



# Packer - Image as Code

*Automating everything*

*Spreker:*  
Dinant Paardenkooper – Innovator

*Onderwerp:*  
Image building met HashiCorp Packer



# Introductie

## Dinant Paardenkooper

Rol: Hands-on Cloud Native Solution Architect (Azure, VMware)

Team: Solution Architect Azure | Kubernetes | Automation

Drive: Innoveren, Business requirements omzetten naar praktische technische oplossingen.



Hobby's: Gitaar spelen, innoveren, hardlopen, squash

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# Aanleiding



In contact via ...

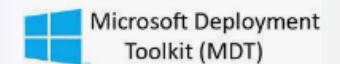
Zo veel tools, welke keuze

Automation Roadmap



## Welke tools voor welk doel?

Image Building



Configuration management



Infrastructure as Code

Scripting



Application Deployment



## Welke tools?

Image Building

Configuration management

Infrastructure as Code

Application Deployment

 Gobbler

 puppet

Scripting


 GitLab

 HashiCorp  
Packer

 ANSIBLE

 HashiCorp  
Terraform

 Azure  
DevOps

 Microsoft Deployment  
Toolkit (MDT)

 Microsoft  
System Center

 PowerShell

 vRealize Automation 8.0

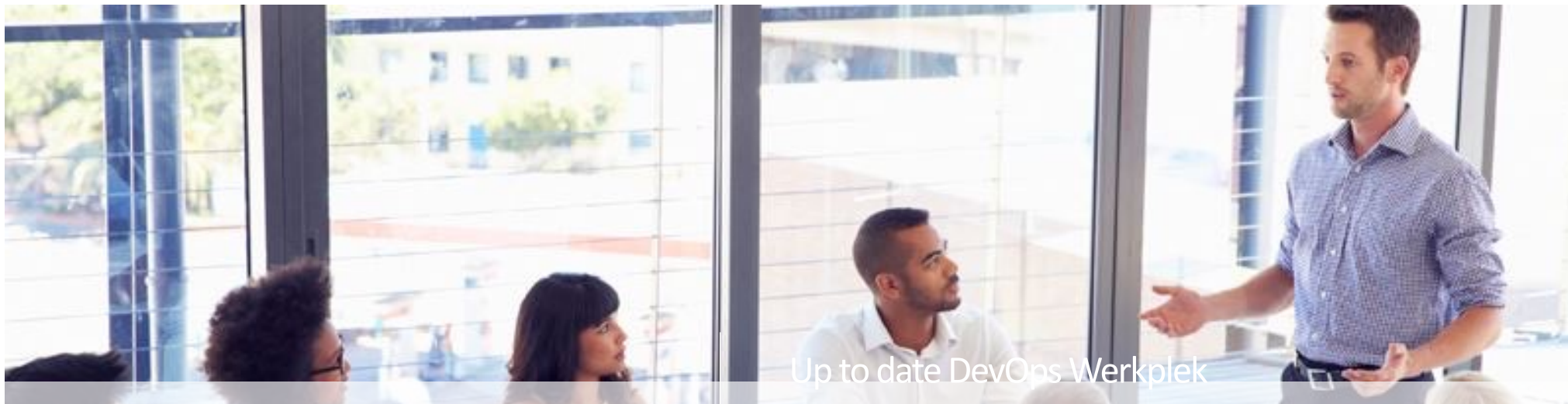
## Waarom Packer?

Platform onafhankelijk

Golden image in minuten

Opensource en lage leercurve



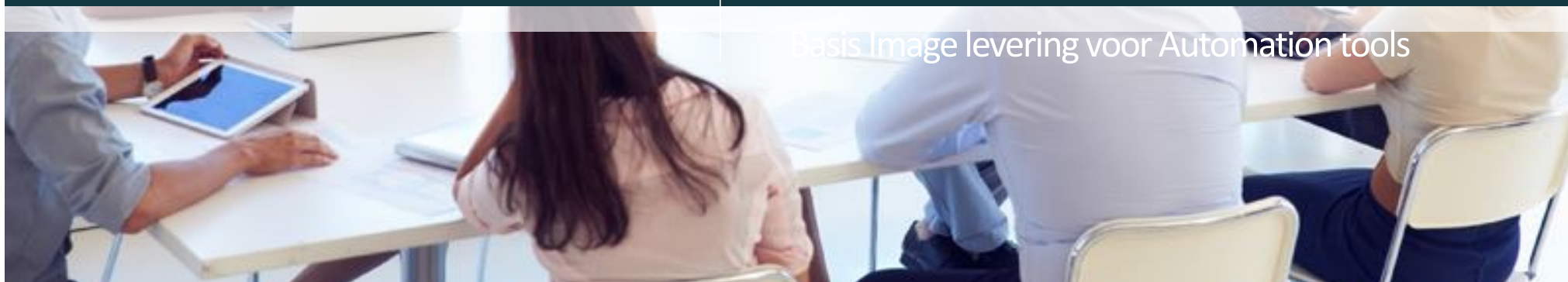


Up to date DevOps Werkplek

## Use cases

Hardening met CIS Benchmarks

Kubernetes Nodes



Basis Image levering voor Automation tools

A photograph of three people in an office environment. A woman with curly hair in a denim jacket is on the left, a woman with blonde hair in a black top is in the middle, and a man in a green shirt is on the right. They are all looking at a laptop screen. The background shows office desks with multiple computer monitors and windows.

**En nu de techniek**

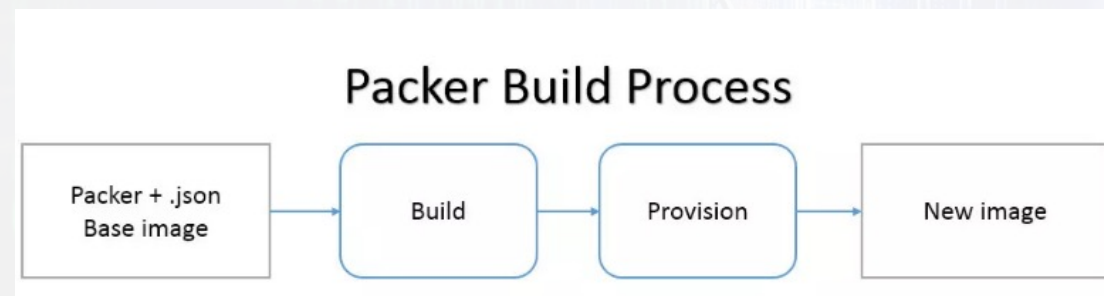
**Definities en installatie**

**Hoe werkt het?**

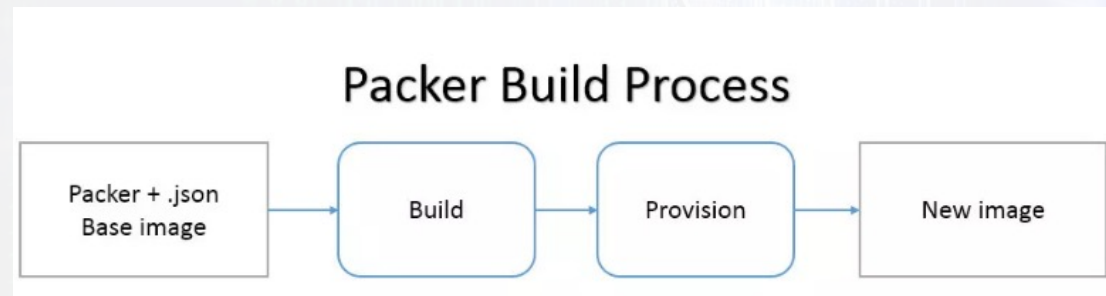
**Demo**



## Definities



## Definities



**Packer Definites**

Data Source

Builders

Provisioners &  
Communicators

Artefacts

**Voorbeelden**

ISO, Git repo

vSphere, Azure

Shell, PS, Ansible

Cloud image

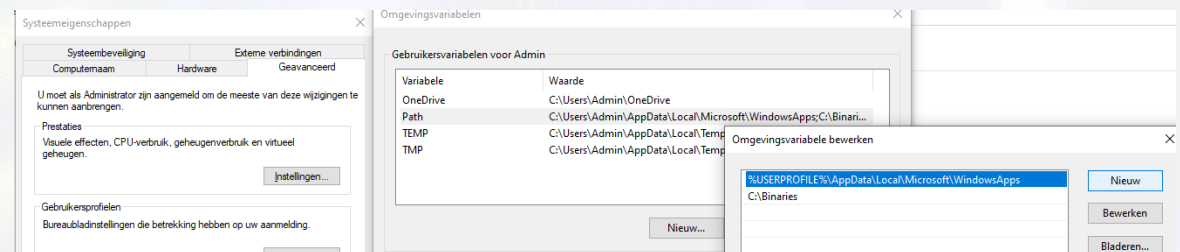
## Installatie

### Linux

- Wget [https://releases.hashicorp.com/packer/1.7.6/packer\\_1.7.6\\_linux\\_amd64.zip](https://releases.hashicorp.com/packer/1.7.6/packer_1.7.6_linux_amd64.zip)
- Unzip packer\_1.7.6\_linux\_amd64.zip
- mv packer /usr/local/bin
- Packer --version

### Windows

- Download de x64 binaries
- Unzip de executable
- Voeg packer toe als omgevings environment
- Open admin powershell
- Packer --version





## Hoe werkt het

**variables.json**

Omgevingsvariabelen

**Preseed.cfg / Autounattend.xml / Cloudinit**

OS instellingen

**<PackerBuilderfile>.json**

Packer configuratie file

**<Provisionerfile>.sh of ps1**

Afconfiguratie taken

## Demo - Ubuntu

Benodigheden:

**Variables.json**

**Preseed.cfg**

**Ubuntu.json**

**Script.sh**



## Demo – Windows Gui



### Benodigheden:

**Variables.json**

**Autounattend.xml**

**Win2k19server.json**

**Powershell script**





## Andere voorbeelden

### Azure image

<https://freshbrewed.science/2021/09/08/packer-linux.html>

### AWS image

<https://devopscube.com/packer-tutorial-for-beginners/>

<https://learn.hashicorp.com/tutorials/packer/aws-windows-image?in=packer/integrations>

### vSphere - Ubuntu

<https://github.com/David-VTUK/Rancher-Packer>

### vSphere – Windows 2019

<https://www.thomaspreischl.de/automate-vmware-vsphere-template-with-packer/>

## Lessons learned

Doen is ervaren

Voeg alleen toe wat nodig is

Veel voorbeelden op Internet

Reduceer tot enkele images

Ververs maandelijks je images

Laat anderen zichzelf overtuigen



# Take aways

Begin klein

Kies een usecase

Toegevoegde waarde zien

Werk Samen

Herhaling? Automatiseer

Build & Test

Gewoon doen!

Blijf Innoveren



# Next Time ...

November 2021

Januari 2022

Februari 2022

Februari 2022

Kennissessie: Ansible (Config mgmt)

Kennissessie Terraform (Infra as Code)

Kennissessie Azure DevOps (App Depl)

Python Training

**Thanks for your attention**

Be inspired, working together, innovate your IT