



# VCF

# TechCon

Powered by VMUG

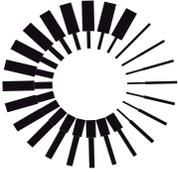
## HoloDeck 9.0

Bart Oevering



**VMUGNL**  
VMware User Group

# Bart Oevering



**Conscia**  
Secure progress



# Agenda

- Labs
  - Hardware
  - Labs
- Holodeck



I KNOW YOU YOUNG'UNS  
THINK WE OLD-TIMERS  
AREN'T ANY FUN,

# My first server 'homelab'



# Renting hardware



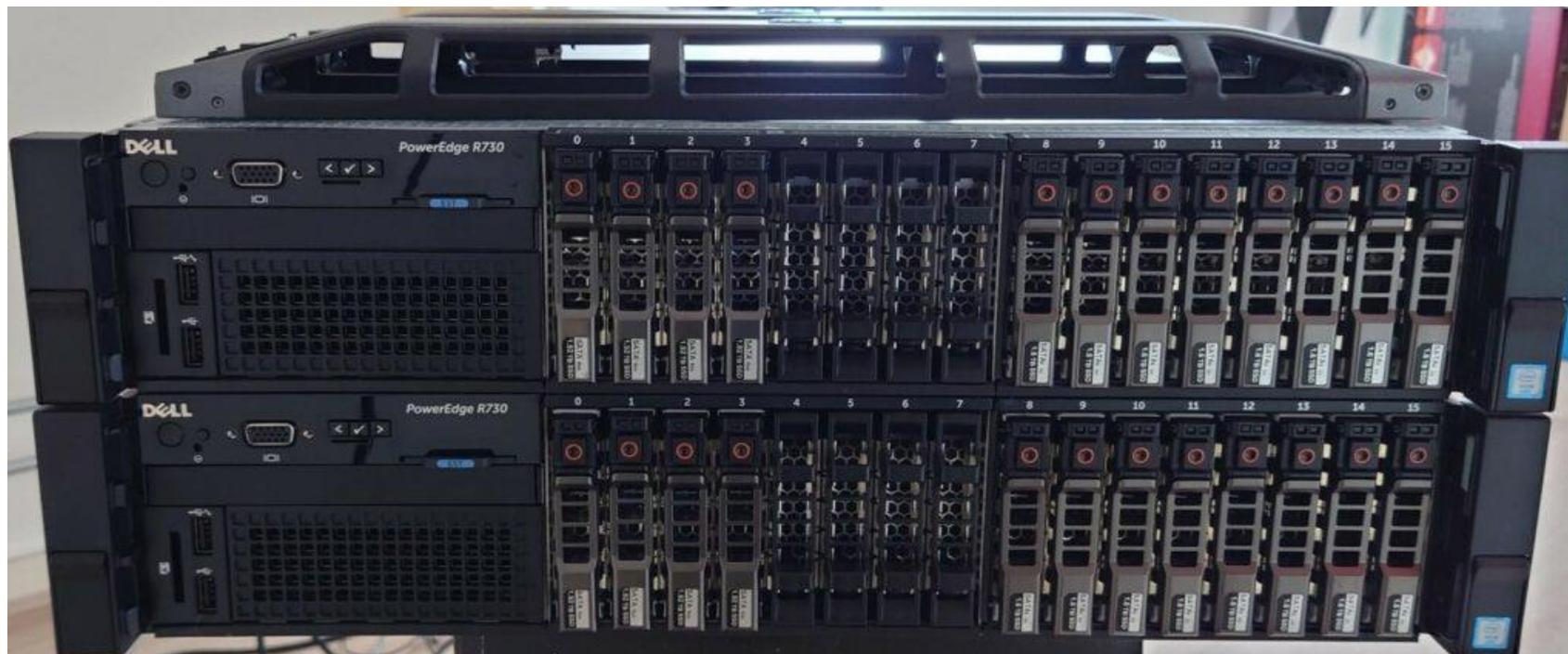
# No so home-lab v1



# No so home-lab v2



# No so home-lab v3



# What about software?



# Self build - VLAN's

- VLAN 1100 LAB01-MGMT
- VLAN 1101 LAB01-VMkernel
- VLAN 1102 LAB01-vMotion
- VLAN 1103 LAB01-vSAN
- VLAN 1105 LAB01-Workload5
- VLAN 1106 LAB01-Workload6
- VLAN 1110 LAB01-NSX-TRANS-1110
- VLAN 1111 LAB01-NSX-TRANS-1111

# Downloads

- Flings; William Lam – ESXi
  - Ombouwen naar vSAN ESA
- VMware vCenter ISO
- VMware NSX OVA
  
- Of VCF componenten
  - ESXi
  - vCenter
  - SDDC Manager/VCF Installer

# Time





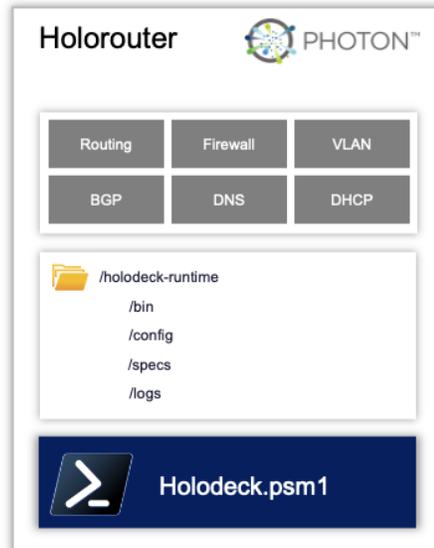


# Holodeck 9.0

Holodeck is your ideal partner for deploying VCF Labs

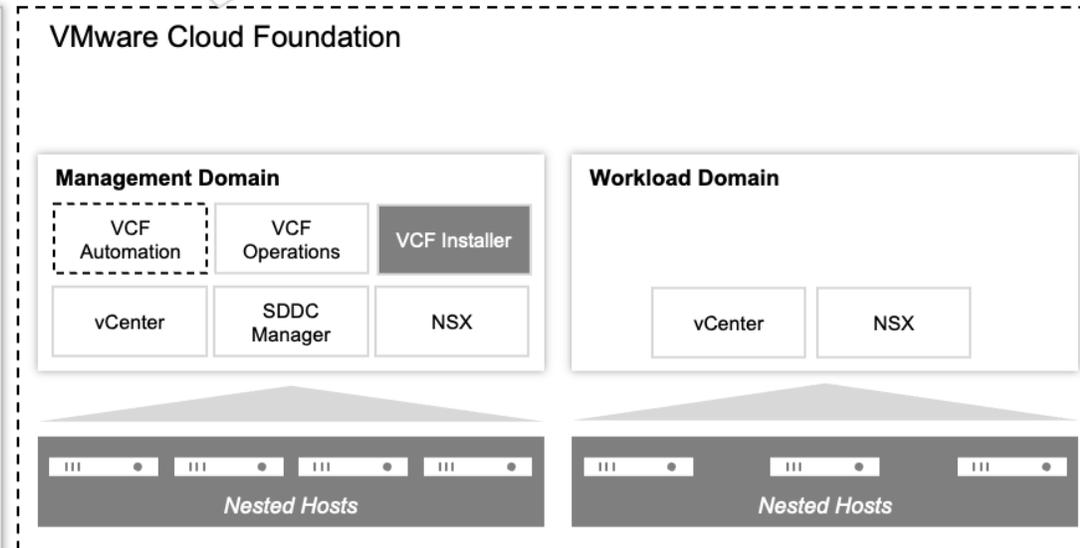
## What is Holorouter?

Photon Appliance with Networking services, runtime folder and a PowerShell Module



## What is holodeck instance?

Fully functional nested VCF instance



## Types of VCF Instance that are currently supported

- Version** – VCF 9.0 and VCF 5.2
- vSAN Mode** – ESA and OSA
- Full stack** – Default Deployment Option to deploy both management and workload domain
- Management Only** – Option to deploy Management Domain only

Target Environment  
vCenter Server | ESX Host



Automation and Repeatability



Self Provision Networking



Idempotency

## Deployment Overview

- 1 Deploy Holorouter
- 2 Configure Networking Services
- 3 Provision Nested ESX hosts
- 4 Provision VCF Installer Appliance
- 5 Deploy Management Domain
- 6 Deploy Workload Domain and Additional Services



Holodeck instance is successfully deployed

# Holodeck 9.0

- Reduced hardware requirements
- Self-contained services (NTP, DNS, AD, DHCP, Cert)
- Isolated networking
- Isolation between environments
- Multiple VCF deployments on a single VMware ESX host of sufficient capacity
- Automation and repeatability

# Holodeck 9.0



# Back to hardware

VCF 5.2	Single Site	Dual Site
CPU	16	32
Memory	384 GB	1TB
Disk	2 TB	4TB

VVF 9.0	Single Site	Dual Site
CPU	12	24
Memory	256 GB	512 GB
Disk	1 TB	2TB

VCF 9.0	Single Site	Dual Site
CPU	24	48
Memory	325 GB	768 GB
Disk	1.1 TB	2.5TB

VCF 9.0	Single Site	Dual Site
CPU	32	64
Memory	325 GB	768 GB
Disk	1.1 TB	2.5TB

**VSAN OSA**

**VSAN OSA**

**VSAN ESA**

# Configuration

- VSS/VDS: TRUNK
  - Accept: Promiscuous Mode, MAC Address changes and Forged transmits
  - VLAN: trunk
    - Create every VLAN on the physical switches
- NSX Overlay:
  - Updated NSX segment profiles
  - Allow 0-4094 VLANID's
  - Need a 'stepping stone' into the VCF environment

# Ready? Set, Go!



# HoloRouter

Holorouter 

Routing	Firewall	VLAN
BGP	DNS	DHCP

 /holodeck-runtime

- /bin
- /config
- /specs
- /logs

 Holodeck.psm1



# Down-/Up-loads

VCF Version	Folder Path
VCF 9.0.1.0	<code>/holodeck-runtime/bin/9.0.1.0/</code>
VCF 9.0.0.0	<code>/holodeck-runtime/bin/9.0.0.0/</code>
VCF 5.2.2	<code>/holodeck-runtime/bin/5.2.2/</code>
VCF 5.2.1	<code>/holodeck-runtime/bin/5.2.1/</code>
VCF 5.2	<code>/holodeck-runtime/bin/5.2/</code>

# Commands

pwsh

```
New-HoloDeckConfig -Description <Description> -TargetHost <Target  
vCenter/ESX IP/FQDN> -Username <username> -Password <password>
```

```
Get-HoloDeckConfig
```

```
Import-HoloDeckConfig -ConfigId <String>
```

```
New-HoloDeckInstance -Version <String> -InstanceID <String> -vSANMode  
<String> -ManagementOnly -NsxEdgeClusterMgmtDomain [-  
DeployVcfAutomation] [-ProvisionOnly] [-DepotType <String>]
```

Don't forget to answer a few questions in the beginning

# URLs

- `http://<holo-router>:30000`

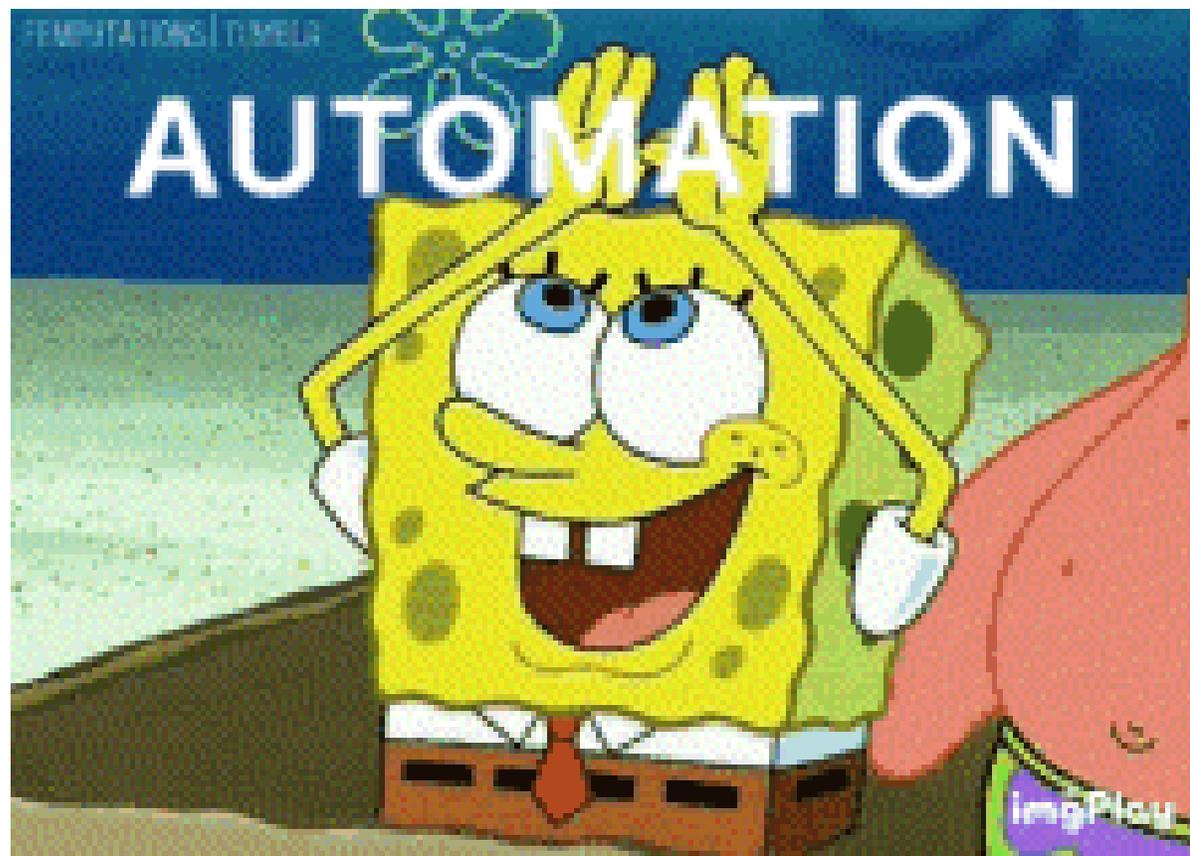
	Appliance	FQDN	Username	Password
Management Domain				
	VCF Installer or Cloud Builder	<code>https://vcfinstaller-a.site-a.vcf.lab</code>	<code>admin@local for VCF Installer admin for Cloud Builder</code>	<code>VMware123!</code> <code>VMware123!</code>

<https://vmware.github.io/Holodeck/#post-deployment>

# Wait



# Added



# Time left for demo?

# Questions

# See more?

- <https://www.vmware.com/explore/video/6377277989112>

It's just 1 hour 26 min 51 sec  
short/long, whatever you prefer

