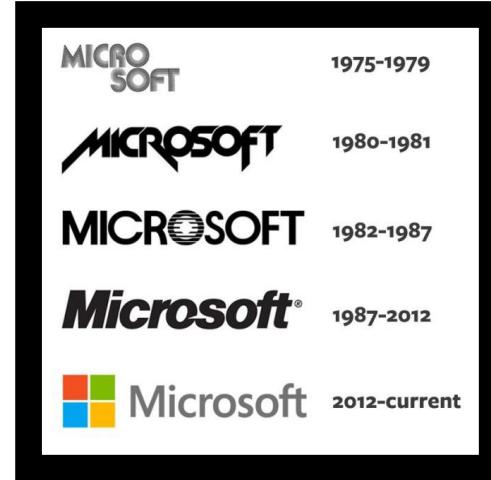




AVS Bootcamp 2026

Did You Know...

Since being founded as Micro-Soft, we've sported five different looks in our almost 51-year history (our birthday is coming up in April. Feel free to send chocolates and flowers).



Day Three of Three
February 5th, 2026

Microsoft Partner Skilling Offerings

PARTNER SKILLING HUB

Welcome to the new Skilling Hub

The new **Skilling Hub** is live — built with partners, for partners. It brings Microsoft Titan, LevelUp, SureStep, AI Tour for Partners, and regional events together in one place, with simplified sign-in and smoother navigation to get you where you need to go.

Here's what made the cut:

- One unified destination for all things skilling
- Curated learning paths to help you specialize and certify with confidence
- A modern, intuitive interface available in 11 languages
- Starting in September, localized events with KUDO will bring even more region-specific content to you

Get started: To access everything, be sure to re-register on the platform [here](#).

Plus—new Solution Areas!

Launching alongside the new Skilling Hub are our updated **Business Solution Areas**. You'll start to see the following changes reflected across skilling content:

- Azure → **Cloud and AI Platform**
- Modern Work + Business Applications → **AI Business Solutions**
 - When needed:
 - Modern Work = **AI Workforce**
 - Business Applications = **AI Business Process**
- **Security** remains unchanged



Screenshot of the Microsoft Skilling Hub homepage. The page features a dark background with white text. At the top, it says "Unlock your learning with Skilling Hub". Below that, there's a section for "Upcoming events" with four thumbnail images of people working at desks. At the bottom, there are three buttons: "Cloud and AI Platforms", "AI Business Solutions", and "Security".

Certification Week for Microsoft AI Cloud Partner Program

Microsoft Certification Week for Microsoft AI Cloud Partner Program is a five-day event that helps prepare you for Microsoft advanced role-based certifications. This is one of the best ways to help your organization meet the skilling criteria needed to attain a Solutions Partner designation.

Who is it for?

Technical professionals who are ready to fill their skill gaps in Microsoft solutions and prepare for certification.

Learn more:

[Certification Weeks](#)

Why should you attend?

This modular five-day virtual training includes structured instructor-led training, hands-on labs, exam preparation, and live Q&A, available during the hours that best fit your busy schedule. The sessions include live chat moderation with subject matter experts, ready to answer your questions. It focuses on the most important aspects of the certification exam curriculum, allowing you to include working billable hours in your day. Other benefits include:

- Streamlined format that prepares you for certification
- Keep pace with technical roles and requirements
- Flexible learning to fit your schedule and working hours
- Lab resources (available on a first come, first served basis)
- Sessions presented in English, with captions in 12 languages
- Three time-zone choices (PST/PDT/GMT/BST/IST)

Project Ready Workshops

Partner Project Ready Workshops offer **intermediate to advanced training** events designed to help experienced technical professionals deepen their capability in specific lines of technology. Taught by seasoned instructors, each workshop focuses on a specific topic to help drive deep skills applications across priority solution plays.

Who is it for?

These intermediate to advanced training events are designed for experienced technical professionals to deepen their capability in specific lines of technology.

Learn more:

[Cloud and AI Platforms](#)
[AI Business Solutions](#)
[Security](#)

Why should you attend?

Project Ready Workshops focus on how to implement Microsoft solutions for customers. Other benefits include:

- Keep pace with technical roles and requirements
- Flexible learning to fit your schedule and working hours
- Lab resources
- Sessions with moderator support via chat
- Content presented in English, with captions in 10 languages
- Three time-zone choices (PST/PDT/GMT/BST/IST)

Many Project Ready Workshop training events include labs. When offered, labs will be available to a limited number of Microsoft partner participants. Access to the labs will be issued on a first-come, first-served basis.

Sales & Tech Deal Ready Skilling

Visit the Partner Skilling Hub: [aka.ms/PartnerSkilling](#)
Partner Skilling resources: [aka.ms/PartnerSkillingNews](#)

Sales Bootcamps

This series provide training led by Microsoft sales specialists focused on providing advanced knowledge for selling the four main Microsoft Cloud solution areas. Become proficient at starting sales conversations, solving customer challenges, pitching Microsoft cloud value, and overcoming objections by showcasing real-time customer benefits.

Capabilities Achieved: Build Solution Area pipeline and sell the Microsoft Cloud
Duration: Multi-day (multi-part) live deliveries
Roles: Sellers, BDM's, Solution Sellers

Microsoft Cloud Executive Skilling Series (Podcast and Podcast)

This series provide partners with a front row seat to discussions hosted by Microsoft senior leaders and experts on their cloud solution strategies. Gain a unique perspective on the value of the Microsoft Cloud and how to engage with customers.

Capabilities Achieved: Executive strategy for achieving business outcomes with the Microsoft Cloud
Duration: 15-30 minute on-demand videos
Roles: Executives, Sales Leaders, Sellers

Copilot Sales Champion

This new offering is built to advance sales knowledge and product evangelism across each Microsoft Copilot solution within our partner community. Copilot Sales Champion is an on-demand and interactive learning path.

Accelerate sales lead cycle success

Solution Play Sales Ready Skilling

Depth

Deeper training on the P26 solution plays. Gain valuable information on industry, use cases, integration, and licensing and pricing.

Capabilities Achieved:

Build solution play pipeline and sell the Microsoft Cloud

Duration:

On-demand learning path

Roles:

Sales and tech deal ready

Solution Play Tech Deal Ready Skilling

Depth

Use case and product knowledge training for P26 solution plays. Gain valuable information on industry, use cases, integration, and licensing and pricing.

Capabilities Achieved:

Build solution play pipeline and sell the Microsoft Cloud

Duration:

On-demand learning path

Roles:

Sales and tech deal ready

Agenda

Day 1: Sales

Session Time	Session Title	Speaker
8:00 – 9:00 a.m.	Welcome and Keynote	Christophe Herrbach Kirsten Megahan
9:00 – 10:00 a.m.	Azure VMware Solution (AVS) Cloud Economics	Greg Kaffenberger Scott Gruenemeier
10:00 – 10:15 a.m.	Break	
10:15- 11:00 a.m.	Partnering with Microsoft – Incentives and Offers	Lisa James
11:00 – 11:45 p.m.	Sales Execution and Assessments	Sean Cattanach Kalpan Raval Lue Hale

Agenda

Day 2: Technical

Session Time	Session Title	Speaker
8:00 – 9:00 a.m.	Accelerate VMware Modernization While Reducing Risk and Cost	Trevor Davis Carlos Villuendas
9:00 – 10:00 a.m.	AVS: Key Features and New Capabilities	Sundeep Hiranandaney Natalia Jiménez
10:00 – 10:15 a.m.	Break	
10:15- 11:00 a.m.	Azure VMware Solution (AVS) Networking: NSX Architecture	Victor Sandoval Daniel Ribeiro, Nehali Neogi
11:00 – 12:00 p.m.	AVS Migration strategy and planning with HCX	Dennis Boeynaems

Agenda

Day 3: Technical

Session Time	Session Title	Speaker
8:00 – 9:00 a.m.	Modernize, Secure and Optimize AVS Workloads and Operations with Azure Services	Husam Hilal
9:00 – 10:00 a.m.	Storage Expansion Options for Optimizing Azure VMware Solution (AVS) Private Clouds	Carl Solazzo Scott Gruenemeier
10:00 – 10:15 a.m.	Break	
10:15- 11:00 a.m.	Azure VMware Solution (AVS) Lessons Learned: Designing, Migrating and Operating	Jon Chancellor Sabine Blair

Today: Technical

Session Time	Session Title	Speaker
8:00 – 9:00 a.m.	Modernize, Secure and Optimize AVS Workloads and Operations with Azure Services	Husam Hilal
9:00 – 10:00 a.m.	Storage Expansion Options for Optimizing Azure VMware Solution (AVS) Private Clouds	Carl Solazzo Scott Gruenemeier
10:00 – 10:15 a.m.	Break	
10:15- 11:00 a.m.	Azure VMware Solution (AVS) Lessons Learned: Designing, Migrating and Operating	Jon Chancellor Sabine Blair

A few quick reminders...

1 Please use the Q&A panel to ask questions

2 Help us continue to build valuable content by completing the event survey

(available in the taskbar of the training console)

3 Recorded version will be in Skilling Hub

(approximately one week after this event concludes)

4 Sales Badges will be awarded

(within 5 days; please display them proudly on your socials!)

5 Kids are full price, no discounts



Showtime

aka.ms/AVSBootcamp2026

Modernize, Secure and Optimize AVS Workloads and Operations with Azure Services



Husam Hilal

Principal Partner Solution
Architect Engineer

Microsoft



Session Agenda

- 
- 1 Introduction
 - 2 Modernization Motivations
 - 3 Manage workloads with Arc
 - 4 Secure AVS Workloads
 - 5 Demo : Arc-enabled + Defender
 - 6 Private Connectivity – Attaching to Azure
 - 7 Demo – DB migration, App modernization
 - 8 Demo – AI-enable AVS hosted Apps
 - 9 Resource for continuous learning
 - 10 Questions



aka.ms/AVSBootcamp2026

Modernization Motivations

Efficiently migrate while maintaining operational consistency

Leverage existing VMware skills while developing Azure competencies

1

Plan migration

Identify workloads suited for migration.

2

Provision AVS

Set up Azure VMware Solution (AVS) in Azure.

3

Connect to AVS

Connect to on-premises environment via Azure ExpressRoute.

4

Migrate workloads

VMware HCX provides migration capabilities for AVS.

5

Attach Azure services

Modernize workloads by attaching Azure services.

Seamless Innovation with Azure Services

Low Latency



Availability Zone
Proximity

High Performance



High bandwidth
connectivity

Private Connectivity



Leverage
Private Endpoints

200+ ways to innovate



Integrate with AI,
ML, Storage,
SQL, AKS, ...

Integrate Azure VMware Solution with 200+ Azure services

Networking

- ExpressRoute
- Virtual WAN
- Route Server
- Virtual Gateway

AI Modernization

- GitHub Copilot
- Azure Copilot
- Azure Migrate

Migration

- Migrate Assessment
- VMware HCX
- 3rd Party Tools

Operations & Management

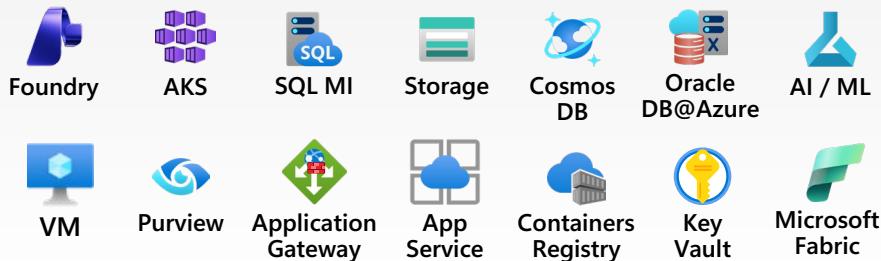
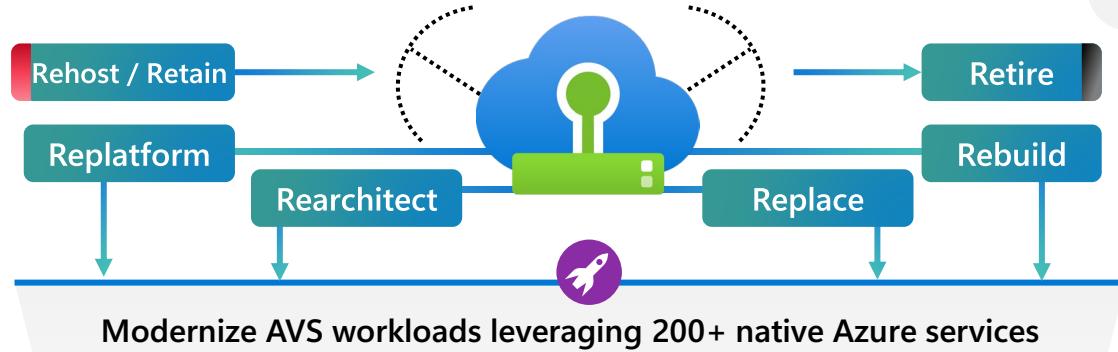
- Arc-enabled vSphere
- Arc-enabled servers
- Lighthouse
- Landing Zone

Storage

- Elastic SAN
- NetApp Files
- Pure Storage Cloud
- 3rd Party Solutions

Governance

- Policy
- Automation
- Update Manager



Security

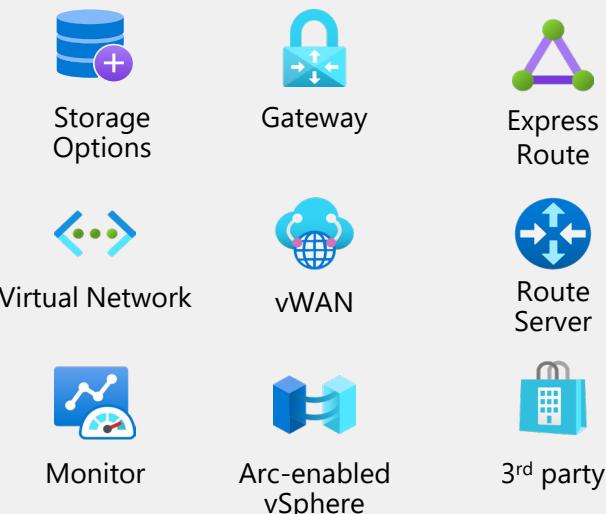
- Defender for Cloud
- Firewall
- Private Endpoint
- Bastion

BCDR

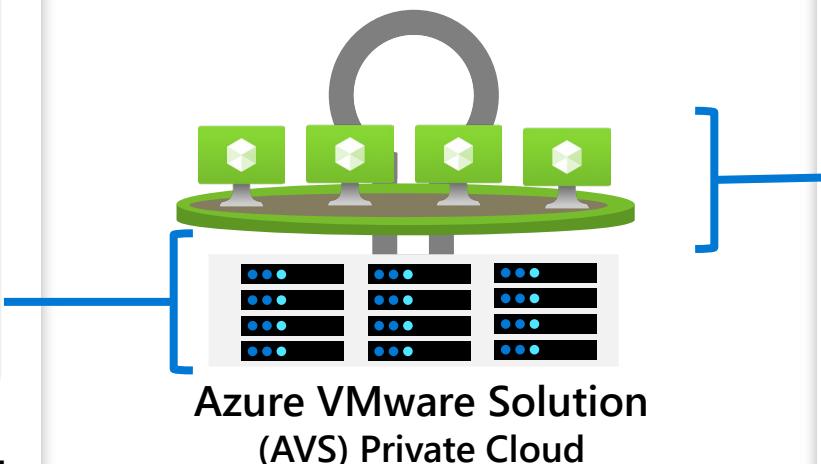
- Backup
- Site Recovery
- 3rd Party Solutions

How AVS integrates with other Azure services

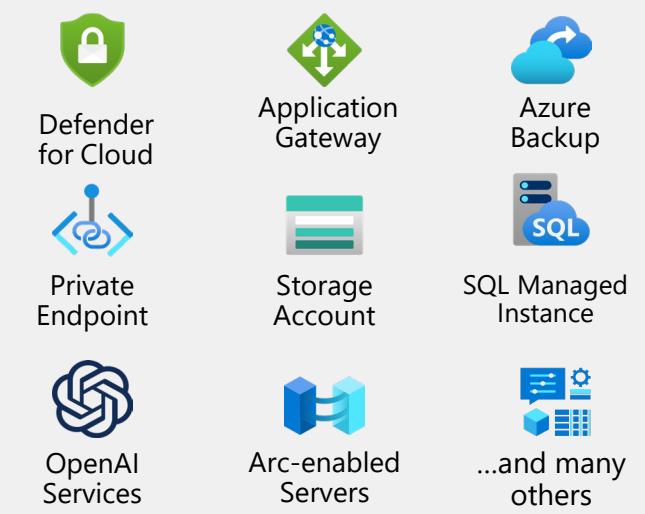
Build core environment



Services integrating with AVS Private Cloud
at hypervisor cluster/host layer



Modernize workloads



Services integrating with [workloads](#)
(VMs) running inside AVS Private Cloud

Secure and defend your apps and data



Identity and access management

- Microsoft Entra ID (identity protection)
- Multi-factor authentication
- Role-based access control
- Managed Identities



Data protection

- Encryption (disks, storage, SQL)
- Azure Key Vault
- Azure confidential computing
- Azure Files and Azure NetApp Files data protection



Network security

- ExpressRoute
- Virtual WAN
- Private Link
- Route Server
- Virtual Gateway
- Firewall



Threat protection

- Microsoft Defender for Cloud
- Defender for Servers
- Microsoft Antimalware for Azure
- Azure DDoS Protection



Security management

- Log Analytics
- EventHub
- Azure Monitor
- Azure Advisor
- Microsoft Sentinel

Additional partner solutions

Protect

Detect

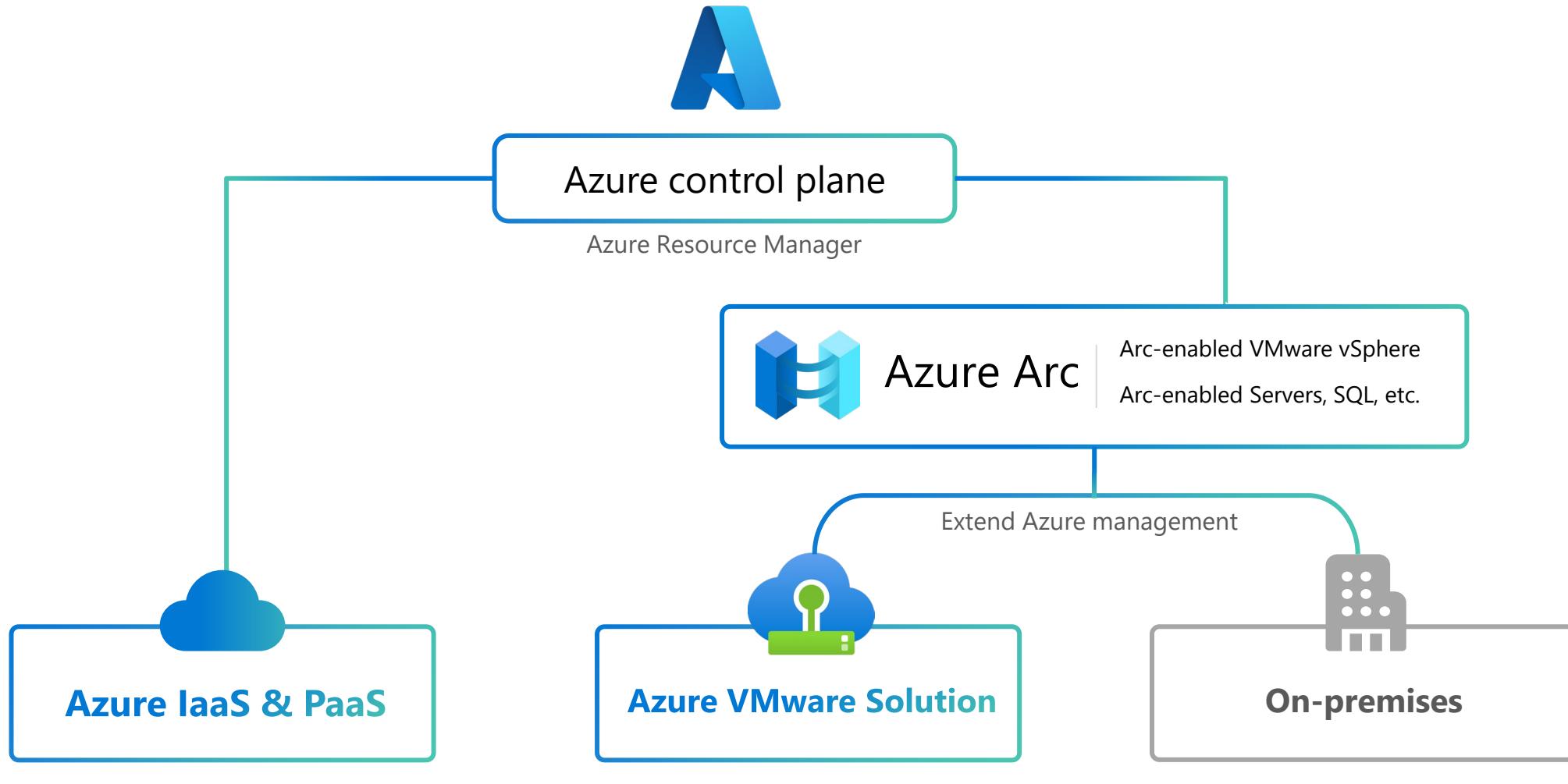
Analyze and Respond



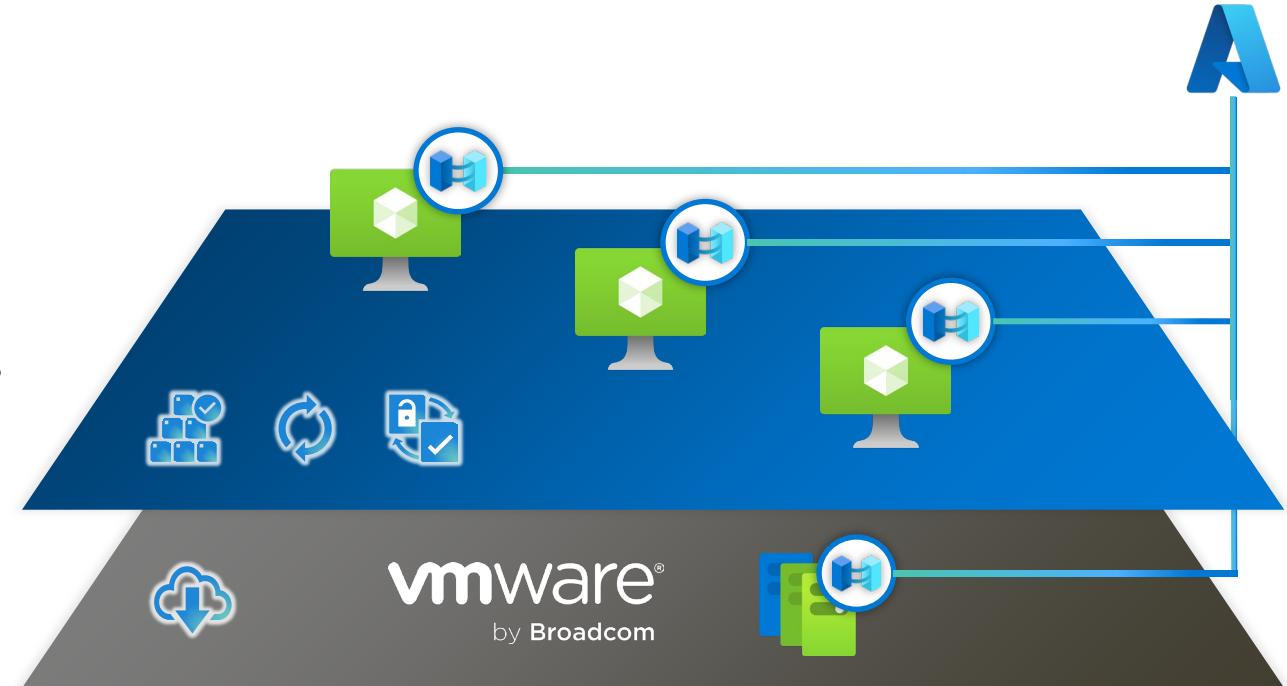
aka.ms/AVSBootcamp2026

Arc-enabled AVS

Bring the Azure control plane to all environments



Azure Services available through Azure Arc for VMware vSphere



Arc-enabled Servers

- Catalog and govern IT inventory
- Protect & Monitor workloads
- Enable self-service management services
- Extend Azure Services to Arc-enabled

Arc-enabled VMware vSphere

- Connect to vSphere environment
- Discover existing estate and resources
- Enable VM Lifecycle Operations (CRUD)
- Install Azure Arc agent at scale

Use Azure governance & management capabilities for VMware vSphere based IT estates running on Azure VMware Solution



Azure Arc



Azure
Managed Identity



Azure Monitor



Microsoft Sentinel



Azure Policy



Microsoft
Defender for Cloud



Azure
Update Manager



Azure
Copilot



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Protect AVS Workloads with Microsoft Defender for Cloud

Protect AVS workloads with Defender for Cloud

Common Cloud Security Challenges

Visibility across workloads

72% of tech companies report insufficient cloud visibility⁰

Increasing cloud attacks

80% of companies affected by cloud security incidents in 2024²

Time to remediate threats

Average time to contain data breach is 64 days³

Native Security with Azure



Built-in, natively integrated security controls

Comprehensive posture management and cloud workload protection coverage

Threat remediation with unified security platform



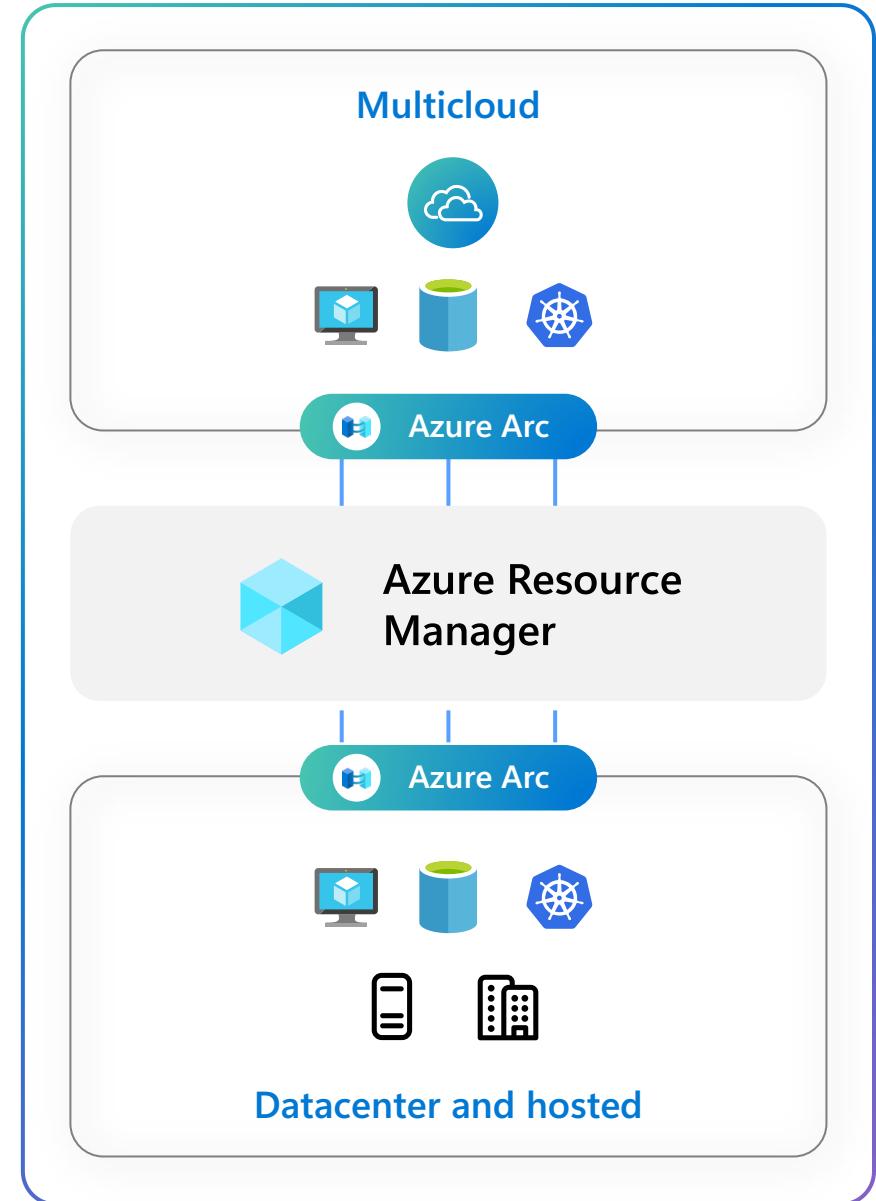
Threat Intelligence, Resilience, Reliability

1. [Research by Trio, 2024](#) | 2. [Research by StaionX, 2024](#) | 3. [Cost of Data Breach Report, IBM, 2024](#)

Protect Azure VMware Solution with Microsoft Defender for Cloud via Azure Arc

- Azure Arc is a bridge that extends the Azure platform so, you can manage security for all your resources in a consistent way
- Enforce compliance and simplify audit reporting
- Asset organization and inventory with a unified view in the Azure Portal using Azure tags and resource groups
- Server owners can view and remediate to meet their compliance—RBAC in Azure
- Set guardrails with Azure Policy integration, server owners can view and remediate to meet their compliance
- Azure Arc connects Azure Adaptive cloud to Defender for Cloud for continuous on-prem server/database protection

- 1 Azure Arc extends cloud management and security protections
- 2 Single control plane for any resource, anywhere



Demo

Arc-enabled VMs on AVS integrating
with Microsoft Defender for Cloud



Microsoft Azure

Search resources, services, and docs (G+/)

Copilot

Home >

AVS-SDDC

Azure VMware Solution private cloud

Search

Overview

Activity log

Access control (IAM)

Tags

Diagnose and solve problems

> Settings

> Manage

> vCenter Server inventory

> Workload networking

> Operations

> Monitoring

> Automation

> Help



vSphere - Demo-ResourcePool

https://vc.5bd2aeabaaf61477bb9e5f3.canadacentral.avs.azure.com/

vSphere Client

Search in all environments

Demo-ResourcePool

ACTIONS

Summary Monitor Configure Permissions

Resource Pool Details

This pool / Total

VMs and Templates:	9 / 9
Powered on VMs:	9 / 9
Child Resource Pools:	0 / 0
Child vApps:	0 / 0

Capacity and Usage

Last updated at 9:21 AM

CPU	103.17 GHz free
0 GHz used	103.17 GHz capacity

Memory	840.87 GB free
1.35 GB used	842.22 GB capacity

VIEW STATS

Related Objects Tags

Recent Tasks Alarms



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Attaching AVS workloads to Azure services privately

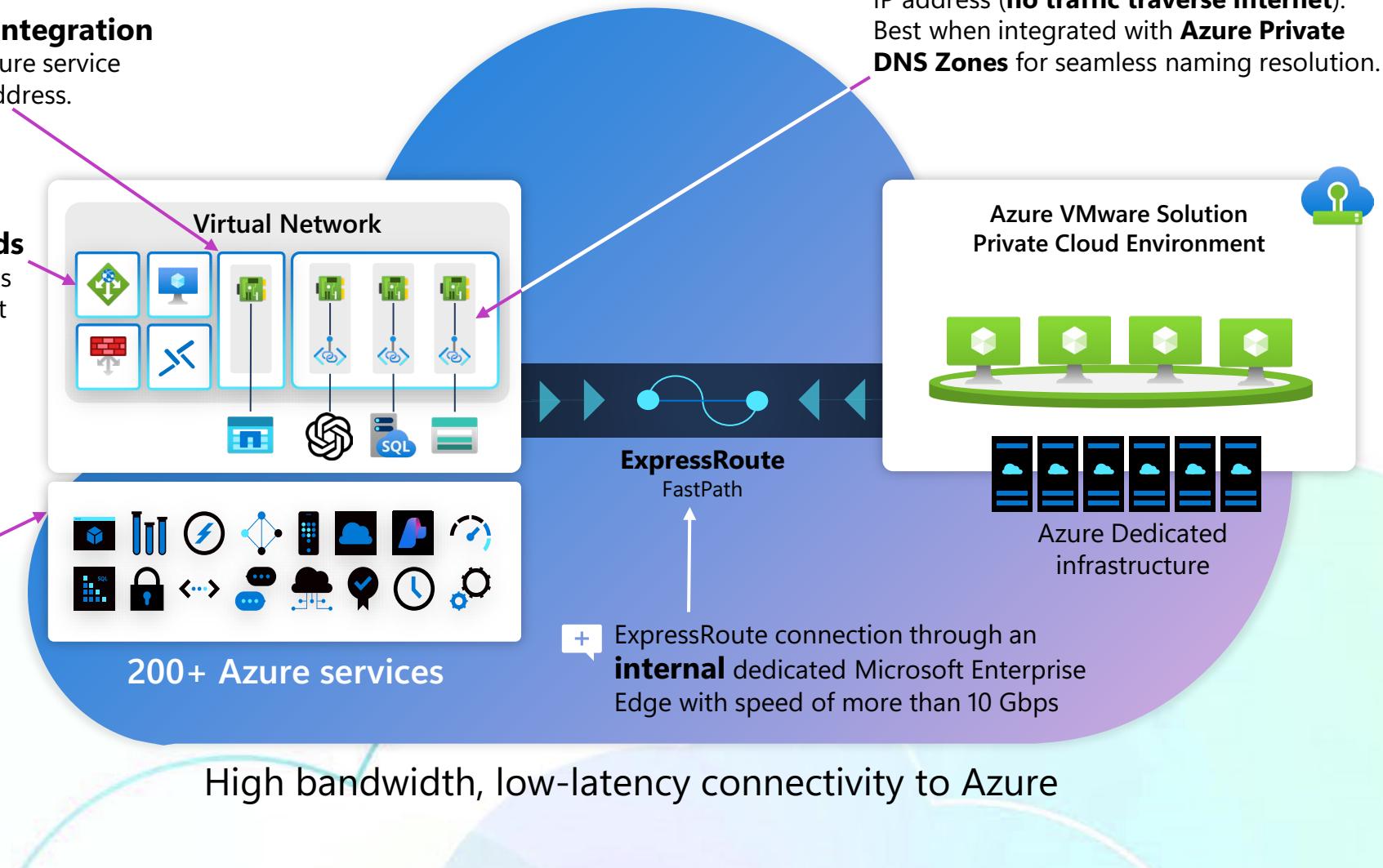
Azure resources **do not** need
the **Internet** to talk to each other

Connectivity with Azure services overview (Gen1)

+ **Subnet delegation and integration** allow communicating with Azure service instance through private IP address.

+ **Reaching AVS Workloads** When you need Azure services or end-consumer to reach out into workloads running on Azure VMware Solution you can leverage **Application Gateway** with WAF

+ **Availability Zones** To maximize performance, deploy Azure resources you want to integrate with AVS in the **same Availability Zone**.

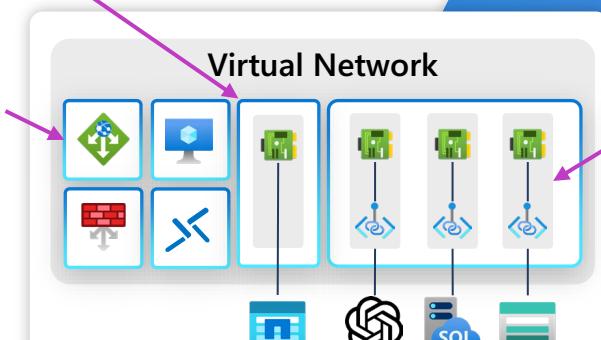


Connectivity with Azure services overview (Gen2)

+ **Subnet delegation and integration** allow communicating with Azure service instance through private IP address.

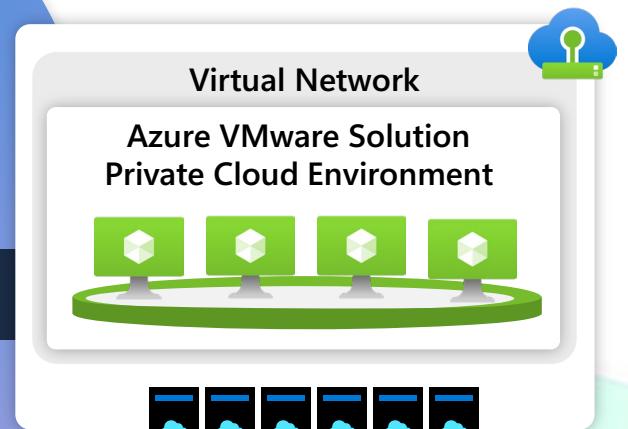
+ **Reaching AVS Workloads** When you need Azure services or end-consumer to reach out into workloads running on Azure VMware Solution you can leverage **Application Gateway** with WAF

+ **Availability Zones** To maximize performance, deploy Azure resources you want to integrate with AVS in the **same Availability Zone**.



200+ Azure services

+ **Private Endpoints** allow communicating with Azure service instance through private IP address (**no traffic traverse Internet**). Best when integrated with **Azure Private DNS Zones** for seamless naming resolution.



Virtual Network Peering

+ **vNet Peering** provides several advantages: enhanced **security**, boosted **performance**, and **scalability**

Private, High bandwidth, low-latency connectivity

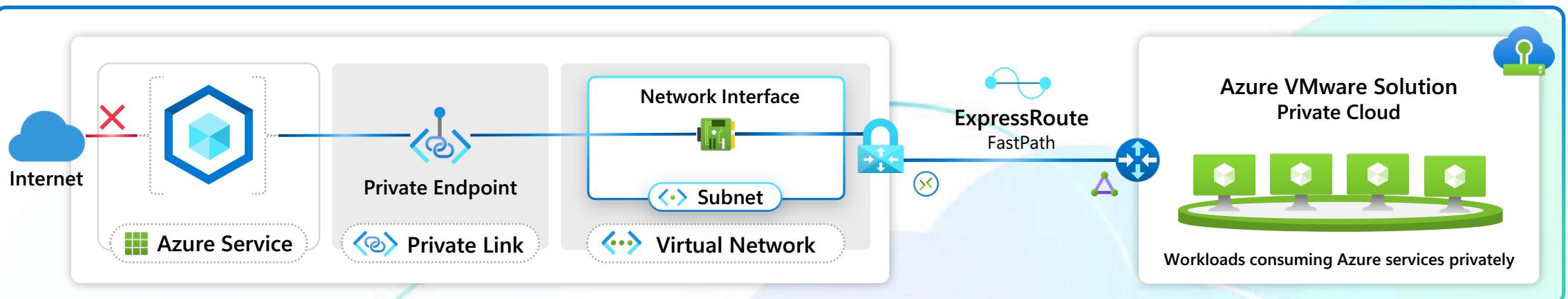
Azure Private Endpoint

What is it:

- A special **network interface** for an Azure (PaaS) resource in your virtual network
- Gets assigned **private IP address** from the IP address range of your virtual network
- Provide **private & secure connectivity** between clients in your virtual network and your resources, powered by Private Link.

Key Benefits:

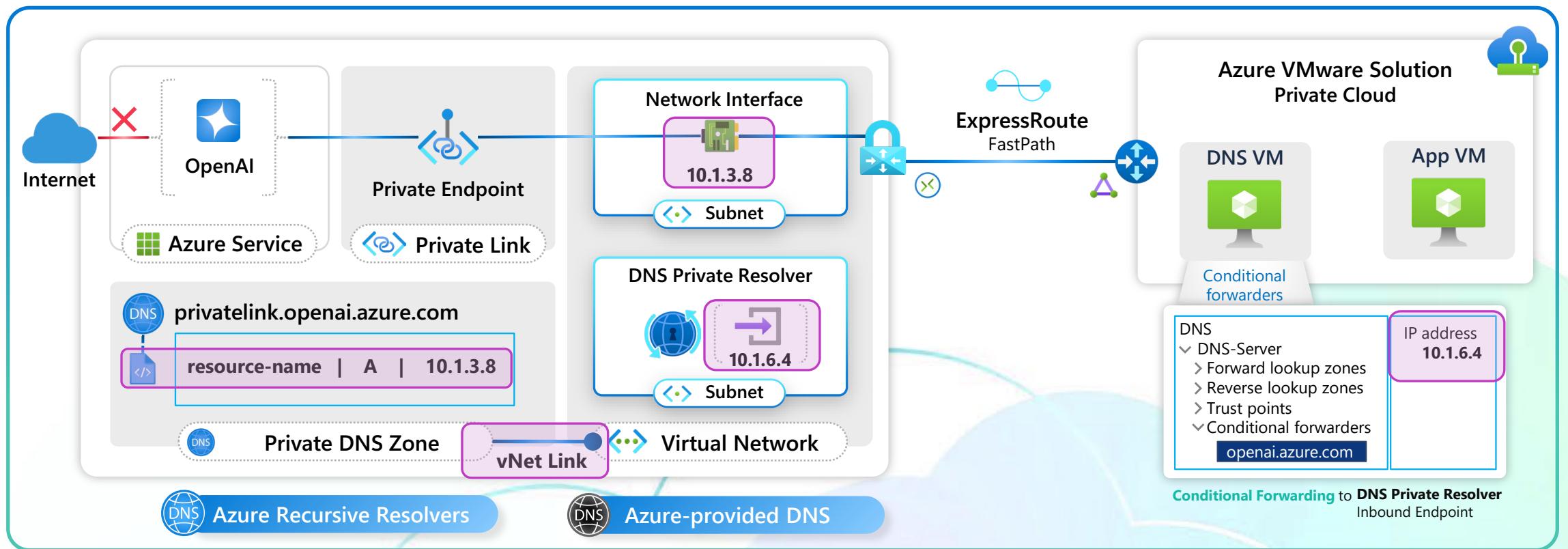
- Enabling you to **block exfiltration** of data from the virtual network
- Enables **private access** from Virtual network resources, peered vNets, and environments that use VPN or Express Route.
- **Predictable** private IP addresses
- Ease **connectivity governance**



Private DNS Resolution

Azure Private DNS Zones Key Benefits:

- Allow Azure Service full name to **resolve to Private IP address** of Private Endpoint Network Interface
- Allow services to remain **accessible via their existing names**, thus no changes to applications



Secure, private connectivity to Azure services

Azure Private Endpoints and Private DNS Zones

Running “nslookup”



From VM running in AVS

Returning a **Private** IP address
for Azure Storage Account

```
nslookup avsstorageacct.blob.core.windows.net
Server: dc.internal.cloudapp.net
Address: 10.5.10.10

Non-authoritative answer:
Name: avsstorageacct.privatelink.blob.core.windows.net
Address: 10.5.13.4
Aliases: avsstorageacct.blob.core.windows.net
```



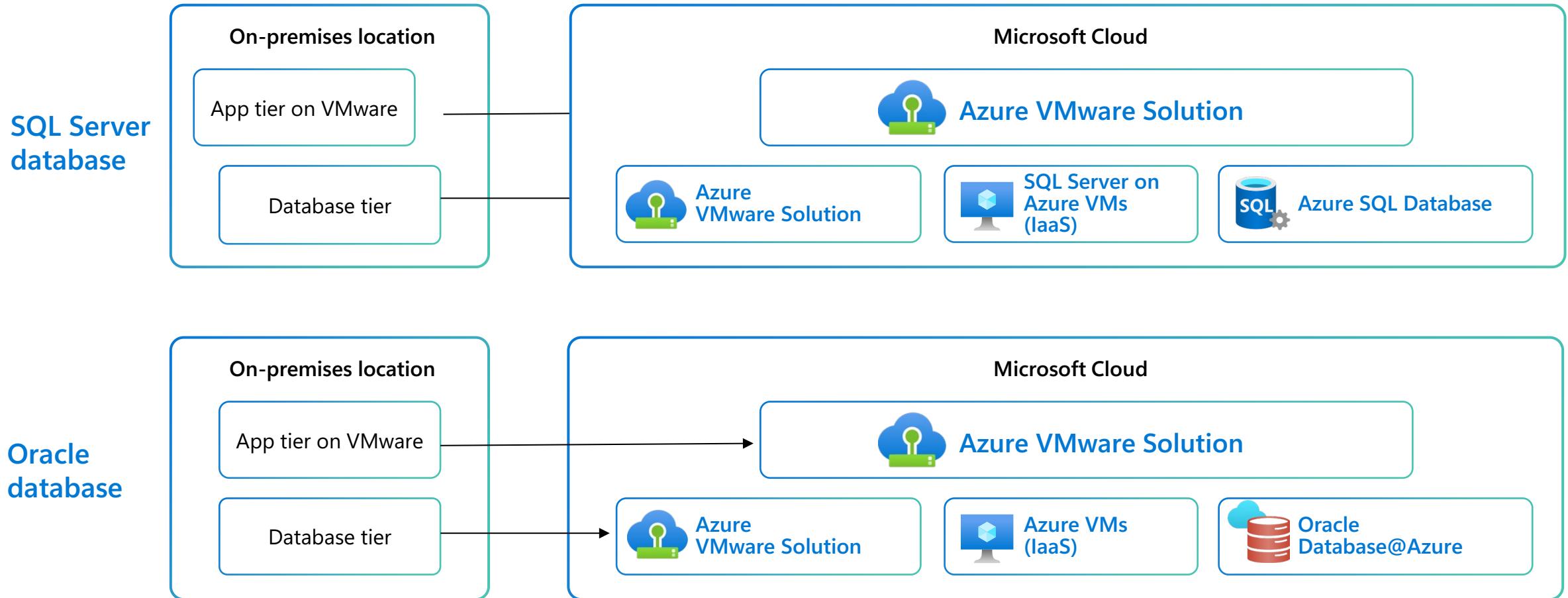
From External VM (outside AVS)

Returning a **Public** IP address for
Azure Storage Account

```
nslookup avsstorageacct.blob.core.windows.net
Server: Unknown
Address: 2601:5cc:c900:eea:daec:5eff:fe13:12f6

Non-authoritative answer:
Name: blob.dm5prdstr12a.store.core.windows.net
Address: 52.239.151.138
Aliases: avsstorageacct.blob.core.windows.net
avssorageacct.privatelink.blob.core.windows.net
```

Options to migrate essential databases to Azure



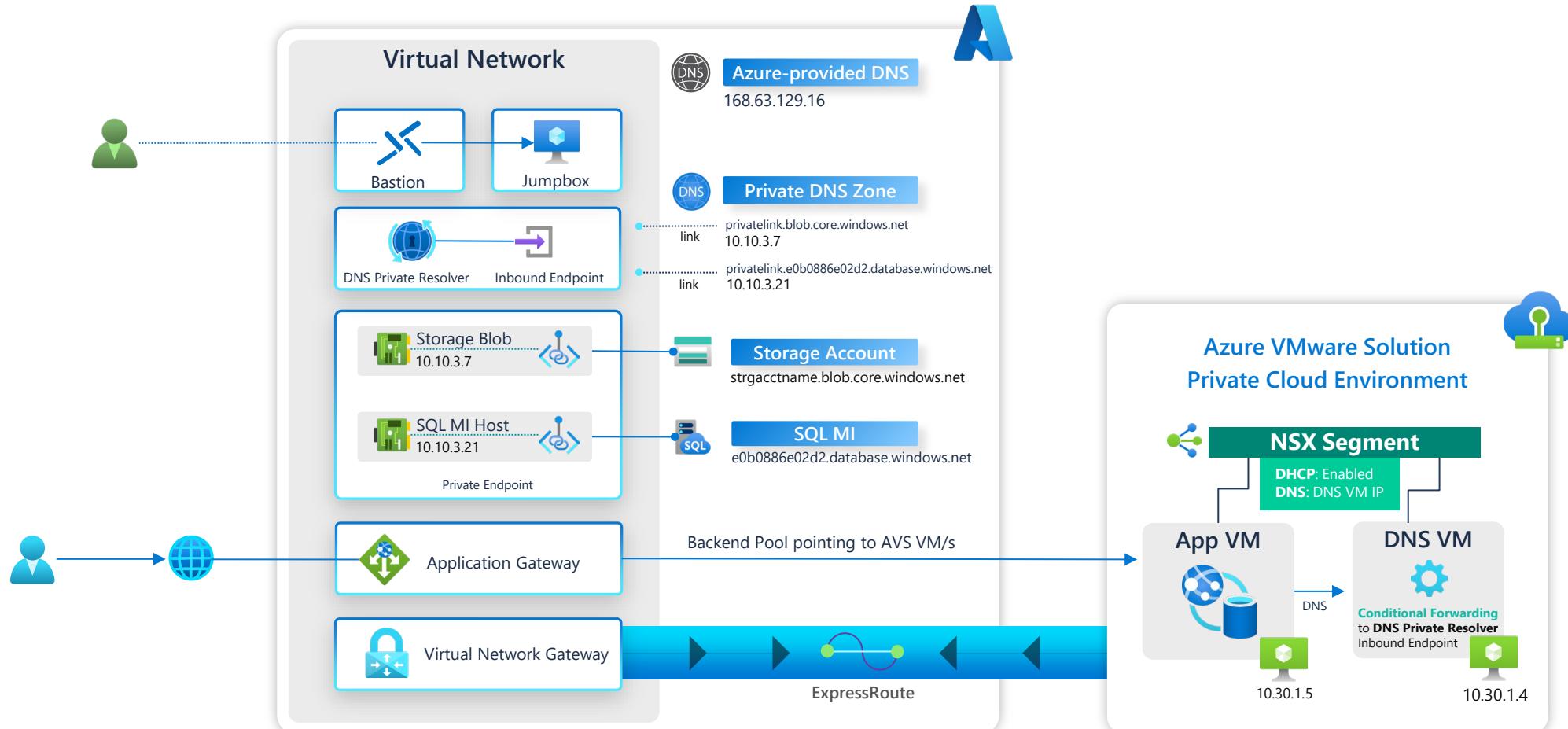
Demo

Modernize AVS Workloads'
databases with Azure services



Demo environment

Reference architecture

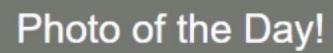


 TodoList App (Demo)

Todos

Create New

Description	Created Date	
Task 1	2024-06-03	Edit Details Delete
Task 2	2024-06-05	Edit Details Delete
Task 3	2024-06-07	Edit Details Delete



Demo

AI-Enable Apps and integrate
securely with Azure Services



Transforming Enterprise IT with Azure innovation

Demo: A Banking Organization's Modernization Journey through Azure VMware Solution



1

Migrate to AVS

Bank organization migrated seamlessly to AVS

2

Modernize Client App

Elevate user experience powered by Azure-native capabilities

3

Secure connectivity

Private access to 200+ Azure native services

4

Confident Access

Authenticate seamlessly through Azure's identity controls

5

Unlimited innovation

Modernize with Azure cutting-edge technology

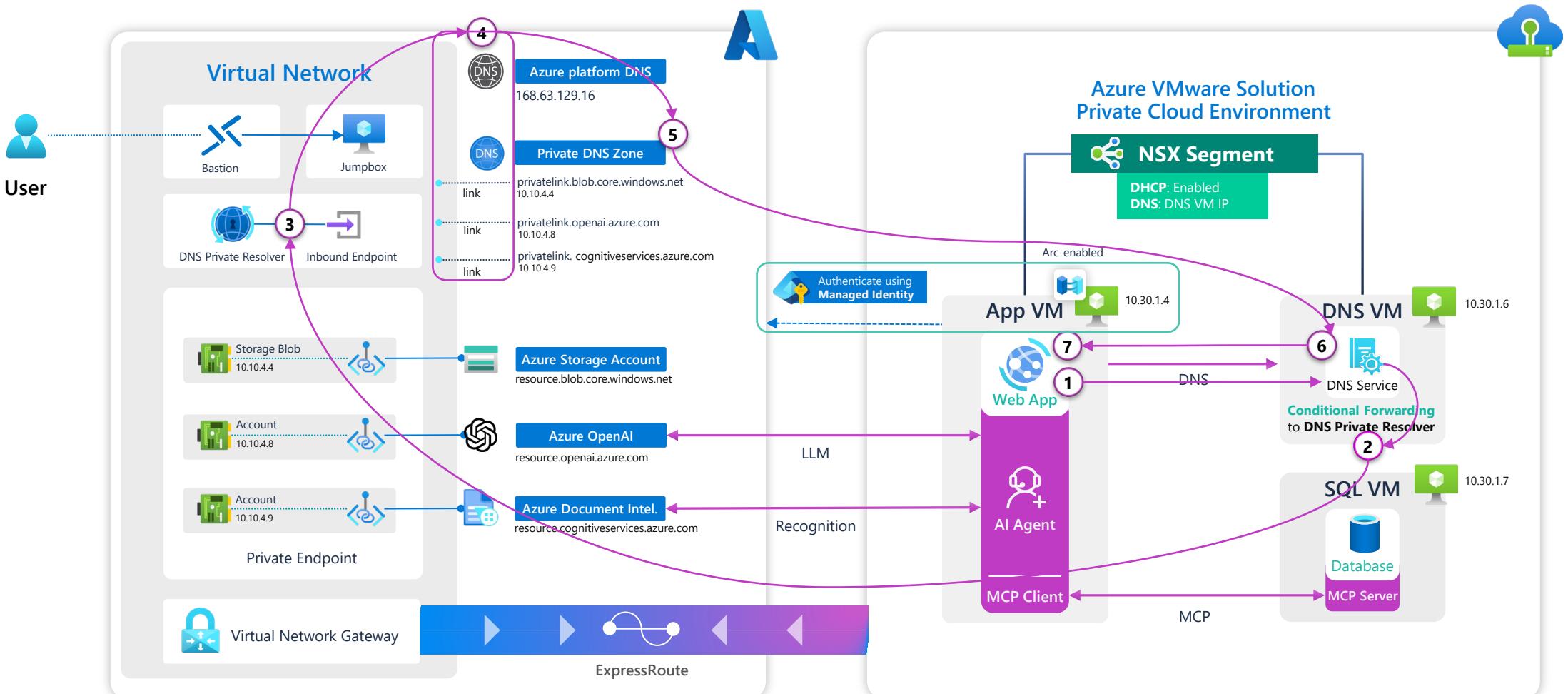
Migrate and Integrate

Modernize

Demo environment

Reference architecture

- Keyless Authentication to Azure Services
- DNS Resolution Flow with Azure Services





AI Banking Assistant

Documents

Clear

Export



Chat now about your accounts or upload a bill to enhance context.

Drag & drop a file or use the paperclip.



Ask about your accounts or upload a bill...

Ready (no document uploaded yet)





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Continue Learning

Kickstart your AVS journey today



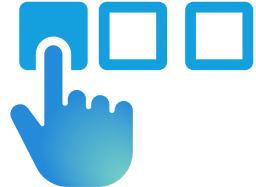
Documentation

aka.ms/AVSDocs



Learning Path

aka.ms/AVSPPath



Interactive Demos

aka.ms/AVSDemos



CAF Landing Zone

aka.ms/AVSLZA



Stay current, join: aka.ms/AVSPros



Click-through demos

aka.ms/AVSDemos 

Capabilities of Arc-enabled AVS

aka.ms/avs-demo-arc

Expanding Storage - Azure Elastic SAN

aka.ms/avs-demo-esan

Expanding Storage - Azure NetApp Files

aka.ms/avs-demo-anf

Secure Internet Connectivity

aka.ms/avs-demo-networking

HDX Migration to AVS

aka.ms/avs-demo-hcx-migration

Disaster Recovery with SRM

aka.ms/avs-demo-srm

Modernize with Azure Services

aka.ms/avs-demo-modernization

aka.ms/AVSBootcamp2026

Questions

aka.ms/AVSBootcamp2026

Thank you!



Stay current, join: aka.ms/AVSPros



Azure VMware Solution External Storage Options



Carl Solazzo
Principal Solution Engineer



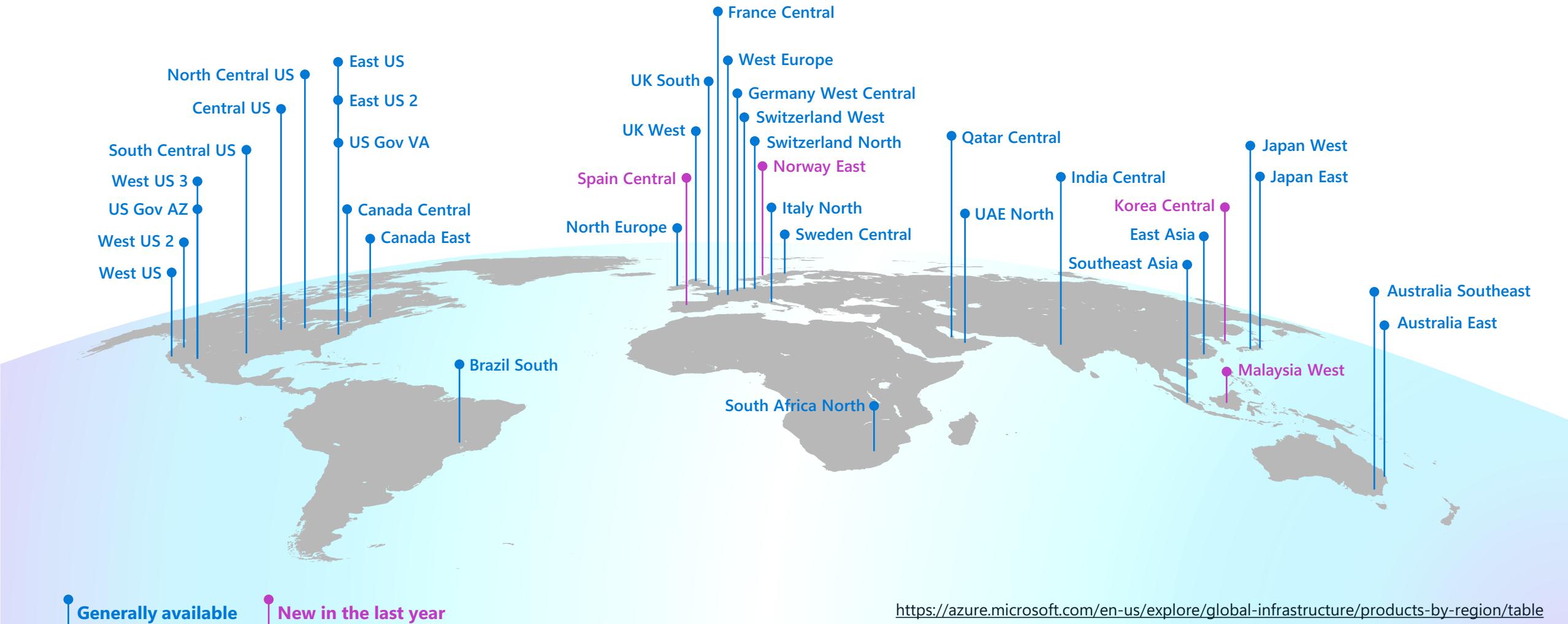
Scott Gruenemeier
Principal Solution Engineer



Azure VMware Solution global availability

Azure VMware Solution
Now available in **37 regions**

Azure IaaS
Now available in more than 70+ regions



AVS SKUs & Hardware Details

AV36P	AV48	AV52	AV64 Gen 1	AV64 Gen 2
 CPU Intel Xeon Gold 6240 (Cascade Lake) 36 Cores @ 2.6 GHz, 3.9 GHz Turbo 72 vCPU	 CPU Intel Xeon Gold 6442Y (Sapphire Rapids) 48 Cores @ 2.6 GHz, 4.0 GHz Turbo 96 vCPU	 CPU Intel Xeon Platinum 8270 (Cascade Lake) 52 Cores @ 2.7 GHz, 4.0 GHz Turbo 104 vCPU	 CPU Intel Xeon Platinum 8370C (Ice Lake) 64 Cores @ 2.8 GHz, 3.5 GHz turbo 128 vCPU	 CPU Intel Xeon Platinum 8370C (Ice Lake) 64 Cores @ 2.8 GHz, 3.5 GHz turbo 128 vCPU
 Memory 768 GB RAM	 Memory 1,024 GB RAM	 Memory 1,536 GB RAM	 Memory 1,024 GB RAM	 Memory 1,024 GB RAM
 vSAN Storage Raw Capacity: 20.70 TB NVMe OSA vSAN Capacity: 19.20 TB NVMe OSA Cache: 1.5 TB Intel Optane Cache	 vSAN Storage vSAN Capacity: 25.6 TB NVMe ESA	 vSAN Storage Raw Capacity: 39.90 TB NVMe OSA vSAN Capacity: 38.40 TB NVMe OSA Cache: 1.5 TB Intel Optane Cache	 vSAN Storage Raw Capacity: 19.2 TB NVMe OSA vSAN Capacity: 15.36 TB NVMe OSA Cache: 3.84 TB NVMe	 vSAN Storage vSAN Capacity: 21.12 TB NVMe ESA
 Dell Hardware	 Dell Hardware	 Dell Hardware	 Azure Fleet Hardware +  + Initial 3 node Dell cluster required to deploy the SDDC	 Azure Fleet Hardware  Azure Virtual Network

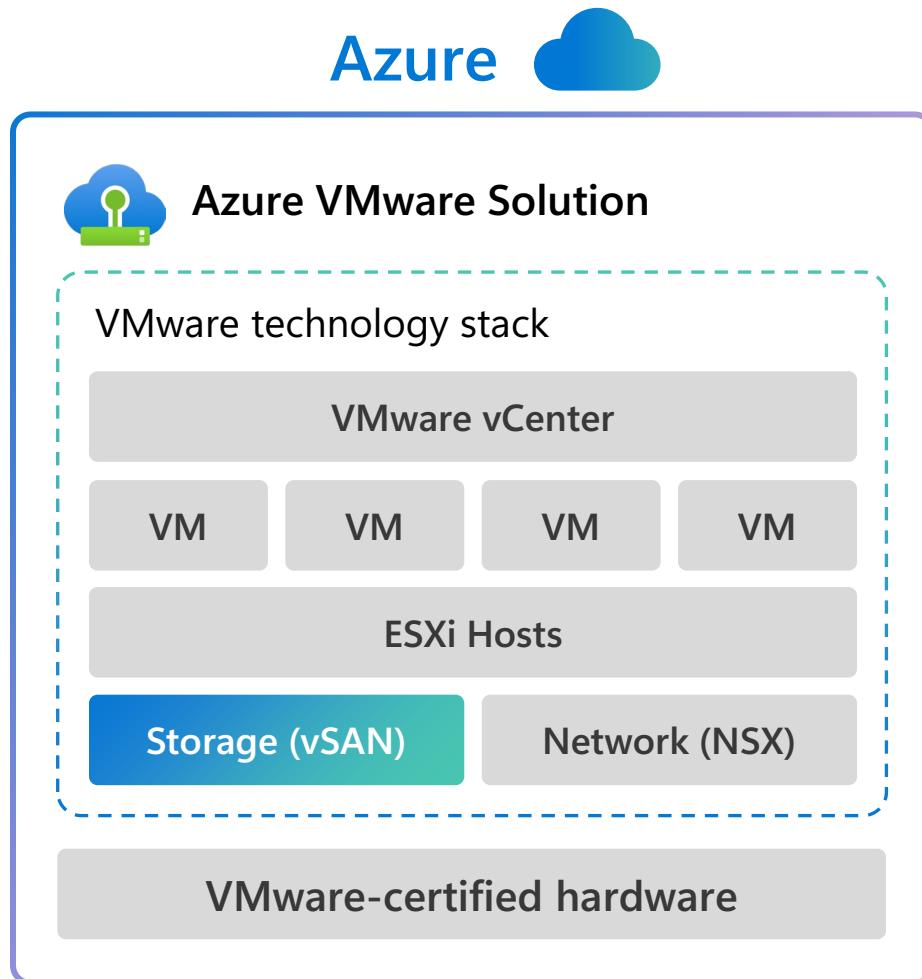
Minimum 3 nodes per vSphere cluster

Maximum 16 nodes per vSphere cluster

Maximum 12 clusters per Private Cloud instance

Maximum 96 nodes per Private Cloud instance

AVS Primary Storage: VMware vSAN



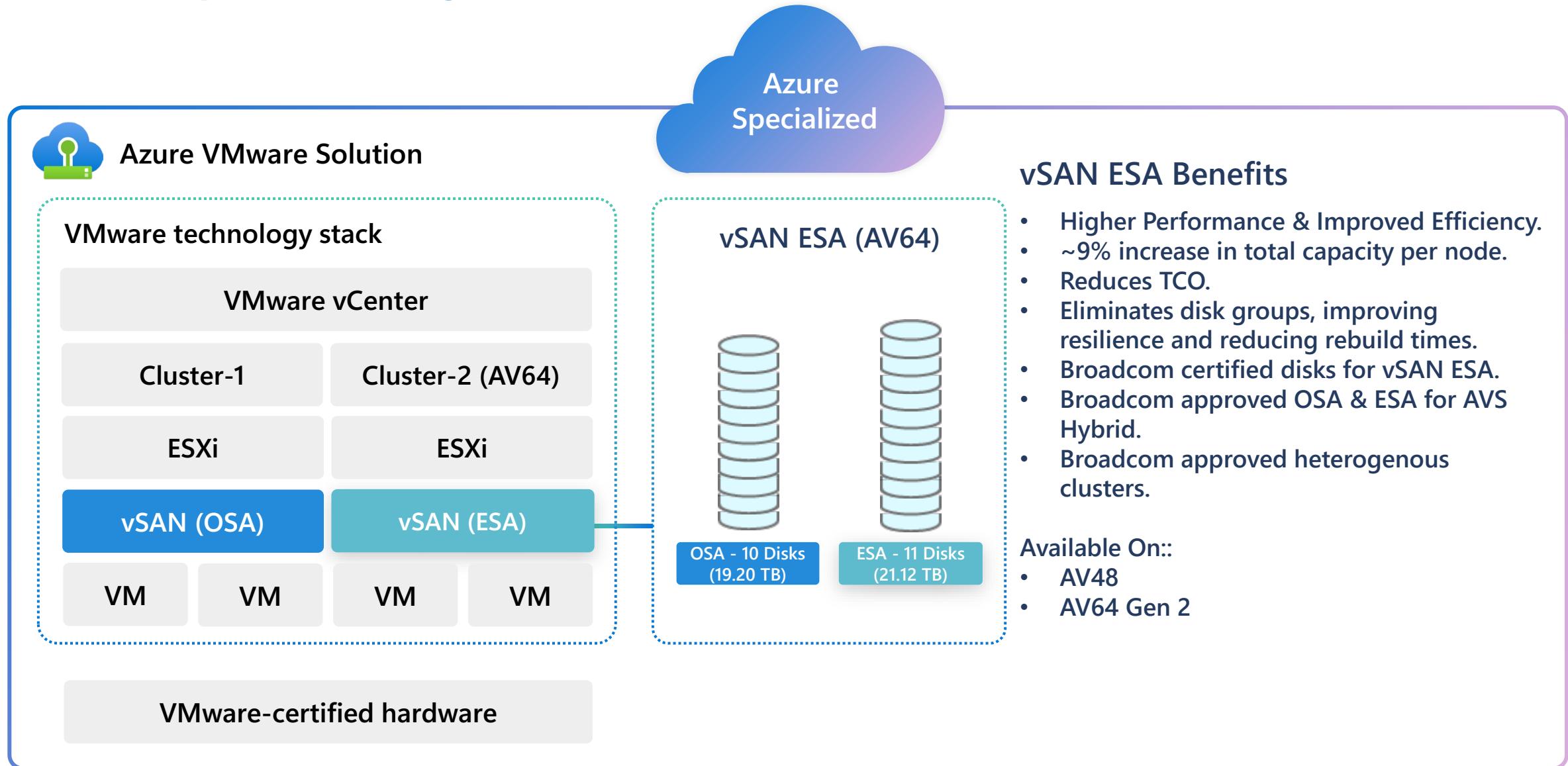
VMware vSAN is your primary storage

- Fully configured all-flash vSAN storage, local to the cluster.
- De-duplication and compression enabled by default.
- Each node of the vSphere cluster has two disk groups with one cache disk and three capacity disks.

Additional storage integrations

- Azure NetApp Files
- Azure Elastic SAN
- Azure Native Pure Storage
- Pure Cloud Block Store (Marketplace)

vSAN Express Storage Architecture



AVS External Storage: Key Considerations

Simply said...

To expand storage capacity and capabilities without adding additional AVS nodes.

- Cost Optimization
- Disaster Recovery Scenarios
- Cross Region Replication
- Snapshot Capabilities
- Performance Improvements

External Storage for AVS: Key Benefits

Improve Compute to Storage Density



Scale storage independently of compute
Support larger number of applications with no storage limits

Advanced Data Management Functionality



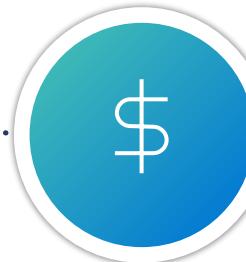
Efficient snapshots and clones to rapidly create copies and checkpoint changes at scale
Efficient incremental block transfer-based replication for regional DR and backup

Improve Compute Utilization



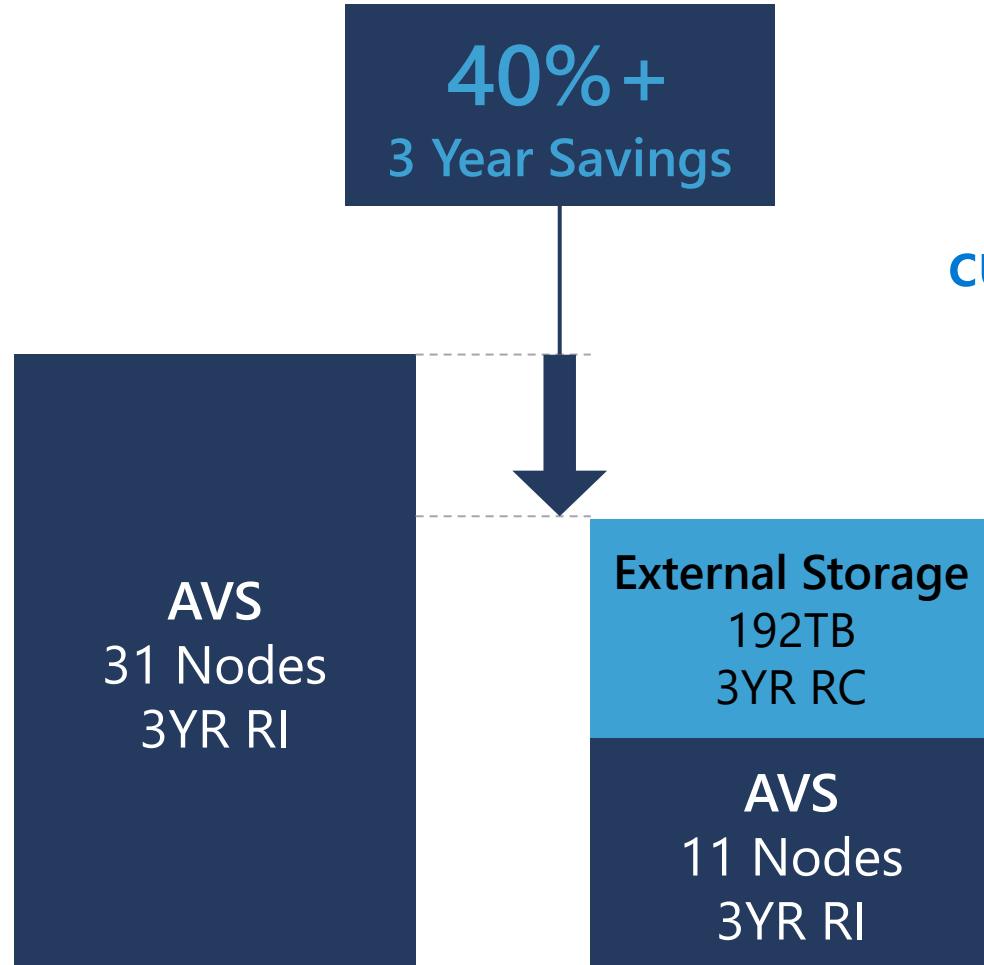
Offload data management operations from compute freeing up resources for actual VMs

Lower Total Cost of Ownership



In storage-intensive deployments save money by offloading storage capacity instead of adding more compute nodes

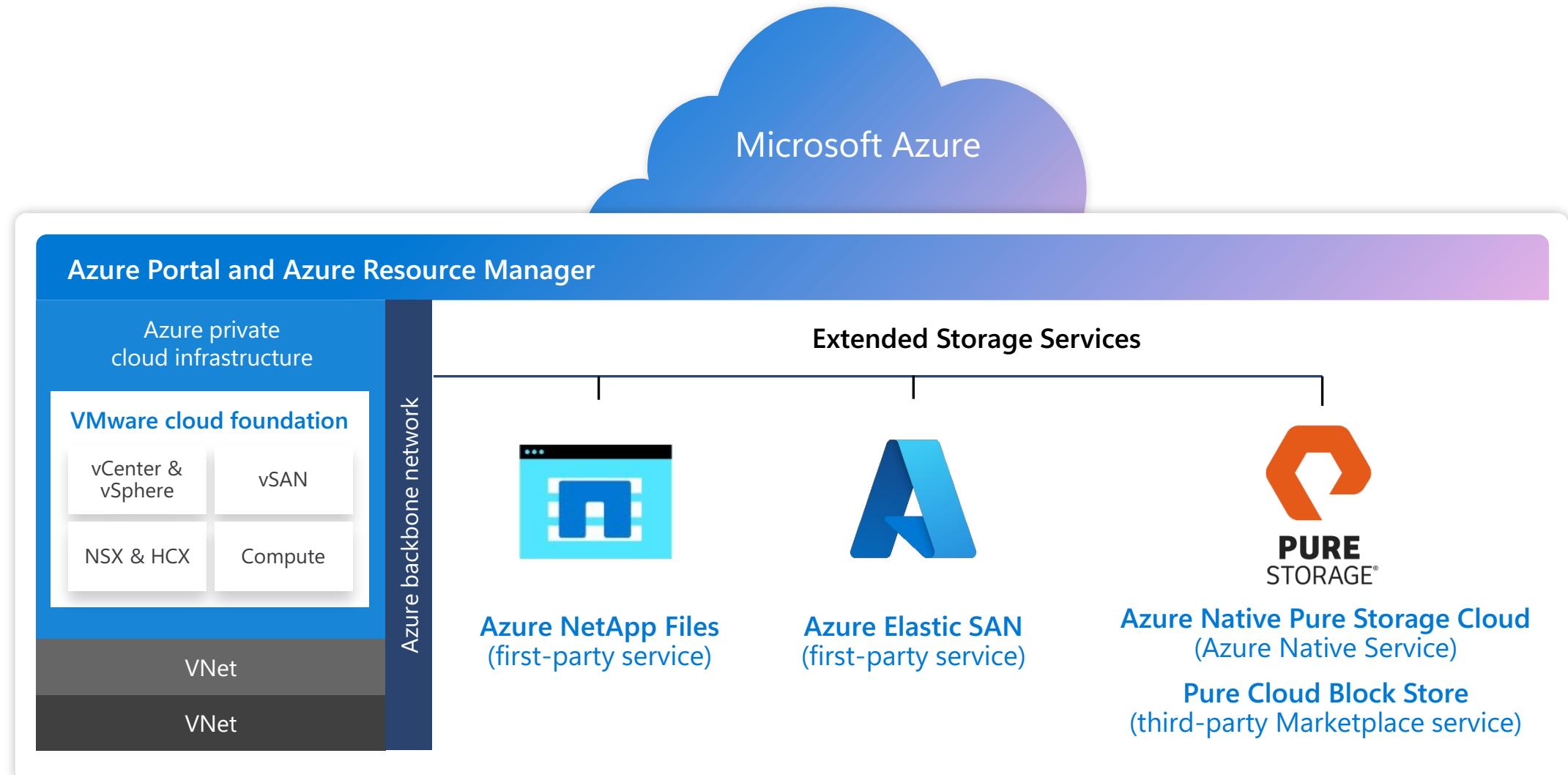
AVS + External Storage



Help storage-heavy
customers save big with
External Storage

Note: This is an example to illustrate a storage heavy environment

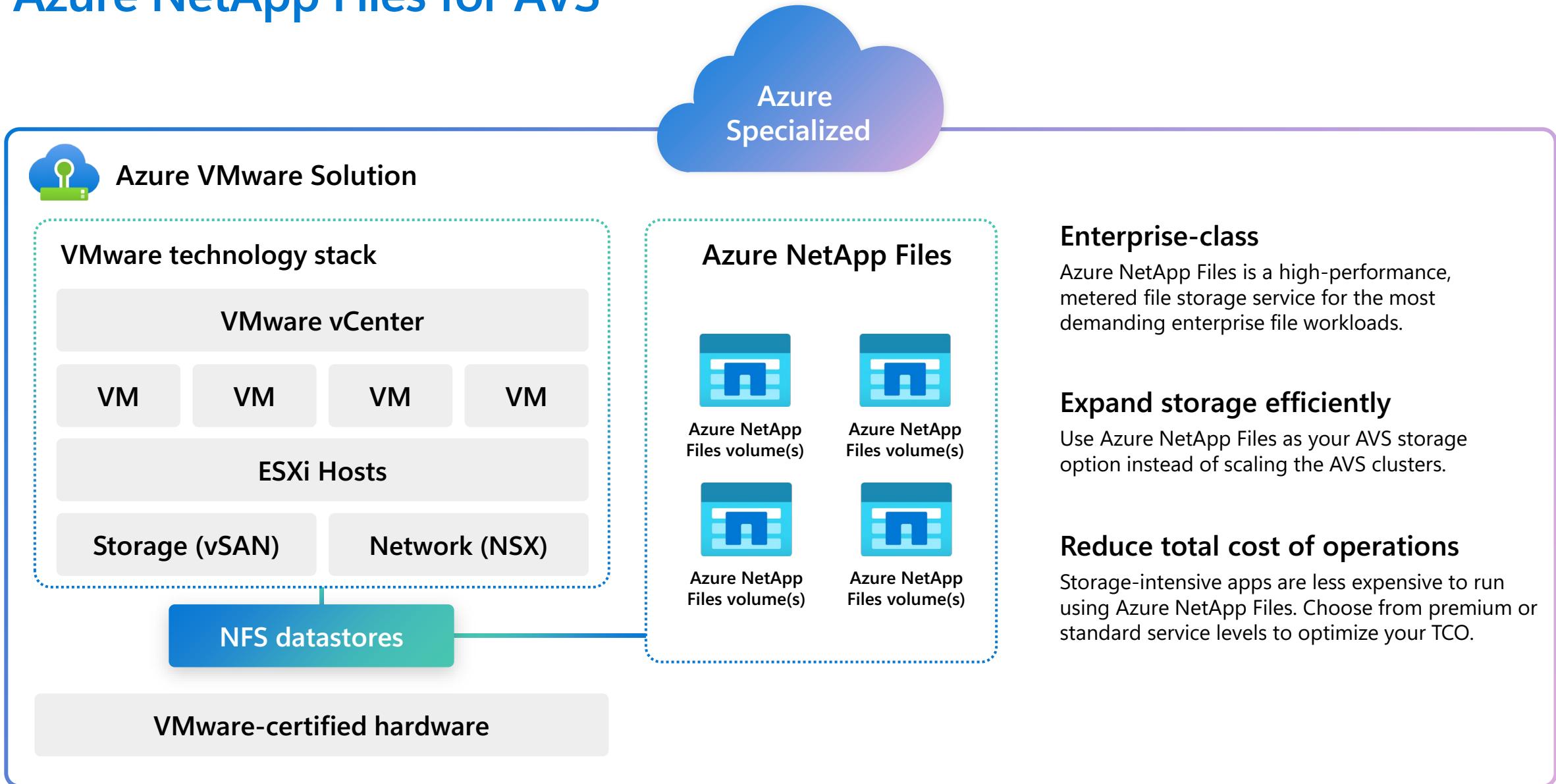
Storage flexibility for intensive workloads





Azure NetApp Files (ANF) for AVS

Azure NetApp Files for AVS



Azure NetApp Files for AVS

Best option for workloads that are latency or IOPS sensitive



Cool access (data tiering)

Reduces storage costs by automatically moving infrequently accessed data to lower-cost storage.

Save up to **76%** on infrequently accessed data.



Reserved capacity (commitment discounts)

Upfront discounts for committing to storage capacity for one or three years.

Saves **18-34%** with spending commitments.



Snapshots (space-efficient copies)

Provides space-efficient copies of data, lowering overall storage requirements for data protection.

Increase effective capacity by **3x** or more.



Flexible service level

New Service Level allowing option to configure capacity and throughput independently. (Public Preview)

Optimize performance and cost based on workload requirements. Save up to 40% when comparing ANF Prem/Ultra and ANF Flexible.

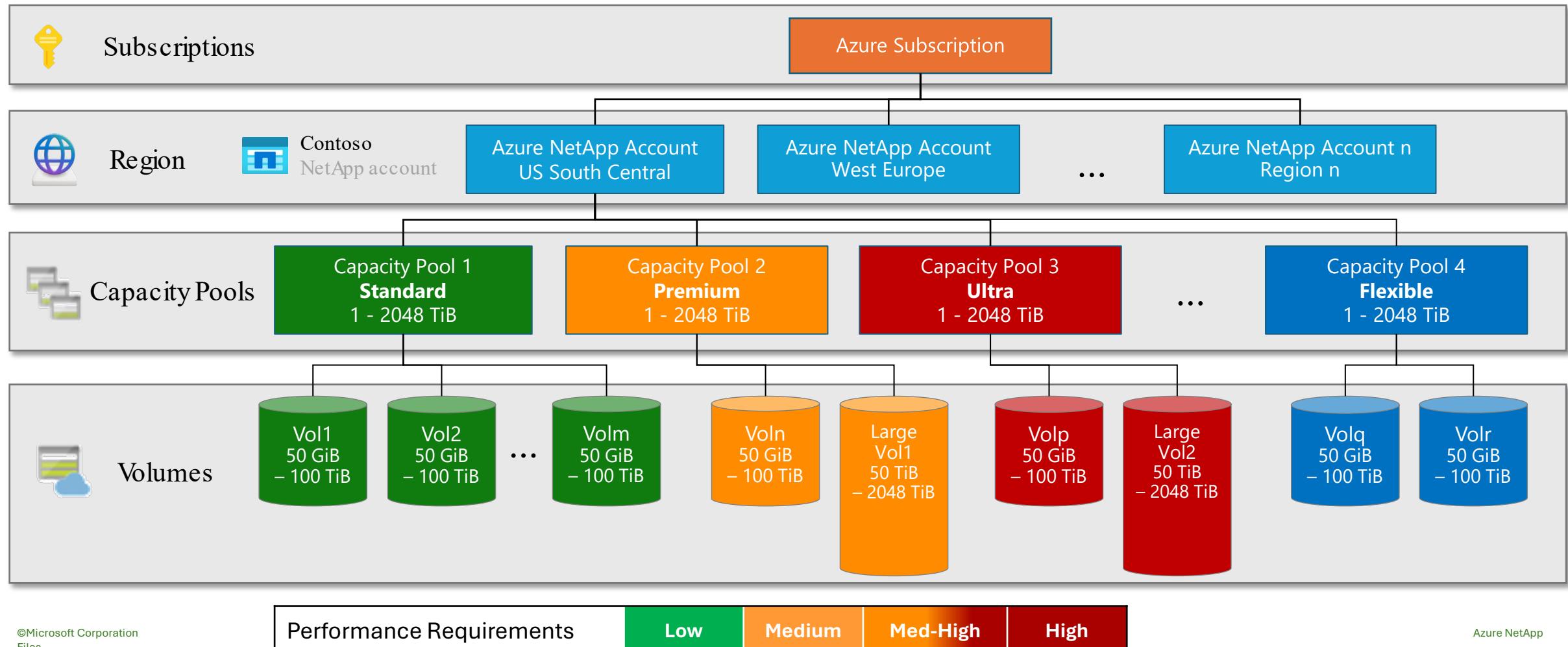
Azure NetApp Files

Four service levels for different workloads

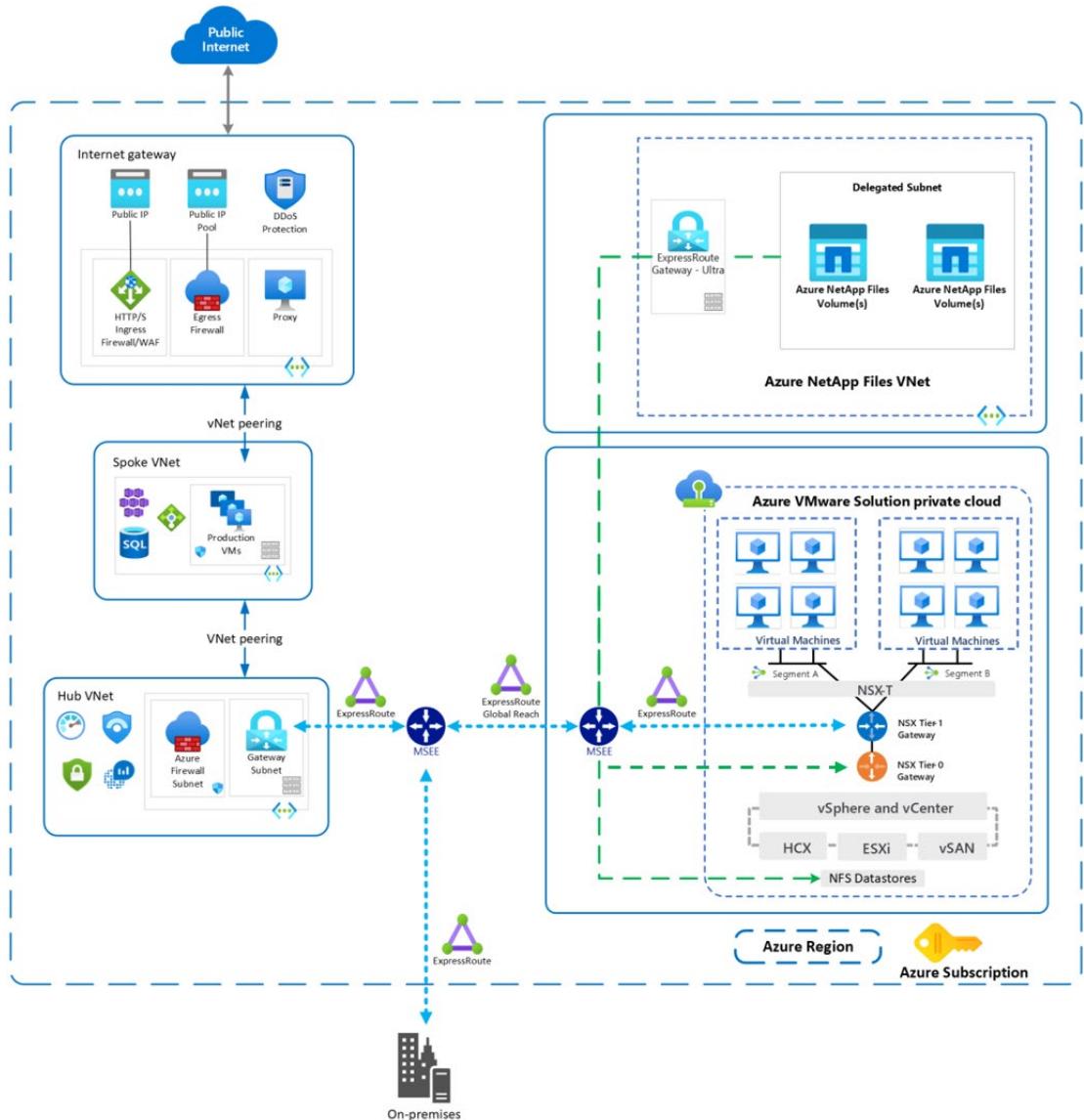
Service Level	Relative Advantage	Workloads
Standard <i>Economic</i>	Capacity optimized	<ul style="list-style-type: none">• Web content• File shares• Home directories
Premium <i>Consistent Performance</i>	Balanced	<ul style="list-style-type: none">• SAP• Databases• Enterprise apps• Analytics• Engineering apps
Ultra <i>High Performance</i>	Performance optimized	<ul style="list-style-type: none">• Enterprise apps (incl. SAP HANA, Oracle, SQL)• VDI
Flexible	Customizable	<ul style="list-style-type: none">• Small workloads with high throughput• Large workloads with low throughput

Azure NetApp Files Hierarchy

<https://learn.microsoft.com/azure/azure-netapp-files/azure-netapp-files-understand-storage-hierarchy>



Azure NetApp Files Datastores and Guest OS mounts Architecture



VMs require storage for:

- Virtual machine disks > ANF Datastores in addition to vSAN
- Access to shared user/app files > ANF as file shares (NFS, SMB, dual-protocol)

Use cases

- DR from on-prem
Use minimal compute and scale out storage during normal operation
- Burst VMs from on-prem
Requires more performance, data protection workflows
- Dev/test environments
Requires rapid clones and snapshots to checkpoint changes
- Migrated / new VMs that replace on-prem
Requires more performance, data protection workflows
- VM access to shared files (VDI user files and shared application files)

Recommended workloads

- Database workloads – SQL Server, Oracle etc.
- Data warehouse – Teradata
- GIS/Imaging, Document archives
- HPC/EDA
- Home directories for virtual desktops
- Application file sharing

ANF Standard – Savings Example

31 AVS Nodes (320 TB Storage Needed)

AVS Only

- 31 Nodes AV64 3Y RI
- \$5,356,142 Total 3 Year Cost

AVS + ANF

- 11 Nodes AV64 3Y RI
- 192 TB **ANF Standard**
(3,072 MBps Throughput)
- \$2,792,064 Total 3 Year Cost

Example Based on

- East US
- FTT2-RAID 6

\$2.56M

48%
3 Year Savings

\$5.36M

\$2.79M

AVS
31 Nodes
3YR RI

ANF Standard
192TB
3YR RC

AVS
11 Nodes
3YR RI

Note: This is a manufactured example to illustrate a storage heavy environment

Example of 3 Year Cost & Savings

ANF Flexible – Savings Example

31 AVS Nodes (320 TB Storage Needed)

AVS Only

- 31 Nodes AV64 3Y RI
- \$5,356,142 Total 3 Year Cost

AVS + ANF

- 11 Nodes AV64 3Y RI
- 192 TB **ANF Flexible**
(4,000 MBps Throughput + 192 TiB Capacity)
- \$2,899,454 Total 3 Year Cost

Example Based on

- East US
- FTT2-RAID 6

Note: This is a manufactured example to illustrate a storage heavy environment

\$2.46M

46%
3 Year Savings

\$5.36M

AVS
31 Nodes
3YR RI

\$2.90M

ANF Flexible
192TB

AVS
11 Nodes
3YR RI

Example of 3 Year Cost & Savings

Azure NetApp Files Storage Tiers

Adaptive service levels

Service level	Economic		Consistent performance		High performance		Flexible
	Cool access	Standard	Cool access	Premium	Cool access	Ultra	Flexible Service Level
Cost * (\$/GiB/mo)	\$0.08 **	\$0.15	\$0.11 **	\$0.29	\$0.13 **	\$0.39	Capacity - \$0.11 **** Throughput - \$2.25 *****
AVS Workloads	Web content, file shares, home directories		SAP, Databases, Enterprise apps, Analytics, Engineering apps		Enterprise apps (incl. SAP HANA, Oracle, SQL), VDI		Small workloads with high throughput Large workloads with low throughput
Comparison	Capacity optimized		Balanced		Performance optimized		Customizable
Pool throughput	16MiB/s per 1TiB provisioned		64MiB/s per 1TiB provisioned		128MiB/s per 1TiB provisioned		128MiB/s + (0 – 640) MiB/s per 1TiB provisioned
Volume throughput	Up to 4.5GiB/s Up to 12.5GiB/s (Large volumes)		Up to 4.5GiB/s Up to 12.5GiB/s (Large volumes)		Up to 4.5GiB/s Up to 12.5GiB/s (Large volumes)		Up to 4.5GiB/s Up to 12.5GiB/s (Large volumes at GA)
Latency	< 1ms (hot tier) Variable (cool tier)	< 1ms	< 1ms (hot tier) Variable (cool tier)	< 1ms	< 1ms (hot tier) Variable (cool tier)	< 1ms	< 1ms

* Approximate pricing for East US region as of February 2025. For exact pricing by region, please refer to <https://azure.microsoft.com/en-us/pricing/details/netapp/>

** Based on 80% cool data and 5% retrieve ratios. Use <https://aka.ms/anfcoolaccesscalc> for estimations

**** \$0.11/per GiB with default 128 MiB/s

***** \$2.25/per additional MiB/s

Use [ANF datastore for AVS TCO Estimator](#) to estimate your TCO savings potential

Azure NetApp Files + AVS TCO Estimator

[ANF TCO Estimator](#)
aka.ms/anfavscalc

Azure NetApp Files datastore for Azure VMware Solution TCO Estimator

Sizer Input

Region: East US

Total VMs*: 400

vCPU/pCore*: 3

CPU: vCPUs/VM*: 4

Memory: vRAM/VM*: 12 GB

Storage: Utilized Storage/VM*: 500 GB

Projected Savings with ANF

Profile	Additional AVS hosts required only for storage	ANF storage to optimize (TB)	TCO One Year AVS	TCO One Year ANF	TCO Savings ⓘ
ANF Ultra Tier	19	126	\$695,719	\$425,652	39%
ANF Premium Tier	19	126	\$695,719	\$318,844	55%
ANF Standard Tier	19	126	\$695,719	\$187,215	74%

Profile driven by Number of hosts

Profile driven by	Number of hosts
Driven by CPU	7
Driven by Memory	10
Driven by Storage	29

Cost (USD)

Category	Additional AVS cost only for storage (USD)	ANF cost (USD)
Driven by CPU	~695,719	~425,652
Driven by Memory	~695,719	~318,844
Driven by Storage	~695,719	~187,215

TCO of Adding Azure NetApp Files Datastores to AVS



Customer:
Home Trust Company

Partner
NetApp

Industry:
Financial - Insurance

Size:
Large (1,000 - 9,999
employees)

[Read full story here](#)



Home Trust increases performance, reduces time to market with Azure VMware Solution



"Now that we're all in on Azure, we can look at a workload and modernize and optimize it by moving it to Azure SaaS, PaaS, or IaaS. With the experience and deep technical support from Microsoft, Bell, NetApp, and everyone else involved, this was a remarkable accomplishment."

- **Doug Caldwell: Vice President of IT Infrastructure Home Trust Company**

Situation:
Home Trust Company faced a costly and time-consuming upgrade project for its datacenter exit. Moving forward, it sought to increase reliability and resilience and reduce operating costs with a managed VMware solution.

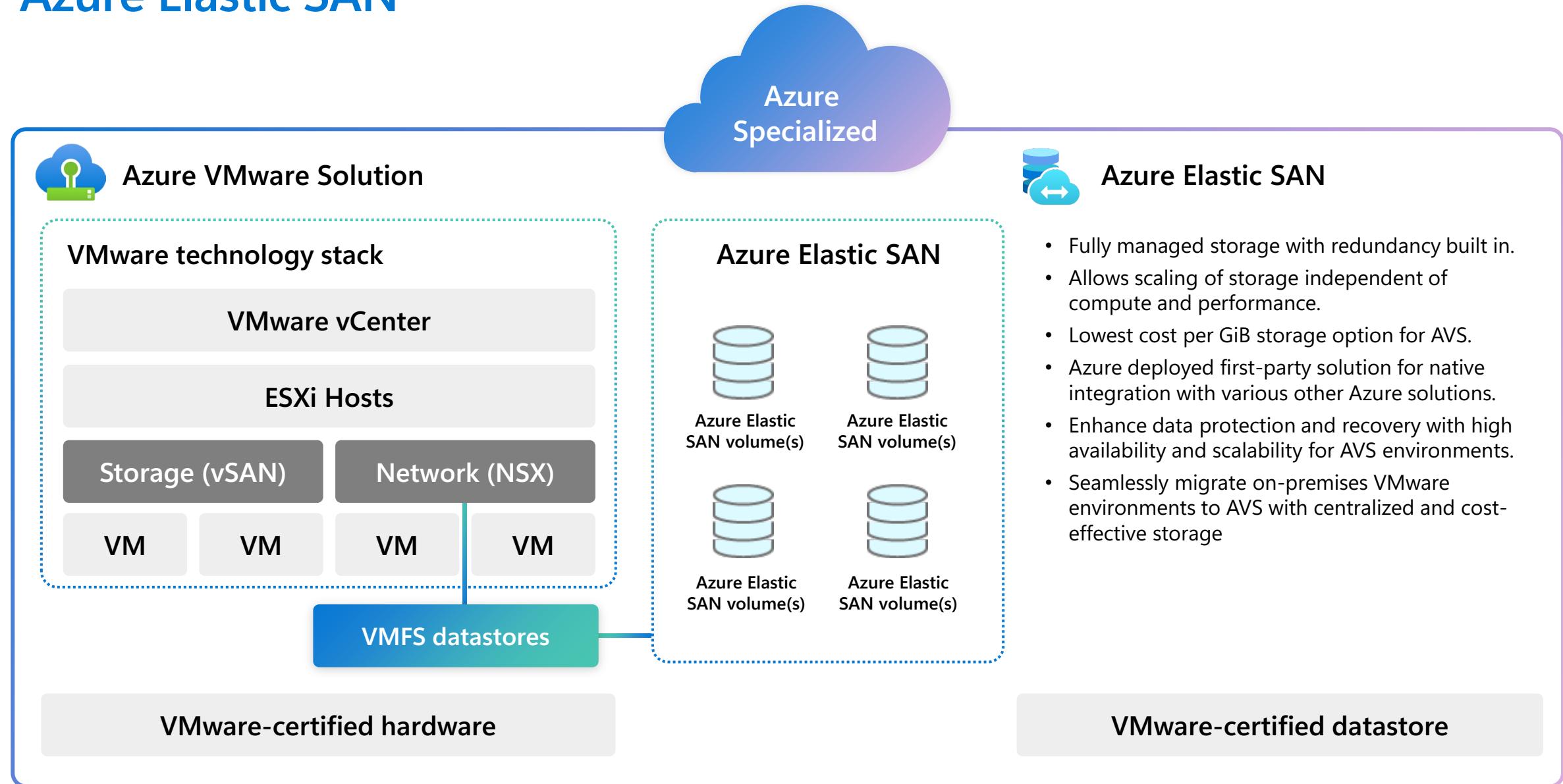
Solution:
Azure NetApp Files was chosen as a datastore based on the TCO savings of eliminating 30 AVS nodes that would have been used for storage only. Azure NetApp Files provides flexibility by offering three tiers of performance to easily scale up or down.

Impact:
Azure NetApp Files datastores for Azure VMware Solution simplified management and achieved significant TCO savings. Azure NetApp Files premium storage was used for both the production and Dev/Test environments.



Azure Elastic SAN (ESAN) for AVS

Azure Elastic SAN



Azure Elastic SAN

Best option for a secondary site or less demanding workloads



Cost-effective storage

Utilize Azure Elastic SAN to store large volumes of data affordably.

Lowest cost per GiB storage option for AVS that can be scaled-up on demand



Scale storage capacity independently

Once your performance needs are met, deploy additional capacity-only units to increase scale.

Saves up to **55%** compared to adding more nodes

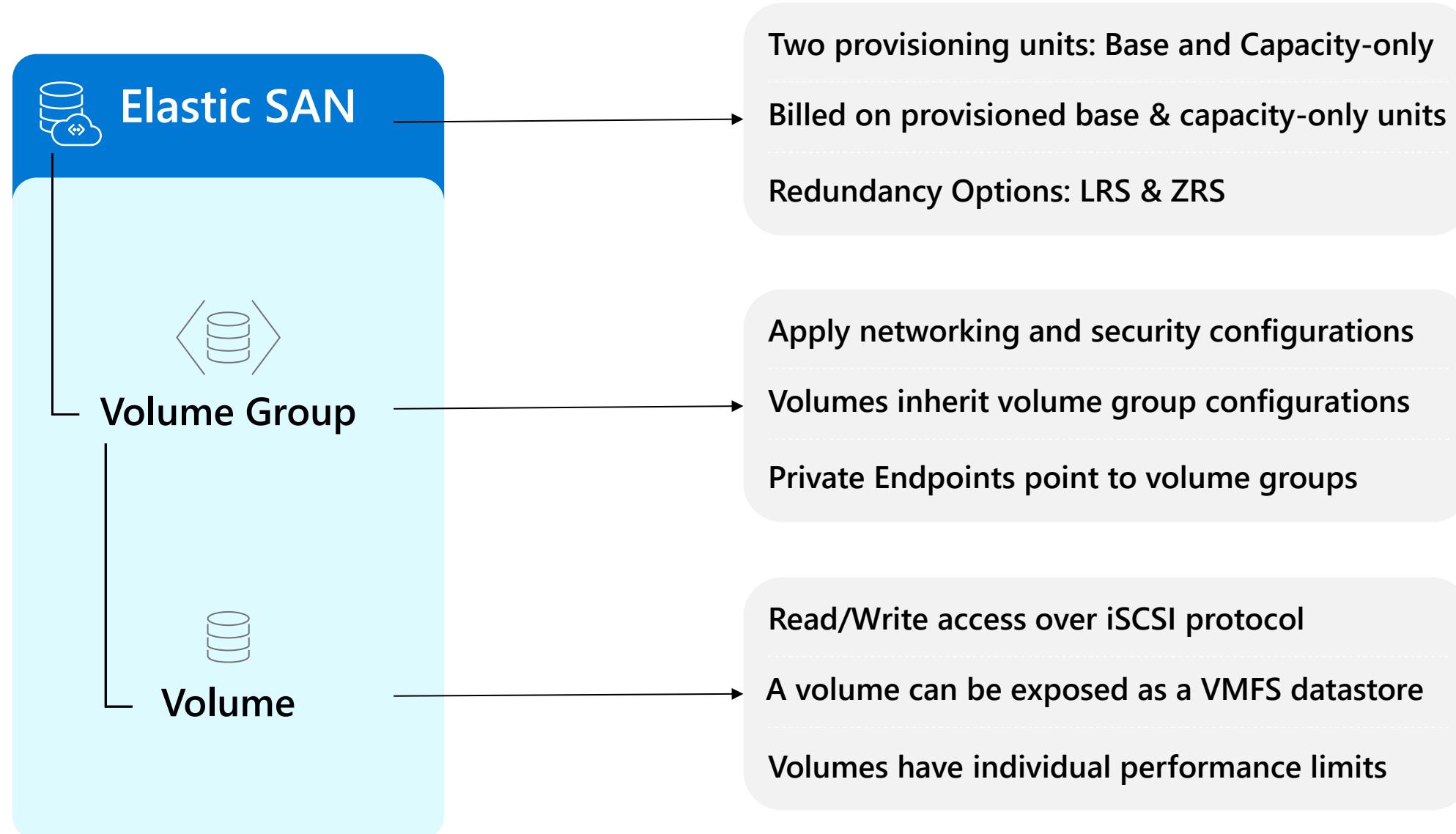


Resilient disaster recovery

Ensure business continuity by leveraging Azure Elastic SAN with ZRS for disaster recovery
(Available in limited AVS regions today, remaining regions are coming soon)

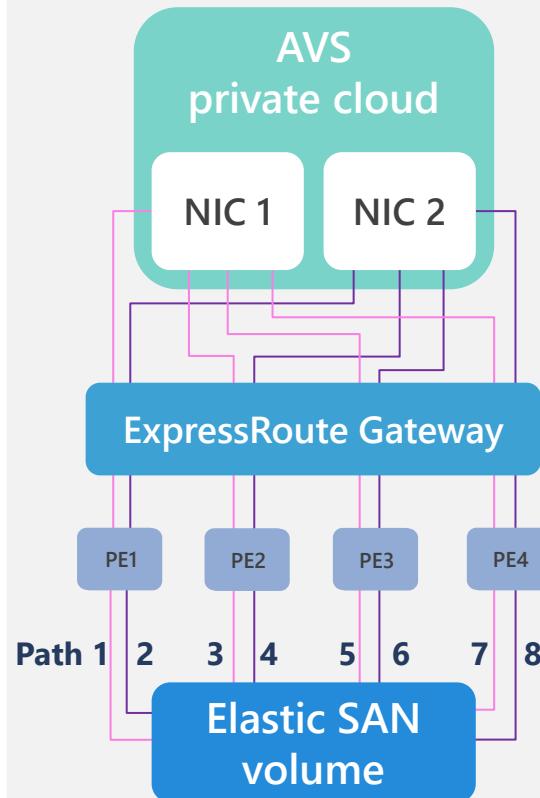
Protect against outages with zone-redundant storage

Azure Elastic SAN - Resource Hierarchy

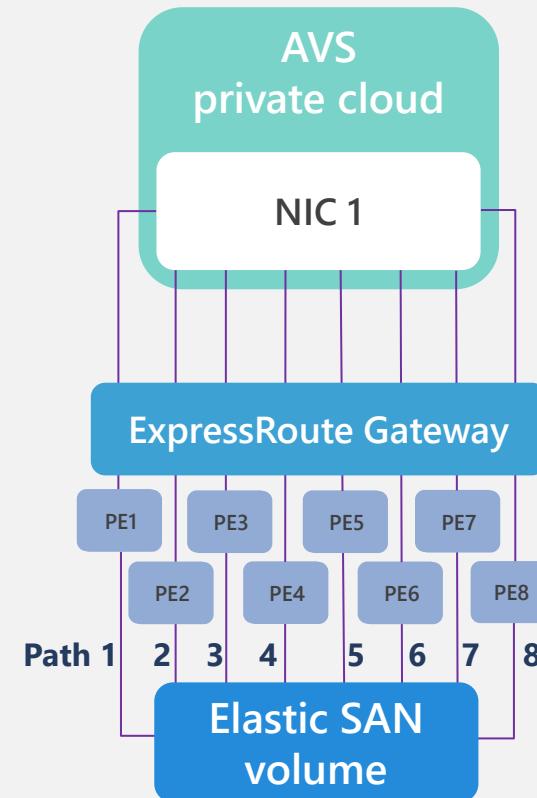


Azure Elastic SAN – Connectivity from AVS

Non-AV64 SKU

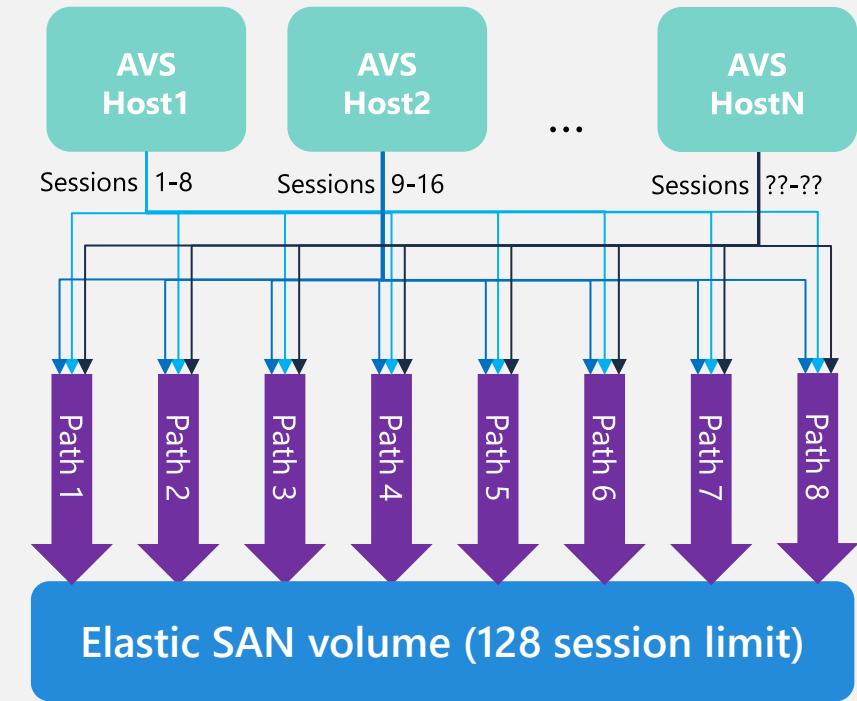


AV64 SKU



SESSION MANAGEMENT

Each AVS Host utilizes every "Path" to send a session for maximum parallelization, which increases performance and resiliency.



Customer sets up:

- AVS private cloud
- ExpressRoute GW
- Private Endpoints (PEs)
- Elastic SAN volume

Created upon connect:

- 1 Path p/NIC to each PE
- 8 Paths total
- VMFS datastore

Created upon connect or new node creation:

- 1 session per Host for each Path to the datastore

(number of paths) x (number of hosts) = total Sessions

Up to 16 hosts, 8 Paths is optimal (8 PE on AV64; 4 PE on non-AV64 SKUs)

ESAN – Savings Example

31 AVS Nodes (320 TB Storage Needed)

AVS Only

- 31 Nodes AV64 3Y RI
- \$5,356,142 Total 3 Year Cost

AVS + ESAN

- 11 Nodes AV64 3Y RI
- **192 TB ESAN** (48 Base + 144 Capacity)
- Endpoints (~11% of Storage Costs)
- \$2,410,654.68 Total 3 Year Cost

Example Based on

- East US
- FTT2-Raid 6

Note: This is a manufactured example to illustrate a storage heavy environment

\$2.95M

55%
3 Year Savings

\$5.36M

AVS
31 Nodes
3YR RI

\$2.41M

ESAN
192TB

AVS
11 Nodes
3YR RI

Example of 3 Year Cost & Savings

Azure Elastic SAN - Pricing

Pricing Meter	Unit	Monthly Price per GiB*
Premium LRS Base unit	1 TiB, 5000 IOPS, 200 MB/s	\$ 0.08
Premium LRS Capacity only unit	1 TiB, capacity only (no provisioned performance)	\$ 0.06
Premium ZRS Base unit	1 TiB, 5000 IOPS, 200 MB/s	\$ 0.12
Premium ZRS Capacity only unit	1 TiB, capacity only (no provisioned performance)	\$ 0.09

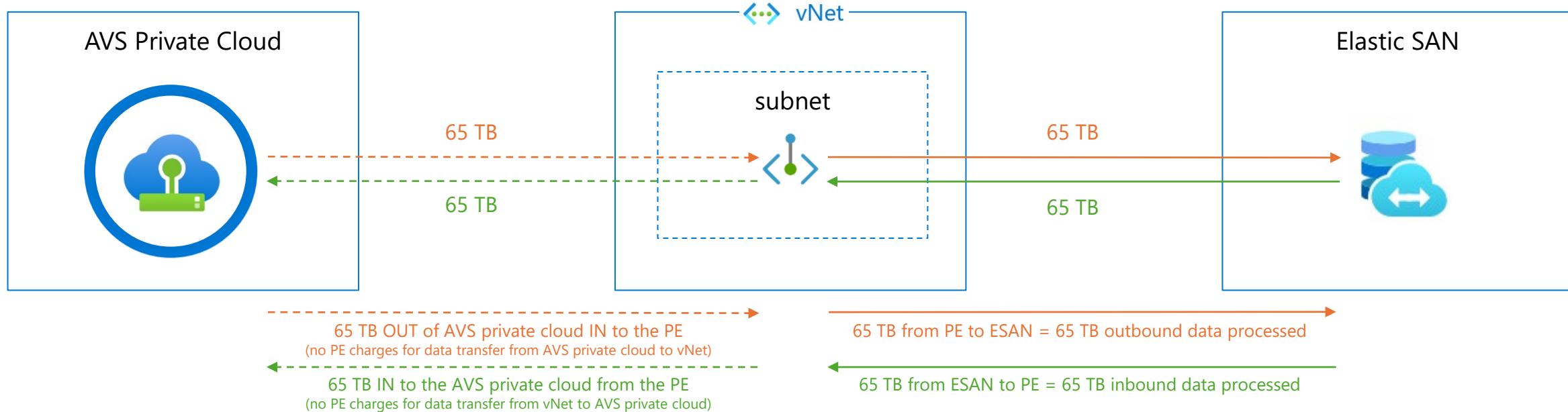
Monthly Cost**	LRS		ZRS	
	#	\$*	#	\$*
Base Units	32	2,621.44	32	3,932.16
Capacity Units	68	4,177.92	68	6,266.88
Total	100	6,799.36	100	10,199.04

* based on East US region. Price may differ per region, please refer to pricing page for details.

** does not include cost of Private Link and Ultra Perf Gateway. Add ~11% upcharge for Private Endpoint cost (extrapolated from existing customer deployments).

Azure Elastic SAN	
Tier 1 & 2 workloads, Databases, VDI hosted on any Compute options (VM, Containers, AVS)	
Scale targets	
Volume	SAN
Size	64 TiB
IOPS	80,000
Throughput	1,280 MB/s
Provisioning model	
Per GiB provisioning granularity	Flexible model at TiB granularity

Private Endpoint - Pricing example (per PE)



Service	Product	Meter	Price (East US)	Total Cost per month
Virtual Network	Virtual Network Private Link	Outbound data processed (65 TB)	\$ 0.01 per GB	\$ 665.60
Virtual Network	Virtual Network Private Link	Inbound data processed (65 TB)	\$ 0.01 per GB	\$ 665.60
Virtual Network	Virtual Network Private Link	Private Endpoint (8 qty)	\$ 0.01 per hour	\$ 58.40

Total monthly cost for PE = \$ 1,389.60

Note: This is an example with one PE. Multiple PEs (4 for non-AV64 and 8 for AV64) are recommended for attaching ESAN datastore to AVS. Costs will vary based on how many PEs are configured and the inbound/outbound data processed through them.

Refer to pricing page for more information: [Pricing - Azure Private Link | Microsoft Azure](#)

Azure Elastic SAN – Pricing Calculator

Search products

Popular

Compute

Networking

Storage

Web

Mobile

Containers

Databases

Analytics

AI + machine learning

Internet of Things

Integration

Identity

Security

Developer tools

1 **Azure Elastic SAN**
Elastic SAN is a cloud-native storage area network (SAN) service built on Azure. Gain access to an end-to-end experience like your on-premises SAN

2 **Azure Managed Lustre**
Azure Managed Lustre is a fully managed, cloud based parallel file system that enables customers to run their high performance computing (HPC) workloads in the cloud

Performance

Azure Elastic SAN
Region: East US Redundancy: LRS

Base Unit
Each unit includes 1 TiB, 5,000 IOPS, 200 MBps

10	x	1,024	x	\$0.08	= \$819.20
----	---	-------	---	--------	------------

Capacity only Unit (1 TiB)
Each unit includes 1 TiB

10	x	1,024	x	\$0.06	= \$614.40
----	---	-------	---	--------	------------

Cost

Upfront cost	\$0.00
Monthly cost	\$1,433.60

Go to Azure Pricing Calculator: <https://azure.microsoft.com/en-us/pricing/calculator/>
For calculating Private Endpoint costs, go to: [Pricing - Azure Private Link | Microsoft Azure](#)

Azure Elastic SAN – Best practices

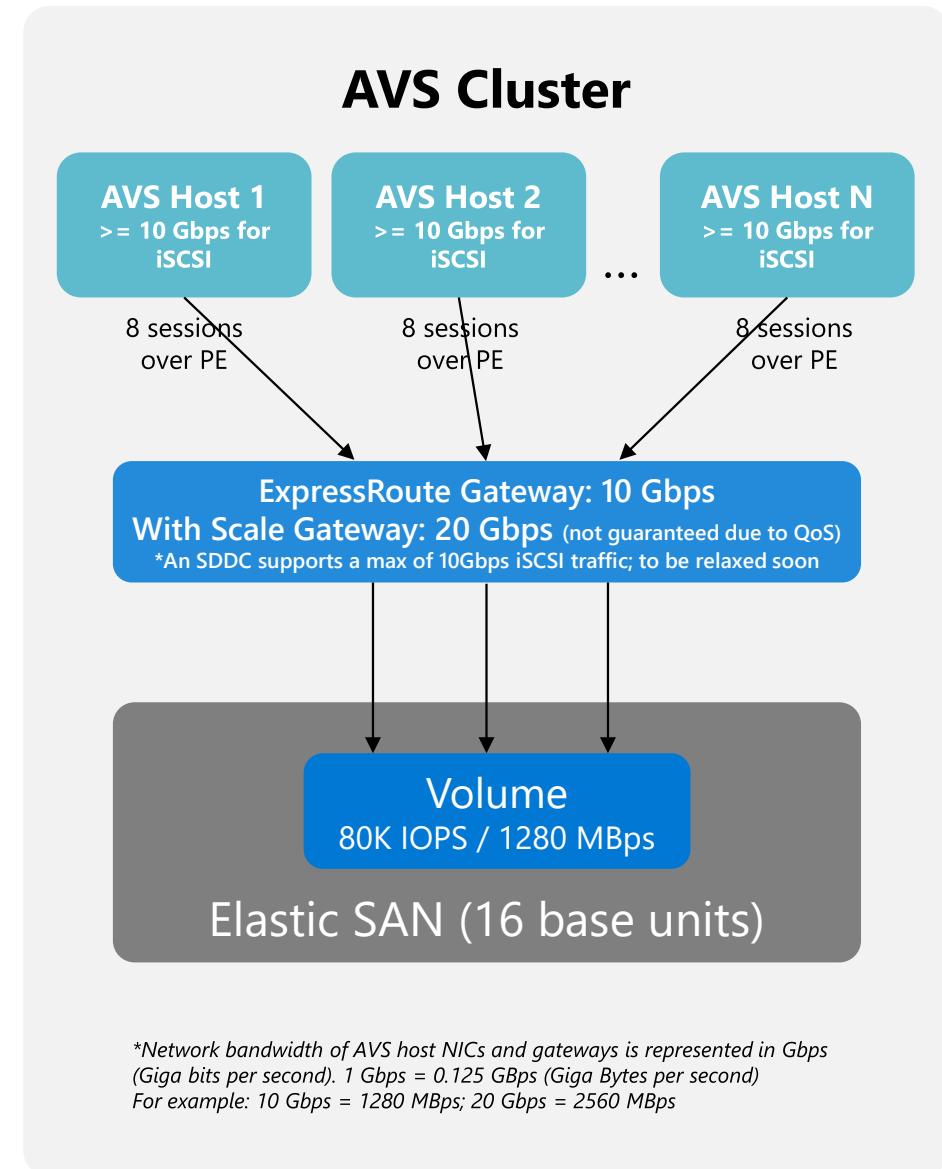
Required configuration to hit performance target

ESAN:

- Ensure AVS private cloud and ESAN are in the same region and the same zone.
- Configure the following # of iSCSI sessions as a minimum from AVS host to Elastic SAN volume.
 - AV36, AV36P, AV52 SKUs - 6 sessions over 3 Private Endpoints
 - AV64 SKU - 7 sessions over 7 Private Endpoints
- Configure the desired Private Endpoint before mounting the Elastic SAN volume to AVS as external datastore.
- A single ESAN volume backing an AVS datastore can support up to 80K IOPS and/or 1280 MBps throughput provided the Elastic SAN is configured with at least 16 base units - [Elastic SAN scalability and performance targets | Microsoft Learn](#)

AVS:

- Use thick provisioning on each virtual disk creation for best performance. Thin provisioning allocates space on demand, which can lead to sub-optimal performance during initial writes as new data blocks need to be zeroed before use.
- Each AVS host supports a total of up to 10 Gbps (on AV36) or higher (on AV64) network bandwidth for iSCSI traffic from that host to ESAN.
- ExpressRoute Ultra Performance virtual network Gateway supports 10 Gbps bandwidth. This can be further increased up to 20 Gbps using ExpressRoute Scale Gateway with 10 scale units, but this is not guaranteed due to QoS - [Architecture - Network interconnectivity - Azure VMware Solution | Microsoft Learn](#)





Customer:
RaceTrac

Solution:
AVS + ESAN

Industry:
Retail / Fuel

Location:
Southeast US

Size:
Corporate
(10,000+ employees)



"Utilizing Azure VMware Solution (AVS) as our disaster recovery (DR) target, RaceTrac requires significantly more storage capacity than compute. By switching to Azure Elastic SAN for capacity scale-up needs, instead of investing in costly vSAN nodes, we've reduced our costs by 30%. The flexibility and scalability of Elastic SAN has allowed us to seamlessly expand our storage capacity as needed."

- Mark Munson, Cloud Engineering Supervisor, RaceTrac

Situation:

RaceTrac needed a cost-effective way to scale storage for disaster recovery without adding unnecessary compute. Existing options like vSAN required extra compute resources, which made them too expensive. They sought a solution that offered flexibility without overpaying for unused features.

Solution:

Azure Elastic SAN offered a scalable, low-cost external storage option for Azure VMware Solution (AVS). It allowed RaceTrac to offload less frequently accessed data and scale storage independently of compute, reducing costs without sacrificing performance.

Impact:

By adopting Elastic SAN, RaceTrac lowered storage costs by 30% compared to vSAN. It became the most cost-effective storage option for AVS, ensuring scalable disaster recovery and protecting workloads from outages and data corruption without unnecessary expenses.



Azure Native Pure Storage Service

Pure Storage Cloud Block Storage (CBS)
Azure Native Pure Storage Service

Pure Storage Cloud Product Family

Pure Cloud Block Store for AVS
3rd Party Marketplace

+ a new product

Azure Native Pure Storage Cloud Service
Native in Azure Portal – Jointly Supported

The screenshot shows the Microsoft Azure Marketplace interface. At the top, there's a search bar labeled "Search Marketplace". Below it, a product listing for "Pure Cloud Block Store™ (subscription)" by "Pure Storage, Inc." is displayed. The listing includes a star rating of "3.9 (12 ratings)". Below the title, there are three tabs: "Overview", "Plans + Pricing", and "Ratings + reviews". The "Overview" tab is selected. The main content area contains a brief description of the service, mentioning it's software-defined storage built on native Azure resources. It highlights features like enterprise-grade storage, cost control, and disaster recovery. There's also a section about its availability as block storage for Azure VMware Solution. A "Get It Now" button is located on the left side of the main content area. On the far left, there's a sidebar with links for "Pricing information", "Categories" (Storage, Compute), "Support", "Legal", and "Learn more".

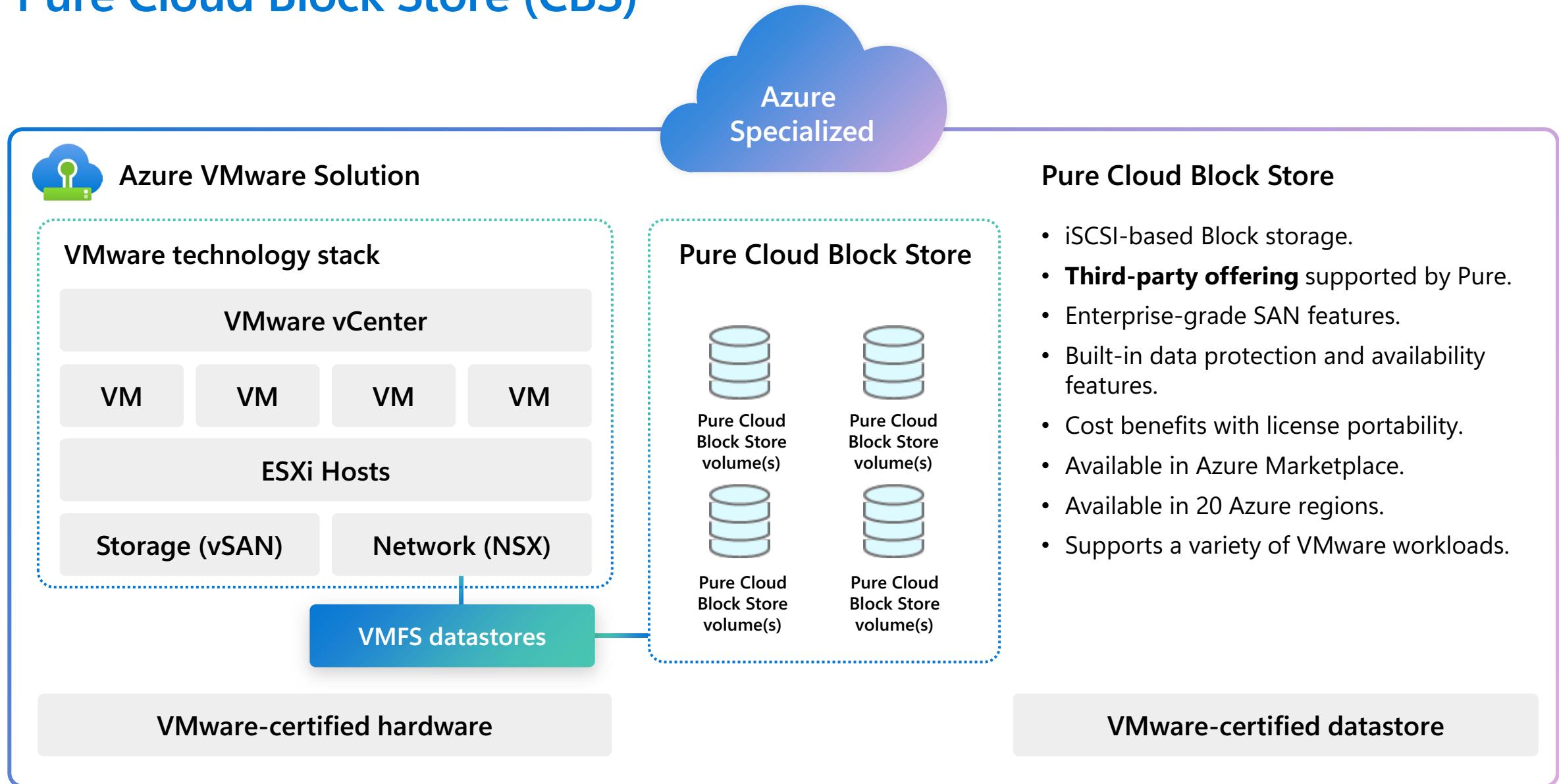
Generally Available

The screenshot shows the Microsoft Azure portal with the URL "pure-storage-service" in the address bar. The page is titled "pure-storage-service" and describes it as an "Azure Native Pure Storage Cloud Service". The main content area shows the service's configuration, including a resource group ("my-avs-rg"), location ("Central US"), subscription ("My_subscription"), and a unique Subscription ID ("12345678-0101-0202-0303-0404050506"). Below this, there are sections for "Essentials", "Monitoring", "Automation", "Help", "Getting Started", "Documentation on Microsoft Learn", and "Pure Storage support". The "Getting Started" section includes a "View" button. The "Documentation on Microsoft Learn" section includes a "View" button. The "Pure Storage support" section includes a "View" button.

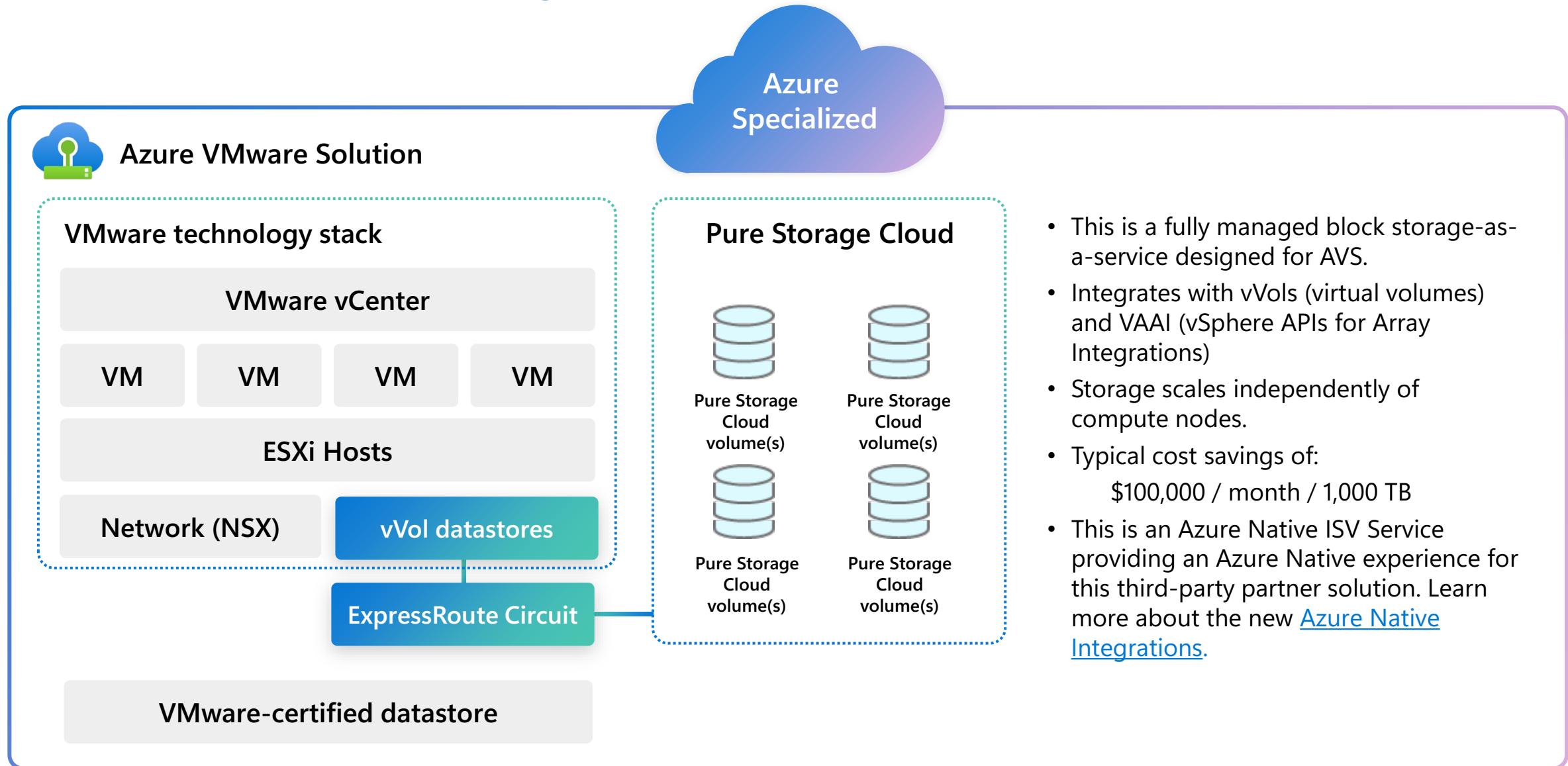
Generally Available



Pure Cloud Block Store (CBS)



Azure Native Pure Storage Cloud



Azure Native Pure Storage Cloud

Best option for balanced performance and cost optimization



Enterprise-scale VMware migration

Use Pure Storage Cloud to migrate storage-heavy VMware environments to Azure without refactoring. With support for vVols, VAAI, and vSphere integration, use familiar VMware tools to save time and get up-and-running quickly.



Seamless hybrid VMware management

Simplify hybrid VMware deployments with the same storage OS from on-premises to the cloud.



Affordable premium storage

Reduce your overall AVS cost by up to 40% with storage that balances performance and efficiency while providing premium enterprise-grade capabilities like immutable snapshots out-of-the-box.



Fully managed reduces complexity

Eliminate the overhead of managing your storage with a service available directly in the Azure portal that supports vVols, plug-in driven management and restore capabilities

Azure Native Pure Storage – Savings Example

31 AVS Nodes (320 TB Storage Needed)

AVS Only

- 31 Nodes AV64 3Y RI
- \$5,356,142 Total 3 Year Cost

AVS + ANF

- 11 Nodes AV64 3Y RI
- 192 TB **Azure Native Pure Storage**
- \$2,557,206 Total 3 Year Cost

Example Based on

- East US
- FTT2-RAID 6

\$2.80M

52%
3 Year Savings

\$5.36M

AVS
31 Nodes
3YR RI

\$2.56M

Azure Pure
192TB
1YR RC

AVS
11 Nodes
3YR RI

Note: This is a manufactured example to illustrate a storage heavy environment

Example of 3 Year Cost & Savings

Azure Native Pure Storage Cloud Pricing

Directly integrated with Azure billing and counts toward MACC

Purchasing & Pricing	Deployment & Billing	Support
<p>Available in the Azure Portal</p> <p>Applies to Microsoft Azure Consumption Commitment (MACC)</p> <p>Trials available by contacting Pure Sales</p> <p>Find the pricing in the AVS Pricing Worksheet in Seismic</p>	<p>Directly through the Azure Portal</p> <p>Billed through Azure with separate line items for committed vs. on-demand.</p> <p>Configure capacity and performance needs independently</p> <p>Min storage pool size 30 TiB & 800 MB/s</p> <p>Min commit size 100 TiB & 1600 MB/s</p> <p>On-demand is assessed hourly and submitted to Azure to calculate monthly charge for customers, if applicable</p>	<p>Azure Native experience for Third-party Partner solution</p> <p>Level 1 ,2 and 3 support provided by Microsoft Support Team with Pure Storage</p>



Customer:
Dupaco Credit Union

Solution:
AVS + Azure Native Pure Storage

Industry:
Financial Services

Location:
Midwest US

Size:
Corporate
(1,000 employees)



"We're excited about the transformative potential of the new Pure Storage Cloud on AVS [...] we anticipate significant savings in our Azure storage costs. This efficiency will allow us to allocate our resources more wisely and invest in other strategic areas of the credit union. The fully-managed service provides us the opportunity to concentrate more on innovation and less on operational complexities."

- Joe Ervolino, IT Infrastructure Manager, Dupaco



Thank you!

ANF Resources

[ANF for AVS Docs Page](#)
[ANF TCO Calculator](#)

ESAN Resources

[ESAN for AVS Docs Page](#)
[ESAN Calculator](#)
[ESAN Endpoint Calculator](#)

Pure Resources

[Pure for AVS Docs Page](#)



AVS
Bootcamp 2026

Break



AVS: Key Features and New Capabilities

Sabine Blair

Senior Cloud Solution Architect

Jon Chancellor

Senior Cloud Solution Architect

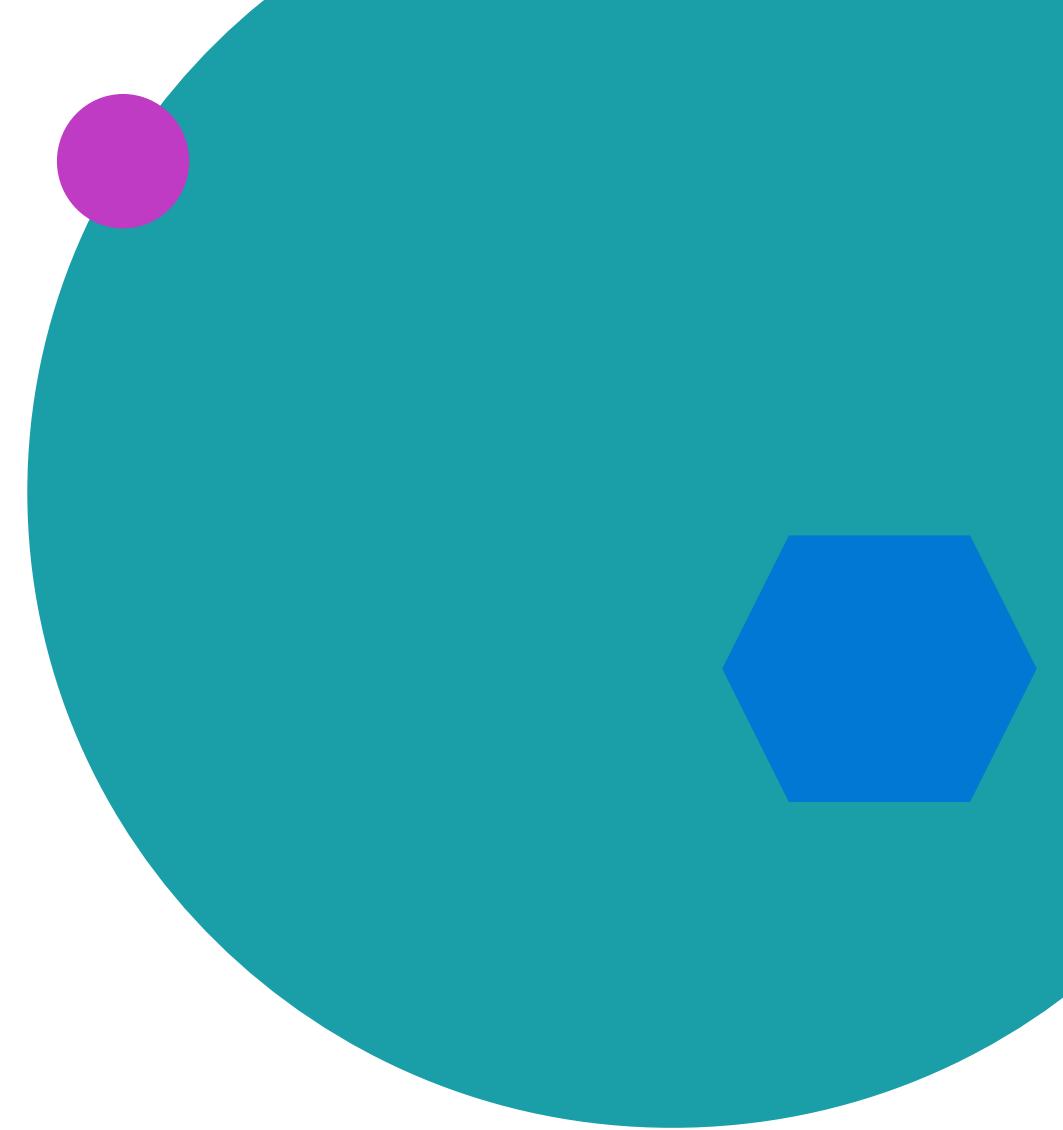


Agenda

01 Migration Lessons Learned - HCX

02 Gen 2 Planning Things to Pay Attention to

03 Observability in AVS



Large Customer Migration – HCX Lessons learned

- Scale NSX and HCX appliances to Extra Large for large migrations
- Scale the management cluster to support increased management load
- Deploy multiple Service Meshes to enable parallelism
- And make sure Migration load is distributed evenly across the Service Meshes
- When using L2 stretch, move the gateway and remove as quickly as possible following the cutover
- Use MON only when necessary

Lessons Learned

New to Azure

- Customers w/ no Landing Zone
- Should leverage an accelerator to get the bare minimum design to support a migration
- Can leverage Gen 1 or Gen 2 depending on requirements and capacity

New to AVS

- Customers with a landing zone but new to AVS
 - Can leverage accelerator modules for deploying addons such as HCX or SRM, external storage, monitoring, and more
 - Gen (AVS in a VNET) offers the simplest integration into an existing hub & spoke architecture.

New to Gen 2

- Customers in AVS but looking to add a second cloud or migrate their cloud to the latest offering
- Need for multiple private clouds to support multiple datacenter migrations
- Disaster Recovery
- Migrating to a newer VS platform

When to choose Gen 1 vs Gen 2

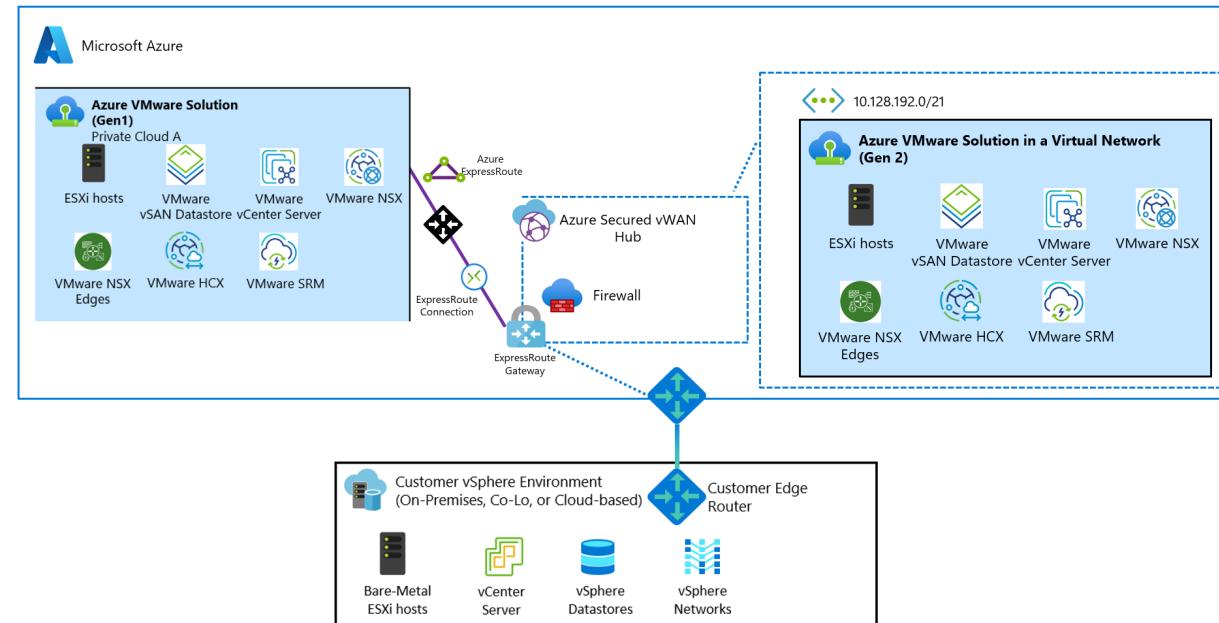
Gen 1 – NSX at Scale

- Scenario: Customer has a large environment with over 1000 VLANs, licensing economics such as Oracle and a lower Vmware runway. This is common in hosting providers, MSP-like customers, deep NSX-T constructs such as network segments that can not be redesigned quickly

Gen 2 – Azure Forward, Azure-Flexible

- Azure integration is a priority. Easier integration with Hub firewall with VNET peering, longer operational runway and hardware availability

Hybrid



Gen 2 Landing Zone Readiness

<input type="checkbox"/>	Name ↑	IPv4	IPv6	Available IPs
<input type="checkbox"/>	default	10.74.0.0/24	-	251
<input type="checkbox"/>	esx-lrnsxuplink	10.74.64.224/28	-	253
<input type="checkbox"/>	esx-lrnsxuplink-1	10.74.64.240/28	-	253
<input type="checkbox"/>	services	10.74.64.160/27	-	19
<input type="checkbox"/>	esx-cust-vmk1	10.74.65.0/24	-	242
<input type="checkbox"/>	esx-vmotion-vmk2	10.74.66.0/24	-	242
<input type="checkbox"/>	esx-vsang-vmk3	10.74.67.0/24	-	242
<input type="checkbox"/>	esx-cust-fdc	10.74.64.64/27	-	60
<input type="checkbox"/>	cust-fds	10.74.64.96/27	-	19

Plan IP space before deployment — not during

"If you're deploying Gen 2 and using HCX, plan a /21 even if you think a /22 is enough today."

Minimum /22 required for the AVS private cloud **HCX requires at least two /24s (management + uplink)**

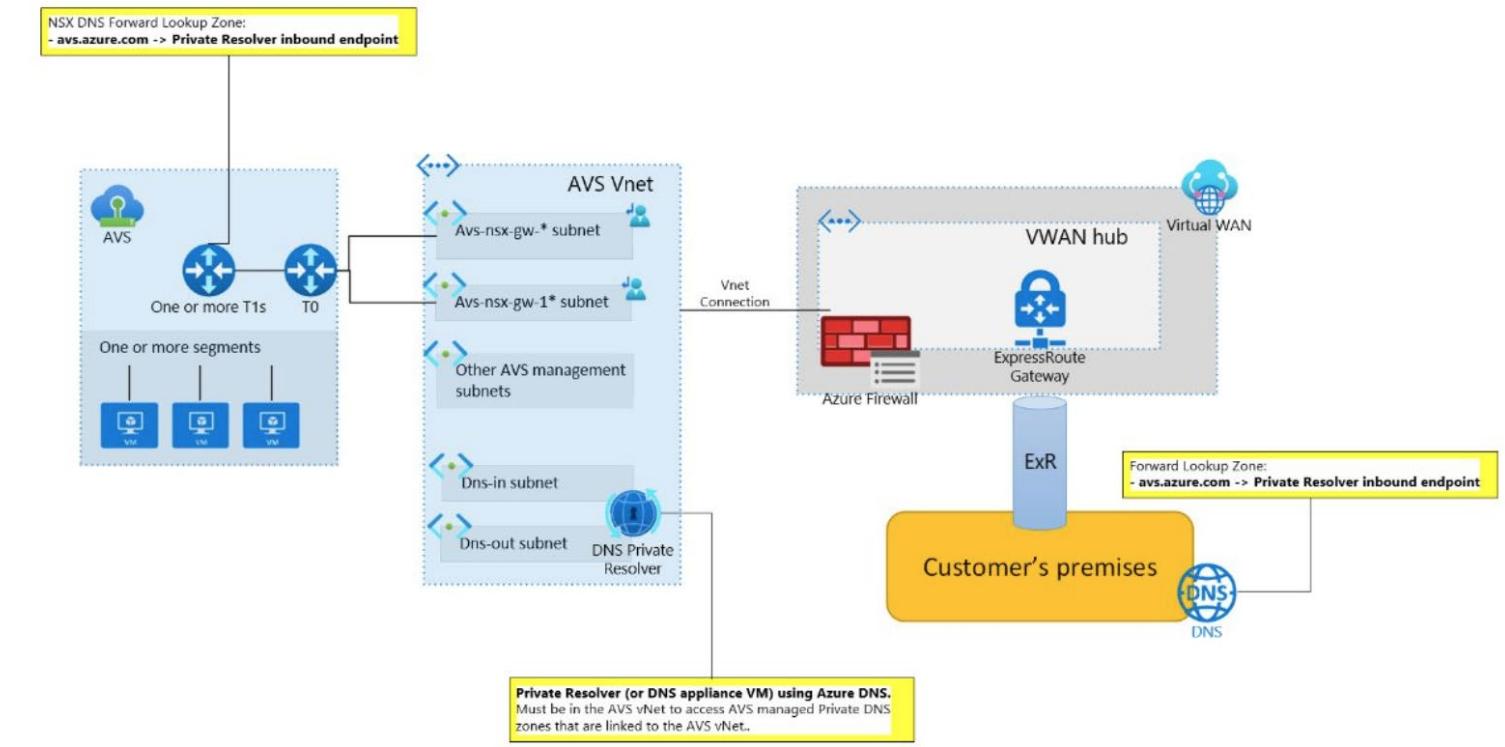
In practice, customers should request a **/21** to allow: /22 for AVS

Multiple /24s for HCX

Future expansion (SRM, additional meshes, NVAs)

Gen 2 DNS is not the same as Gen1

- vCenter / NSX FQDNs may resolve via **Private DNS**
- Gen2 requires a **Private DNS Resolver or DNS solution in the same VNet as AVS** when using private DNS
- Hub-only DNS resolvers are **not sufficient** for Gen2 private name resolution

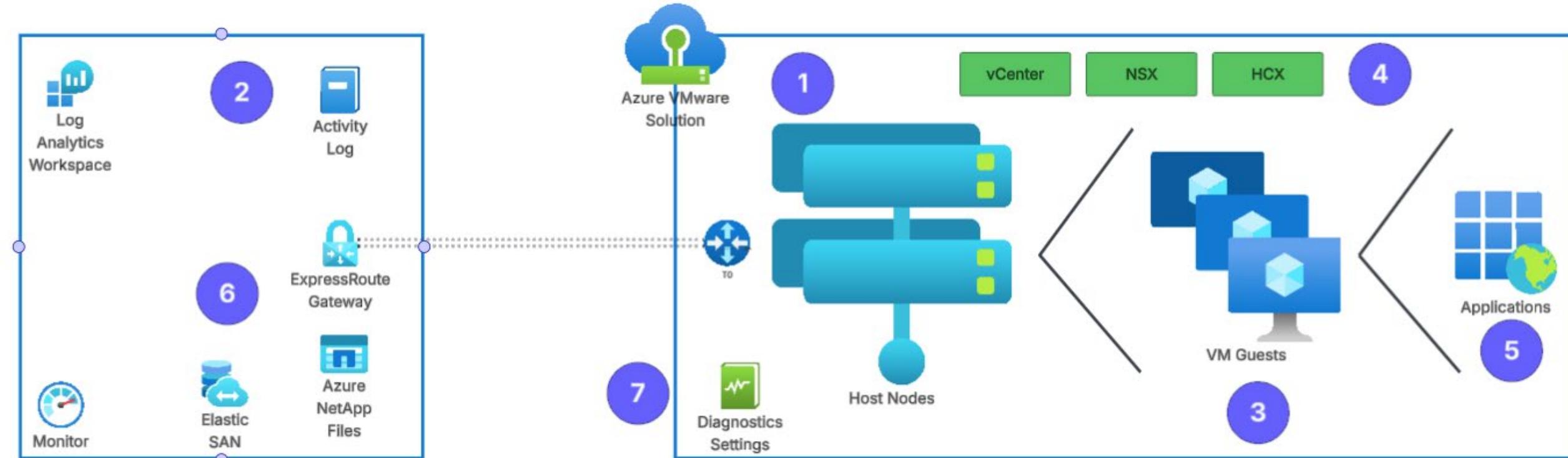


Other Gen 2 Special Design Considerations

- Pay attention to Gen2's specific Route limitations (max /16 usable)
- Enable Vnet automatic peering sync (preview) to update peerings dynamically
- Strict Azure Policies pushing UDR or NSG rules may cause installation failures
- Gen 2 doesn't include a SNAT option, so plan for AVS internet egress through NVA, Azure Firewall, or Force Tunneling
- Read the deployment pre-requisites carefully:
 - Deployer account must have owner or User Access Administrator on the deployment scope
 - New Virtual Network and Private Cloud must be in the same resource group
 - Only one gen2 SDDC per resource group
- Cross Scope (RG/Sub) references can cause installation failures (DDOS, UDR, or other linkages)

AVS Observability Landscape

- 1 Host Metrics
- 2 Activity Log Generated Alerts
- 3 VM Guest Monitoring
- 4 VMware Control Plane
- 5 Application Monitoring
- 6 AVS consumed Azure Services
- 7 Syslog Export



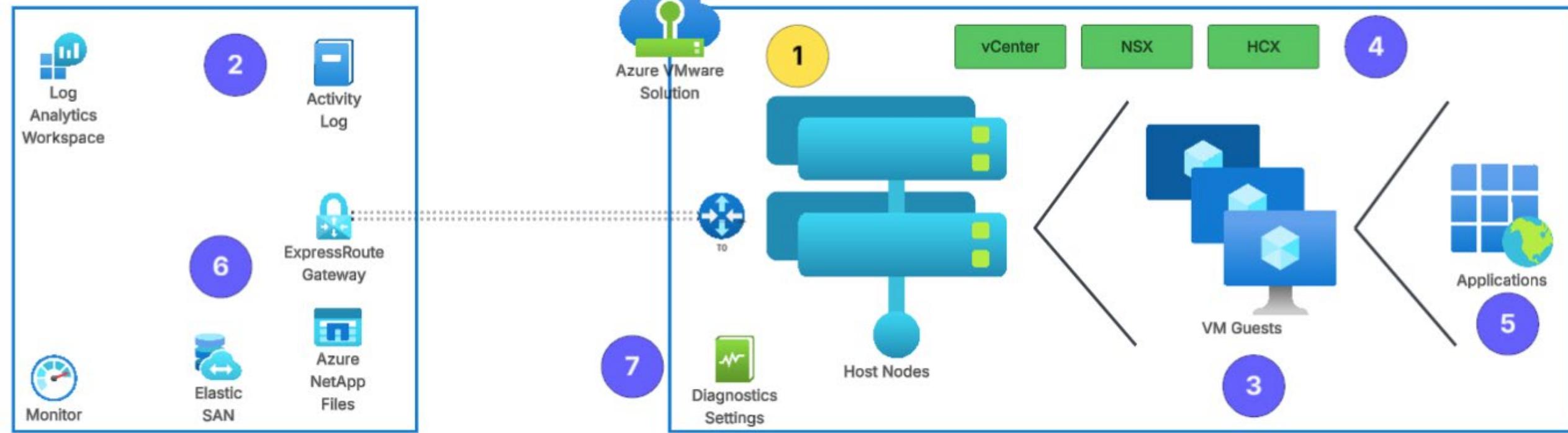
AVS Observability – Host Metrics

Key Notes

- Host and VSAN Datastore Metrics
- Used to monitor host and cluster usage
- Scale your clusters based on load
- [AVS Host Metrics Design Docs](#)

Sample Metrics

- CPU – 80% (Warn), 90% (Critical)
- Memory – 80% (Warn), 90% (Critical)
- VSAN – 70% (Warn), 75% (Critical)



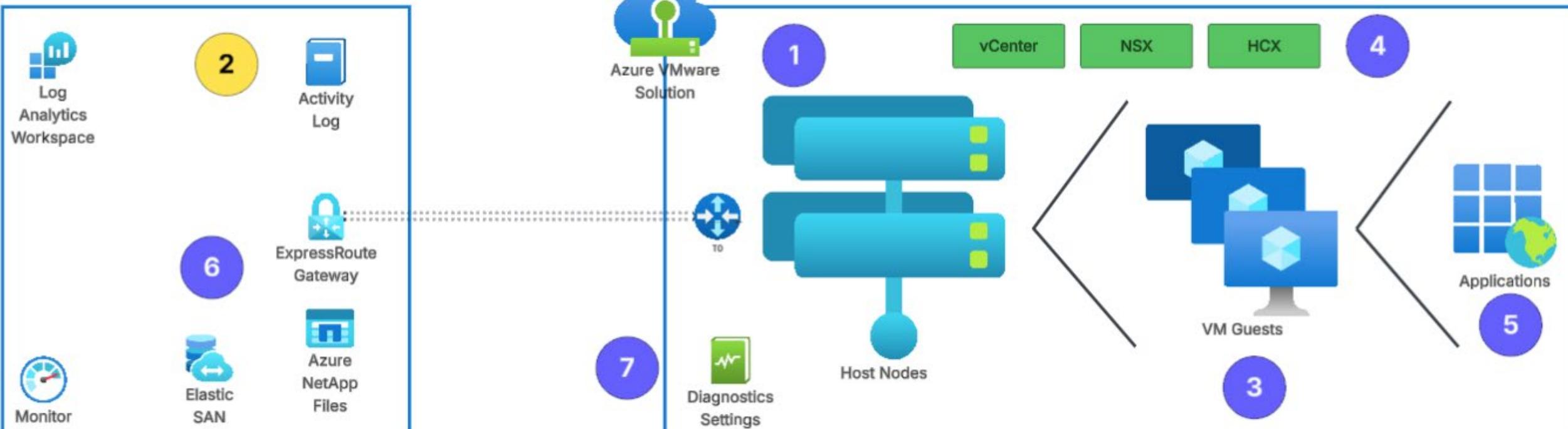
AVS Observability – Activity Log Alerts

Key Notes

- Resource Health, Service Health, and Admin Actions
- Track Platform and Service events
- React to Planned and Unplanned events
- Resource Health Includes Customer Intervention and System Remediated events

Sample Configuration

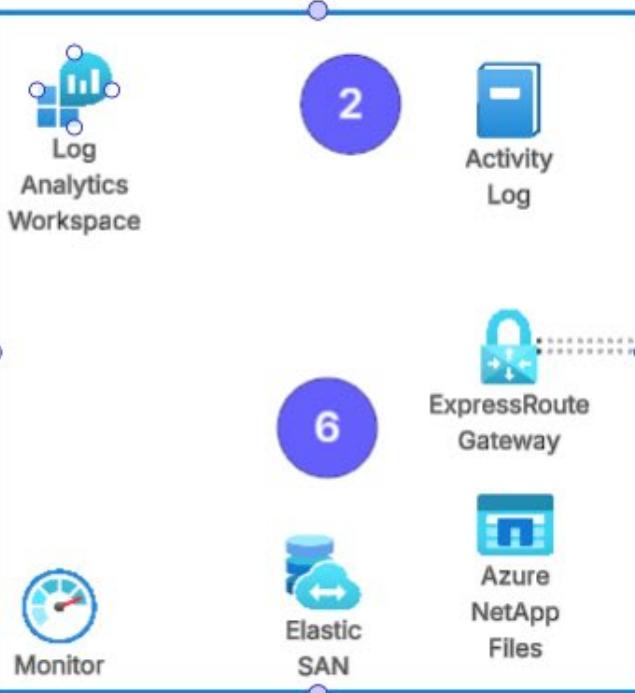
- Configure Azure Monitor to alert on all Resource Health event
- Configure Service Health to alert on Action Required, Incident, Maintenance, and Security event types for Azure Services in the deployed region



AVS Observability – VM Guest Monitoring

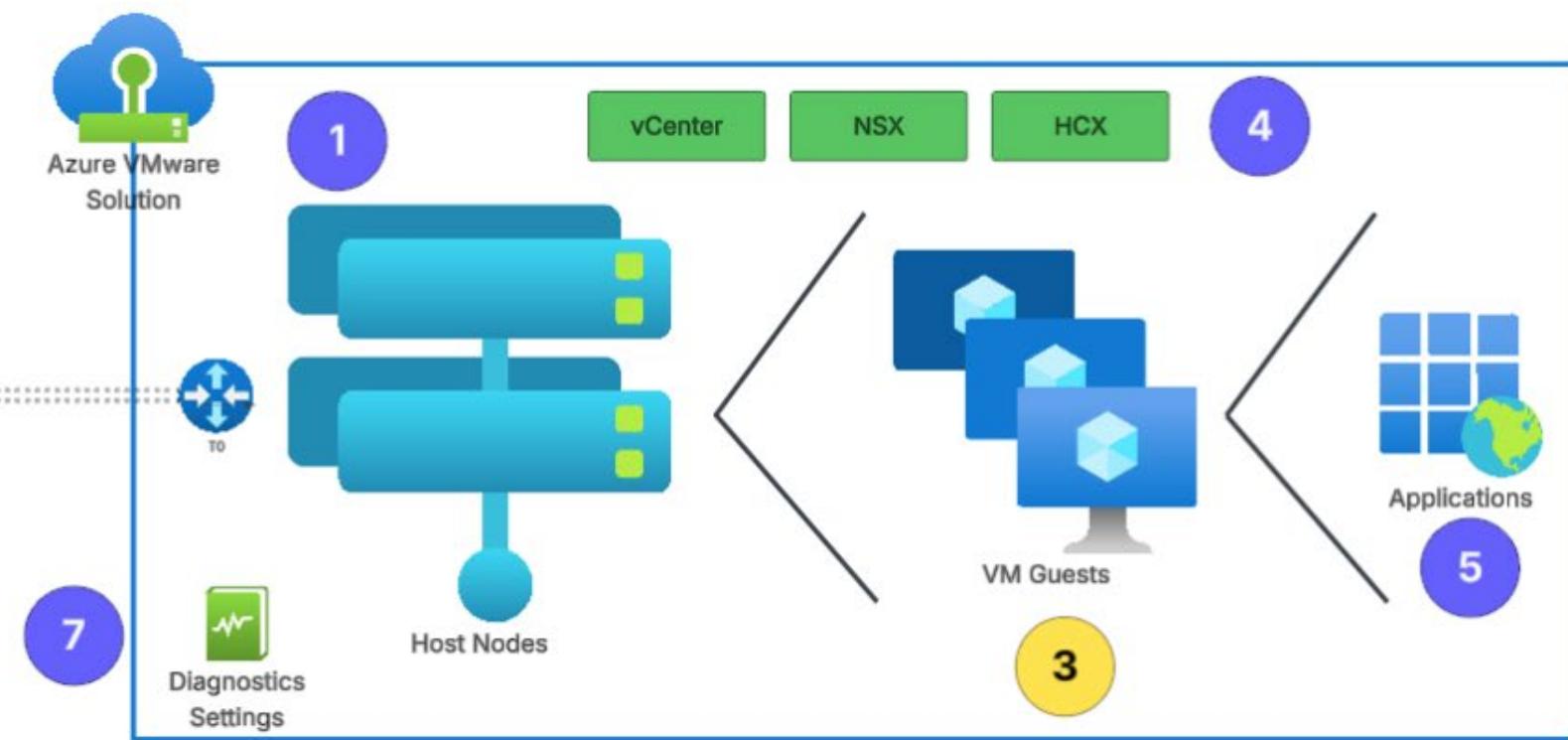
Key Notes

- Track key performance and availability metrics
- Multiple tooling options exist for this purpose
- Prioritize by criticality
- Consider Azure Arc when using Azure Monitor Agent
- Integrate VM logs to Defender for Cloud
- Integrate security alerts with a SIEM



Sample Metrics and Configuration

- Virtual Machine up/down
- CPU, Memory performance thresholds
- Disk consumption
- Defender for Cloud integration



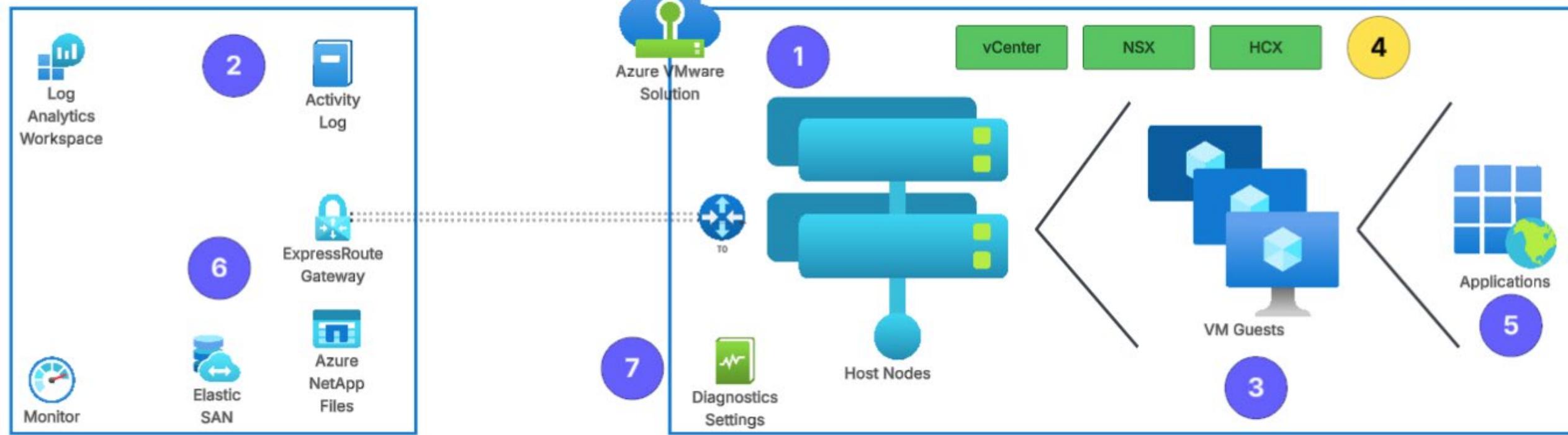
AVS Observability – VMWare Control Plane

Key Notes

- Start with Resource Health Alerts
- For more detailed alerting consider VCF Operations with associated management packs (NSX, HCX)

Sample Metrics and Configuration

- NSX Node Performance
- HCX Tunnel status



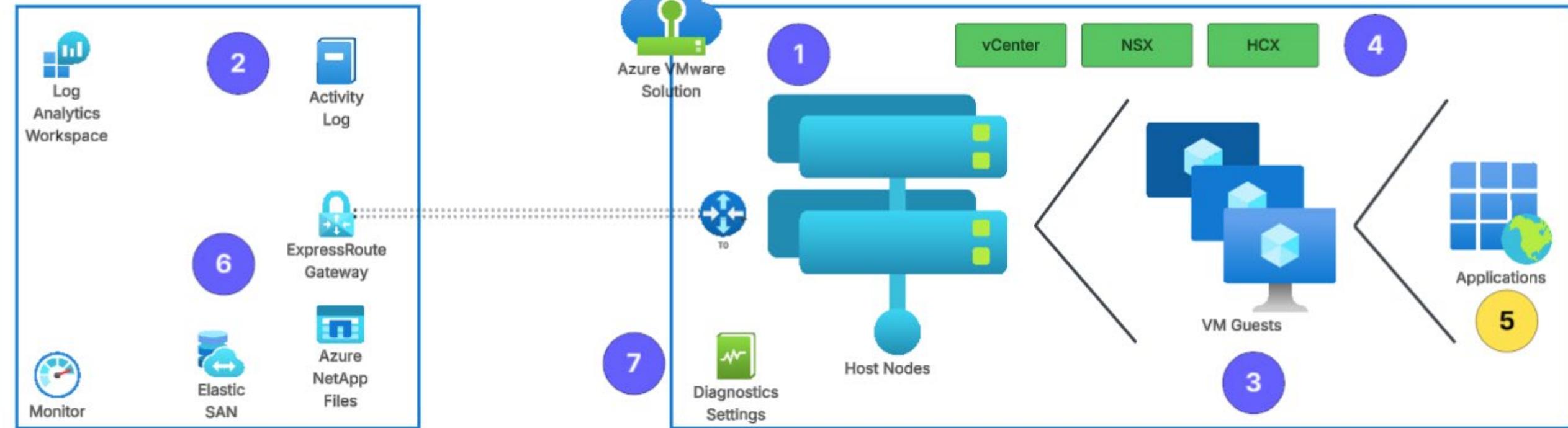
AVS Observability – Application Monitoring

Key Notes

- Prioritize High Impact applications
- Use the tool that addresses app observability requirements
- If just starting, consider Azure Application insights

Sample Metrics and Configuration

- API metrics
- App Response latencies
- App endpoint availability
- App tracing
- Application Log management



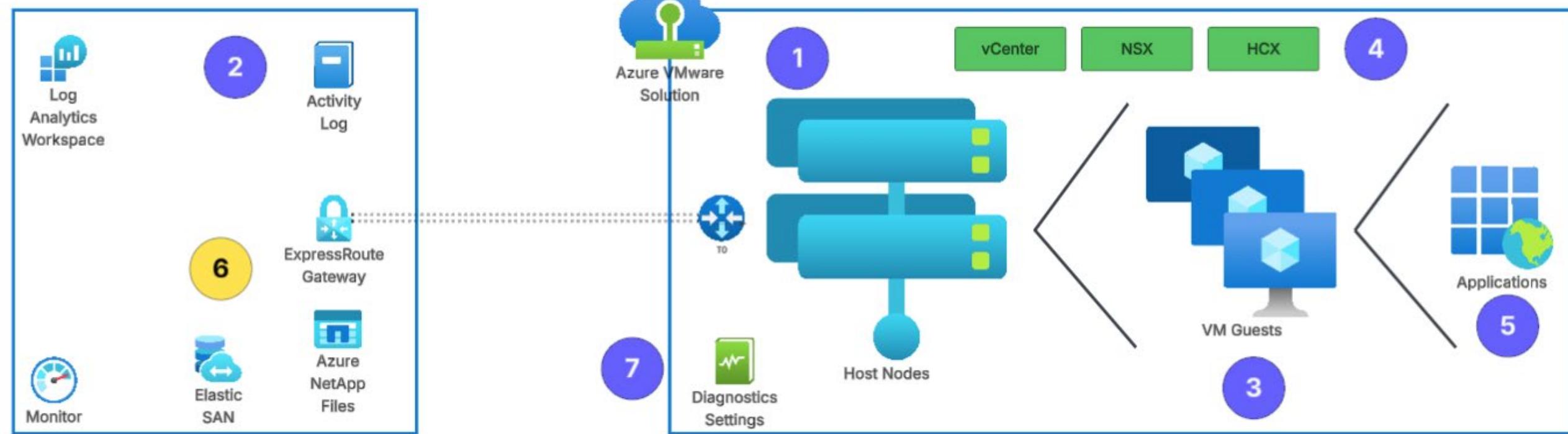
AVS Observability – Azure Services

Key Notes

- AVS may consume or integrate other Azure Services
- Implement metrics monitoring for external storage and networking services
- Leverage AMBA metrics as initial defaults

Sample Metrics and Configuration

- ANF or ESAN latency
- ANF or ESAN consumed capacity
- ExR Gateway throughput (high and low)
- ExR Gateway Arp/BGP availability
- ExR Gateway Route metrics



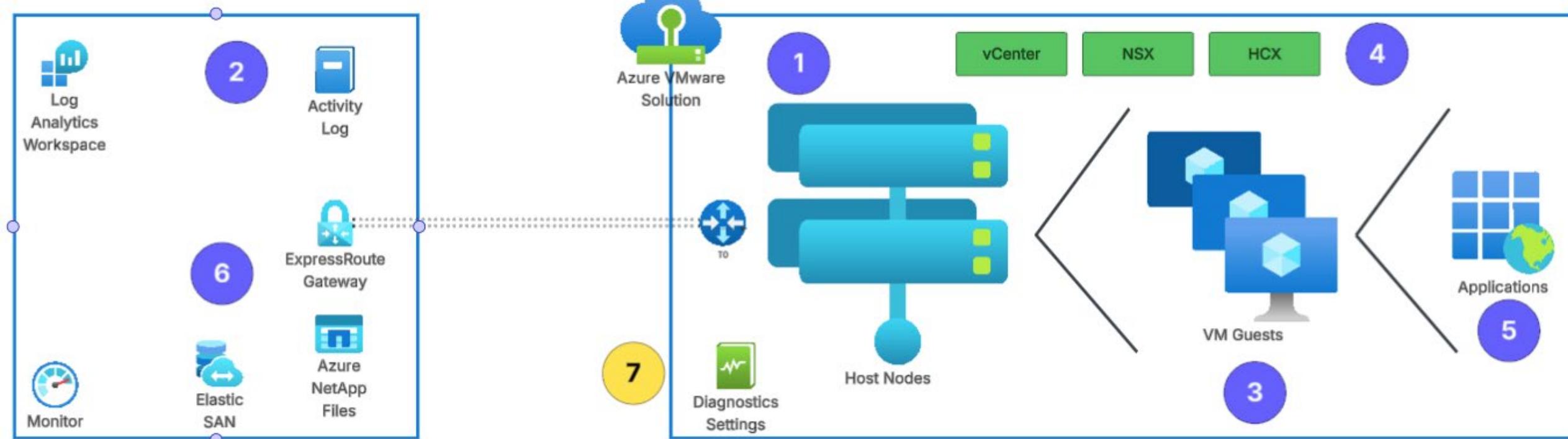
AVS Observability – Syslog

Key Notes

- AVS can emit syslogs from the VMware stack
- This is configured using AVS diagnostic settings
- Multiple targets including log analytics and 3rd party solutions
- Very dense log stream (\$\$\$), consider activating only when needed

Sample Metrics and Configuration

- All Logs
- All Metrics
- Target log analytics, storage account, 3rd party via event hub
- 3rd party using logic app instructions



Thank you!

Agenda

Day 1: Sales

Session Time	Session Title	Speaker
8:00 – 9:00 a.m.	Welcome and Keynote	Christophe Herrbach Kirsten Megahan
9:00 – 10:00 a.m.	Azure VMware Solution (AVS) Cloud Economics	Greg Kaffenberger Scott Gruenemeier
10:00 – 10:15 a.m.	Break	
10:15- 11:00 a.m.	Partnering with Microsoft – Incentives and Offers	Lisa James
11:00 – 11:45 p.m.	Sales Execution and Assessments	Sean Cattanach Kalpan Raval Lue Hale

Agenda

Day 2: Technical

Session Time	Session Title	Speaker
8:00 – 9:00 a.m.	Accelerate VMware Modernization While Reducing Risk and Cost	Trevor Davis Carlos Villuendas
9:00 – 10:00 a.m.	AVS: Key Features and New Capabilities	Sundeep Hiranandaney Natalia Jiménez
10:00 – 10:15 a.m.	Break	
10:15- 11:00 a.m.	Azure VMware Solution (AVS) Networking: NSX Architecture	Victor Sandoval Daniel Ribeiro, Nehali Neogi
11:00 – 12:00 p.m.	AVS Migration strategy and planning with HCX	Dennis Boeynaems

Agenda

Day 3: Technical

Session Time	Session Title	Speaker
8:00 – 9:00 a.m.	Modernize, Secure and Optimize AVS Workloads and Operations with Azure Services	Husam Hilal
9:00 – 10:00 a.m.	Storage Expansion Options for Optimizing Azure VMware Solution (AVS) Private Clouds	Carl Solazzo Scott Gruenemeier
10:00 – 10:15 a.m.	Break	
10:15- 11:00 a.m.	Azure VMware Solution (AVS) Lessons Learned: Designing, Migrating and Operating	Jon Chancellor Sabine Blair

Thank You For Attending AVS Bootcamp 2026



“That's all Folks!”

Welcome to the new Skilling Hub

The new **Skilling Hub** is live — built with partners, for partners. It brings Microsoft Titan, LevelUp, SureStep, AI Tour for Partners, and regional events together in one place, with simplified sign-in and smoother navigation to get you where you need to go.

Here's what made the cut:

- One unified destination for all things skilling
- Curated learning paths to help you specialize and certify with confidence
- A modern, intuitive interface available in 11 languages
- Starting in September, localized events with KUDO will bring even more region-specific content to you

Get started: To access everything, be sure to re-register on the platform [here](#).

Plus—new Solution Areas!

Launching alongside the new Skilling Hub are our updated **Business Solution Areas**. You'll start to see the following changes reflected across skilling content:

- Azure → **Cloud and AI Platform**
- Modern Work + Business Applications → **AI Business Solutions**
 - When needed:
 - Modern Work = **AI Workforce**
 - Business Applications = **AI Business Process**
- **Security** remains unchanged

A screenshot of the Skilling Hub homepage. The top navigation bar includes links for "Skilling Hub", "Digital", "Innovate Microsoft", "Sign in", "Search", and "Help". The main header reads "Welcome to the new Skilling Hub". Below the header, there's a section titled "Here's what made the cut:" with a bulleted list. Another section titled "Plus—new Solution Areas!" contains text about updated business solution areas and a list of changes. On the right side, there's a "Unlock your learning with Skilling Hub" section featuring a photo of a man working at a desk, and a "Upcoming events" section showing four event thumbnails.