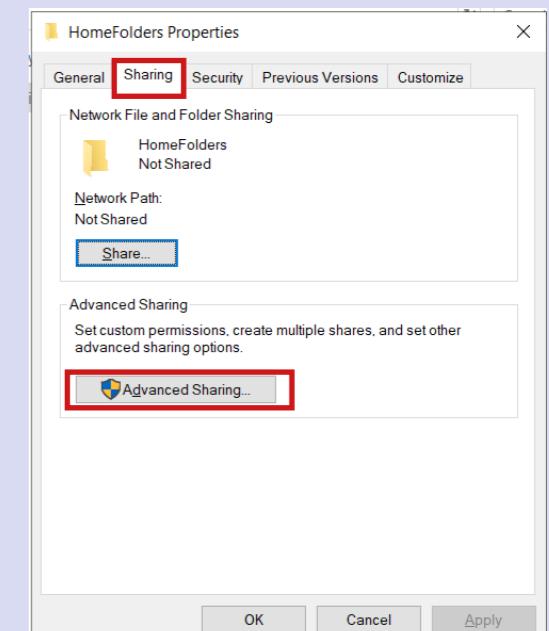
Step 1



Step 2



Step 3



Home

- Step 6

- Press 'Apply' and close the sharing windows

Step 7

- Inside HomeFolders Properties select the 'Security' tab' and press 'Advanced'

Step 8

- Press 'Disable inheritance' and the select 'Remvoe all inherited permissions from this object'

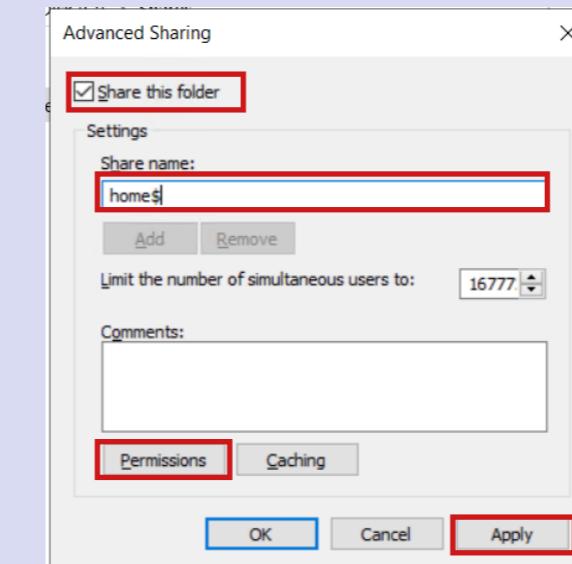
Step 9

Now create the following permissions:

- Administrators (Full control)
- CREATOR OWNER (Subfolders and files only, Full control)
- SYSTEM (Full control)
- Authenticated Users (This folder only ,Read & execute, List folder content, Read)

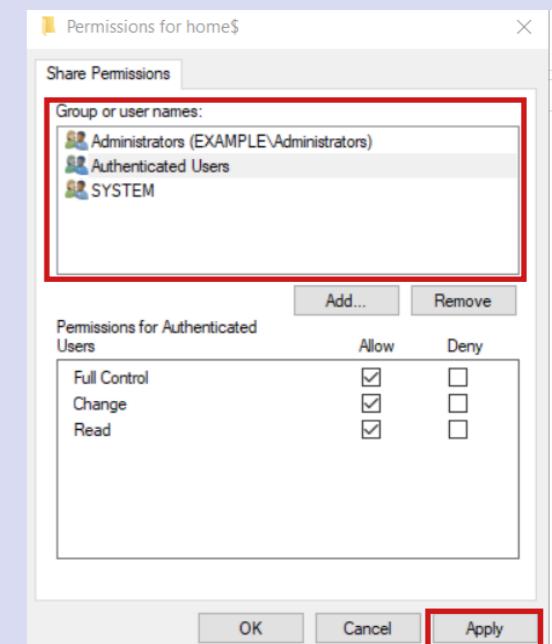
Creating a permission: 'Add..' → Select principal → 'Ok'

Press 'Apply' once finished

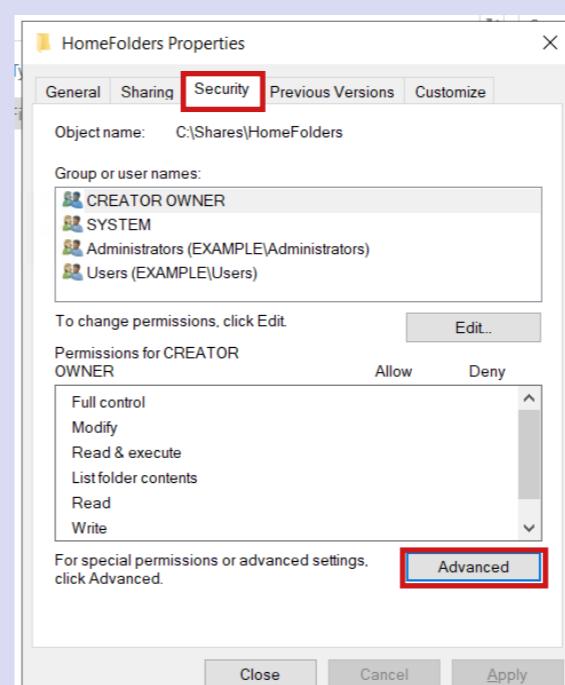


Home

Step 4

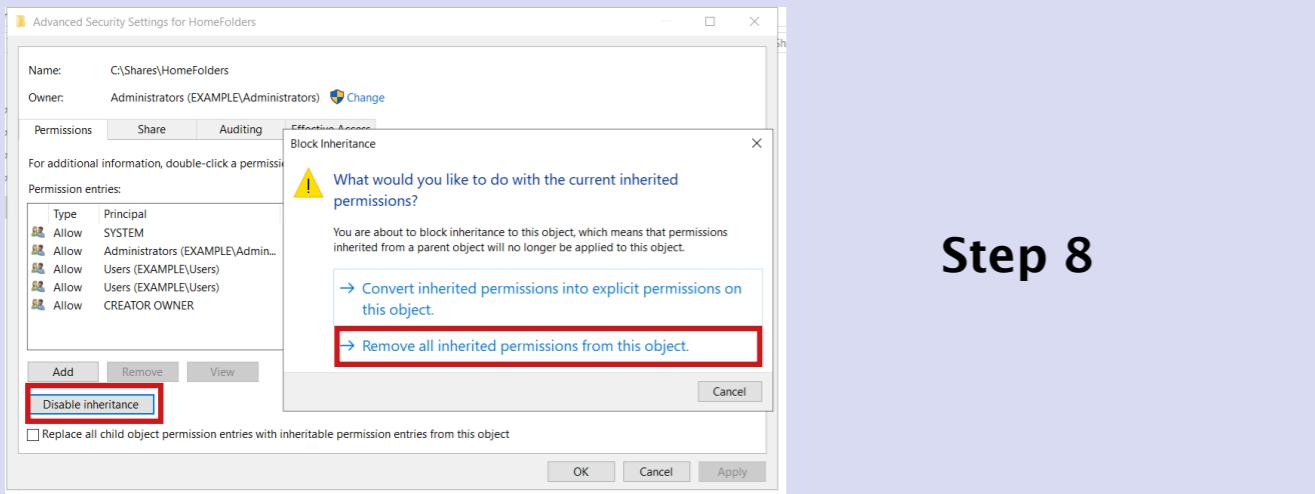


Step 5



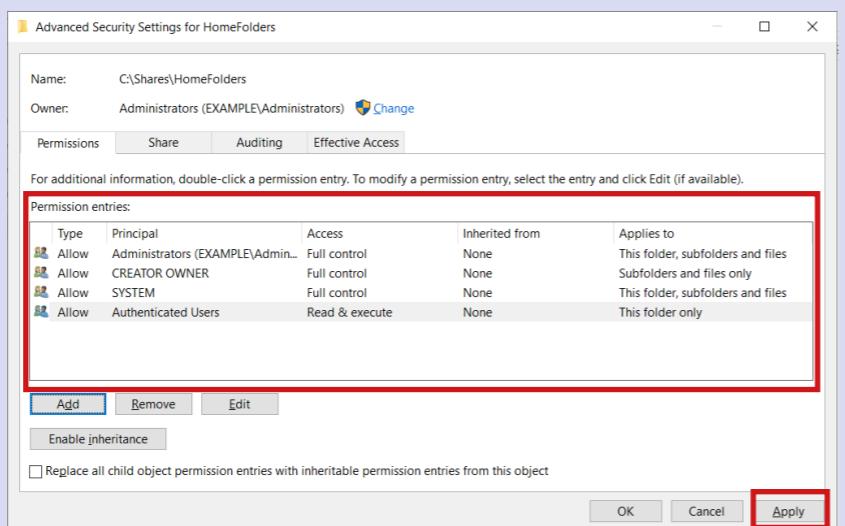
Step 7

Home



Step 8

Home



Step 9

Home

Creating OU

How to create a Organizational Unit

Step 1

- At the top inside 'Server manager' press 'Tools' and select:
'Active Directory Users and Computers'

Step 2

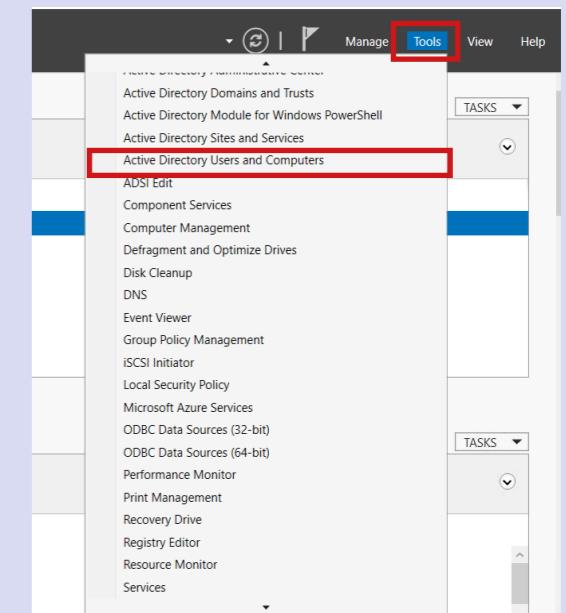
- Click the little arrow in front of your domain in this case
' > Example.local'

Step 3

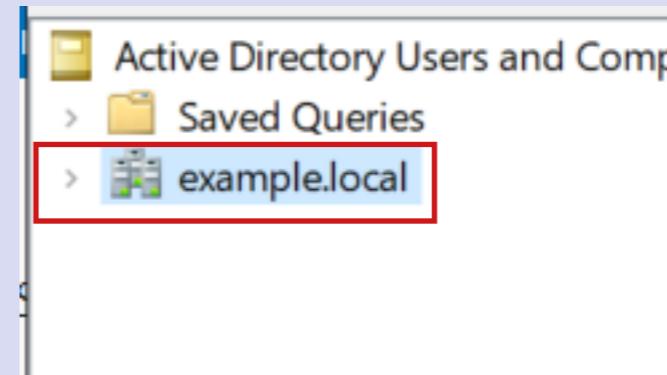
- To make the OU just right click on the domain and select
'New' → 'Organizational Unity'
Choose any name of your liking

They can also be created inside another OU

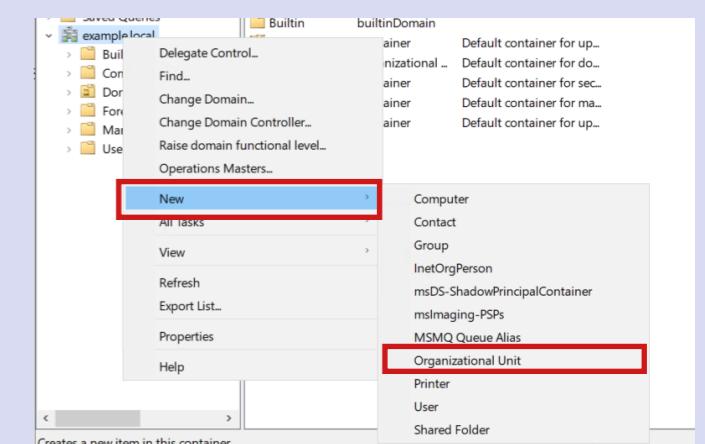
Home



Step 1



Step 2



Creating Temp User

Creating a template user that can later be copied to make new users

Step 1

- At the top inside 'Server manager' press 'Tools' and select: 'Active Directory Users and Computers'

Step 2

- Open any desired OU, right click 'New' → 'User'

Step 3

- Type any desired information, for example

Name: _example

Last name: Temp

User logon name: _exampletemp

press 'Next'

Step 4

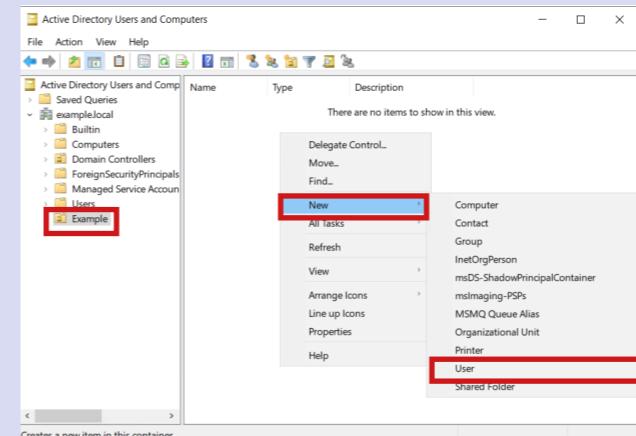
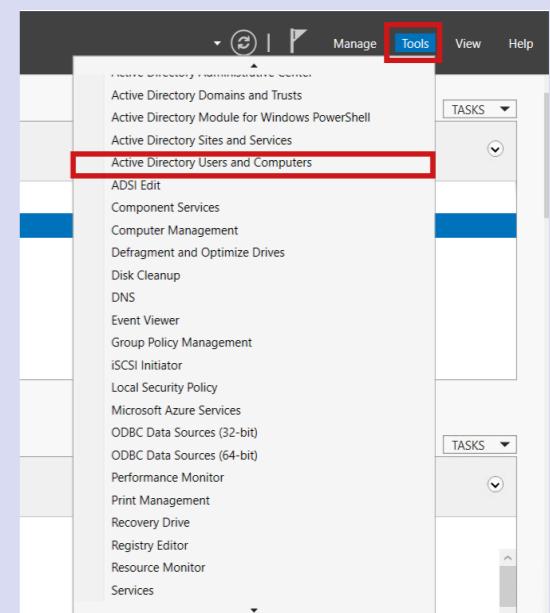
- Type any password, and disable every option besides 'Account is disabled'

Press 'Next' and then 'Finish'

Home

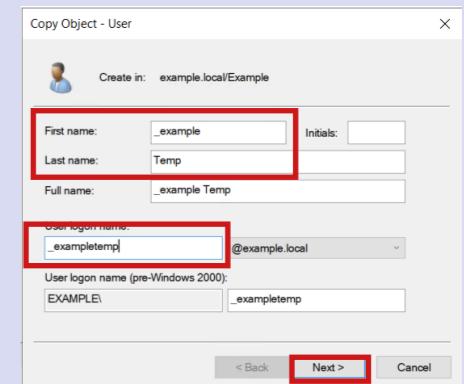
Home

Step 1

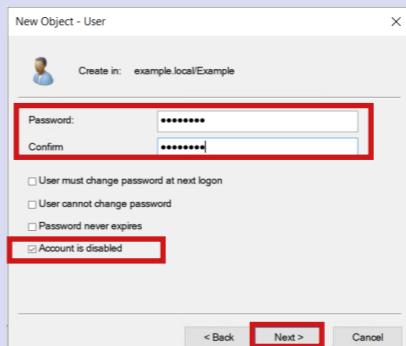


Step 2

Step 3



Step 4



Home

Step 5

Setting up home folder

- Right click on the user and select 'Properties'

Step 6

- Select 'Profile' and then in Home folder select 'Connected'

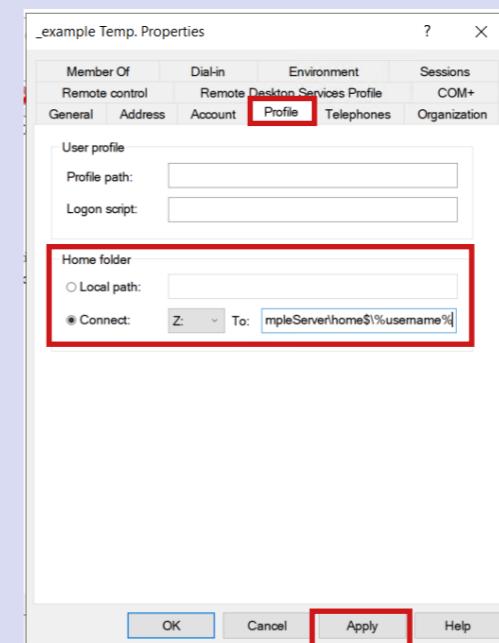
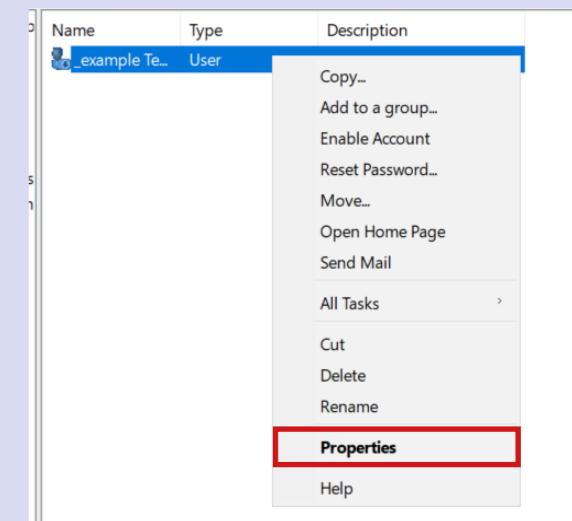
in there write the path for the shared home folder example:

\exampleServer\home\$\%username%

then click 'Apply'

Home

Step 5



Step 6

DHCP

In this section you'll learn the basics of DHCP

this will include:

- Instalation**
- Setting up IPv4 Scope**

Install DHCP

How to install DHCP to your server

Step 1

- Inside 'Server manager' select 'Manage' and press 'Add roles and Features'

Step 2

- Press 'Next' until you see the 'Server Roles' tab, select 'DHCP Server' and in the popup press 'Add Feature'

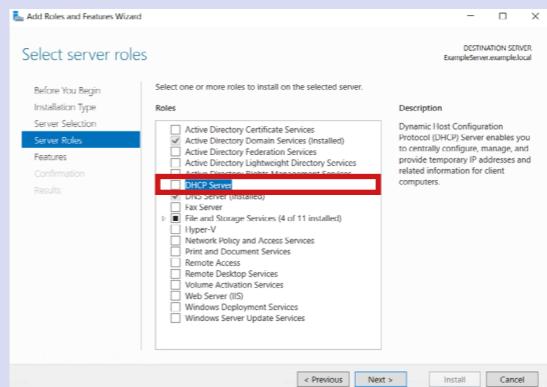
Step 3

- Press 'Next' until you see 'Confirmation' and then press 'Install', you can now close the panel

Press the flag and click 'Next' → 'Commit'

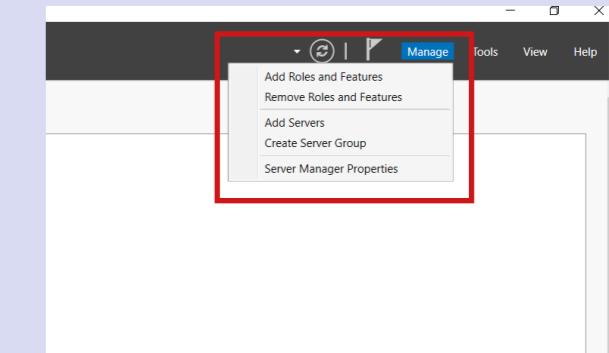
Home

Step 1

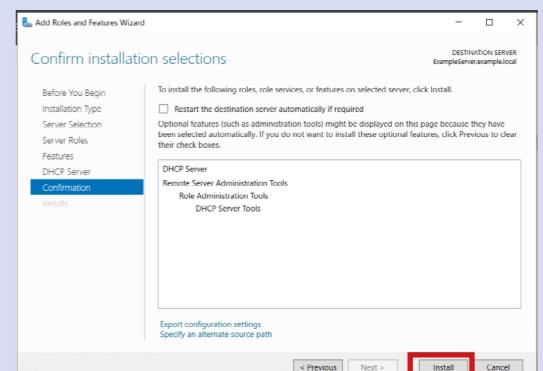


Home

Step 2



Step 3



Home

DHCP Scope

How to set up the DHCP Servers Scope

Step 1

- Open 'Server manager' Click on tools and select 'DHCP'

Step 2

- Click on the server and right click on 'IPv4' and select 'New Scope'

Step 3

- In the New Scope Wizard you click 'Next' and then enter a name for your scope
click 'Next'

Step 4

- Write your desired IP address, in this case we will use:

Start IP address: 192.168.1.2

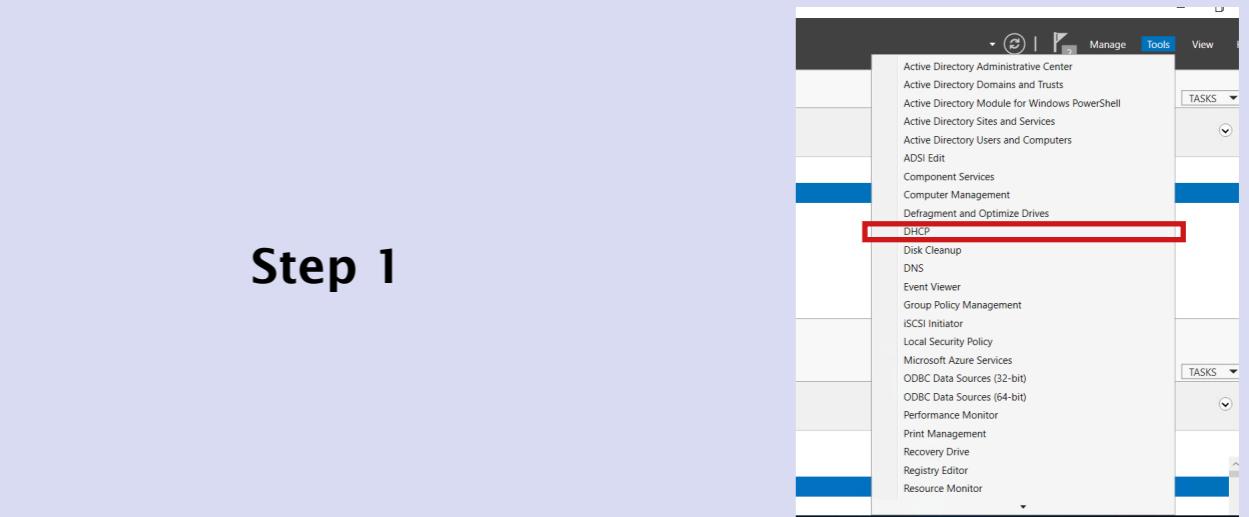
End IP address: 192.168.1.100

Click 'Next'

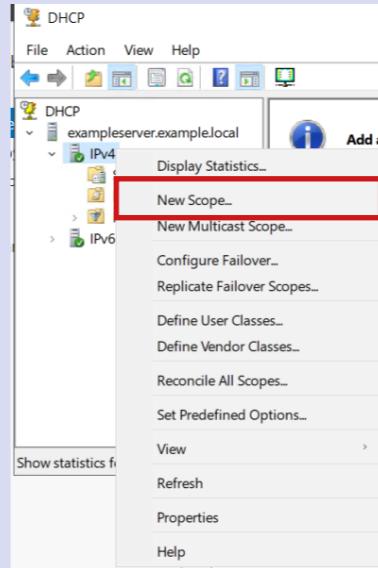
Step 5

- exclude any range of IP's to your desire, in this case the IP's 192.168.1.2 to 192.168.1.20 are excluded

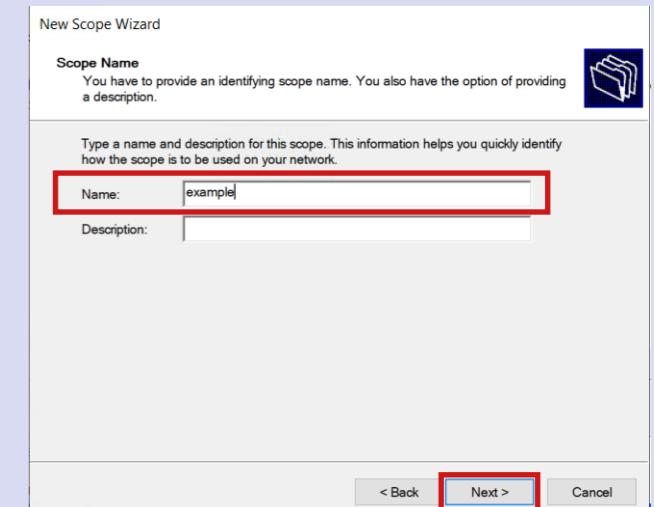
Step 1



Step 2



Step 3



Home

press 'Next' until 'Configure DHCP Options'

Step 6

- Select 'Yes, I want to configure these options now' and click 'Next'

Step 7

- Write the IP-address of your router, in this case: 192.168.1.1, Click 'Next'

Step 8

- You don't have to specify any new IP-addresses if this server has DNS. Click 'Next'

Step 9

- Leave this page empty and click 'Next'

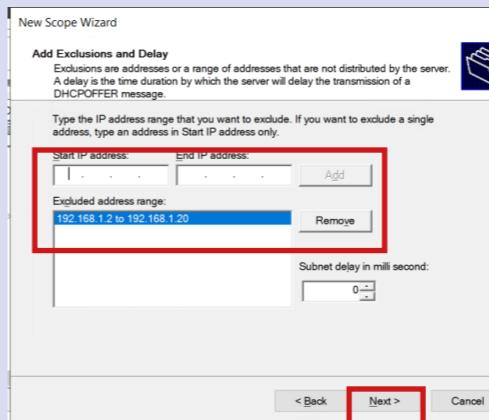
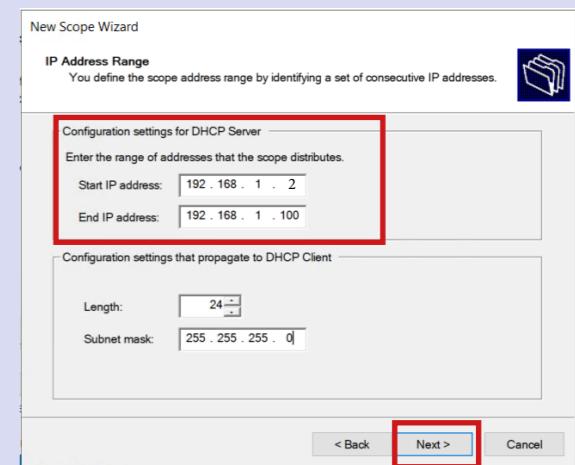
Step 10

- Select 'Yes, I want to activate this scope now' , click 'Next' and then 'Finish'

Home

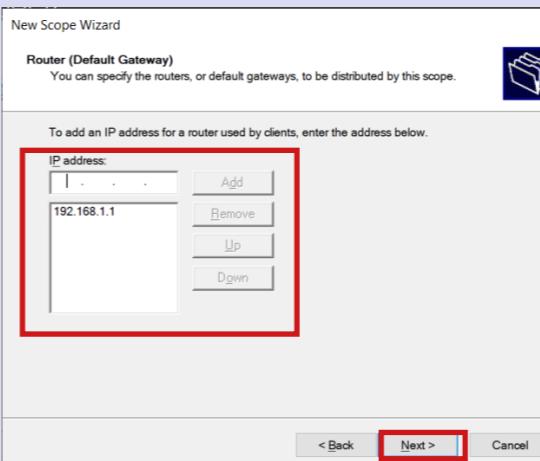
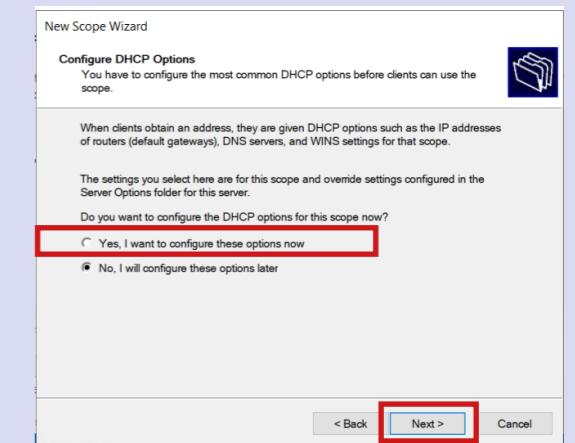
press 'Next' until 'Configure DHCP Options'

Step 4

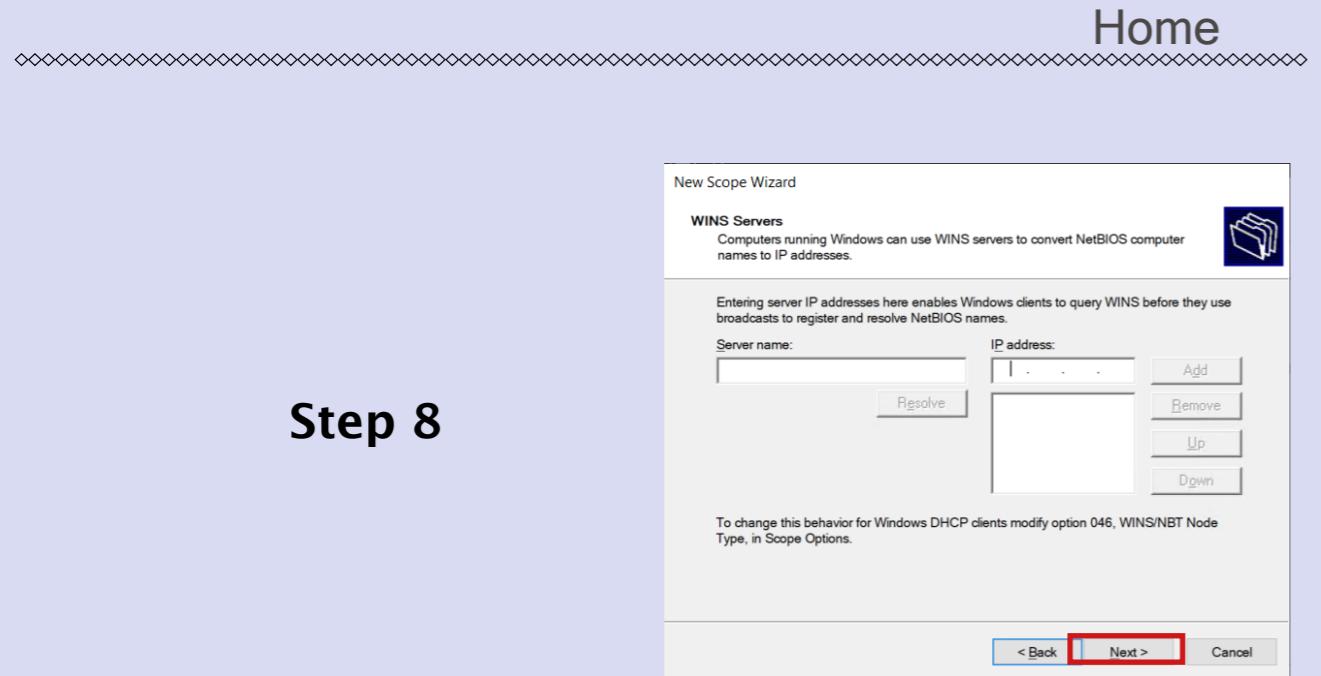


Step 5

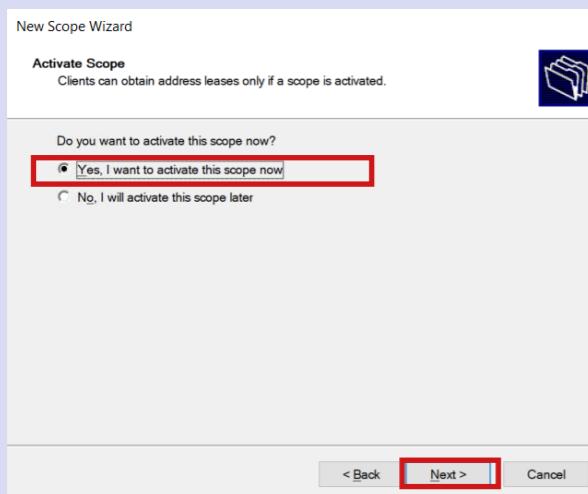
Step 6



Step 7



Step 8



Step 9

Client

**In this section you'll learn setup a client to connect to
the server**

this will include:

- Download client**
- Installation**
- Connect to Domain**

Home

Download Client

How to find the client file and download them

Step 1

- Go to <https://portal.azure.com/#home>

Step 2

- Search for Education at the top and then on the left click on Software

Step 3

- Search for Windows 10 Education and choose Windows 10 Education, version 22H2

Step 4

- Click download at the bottom

Home

The screenshot shows the Microsoft Azure portal interface. At the top, there's a navigation bar with 'Home', 'Education', 'Services (2)', 'Marketplace (28)', 'Documentation (99+)', 'Azure Active Directory (7)', and 'Resources (0)'. On the left, a sidebar menu includes 'Overview', 'Learning resources', 'Roles', 'Software' (which is highlighted with a red box), 'Learning', 'Templates', and 'Need help? Support'. The main content area is titled 'Education | Software' and shows a list of services under 'Education': 'Education Framework', 'Velocity Learning Management System', 'CalendarConnect for Education', 'CloudConnect for Education', 'PathPreventer Education', 'Skimware Offer 1', 'PhishHunter for Education', and 'Fast Toolkit to Create eLearning Courses'. Below this is a section for 'Documentation' with links like 'Education Manager Class', 'Open Education Analytics - MME5 Education', 'College credit for certification exams', 'Azure Education Hub Documentation', and 'Continue searching in Azure Active Directory'.

Step 2

This screenshot shows the 'Software' catalog page. A search bar at the top contains the query 'windows 10 education'. Below it, a table lists two items: 'Windows 10 Education, version 22H2' and 'Windows 10 Education N, version 22H2'. The first item is highlighted with a red box. The table has columns for 'Name', 'Product category', 'Operating System', and 'System type'. The details for 'Windows 10 Education, version 22H2' are shown on the right, including its description as an operating system for Windows, 64-bit, and its specific product details: 'Windows', 'Operating System', 'Windows', and '64 bit'. There are also 'View Key' and 'Help improve this page' buttons. At the bottom right of the table, there's a large blue 'Download' button.

Step 3 + 4

Home

Installation

How to install the client, check create new VM for more indepth.

Step 1

- Go to Hyper-V and press 'New' → 'Virtual Machine'

Step 2

- Follow through the set up with these settings:

- Specify Generation: Generation 2
- Configure Networking: same switch as server
- Installation Options: Install operations system from bootable image file (Choose windows 10/11 ISO file)

Step 3

- Double click on the new virtual machine and press 'Start' once it starts you want to spam any key to boot correctly

Step 4

- Choose language and keyboard, click 'Next'

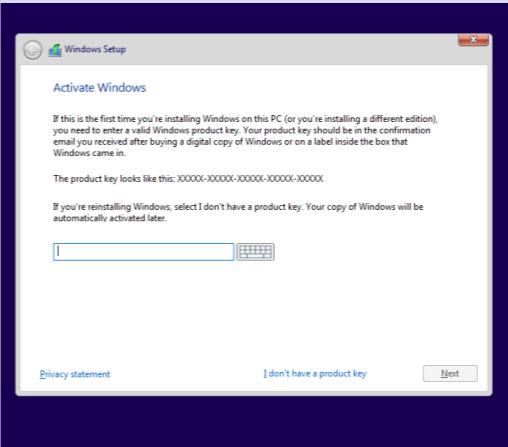
Step 5

- Press install now and press 'I dont have a product key'

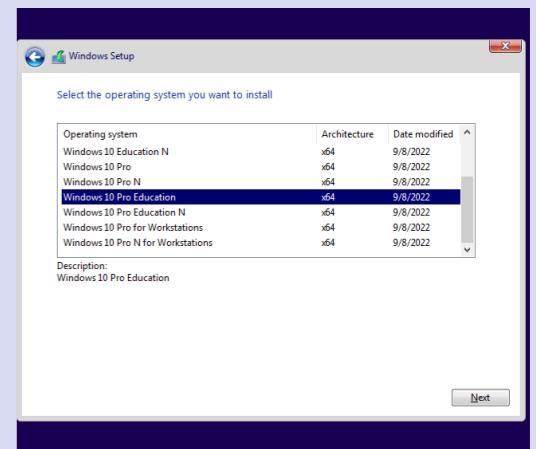
Step 4



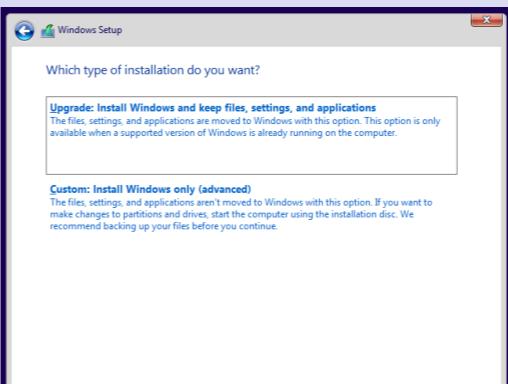
Step 5



Step 6



Step 7



Home

Step 6

- Select a operating system, in this we will choose 'Windows 10 Pro Education' and then press 'Next'
Accept terms and conditions

Step 7

- Select Custom: Install Windows only
Click 'Next' and then wait for the installation to finish

Once the installation is finished you can go through it like a normal windows pc setup

Home

Home

Connect to account

How to login to the account that is made in the server

Step 1

- Open settings and choose 'Accounts'

Step 2

- Select 'Access work or school' and click 'Connect'

Step 3

-

Step 4

- in the popup you want to select the text at the bottom saying
'Join this device to a local Active Directory Domain'

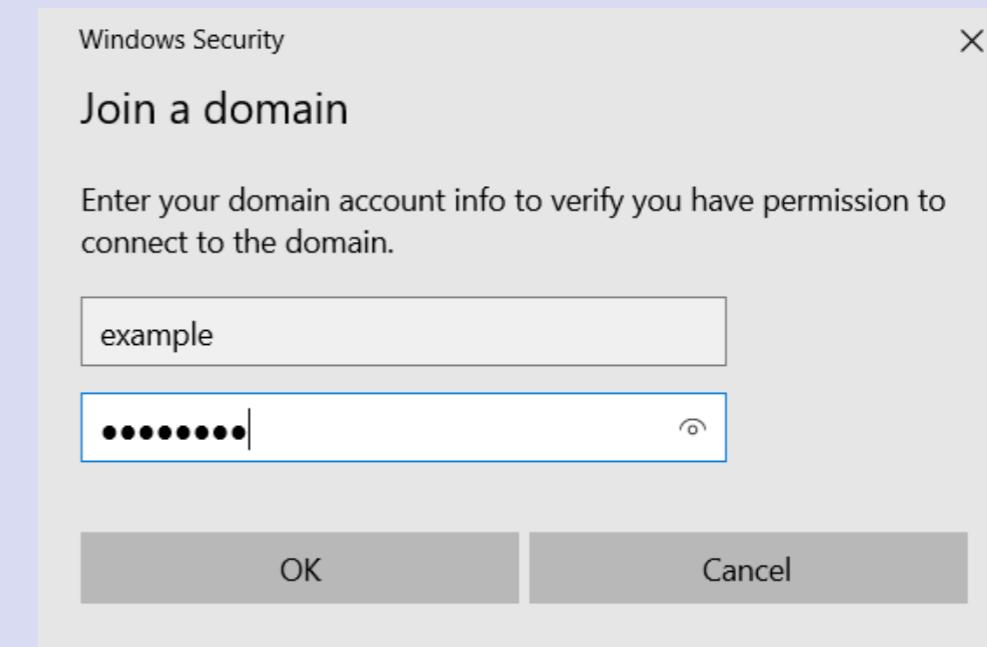
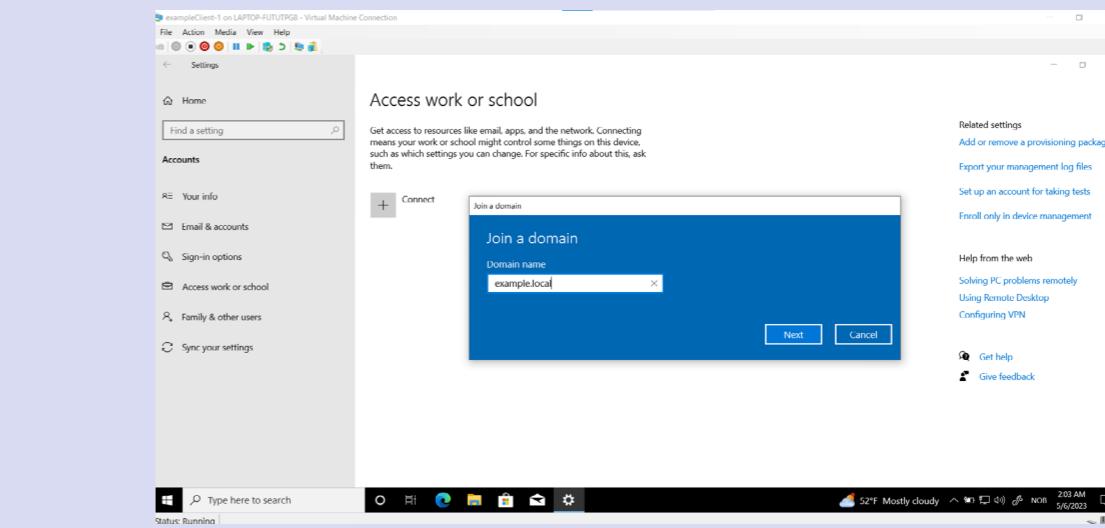
Step 5

- Write your domain name, in this case 'Example.local'

Step 4

- Login with username and password

Home



IIS

In this section you'll learn the basics of IIS

this will include:

- Installation**

Home

Install IIS

How to install IIS to your server

Step 1

- Inside 'Server manager' select 'Manage' and press 'Add roles and Features'

Step 2

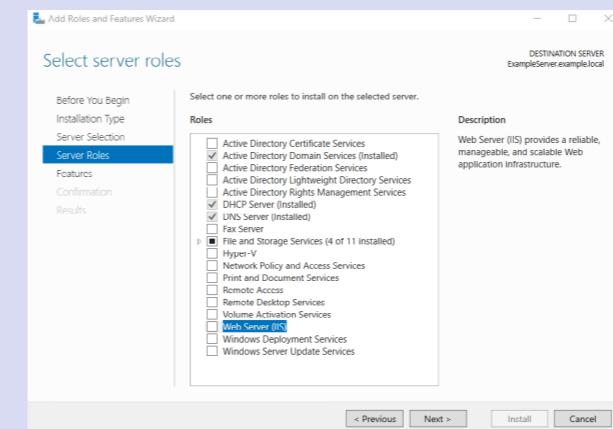
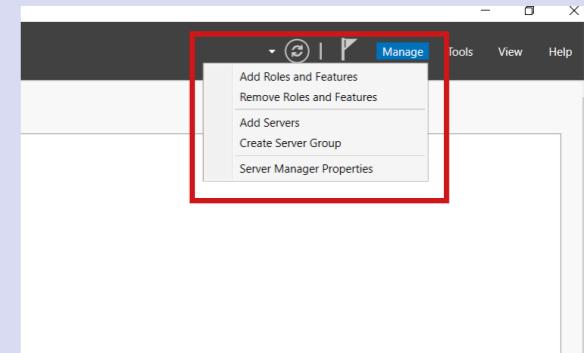
- Press 'Next' until you see the 'Server Roles' tab, select 'IIS' and in the popup press 'Add Feature'

Step 3

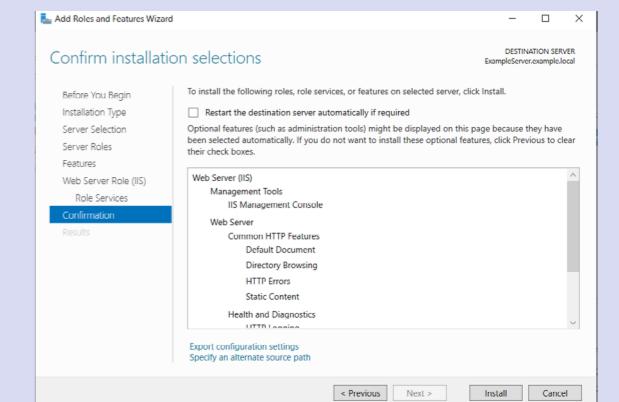
- Press 'Next' until you see 'Confirmation' and then press 'Install', you can now close the panel

Home

Step 1



Step 2



Step 3

Terms

**This part is a collection of lots of terms that can be
good to know.**