



# Inleiding



Powershell



Wat is Powershell?



Ontstaan Powershell



Versies van Powershell



Powershell met GUI

# *Wat is Powershell?*

= Uitbreidbare automatisatie engine

- ➔ Uitbreidbaar
  - ➔ Toevoegen van snap-ins (bvb. AD snap-in voor aanmaken van AD-users)
- ➔ Automatisatie engine
  - ➔ Processen automatiseren
  - ➔ Configuratie management



**Object-based  
command-line shell**

# *Wat is Powershell?*

= Task-based scripting technologie

- ➔ Zowel lokaal als remote (ook Cloud)
  - ➔ Remote gedeelte sterk uitgebreid de laatste jaren
  - ➔ Microsoft365- en Azure-omgeving
- ➔ Beheren en automatiseren van beheertaken
  - ➔ Processen automatiseren

# *Wat is Powershell?*

- ➔ Microsoft-producten gebruiken steeds meer Powershell
  - ✓ Veel grafische taken en scripts voeren Powershell CMD-Lets uit
    - ➔ Exchange                      Bij elke taak wordt Powershell CMD-Let uitgevoerd
    - ➔ Active Directory           Powershell history in ADAC
- ➔ Powershell kan ook gebruikt worden met 3rd party producten
  - ✓ VMWare ESXi, Citrix, ...

# *Ontstaan van Powershell*

- ➔ Oorspronkelijke naam = Monad  
= beta-versie van Powershell
- ➔ Eerste versie van Powershell verschijnt in november 2006
- ➔ Nieuwe taal voor beheerders

# *Versies van Powershell*

FUTURE-PROOF

PEOPLE-CENTRIC

1.0

2.0

3.0

4.0

5.0

6.0

7.0

- ✓ Windows XP SP2, Windows Vista
- ✓ Windows Server 2003
- ➔ Optionele feature
  - ✓ Windows Server 2008

# *Versies van Powershell*

FUTURE-PROOF

PEOPLE-CENTRIC

1.0

2.0

3.0

4.0

5.0

6.0

7.0

- ✓ Windows 7
- ✓ Windows Server 2008 R2
- ➔ Aparte installatie
  - ✓ Windows XP SP3, Windows Vista SP1
  - ✓ Windows Server 2003 SP2



# *Versies van Powershell*

FUTURE-PROOF

PEOPLE-CENTRIC

1.0

2.0

3.0

4.0

5.0

6.0

7.0

- ✓ Windows 8
- ✓ Windows Server 2012
- ➔ Aparte installatie
  - ✓ Windows 7 SP1
  - ✓ Windows Server 2008 SP1 / R2 SP1

# *Versies van Powershell*

FUTURE-PROOF

PEOPLE-CENTRIC

1.0

2.0

3.0

4.0

5.0

6.0

7.0

- ✓ Windows 8.1
- ✓ Windows Server 2012 R2
- ➔ Aparte installatie
  - ✓ Windows 7 SP1
  - ✓ Windows Server 2008 R2 / 2012
- ➔ Niet voor Windows 8
  - ✓ Upgrade naar Windows 8.1 nodig

# *Versies van Powershell*

FUTURE-PROOF

PEOPLE-CENTRIC

1.0

2.0

3.0

4.0

5.0

6.0

7.0

- ✓ Windows 10
- ✓ Windows Server 2016 / 2019 / 2022
- ➔ Aparte installatie
  - ✓ Windows 7 SP1, Windows 8 / 8.1
  - ✓ Windows Server 2008 R2 / 2012 / 2012 R2

# Versies van Powershell

FUTURE-PROOF

PEOPLE-CENTRIC

1.0

2.0

3.0

4.0

5.0

6.0

7.0

✓ Powershell Core 6.0

➔ Aparte download

✓ Windows

✓ Linux

✓ MacOS

[Install Powershell Core 6.0](#)

# Versies van Powershell

1.0

2.0

3.0

4.0

5.0

6.0

7.0

✓ Laatste versie = Powershell 7.3

➔ Aparte download

✓ Windows

✓ Linux

✓ MacOS

[Install Powershell 7.x](#)

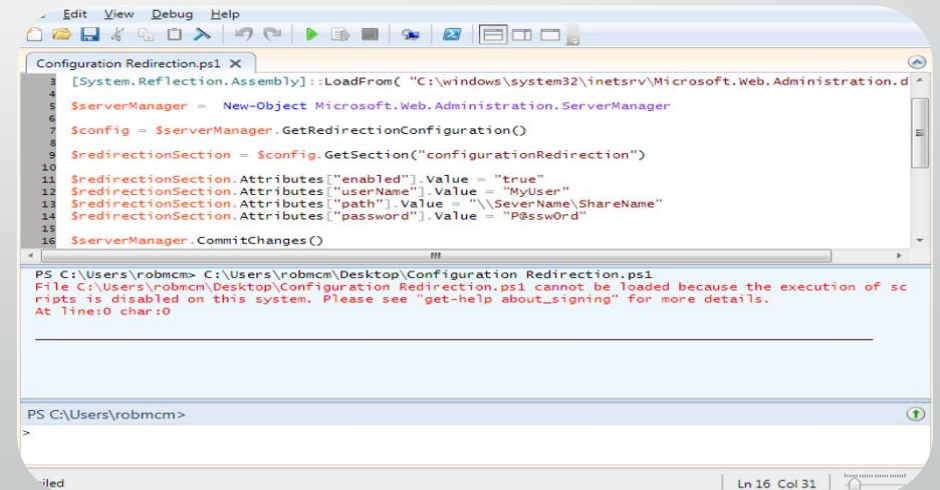
# Powershell met GUI

## Powershell ISE

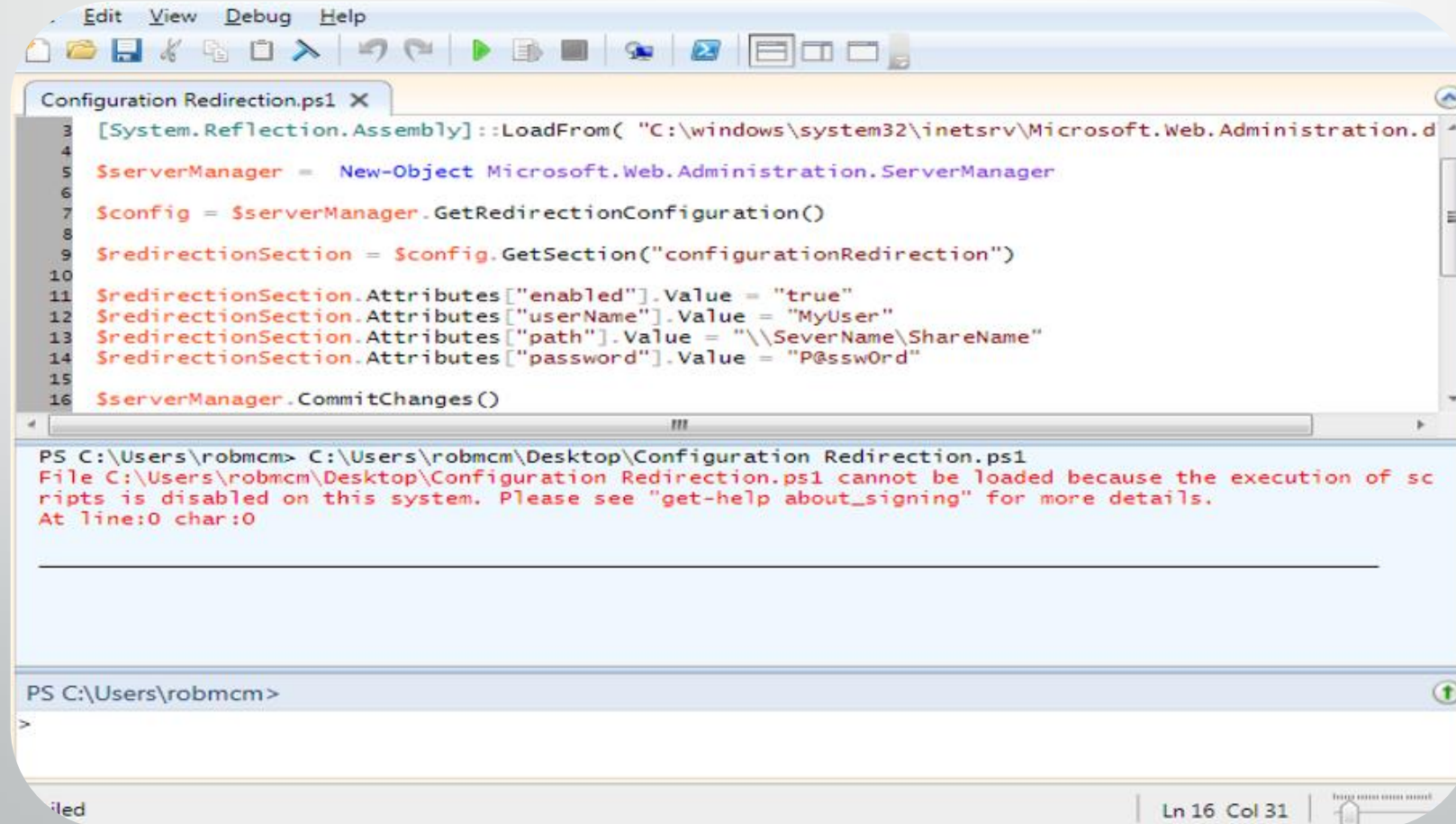
= Integrated Scripting Environment

➔ Bedoeld voor Powershell scripts

- ✓ maken
- ✓ aanpassen
- ✓ debuggen



# Powershell met GUI



The screenshot shows a PowerShell script editor window titled "Configuration Redirection.ps1 X" with a menu bar (Edit, View, Debug, Help) and a toolbar. The script content is as follows:

```
3 [System.Reflection.Assembly]::LoadFrom( "C:\windows\system32\inetsrv\Microsoft.Web.Administration.dll"
4
5 $serverManager = New-Object Microsoft.Web.Administration.ServerManager
6
7 $config = $serverManager.GetRedirectionConfiguration()
8
9 $redirectionSection = $config.GetSection("configurationRedirection")
10
11 $redirectionSection.Attributes["enabled"].Value = "true"
12 $redirectionSection.Attributes["userName"].Value = "MyUser"
13 $redirectionSection.Attributes["path"].Value = "\\SeverName\ShareName"
14 $redirectionSection.Attributes["password"].Value = "P@ssw0rd"
15
16 $serverManager.CommitChanges()
```

Below the editor is a console window showing the command execution:

```
PS C:\Users\robmcm> C:\Users\robmcm\Desktop\Configuration Redirection.ps1
File C:\Users\robmcm\Desktop\Configuration Redirection.ps1 cannot be loaded because the execution of scripts is disabled on this system. Please see "get-help about_signing" for more details.
At line:0 char:0
```

The status bar at the bottom indicates "Ln 16 Col 31".