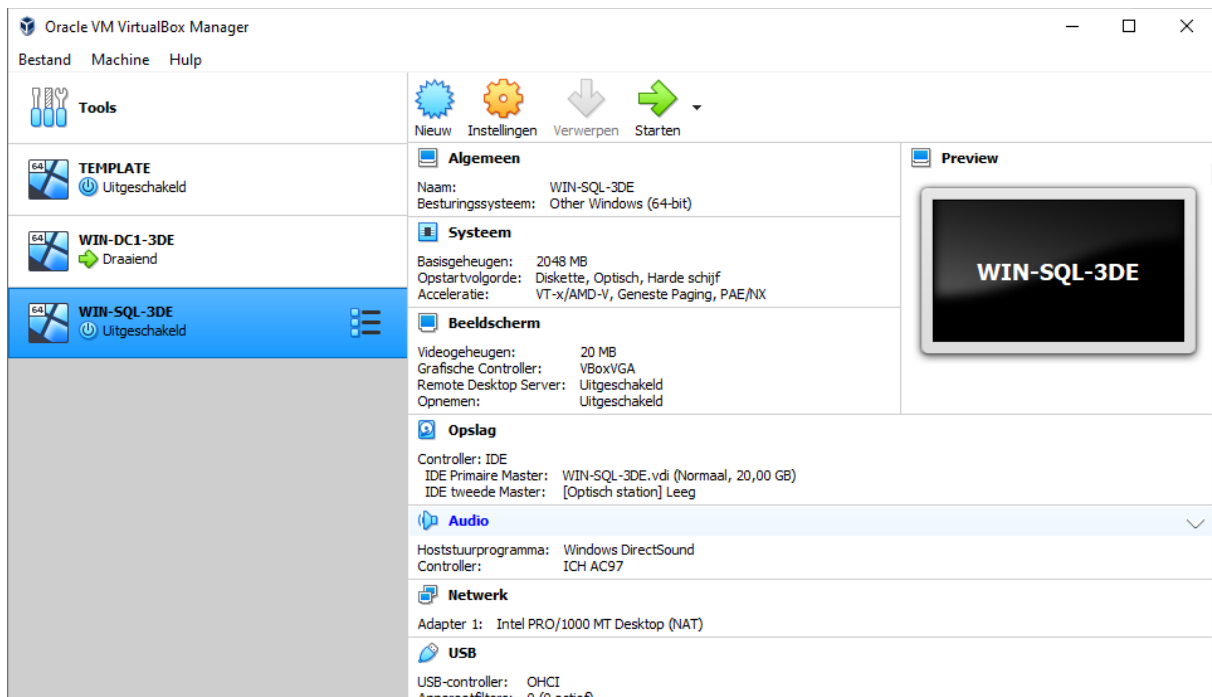


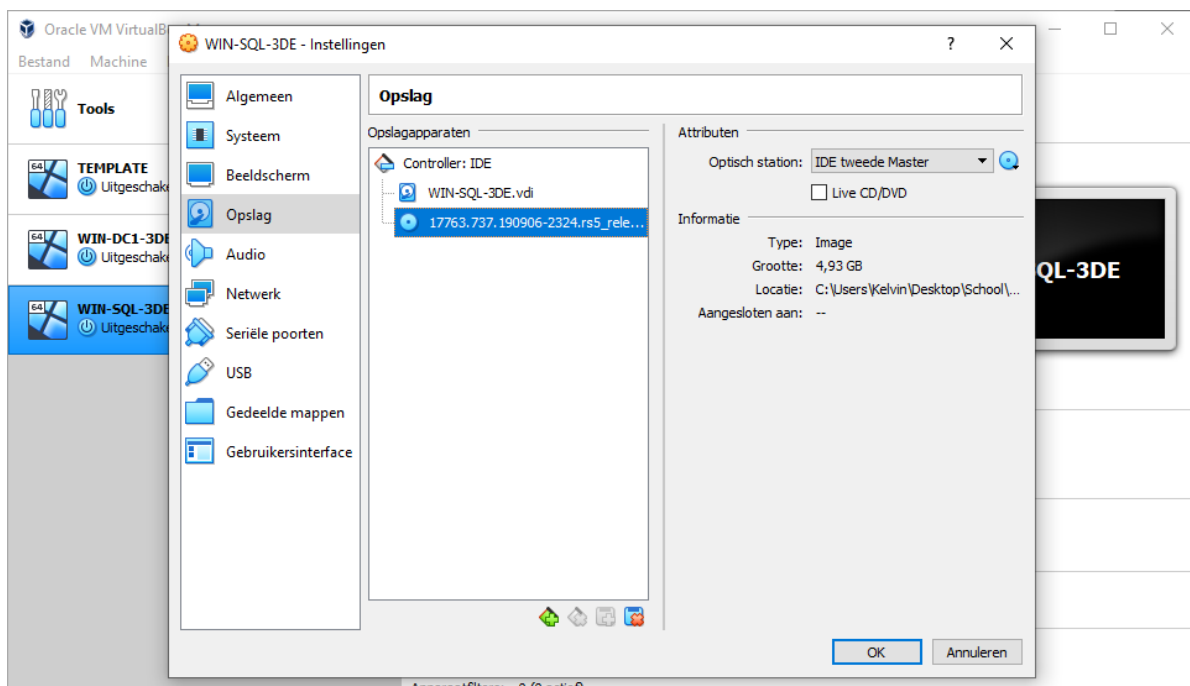
Installatie SQL Server 2016

Na de Domein Controller geïnstalleerd te hebben, zullen we de SQL Server installeren. Deze is ook heel belangrijk, want zonder de SQL Server kunnen sommige andere servers die we straks zullen bespreken niet functioneren. Denk maar aan de SharePoint Server.

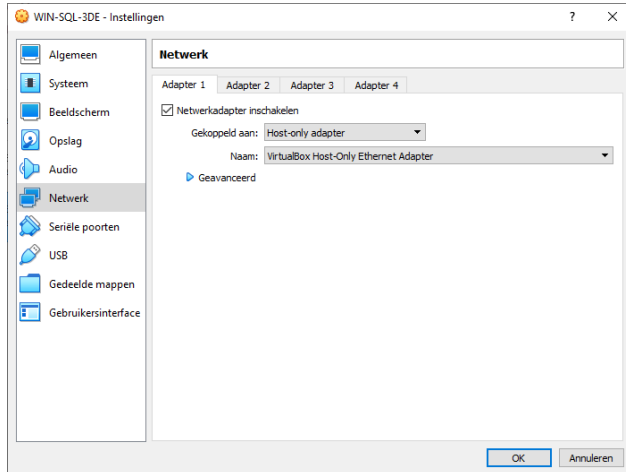
In de vorige handleiding hadden we een template gemaakt. Deze gaan we nu *klonen*. We kiezen een gepaste naam (in dit geval: WIN-SQL-3DE) en klonen alles wat we in de template reeds hebben aangemaakt.



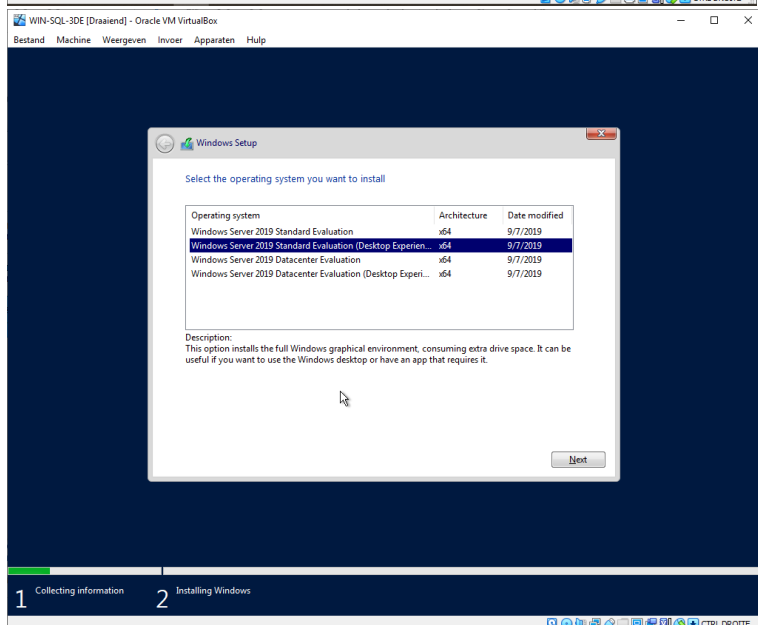
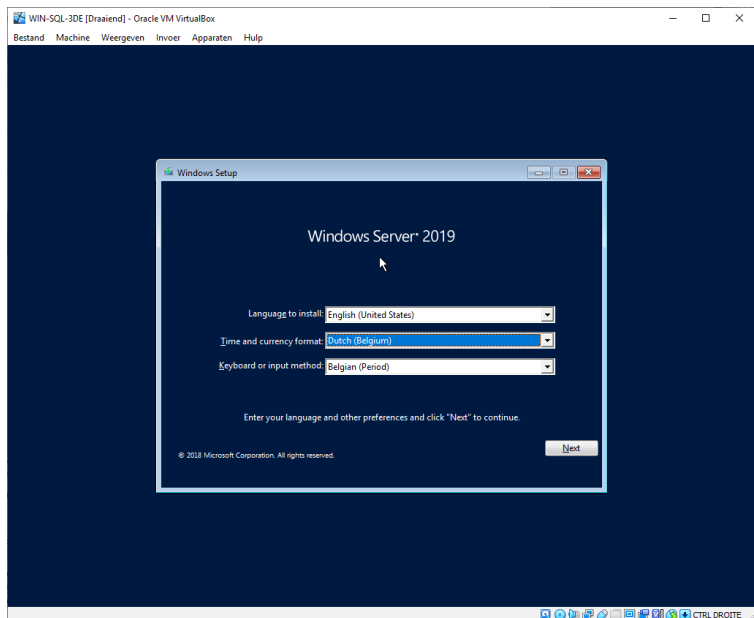
We voegen de .iso die we in de eerste handleiding gedownload hebben in.



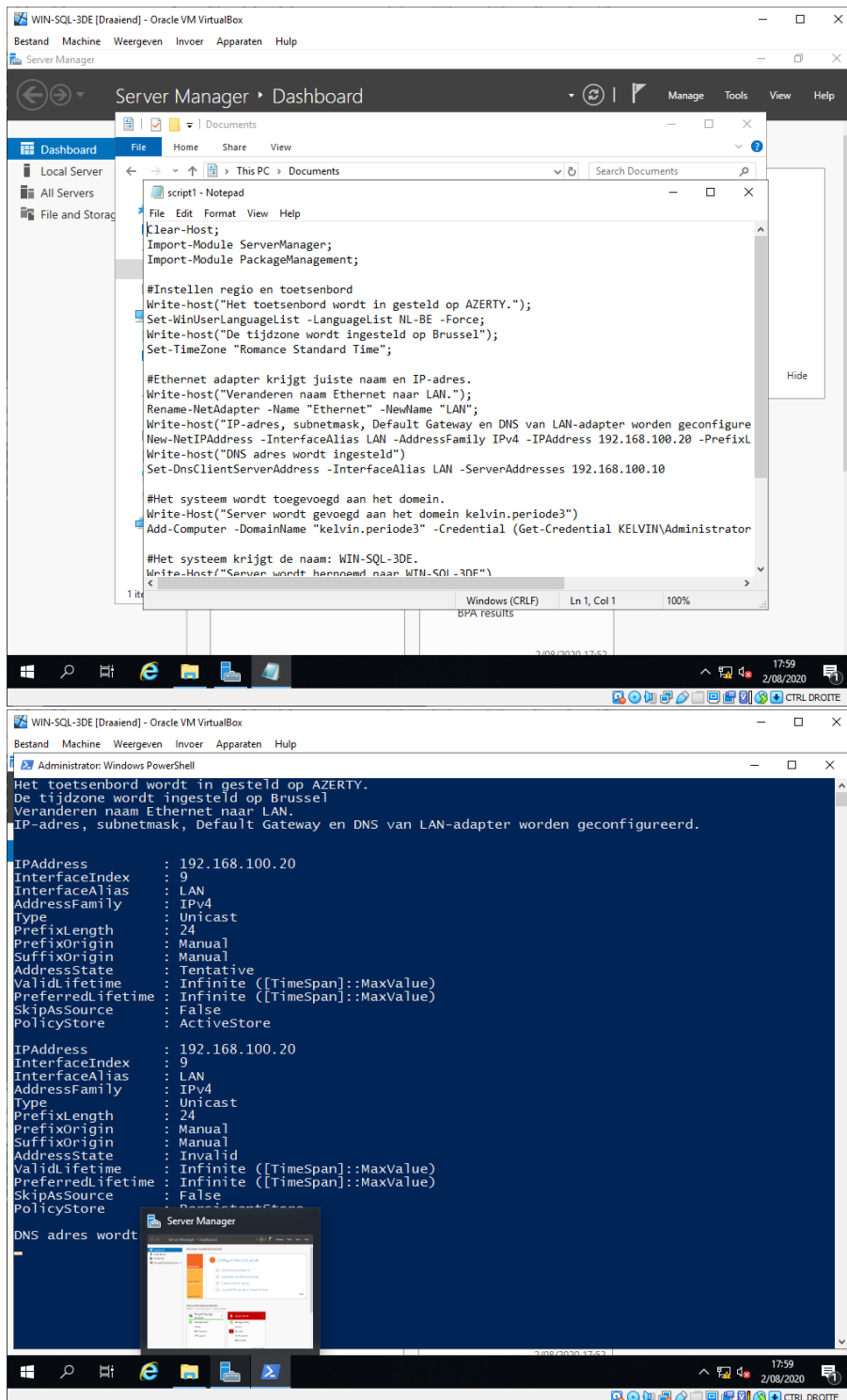
Dit systeem heeft maar één netwerkadapter nodig.



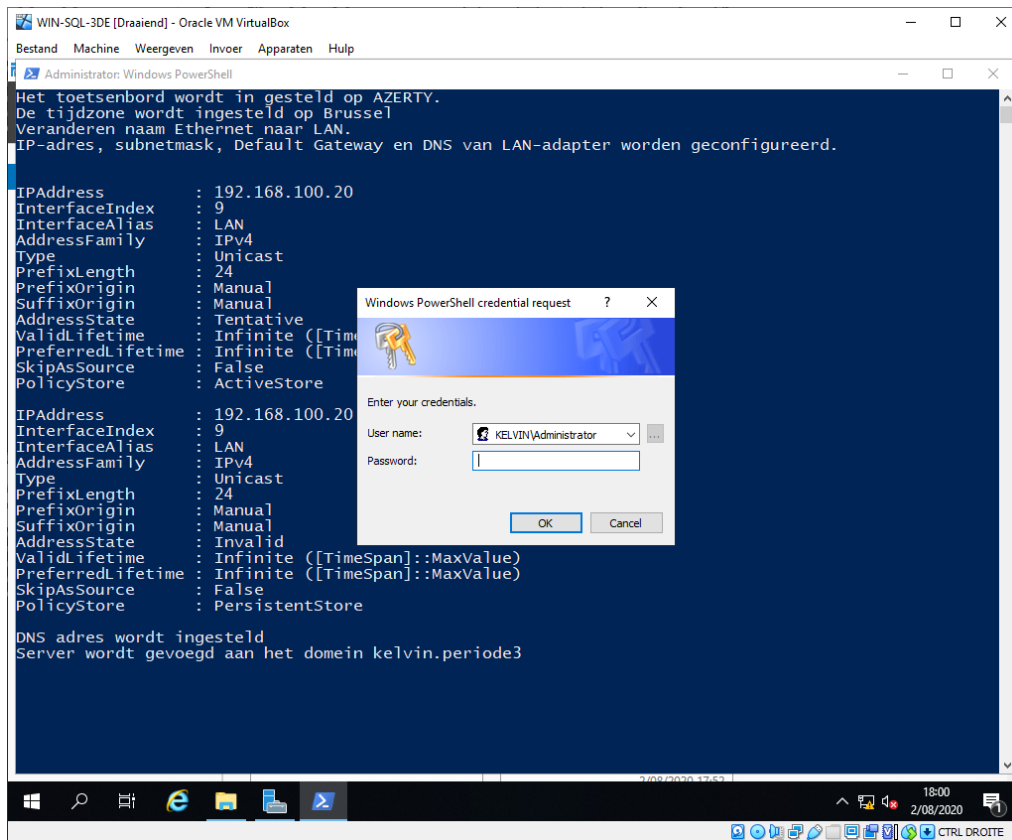
We stellen de taal in en kiezen de Standard Edition.



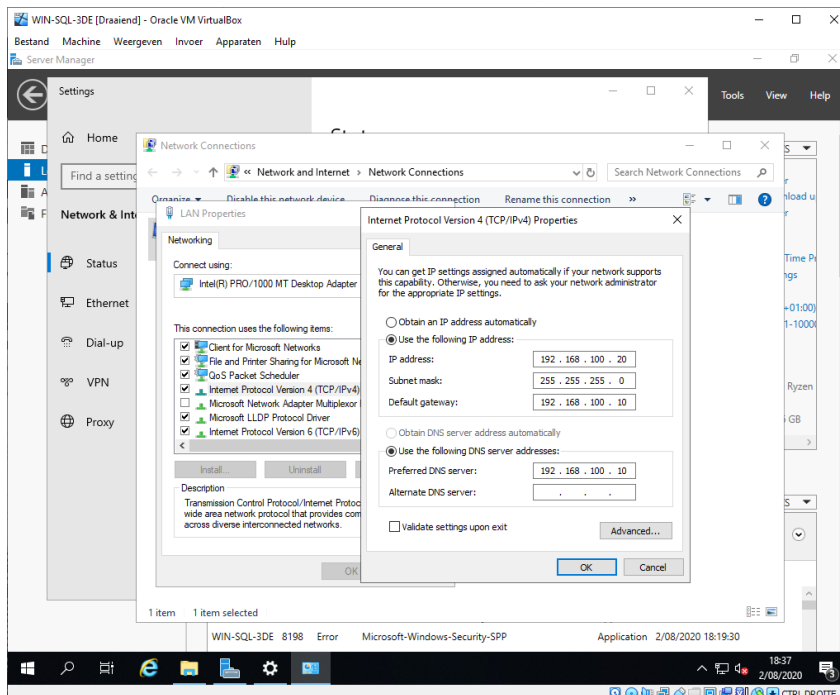
Voor de configuratie van de SQL Server werden er twee scripts geschreven. Deze kan je terugvinden in *Scripts > WIN-SQL-3^{DE}*. Het eerste script (dat opnieuw uitgevoerd wordt in Powershell), script1, stelt de naam van de server in, stelt het juiste toetsenbord in, configureert de netwerk adapter zodat deze de juiste naam, maar vooral: de juiste IP-adres instellingen heeft. Ook wordt het systeem toegevoegd aan het domein kelvin.periode3. na toevoeging aan het domein wordt het wachtwoord van de Administrator gevraagd. Voer dit in. Hierna zal de server opnieuw opstarten om de wijzigingen door te voeren.



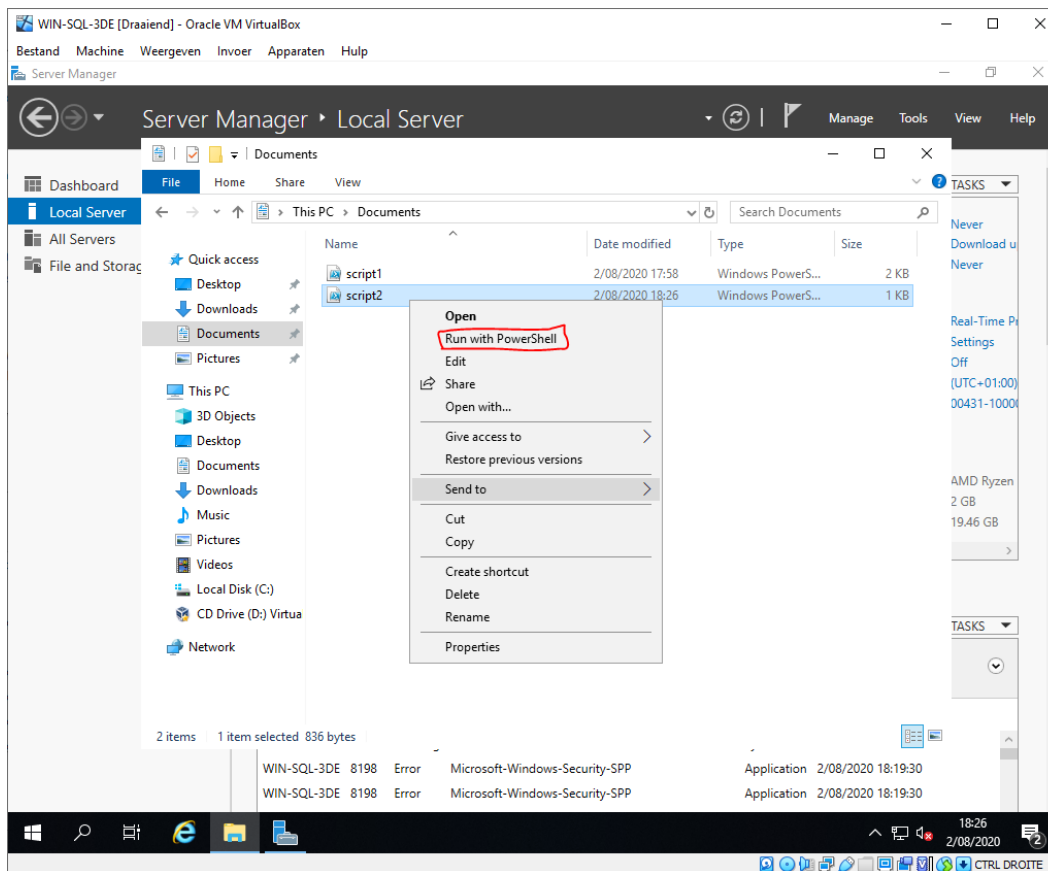
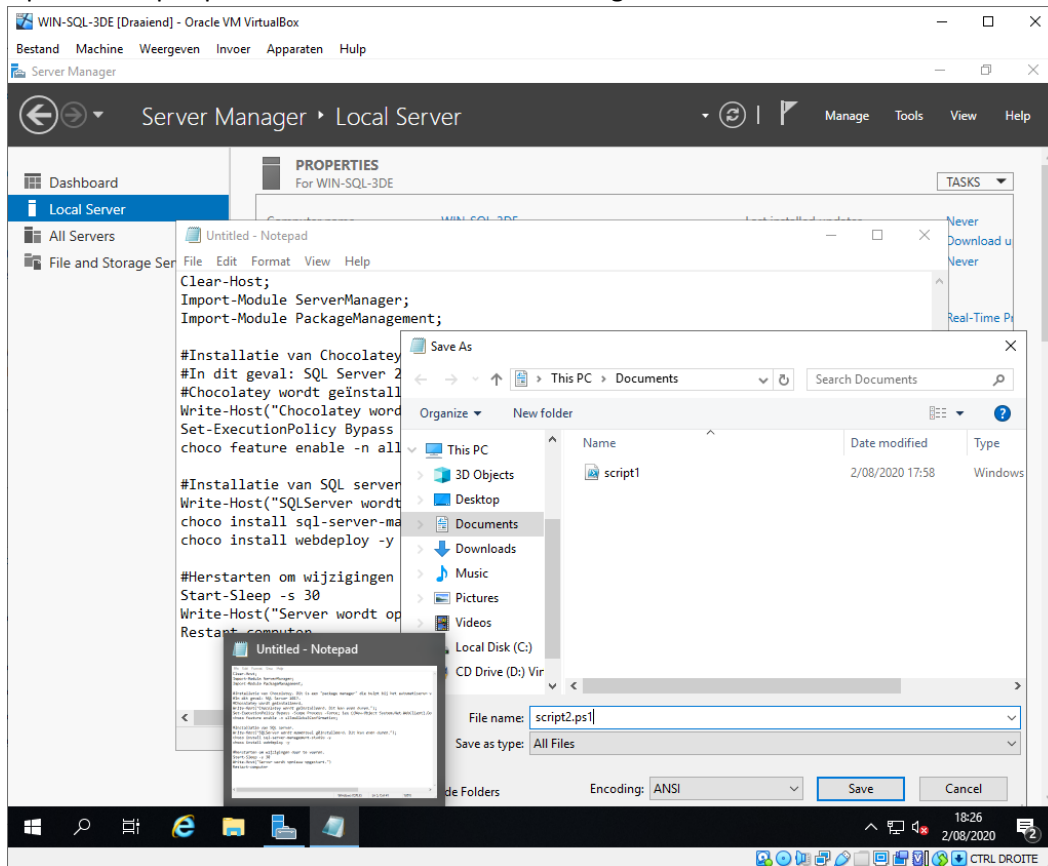
Dit is het scherm waar we de inloggegevens van de “Domein Administrator” moeten invullen. In ons geval *Admin_2019*.



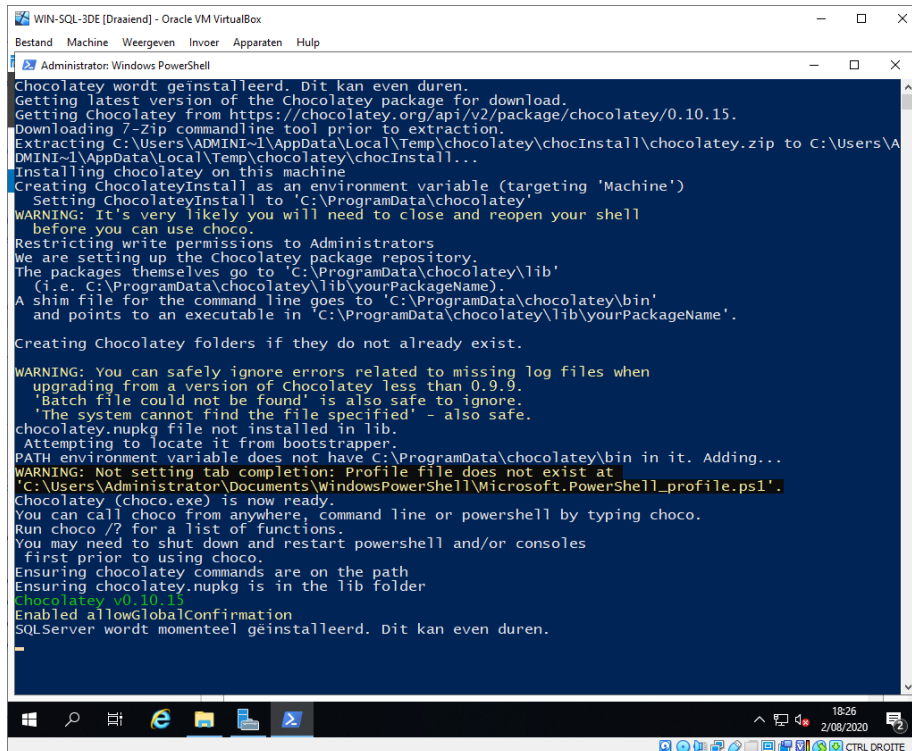
Hierna wordt zoals reeds vernoemd de computer opnieuw opgestart. We checken even of de instellingen kloppen (waardoor we internet hebben). Dit is het geval.



Open nu script2.ps1 in Powershell zoals hieronder getoond wordt.



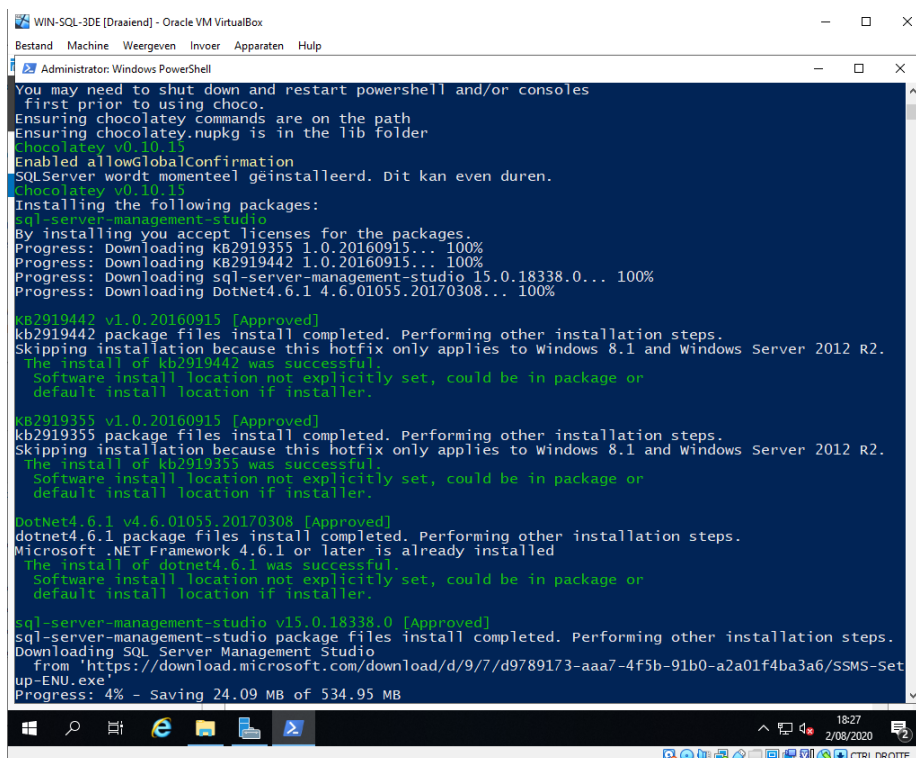
In script2 maken we gebruik van *Chocolatey*. Dit is een "package manager" die helpt bij het automatiseren van de installatie van Windows programma's. In dit geval: SQL Server 2017. Na de installatie van Chocolatey wordt SQL Server geïnstalleerd. Dit kan even duren, je hoeft je geen zorgen te maken. Ook treffen we al de nodige voorbereidingen voor latere installaties (namelijk voor onze SharePoint Server). Na deze installaties zal de computer na 30s herstarten. Hieronder enkele screenshots van het installatieproces in Powershell.



```
Chocolatey wordt geïnstalleerd. Dit kan even duren.
Getting latest version of the Chocolatey package for download.
Getting Chocolatey from https://chocolatey.org/api/v2/package/chocolatey/0.10.15.
Downloading 7-Zip commandline tool prior to extraction.
Extracting C:\Users\ADMINI~1\AppData\Local\Temp\chocolatey\chocInstall\chocolatey.zip to C:\Users\ADMINI~1\AppData\Local\Temp\chocolatey\chocInstall...
Installing chocolatey on this machine
Creating ChocolateyInstall as an environment variable (targeting 'Machine')
Setting ChocolateyInstall to 'C:\ProgramData\chocolatey'
WARNING: It's very likely you will need to close and reopen your shell
before you can use choco.
Restricting write permissions to Administrators
We are setting up the Chocolatey package repository.
The packages themselves go to 'C:\ProgramData\chocolatey\lib'
(i.e. C:\ProgramData\chocolatey\lib\yourPackageName).
A shim file for the command line goes to 'C:\ProgramData\chocolatey\bin'
and points to an executable in 'C:\ProgramData\chocolatey\lib\yourPackageName'.

Creating Chocolatey folders if they do not already exist.

WARNING: You can safely ignore errors related to missing log files when
upgrading from a version of Chocolatey less than 0.9.9.
'Batch file could not be found' is also safe to ignore.
'The system cannot find the file specified' - also safe.
chocolatey.nupkg file not installed in lib.
Attempting to locate it from bootstrapper.
PATH environment variable does not have C:\ProgramData\chocolatey\bin in it. Adding...
WARNING: Not setting tab completion: Profile file does not exist at
'C:\Users\Administrator\Documents\WindowsPowerShell\Microsoft.PowerShell_profile.ps1'.
Chocolatey (choco.exe) is now ready.
You can call choco from anywhere, command line or powershell by typing choco.
Run choco /? for a list of functions.
You may need to shut down and restart powershell and/or consoles
first prior to using choco.
Ensuring chocolatey commands are on the path
Ensuring chocolatey.nupkg is in the lib folder
chocolatey v0.10.15
Enabled allowGlobalConfirmation
SQLServer wordt momenteel geïnstalleerd. Dit kan even duren.
```



```
You may need to shut down and restart powershell and/or consoles
first prior to using choco.
Ensuring chocolatey commands are on the path
Ensuring chocolatey.nupkg is in the lib folder
chocolatey v0.10.15
Enabled allowGlobalConfirmation
SQLServer wordt momenteel geïnstalleerd. Dit kan even duren.
chocolatey v0.10.15
Installing the following packages:
sql-server-management-studio
By installing you accept licenses for the packages.
Progress: Downloading kb2919355 1.0.20160915... 100%
Progress: Downloading kb2919442 1.0.20160915... 100%
Progress: Downloading sql-server-management-studio 15.0.18338.0... 100%
Progress: Downloading DotNet4.6.1 4.6.01055.20170308... 100%
kb2919442 v1.0.20160915 [Approved]
kb2919442 package files install completed. Performing other installation steps.
Skipping installation because this hotfix only applies to Windows 8.1 and Windows Server 2012 R2.
The install of kb2919442 was successful.
Software install location not explicitly set, could be in package or
default install location if installer.
kb2919355 v1.0.20160915 [Approved]
kb2919355 package files install completed. Performing other installation steps.
Skipping installation because this hotfix only applies to Windows 8.1 and Windows Server 2012 R2.
The install of kb2919355 was successful.
Software install location not explicitly set, could be in package or
default install location if installer.
DotNet4.6.1 v4.6.01055.20170308 [Approved]
dotnet4.6.1 package files install completed. Performing other installation steps.
Microsoft .NET Framework 4.6.1 or later is already installed
The install of dotnet4.6.1 was successful.
Software install location not explicitly set, could be in package or
default install location if installer.
sql-server-management-studio v15.0.18338.0 [Approved]
sql-server-management-studio package files install completed. Performing other installation steps.
Downloading SQL Server Management Studio
from 'https://download.microsoft.com/download/d/9/7/d9789173-aaa7-4f5b-91b0-a2a01f4ba3a6/SSMS-Set
up-ENU.exe
Progress: 4% - Saving 24.09 MB of 534.95 MB
```

```
WIN-SQL-3DE [Draaiend] - Oracle VM VirtualBox
Bestand Machine Weergeven Invoer Apparaten Hulp
Administrator: Windows PowerShell

Enabled allowGlobalConfirmation
SQLServer wordt momenteel geïnstalleerd. Dit kan even duren.
Chocolatey v0.10.15
Installing the following packages:
sql-server-management-studio
By installing you accept licenses for the packages.
Progress: Downloading kb2919355 1.0.20160915... 100%
Progress: Downloading kb2919442 1.0.20160915... 100%
Progress: Downloading sql-server-management-studio 15.0.18338.0... 100%
Progress: Downloading DotNet4.6.1 4.6.01055.20170308... 100%

kb2919442 v1.0.20160915 [Approved]
kb2919442 package files install completed. Performing other installation steps.
Skipping installation because this hotfix only applies to Windows 8.1 and Windows Server 2012 R2.
The install of kb2919442 was successful.
Software install location not explicitly set, could be in package or
default install location if installer.

kb2919355 v1.0.20160915 [Approved]
kb2919355 package files install completed. Performing other installation steps.
Skipping installation because this hotfix only applies to Windows 8.1 and Windows Server 2012 R2.
The install of kb2919355 was successful.
Software install location not explicitly set, could be in package or
default install location if installer.

DotNet4.6.1 v4.6.01055.20170308 [Approved]
dotnet4.6.1 package files install completed. Performing other installation steps.
Microsoft .NET Framework 4.6.1 or later is already installed
The install of dotnet4.6.1 was successful.
Software install location not explicitly set, could be in package or
default install location if installer.

sql-server-management-studio v15.0.18338.0 [Approved]
sql-server-management-studio package files install completed. Performing other installation steps.
Downloading SQL Server Management Studio
From 'https://download.microsoft.com/download/d/9/7/d9789173-aaa7-4f5b-91b0-a2a01f4ba3a6/SSMS-Setup-ENU.exe'
Progress: 100% - Completed download of C:\Users\Administrator\AppData\Local\Temp\chocolatey\sql-ser
ver-management-studio\15.0.18338.0\SSMS-Setup-ENU.exe (534.95 MB).
Download of SSMS-Setup-ENU.exe (534.95 MB) completed.
Hashes match.
Installing SQL Server Management Studio...
```

```
WIN-SQL-3DE [Draaiend] - Oracle VM VirtualBox
Bestand Machine Weergeven Invoer Apparaten Hulp
Select Administrator: Windows PowerShell

SQL Server Management Studio has been installed.
sql-server-management-studio may be able to be automatically uninstalled.
Environment Vars (like PATH) have changed. Close/reopen your shell to
see the changes (or in powershell/cmd.exe just type 'refreshenv').
The install of sql-server-management-studio was successful.
Software installed to 'C:\Program Files (x86)\Microsoft Help Viewer\v2.3\'

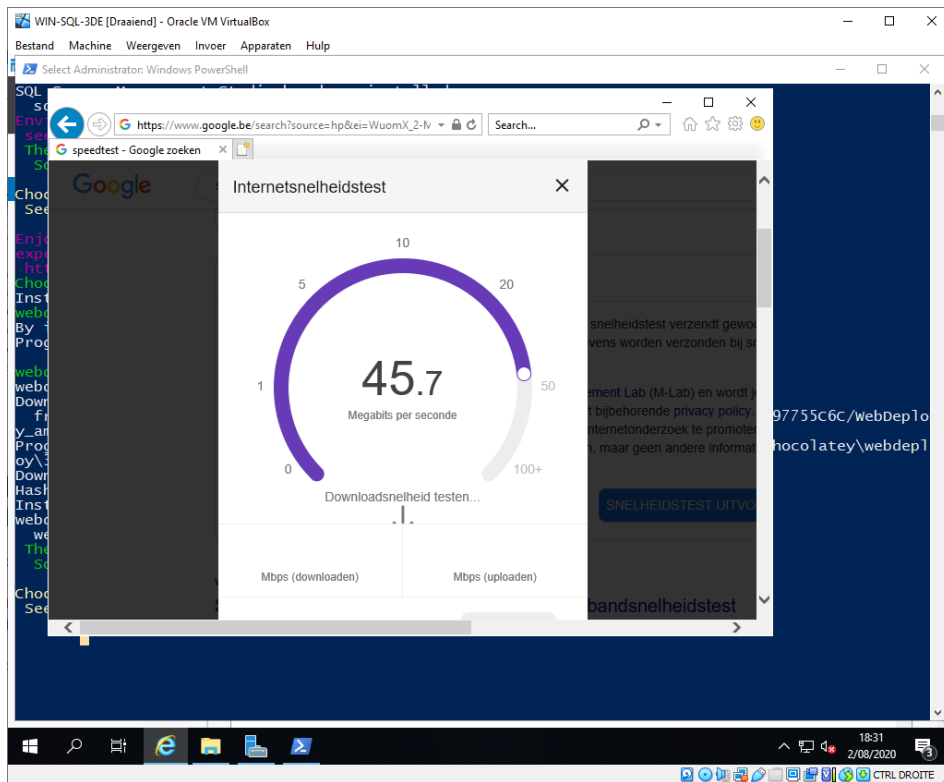
Chocolatey installed 4/4 packages.
See the log for details (C:\ProgramData\chocolatey\logs\chocolatey.log).

Enjoy using Chocolatey? Explore more amazing features to take your
experience to the next level at
https://chocolatey.org/compare
Chocolatey v0.10.15
Installing the following packages:
webdeploy
By installing you accept licenses for the packages.
Progress: Downloading webdeploy 3.6.20170627... 100%

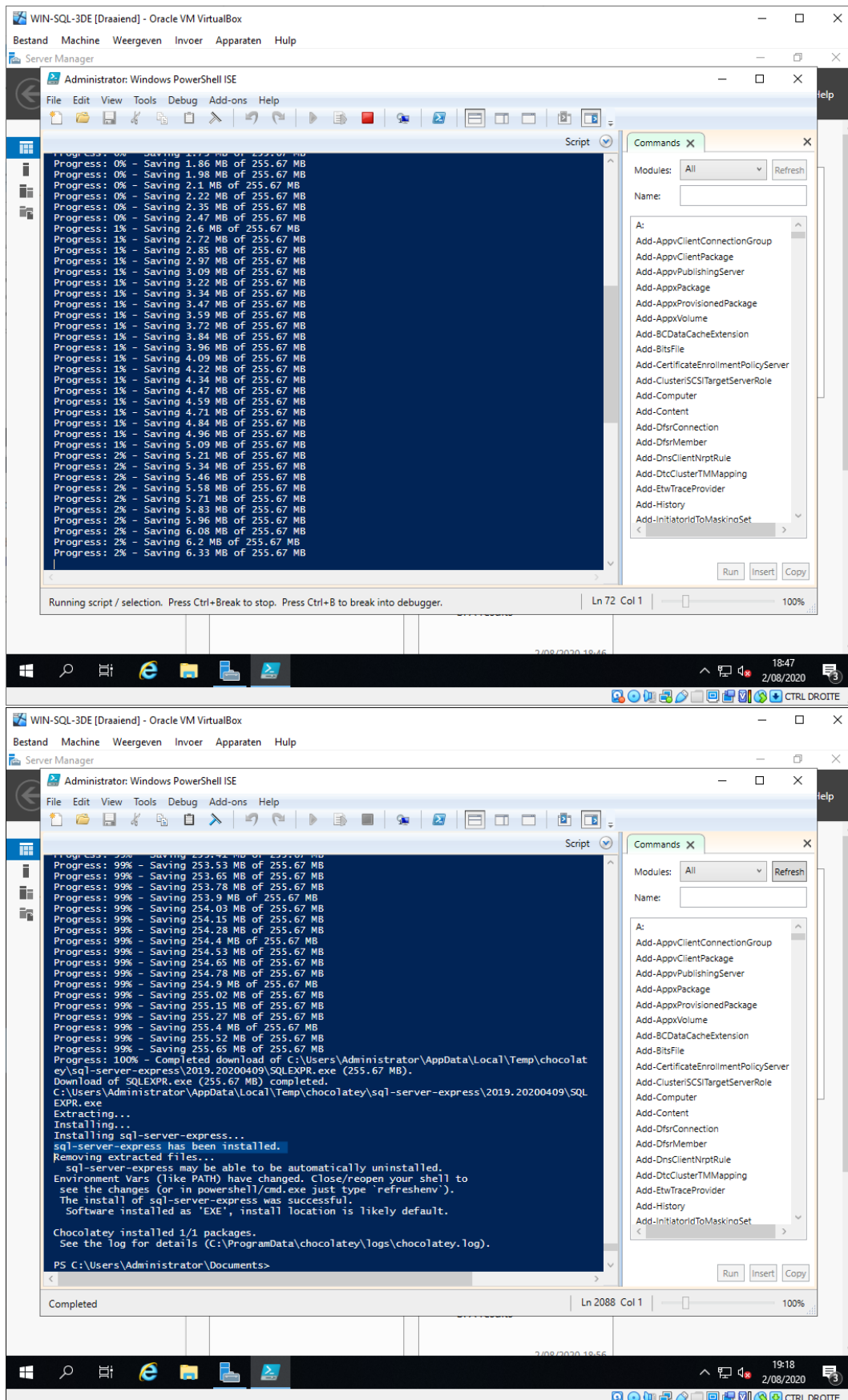
webdeploy v3.6.20170627 [Approved]
webdeploy package files install completed. Performing other installation steps.
Downloading webdeploy 64 bit
From 'https://download.microsoft.com/download/0/1/D/01DC28EA-638C-4A22-A57B-4CEF97755C6C/WebDeploy_
amd64_en-US.msi'
Progress: 100% - Completed download of C:\Users\Administrator\AppData\Local\Temp\chocolatey\webdepl
oy\3.6.20170627\WebDeploy_amd64_en-US.msi (6.12 MB).
Download of WebDeploy_amd64_en-US.msi (6.12 MB) completed.
Hashes match.
Installing webdeploy...
webdeploy has been installed.
webdeploy may be able to be automatically uninstalled.
The install of webdeploy was successful.
Software installed to 'C:\Program Files (x86)\Microsoft Help Viewer\v2.3\'

Chocolatey installed 4/4 packages.
See the log for details (C:\ProgramData\chocolatey\logs\chocolatey.log).
```

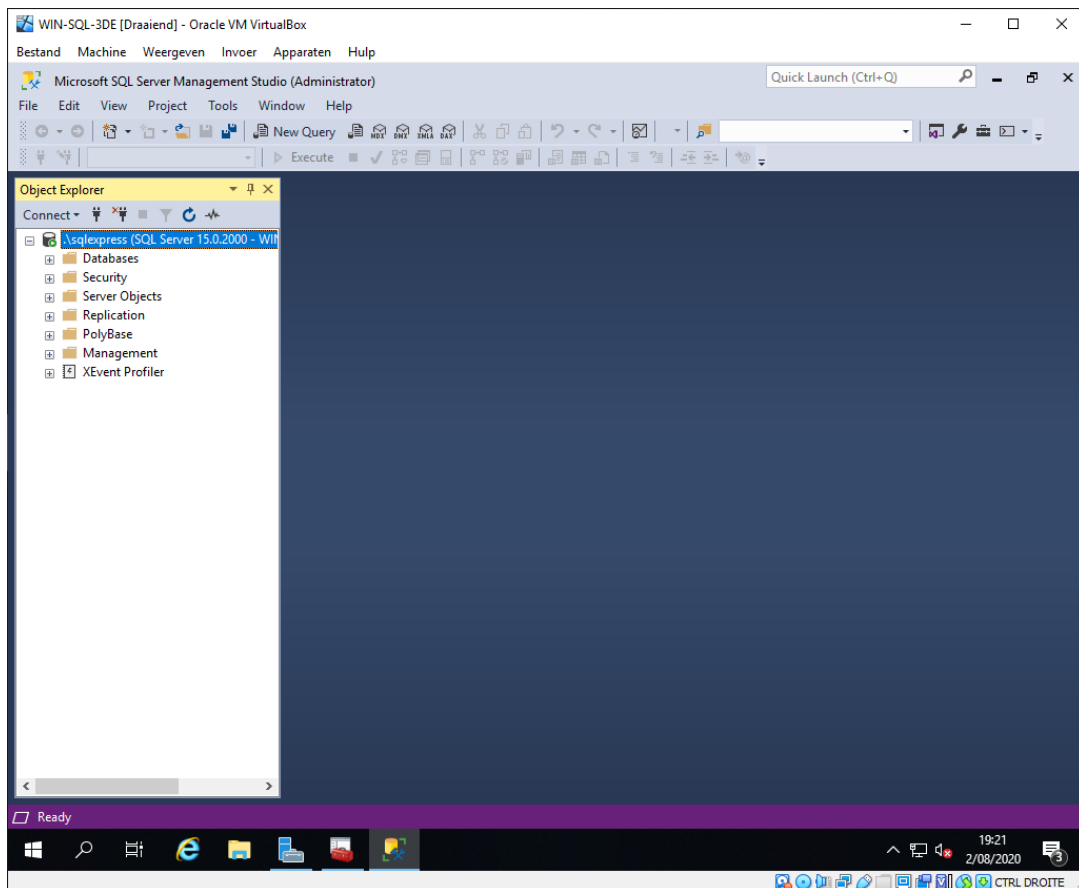
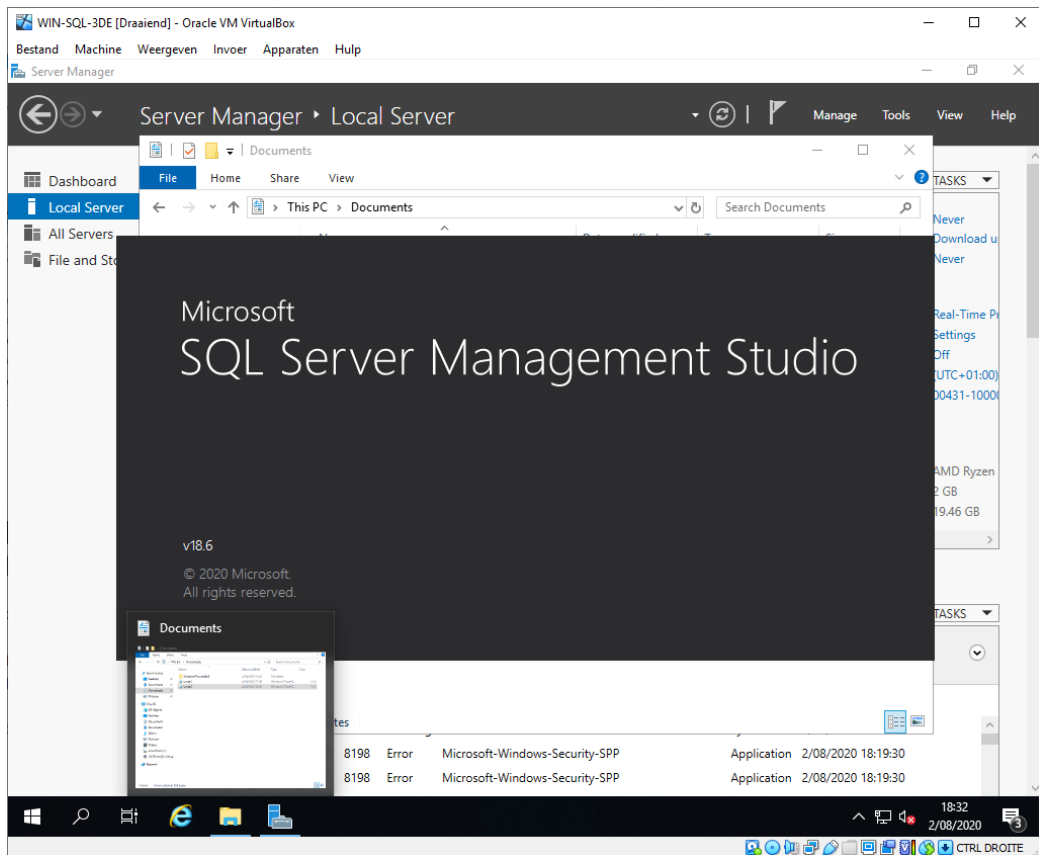
Om aan te tonen dat we internet hebben op de sql server werd er een snelheidstest uitgevoerd. Dit is niet nodig, en diende louter ter bevestiging.



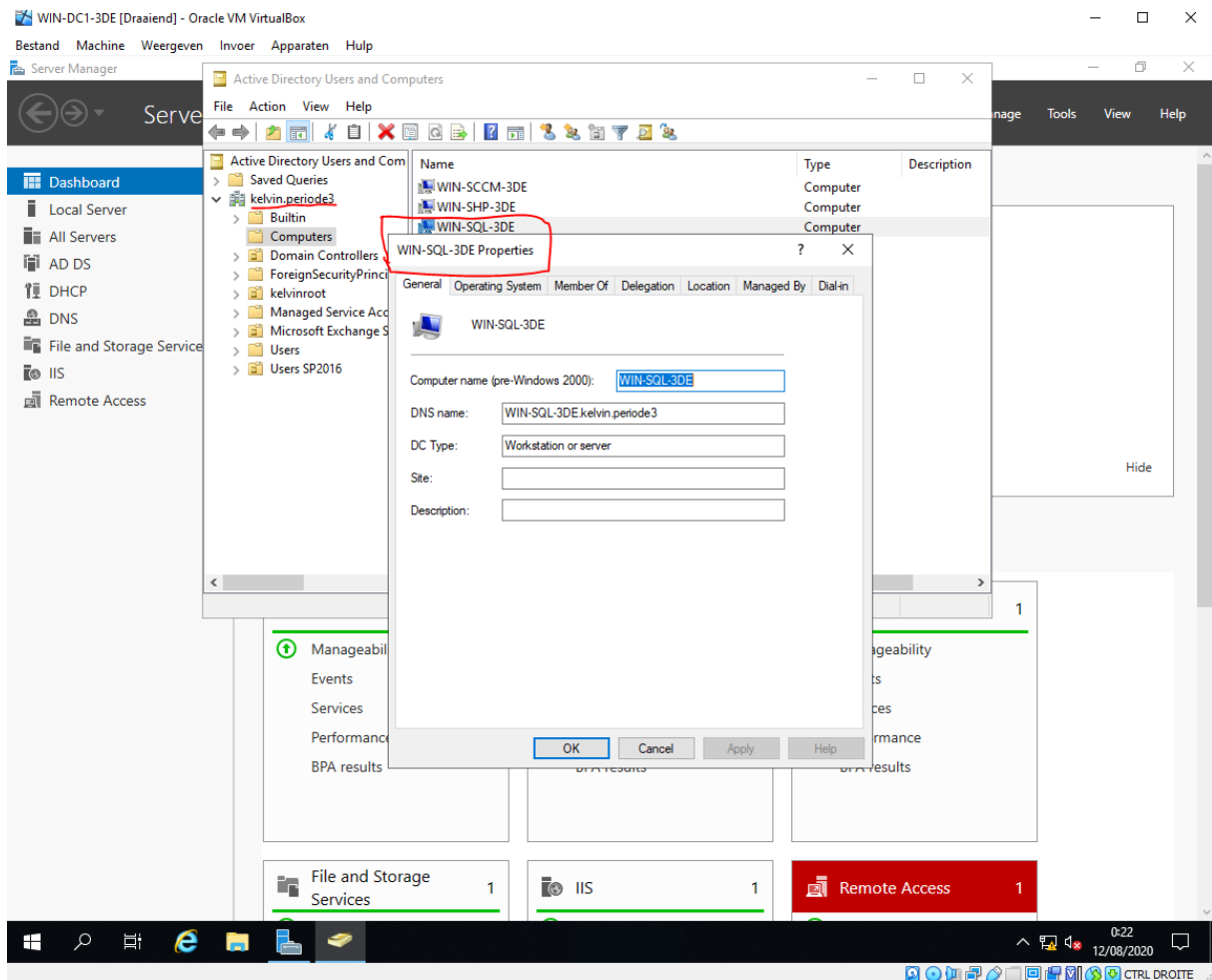
Zoals reeds aangegeven kan de installatie even duren, er worden namelijk vrij grote bestanden gedownload.



SQL Server Management Studio werd ook geïnstalleerd om toekomstige databases te beheren. Zoals je kan zien kan er geconnecteerd worden met de server (.\sqlexpress).



De installatie van de SQL Server is nu voltooid. Als laatste check kijken we op onze Domein Controller of we ons pas geïnstalleerde machine terug kunnen vinden in ons domein. Dit is het geval.



De installatie is geslaagd, we kunnen nu overgaan tot de installatie van de SCCM server.

Bronnen

- <https://docs.microsoft.com/en-us/powershell/module/>
- <https://docs.microsoft.com/en-us/sql/relational-databases/lesson-2-connecting-from-another-computer?view=sql-server-ver15>
- Cursus SQL 2017
- Cursus Win 2016