

# Migrating Physical and Virtual Servers to Microsoft Azure

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## EVALUATING THE MIGRATION ENVIRONMENT



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# Overview



**Understand the Azure Site Recovery (ASR) use cases**















**Consider Azure Migrate**

**Run the ASR Deployment Planner for Hyper-V**

**Run the Database Migration Assistant (DMA) for SQL Server**



# Exercise Files



What do you want to learn?

Timothy  
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## 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 contentsDescriptionTranscript**Exercise files**DiscussionLearning CheckRecommended

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

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# Azure Site Recovery Use Cases



# Source Migration Environments

On-prem physical  
servers

On-prem Hyper-V  
VMs

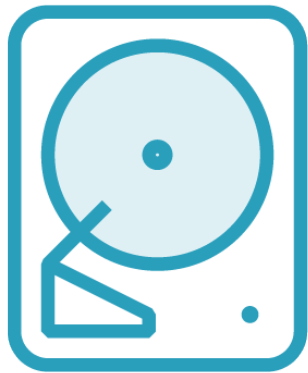
On-prem VMware  
VMs

Azure VMs

Other clouds  
(AWS)



# "Lift and Shift" Strategies



Upload (Gen 1) VHDs



Azure Data Box

**But what about workloads (SharePoint farm)?**



# Azure Site Recovery (ASR)

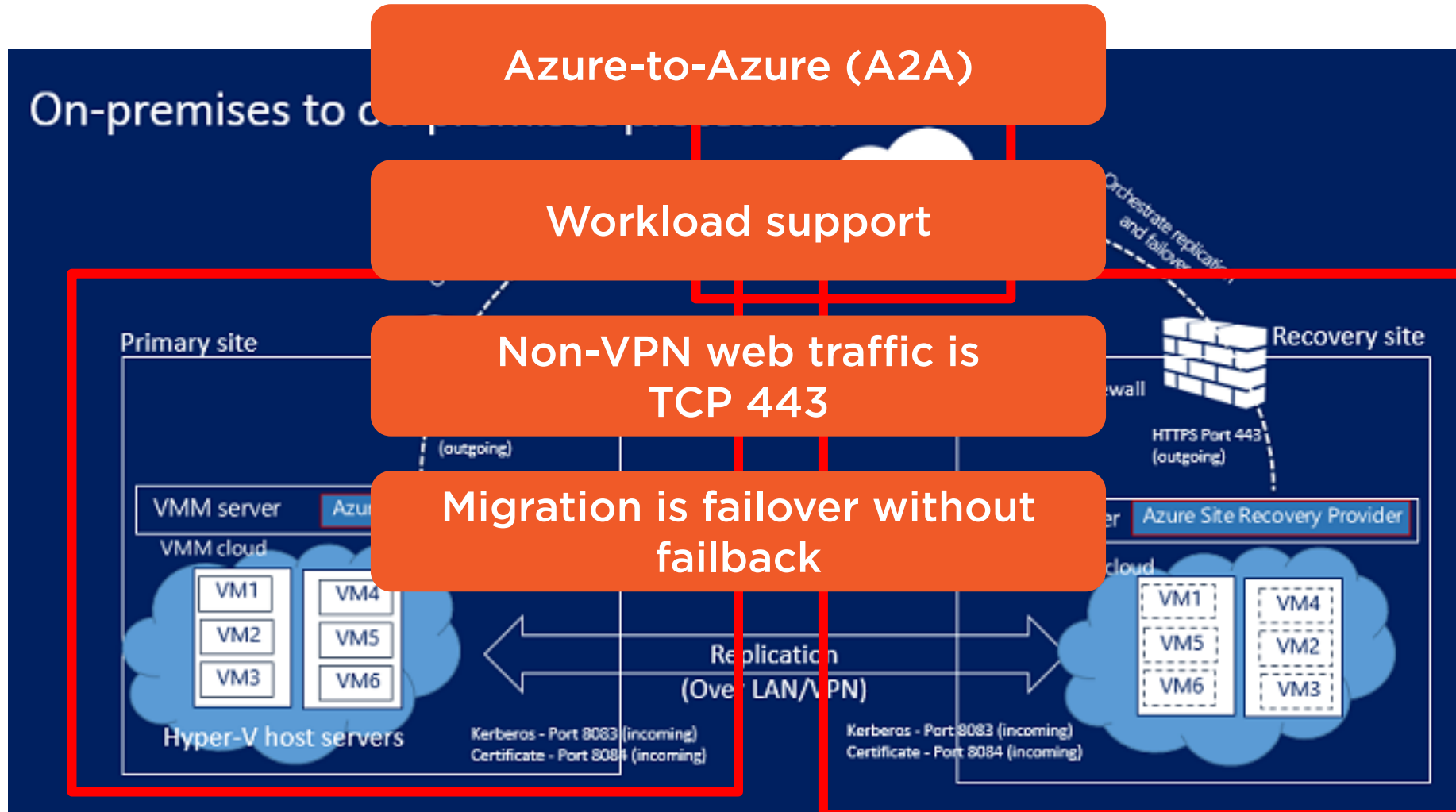
**Business continuity/disaster recovery (BCDR) solution**

**Orchestrates replication, failover, and failback**

**Migration is also a perfectly valid use case**



# ASR Scenarios





# Azure Migrate



# Azure Migrate



Discover, assess, and migrate your on-premises VMware VMs to Azure (Hyper-V support coming soon)



Use results with ASR or Database Migration Service (DMS)



Next generation of the ASR Deployment Planner tool



# Demo



# 1

Azure Migrate (portal)

Migration VM appliance



# ASR Deployment Planner



# What Does ASR Recovery Planner Do?

## Compatibility assessment

- Assess Azure readiness
- Churn, IOPS, CPU
- Recommend VM size

## Capacity estimations

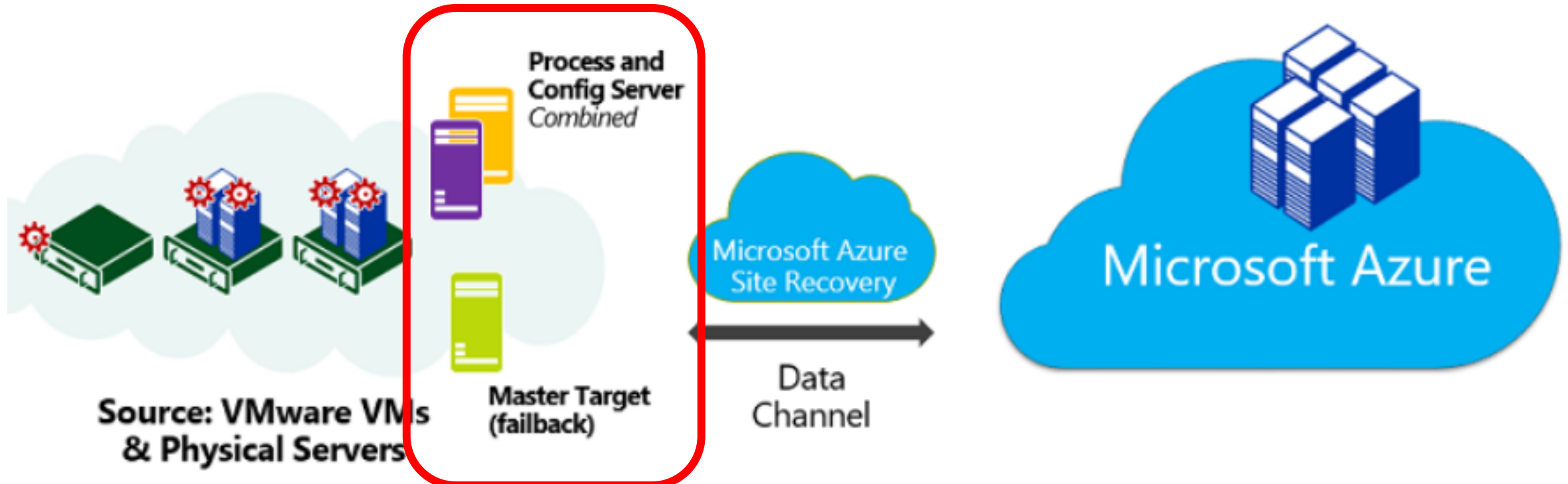
- Network bandwidth
- On-prem and cloud storage requirements
- Monthly cost

## Process

- Get VM list
- Profile VMs (~30 days)
- Generate XLSM report



# VMware to Azure ASR Scenario



Hyper-V to Azure requires only ASR provider/Recovery Services vault agent

# Demo



# 2

Portal > walk through VMware and show process server UI

ASR Deployment Planner and report review for Hyper-V



# Prepare Azure for ASR





# Azure ASR Preparation To-do List



**Recovery  
Services vault**

**Storage account  
(RA-GRS)**

**Virtual network**



# Demo



# 3

**Prepare Azure environment (keep region foremost in mind):**

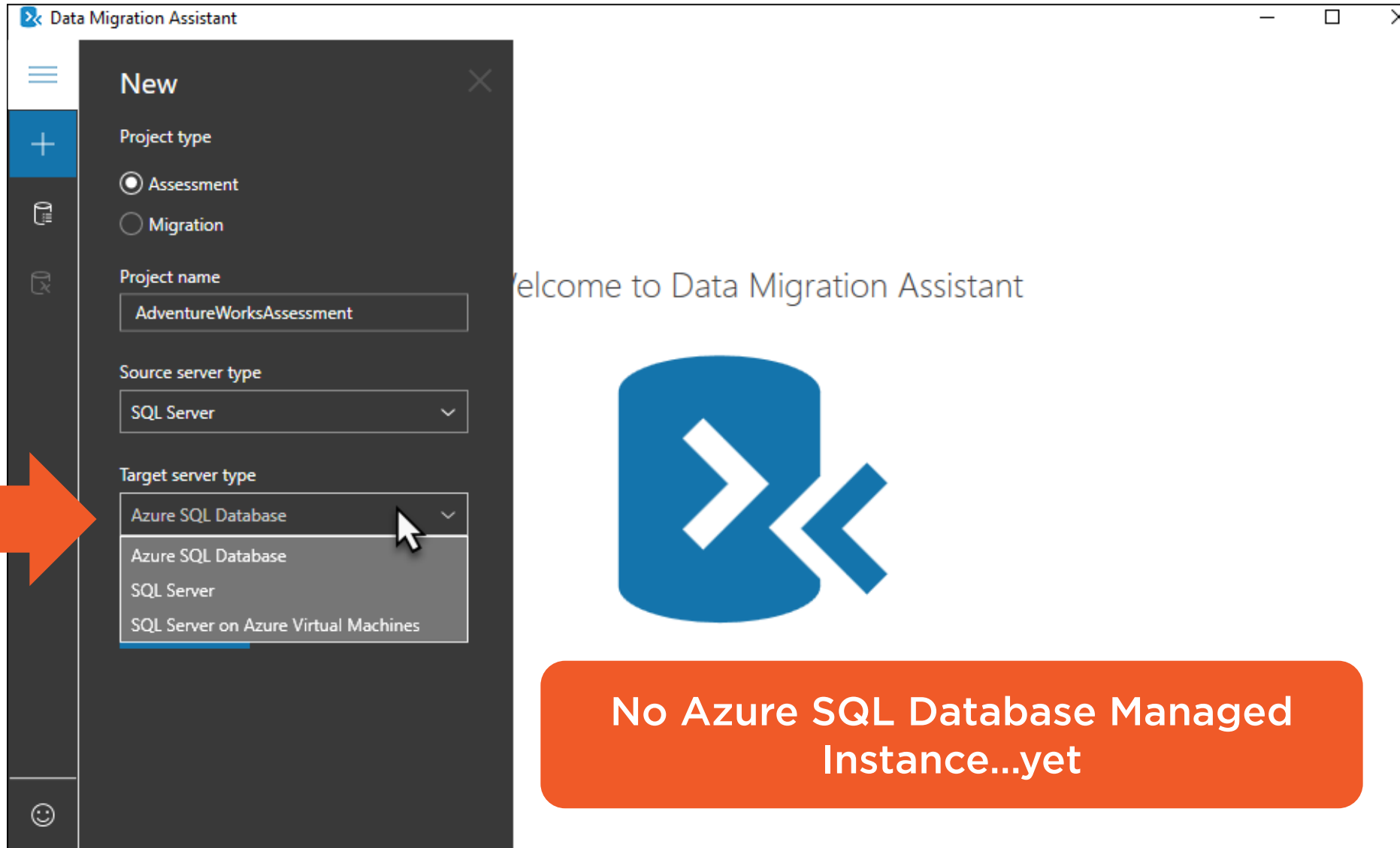
- Recovery Services vault
- Storage account (GP, RA-GRS, no secure transfer)
- Virtual network



# Database Migration Assistant



# Database Migration Assistant (DMA)



Demo



4

Run DMA against AdventureWorks



# Summary



The new Microsoft embraces VMware environments

- ASR is not limited to Hyper-V

Please invest the time to undertake a proper assessment of your on-premises environment

Azure PaaS solutions for SQL Server databases are tremendous

**Next module:** Migrating VMs to Microsoft Azure with Azure Site Recovery

