



Microsoft Azure Local Hands-on Experience

Francesco Parri – Computer Gross

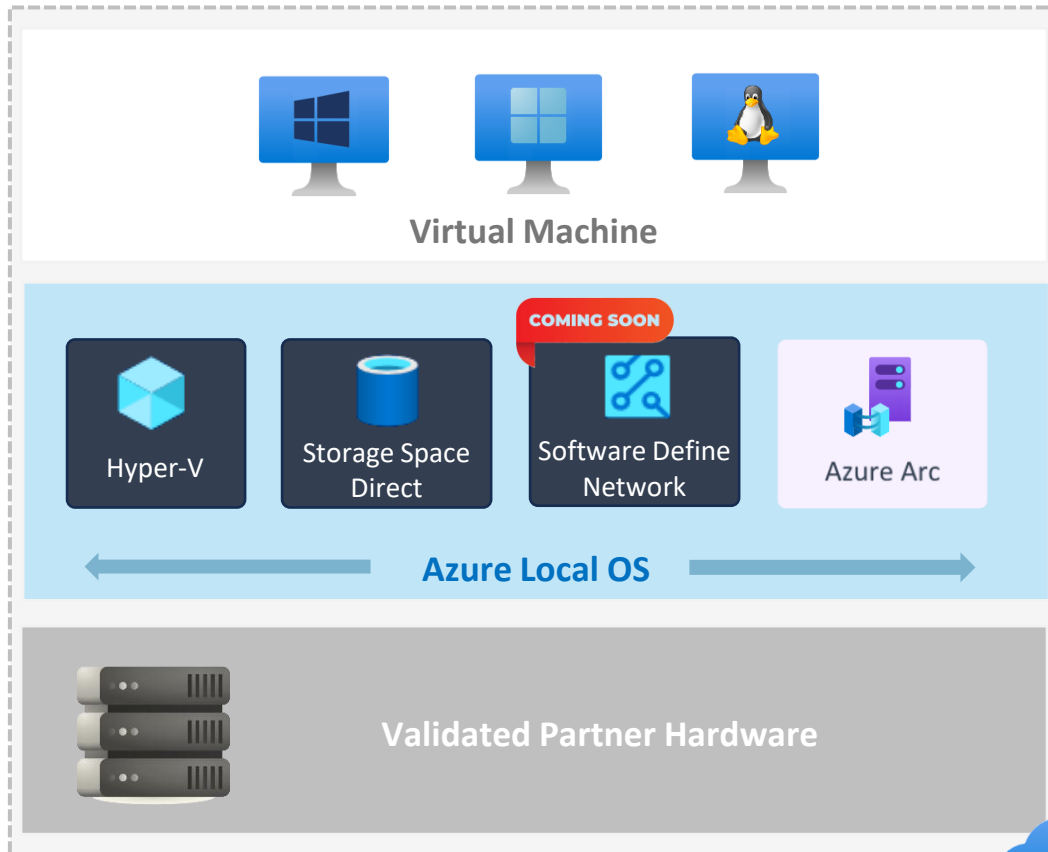


Azure Local

Francesco Parri
MCT & Microsoft Cloud Architect
Computergross Spa



Azure Local - Architecture



Azure Local

Azure



Validated Partner Hardware

There are **more than 30 hardware partners** offering solutions for Azure Local.

Microsoft Azure Local solutions Catalog Size (preview) Network Requirements All Microsoft Sign in

Affina risultati

Solution categories

Solution form factor

Solution builder

Vedi altro

Microsoft consiglia di scegliere i sistemi integrati

I sistemi integrati offrono la migliore esperienza clienti per Azure Stack HCI. Vengono forniti con il sistema operativo preinstallato in hardware integrato di qualità elevata, configurato in modo ottimale per Azure Stack HCI e che abbia completato i test di convalida delle soluzioni cluster di Microsoft.

Solution categories

Deseleziona tutto

Cerca

Ordina per

Showing 1-17 of 17 platforms

HPE ProLiant DL380 Gen11 Integrated System

Sistema Integrato

Da 1 a 16 nodi
Intel® 5th Gen Xeon® Scalable Processor

2 soluzioni >

HPE ProLiant DL360 Gen11

Da 1 a 16 nodi
Intel® 5th Gen Xeon® Scalable Processor

4 soluzioni >

HPE ProLiant DL380 Gen11

Da 1 a 16 nodi
Intel® 5th Gen Xeon® Scalable Processor

4 soluzioni >

HPE ProLiant DL385 Gen11

Da 1 a 16 nodi
AMD 5th Gen EPYC™

2 soluzioni >

HPE ProLiant DL325 Gen11

Da 1 a 16 nodi
AMD 5th Gen EPYC™

2 soluzioni >

HPE ProLiant DL365 Gen11

Da 1 a 16 nodi
AMD 5th Gen EPYC™

2 soluzioni >

HPE ProLiant DL345 Gen11

Da 1 a 16 nodi
AMD 5th Gen EPYC™

2 soluzioni >

HPE ProLiant DL145 Gen11

Da 1 a 4 nodi
AMD 4th Gen EPYC™

1 soluzione >

HPE ProLiant DL380 Gen11

Sito dello sviluppatore della soluzione

Avvia utilità di dimensionamento

Descrizione

Adaptable for diverse workloads and environments, the secure HPE ProLiant DL380 Gen11 delivers world-class performance with the right balance of expandability and scalability. Designed for supreme versatility and resiliency while backed by a comprehensive warranty make it ideal for multiple environments from Containers to Cloud to Big Data.

Optimized for workload

Discover the range of workloads that can be run on Azure Local. [Learn more](#)

Soluzioni disponibili GPU Support Tech Specs

Nome configurazione 1	Supporto nodo singolo*	Tipo di archiviazione	Spazio di archiviazione minimo	Spazio di archiviazione massimo	Memoria centrale minima	Memoria centrale massima	RAM minima	Utilizzo massimo RAM
All Flash SAS	SI	SSD	1.6 TB	102.4 TB	8	128	128 GB	8 TB
Hybrid NVMe/HDD	SI	NVMe/HDD	3.6 TB	81.6 TB	8	128	128 GB	8 TB
Hybrid SSD/HDD	SI	SSD/HDD	3.6 TB	81.6 TB	8	128	128 GB	8 TB
NVMe	SI	NVMe	1.6 TB	368.6 TB	8	128	128 GB	8 TB

*I cluster con un singolo nodo possono usare un solo tipo di archiviazione (NVMe o SSD). [Altre informazioni](#)

Sito dello sviluppatore della soluzione

Avvia dimensionamento

Ogni configurazione della soluzione è costituita da componenti approvati e convalidati in una configurazione di set che ha superato processi di convalida Microsoft estesi. Il provider di soluzioni può fornire l'elenco di componenti specifici inclusi in ogni configurazione che qualificano la soluzione per l'assistenza clienti. Per i prezzi hardware, contattare il generatore di soluzioni locale o l'integratore di sistema perché i prezzi possono variare in base al paese/area geografica e sono soggetti a disponibilità. [Learn more about Microsoft operating system support](#)



More Info:

<https://azurelocalsolutions.azure.microsoft.com/#/catalog>



Validated Partner Hardware (Form Factor)



Datacenter



Remote/Branch Office



Edge compute

Azure Local Features & Benefits



Azure Local - Features & Benefits



**Enterprise
Solution**



**Azure Hybrid
Benefits**



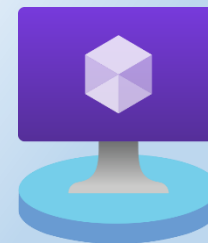
**GPU
Partition**



**Backup
Disaster Recovery**



Updates



**Azure Arc
Integration**

Azure Local – Enterprise Solutions



Virtual Machine - OS Support



Windows Server OS:

- Windows Server 2012 R2* to 2025
- **Windows Server Azure Edition**



Windows Desktop OS:

- Windows Server 8.1, 10 , 11
- **Windows 10/11 Multisession**



Linux:

- RHEL/CentOS 5.x,7.x,8.x,9x Series
- SLES 11,12,15 Series
- Debian 10.x, 11 Series
- Ubuntu
- FreeBSD



Oracle:

Oracle Linux 6.x,7.x,8.x,9.x Series



Windows Server Azure Edition

Features available generally	Windows Server 2025 Standard/Datacenter OEM	Windows Server 2025 Datacenter Azure Edition
Azure Extended Network	No	Yes
Hotpatching	No	Yes
SMB over QUIC	No	Yes



Windows 10/11 Multisession

Multisession Desktop OS

Windows 11/10 Multisession

Operating system
(64-bit only)

- Windows 11 Enterprise Multisession
- Windows 10 Enterprise Multisession

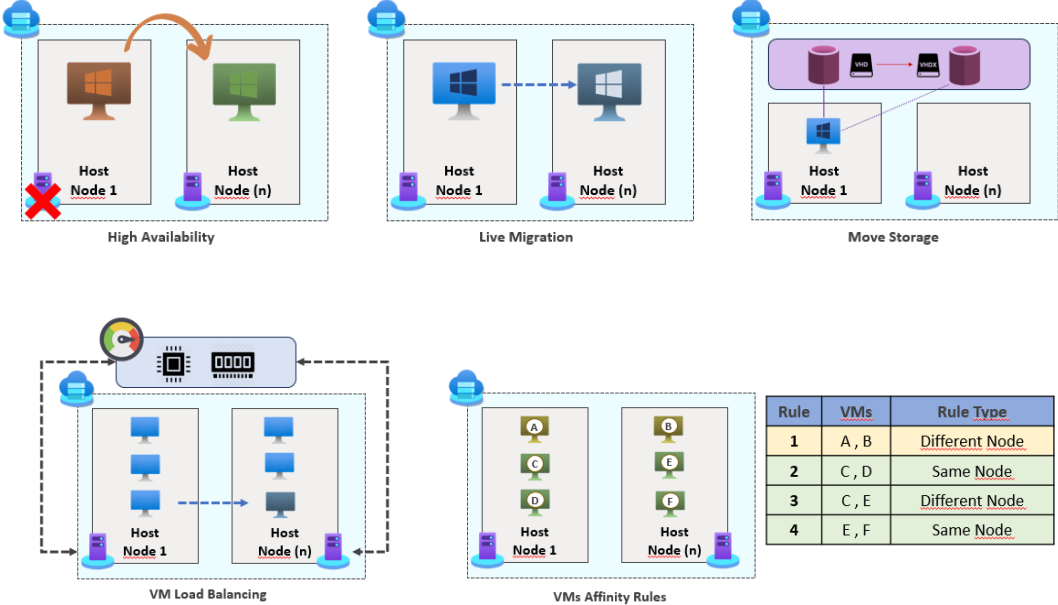
***Available only on Azure and Azure Local**

Azure Local – Enterprise Solutions

Maximum Supported Hardware Specifications & Cluster Features



System	Resource	Azure Stack HCI
 Cluster	Nodes	1*-16
	Storage per cluster	4 PB
	N. Volumes per Cluster	64
	Single Volume Size	64 TB
 Host	Logical processors	512
	Physical memory	24 TB
	vCPUs per host	2,048
	Storage per host	400 TB
	Virtual Machine per Host	1024
 Virtual Machine	vCPUs per VM	240
	Memory per VM	12 TB
	Disks per VM	256



Azure Local - Features & Benefits



**Enterprise
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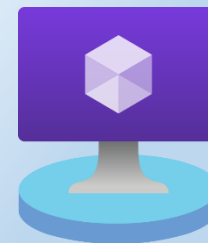
**GPU
Partition**



**Backup
Disaster Recovery**



Updates



**Azure Arc
Integration**



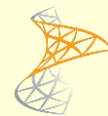
Windows Server 2012/R2

(End of Extended Support : 10 October 2023)



Windows Server 10

(End of Extended Support : 14 October 2025)



SQL Server 2012/R2

(End of Extended Support : 12 July 2022)

Fare clic per modificare gli stili del testo dello schema

• Secondo livello

Extended Support Update

Eligibility criteria

• Terzo livello

To qualify for ESU on-premises or in hosted environments, your server or operating system must meet one of the following prerequisites:

1. Be covered by an active **Software Assurance (SA)** plan acquired through any program, such as Enterprise Agreement (EA), Enterprise Agreement Subscription (EAS), Server & Cloud Enrollment (SCE), or Enrollment for Education Solutions (EES).
2. **Have active subscription licenses** acquired through any program, including **Cloud Solution Provider (CSP).**

Description	QTA	Draft Price List
Win Srv 2025 Standard Sw Sub 8 C Sw Sub 1Y	1	269 Euro
Win Srv Std Core ESU 8 C 1Y (2023-2024)	1	517 Euro
Win Srv Std Core ESU 8 C 1Y (2024-2025)	1	517 Euro
Total 2Y (single VM up to 8 vCore)		1303 Euro



Windows Server
2012/R2
(up to 8 vcore)

Azure Local - Features & Benefits



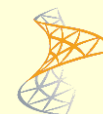
Azure License Benefit - Extended Support Update with no extra cost



Windows Server 2012/R2
(End of Extended Support : 10 October 2023)

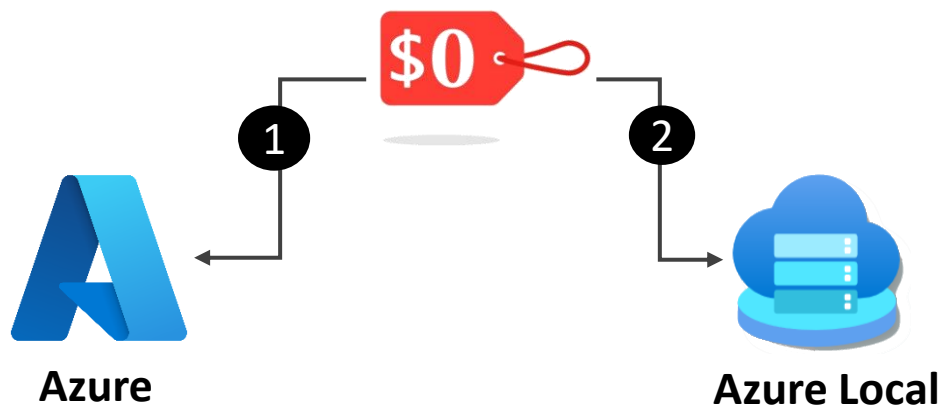


Windows Server 10
(End of Extended Support : 14 October 2025)



SQL Server 2012/R2
(End of Extended Support : 12 July 2022)

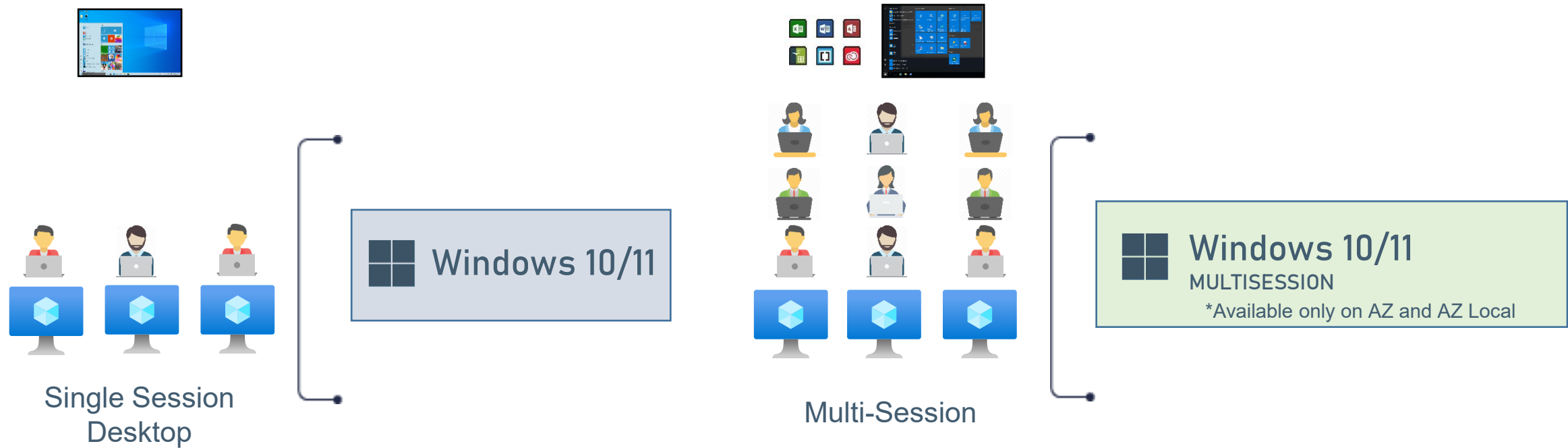
Extended Support Update



Windows Server 2012/R2, Windows 10 ,SQL Server 2012 extended security updates at no extra cost when migrating to Azure or Azure Local.

Azure Local – Azure Hybrid Benefits

AVD Hybrid Benefit



Operating System	Required Licenses
Windows 10/11 Enterprise	- Microsoft 365 E3, E5, A3, A5, F3, Business Premium - Windows 10 E3, E5, A3, A5
Windows 10/11 Enterprise Multisession	- Microsoft 365 E3, E5, A3, A5, F3, Business Premium - Windows 10 E3, E5, A3, A5

More Info:

<https://learn.microsoft.com/en-us/azure/virtual-desktop/licensing>

Azure Local - Features & Benefits



**Enterprise
Solution**



**Azure Hybrid
Benefits**



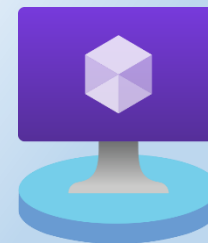
**GPU
Partition**



**Backup
Disaster Recovery**



Updates

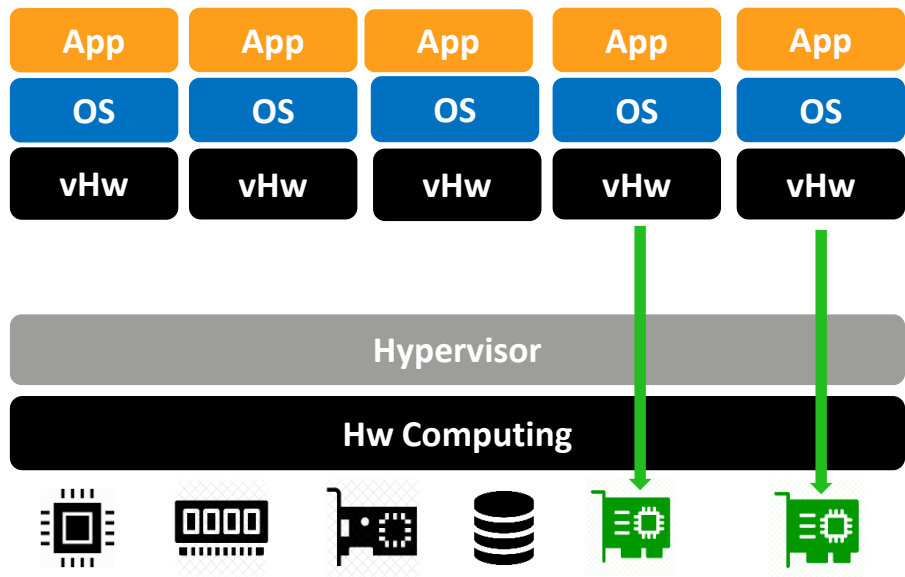


**Azure Arc
Integration**

Azure Local - Use GPUs with VMs

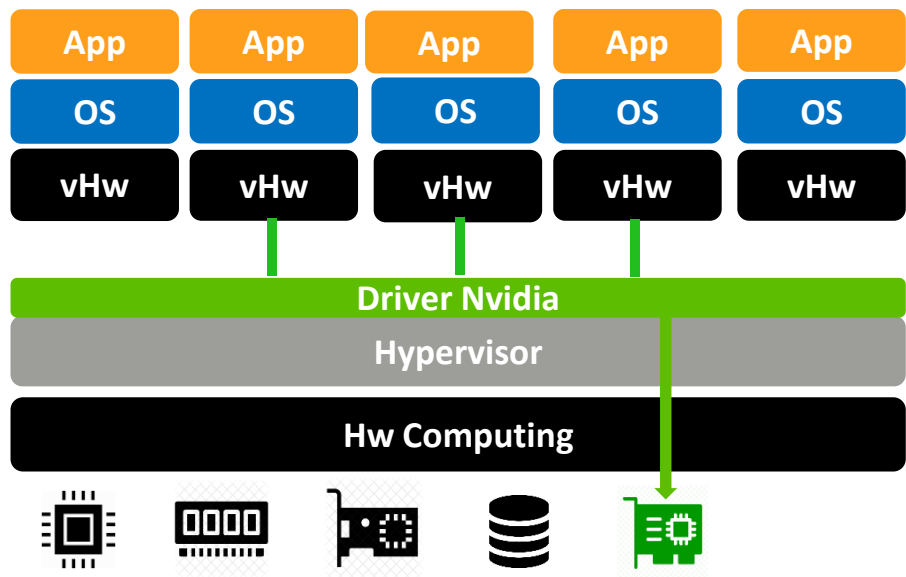


Virtualized
Server Architecture



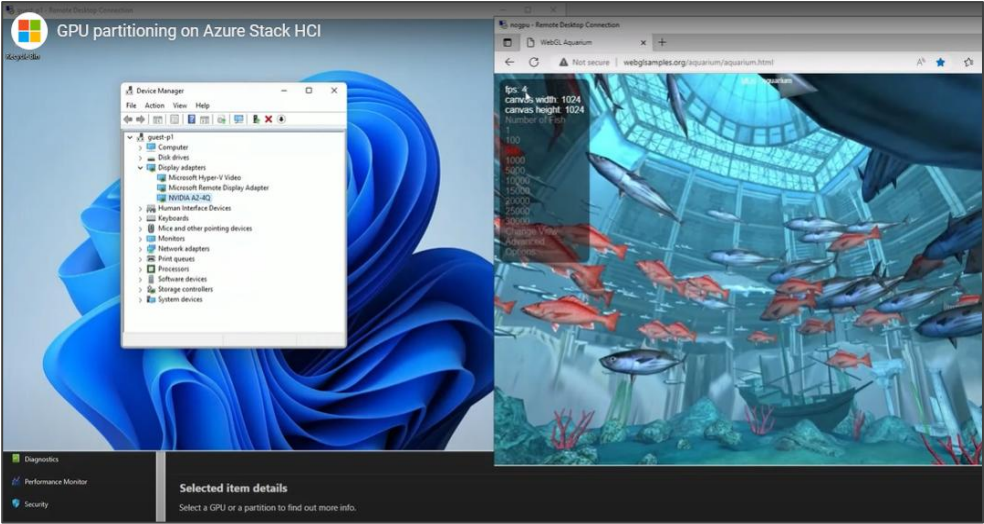
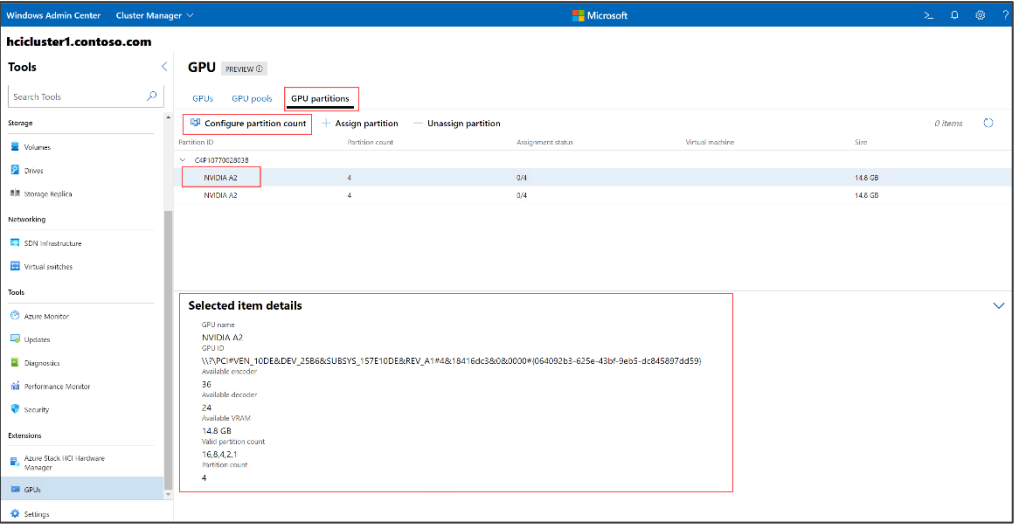
DDA
(Discrete Device Assignment)

Virtualized
Server Architecture



GPU Partition or vGpu

Azure Local - Use GPUs with VMs



Card	A2	A10	A16	A40	L4	L40/L40S
Mode	vGPU/DDA	vGPU	vGPU/DDA	vGPU	vGPU	vGPU/DDA
License Support	vWS vPC vApps	vWS vPC vApps	vWS vPC vApps	vWS vPC vApps	vWS vPC vApps	vWS vPC vApps
FP32 Cores/GPU	1,280	9,216	5,120	10,572	7,680	18,176
Total Memory Size/GPU	16 GB	24 GB	64 GB	48 GB	24 GB	48 GB
Max GPU Power/GPU	60W	150W	250W	300W	72W	300W

Requirements and Support (Nvidia Driver v16.1 or above):

Azure Local Version:

- Microsoft Azure Local 2311.2 or above

VMs Operating System:

- Windows Server 2019, 2022,2025
- Windows 10 ,11
- Red Hat Enterprise Linux 9 or above
- Ubuntu 20.04 LTS or above
- Rocky Linux 8.4



Azure Local - Features & Benefits



**Enterprise
Solution**



**Azure Hybrid
Benefits**



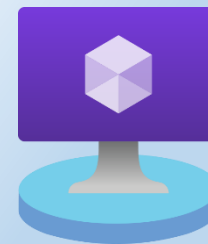
**GPU
Partition**



**Backup
Disaster Recovery**

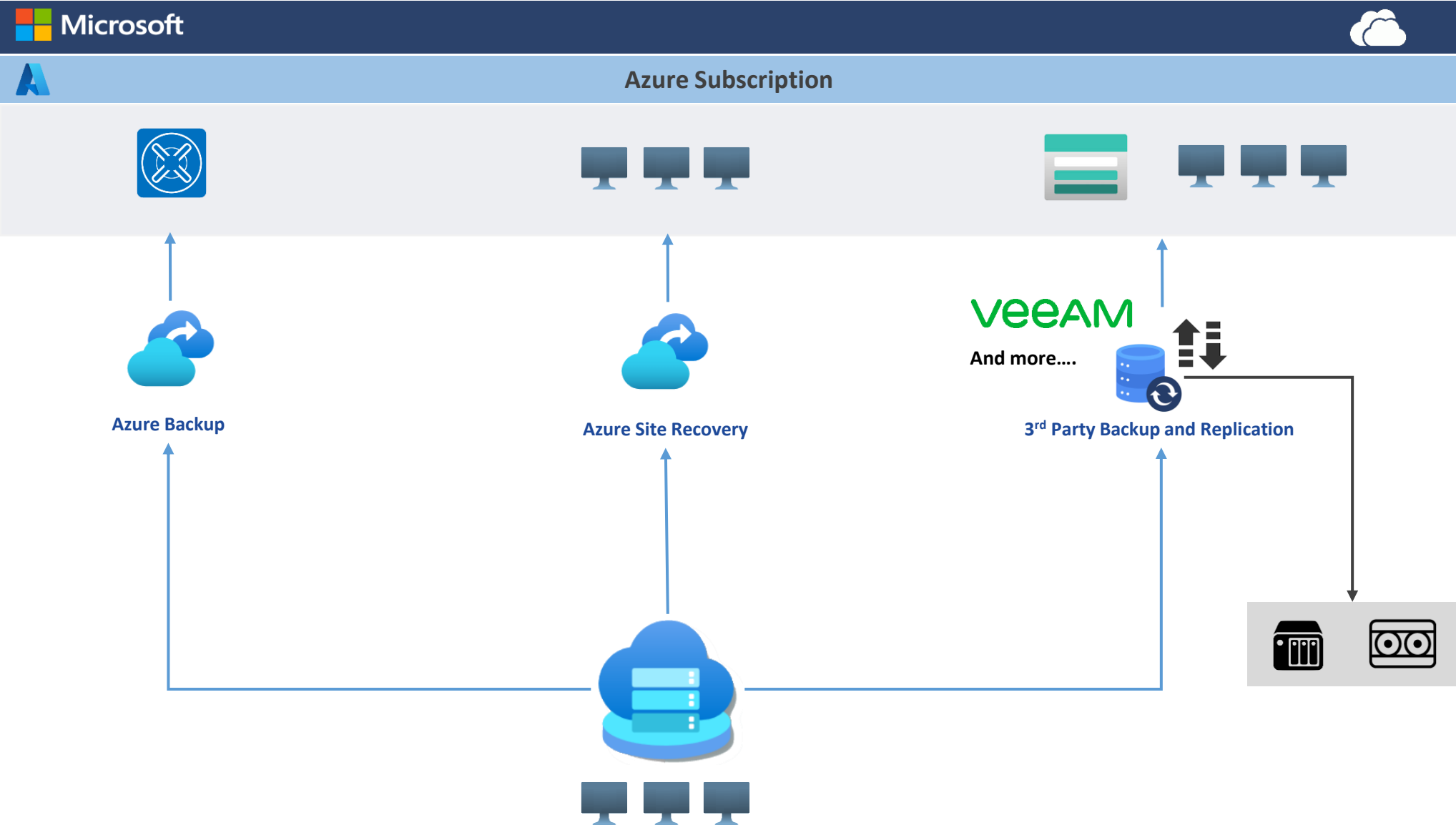


Updates



**Azure Arc
Integration**

Azure Local – Backup & Replication VMs



Azure Local - Features & Benefits



**Enterprise
Solution**



**Azure Hybrid
Benefits**



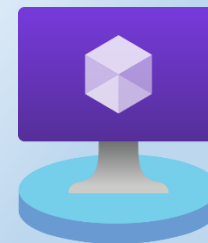
**GPU
Partition**



**Backup
Disaster Recovery**



Updates



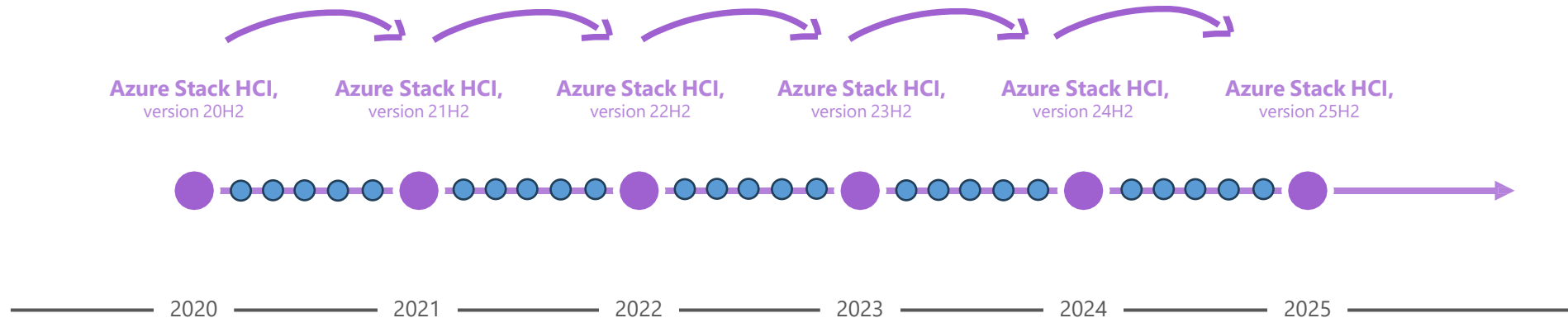
**Azure Arc
Integration**

Azure Local – Updates



Azure Stack HCI solutions are designed to have a **predictable update** and **upgrade experience**

- Microsoft releases **monthly quality and security updates** as well as **annual feature updates** to the Azure Stack HCI operating system.
- To **keep your Azure Stack HCI service in a supported state**, you have up to **six months to install updates**, but we recommend installing updates as they are released.
- **OEM firmware/driver packages** are typically available **quarterly**



Subscription business model = customers are always entitled to updates

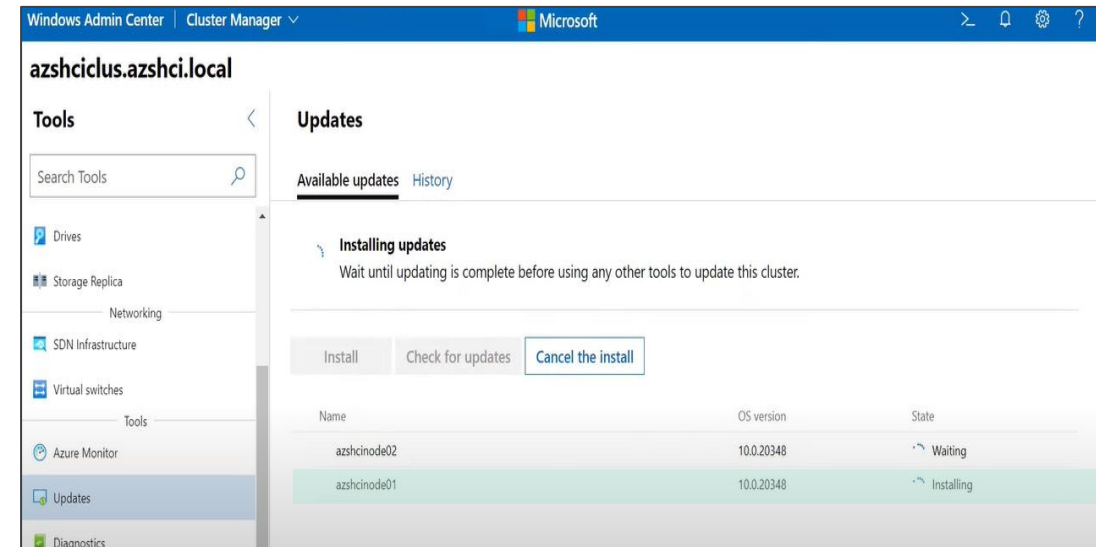
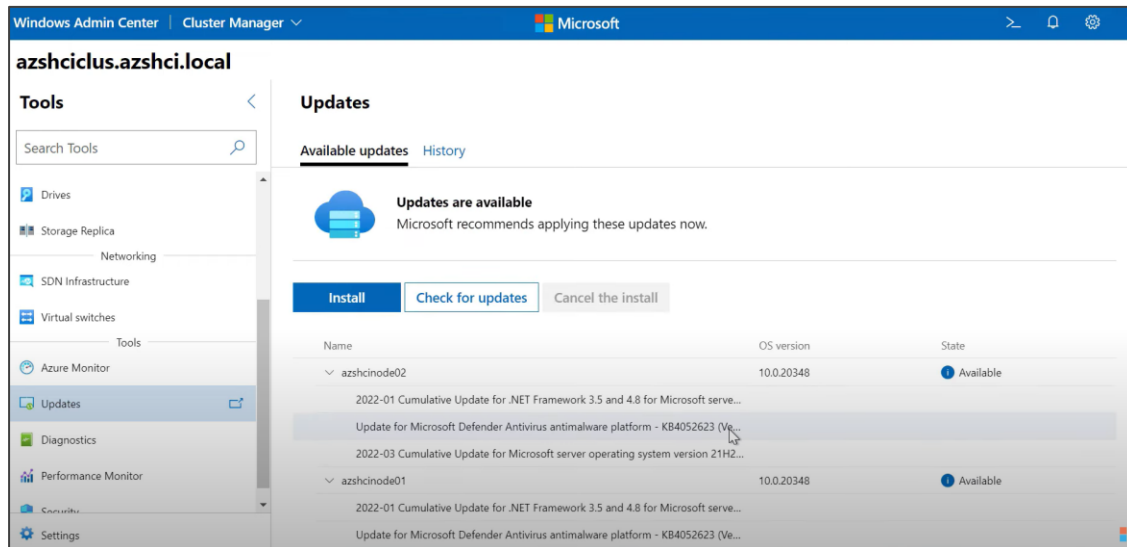
More Info:

<https://learn.microsoft.com/en-us/azure/azure-local/concepts/updates>

Azure Local – Updates



Cluster Update Coordinator (CAU) process starts on the node that currently owns the Cluster-Aware Updating clustered role, and the process sequentially performs updates on each cluster node.



More Info:

<https://learn.microsoft.com/en-us/azure/azure-local/manage/update-cluster?#choose-a-cau-updating-mode>

Azure Local – Updates



Cluster-Aware Updating is extensible to support partner plug-ins that retrieve **firmware and driver updates**.

Windows Admin Center Cluster Manager

r640-hy-dev5.test.lab

Tools

Search Tools

Dashboard

Compute

Virtual machines

Servers

Storage

Volumes

Drives

Networking

Virtual switches

Tools

Azure Monitor

Updates

Diagnostics

Performance Monitor

Extensions

Dell EMC OpenManage Integration

DELL EMC OpenManage Integration with Microsoft Windows Admin Center

Cluster - Dell EMC S2D Ready Node (Nodes: 6)

Health Status | Hardware Inventory | iDRAC | Update Compliance | Settings | About

Overview > R640HYN1

Components

Firmware

Component

Version

OS COLLECTOR, 3.0, A00

3.0

Backplane 0

4.27

BP14G+EXP 0-1

2.41

Dell HBA330 Mini

16.17.00.05

Mellanox ConnectX-4 LX 25GbE SFP Rack NDC - 248A0792-DAF5

14.25.10.20

iDRAC Service Module Installer, 3.0.1, A00

3.0.1

Power Supply.Slot.1

00.23.32

Disk 0 in Backplane 1 of Integrated Storage Controller 1

AS0E

Disk 2 in Backplane 1 of Integrated Storage Controller 1

NT32

Disk 0 on AHCI Controller in slot 1

DL43

BOSS-S1

2.5.13.3022

Identity Module (iRV4R)

5.04

BIOS

2.3.10

Windows Admin Center Cluster Manager

a4200-cluster.tme.syd

Tools

Search Tools

Virtual machines

Servers

Azure Kubernetes Service

Storage

Volumes

Drives

Storage Replica

Networking

SDN Infrastructure

Virtual switches

Tools

Azure Monitor

Updates

Diagnostics

Performance Monitor

Settings

HPE Azure Stack HCI Extension for Windows Admin Center

Overview | Inventory | Storage Manager | Help

Summary (Total: 1)

The servers work properly.

Expand all groups Collapse all groups

Health Status	Location ↑	Media Type	Disk LED
a4200-as118			
OK	Box 1, Bay 1	SATA SSD	
OK	Box 1, Bay 2	SATA SSD	
OK	Box 1, Bay 11	SATA SSD	
OK	Box 1, Bay 12	SATA SSD	
OK	Box 1, Bay 13	SATA SSD	
OK	Box 1, Bay 14	SATA SSD	
OK	Box 1, Bay 22	SATA SSD	
OK	Box 1, Bay 23	SATA SSD	
a4200-as119			
OK	Box 1, Bay 1	SATA SSD	
OK	Box 1, Bay 2	SATA SSD	
OK	Box 1, Bay 11	SATA SSD	
OK	Box 1, Bay 12	SATA SSD	

Manufacturer: ATA Model: VK001920GXCGP

Firmware Version: HPG2 Percentage Remaining: 100

Size: 1.92 TB Virtual Disk Footprint: 281 GB

Storage Controller: HPE Smart Array P408i-a SR Gen10, Slot 12 Physical Location: Controller Port 11, Box 1, Bay 1

Serial Number: 2009275ATAFF Part Number: -

More Info:

<https://learn.microsoft.com/en-us/azure-stack/hci/manage/update-cluster#choose-a-cau-updating-mode>

Azure Local - Features & Benefits



**Enterprise
Solution**



**Azure Hybrid
Benefits**



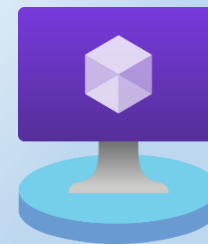
**GPU
Partition**



**Backup
Disaster Recovery**

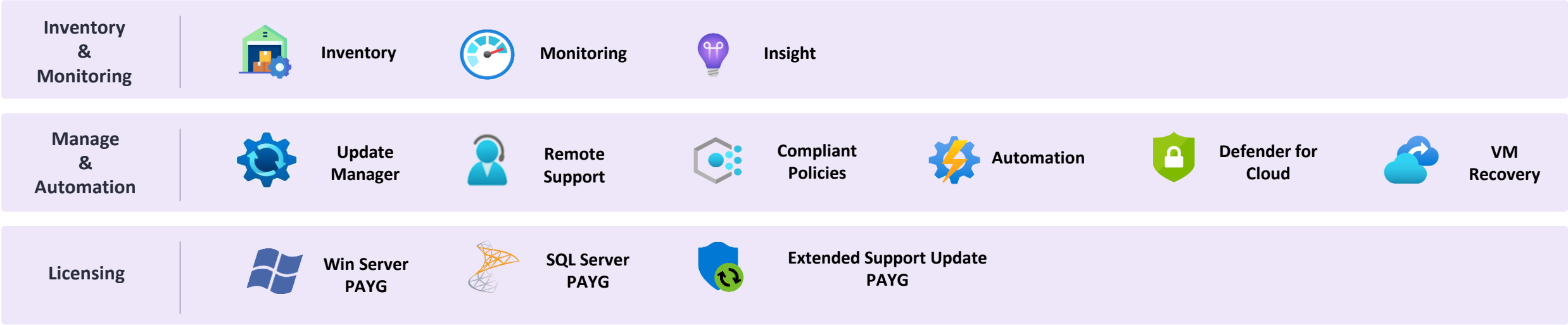
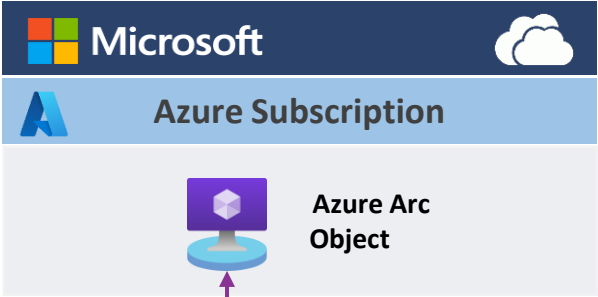
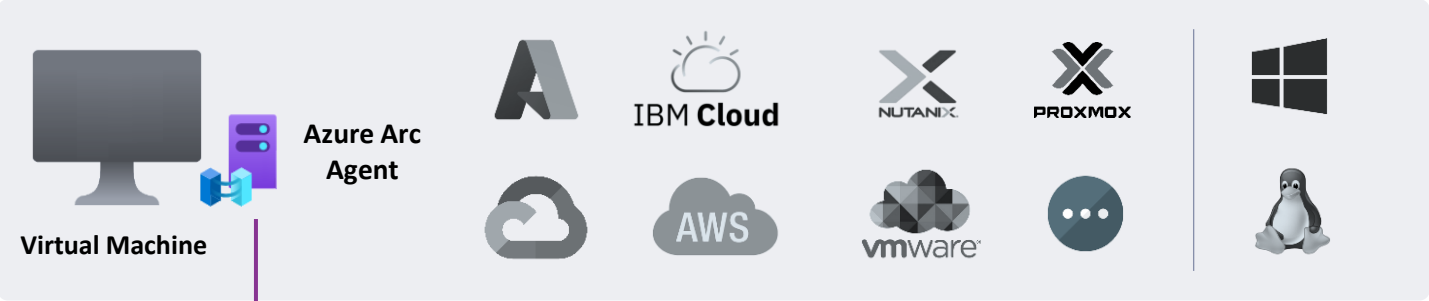


Updates

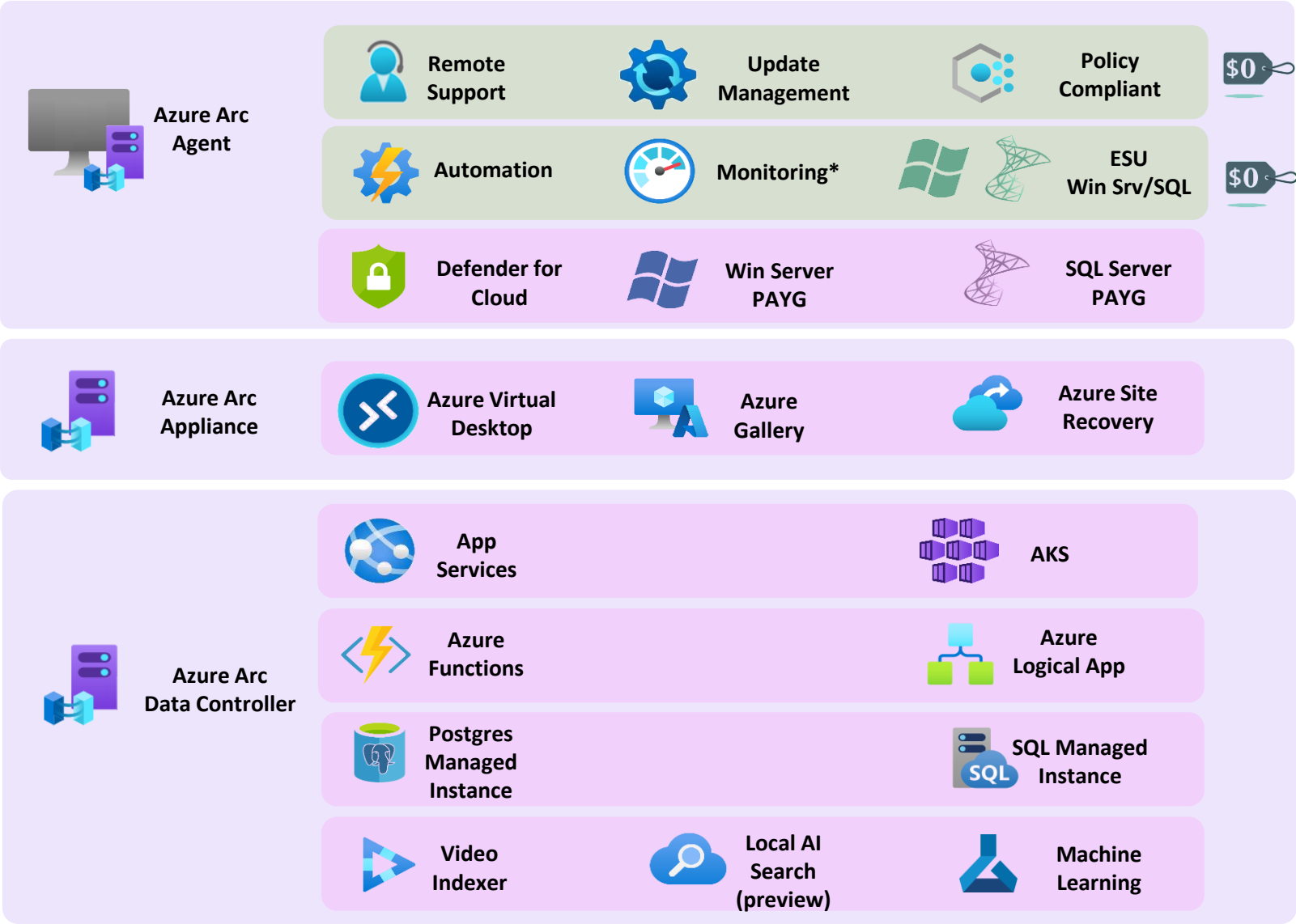


**Azure Arc
Integration**

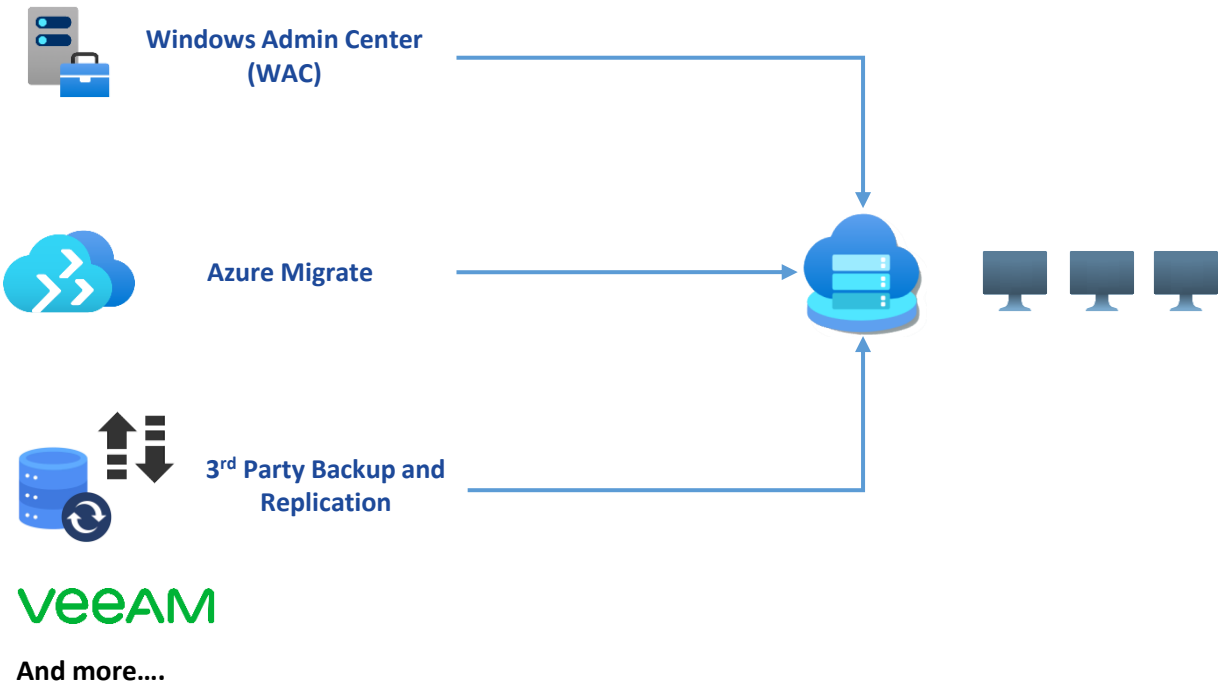
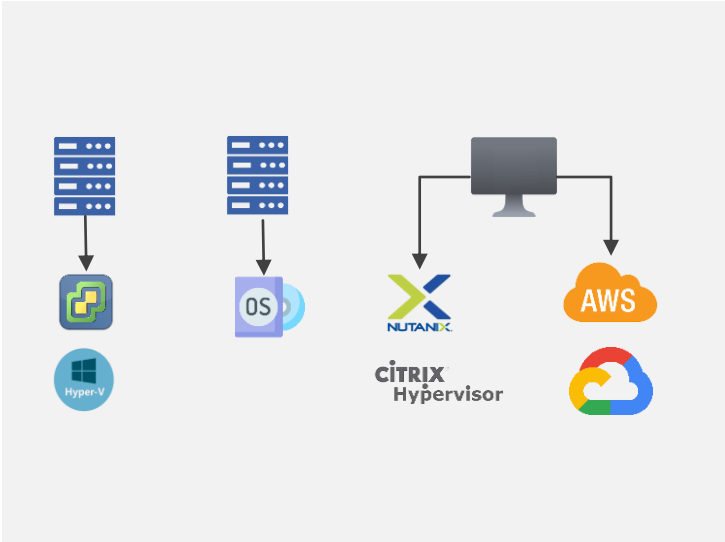
Azure Arc



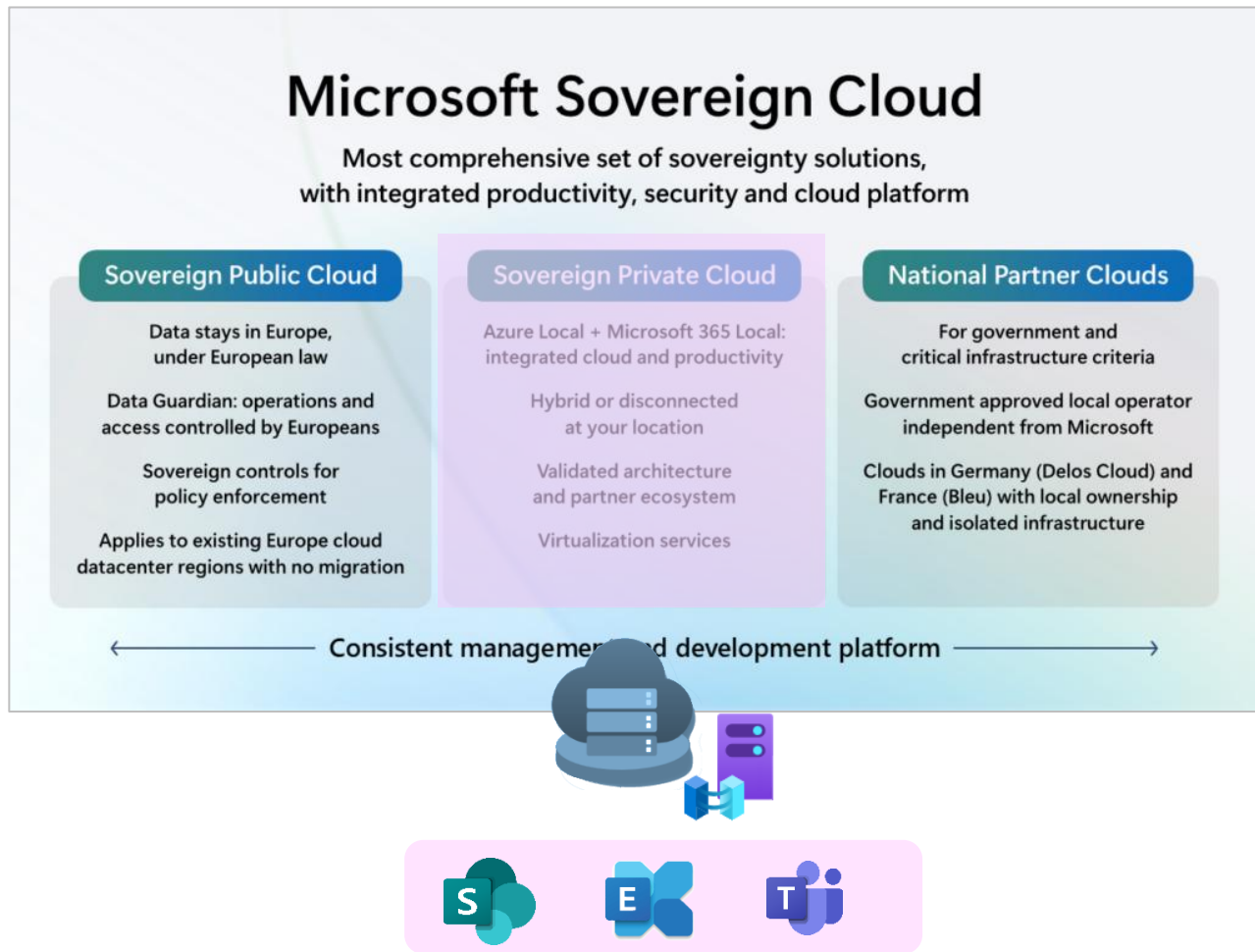
Azure Arc for Azure Local



Azure Local – Convert Existing VMs on Azure Local



Azure 365 Local



More Info:
<https://blogs.microsoft.com/blog/2025/06/16/announcing-comprehensive-sovereign-solutions-empowering-european-organizations/>

Grazie a tutti

