

Welcome to the  
**WVD Community**



Rollout of session hosts: VM, Scale  
Sets and Emphermal disks

# About me



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**sepago**<sup>®</sup>

<https://www.sepago.de/en/wvd-value-add-tools/>

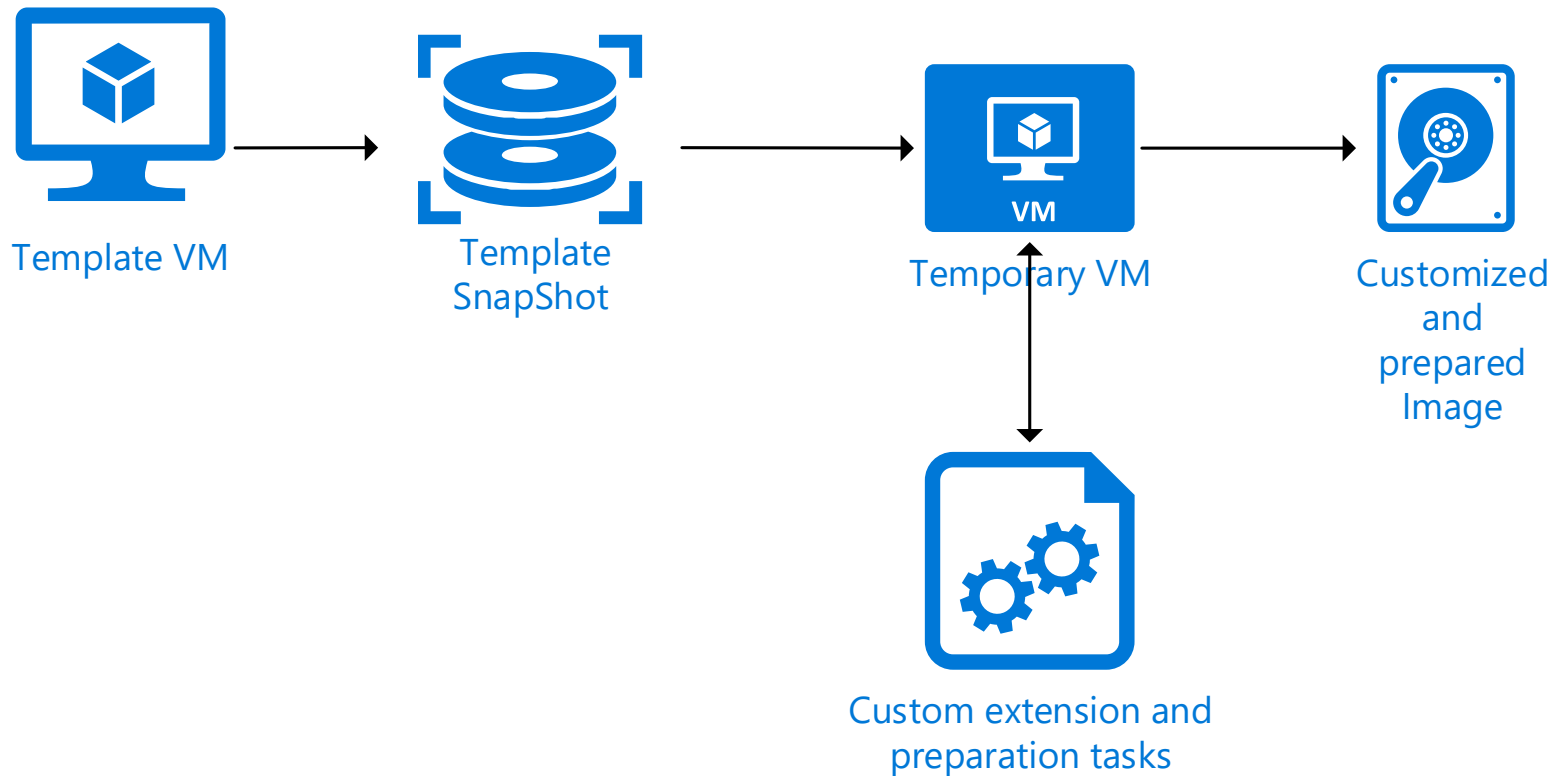
# Deployments of Session Hosts

- Deployment from the Azure Market place
  - Vanilla images or syspreped images
  - Have to enter all parameters, like domain credentials, WVD SP, OU, ...
  - Limited flexibility; fails if DSC extensions cannot be loaded from the internet (policies, proxies,...)
  - Experience for admins :-/
- Deployment from PowerShell
  - You can do anything in a high automated way
  - You need PS know-how and have to work with the Azure resources directly
  - High flexibility
  - Experience for admins 😊
- Deployment with WVDAdmin (free community tool)
  - Like deployment from PowerShell with a friendly GUI
  - Build-in image creation process from template VMs (re-usable)
  - Experience for admins ;-)

# Deployments of Session Hosts

Who has ever created an image?

The golden image approach



*SYSPREP ISSUE  
With modern apps!*

<https://blog.itprocloud.de/Sysprep-and-WVD-and-UWP/>

# Deployments of Session Hosts

Building Images and roll out Session Hosts

# DEMO

# Kind of Disks and VM's

- Different disk sizes
  - HDD (don't use this one except for a template VM)
  - Standard SSD (my favorite)
  - Premium SSD
  - And very special: Ephemeral disks

- VMs
  - „Normal“ VMs
  - Virtual Machine Scale Sets (they don't scale in a WVD perspective!)

## Disk comparison

The following table provides a comparison of ultra disks, premium solid-state drives (SSD), standard SSD, and standard hard disk drives (HDD) for managed disks to help you decide what to use.

	Ultra disk	Premium SSD 21,68\$*	Standard SSD 9,60\$*	Standard HDD 5,89\$*
Disk type	SSD	SSD	SSD	HDD
Scenario	IO-intensive workloads such as <a href="#">SAP HANA</a> , top tier databases (for example, SQL, Oracle), and other transaction-heavy workloads.	Production and performance sensitive workloads	Web servers, lightly used enterprise applications and dev/test	Backup, non-critical, infrequent access
Max disk size	65,536 gibibyte (GiB)	32,767 GiB	32,767 GiB	32,767 GiB
Max throughput	2,000 MiB/s	900 MiB/s	750 MiB/s	500 MiB/s
Max IOPS	160,000	20,000	6,000	2,000

Source:  
<https://docs.microsoft.com/en-us/azure/virtual-machines/windows/disk-types>

# Deployments of Session Hosts

Ephemeral disks and scale sets

# DEMO

# Deployments of Session Hosts

## Ephemeral disks and scale sets

CrystalDiskMark 8 Beta 4 x64 [ADMIN] window showing performance results for Standard SSD. The window displays a table of Read and Write speeds in MB/s for various test patterns. The C: drive is 15% full (20/127GiB).

	Read	Write
SEQ1M Q8T1	137.06	109.40
SEQ1M Q1T1	139.57	139.59
RND4K Q32T1	68.15	22.39
RND4K Q1T1	20.68	17.05

Standard SSD

CrystalDiskMark 8 Beta 4 x64 [ADMIN] window showing performance results for Ephemeral disk. The window displays a table of Read and Write speeds in MB/s for various test patterns. The C: drive is 15% full (19/127GiB).

	Read	Write
SEQ1M Q8T1	140.97	140.08
SEQ1M Q1T1	141.30	140.06
RND4K Q32T1	68.22	68.16
RND4K Q1T1	16.68	22.75

Ephemeral

CrystalDiskMark 8 Beta 4 x64 [ADMIN] window showing performance results for Premium disk. The window displays a table of Read and Write speeds in MB/s for various test patterns. The C: drive is 16% full (20/127GiB).

	Read	Write
SEQ1M Q8T1	139.81	118.98
SEQ1M Q1T1	140.05	139.71
RND4K Q32T1	68.16	68.19
RND4K Q1T1	16.68	14.04

Premium



# The true about Azure Scale Sets

## Virtual machine scale set ✨

Microsoft



### Virtual machine scale set [Save for later](#)

Microsoft

Create

Overview Plans

Azure virtual machine scale sets let you create and manage a group of identical, load balanced VMs. The number of VM instances can automatically increase or decrease in response to demand or a defined schedule. Scale sets provide high availability to your applications, and allow you to centrally manage, configure, and update a large number of VMs. With virtual machine scale sets, you can build large-scale services for areas such as compute, big data, and container workloads. (Portal VMSS version 7.1.7)

- Easy to create and manage multiple VMs
- Provides high availability and application resiliency
- Allows your application to automatically scale as resource demand changes
- Works at large-scale

Useful Links

[Learn more](#)

[Documentation](#)

They cannot scale  
in a WVD perspective!

Questions

