

Deploying Multiple VMs in Microsoft Azure

CREATING A VM IMAGE LIBRARY



Tim Warner

AUTHOR EVANGELIST, PLURALSIGHT

@TechTrainerTim

timw.info



Microsoft
CERTIFIED

Trainer

Solutions Expert

Cloud Platform and
Infrastructure



Overview

















Generalize a Windows Server or Linux VM running in Azure

Capture the VM image

Deploy a new VM based on the image



Exercise Files



What do you want to learn?

Timothy
timothywarner316@gmail.com

Troubleshooting with Microsoft Azure Network Watcher

by Tim Warner

Microsoft now gives you packet-level access to your Windows Server and Linux virtual machines (VMs) running in Azure. You'll learn how to use Network Watcher to troubleshoot network security groups (NSGs), perform packet captures, and much more.

[Resume Course](#) [Bookmark](#) [Add to Channel](#)

Table of contents

Description

Transcript

Exercise files

Discussion


Learning Check

Recommended

These exercise files are intended to provide you with the assets you need to create a video-based hands-on experience. With the exercise files, you can follow along with the author and re-create the same solution on your computer. We find this to be even more effective than written lab exercises.

[Download exercise files](#)

Course author

**Tim Warner**

Timothy Warner is a Microsoft Most Valuable Professional (MVP) in Cloud and Datacenter Management who is based in Nashville, TN.

Course info

Level	Intermediate
Rating	★★★★★
My rating	★★★★★
Duration	2h 12m
Released	31 Oct 2017

Share course

[f](#) [t](#) [g+](#) [in](#)



Azure Architecture Center

Microsoft Azure

Contact Sales: 1-800-867-1389SearchPortal

Why AzureSolutionsProductsDocumentationPricingTrainingMarketplacePartnersSupportBlogMoreFree account

[Azure](#) / Architecture

Filter by title

Azure Architecture Center

> Azure Cloud Adoption Guide

> Application Architecture Guide

Data Architecture Guide

> Reference Architectures

> Cloud Design Patterns

> Best Practices

> Performance Antipatterns


> Design Review Checklists

> Design for Resiliency

> Scenario guides


> Resources

Azure Architecture Center




Azure Application Architecture Guide

A guide to designing scalable, resilient, and highly available applications, based on proven practices that we have learned from customer engagements.




Reference Architectures

A set of recommended architectures for Azure. Each architecture includes best practices, prescriptive steps, and a deployable solution.




Cloud Design Patterns

Design patterns for developers and solution architects. Each pattern describes a problem, a pattern that addresses the problem, and an example based on Azure.




Building Microservices on Azure

This multi-part series takes you through the process of designing and building a microservices architecture on Azure. A reference implementation is included.




Azure Data Architecture Guide

A structured approach to designing data-centric solutions on Microsoft Azure.



Best Practices for Cloud Applications

Best practices for cloud applications, covering aspects such as auto-scaling, caching, data partitioning, API design, and others.



Designing for Resiliency

Learn how to design resilient applications for Azure.

Download PDF



timw.info/arch



Generalize a VM in Azure



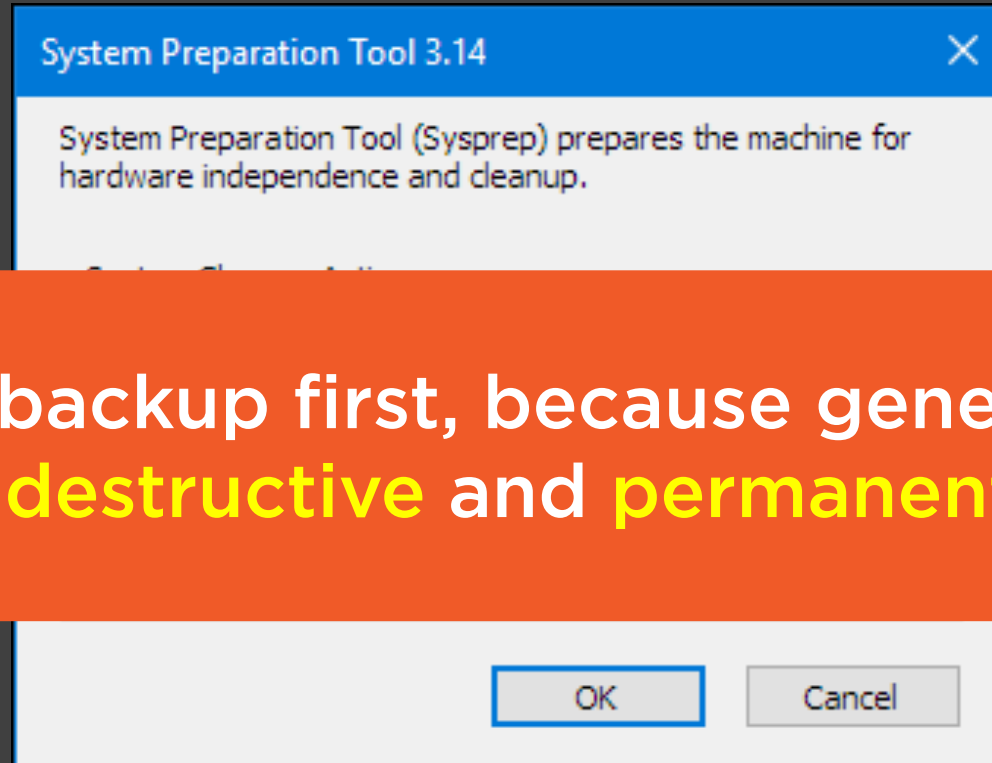
Purpose of Generalization



Resets server-specific data:

- Computer name
- Security identifiers (SIDs)
- Local Administrator/root identity
- Device driver cache
- Event logs

Generalize a Windows Server or Linux VM



Take a VM backup first, because generalization is **destructive** and **permanent**

```
sudo waagent -deprovision+user
```



Managed Disks

Disks

- No storage account (management) required
- Pay for pre-allocated storage (P10 = 128 GB SSD VHD)

Snapshots

- Read-only full copy of a managed disks

Images

- Generalized VM disk image
- Snapshots can be converted into images



Demo



1

Generalize a VM

- Manually
- PowerShell (Cloud Shell?)



Capture a VM Image in Azure



Demo



2

Capture a managed VM in the portal



Deploy a VM Based on an Image



Demo



3

Deploy a VM from an image

Deploy a VM from a snapshot



Summary



Please be sure to use managed disks for your VMs in Azure

- ConvertTo-AzureRmVMManagedDisk

You can use your custom images with Azure Resource Manager (ARM) templates

Next module: Configuring ARM Templates for Multi-VM Deployment

