

### 3. Osat taitotalon harjoitusta - 1

Sunday, October 12, 2025 14:16

Tässä kappaleessa mennään aikaisemman taitotalon harjoituksia, että harjotuksen kertauksena & osat voi skippata ja jos ei tarvi, mutta tärkeitä konffauksia tehdään ja nämä tulee kuvakaappauksena step by step.

Huomoina, laiskuuden takia ei jaksa avata sitä videota uudestaan ja näitä löytyy omasta kanavan tallenteesta. Vanhoja videoita, mutta hyvin selostettu ajalta ennen 2024.

Tärkeää osuus ensimmäisenä ja muistutus windows server IP-osoite ja yms:

PS C:\Users\Administrator> ipconfig

#### Windows IP Configuration

##### Ethernet adapter Ethernet0:

###### Connection-specific DNS Suffix . :

Link-local IPv6 Address . . . . . : fe80::f55a:98b9:ed73:3dd3%13

IPv4 Address. .... : 192.168.100.10

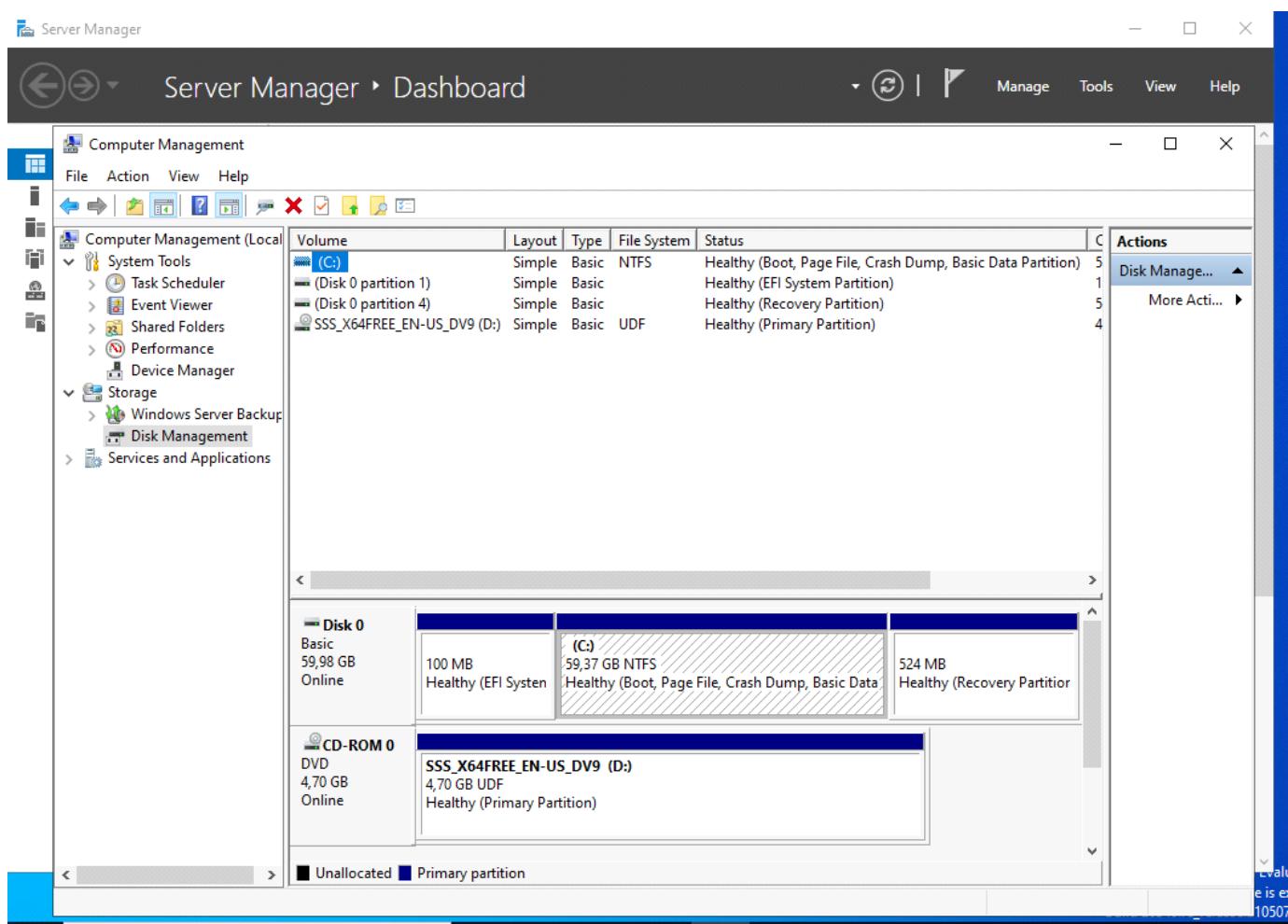
Subnet Mask . . . . . : 255.255.255.0

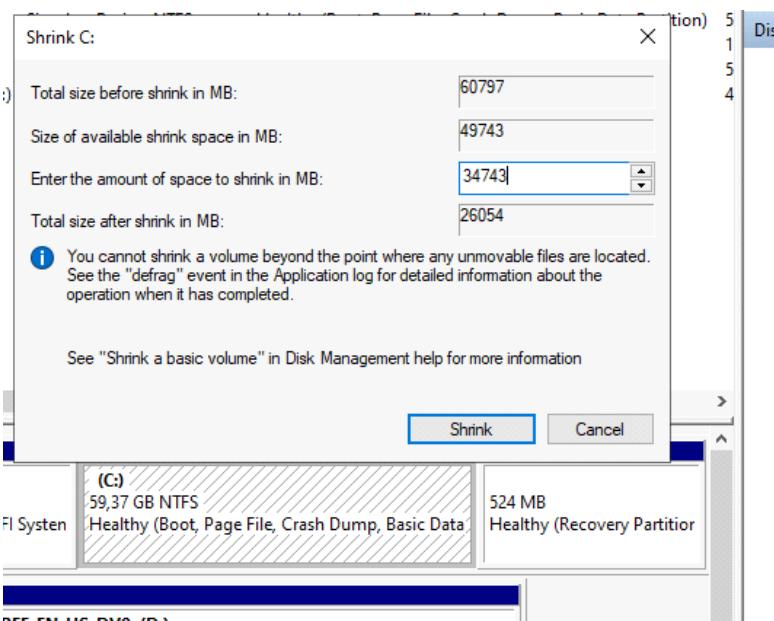
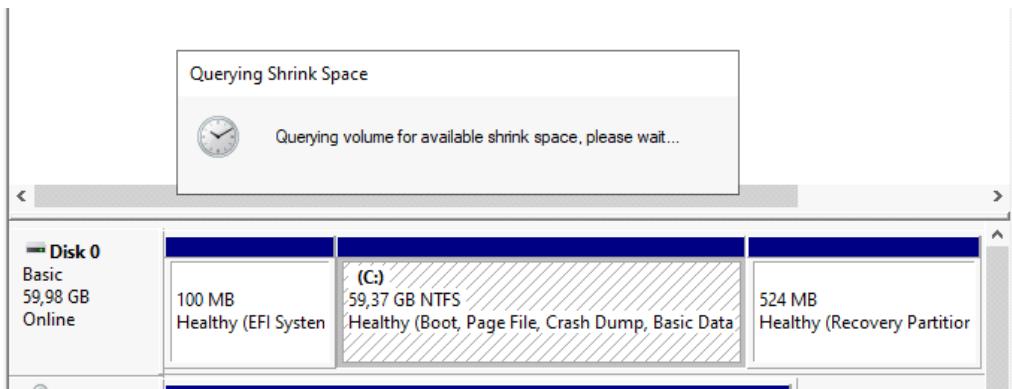
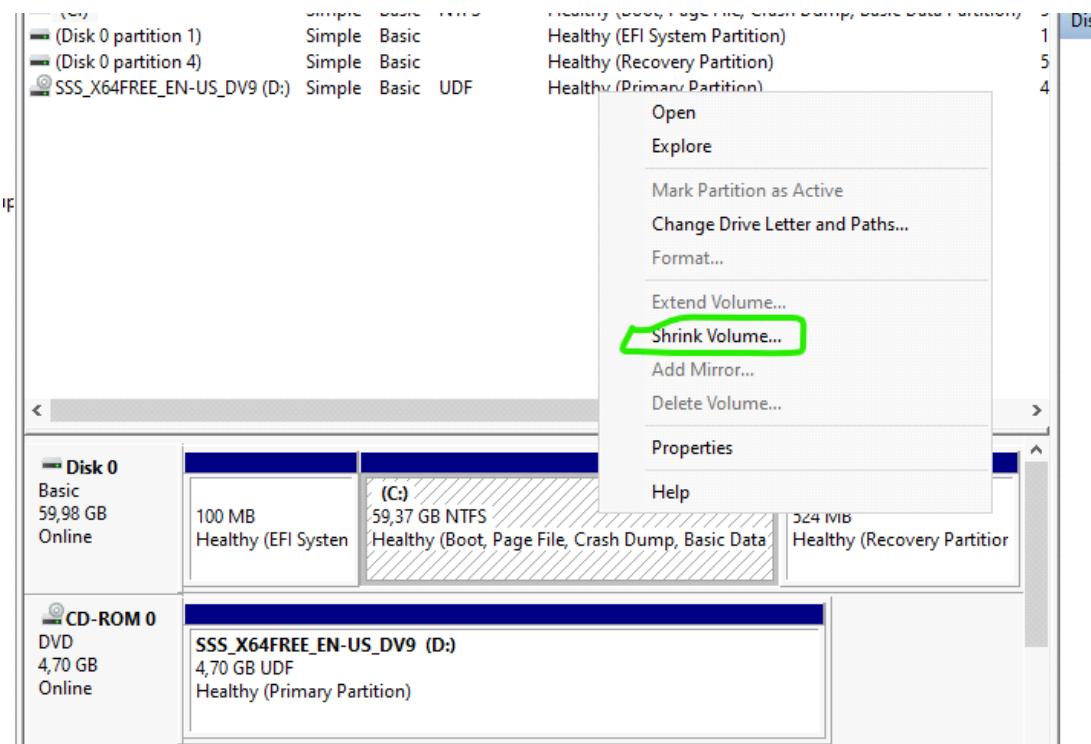
Default Gateway . . . . . : 192.168.100.1

Palvelin DNS: 192.168.100.2

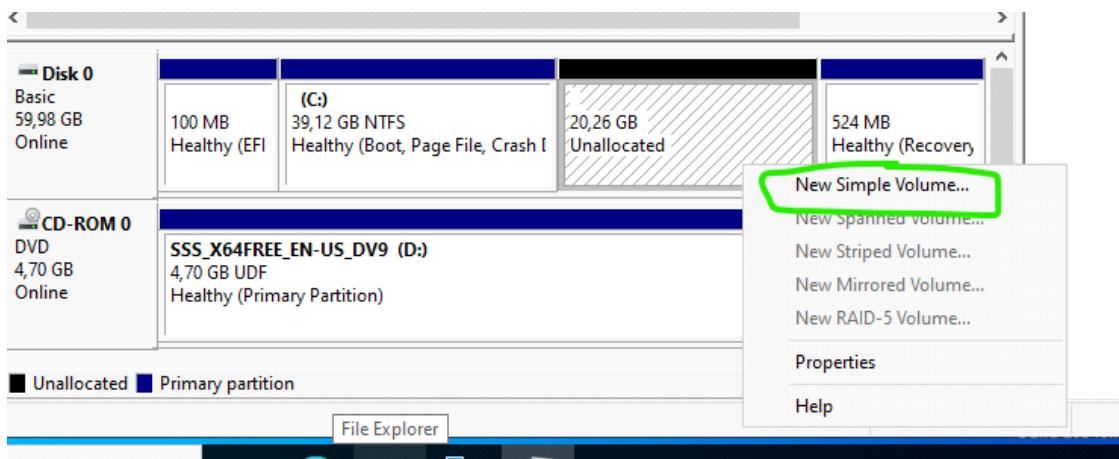
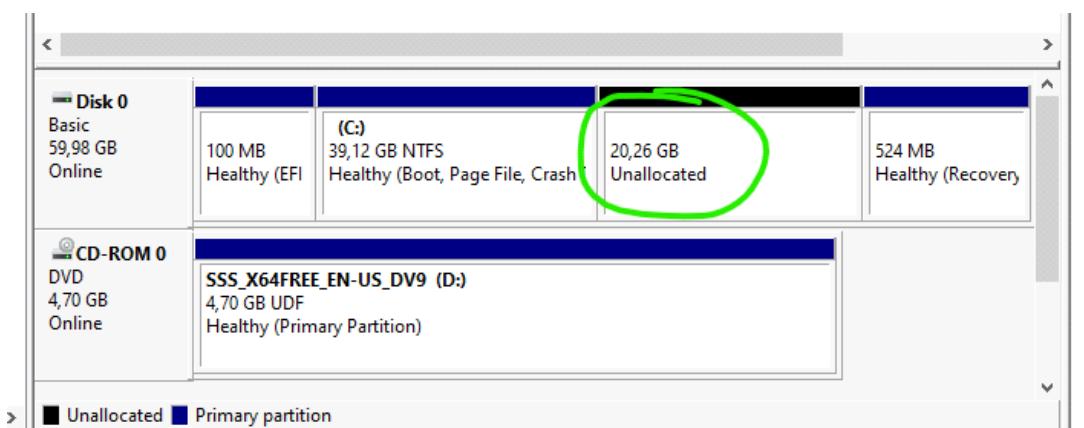
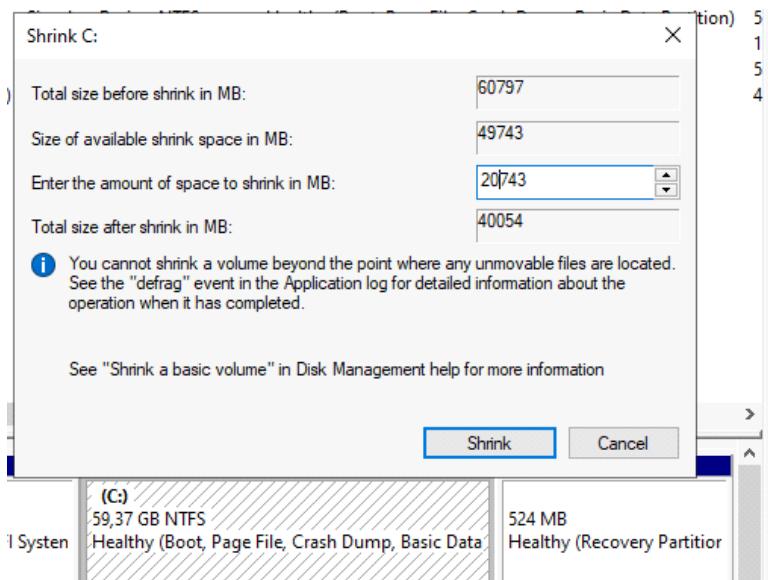
## TODO - 1 - levyn jakaminen - START HERE;

Kokeillaan tästä C-levystä pienentää

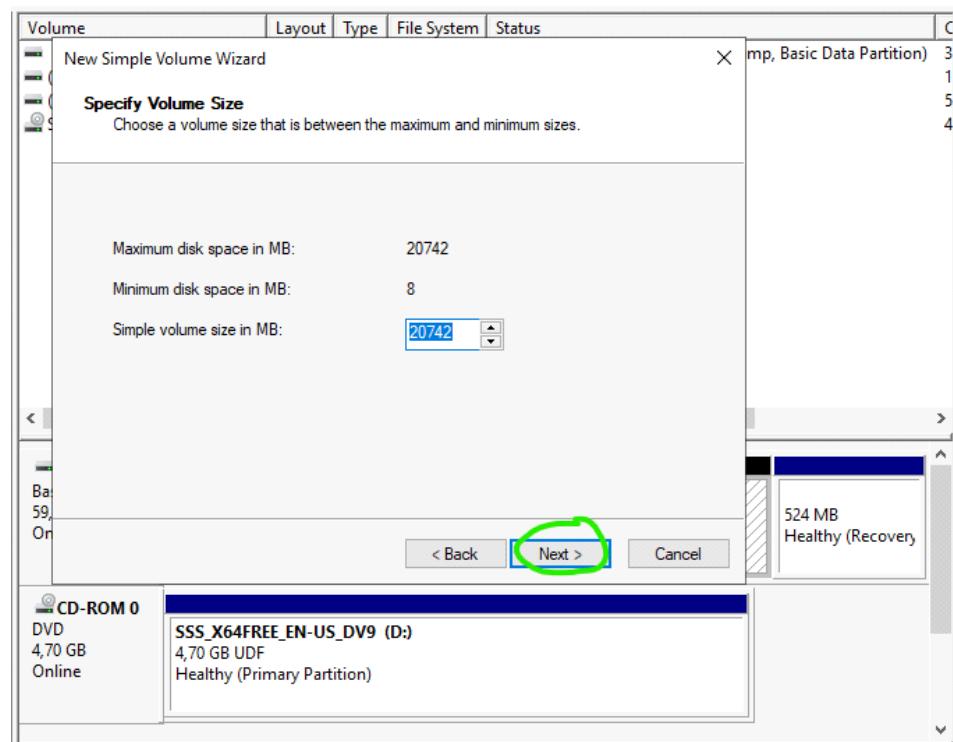
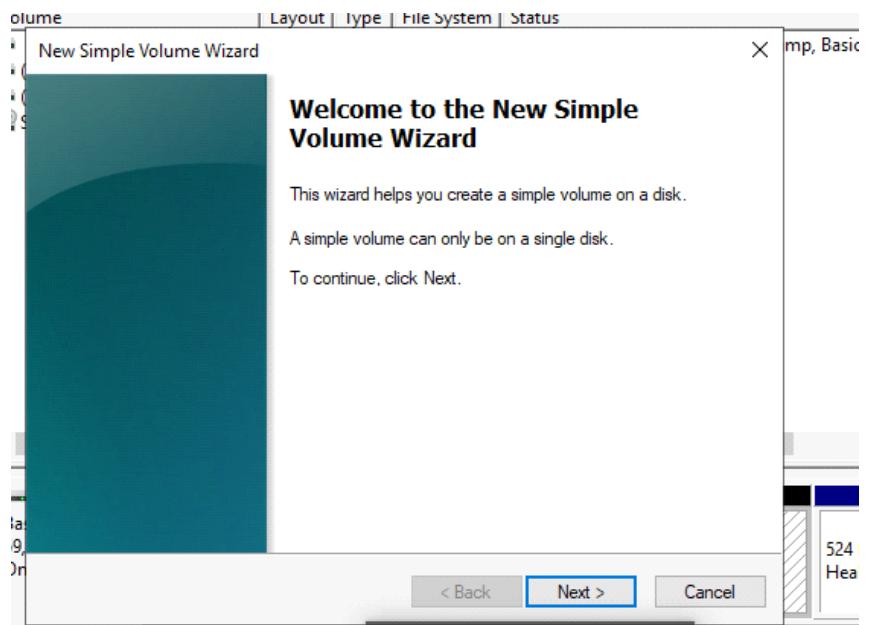




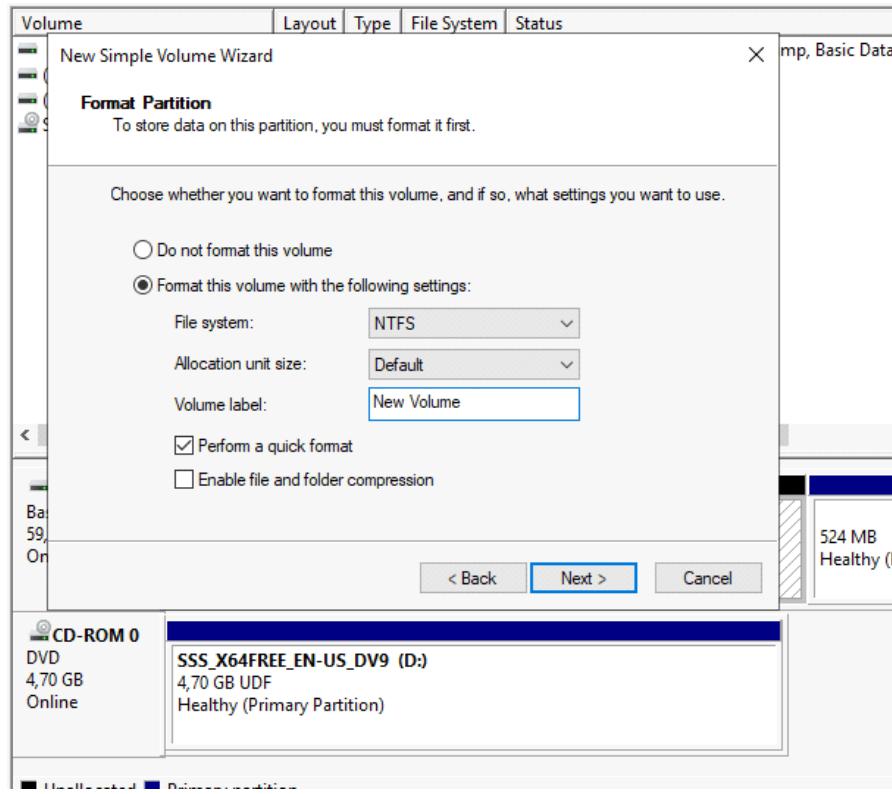
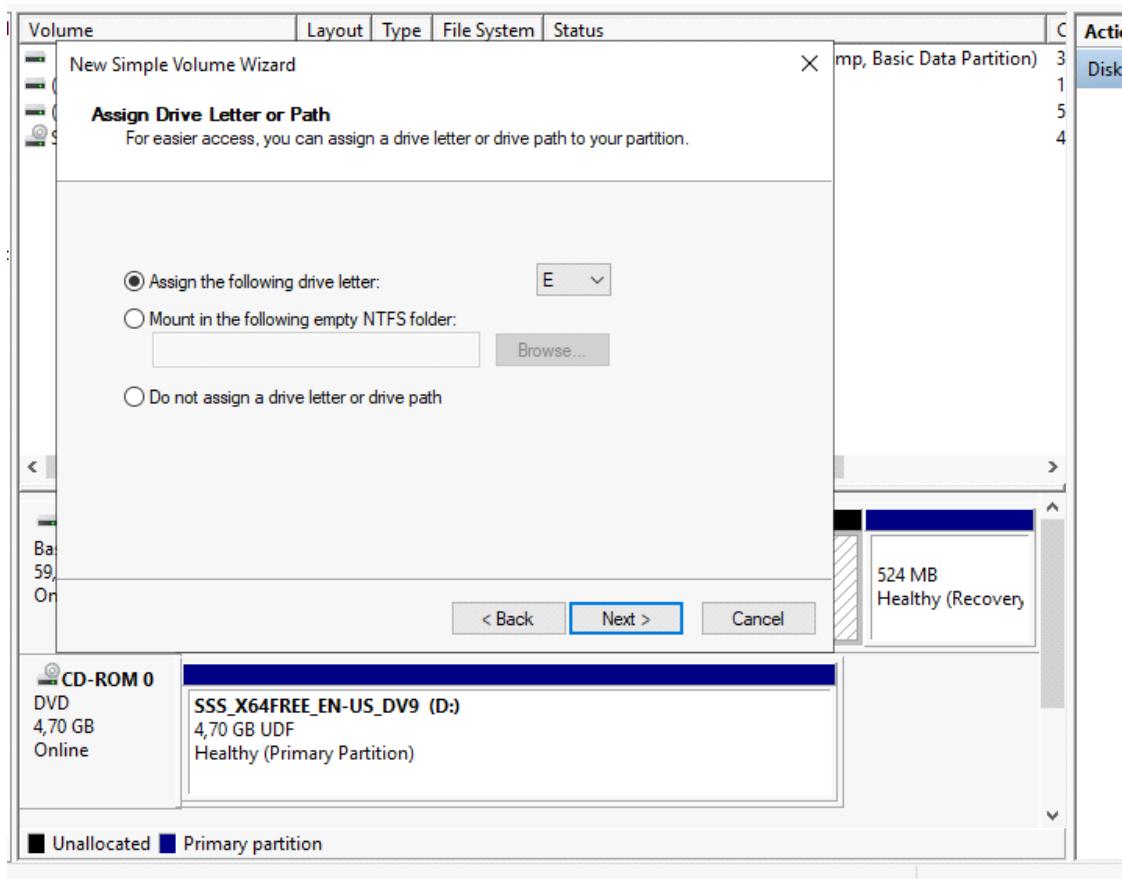
Kokeillaan 20GB - eli pienetään ja tästä sen jälkeen saadaan aad ds levy



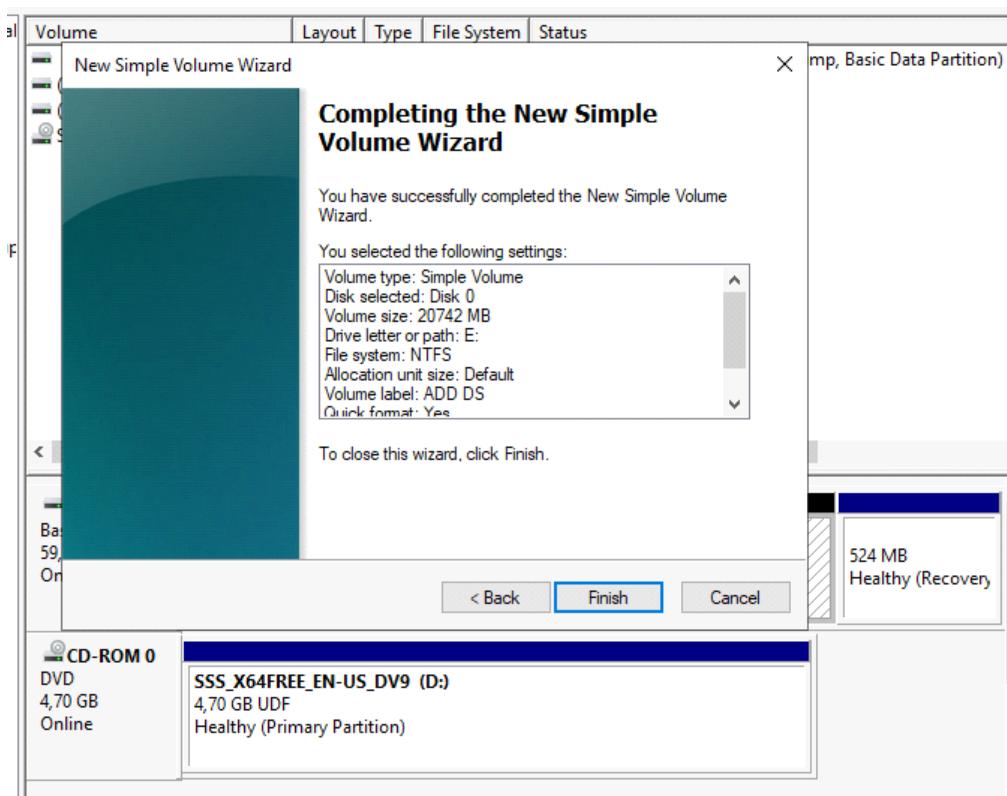
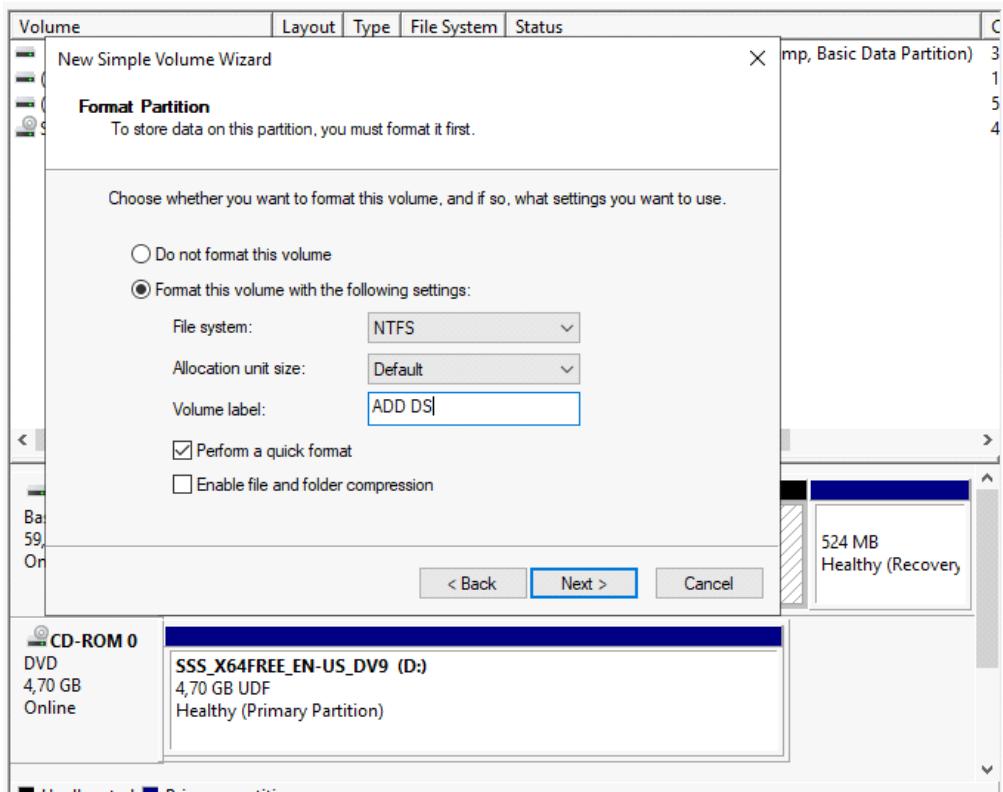
Seuraavaksi velho käynttiin



Tässä on oletuksena E - kirjain , se on vain se levy että millä kirjaimella X levy



Annat volume label: joku nimi vaan - jos unohtuu antaa nimen niin "computer management >>> Disk management" alta voi editoida sen nimensä.



Finish - jälkeen tulee pieni viive niin sitten se levy tulee näkyvinsä

Volume	Layout	Type	File System	Status	C
(C:)	Simple	Basic	NTFS	Healthy (Boot, Page File, Crash Dump, Basic Data Partition)	3
(Disk 0 partition 1)	Simple	Basic		Healthy (EFI System Partition)	1
(Disk 0 partition 4)	Simple	Basic		Healthy (Recovery Partition)	5
ADD DS (E:)	Simple	Basic	NTFS	Healthy (Basic Data Partition)	2
SSS_X64FREE_EN-US_DV9 (D:)	Simple	Basic	UDF	Healthy (Primary Partition)	4

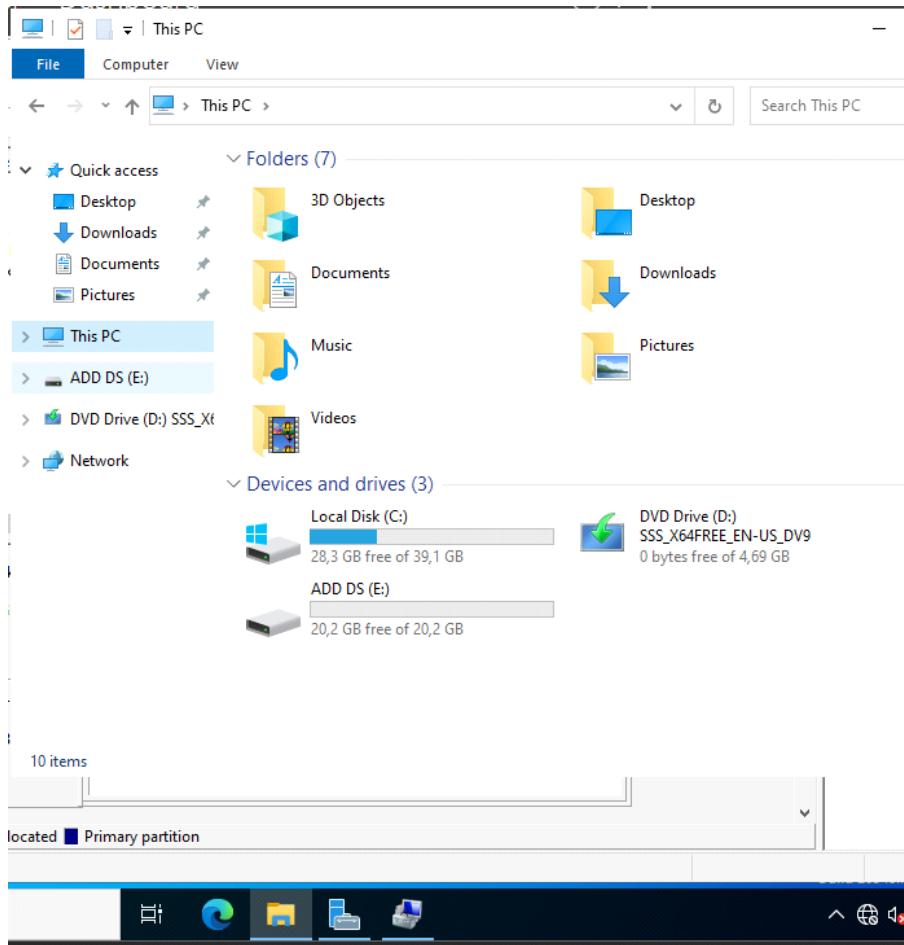
F

< >

Disk 0	Basic 59,98 GB Online	100 MB Healthy (EFI)	(C:) 39,12 GB NTFS Healthy (Boot, Page File, Crash I	ADD DS 20,26 GB NTFS Healthy (Basic Data Partition)	524 MB Healthy (Recovery)
CD-ROM 0	DVD 4,70 GB Online	SSS_X64FREE_EN-US_DV9 (D): 4,70 GB UDF Healthy (Primary Partition)			

■ Unallocated ■ Primary partition

Näin saadaan se toinen levy, ja varmistetaan ettei ole C-levyn juressa.



#####
#####

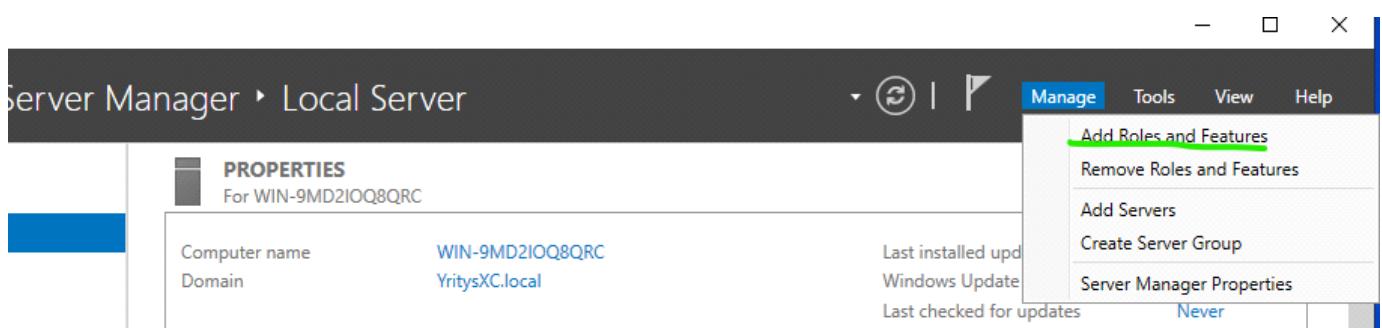


## TODO - 2 - DHCP asennus - START HERE;

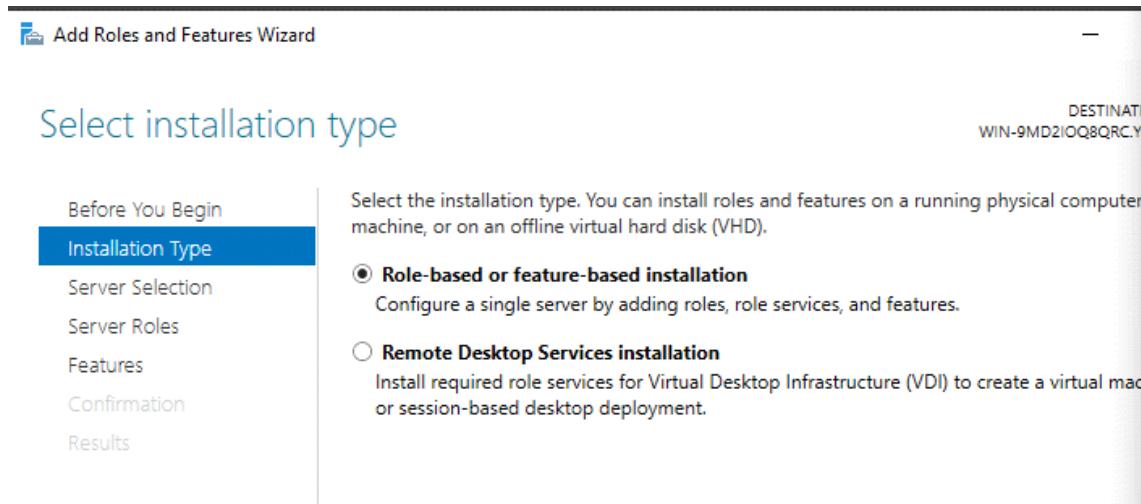
Kokeillaan leikisti konffaa 100 työasemaa (1 työasema) ja sillä kautta esim. Laitettaisiin 2 tunnusta

### DHCP ja IP-osoitteiden jako kertauksena:

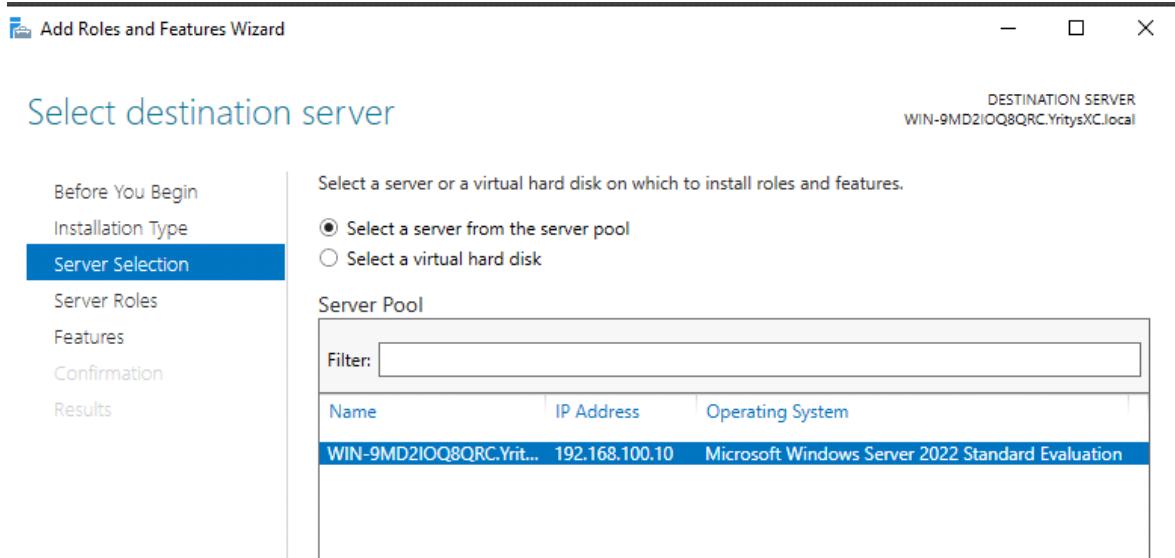
- DHCP-palvelin jakaa automaattisesti IP-osoitteita asiakaslaitteille.
- Käytössä oleva IP-osoitealue on yleensä **192.168.100.1–192.168.100.254**.
- Osoitteet jaetaan **dynaamisesti ja satunnaisesti** vapaiden osoitteiden joukosta.
- **192.168.100.1** on usein varattu **reitittimelle** (gateway), ja **192.168.100.254** voi olla varattuna esimerkiksi **broadcast-osoitteeksi** tai toiselle tärkeälle laitteelle.
- Kyseessä on **yksityinen IP-osoiteavaruus**, jota käytetään sisäverkoissa (RFC 1918).
- Näitä osoitteita käytetään tyypillisesti **työasemille, palvelimille ja muille sisäverkon laitteille**.



Jatkuu samalla rooli pohjalla



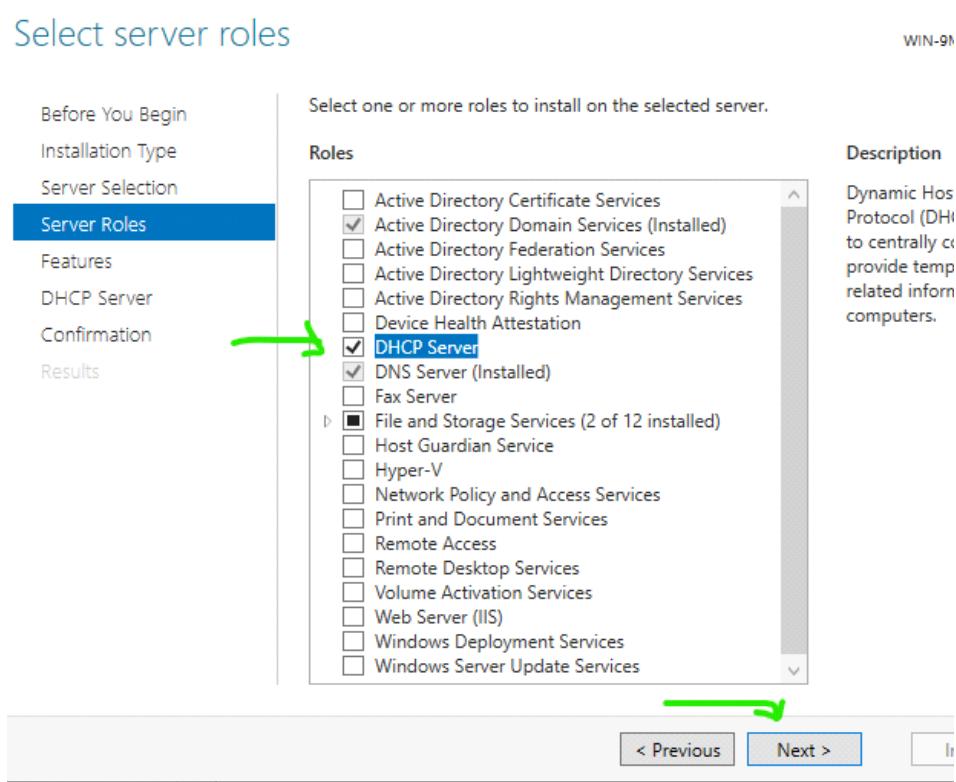
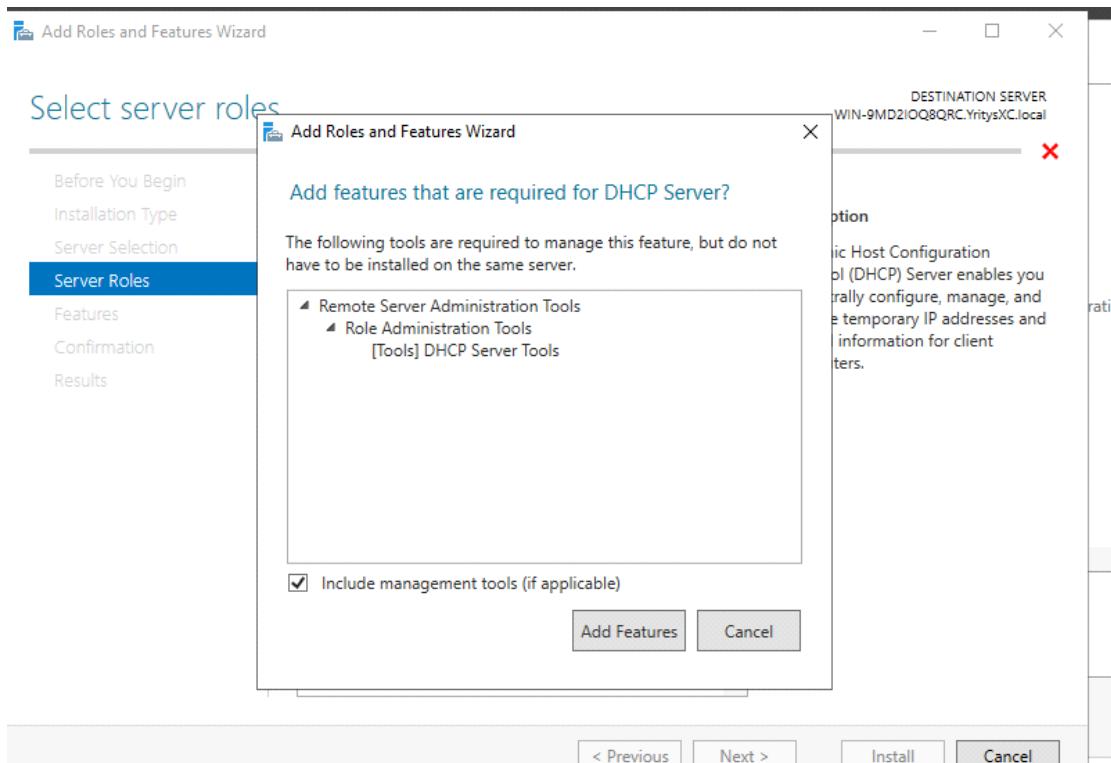
Tämä on serveri toimi alue, että sitä nimeä voi muuttaakin ja lyhentää - pidettynä nyt oletuksnea näin



## Select server roles

The screenshot shows the 'Select server roles' step of the 'Add Roles and Features Wizard'. The navigation pane is identical to the previous screen. The main pane title is 'Select one or more roles to install on the selected server.' It shows a list of roles under the heading 'Roles'. A green arrow points to the 'DHCP Server' checkbox, which is checked. Other roles 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, 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. Descriptions for some roles are visible on the right. At the bottom, there are '< Previous' and 'Next >' buttons.

Pikainen tarkistus että se lataa ne "tools:it"



Features - voi skipata ellei tarvitse tiettyä ominaisuutta

## Select features

Before You Begin  
Installation Type  
Server Selection  
Server Roles  
**Features**  
DHCP Server  
Confirmation  
Results

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

Features	Desc
<input type="checkbox"/> .NET Framework 3.5 Features	.NET power APIs build appear information security the business
<input checked="" type="checkbox"/> .NET Framework 4.8 Features (2 of 7 installed)	
<input type="checkbox"/> Background Intelligent Transfer Service (BITS)	
<input type="checkbox"/> BitLocker Drive Encryption	
<input type="checkbox"/> BitLocker Network Unlock	
<input type="checkbox"/> BranchCache	
<input type="checkbox"/> Client for NFS	
<input type="checkbox"/> Containers	
<input type="checkbox"/> Data Center Bridging	
<input type="checkbox"/> Direct Play	
<input type="checkbox"/> Enhanced Storage	
<input type="checkbox"/> Failover Clustering	
<input checked="" type="checkbox"/> Group Policy Management (Installed)	
<input type="checkbox"/> Host Guardian Hyper-V Support	
<input type="checkbox"/> I/O Quality of Service	
<input type="checkbox"/> IIS Hostable Web Core	
<input type="checkbox"/> Internet Printing Client	
<input type="checkbox"/> IP Address Management (IPAM) Server	
<input type="checkbox"/> LPR Port Monitor	

< Previous      Next >

### Pieni huomio

## DHCP Server

DESTINATION SERVER  
WIN-9MD2IOQ8QRC.YritysXC.local

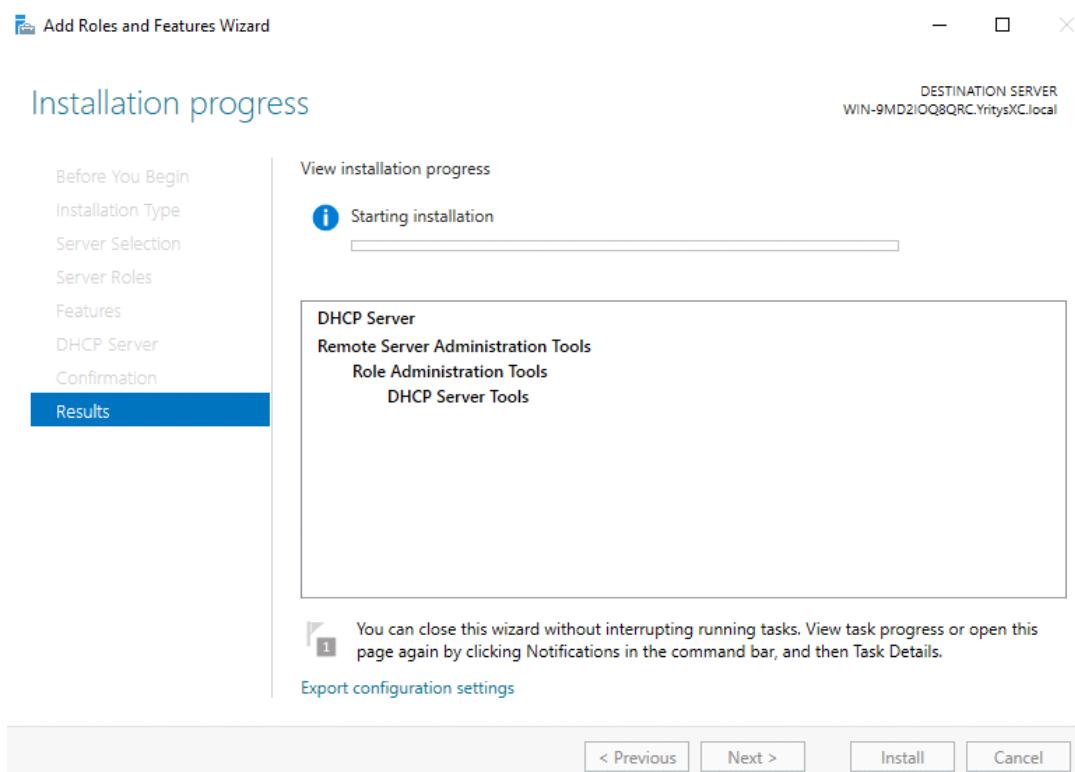
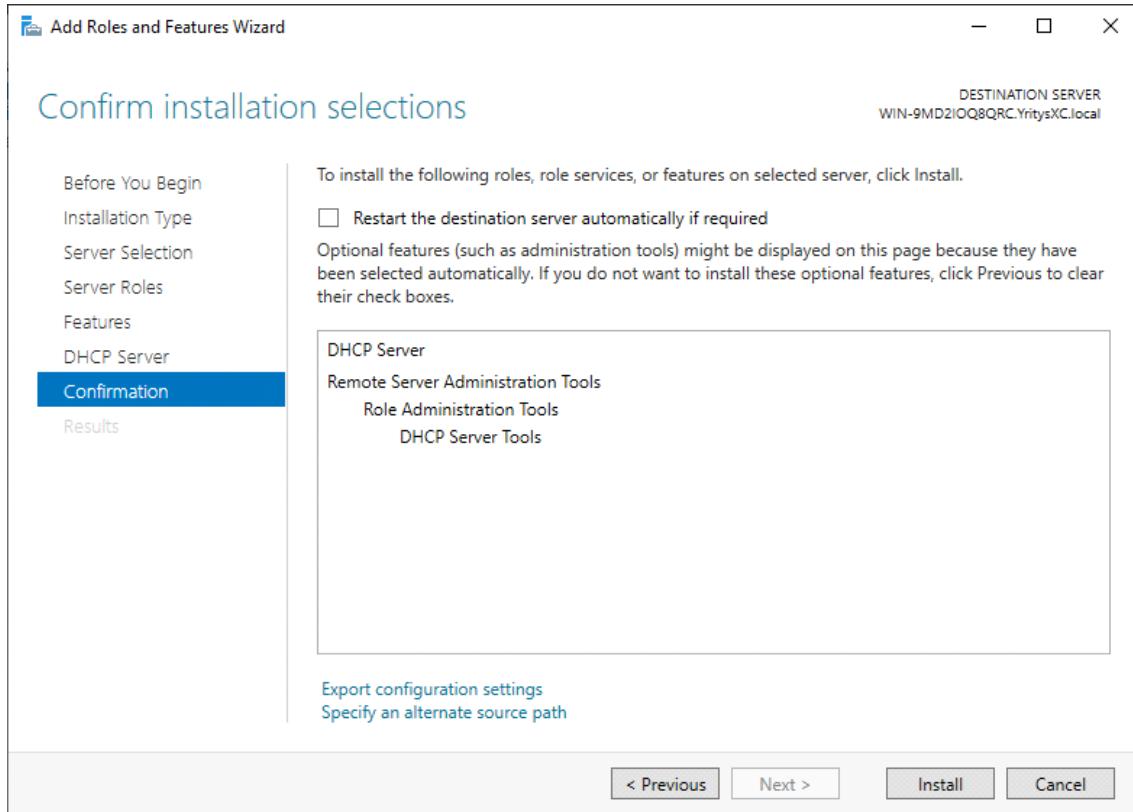
Before You Begin  
Installation Type  
Server Selection  
Server Roles  
Features  
**DHCP Server**  
Confirmation  
Results

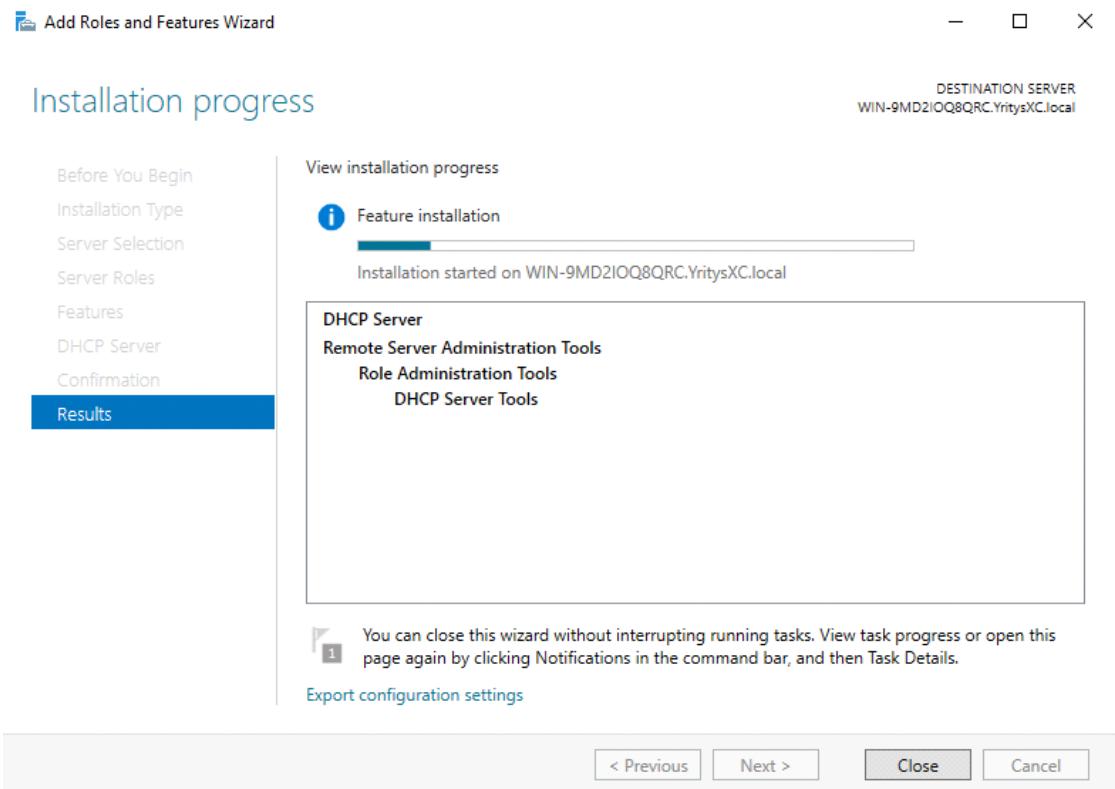
The Dynamic Host Configuration Protocol allows servers to assign, or lease, IP addresses to computers and other devices that are enabled as DHCP clients. Deploying a DHCP server on the network provides computers and other TCP/IP-based network devices with valid IP addresses and the additional configuration parameters these devices need, called DHCP options. This allows computers and devices to connect to other network resources, such as DNS servers, WINS servers, and routers.

Things to note:

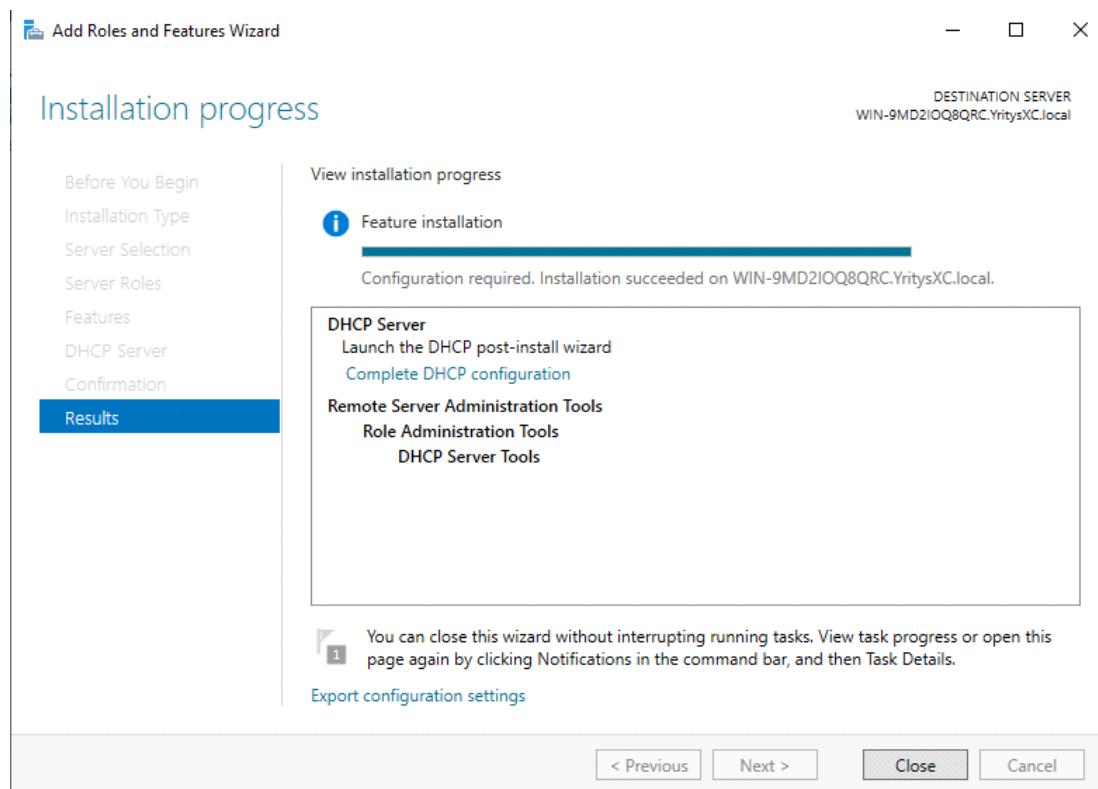
- You should configure at least one static IP address on this computer.
- Before you install DHCP Server, you should plan your subnets, scopes and exclusions. Store the plan in a safe place for later reference.

### Pieni yhteenvetö ja tarkistus sitten vaan "install"

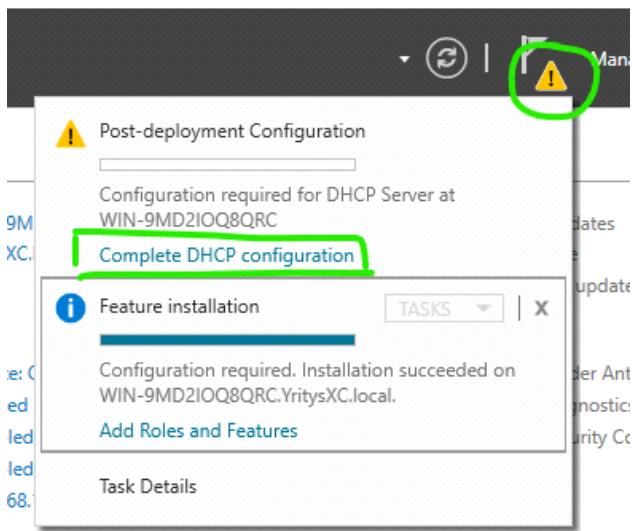




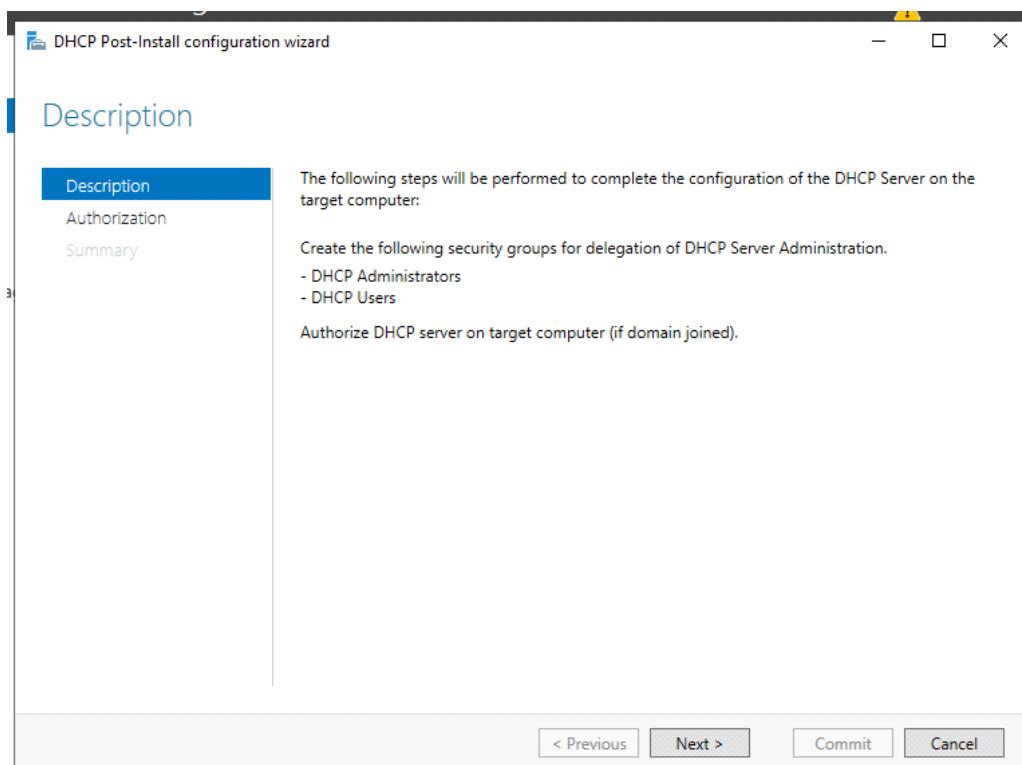
Valmis



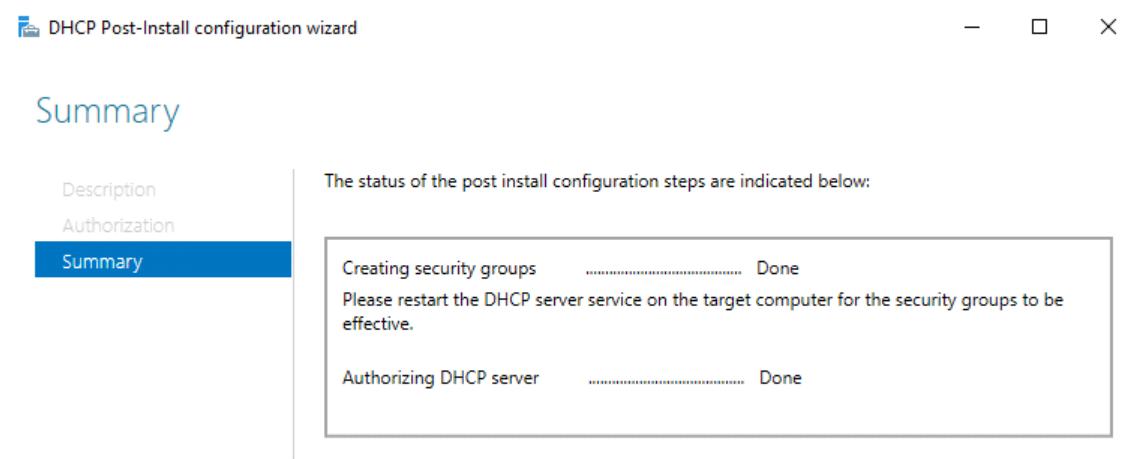
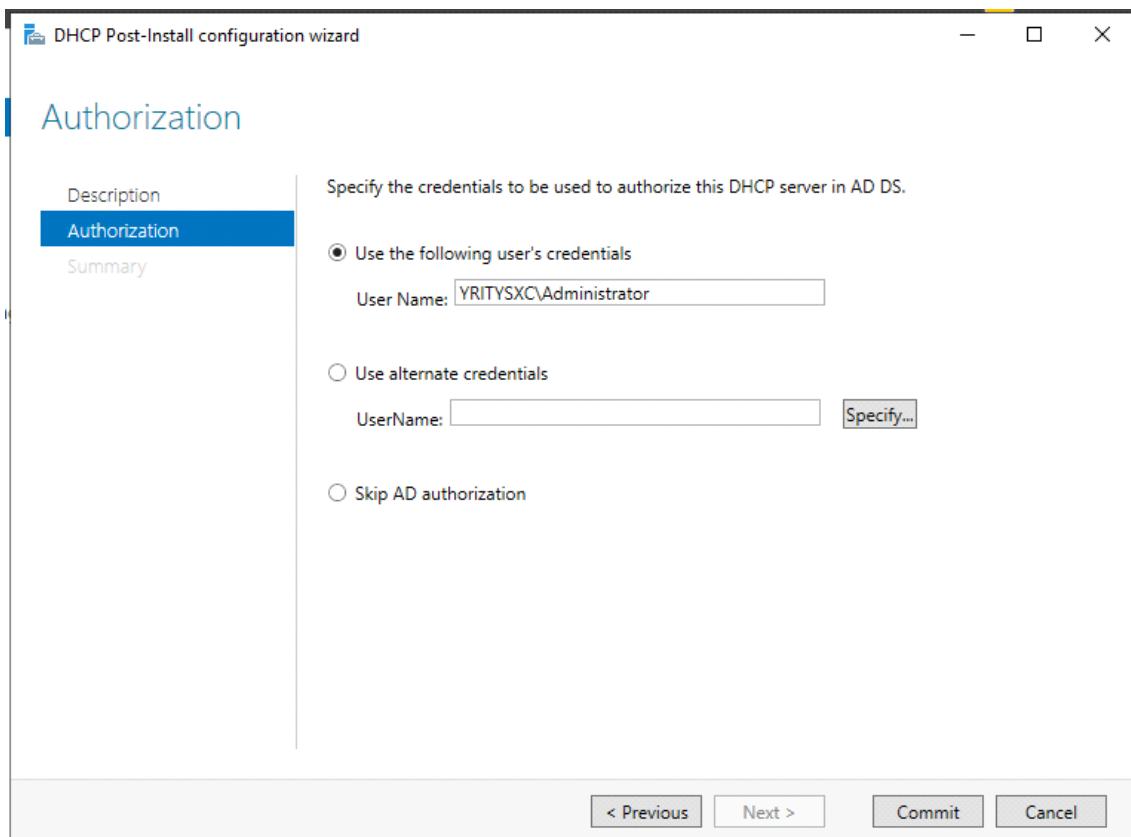
Sitten taas uusi huomio lippu ja siten vaan suorittamaan/viimeistellä loppuun asti tämä ladattu osa



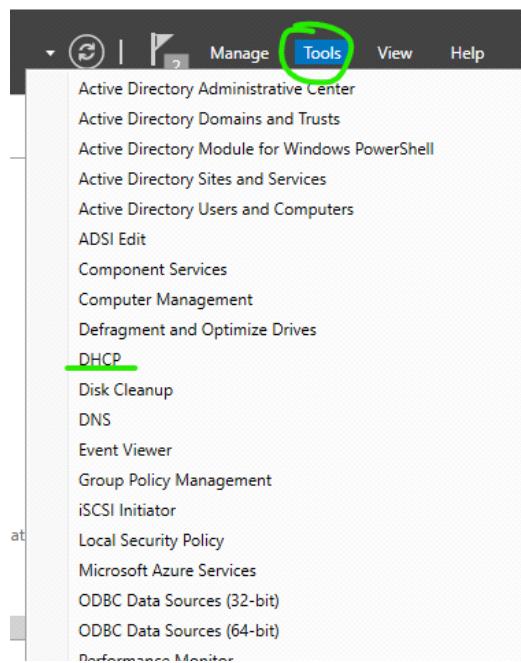
Kuvaus koskien DHCP



Tarkistus ja hyväksyntä - pidä tämä oletuksena

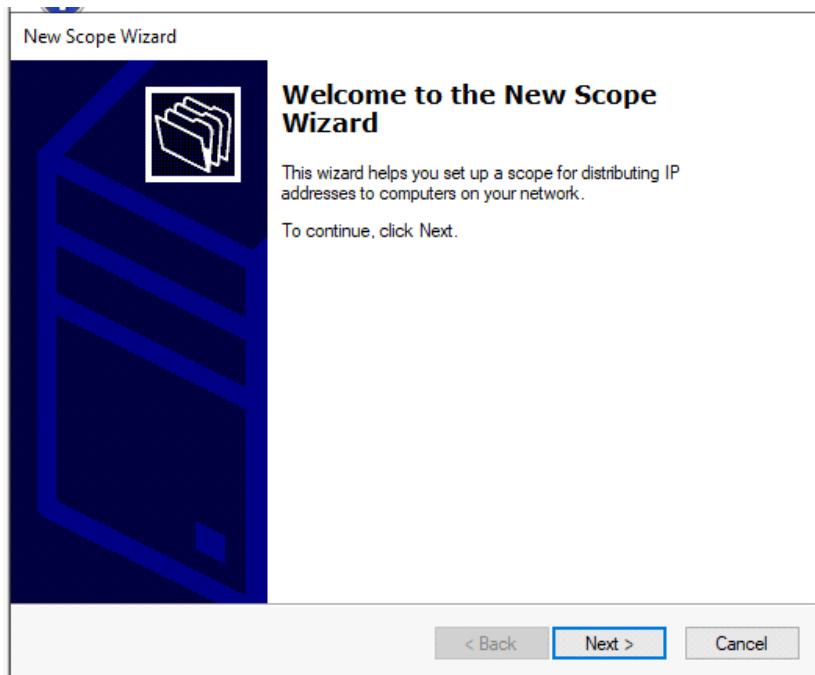


Nyt DHCP konffaust on valmis nyt ja seuraavaksi työasema scope lisätään nyt.

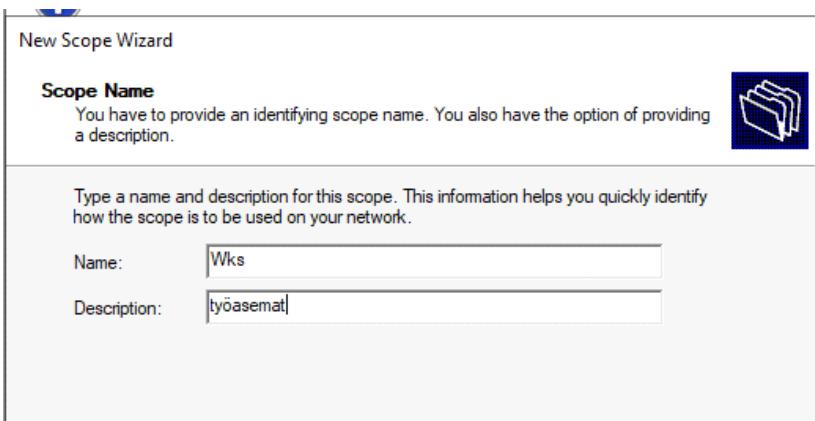


Huomoina tuossa IPV4 ja IPV6:ssa on vihree niin on käytössä ja toiminnassa

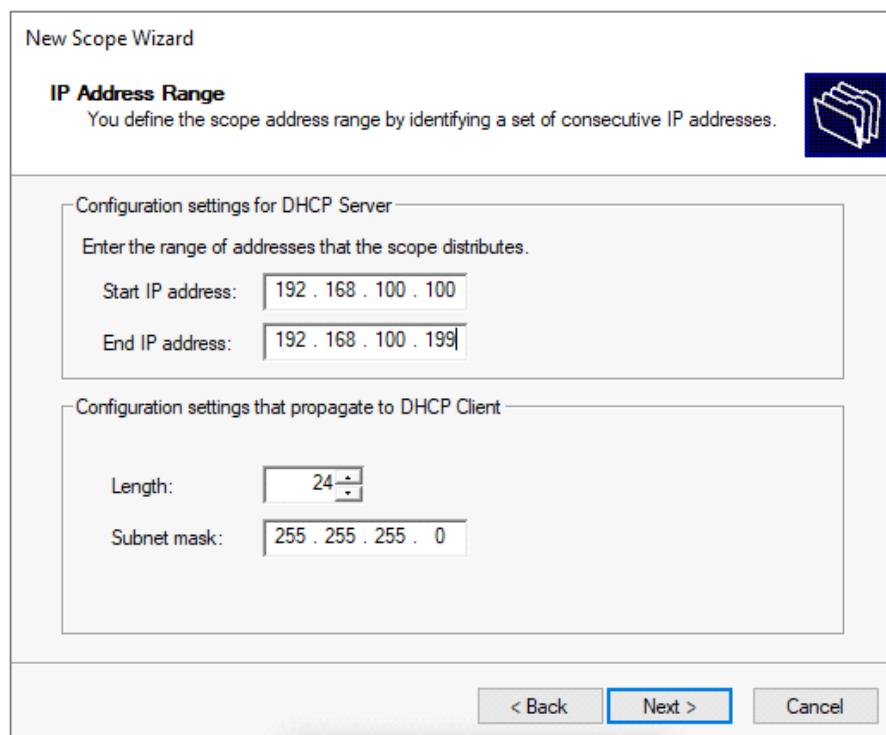
A screenshot of the Microsoft DHCP Management console. The left pane shows a tree structure with 'DHCP' selected, followed by a node for the local computer 'win-9md2ioq8qrc.yritysxc.local', then 'IPv4', and finally 'IPv6'. A context menu is open over the 'IPv4' node, with the 'New Scope...' option highlighted and circled in green. The menu also includes 'Display Statistics...', 'New Multicast Scope...', 'Configure Failover...', 'Replicate Failover Scopes...', 'Define User Classes...', 'Define Vendor Classes...', 'Reconcile All Scopes...', 'Set Predefined Options...', 'View', 'Refresh', 'Properties', and 'Help'. The right pane shows an 'Actions' section with 'IPv4' selected and 'More Actions' available. A tooltip for 'Add a Scope' indicates it's used to define a range of IP addresses assigned to computers requesting a dynamic IP address.



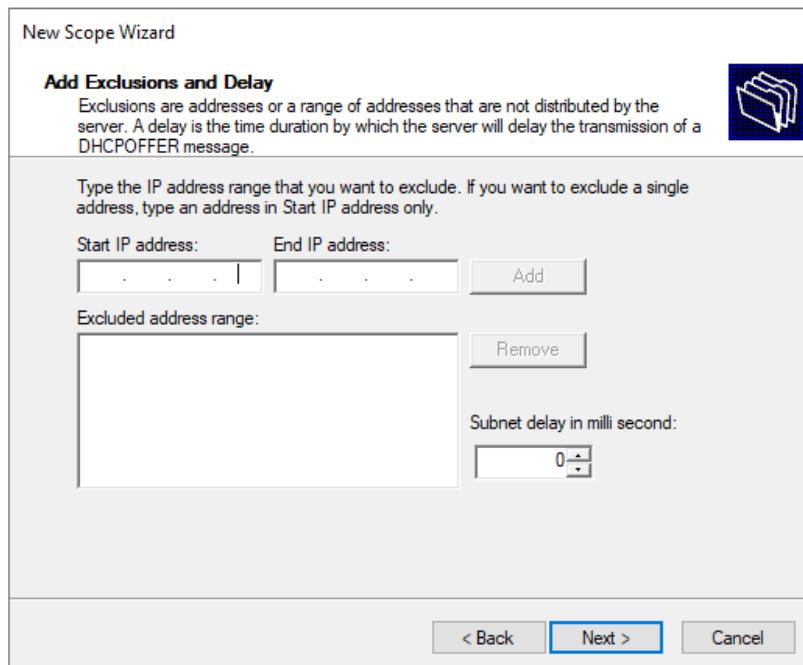
Seuraavaksi nimeä jotakin ja pieni kuvaus



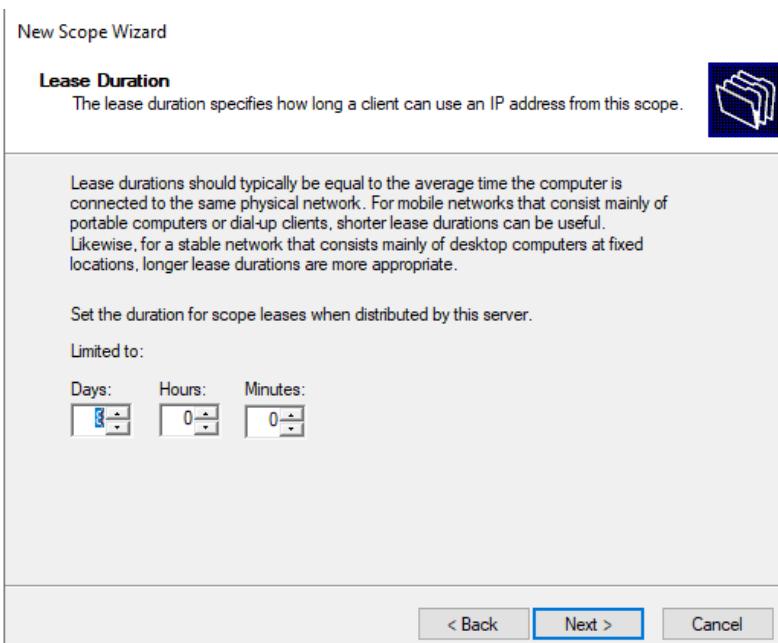
Kokeillaan asettaa n. mutta esim. Työasemat tulee saamaan jotakin 192.168.100.100 ja 192.168.100.199 joku IP-osite tuosta välistä



Tämä osuuus jää tyhjäksi, koska tämä on se alue josta esim. Ei haluta josta voidaan esim. Asettaa 192.168.100.10 ja 192.168.100.15 kielettyä aluetta & oletuksena tämä jää tyhjäksi



Oletus arvo 8pv



## New Scope Wizard

### Configure DHCP Options

You have to configure the most common DHCP options before clients can use the scope.



When clients obtain an address, they are given DHCP options such as the IP addresses of routers (default gateways), DNS servers, and WINS settings for that scope.

The settings you select here are for this scope and override settings configured in the Server Options folder for this server.

Do you want to configure the DHCP options for this scope now?

- Yes, I want to configure these options now.  
 No, I will configure these options later

< Back Next > Cancel

## New Scope Wizard

### Router (Default Gateway)

You can specify the routers, or default gateways, to be distributed by this scope.



To add an IP address for a router used by clients, enter the address below.

IP address:

192 . 168 . 100 . 1	<input type="button" value="Add"/>
	<input type="button" value="Remove"/>
	<input type="button" value="Up"/>
	<input type="button" value="Down"/>

< Back Next > Cancel

### Router (Default Gateway)

You can specify the routers, or default gateways, to be distributed by this scope.

To add an IP address for a router used by clients, enter the address below.

IP address:

<input type="text" value="192.168.100.1"/>	<input type="button" value="Add"/>
	<input type="button" value="Remove"/>
	<input type="button" value="Up"/>
	<input type="button" value="Down"/>

Tämä on se DNS palvelin siksi 192.168.100.2

New Scope Wizard

**Domain Name and DNS Servers**

The Domain Name System (DNS) maps and translates domain names used by clients on your network.

You can specify the parent domain you want the client computers on your network to use for DNS name resolution.

Parent domain:

To configure scope clients to use DNS servers on your network, enter the IP addresses for those servers.

Server name:  IP address:

Add Remove Up Down

Resolve

< Back Next > Cancel

Tämä voi jättää tyhjäksi

New Scope Wizard

**WINS Servers**

Computers running Windows can use WINS servers to convert NetBIOS computer names to IP addresses.

Entering server IP addresses here enables Windows clients to query WINS before they use broadcasts to register and resolve NetBIOS names.

Server name:  IP address:

Add Remove Up Down

Resolve

To change this behavior for Windows DHCP clients modify option 046, WINS/NBT Node Type, in Scope Options.

< Back Next > Cancel

Aktivoidaan tämä

New Scope Wizard

**Activate Scope**

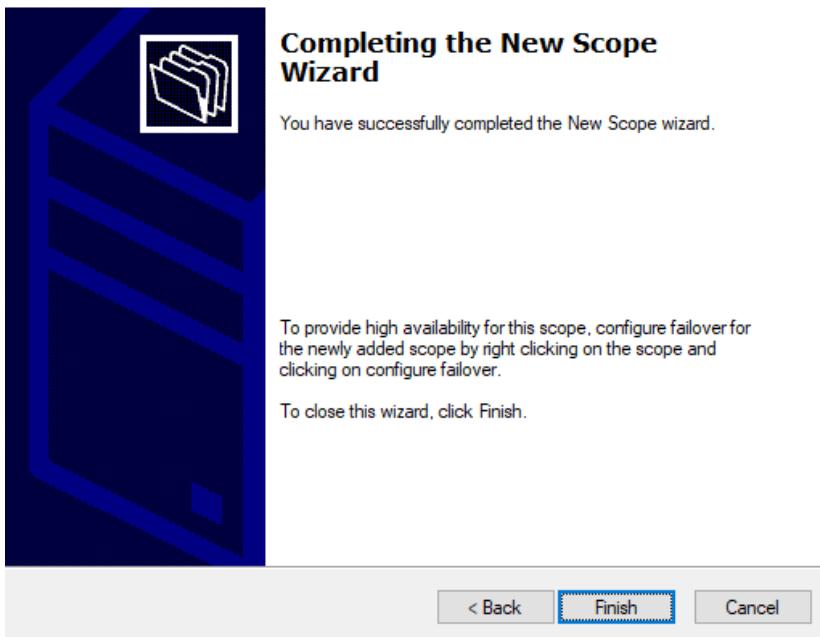
Clients can obtain address leases only if a scope is activated.

Do you want to activate this scope now?

Yes, I want to activate this scope now!

No, I will activate this scope later

## New Scope Wizard



Sitten tehdä tarkistuksena tämän alta että kaikki on ok - eli näiden arvot pitäisi näkyä

Työasemat pitäisi saada sitten näiden osoitteenvaihto mukaan palvelimeen yhteydessä

The screenshot shows the Windows Server DHCP Manager. On the left, the navigation pane shows a tree structure: 'DHCP' > 'win-9md2ioq8qrc.yritysxc.local' > 'IPv4' > 'Scope [192.168.100.0] Wks'. Under this scope, 'Scope Options' is selected. On the right, a table displays the configured options:

Option Name	Vendor	Value	Policy Name
003 Router	Standard	192.168.100.1	None
006 DNS Servers	Standard	192.162.100.2	None
015 DNS Domain Name	Standard	YritysXC.local	None

JATKUU TOISESSA SIVUSTOSSA (CONTINUE..) EI TURHAN LIIAN OHJE - PITKÄ SCROLLAUS