

# Exam Prep: AZ-104 Azure Certified Administrator

Tim Warner  
@TechTrainerTim

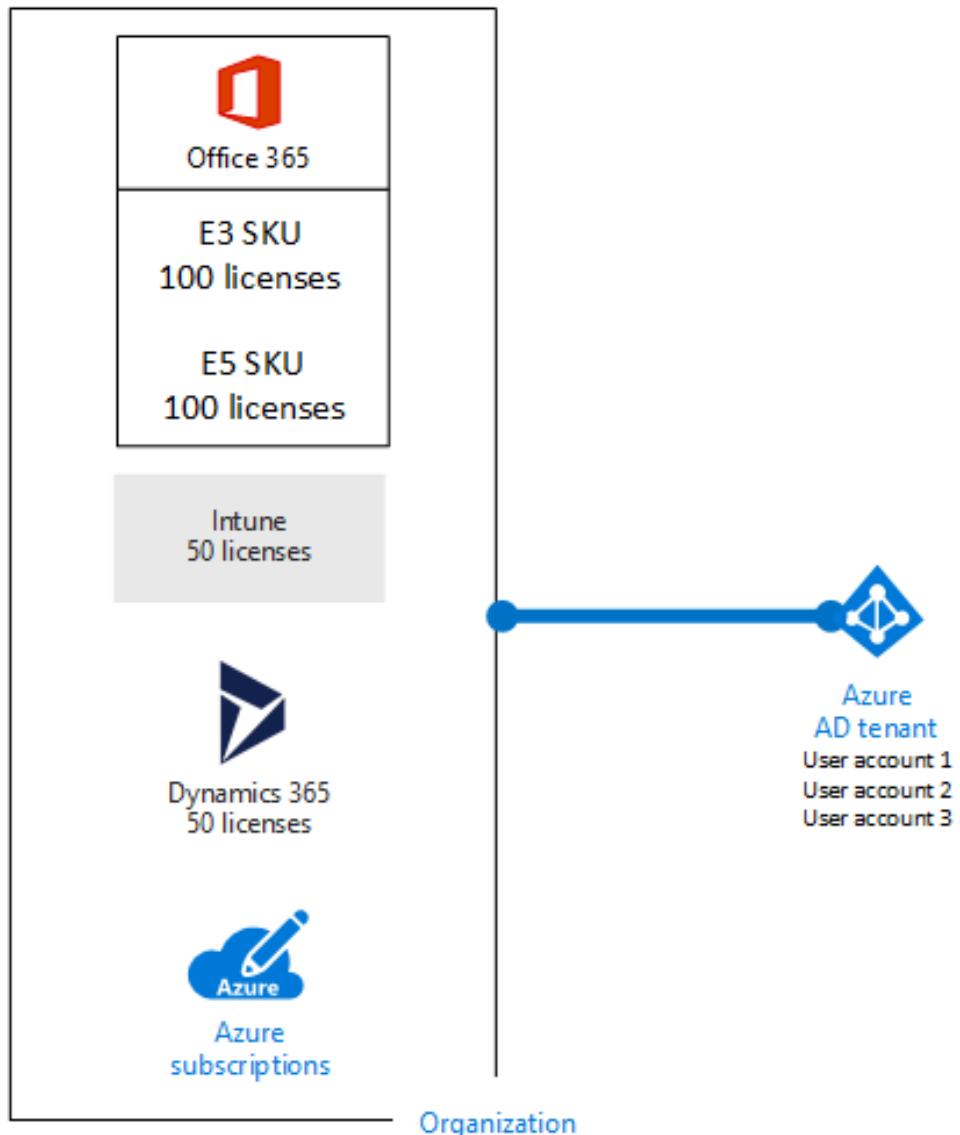


# **Manage Azure Identities and Governance (15-20%)**

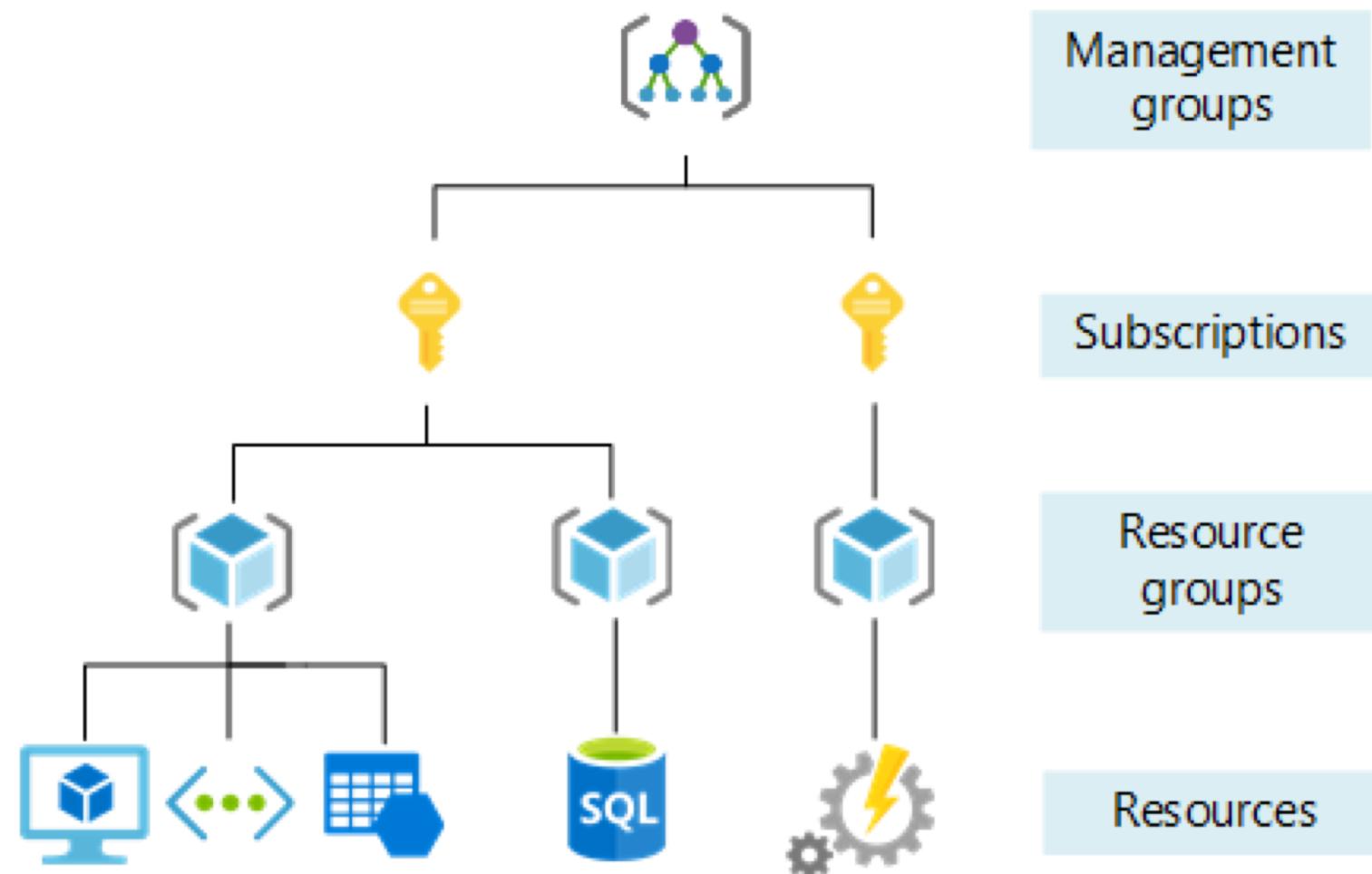
# Manage Azure AD Objects

- Create users and groups (cloud-native and guest)
- Configure self-service password reset
- Manage user and group properties
- Perform bulk user updates
- Configure Azure AD Join and device settings

# Azure Subs & Tenants



# Azure Management Scopes



# Manage Subscriptions and Governance

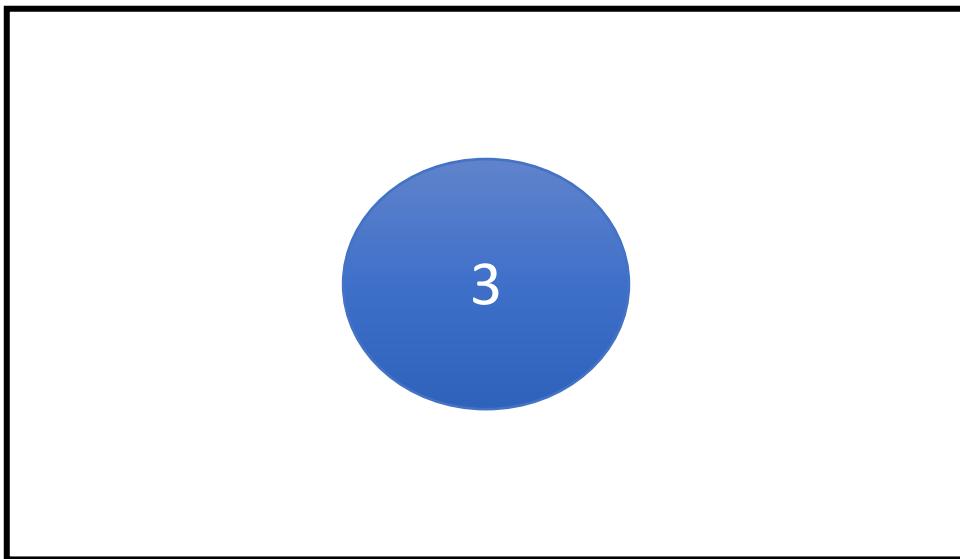
- Manage subscriptions
- Configure Cost Management
- Configure management groups
- Create and manage resource groups
- Move resources
- Configure Azure governance
  - Apply tags
  - Apply resource locks
  - Apply Azure policies
- Configure resource locks

# **Implement and Manage Storage (10-15%)**

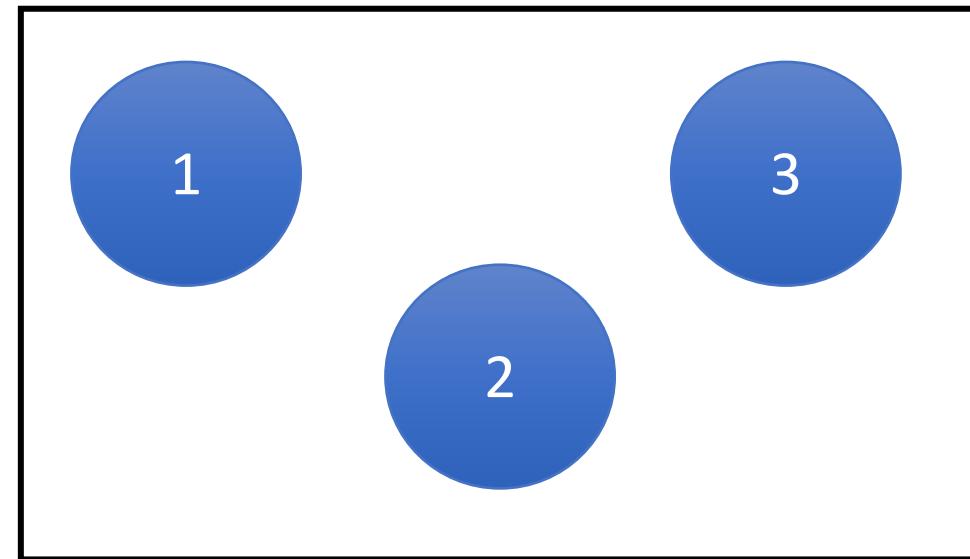
# Configure Azure Files and Azure Blob Storage

- Configure Azure blob storage
- Configure storage tiers for Azure blobs
- Create an Azure file share
- Create and configure Azure File Sync service

# Storage Account Replication

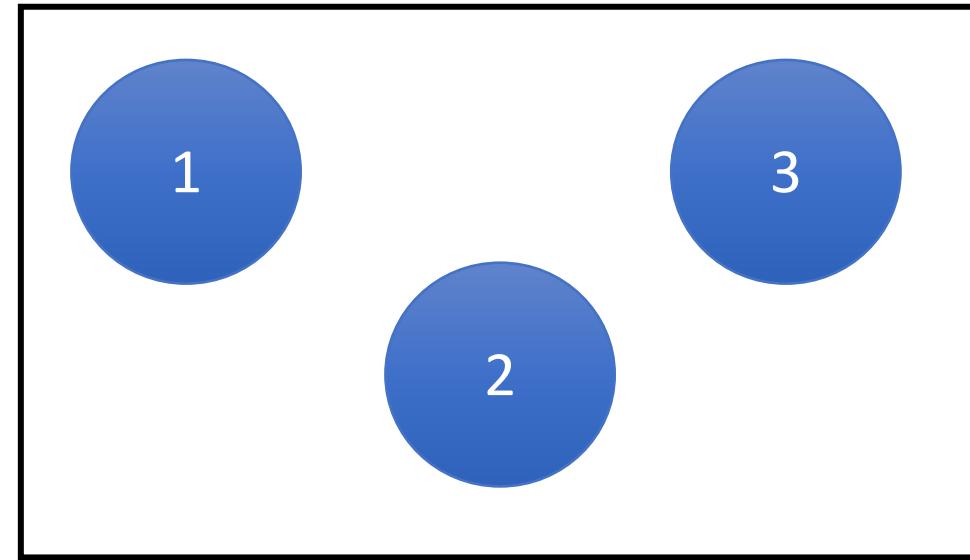
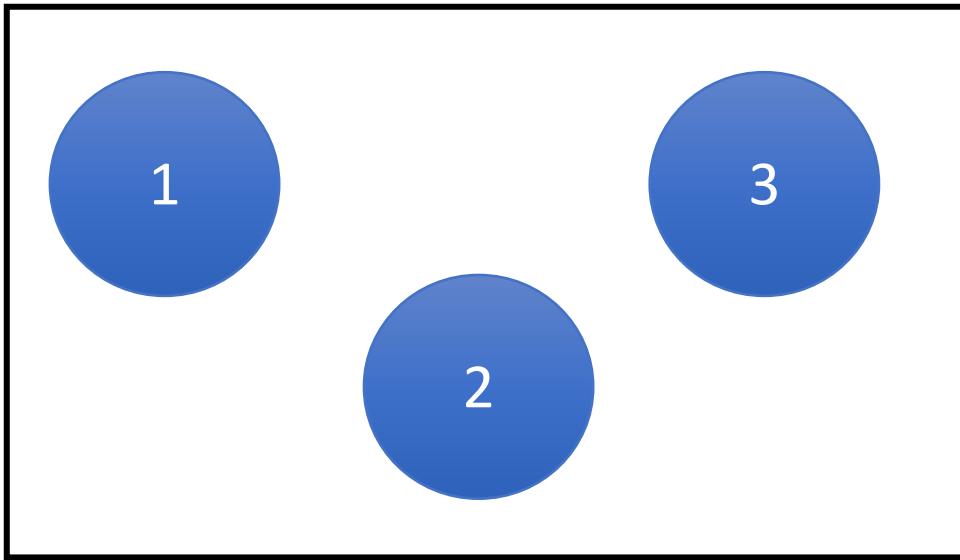


LRS



ZRS

# Storage Account Replication



GRS – RA/GRS

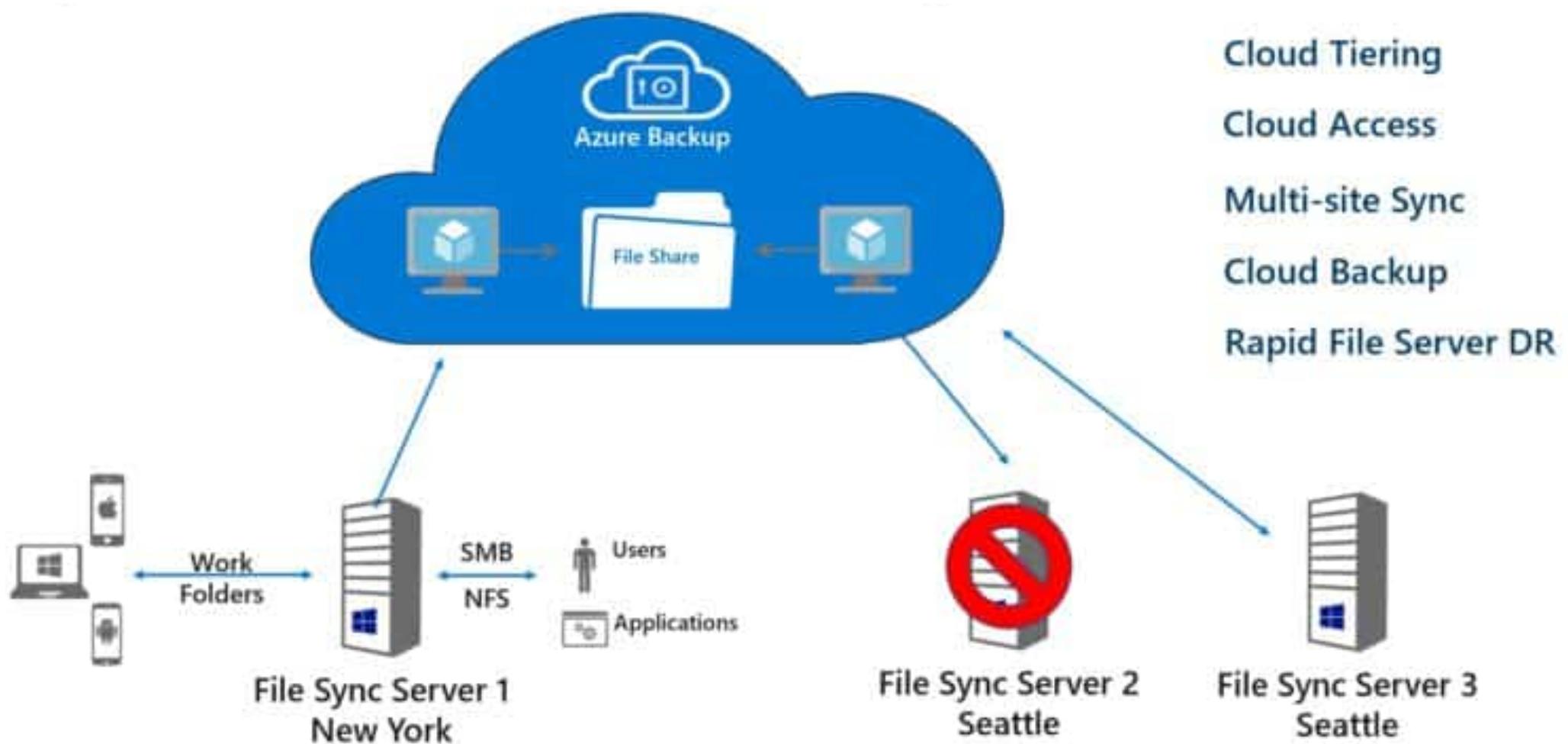
# AzCopy

```
azcopy login –tenant-id=<tenant-id>
```

```
AzCopy /Source:https://sourceaccount.blob.core.windows.net/  
mycontainer1
```

```
/Dest:https://destaccount.blob.core.windows.net/  
mycontainer2 /SourceKey:key1 /DestKey:key2 /Pattern:abc.txt
```

# Azure File Sync

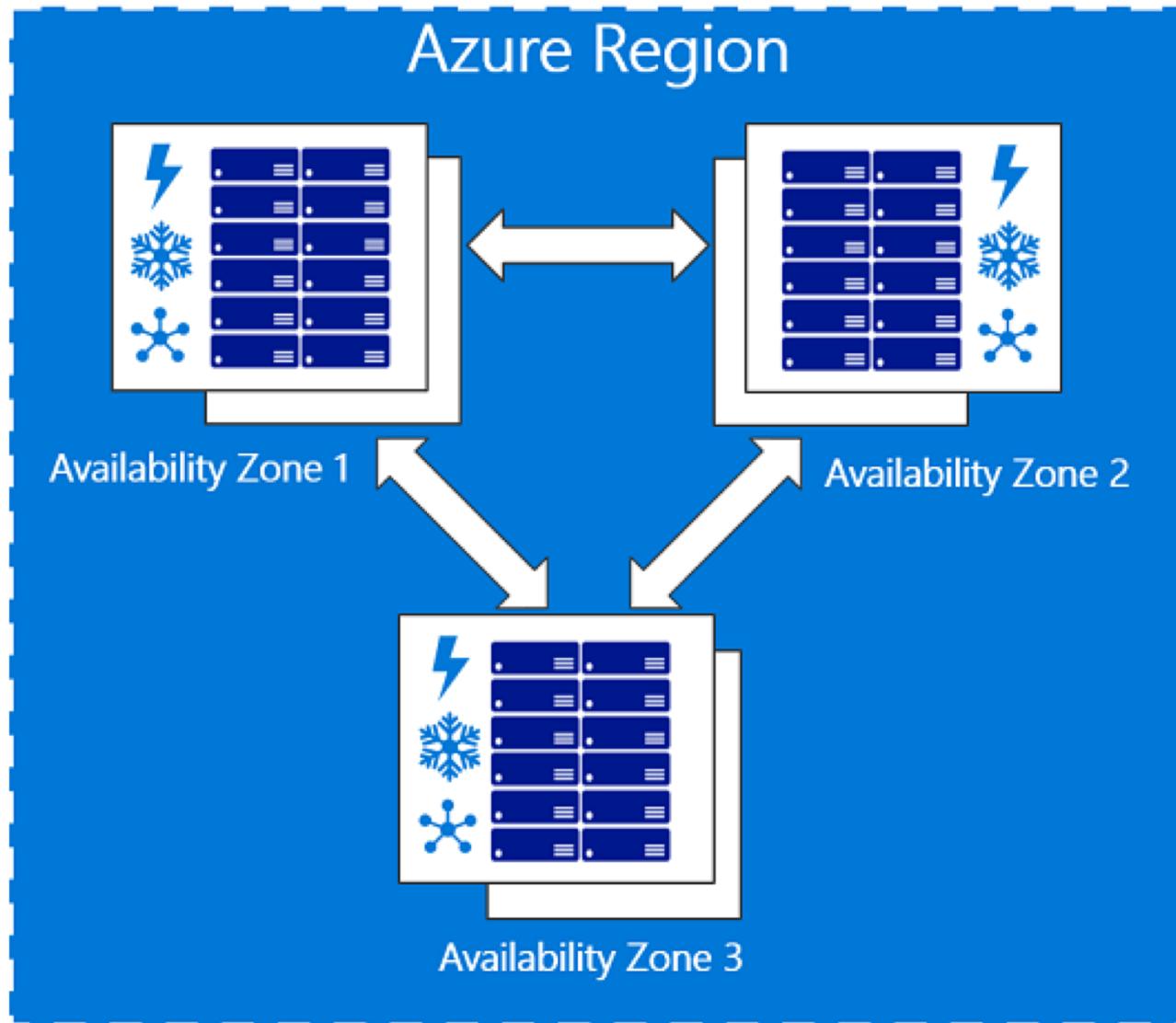


# **Deploy and Manage Azure Compute Resources (25-30%)**

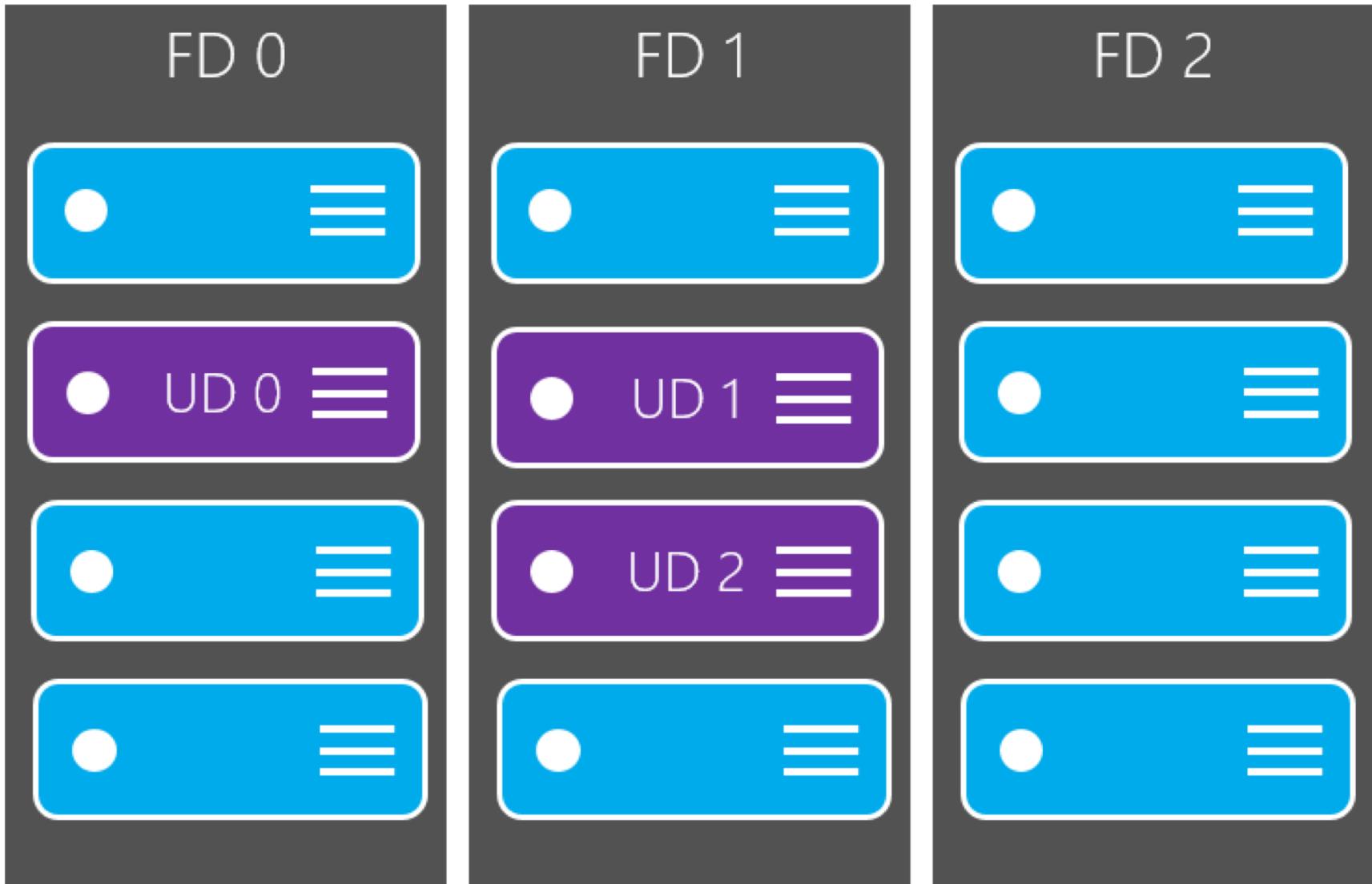
# Configure VMs for High Availability and Scalability

- Configure high availability
- Deploy and configure scale sets

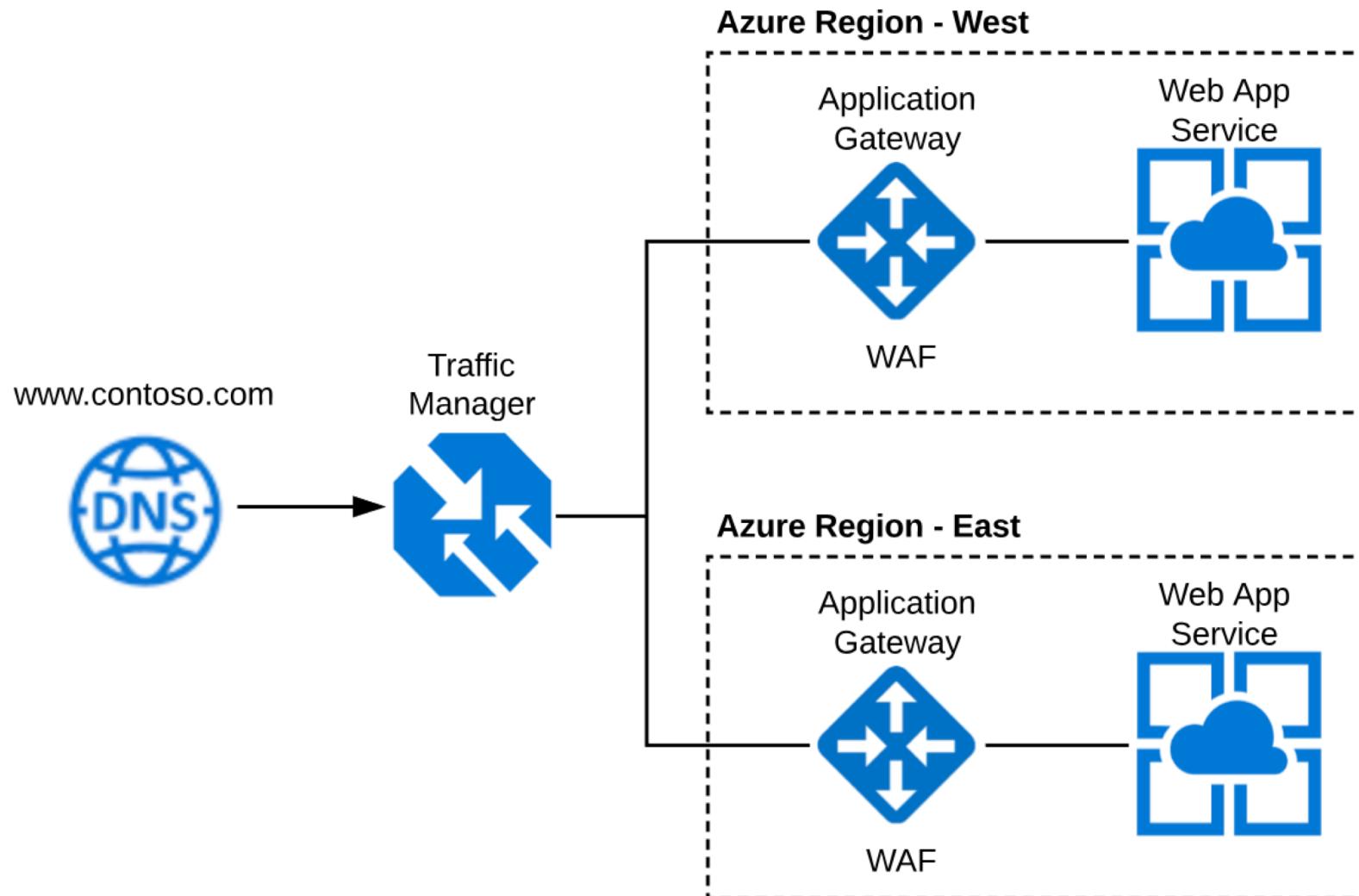
# Availability Zones



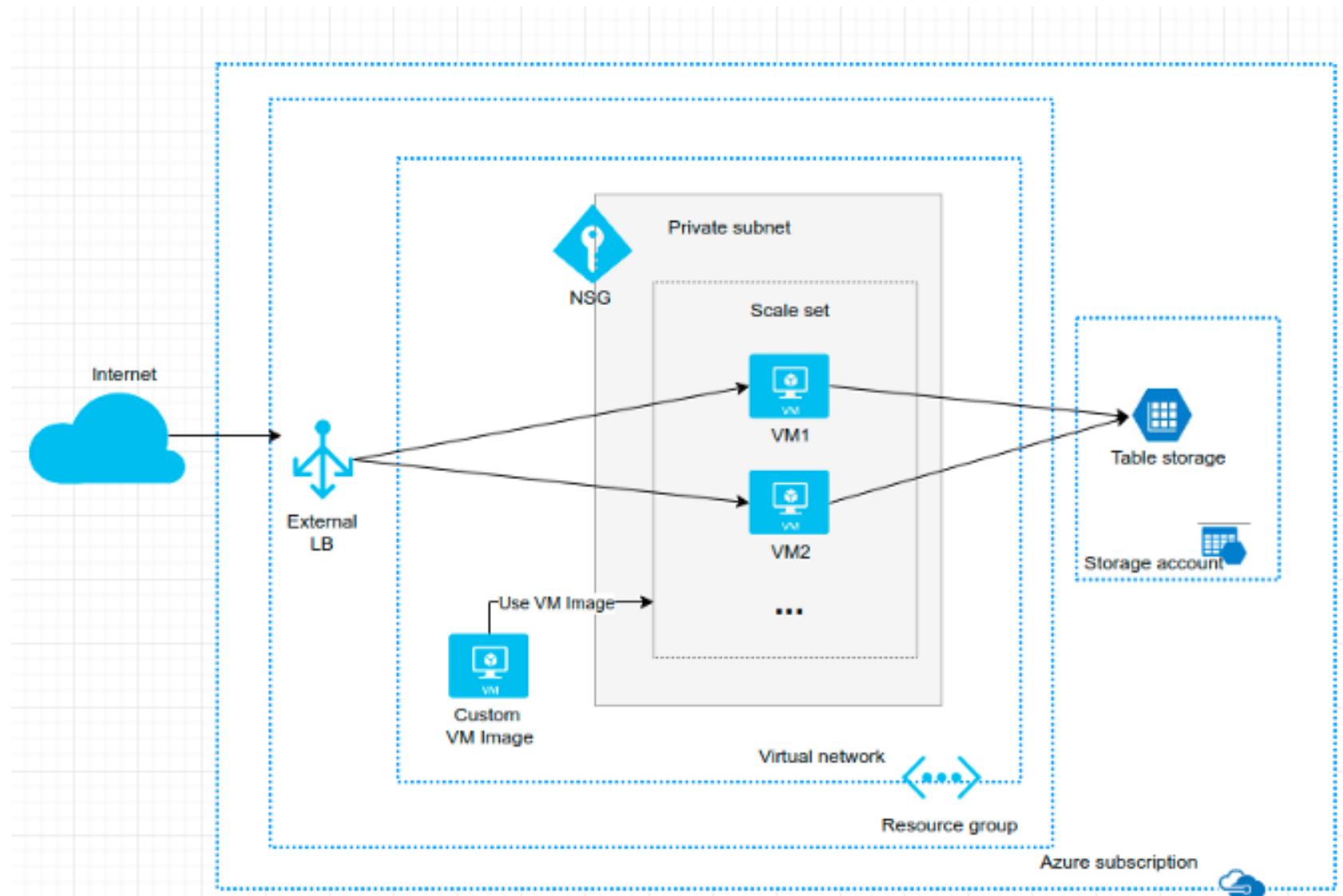
# Availability Sets



# App Service Scaling



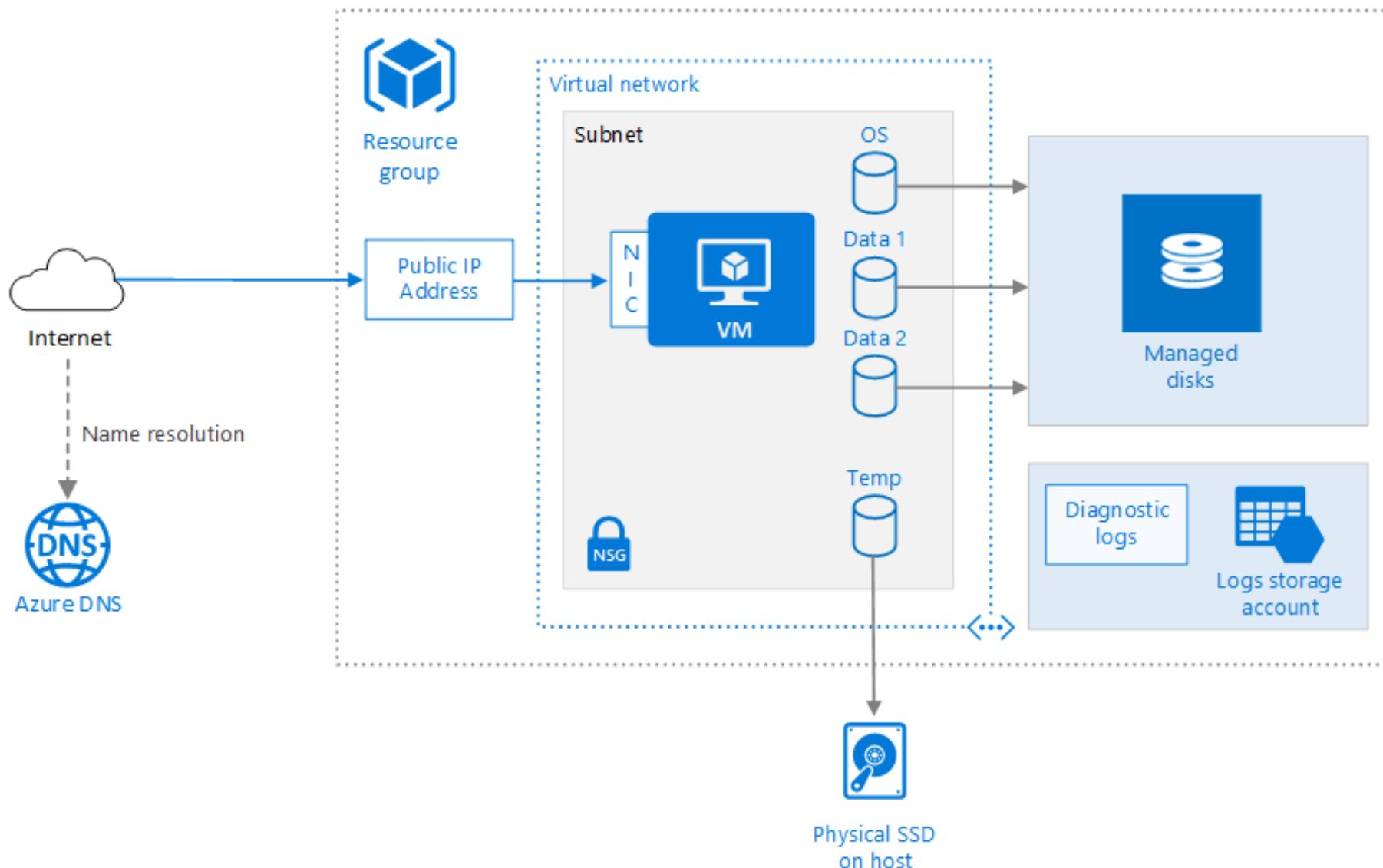
# Azure VM Scale Sets



# Create and Configure VMs

- Create VM
  - Proximity / reserved
- configure Azure Disk Encryption
- Manage VM sizes
- Add data disks
- Configure networking
- Redeploy VMs
- JIT VM Access / Bastion

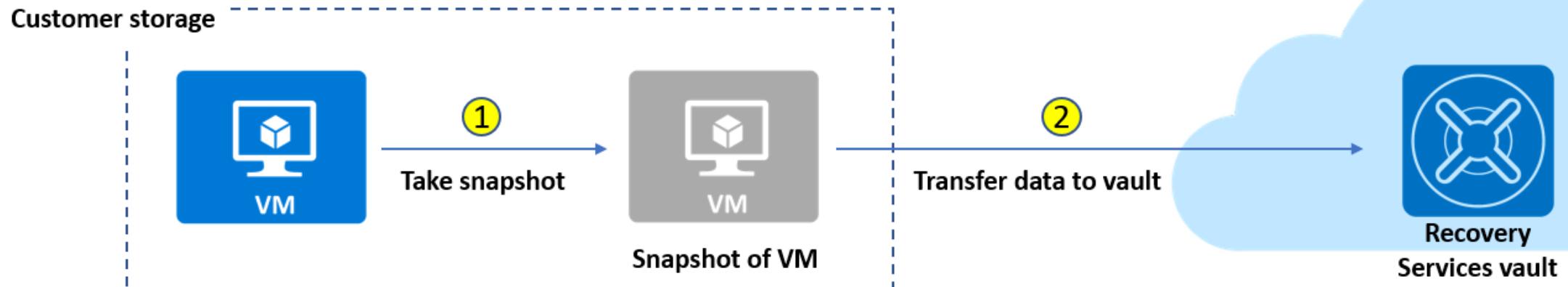
# Azure VM Networking



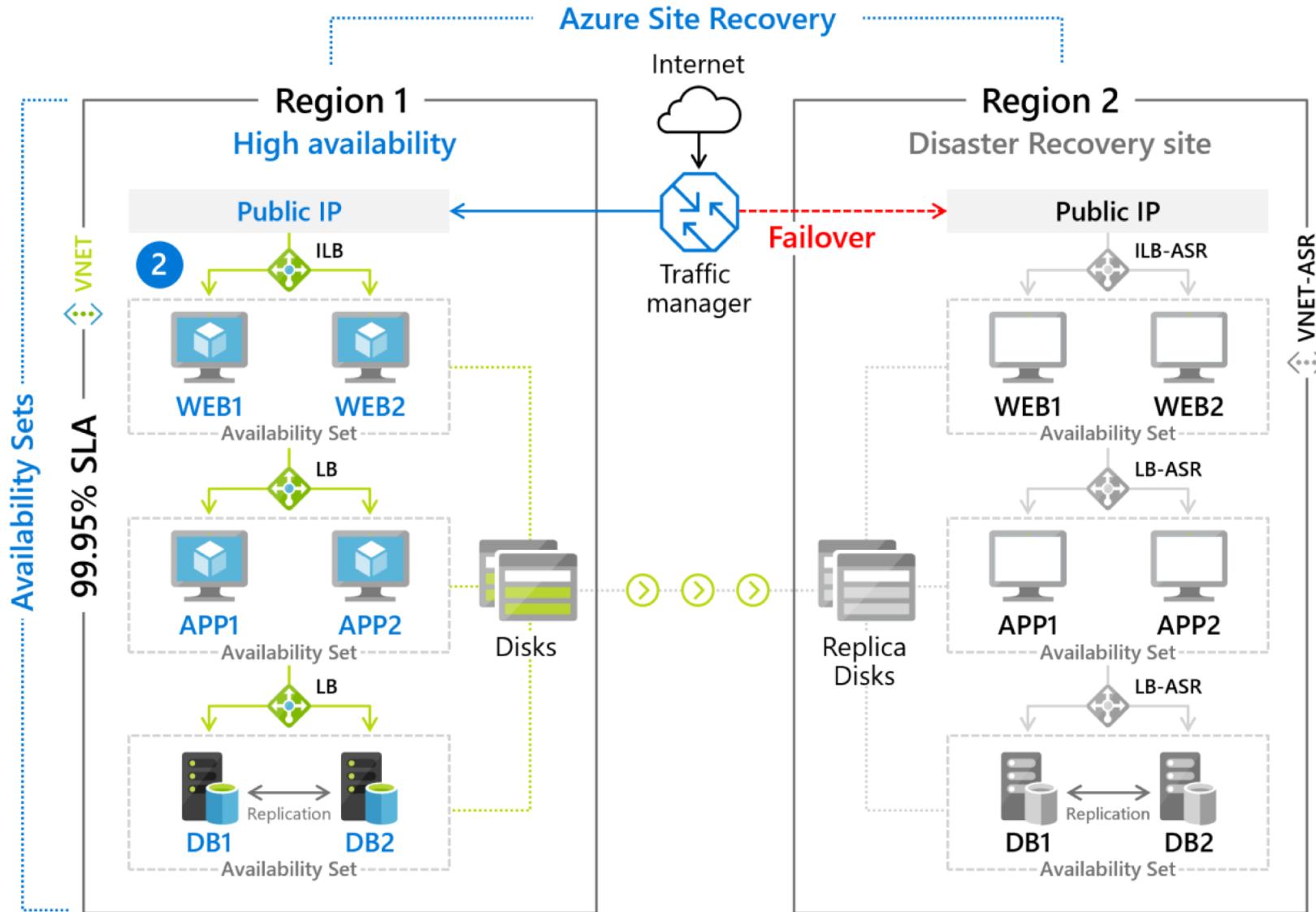
# Implement Backup and Recovery

- Create a Recovery Services Vault
- Create and configure backup policy
- Perform backup and restore operations by using Azure Backup Service
- Use soft delete to recover Azure VMs
- Perform site-to-site recovery by using Azure Site Recovery
- Configure and review backup reports

# Instant Restore



# Azure Site Recovery (ASR)



# **Configure and Manage Virtual Networking (30-35%)**

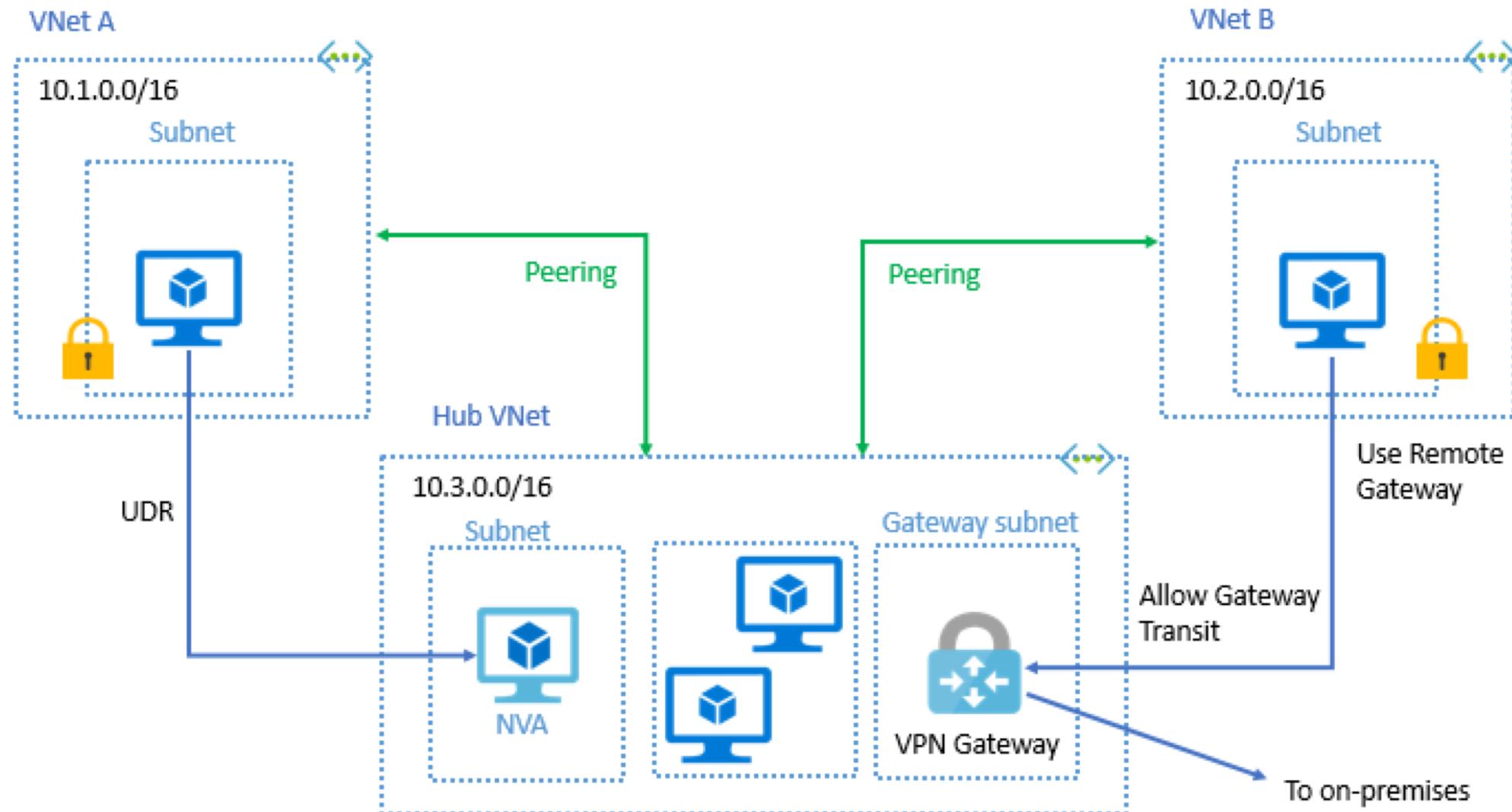
# Day 3 Agenda

- Virtual networking and name resolution (Tim)
- VNet security and load balancing (Mike)
- Monitor and troubleshoot Vnets (Tim)
- Lunch
- Hybrid cloud (Mike)
- Azure Monitor (Tim)
- AZ-104 Study cram session

# Implement and Manage Virtual Networking

- Create and configure VNet peering
- Configure
  - **Private and public IP addresses**
  - Network routes
  - Network interface
  - Subnets
  - Virtual network

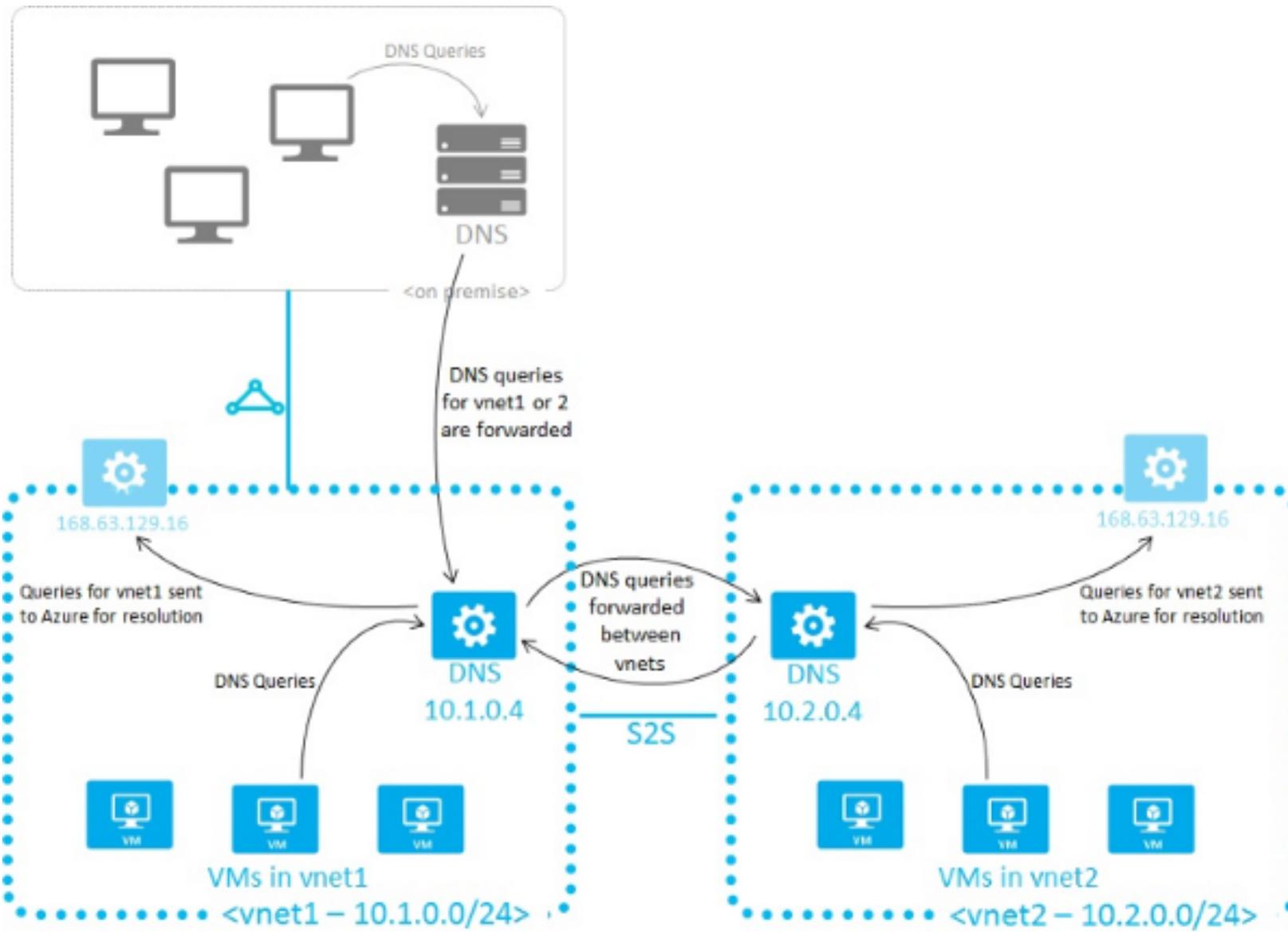
# VNet Global Peering



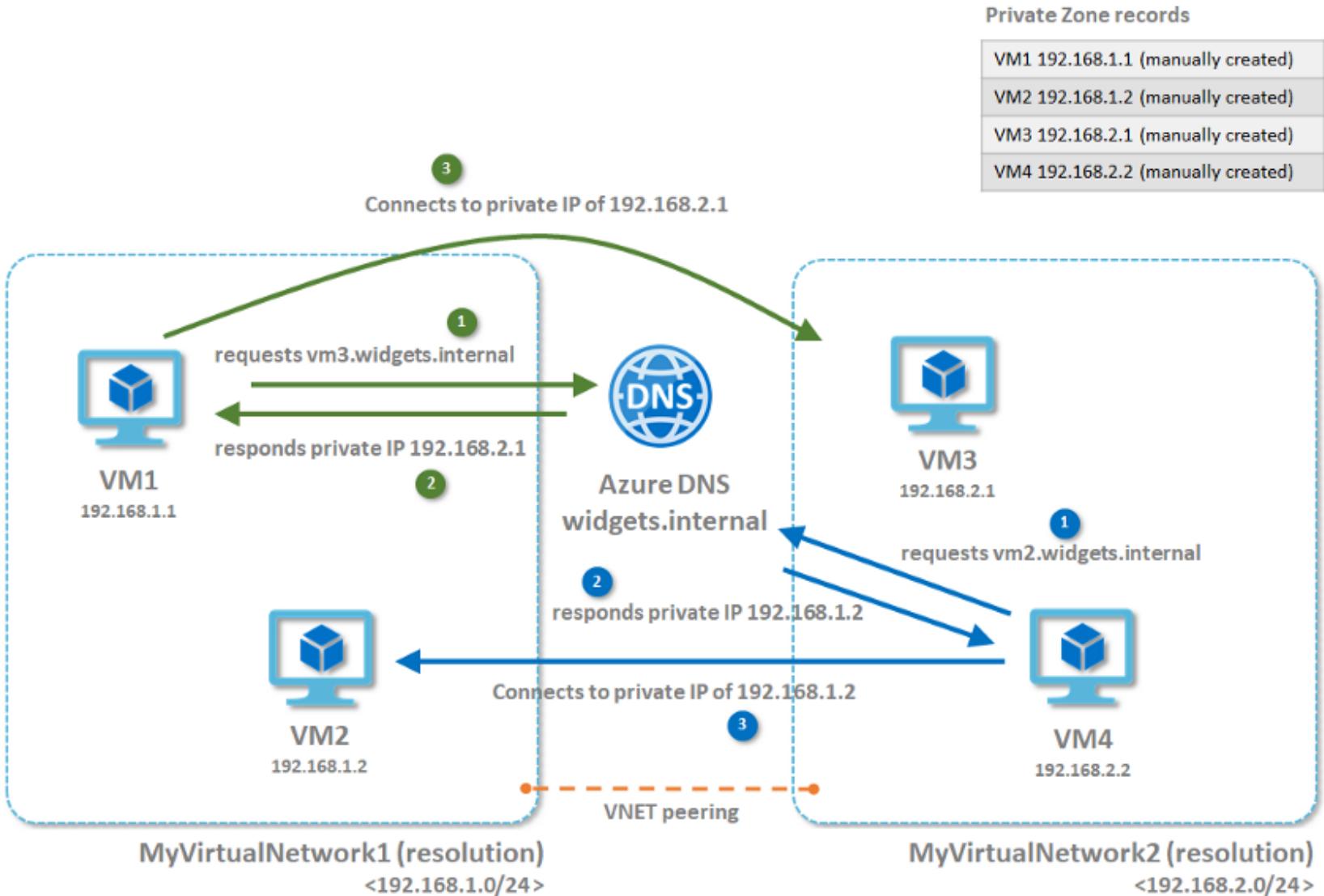
# Configure Name Resolution

- Configure Azure DNS
- Configure custom DNS settings
- Configure a private or public DNS zone

# Azure DNS Part 1



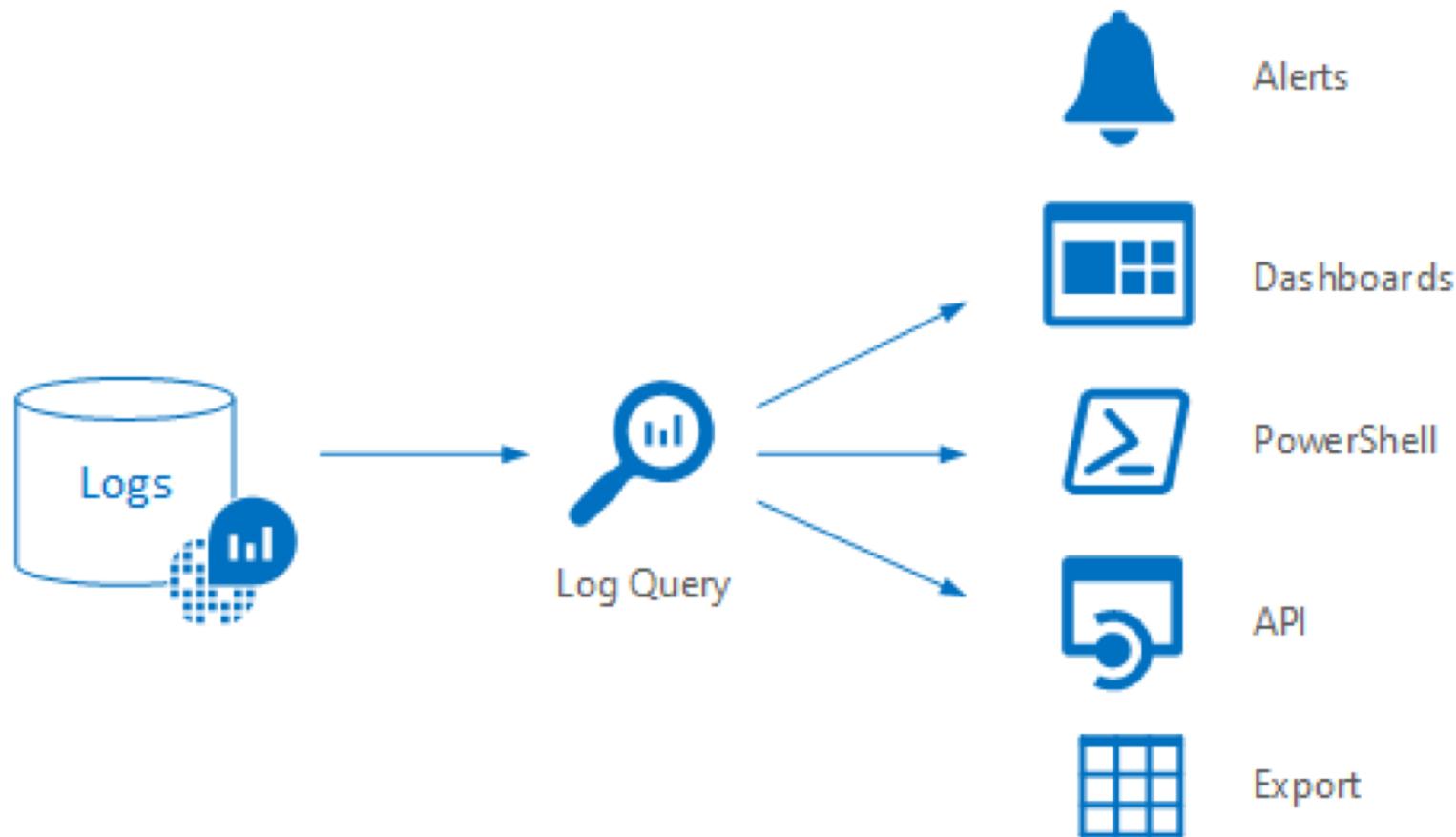
# Azure DNS Part 2



# Monitor and Troubleshoot Virtual Networking

- Monitor on-premises connectivity
  - Use **Network Performance Monitor**
- Use **Network Watcher**
  - Troubleshoot external networking
  - Troubleshoot virtual network connectivity

# Azure Log Analytics



# NPM

Network Performance Monitor  
npm-ashlab

Refresh Analytics Configure Actions [Provide Feedback](#)

Snapshot at: 2/14/2018, 4:24:49 PM, Auto-refresh: ON

**TOP NETWORK HEALTH EVENTS**

RULE NAME	TIME SINCE ACTIVE
Microsoft Teams	5 Day 13 Hr 29 Min

**1 ! Health Events**

**EXPRESSROUTE MONITOR (PREVIEW)**

ExpressRoute Circuits being monitored



UNHEALTHY CIRCUITS 0  
HEALTHY CIRCUITS 1

**SERVICE ENDPOINT MONITOR (PREVIEW)**

Service EndPoint Monitoring Tests



UNHEALTHY TESTS 1  
HEALTHY TESTS 1

**PERFORMANCE MONITOR**

Subnetwork Links being monitored



UNHEALTHY SUBNETWORK LINKS 0  
HEALTHY SUBNETWORK LINKS 2

**COMMON QUERIES**

- [Log Data For All NetworkMonitoring](#)
- [Log Data For All SubNetworkMonitoring](#)
- [Log Data For All No NetworkMonitoring](#)
- [Log Data For All Un NetworkMonitoring](#)
- [Log Data For All Un NetworkMonitoring](#)
- [Log Data For All Un NetworkMonitoring](#)
- [Log Data For All Test NetworkMonitoring](#)
- [Log Data For All End NetworkMonitoring](#)

**2 Topology**  
Network Topology of ExpressRoute Circuits

**3 Topology**  
Topology from nodes to service endpoints

**4 Topology**  
Topology of network paths

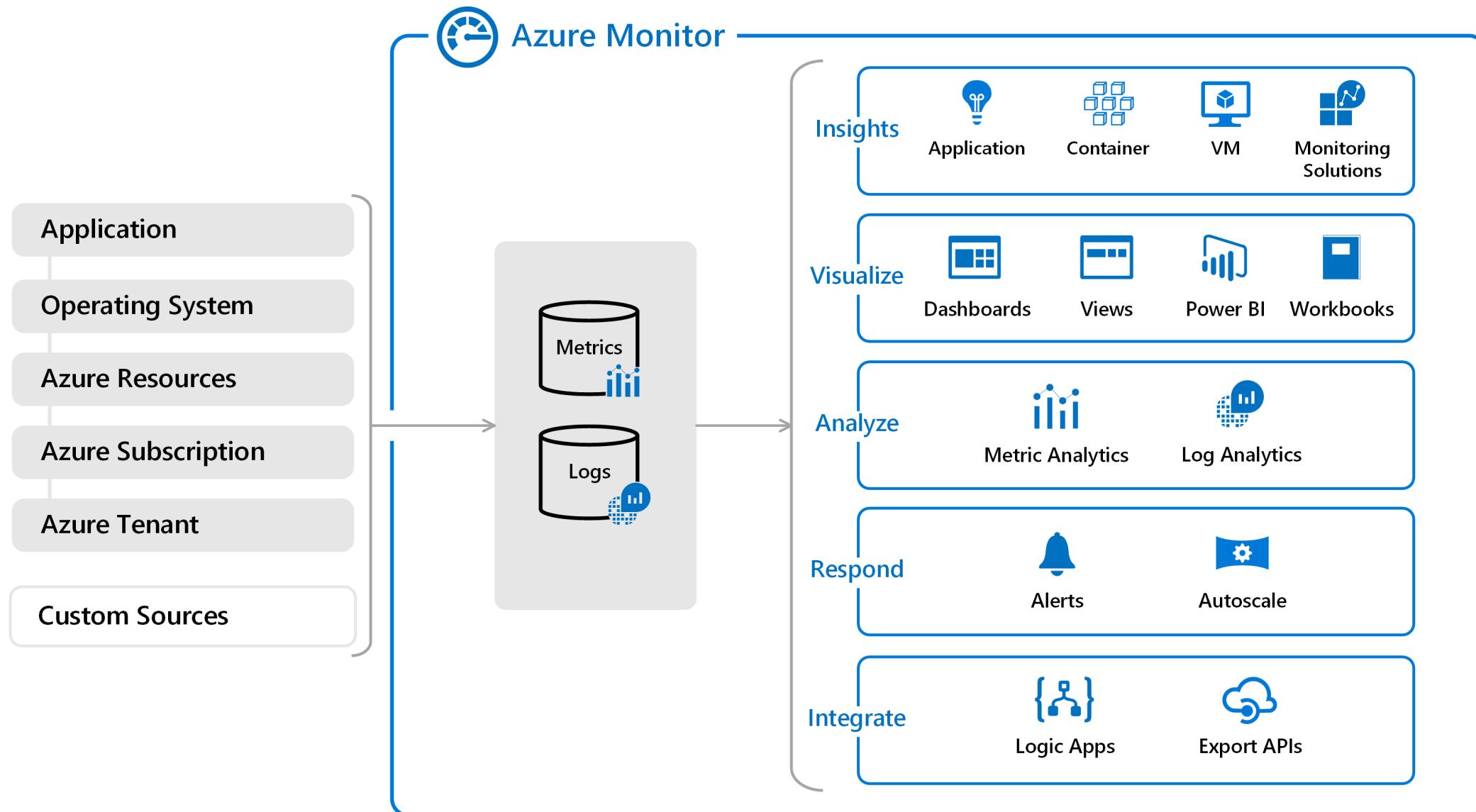
[See all health events](#)

# **Monitor and Back Up Azure Resources (10-15%)**

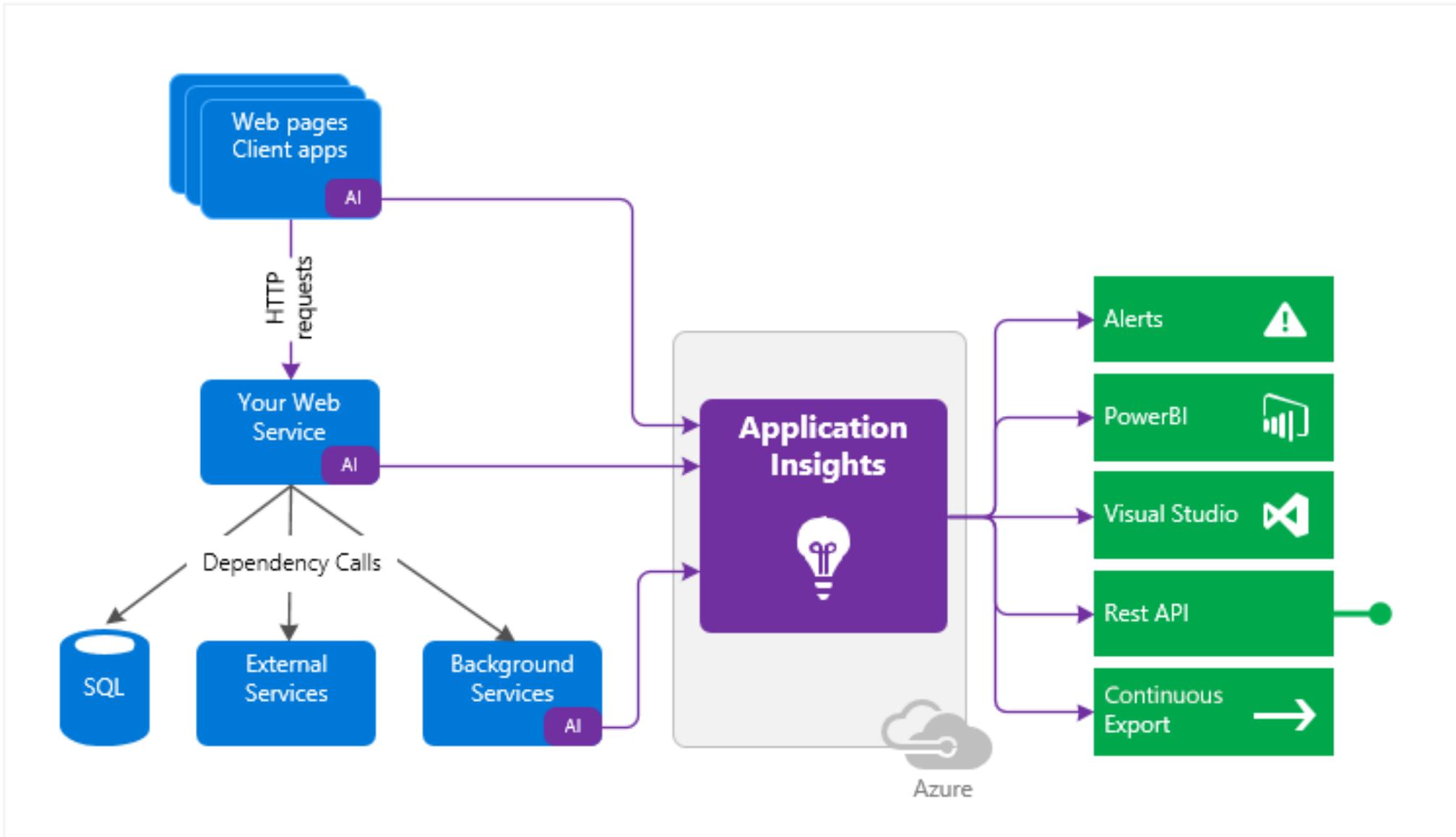
# Monitor Resources by Using Azure Monitor

- Configure and interpret metrics
- Analyze metrics across subscriptions
  - Activity Log Analytics
- Configure Log Analytics
  - Query and analyze logs
- Set up alerts and actions
- Configure Application Insights

# Azure Monitor



# Azure Application Insights



# Multiple Choice



## Question 4 (of 5)

Time remaining 01:58:22

- Review later
- Comment later

Your network contains an Active Directory domain named contoso.com. The domain contains two servers named Server1 and Server2 that run Windows Server 2012 R2. Server1 has the Group Policy Management feature installed. Server2 has the Print and Document Services server role installed.

On Server2, you open **Print Management** and you deploy a printer named Printer1 by using a Group Policy object (GPO) named GPO1.

When you open GPO1 on Server1, you discover that the Deployed Printers node does not appear.

You need to view the Deployed Printers node in GPO1.

What should you do?

- A. On Server1, add and share a printer.
- B. On Server1, install the Print and Document Services Tools.
- C. On a domain controller, create a Group Policy central store.  

- D. On Server1, modify the Group Policy filtering options of GPO1.



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# Multiple Choice



Question 2 (of 9)

- Review later
- Comment later

Time remaining 01:45:46

You are an administrator for fabrikam.com.

You need to prove domain ownership for your domain for Office 365.

Which two DNS record types can you create? Each correct answer presents a complete solution.

- A. Host record (A)
- B. Text record (TXT)
- C. Service record (SRV)
- D. Alias record (CNAME)
- E. Mail Exchanger record (MX)



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# Repeated Scenario

You need to move an Azure VM to another hardware host.

Solution: You redeploy the VM.

Does this solution meet the goal?

- a. Yes
- b. No

# Repeated Scenario

You need to move an Azure VM to another hardware host.

Solution: You do something else.

Does this solution meet the goal?

- a. Yes
- b. No

# Select and Place



## Question 5 (of 9)

- Review later
- Comment later

Time remaining 01:38:28

You have a Microsoft SharePoint 2013 Service Pack 1 (SP1) server farm.

You need to recommend which tools should be used to recover deleted SharePoint site groups, deleted document libraries, and deleted SharePoint Designer 2010 workflows. The solution must use the minimum amount of administrative effort.

Which tool should you recommend for each type of content? To answer, drag the appropriate tool to the correct recovery task. Each tool may be used once, more than once, or not at all. You may need to drag the split bar between panes or scroll to view content.

The screenshot shows a 'Recovery Task' dialog box. On the left, a vertical list of tools is shown: 'Microsoft SQL Server backups', 'Recycle Bin', and 'Windows Server Backups'. The 'Windows Server Backups' item is highlighted with a blue selection bar and has a white cursor arrow pointing to its right edge. On the right, three recovery tasks are listed with corresponding tool boxes:

Recovery Task	Tool
Document libraries	Microsoft SQL Server backups
SharePoint Site groups	Recycle Bin
SharePoint Designer workflows	Resources



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# Build List and Reorder

Question 4 (of 5) Time remaining 01:56:12

Review later  
 Comment later

You have a Hyper-V host named Server1.

A technician creates a virtual machine named VM1 on Server1 by using the New Virtual Machine Wizard.

You start VM1 and you discover that there is no option to start by using PXE.

You need to ensure that you can start VM1 by using PXE.

Which three actions should you perform in sequence? (To answer, move the appropriate three actions from the list of actions to the answer area and arrange them in the correct order.)

Actions

- Shut down VM1.
- Modify the BIOS settings of VM1.
- Enable DHCP guard on the legacy network adapter.

Answer Area

- 1 Modify the virtual switch settings of the legacy network adapter.
- 2 Add a legacy network adapter to VM1.
- 3 Install Integration Services on VM1.

• • • •

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# Active Screen

## Question 18 of 32

You configure a SharePoint Server 2010 Service Pack 1 (SP1) server farm.

You need to enable the cache profile for anonymous users on internal collaboration sites for the site collection. You also need to allow administrators to choose a different page output cache profile for page layouts.

What should you do? (To answer, configure the appropriate option or options in the dialog box in the answer area.)

**Answer Area**

<b>Libraries</b> Site Pages Shared Documents	<b>Output Cache</b> Select the <b>Enable output cache</b> check box to enable output caching in this site collection.	<input checked="" type="checkbox"/> Enable output cache
<b>Lists</b> Calendar Tasks	<b>Default Page Output Cache Profile</b> A cache profile specifies how long items should be held in the cache. It also describes to the caching system how to determine whether a cached page element is in fact valid for other requests for the same element from different users. You can specify different cache profiles to use for anonymous and authenticated users. This optimizes the use of the cache based on the authentication methods allowed on the site. Page output cache profiles specifically affect portal publishing pages. <a href="#">Learn more about the default page output cache profile.</a>	Anonymous Cache Profile <b>Intranet (Collaboration Site)</b> Optimized for collaboration sites where authoring, web part customization, and minor version are enabled.
<b>Discussions</b> Team Discussion		Authenticated Cache Profile <b>Disabled</b> Caching is not enabled
 Recycle Bin		

**Reset(T)** **Instructions(I)**

# Case Study

## Case Study

Time remaining 01:56:02

### Question

#### Background



Existing Environment

Business Requirements

Technical Requirements

Problem Statements

Exhibits

This exam includes at least one case study. **Case studies are not timed separately. You can use as much exam time as you would like to complete each case.** However, there may be additional case studies and sections on this exam. You must manage your time to ensure that you are able to complete all questions included on this exam in the time provided.

To answer the questions included in a case study, you will need to reference information that is provided in the case study. Case studies might contain exhibits and other resources that provide more information about the scenario that is described in the case study. Each question is independent of the other questions in this case study.

At the end of this case study, a review screen will appear. This screen allows you to review your answers and to make changes before you move to the next section of the exam. After you begin a new section, you cannot return to this section.

#### To start the case study

To display the first question in this case study, click the **Next** button. Use the buttons in the left pane to explore the content of the case study before you answer the questions. Clicking these buttons displays information such as business requirements, existing environment, and problem statements. If the case study has an **All Information** tab, note that the information displayed is identical to the information displayed on the subsequent tabs. When you are ready to answer a question, click the **Question** button to return to the question.



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# Performance-Based Lab

All resources - Microsoft

https://portal.azure.com/#blade/HubsExtension/Resources/resourceType/Microsoft.Resource

Microsoft Azure

Search resources, services, and docs

Home > All resources

All resources

Subscriptions: Pay-As-You-Go - Don't see a subscription? Open Directory + Subscription settings

Add Edit columns Refresh Assign tags Delete Try preview

Filter by name... All resource gr... All types All locations All tags No grouping

1 of 80 items selected Show hidden types

NAME	TYPE	RESOURCE GR...	LOCATION	SUBSCRIPTION	...
VM1	Virtual machine	RG1007290156	East US	Pay-As-You-Go	...
VM1	Virtual machine	RG1007293122	East US	Pay-As-You-Go	...
VM1	Virtual machine	RG1007293312	East US	Pay-As-You-Go	...
VM1	Virtual machine	RG1007294322	East US	Pay-As-You-Go	...
VM1Disk1	Disk	RG1007289505	East US	Pay-As-You-Go	...
VM1Disk1	Disk	RG1007289687	East US	Pay-As-You-Go	...
VM1Disk1	Disk	RG1007290156	East US	Pay-As-You-Go	...
VM1Disk1	Disk	RG1007293122	East US	Pay-As-You-Go	...
VM1Disk1	Disk	RG1007293312	East US	Pay-As-You-Go	...
VM1Disk1	Disk	RG1007294322	East US	Pay-As-You-Go	...
VM1-NetworkInterface	Network interface	RG1007289505	East US	Pay-As-You-Go	...
VM1-NetworkInterface	Network interface	RG1007290156	East US	Pay-As-You-Go	...

Time remaining 01:54:00

### Tasks

Click to expand each objective

- + Task 1
- + Task 2
- + Task 3
- + Task 4
- + Task 5
- + Task 6
- + Task 7

?

Help

Username/  
Password

Next