

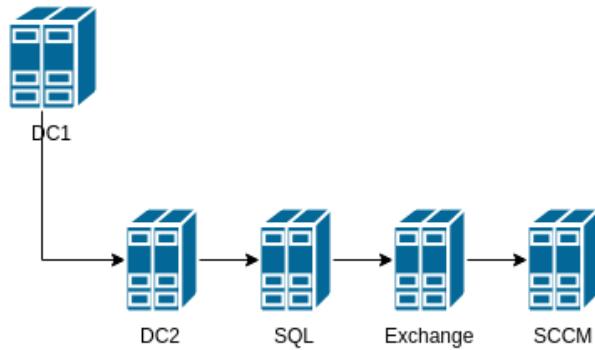
Windows Server: Domeincontroller 1

Jens Du Four

2018 - 2019

1 Introductie

U bent IT-Consultant en krijgt de vraag om een voorstel te maken en te demonstreren van een Windowsomgeving. Deze omgeving moet bestaan uit het volgende . De cliënt wenst een redundante oplossing voor zijn servers. Dit vooral op de domeincontrollers. De cliënt wenst ook dat er een mailomgeving geïnstalleerd wordt en een omgeving die toelaat om op een efficiënte manier Windows toestellen te installeren en te deployen.



2 Server Requirements

1. DC1
 - (a) RAM: 2048 MB
 - (b) HDD: 50 GB
 - (c) Netwerkadapters: NAT en Internal Network (jenduf.gent)
 - i. NAT
 - i. IP: 192.168.1.1
 - ii. SN: 255.255.255.0
 - (d) OS Version: Windows Server 2016

2. DC2

- (a) RAM: 2048 MB
- (b) HDD: 50 GB
- (c) Netwerkadapters: Internal Network (jenduf.gent)
 - i. IP: 192.168.1.2
 - ii. SN: 255.255.255.0
 - iii. DG: 192.168.1.1
- (d) OS Version: Windows Server 2016

3. SQL Server

- (a) RAM: 2048 MB
- (b) HDD: 50 GB
- (c) Netwerkadapters: Internal Network (jenduf.gent)
 - i. IP: 192.168.1.3
 - ii. SN: 255.255.255.0
 - iii. DG: 192.168.1.1
- (d) OS Version: Windows Server 2016
- (e) SQL Version: SQL Server 2013-2016

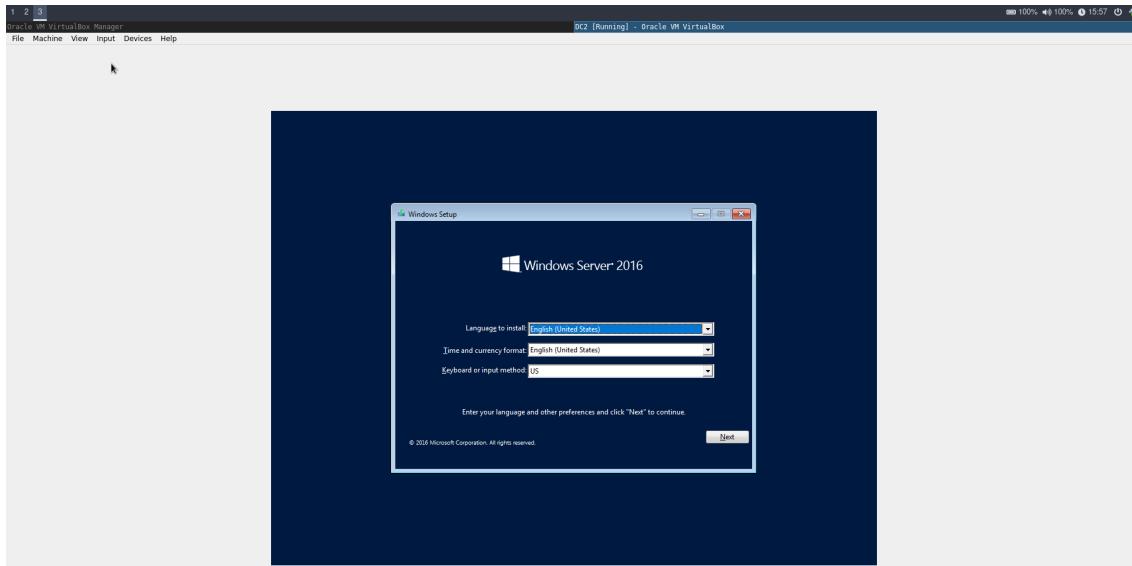
4. Exchange Server

- (a) RAM: 8096 MB
- (b) HDD: 100 GB
- (c) Netwerkadapters: Internal Network (jenduf.gent)
 - i. IP: 192.168.1.4
 - ii. SN: 255.255.255.0
 - iii. DG: 192.168.1.1
- (d) OS Version: Windows Server 2016
- (e) Exchange Version: Exchange Server 2013-2016

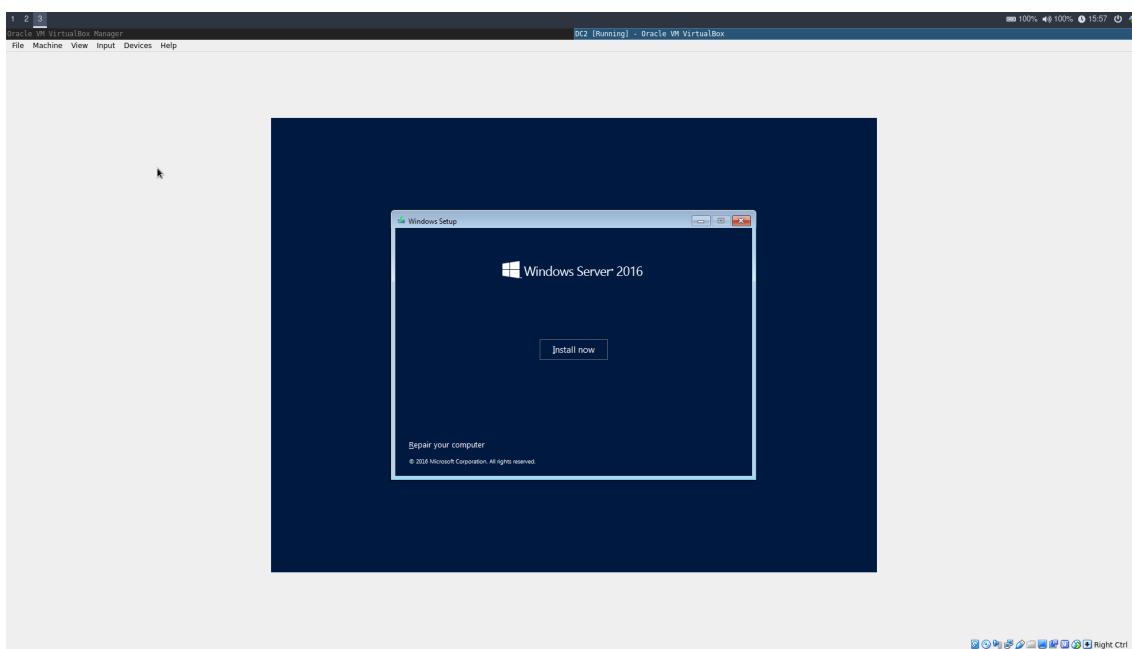
5. SCCM Server

- (a) RAM: 8089 MB
- (b) HDD: 100 GB
- (c) Netwerkadapters: Internal Network (jenduf.gent)
 - i. IP: 192.168.1.5
 - ii. SN: 255.255.255.0
 - iii. DG: 192.168.1.1
- (d) OS Version: Windows Server 2016
- (e) OS Version: Windows Deployment Server 2012

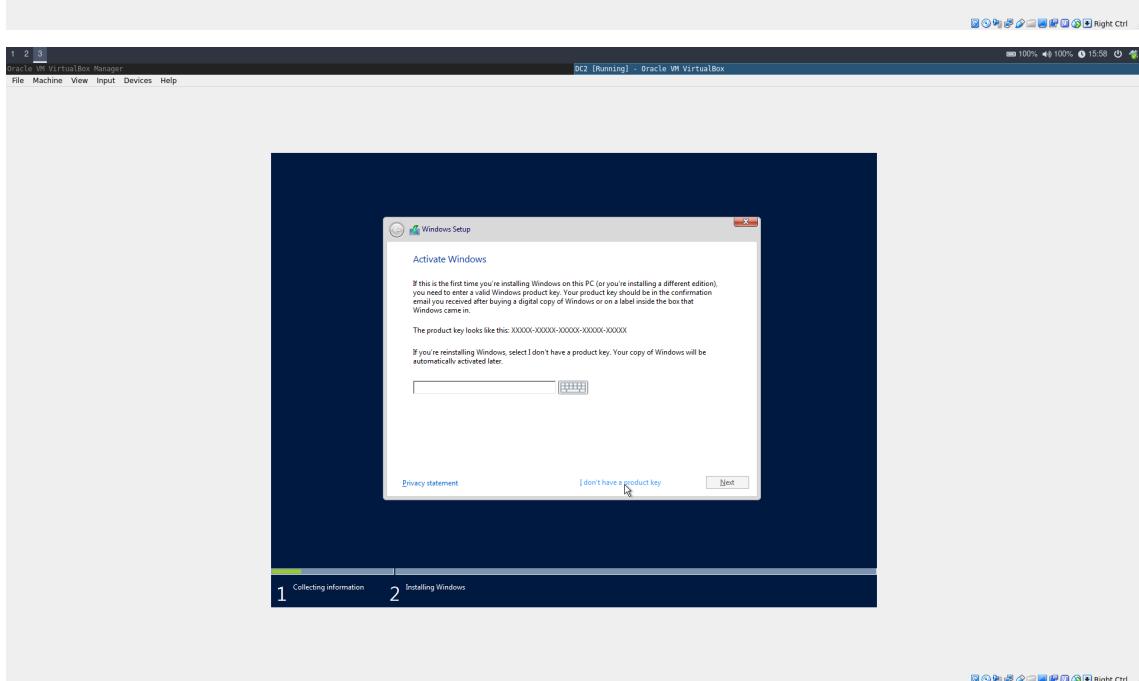
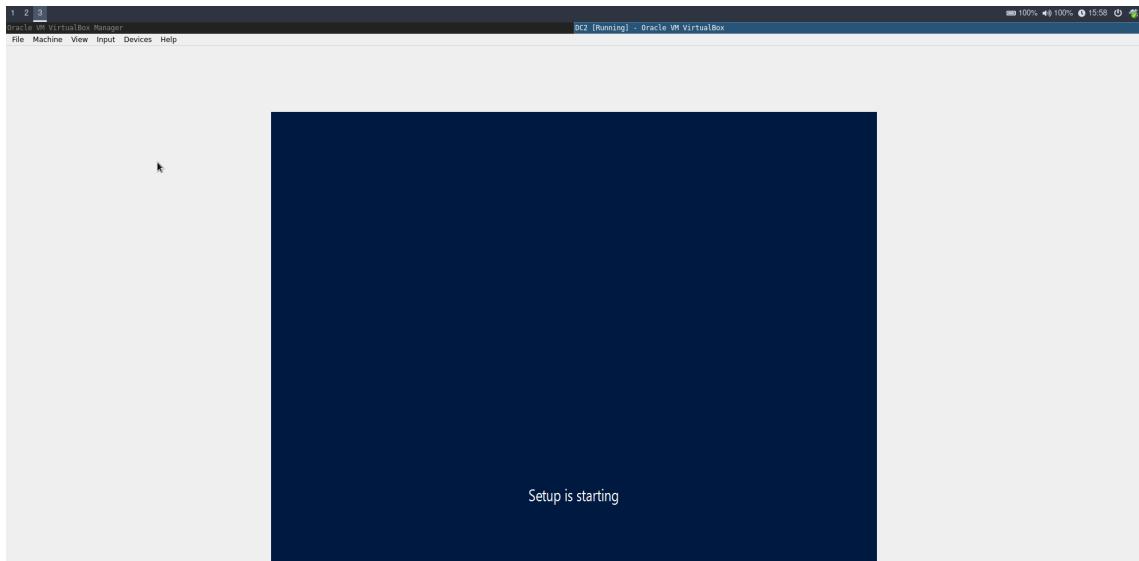
3 Windows Server Installatie



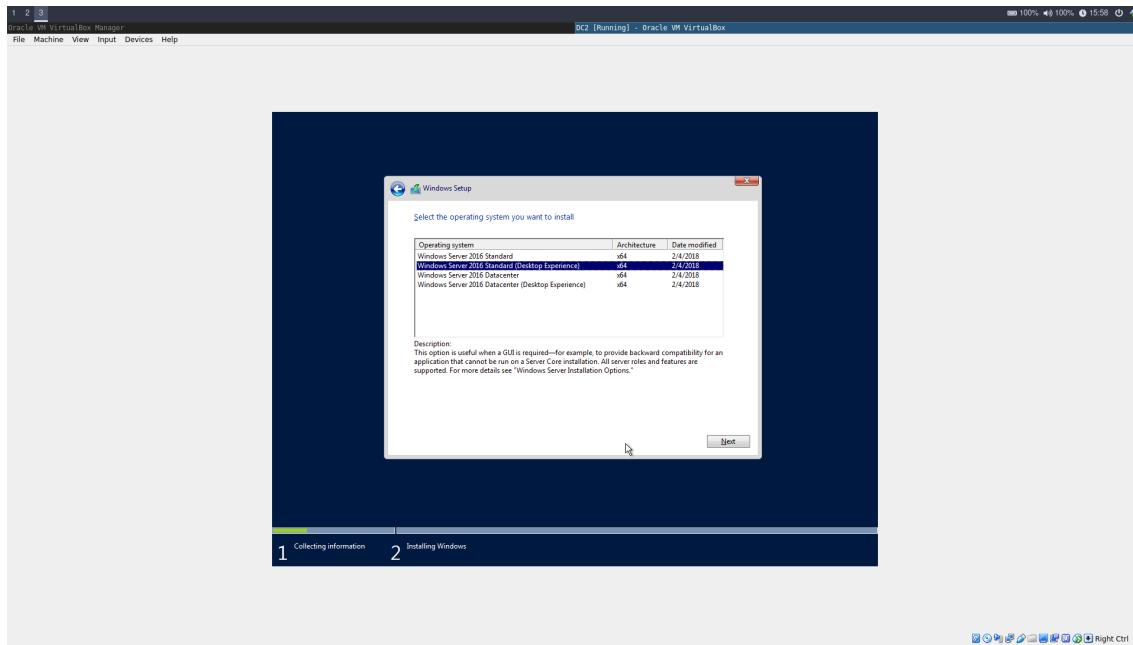
Selecteer de gewenste taalinstellingen.



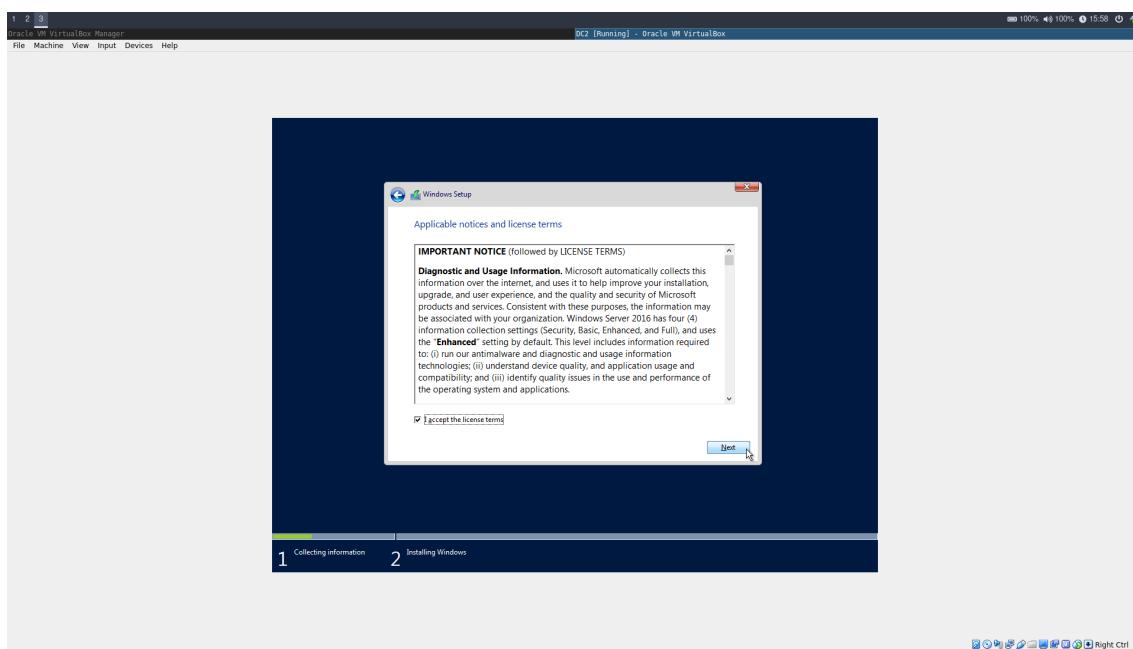
Start de installatie.



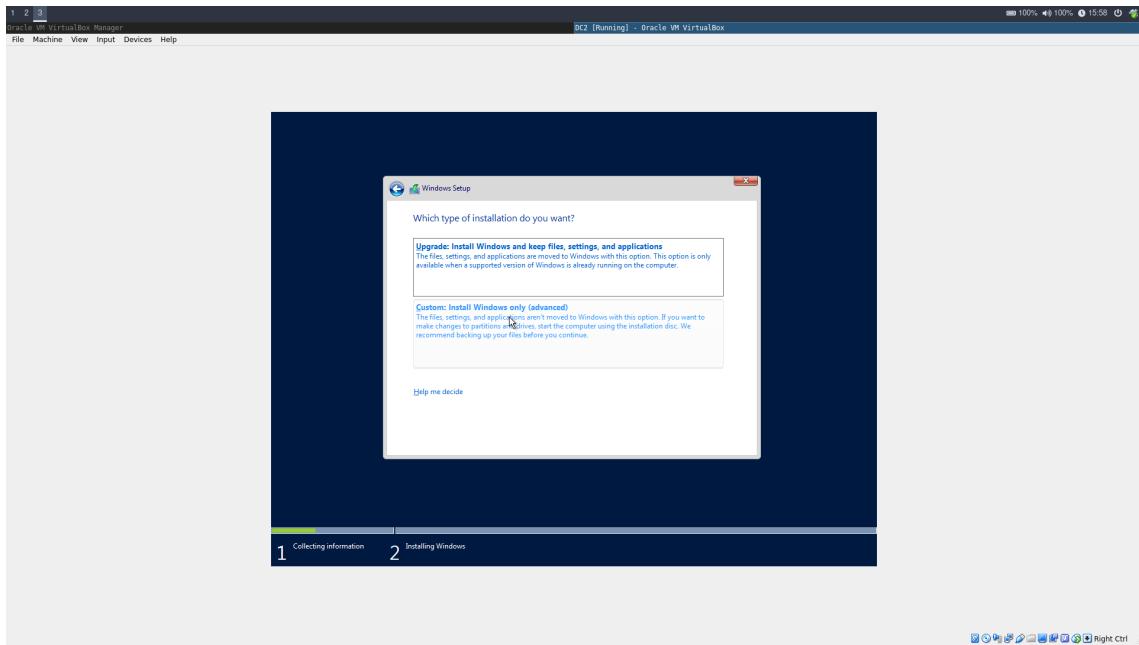
Selecteer "I don't have a product key".



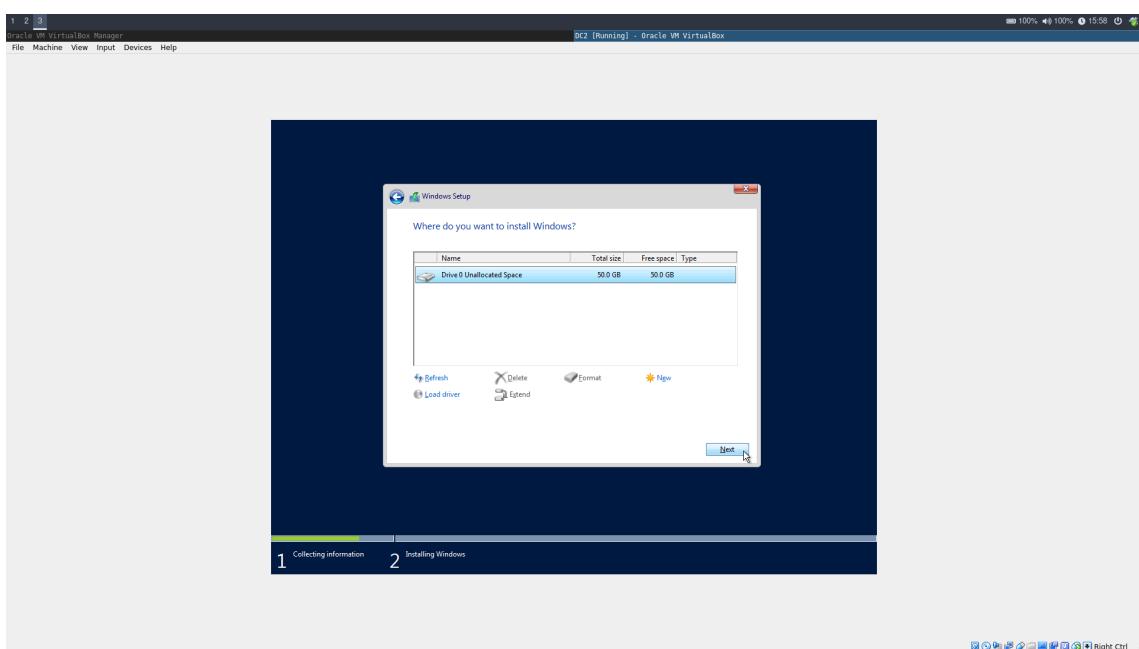
Selecteer "Windows Server 2016 Standard (Desktop Experience)".



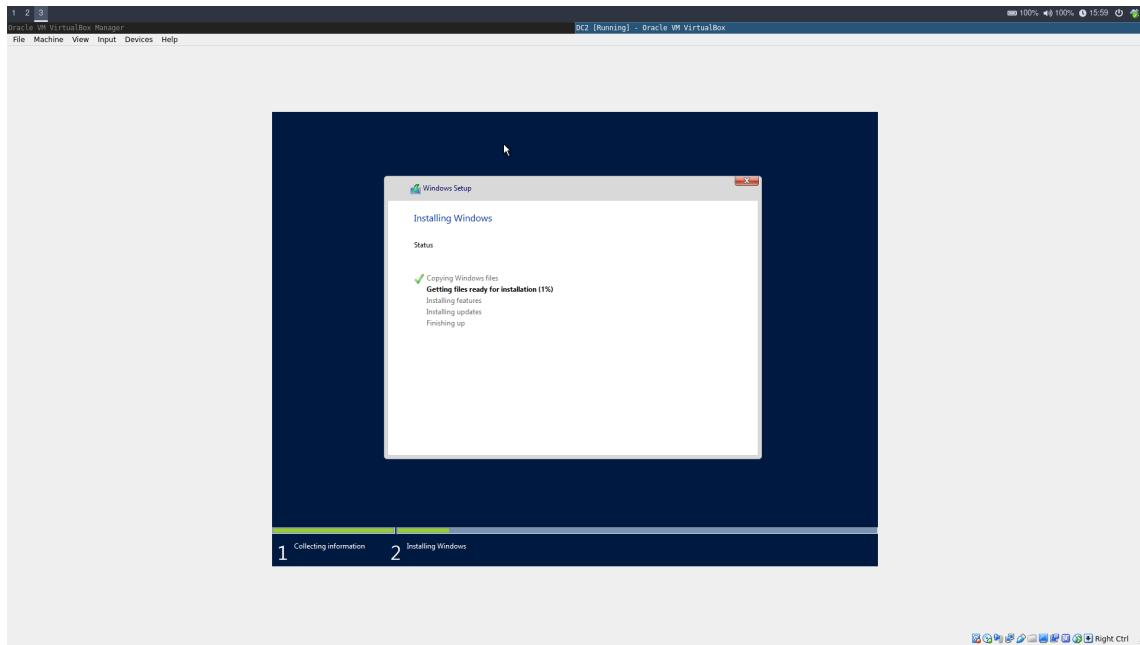
Ga akkoord met de gebruiksvoorwaarden.



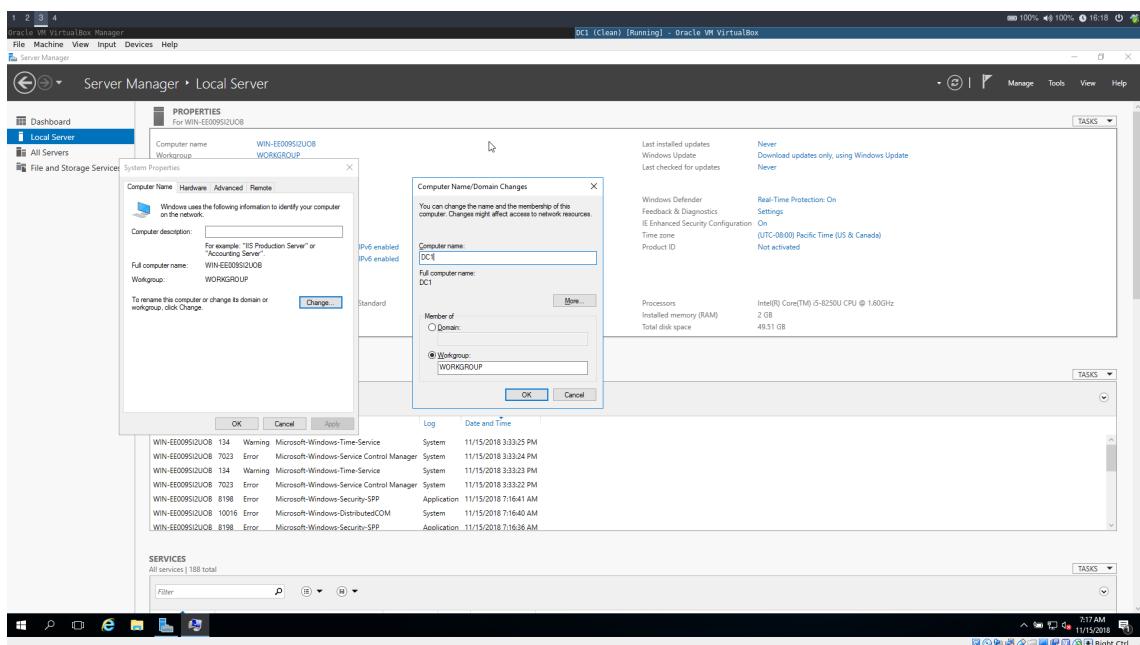
Selecteer "Costum: Install Windows only (Advanced)".



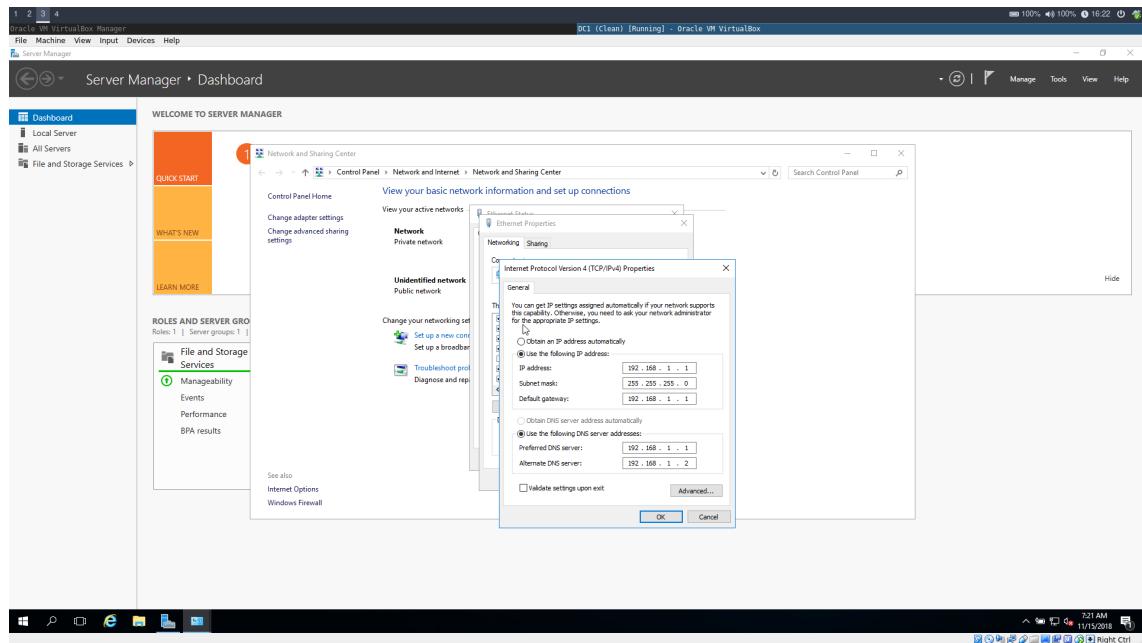
Ga verder.



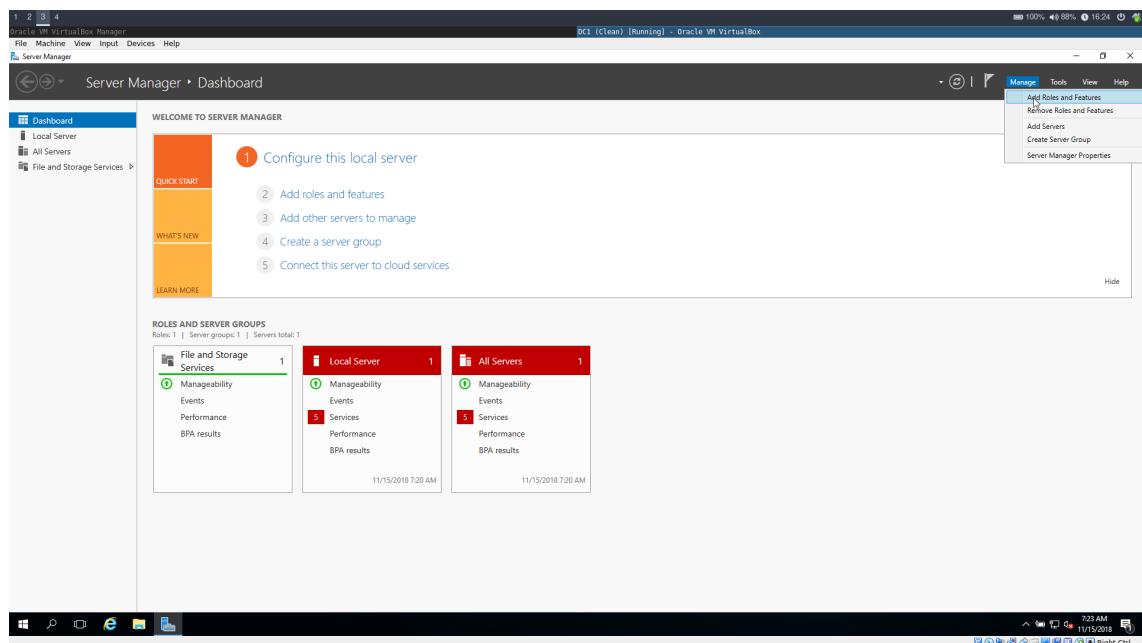
3.1 Server Hernoemen

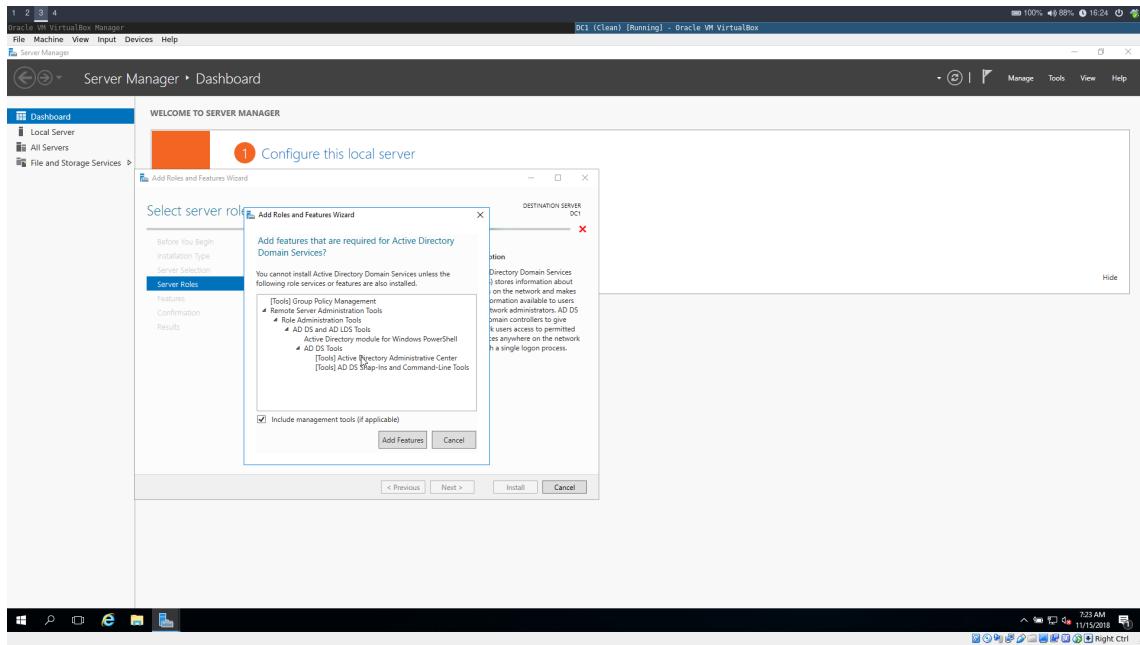


3.2 IP Instellingen

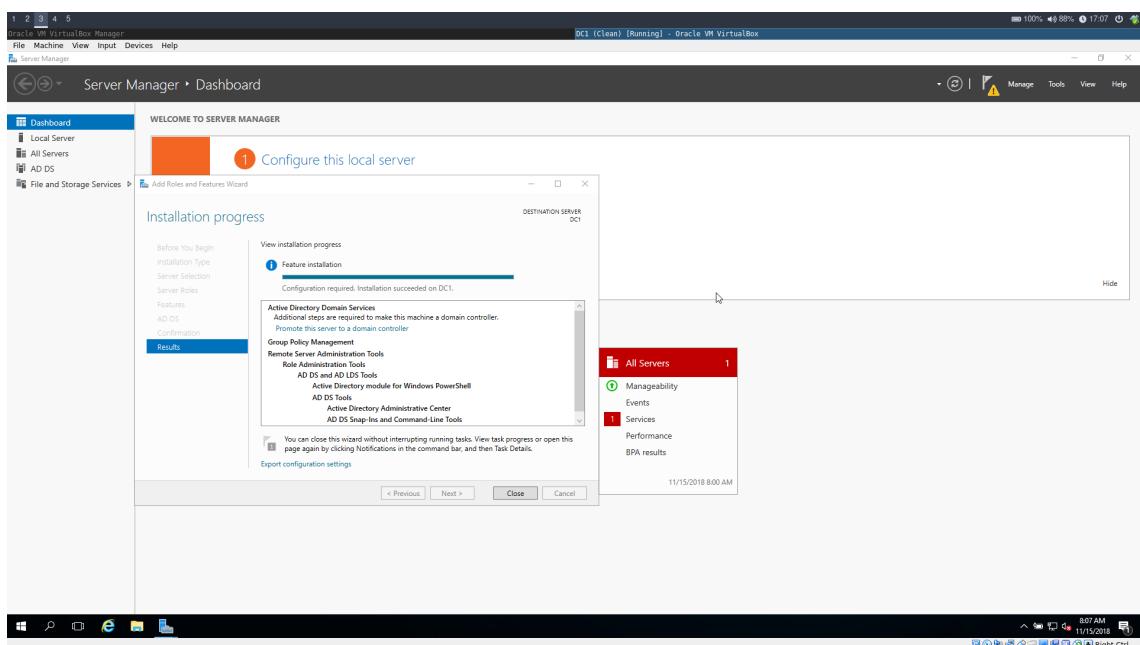


4 Installatie ADDS

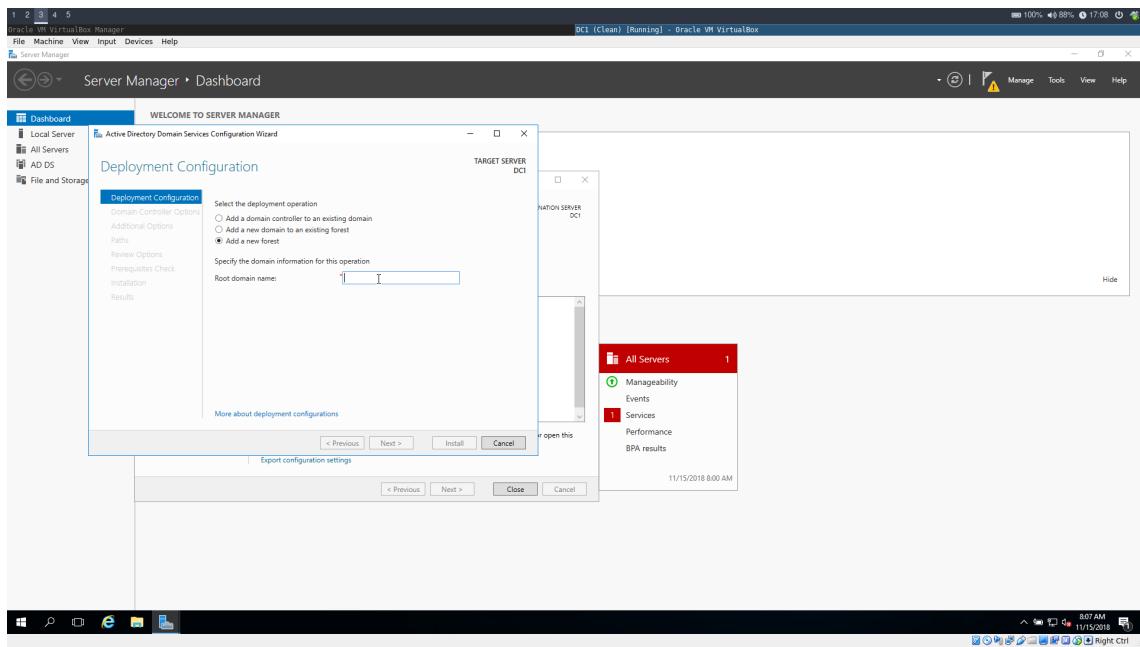




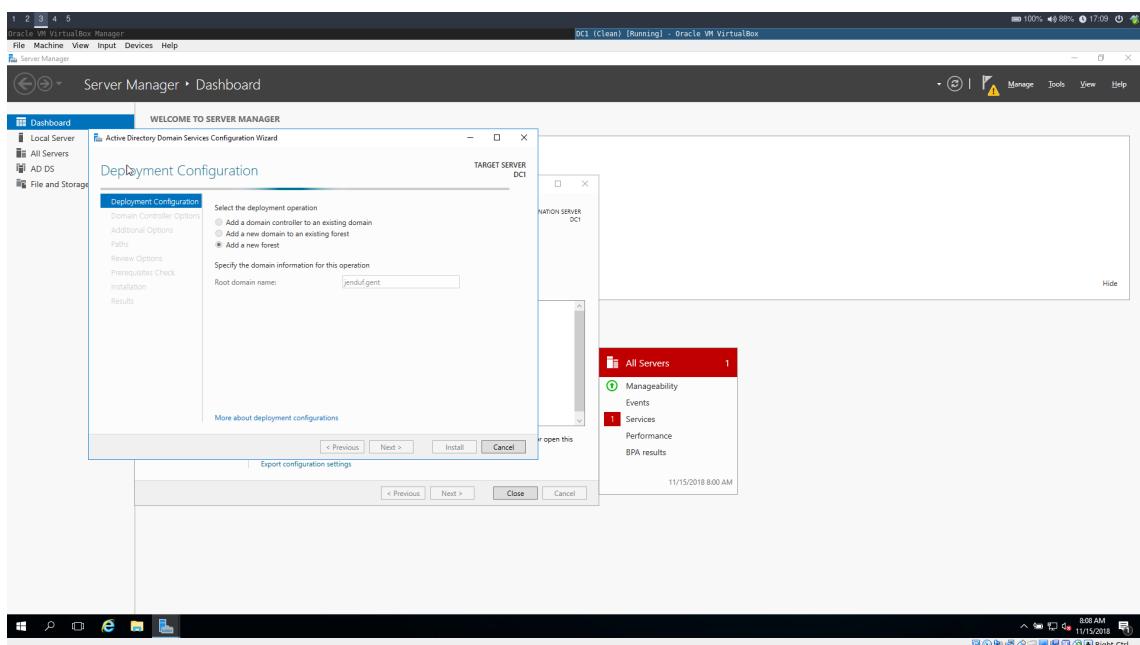
Selecteer Active Directory Domain Service.



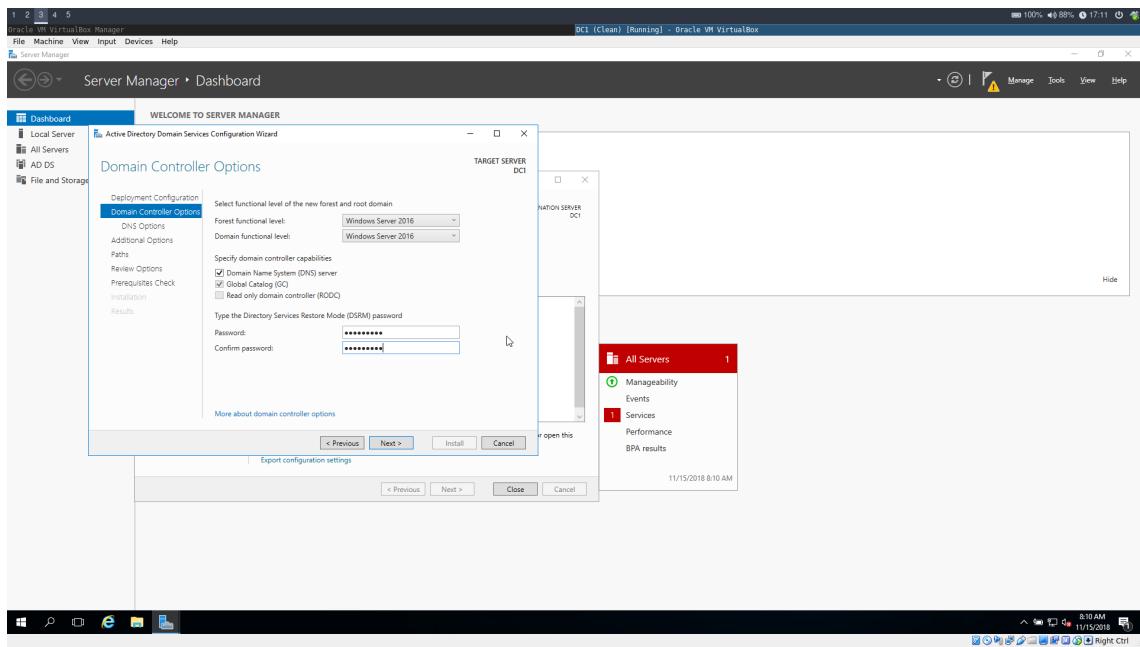
Volg de installatiewizard.



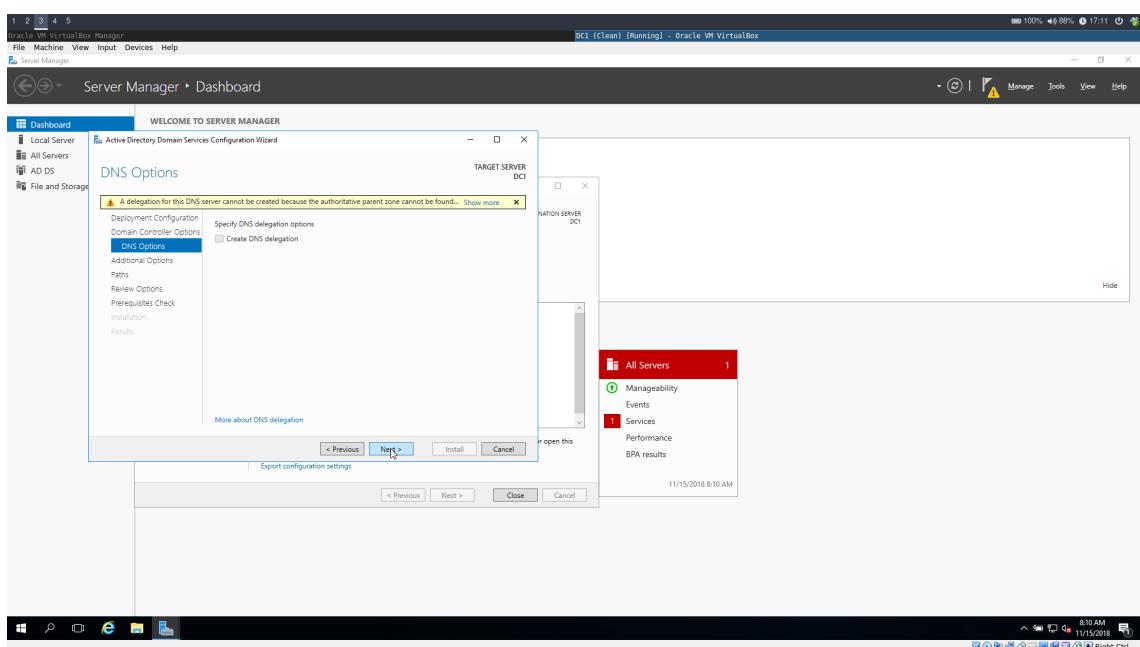
Selecteer het aanmaken van een nieuw forest.



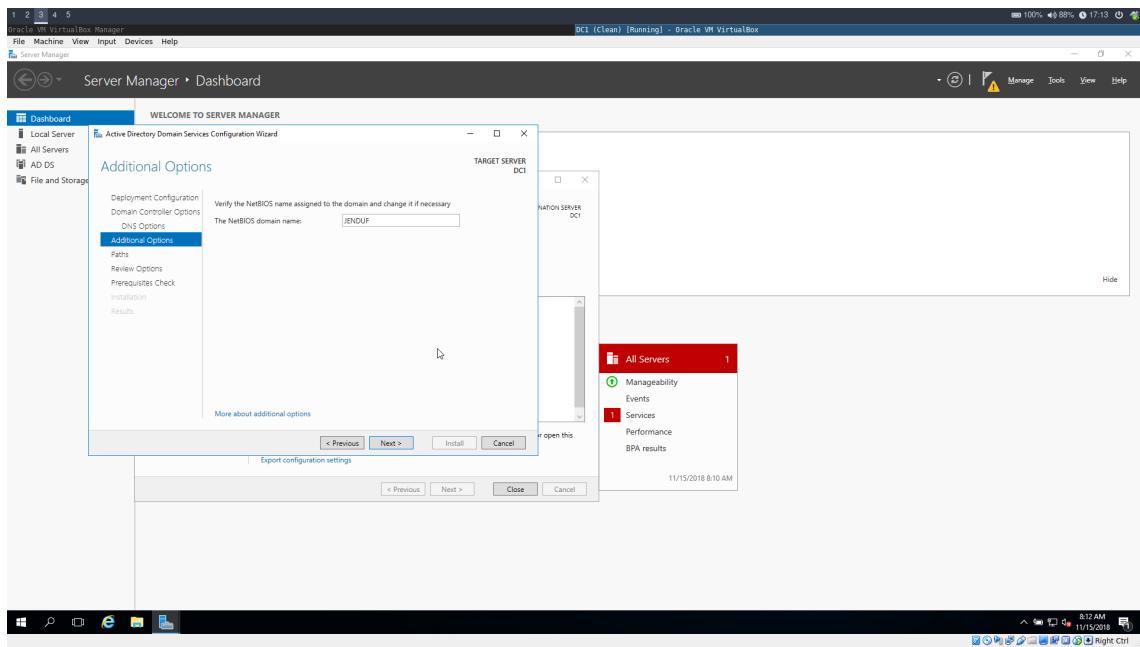
Kies als domeinnaam "jenduf.gent"



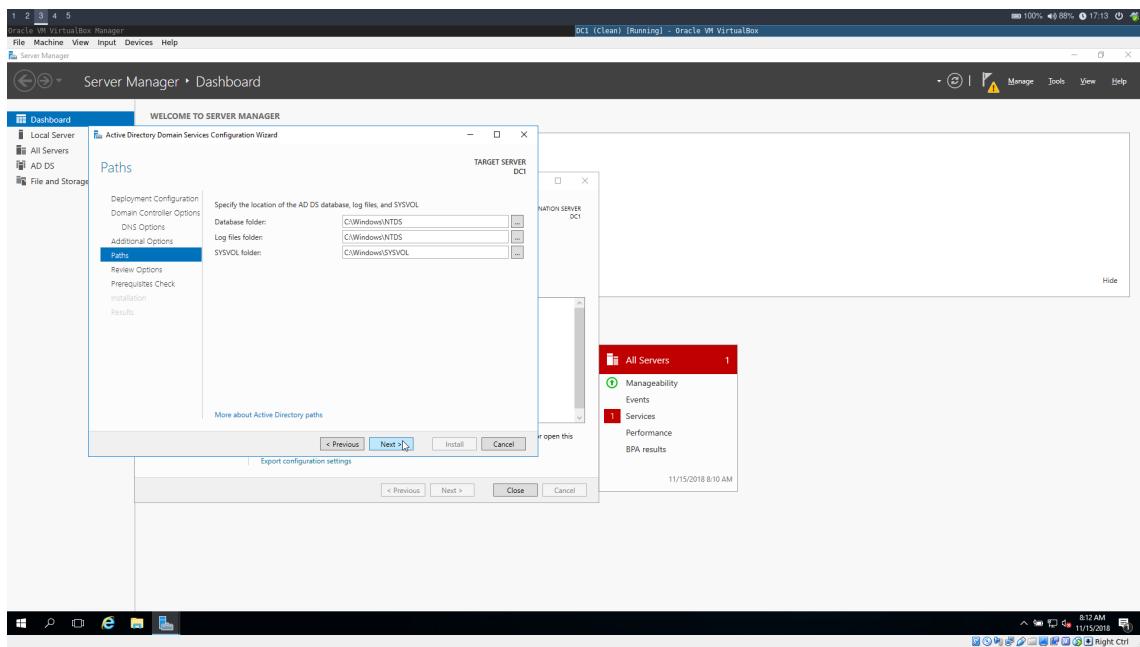
Selecteer functieniveau Windows Server 2016 en kies paswoord Admin2018

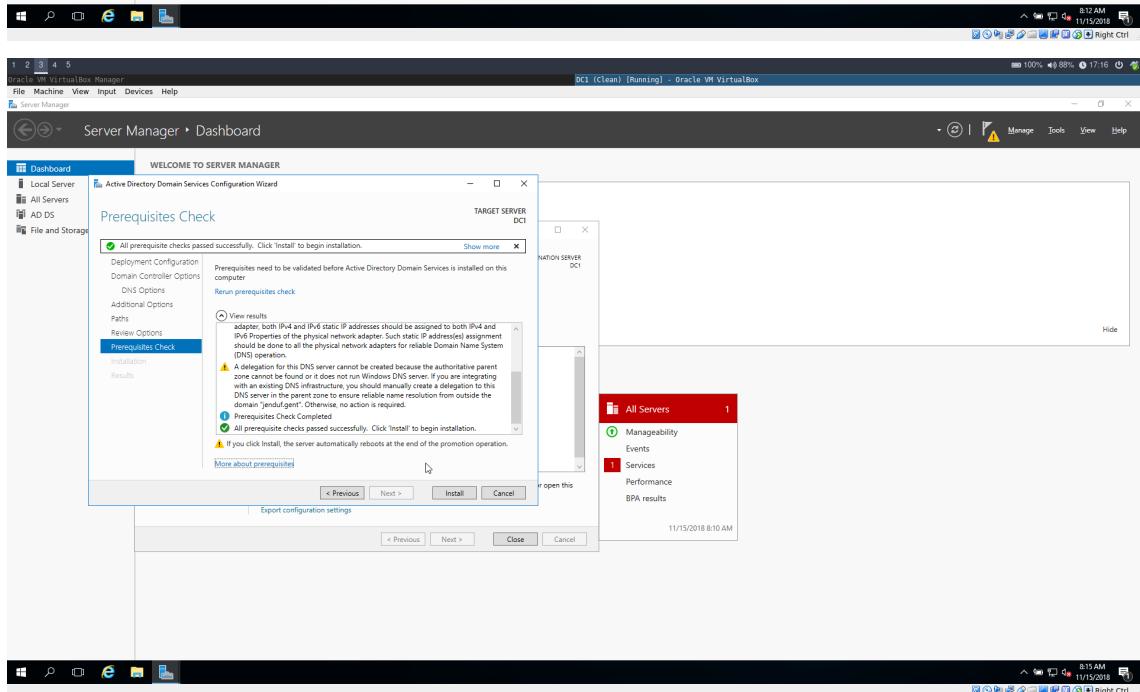
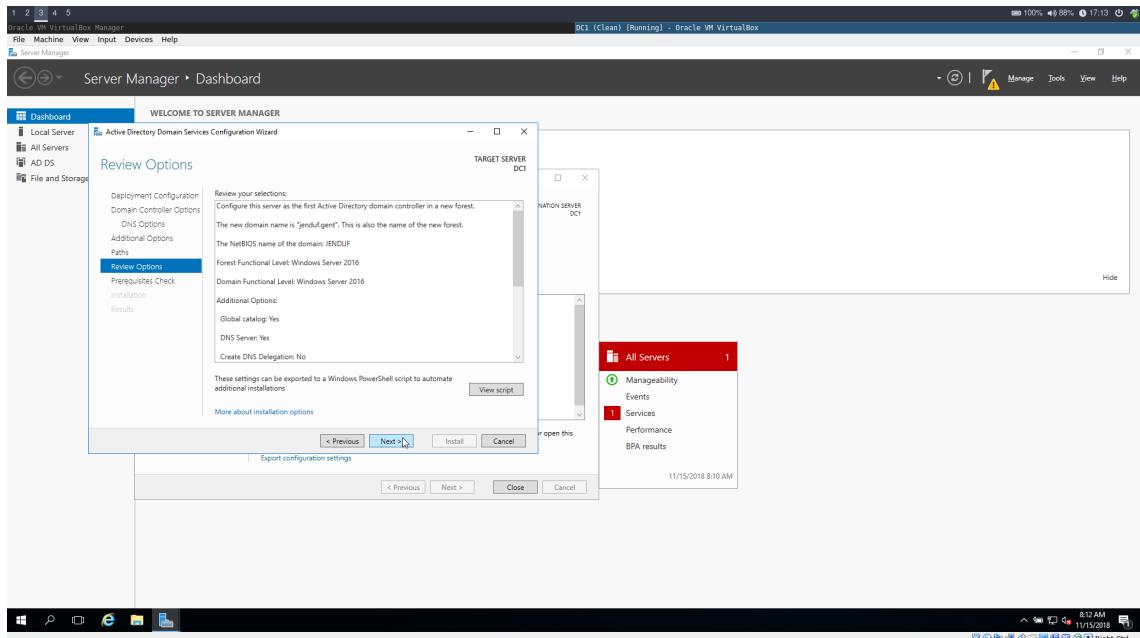


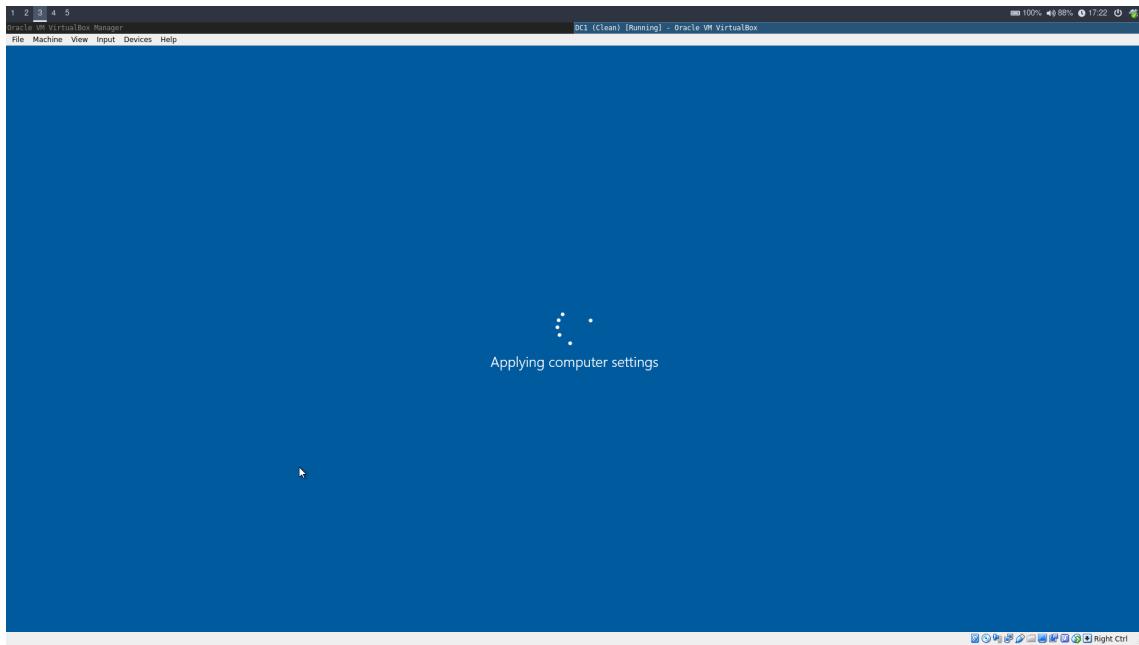
Volg de configuratiewizard verder.



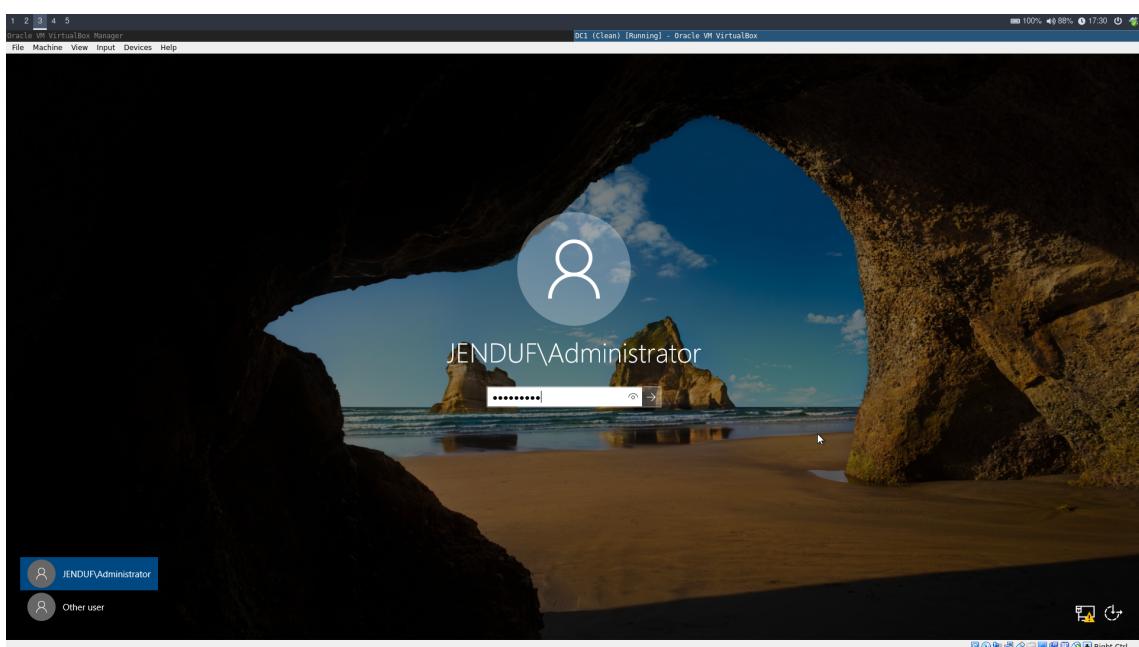
Stel "JENDUF" in als NetBIOS domeinnaam.



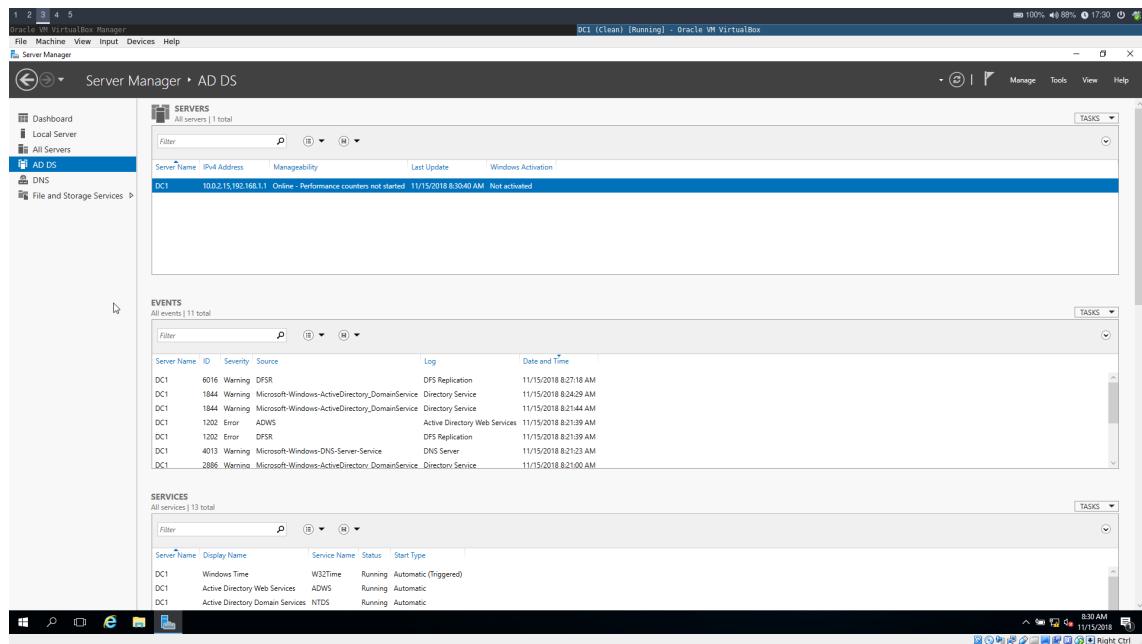




Na het heropstarten is de ADDS geinstalleerd en geconfigureerd.

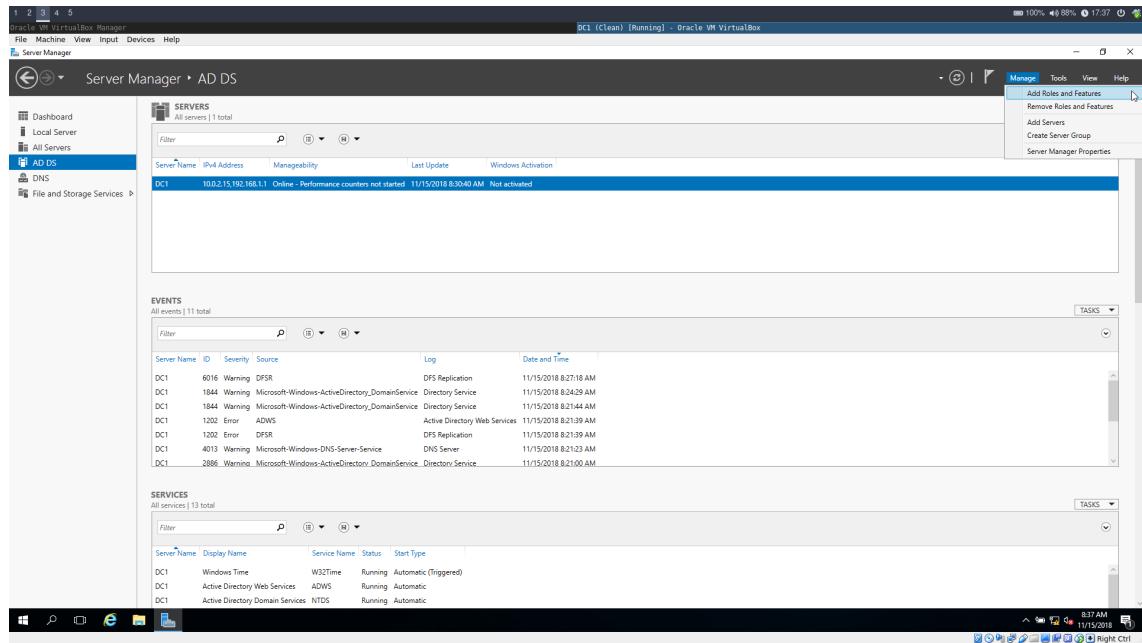


Meld aan met het paswoord Admin2018.

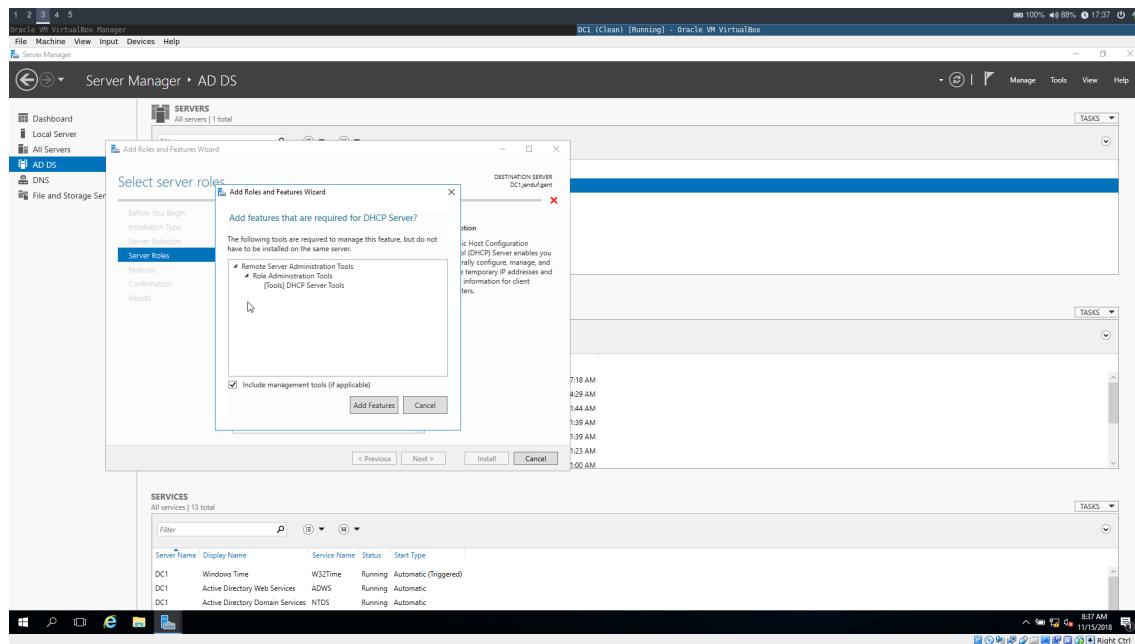


De ADDS is werkend te zien.

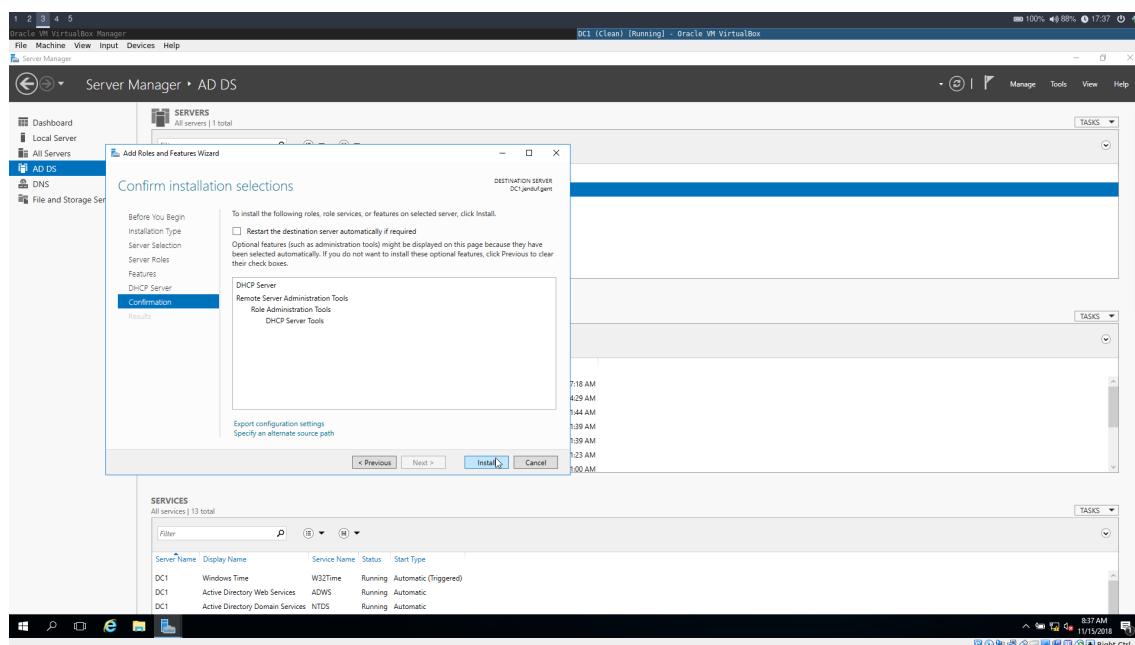
5 Configuratie DHCP



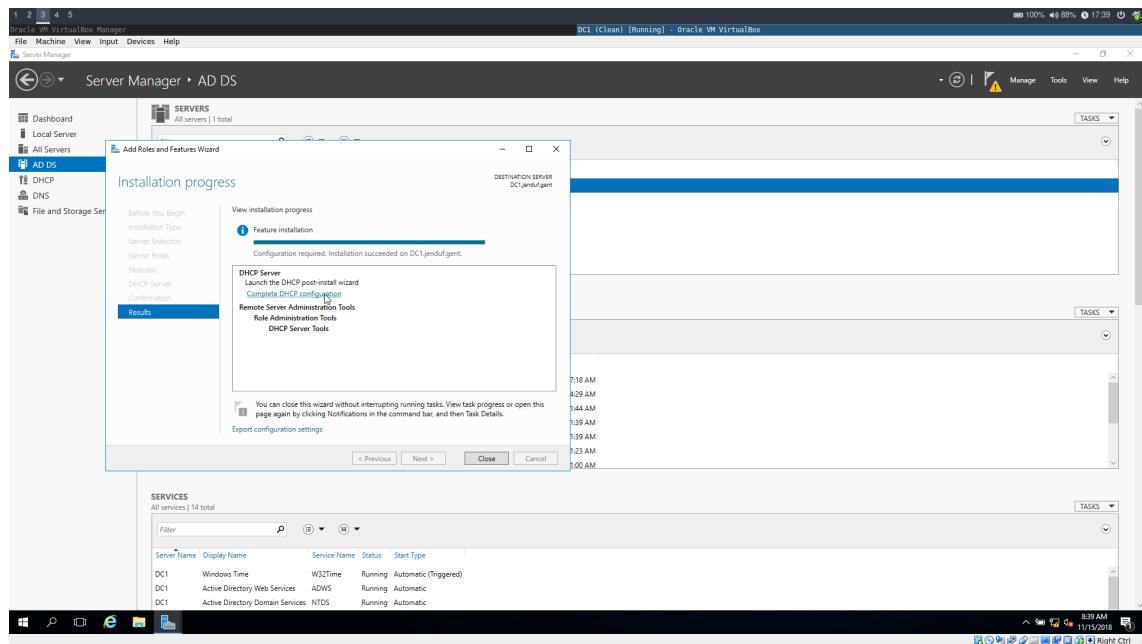
Voeg een nieuwe rol toe.



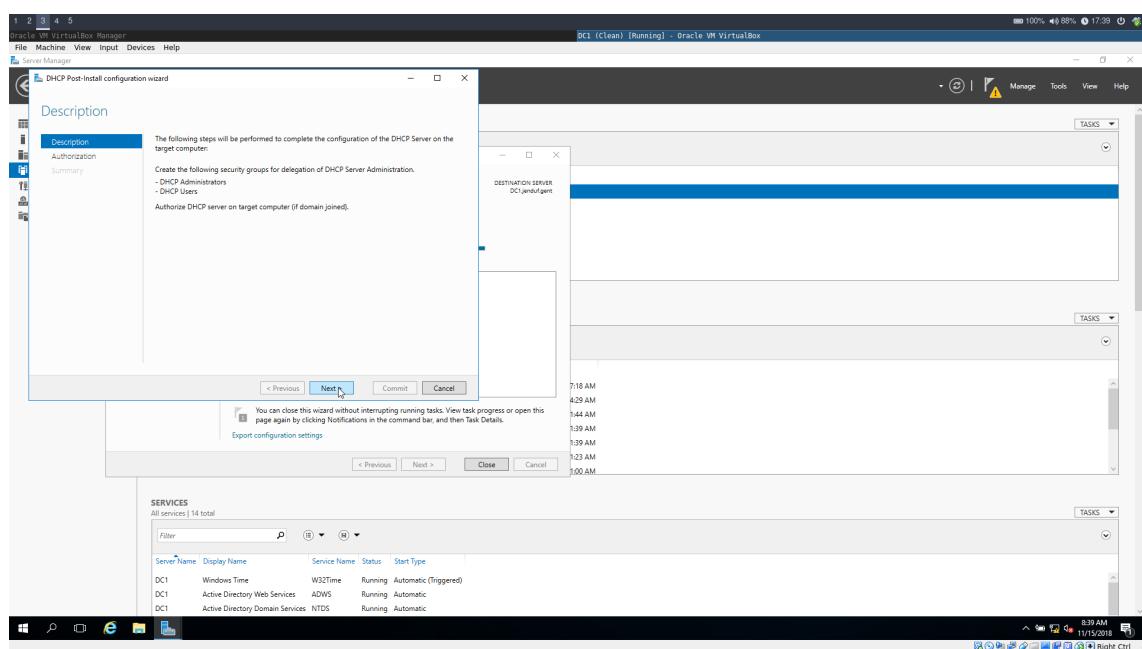
Voeg de DHCP Server toe

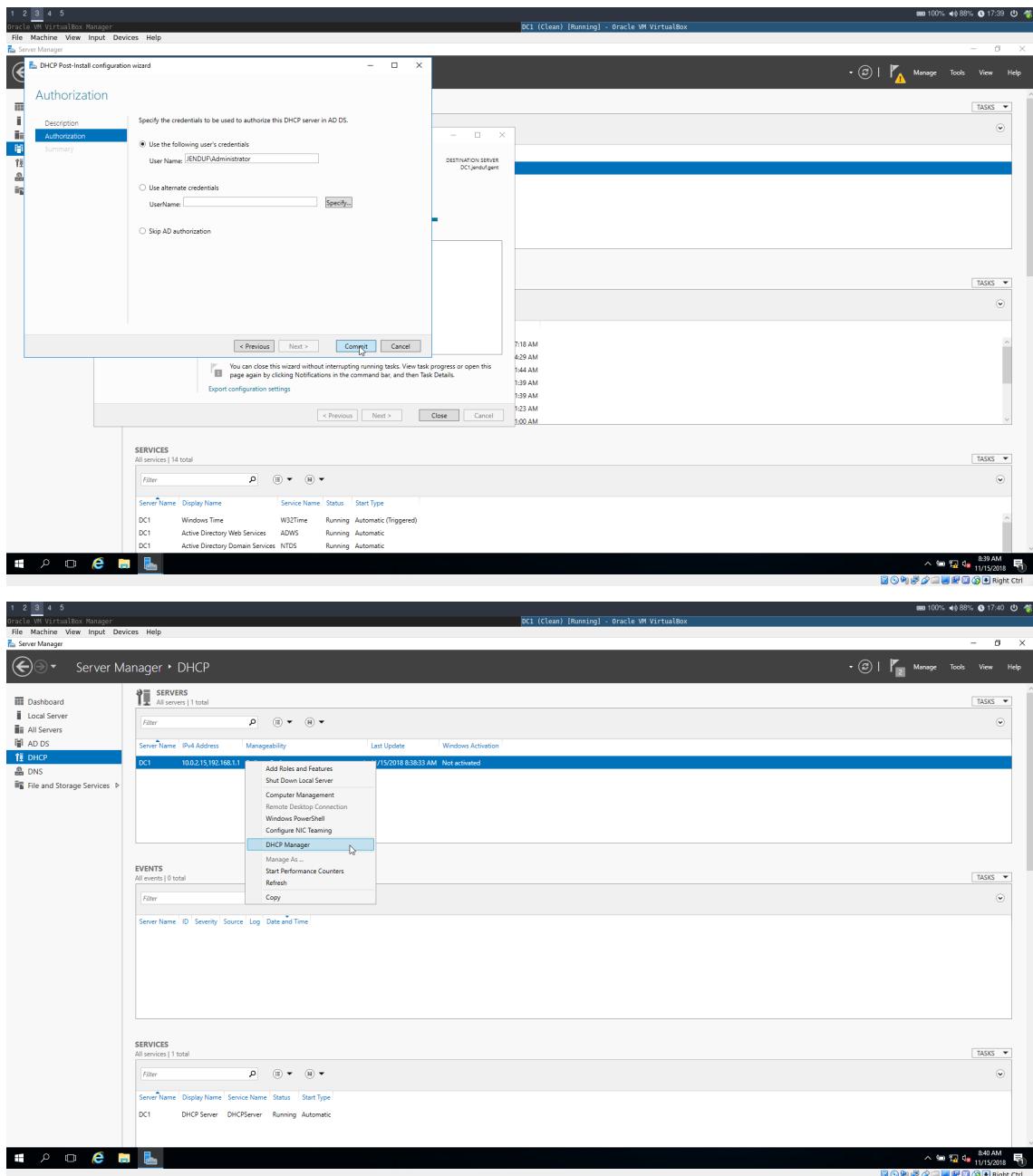


Volg de installatiewizard.

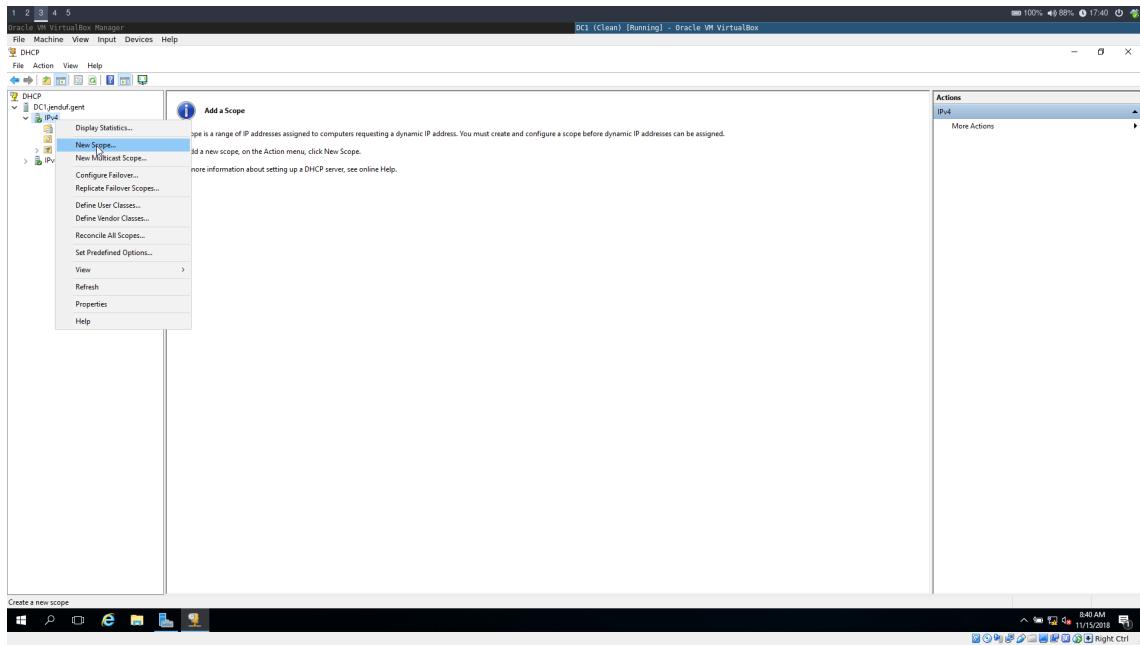


Klik door naar de configuratiewizard.

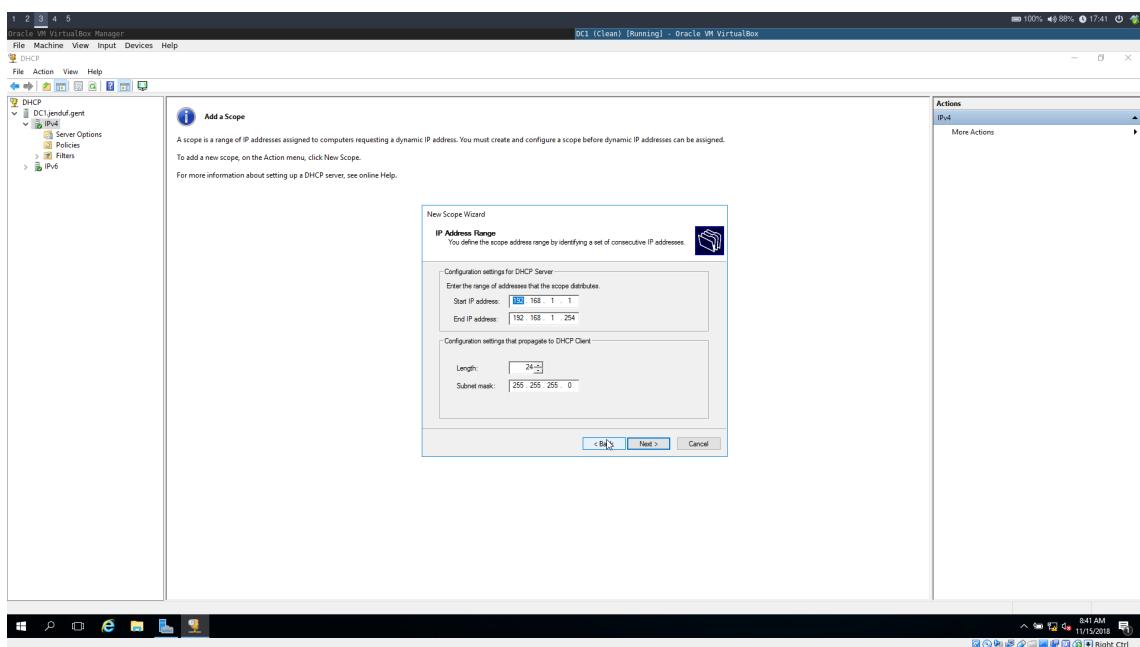




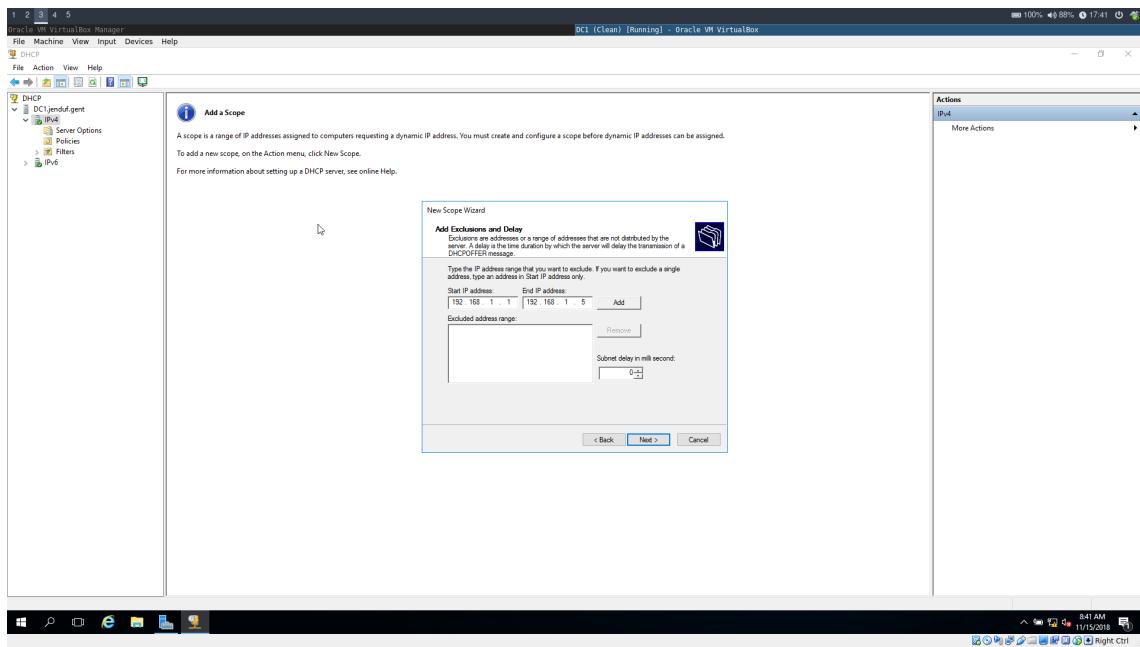
Open de DHCP Manager



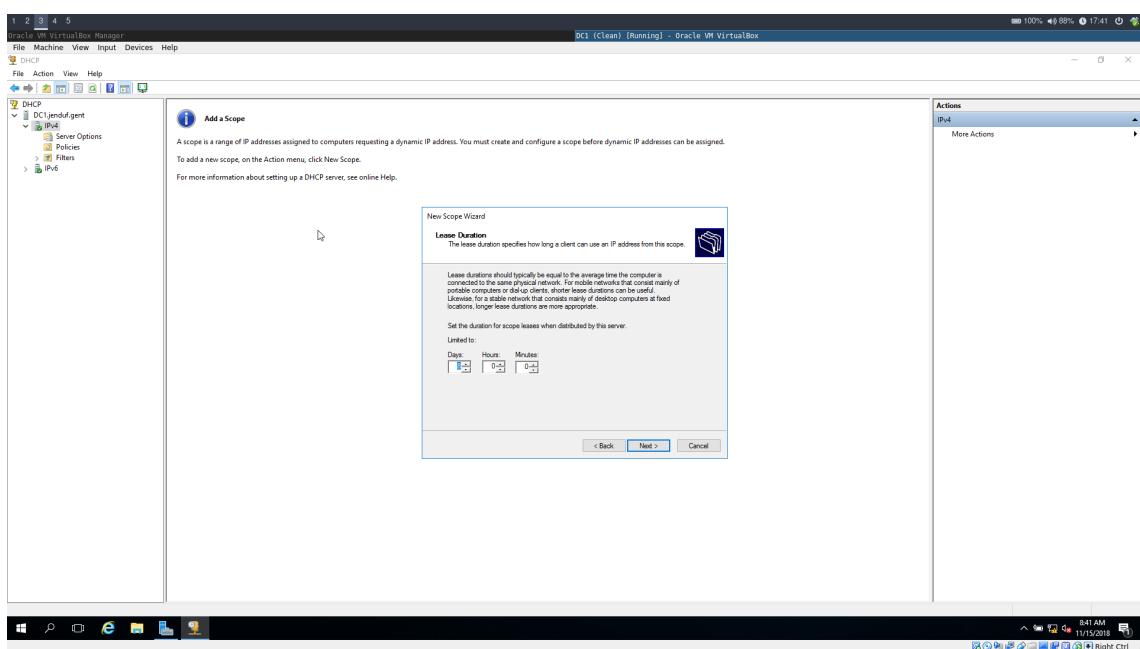
Voeg een nieuwe scope toe.



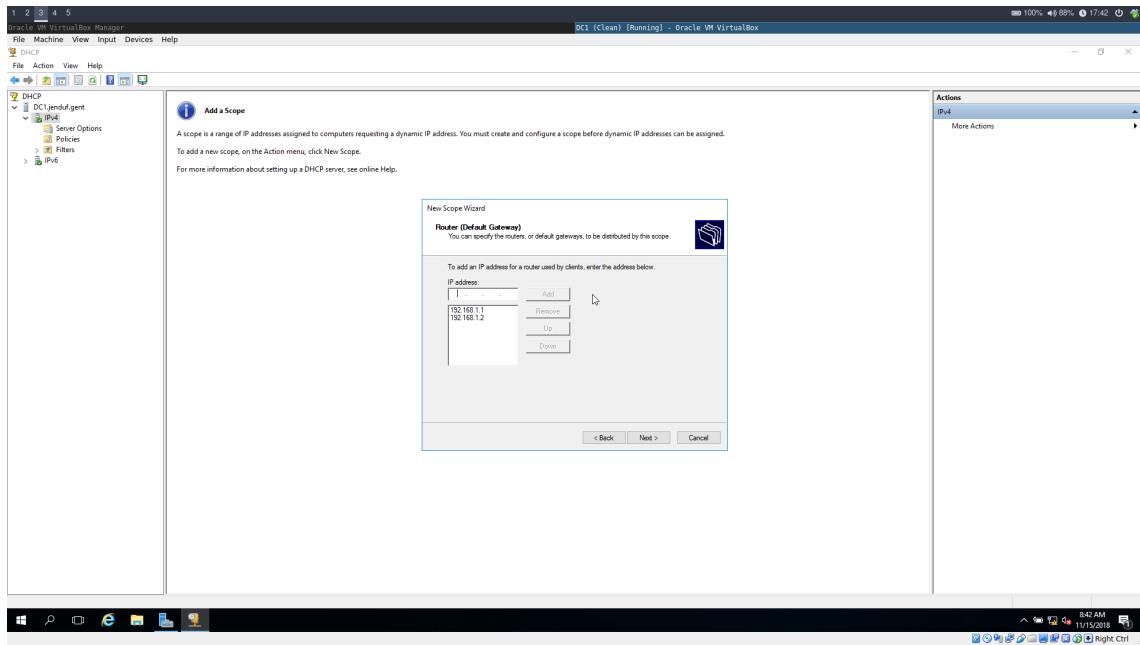
Geef het addressenbereik in.



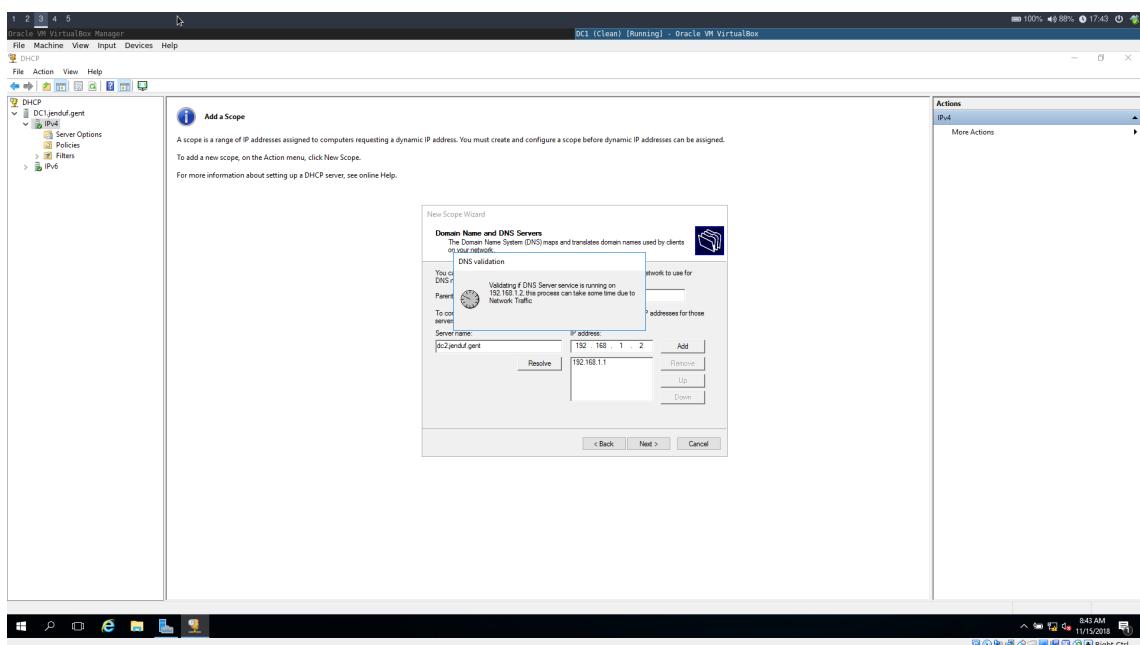
Geef de uitgesloten adressen in.



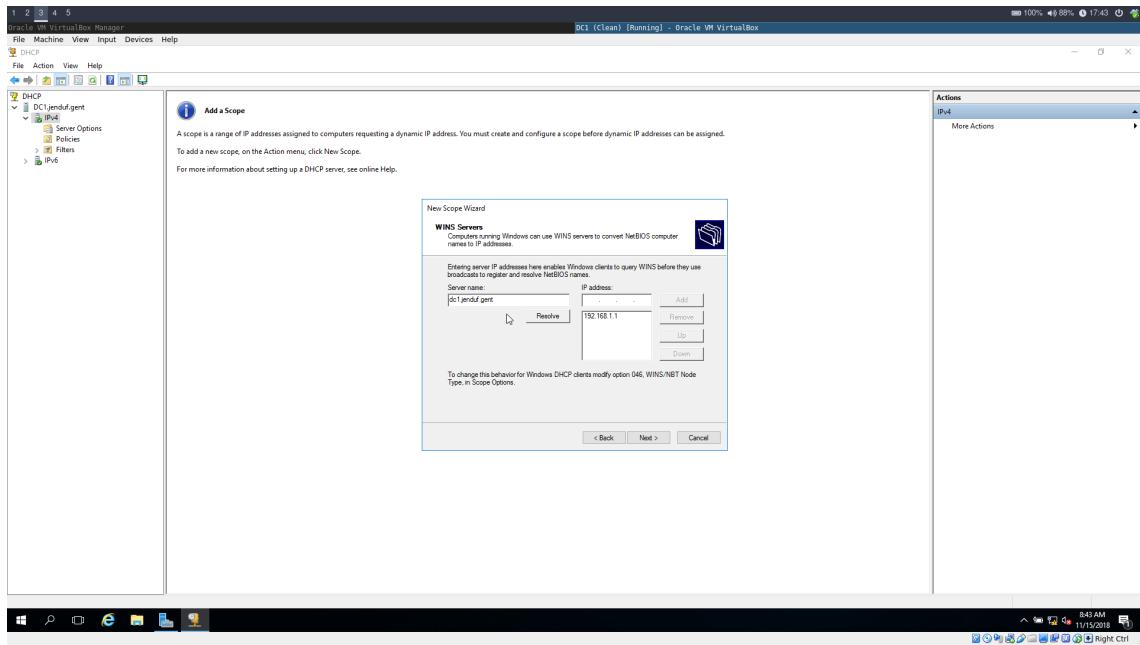
Geef de levensduur in.



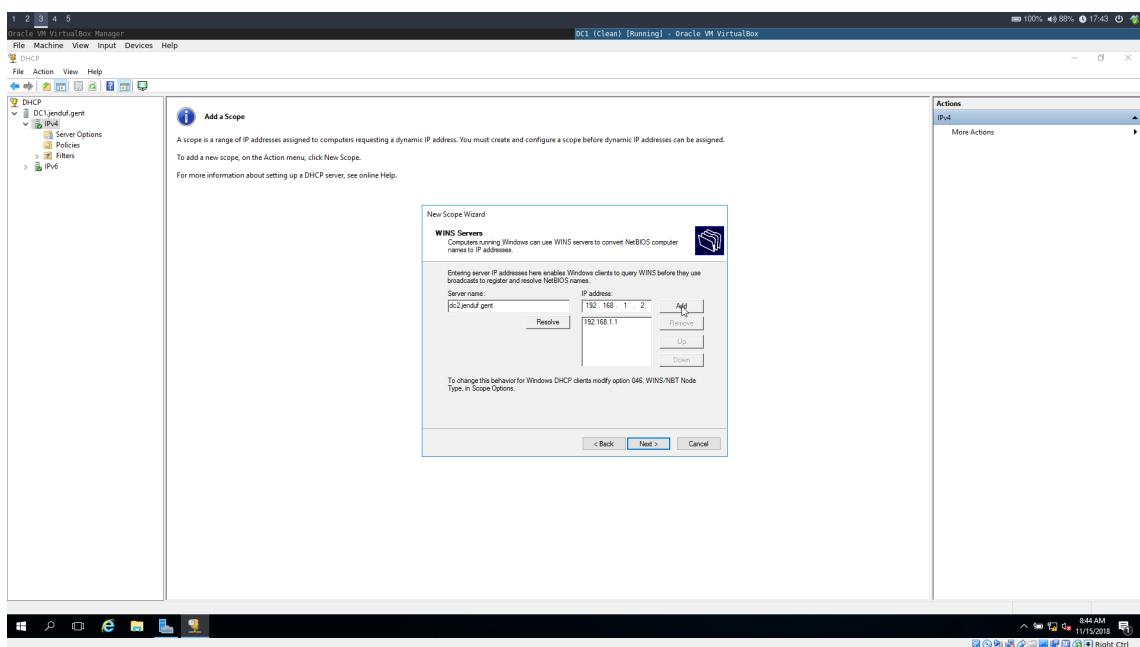
Geef de IP adressen in van DC1 en DC2.

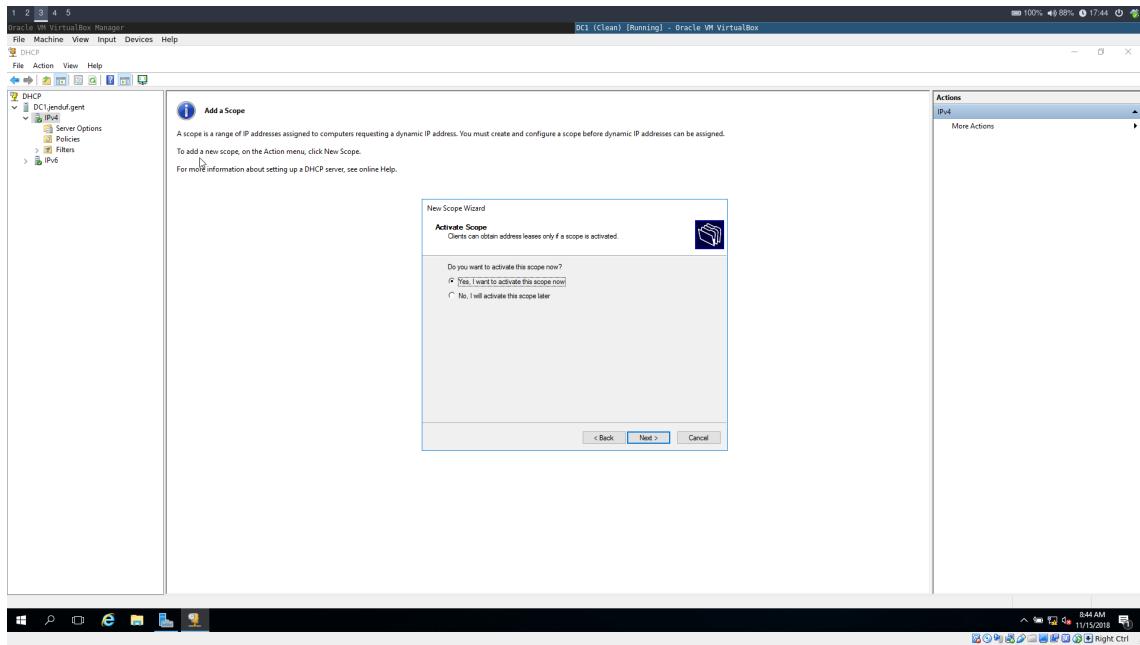


Geef de IP adressen in van DC1 en DC2 gelinkt aan hun naam voor de DNS.



Geef de IP adressen in van DC1 en DC2 gelinkt aan hun naam voor de WINS Servers.



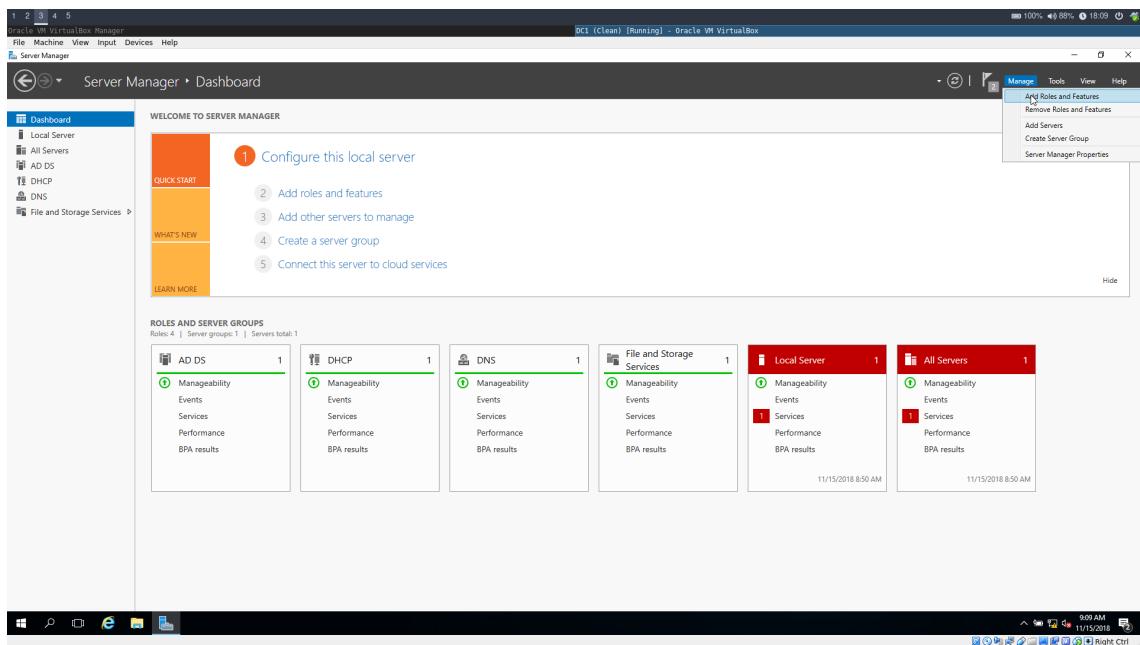


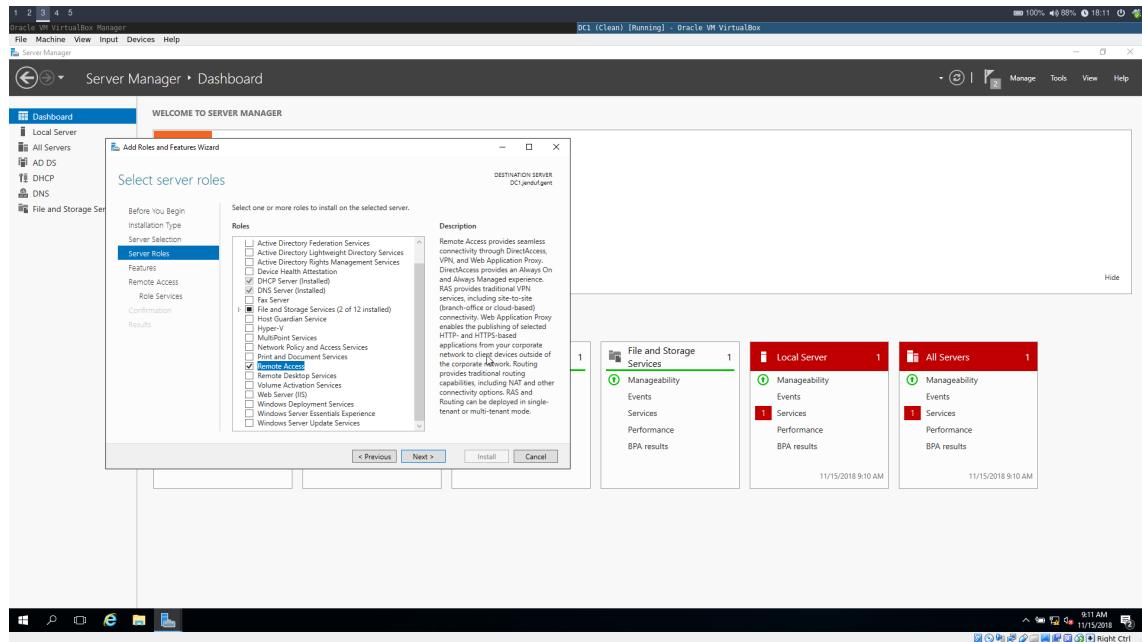
Activeer de nieuwe scope.

6 Configuratie DNS

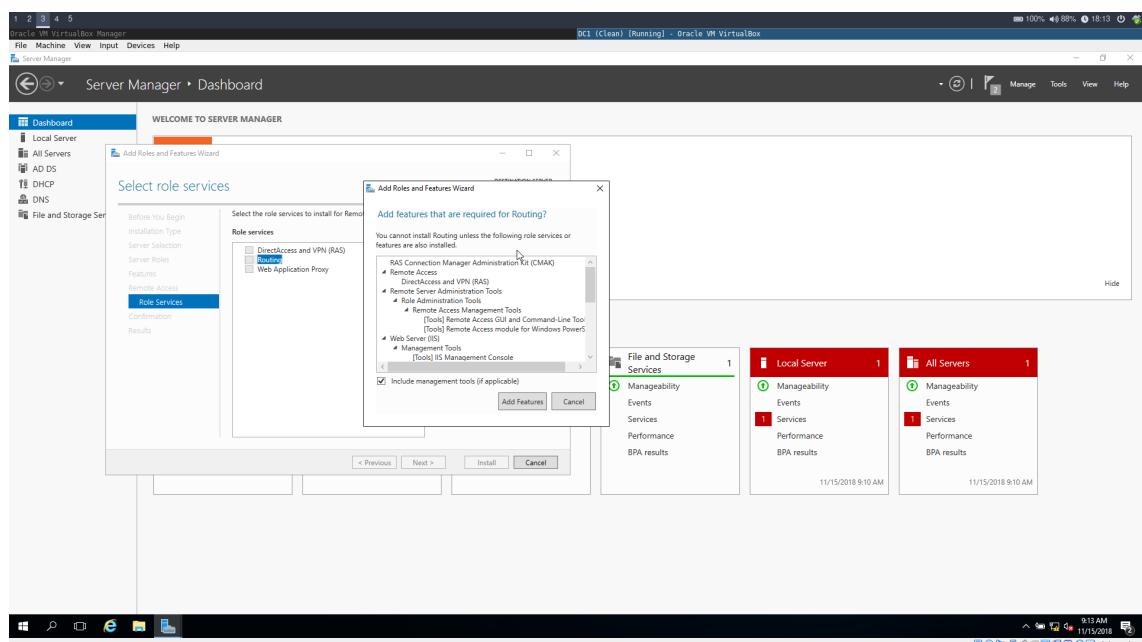
De DNS-service werd automatisch geïnstalleerd met de ADDS.

7 Configuratie Routing

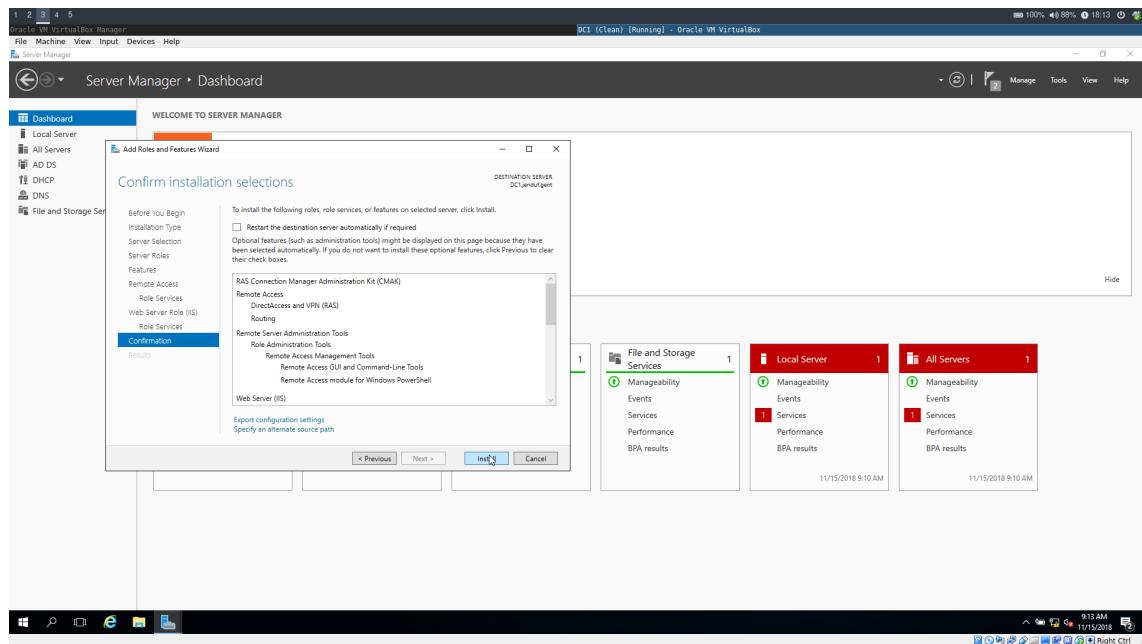




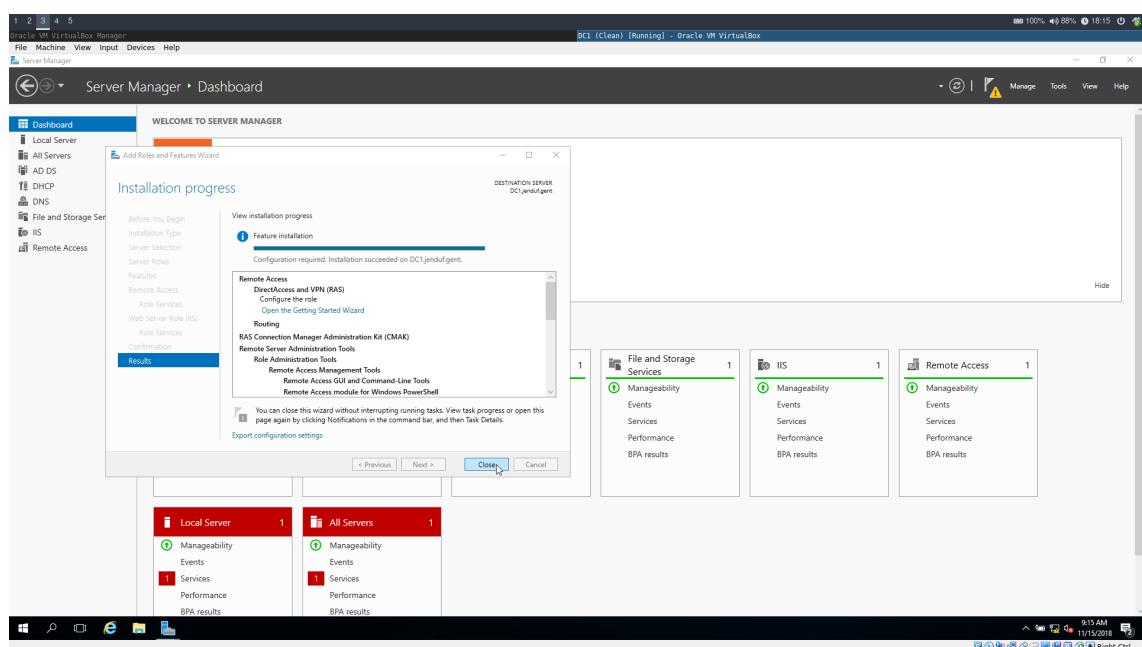
Voeg de rol "Remote Access" toe.

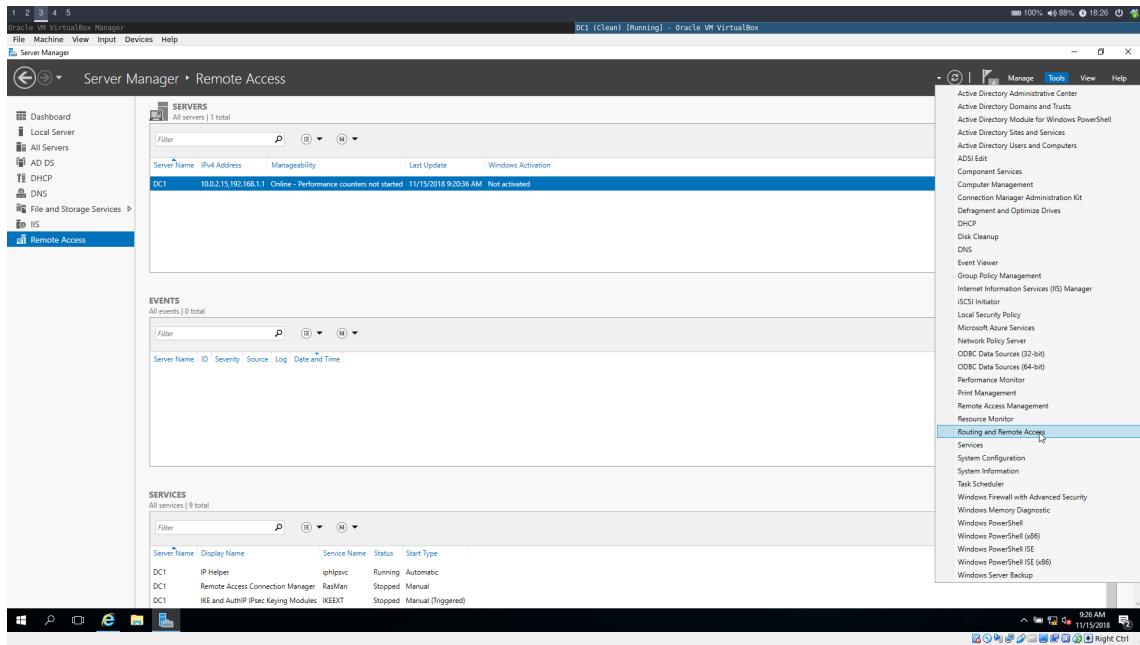


Selecteer Routing als installatie-optie.

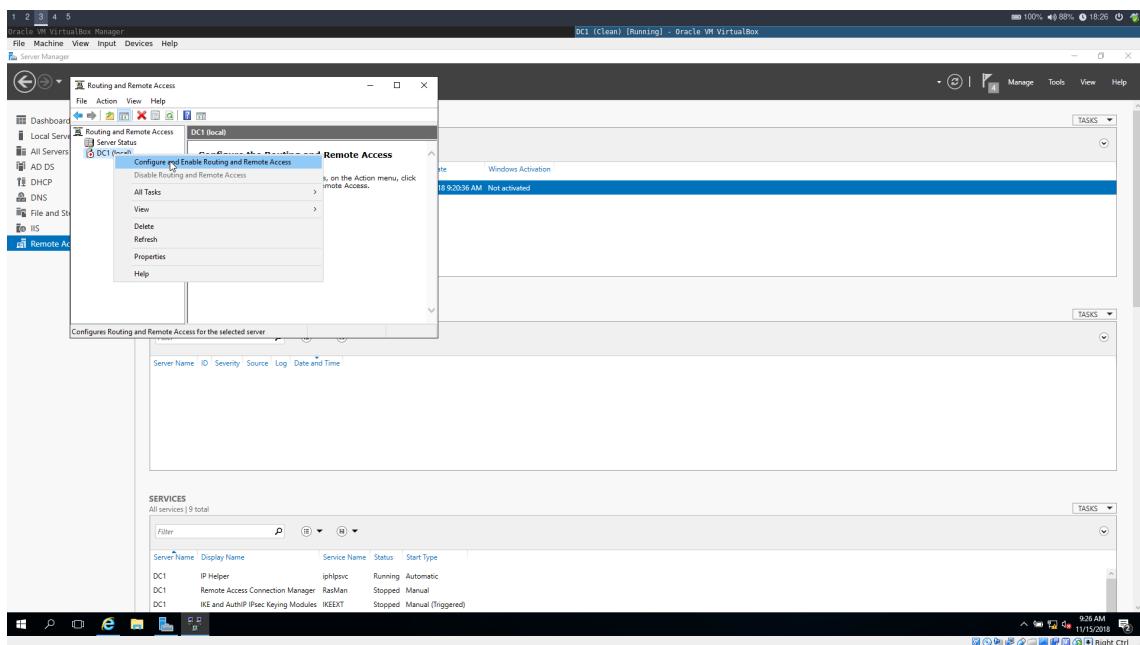


Volg de installatiewizard.

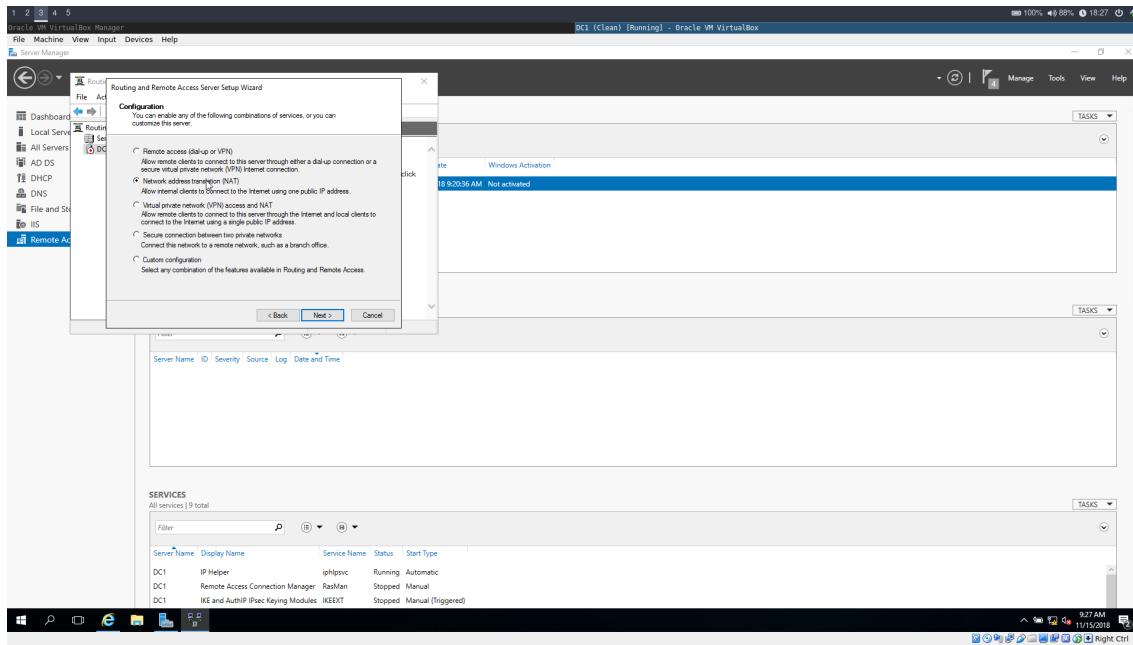




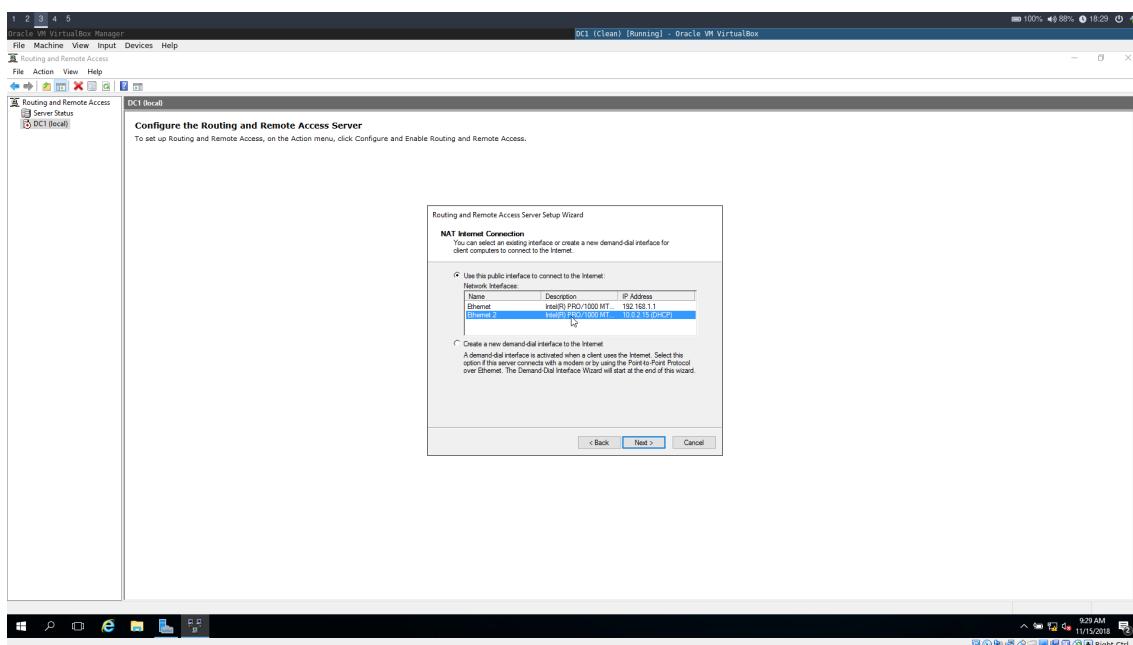
Ga naar "Routing and Remote Access".



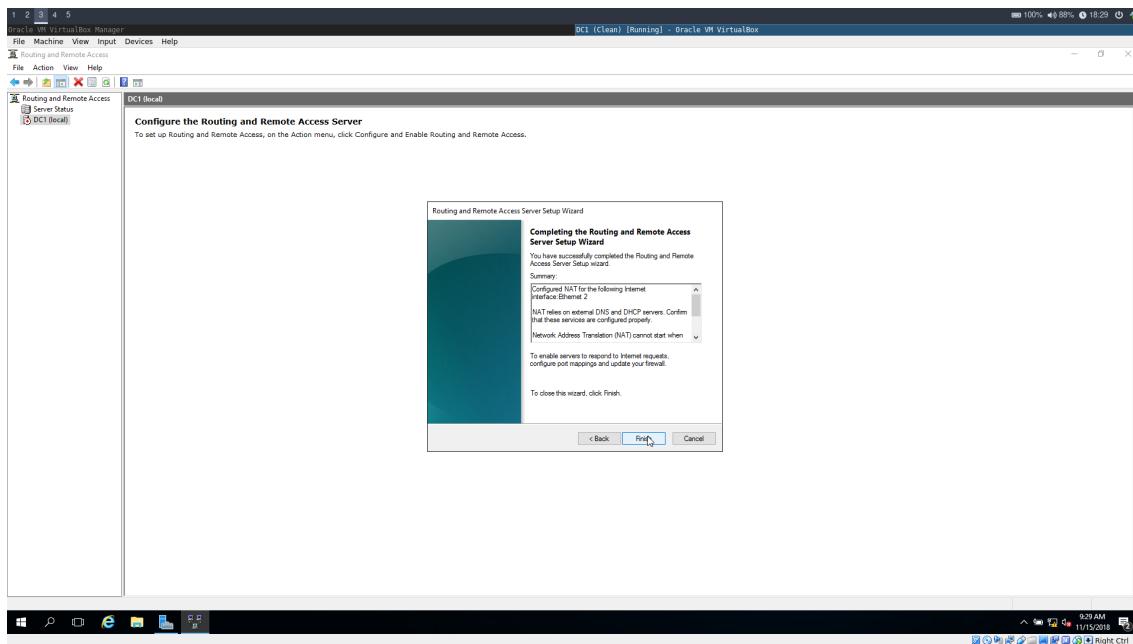
Selecteer met de rechtermuisklik de optie "Configure and Enable Routing and Remote Access" /



Selecteer "Network Address Translation".



Selecteer de adapter waarop DHCP geconfigureerd is.



Sluit de configuratiewizard af. Alle servers in het interne netwerk hebben nu internet via DC1.

8 Powershell

Script 1:

```
#Activeer PS
Set-ExecutionPolicy Unrestricted
#Declaring variables
$hostname = "ns1"

#Computer naam wijzigen
Rename-Computer -ComputerName $env:COMPUTERNAME -newName $hostname -Force -Restart
```

Script 2:

```
#Declaring variables
$domainname = "jenduf.gent"

#IP-adres en default gateway wijzigen
New-NetIPAddress -InterfaceAlias "Ethernet" -IPAddress "192.168.1.1"
-PrefixLength 24 -DefaultGateway "192.168.1.1"

#Firewall uitschakelen
Set-NetFirewallProfile -Profile Domain,Public,Private -Enabled False

#DC en DNS installeren en domeinnaam instellen
Install-WindowsFeature AD-Domain-Services -IncludeManagementTools
Install-ADDSForest -DomainName $domainname -SafeModeAdministratorPassword:
(ConvertTo-SecureString -String "Admin2018" -AsPlainText -Force) -Force

#Server opnieuw opstarten
Restart-computer
```