Azure Local – Is It Your VMware Replacement

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Agenda

- Understanding the current landscape and why this topic matters
- What is Azure Local?
- VMware Today
- Azure Local vs VMware – Head-to-Head
- Deep Dive: Azure Local
- Real-World Use Cases
- Migration
- Is Azure Local Ready for You?
- Q&A

Understanding the current landscape and why this topic matters

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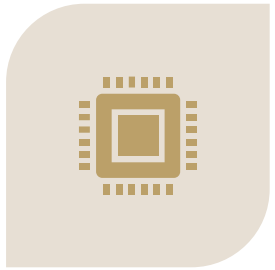
The Virtualization Landscape Is Changing



VMWARE HAS BEEN A MARKET LEADER IN ON-PREM VIRTUALIZATION FOR 20+ YEARS

CLOUD-FIRST MANDATES ARE NOW STANDARD(THIS MIGHT CHANGE SOON)

BROADCOM'S ACQUISITION OF VMWARE RAISED UNCERTAINTY AROUND PRICING AND STRATEGY

ORGANIZATIONS NEED MORE AGILITY AND COST CONTROL

Enterprise IT Is at an Inflection Point

Key questions decision-makers are asking:

Do we still need a traditional hypervisor like VMware?

Can we simplify our stack by aligning with our cloud roadmap?

Is Azure Local ready for prime time?

What is Azure Local

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Azure Local and Windows Server

Azure Local

- Exciting roadmap of new HCI focused releases
- Innovation focused on being the **best virtualization host**
- **Future of Hyper-V virtualization**, software-defined storage and networking
- Run apps inside Windows or Linux virtual machines
- Runs on **your hardware**

Windows Server

- Exciting roadmap of new releases
- Innovation focused on being the **best guest** and **traditional server**
- **All other Windows Server roles**, like IIS, File Services, DNS, DHCP, AD/DS
- Runtime for Windows apps like SQL Server
- Runs **anywhere**

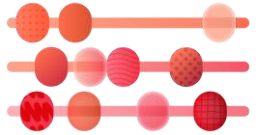
Azure Local

Modern infrastructure to deploy cloud native solutions anywhere

Cloud native anywhere

Secure and run all workloads from cloud to edge

Familiar management and operations



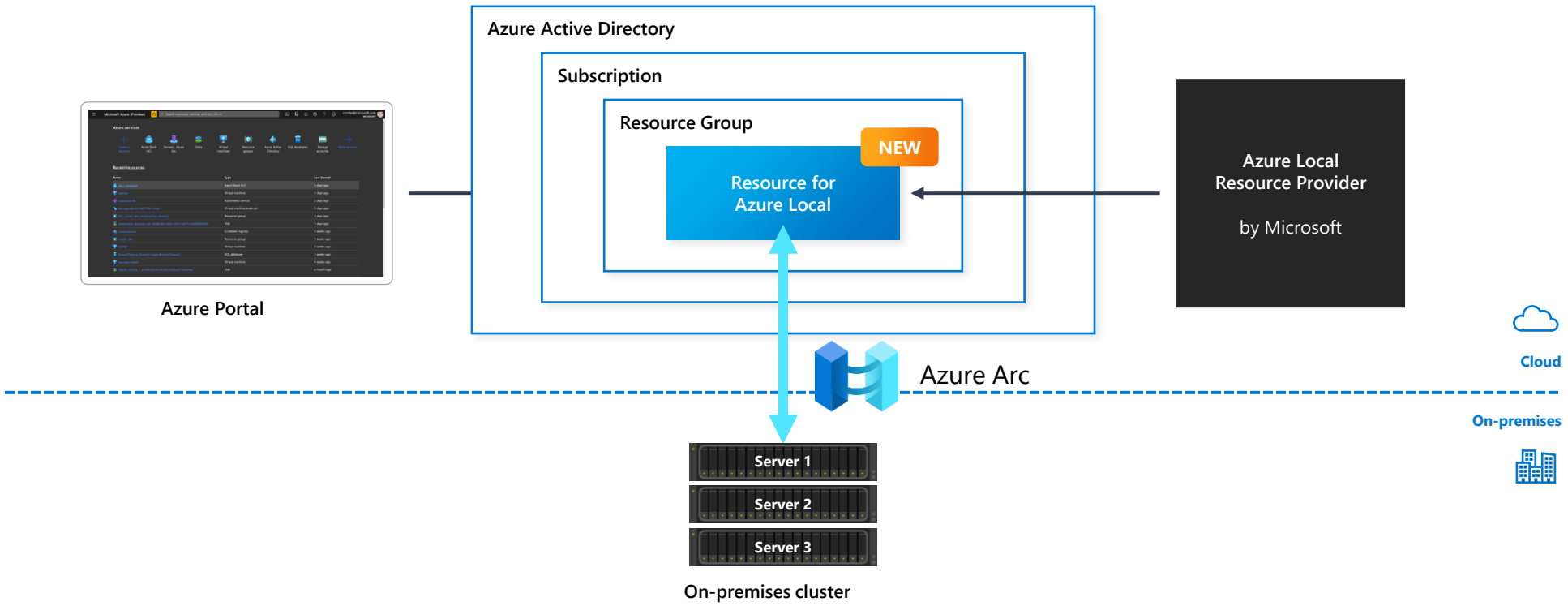
Deploy with flexible options at the right price/performance point

Simplify hybrid with native Azure integration

Azure Resource Manager (ARM) resource represents each on-premises Azure Local cluster

Visibility in the Azure portal and foundation for hybrid management

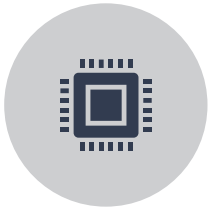
No fuss with agents or scripts – it's built-in!



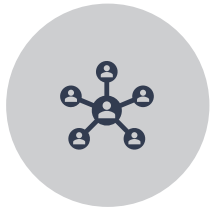
VMware Today

The VMware Ecosystem – What It Offers Today

VSPHERE & ESXI – ENTERPRISE-GRADE HYPERVISOR; CORE OF VIRTUAL INFRASTRUCTURE



VCENTER SERVER – CENTRALIZED MANAGEMENT, AUTOMATION, AND ORCHESTRATION



NSX – SOFTWARE-DEFINED NETWORKING, MICROSEGMENTATION, AND SECURITY SERVICES

VSAN – HYPERCONVERGED, SOFTWARE-DEFINED STORAGE SOLUTION

VMWARE CLOUD FOUNDATION (VCF) – INTEGRATED STACK FOR HYBRID CLOUD INFRASTRUCTURE

SUPPORTS HYBRID AND MULTI-CLOUD (AWS, AZURE, GOOGLE CLOUD INTEGRATIONS)

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A Trusted Foundation for Enterprise IT

Stability & Performance – Proven in production at scale

Tooling & Ecosystem – Wide array of integrations and certified solutions

Skilled Talent Pool – Many VMware-certified professionals available

Enterprise Features – High availability, vMotion, DRS, snapshots, etc.

Hybrid Cloud Flexibility – VMware Cloud offerings across major providers

Strengths vs. Strategic Friction

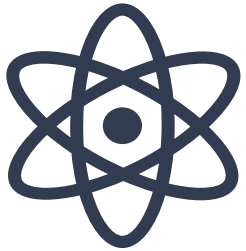
Strengths:

Highly reliable & battle-tested

Granular control over virtual infrastructure

Broad customer & partner ecosystem

Mature management tools



Challenges:

High and rising costs – Licensing, support, and upgrades

Complexity – Multiple layers: vCenter, NSX, vRealize, etc.

Cloud-native mismatch – Less agile vs Azure/AWS

Broadcom acquisition changes: licensing, ecosystem shifts, customer trust erosion

Azure Local vs VMware – Head-to-Head

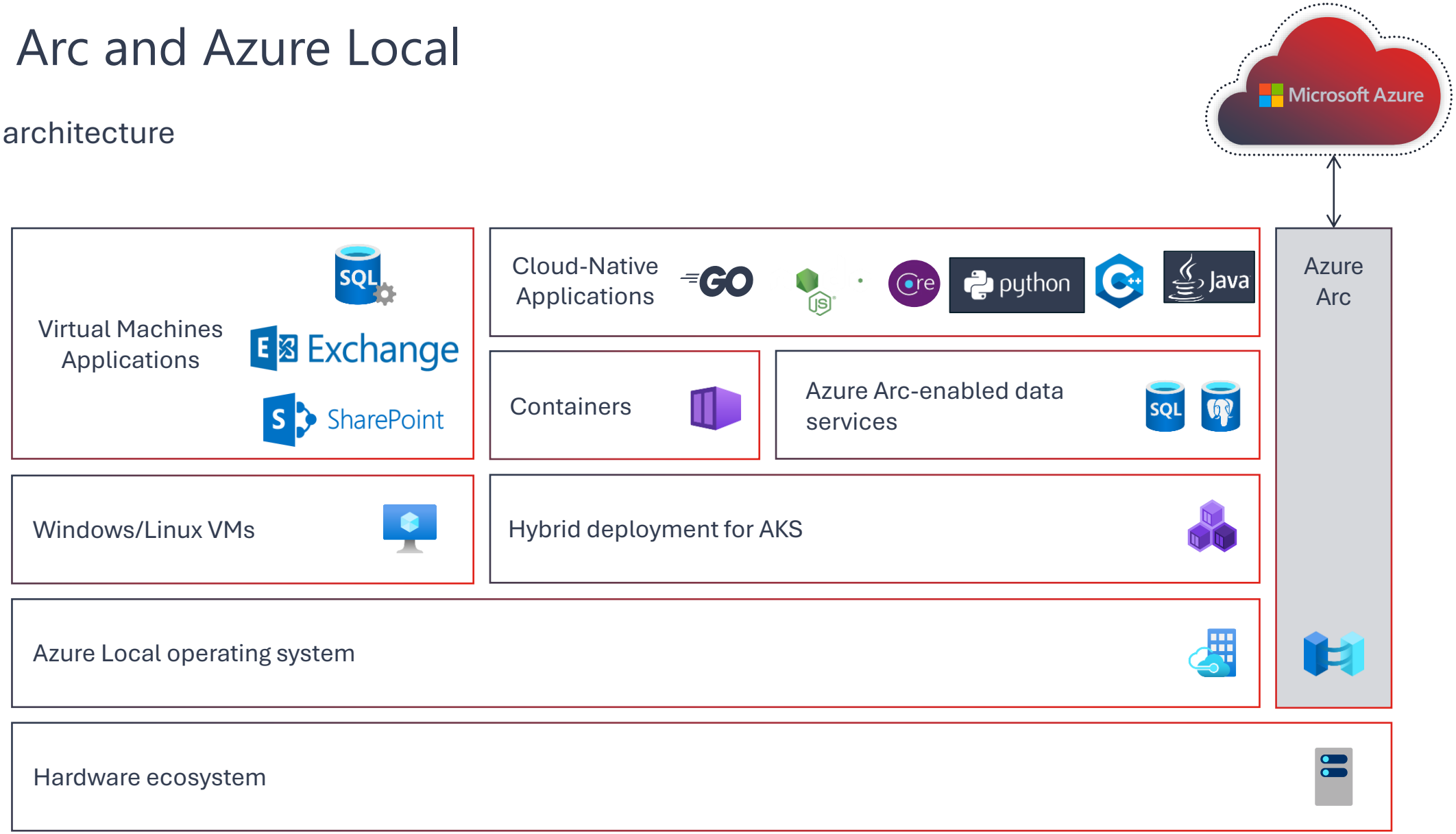
Azure Local vs VMware

CATEGORY	AZURE LOCAL	VMWARE
Hypervisor	Hyper-V (Windows Server based)	ESXi (bare-metal hypervisor)
Management Console	Azure Portal via Azure Arc	vCenter Server
Host OS	Windows Server Core + Azure Local OS	ESXi Hypervisor (proprietary Linux-like OS)
Cluster Management	Windows Admin Center, Azure Arc	vCenter, vSphere Clustering
Networking	Azure SDN integrations, Network Adapter, BGP	NSX, Distributed Switches
Storage	Storage Spaces Direct, Azure Blob, iSCSI, SMB	vSAN, VMFS, NFS
Backup & DR	Azure Backup, Site Recovery, Veeam	VDP (deprecated), SRM, Veeam
Security	Azure Defender, Just-In-Time Access, Conditional Access	NSX microsegmentation, vSphere Trust Authority
Automation	Azure Policy, Azure Automation, Bicep, ARM templates	vRealize Orchestrator, PowerCLI, Auto Deploy
Monitoring	Azure Monitor, Log Analytics, Update Management	vRealize Operations, vCenter Alarms
Guest OS Support	Windows, Linux (Ubuntu, RedHat, etc.)	Windows, Linux, PhotonOS
Kubernetes Support	AKS on HCI / Arc-enabled K8s	Tanzu Kubernetes Grid (TKG)
Hybrid Cloud Support	Native Azure integration + Arc to connect any infra	VMware Cloud Foundation + AWS, Azure, GCP connectors
Edge Computing	Strong edge use cases, disconnected mode, minimal footprint	VMware Edge Compute Stack, less mature deployment tools
Licensing Model	Subscription, Azure-consumption based	Perpetual/subscription (shifting under Broadcom)
Billing Flexibility	Pay-as-you-go, integrated with Azure EA / CSP	Prepaid or per-core licensing, fixed tiers
Hardware Compatibility	Certified Azure Local hardware list	VMware HCL (broader but stricter BIOS/firmware dependencies)
Cloud Native Integration	ARM/Bicep templates, GitHub Actions, DevOps pipelines	Terraform, Ansible, vRealize Automation
User Community & Ecosystem	Growing fast, backed by Microsoft Cloud	Very mature and long-standing ecosystem

AZURE LOCAL DEEP DIVE

Azure Arc and Azure Local

Platform architecture



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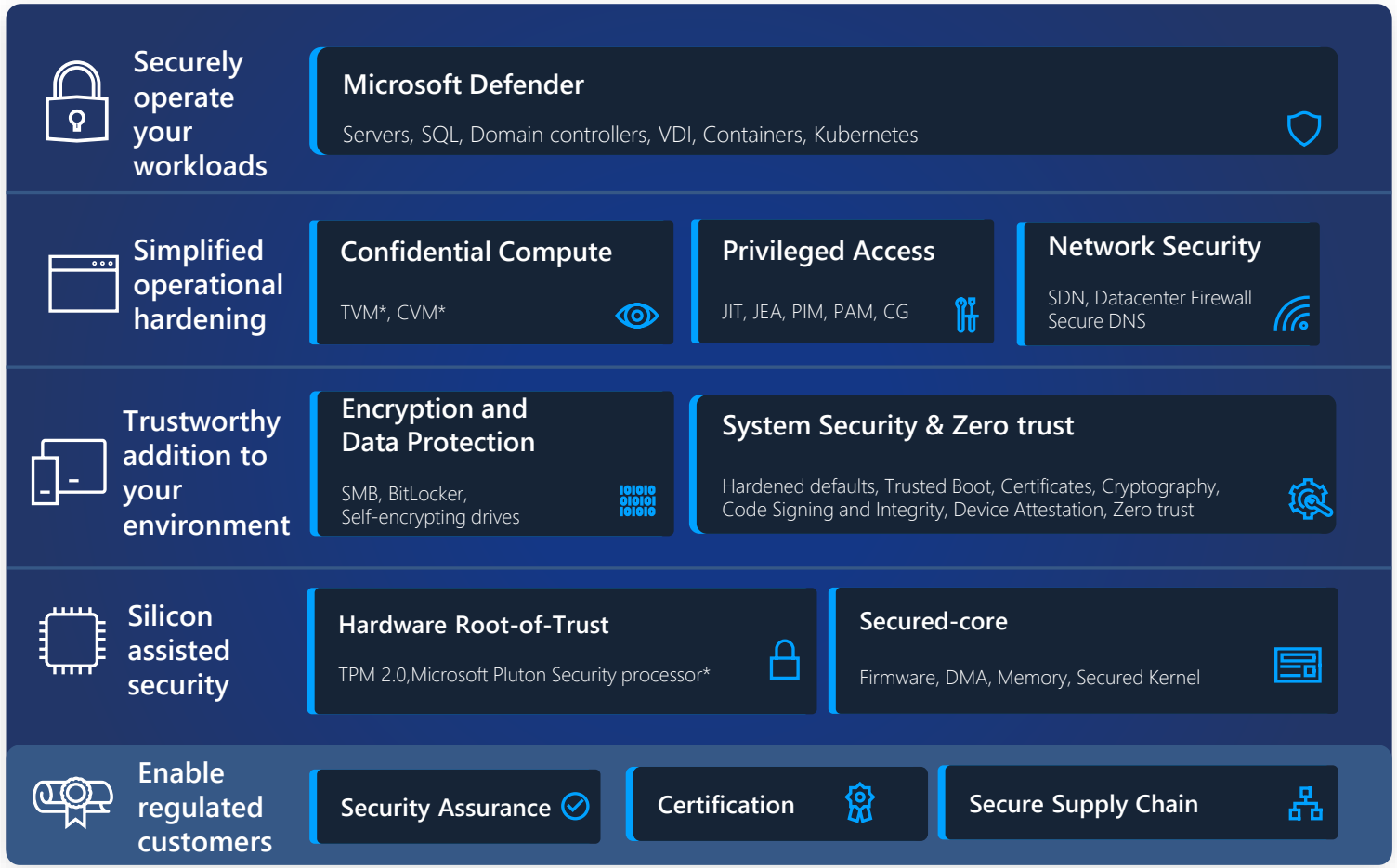
Layered security built-in



Industry leading built-in security

Microsoft's security products are industry leading in several Gartner magic quadrants.

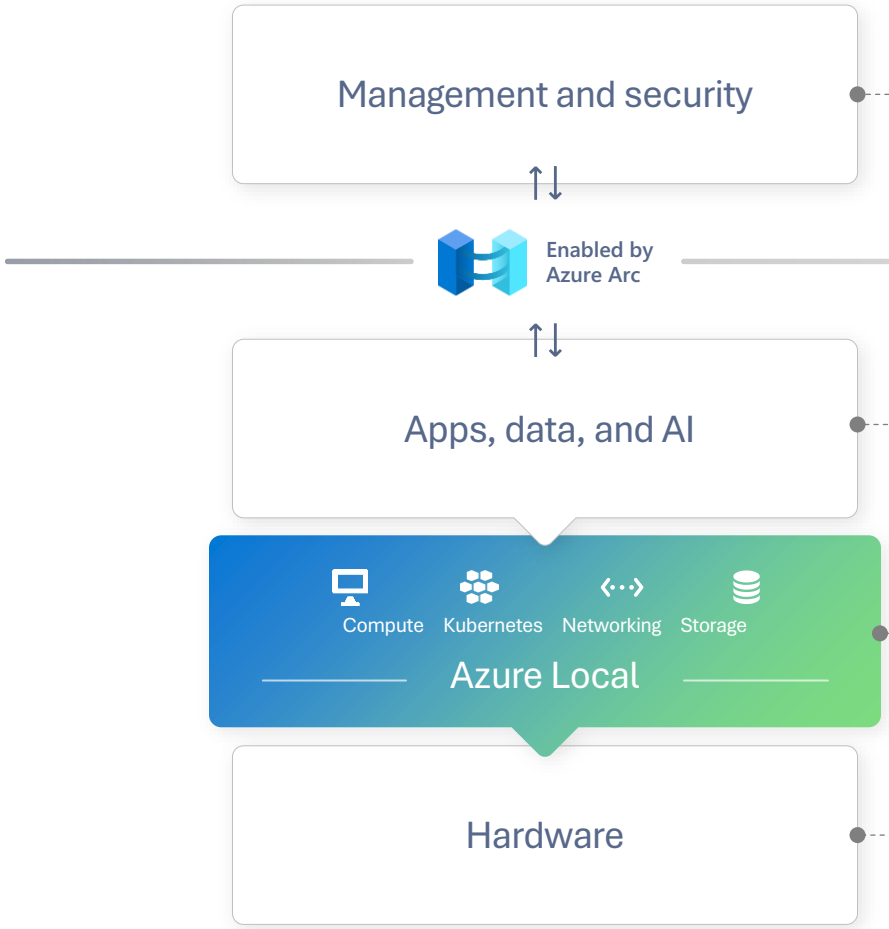
Security built for the Azure datacenter

Azure Localsecurity derives learnings from our hyperscale cloud and brings it to your datacenter.

Silicon assisted security

Unique differentiation delivered with our Silicon and OEM partners via Secured-core.

How Azure Local works (connected)



4 Operate with unified management and security for all your resources

3 Deploy apps onto cloud-consistent virtual machines and Kubernetes

2 Provision the Azure Local software to form local cloud infrastructure

1 Get hardware from your preferred vendor, connect power and network

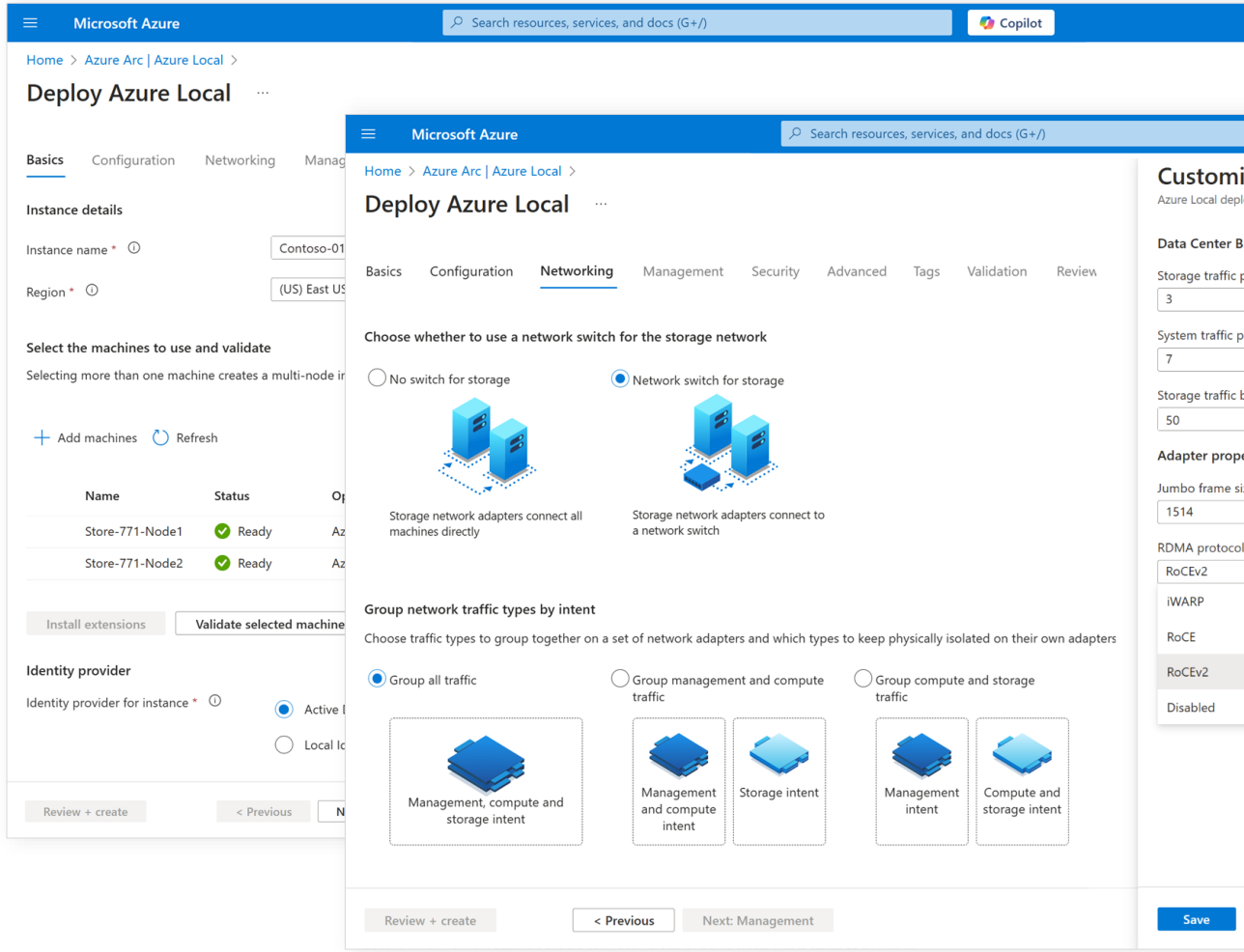
Deploy distributed infrastructure from the cloud

Shift responsibility from on-site to central IT

Treat physical machines like cloud resources, using Azure portal, APIs, or even Terraform

Simple wizard, backed by powerful automation

Advanced options to customize the cluster, networking, and storage for your environment



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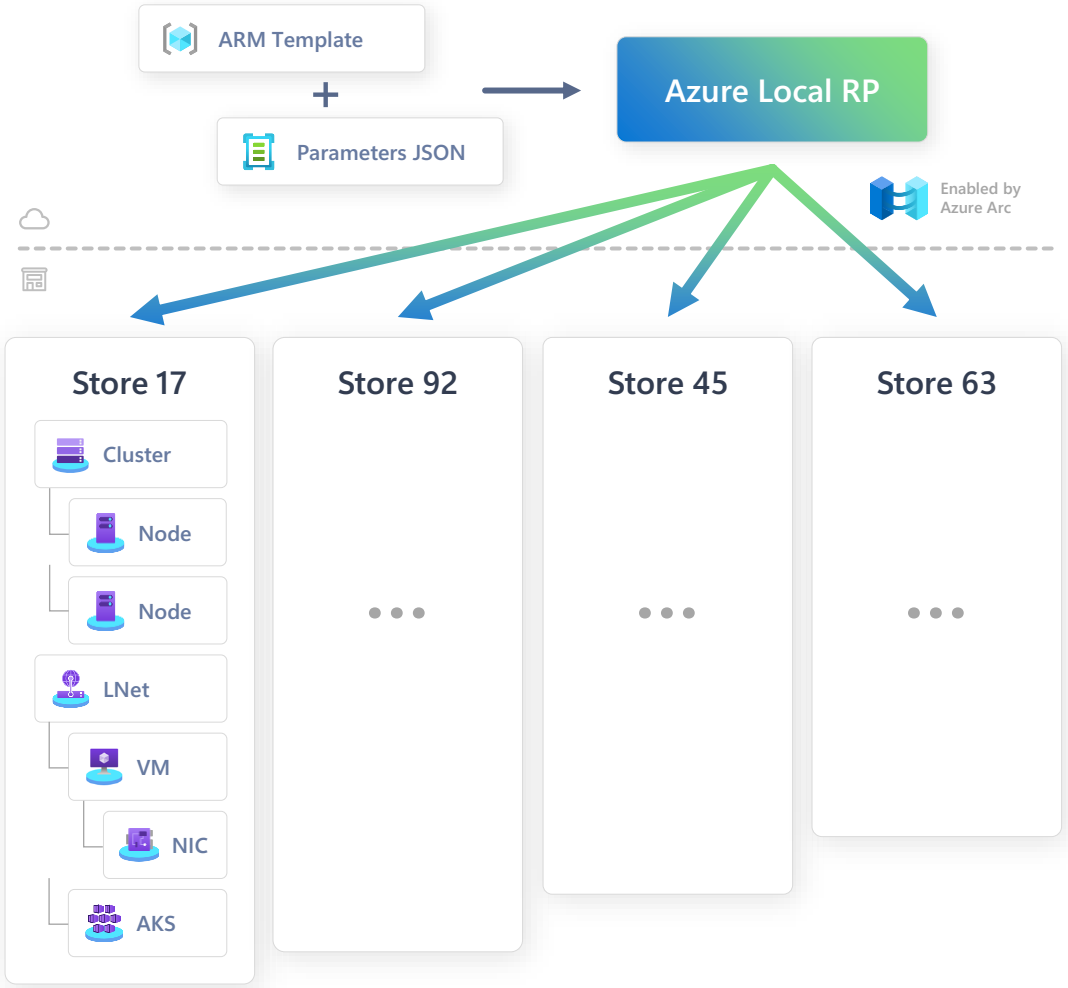
Repeat and scale with infrastructure-as-code

Contoso-Store-092.parameters.json

```
29  "parameters": {
30    "clusterName": {
31      "value": "Contoso-Store-092"
32    },
33    "useDhcp": {
34      "value": false
35    },
36    "networkingPattern": {
37      "value": "hyperConverged"
38    },
39    "physicalNodesSettings": {
40      "value": [
41        {
42          "name": "Node1",
43          "ipv4Address": "100.156.94.11"
44        },
45        {
46          "name": "Node2",
47          "ipv4Address": "100.156.94.12"
48        },
49        {
50          "name": "Node3",
51          "ipv4Address": "100.156.94.13"
52        }
53      ]
54    },
55    "securityLevel": {
56      "value": "Recommended"
57    },
58    "clusterWitnessStorageAccountName": {
59      "value": "contoso092storageaccount"
```



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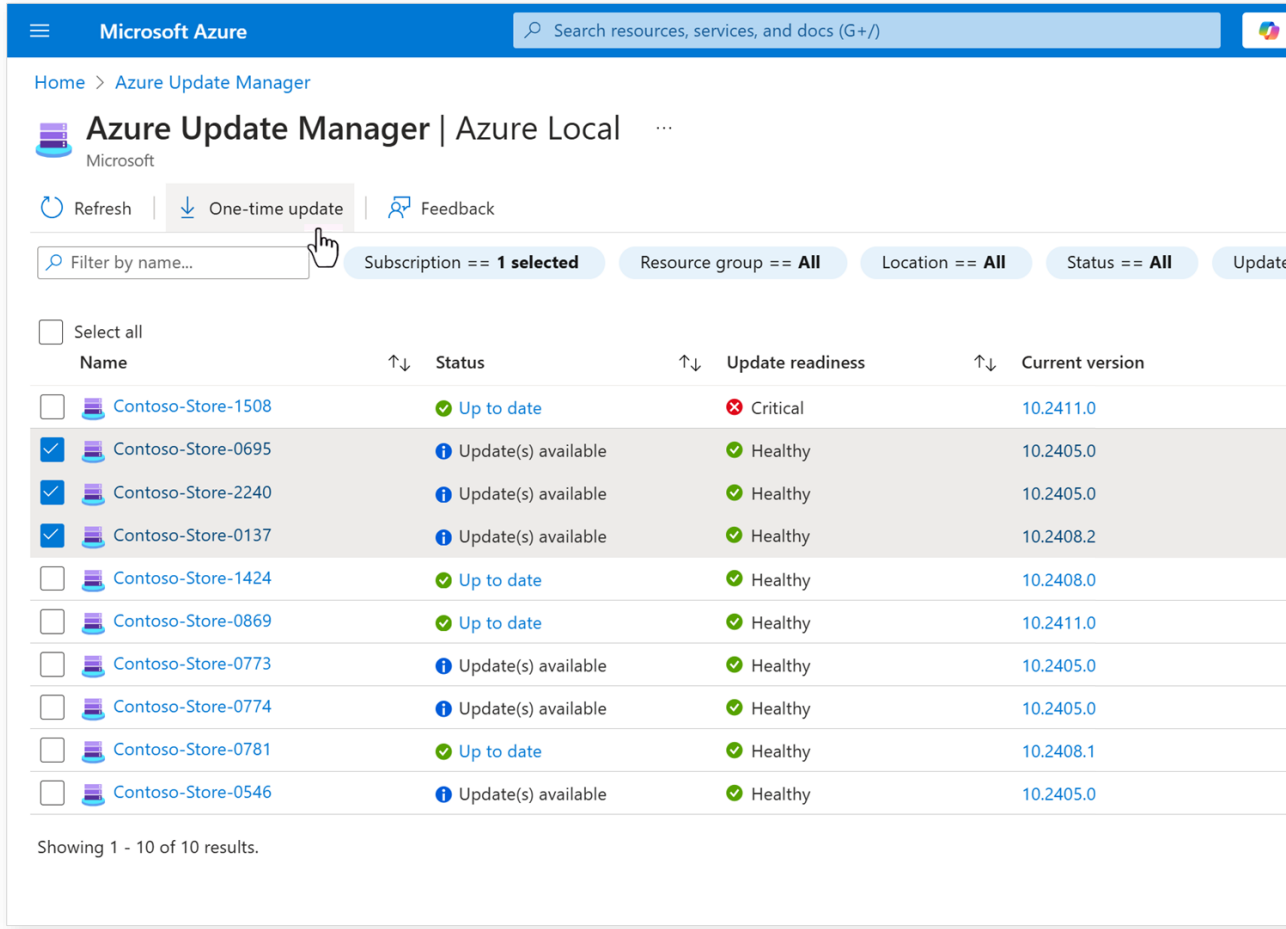
One-click infrastructure updates from the cloud

Conveniently view and manage updates across locations in Azure Update Manager

Full-stack update package includes all Azure Local software plus OEM content [1]

Non-disruptive (workloads keep running)

You control when to apply updates



1 : Firmware and driver packages available for Premier solutions like Dell APEX Cloud Platform and Lenovo ThinkAgile MX455 V3

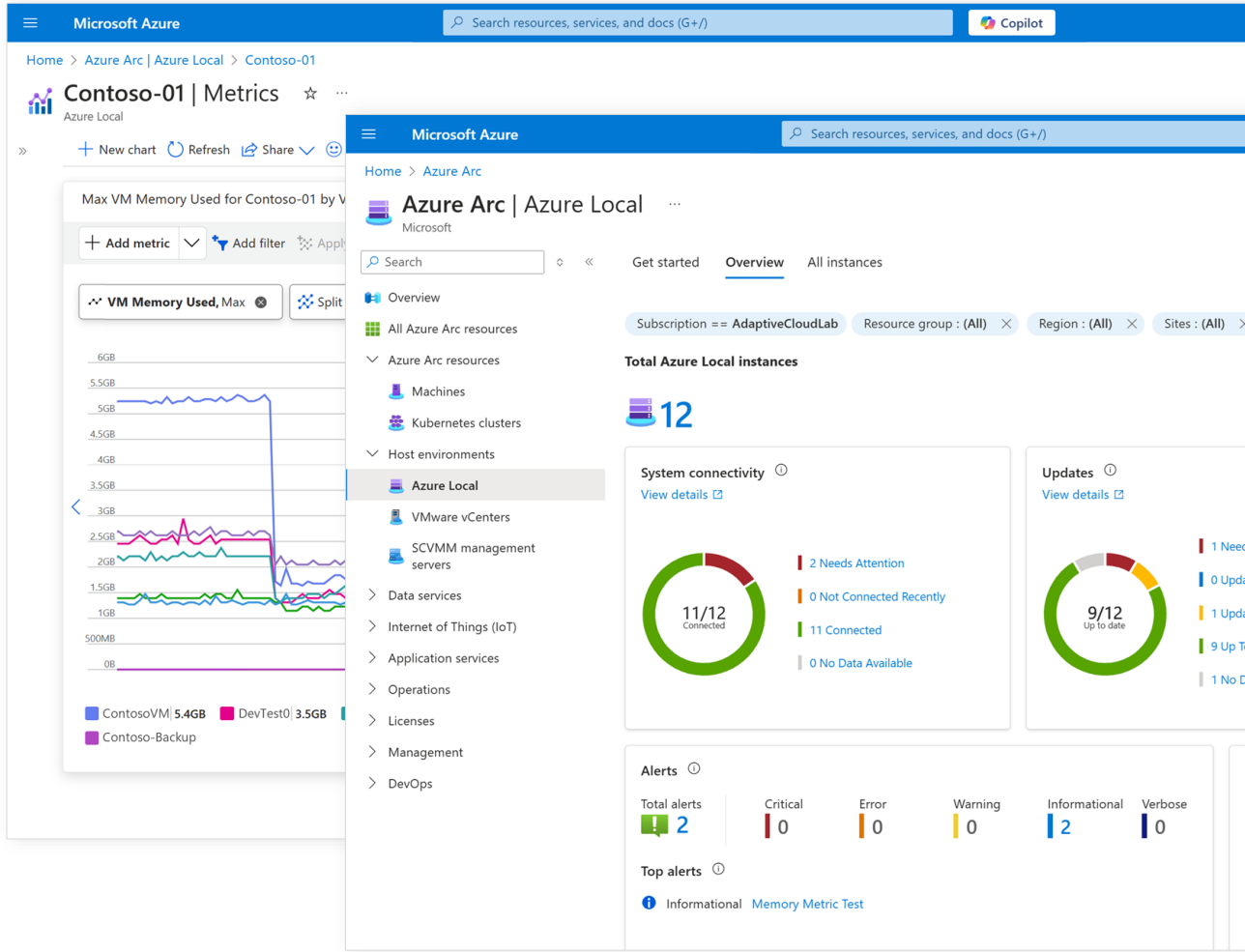
Central visibility across all your locations

Monitor infrastructure, VMs, and Kubernetes from the Azure portal, enabled by Azure Arc

Ready-made dashboards you can customize

50+ standard metrics for infrastructure cover hypervisor, storage, and networking

Set alert rules to send email and more



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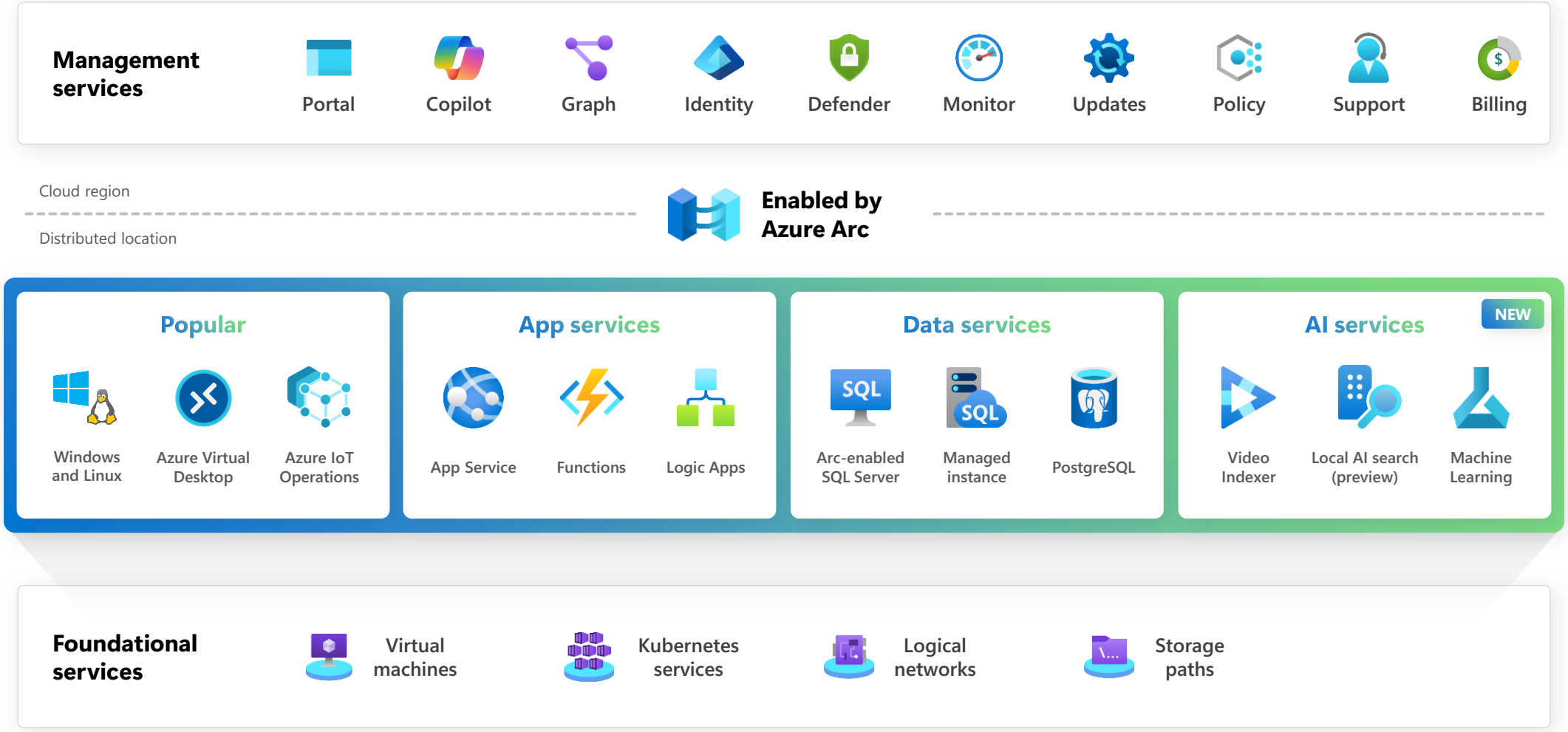
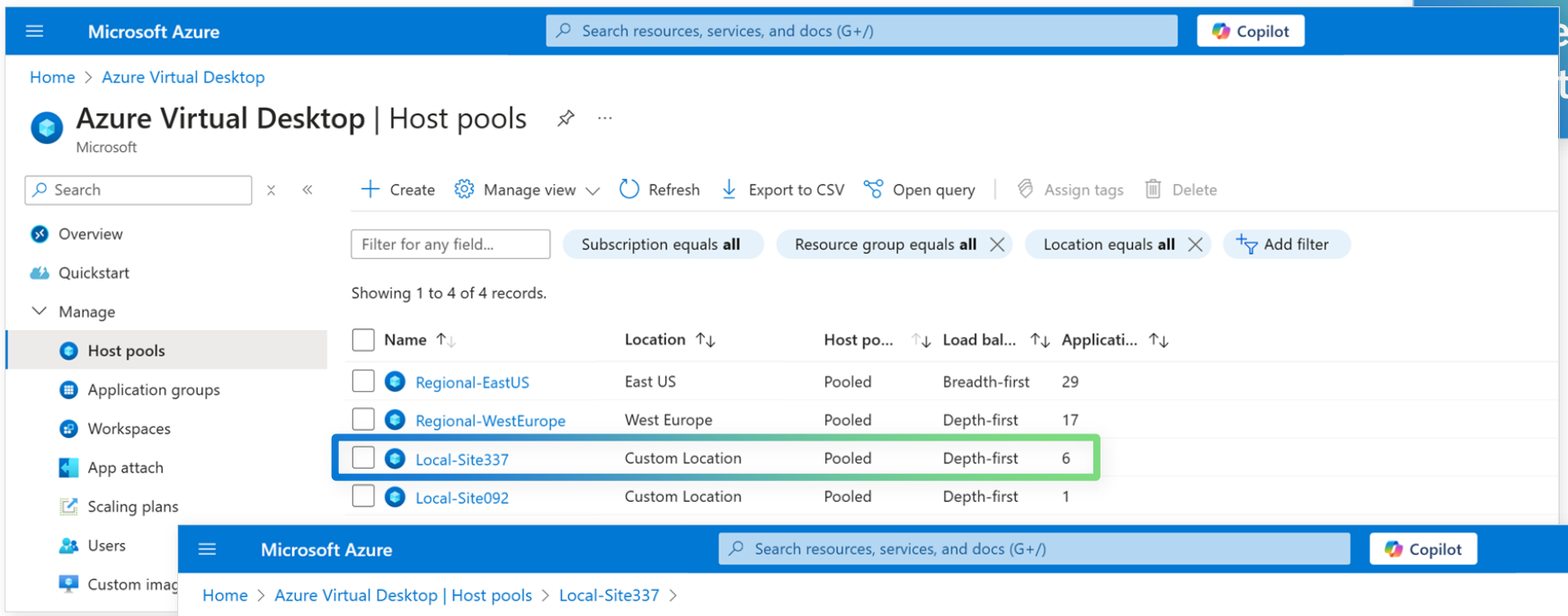
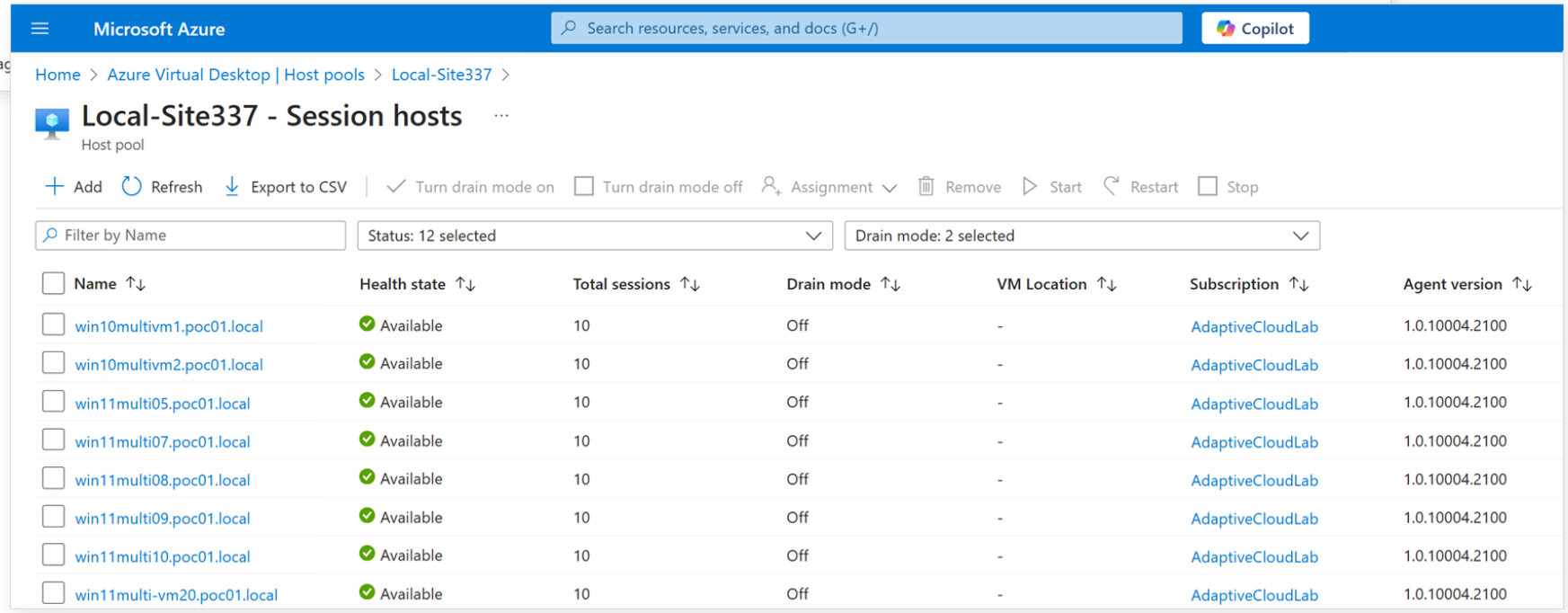
Bring Azure app, data, and AI services anywhere



e Virtual Desktop
th Azure Local





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Azure Local Solution Categories

Premier Solutions

Turnkey Azure Local solution

- Deepest integration and highest level of automation, built through deep engineering collaboration between Microsoft and solution partners
- Continuous testing by Microsoft and our partners, to ensure higher reliability and minimal downtime
- End-to-end deployment workflows that make it easy to deploy one cluster or a thousand clusters

Integrated Systems

Single purpose system with pre-installed software

- Optimized hardware selection with regular testing for ongoing reliability
- Delivered with software pre-installed and security set by default
- Validated full-stack updates and native hardware management tools

Validated Nodes

Broadest choice of hardware components

- Choose from a diverse selection of validated hardware from more than 30 partners, or re-use existing validated hardware
- Engage with preferred SI for deployment and integration, as needed
- On new hardware - OR - Check with your OEM or solution provider to ensure you are running a validated solution. In certain cases, you may be able to re-use existing hardware

Visit the Azure Local Catalog to discover the current hardware solutions available to fit your edge needs

Hardware deployment comparison

Feature	Validated Nodes	Integrated Systems	Premier Solutions
Validated solution with certified hardware configuration	✓	✓	✓
Solution committed to 5 years of hardware support	✓	✓	✓
Solution testing requirement	Once	2-4 times/year	Continuously
Ease of deployment and updates	Manual	Double-click	Single-click, seamless
HCI software pre-installed or on-site deployment services		✓	✓
Solution available as multi-node		✓	✓
Support from Microsoft and hardware solution partner		✓	✓
Security settings and features enabled by default		✓	✓
Validated by Microsoft in our own labs			✓
One stop for Level 1 and Level 2 support for HCI software			✓
Call home support service option available			✓
Global availability (solution and services in 100+ countries)			✓
White glove deployment services available			✓
As-a-service purchasing option available			✓
Optimal customer use case	Customers who run multiple operating systems or want to manage their own firmware, driver, and OS updates	Customers seeking some level integration and validation from Azure Local for multi-node clusters	Customers requiring turnkey, enterprise-wide deployments across their global portfolio with simplified management

Choose hardware from your preferred vendor

DELL Technologies

Lenovo

Hewlett Packard Enterprise

DataON

CISCO

SUPERMICRO

FUJITSU

1 Engage directly with your preferred vendor

2 Customize hardware specs, storage, and networking

3 Purchase 1 to N nodes up-front or as-a-service

Explore solutions at aka.ms/AzureLocalCatalog

Low-spec, low-cost options for edge use cases

NEW

Azure Local Requirements at launch	Azure Local [1] Requirements at launch
Windows Server certified	Windows Server certified
~~Min. 2+ machines~~	1+ machine
~~Min. 4+ disks per machine~~	1+ SSD per machine [2]
~~Min. 10 Gbps w/ RDMA~~	1 Gbps/2.5 Gbps Ethernet [3]
~~Active Directory required~~	Doesn't require AD [4]

SuperMicro SYS-E302
Fan-less server

Dell MC-4000r/z + MC-4510c
Rugged two-sled chassis

HPE MicroServer Gen11
Micro tower server

Lenovo ThinkEdge SE350v2
Half-width, half-depth 1U

Example possible solutions, pending validation

1 : Reduced requirements allowed up to maximum of 3-node cluster 2 : Excludes OS boot disk 3 : Must support Hyper-V virtualization 4 : In preview now, coming 2025

Licensing

108nok pr month pr physical core

Hybird Benefits

Free with EA Software Assurance

Free with CSP Windows Server Datacenter Subscription

Each 16 core license covers 16vcpu on AKS

You need to license workloads on top

Windows Server Licenses either normal or via Subscription based

AVD 1 cent pr hour pr vcpu + Windows 11 Enterprise

Linux Lincenses

Plus any other software that requires a license

Overview of Extended Security Updates (ESU) supported solutions

Windows Server 2012 and 2012 R2 and SQL Server 2012

Product version	Hosted	ESU duration	ESU end date
Windows Server 2012 Windows Server 2012 R2	Azure*	Three years	October 13, 2026
Windows Server 2012 Windows Server 2012 R2	Not in Azure	Three years	October 13, 2026

	On premises	SPLA	Azure VMs and Azure Dedicated Host	Azure Local	Azure VMware Solution, Azure Nutanix Solution
SQL Server	Option to purchase ESU	Not available	Free ESUs	Free ESUs	Free ESUs
Windows Server	Option to purchase ESU	Not available	Free ESUs	Free ESUs	Free ESUs

Windows Server 2016

Real World Use Cases

- Deployed to Goverment Companies
- Universities
- Factories OT Environments
- Retail
- +++

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Coles

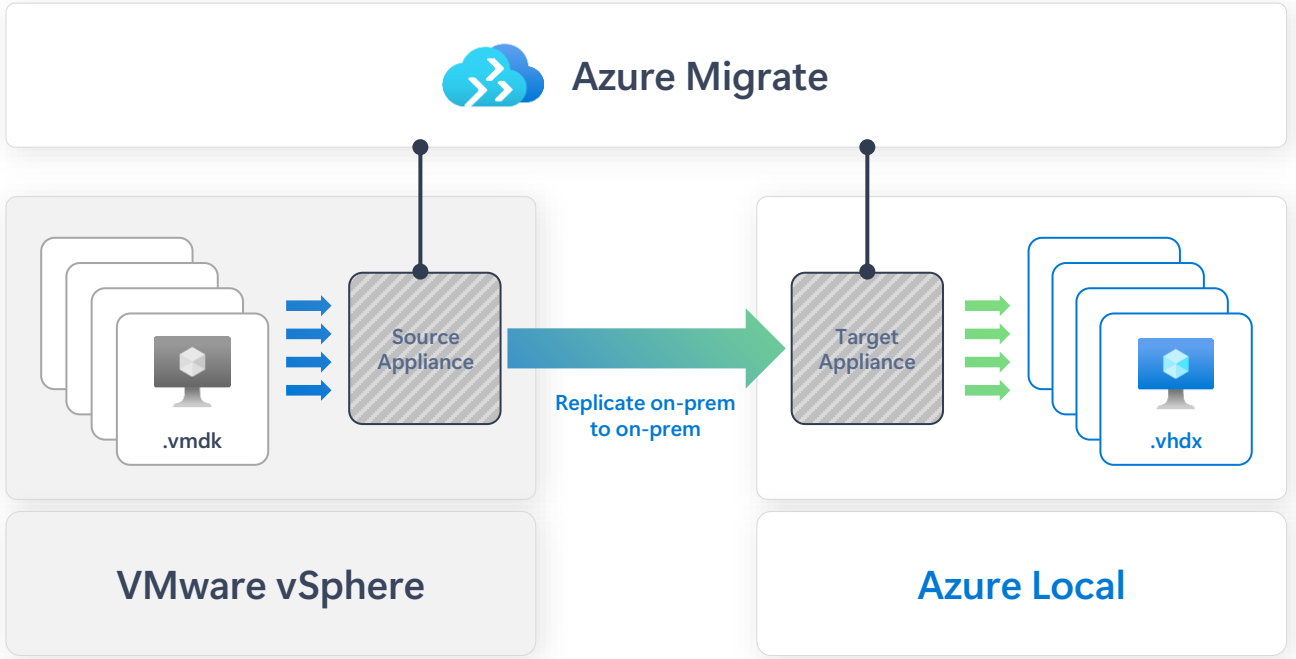
1,800+ stores in Australia

Deploying edge AI to improve efficiency and offer leading customer experiences

Deployed over 1,000 instances of Azure Local in production [1]

Migrate from VMware to Azure Local (preview)

- Reduce your VMware costs and footprint with full-stack alternative
- No need to change/rewrite apps
- Copy and convert VMware VMDK to Azure Arc VM entirely on-premises
- Guided workflow in Azure Migrate



Learn more at aka.ms/AzureLocal/Migrate

Is Azure Local Ready for you?

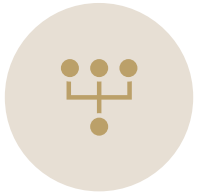
Supports modern VM workloads (Windows/Linux), containers, and AKS on Azure Local.

Azure Arc enables centralized policy, monitoring, security, and automation across environments.

Comparable to VMware with easier SDN configuration via Azure services; no NSX learning curve.

Uses Storage Spaces Direct with support for SMB, iSCSI, and Azure Blob integration.

Built-in integration with Microsoft Defender, Just-in-Time VM access, and compliance policy enforcement.



Well-suited for branch and disconnected deployments with offline management capabilities.

Some enterprise-grade features like DRS-like load balancing still maturing.

Growing, but not yet as broad as VMware's long-established vendor integrations.

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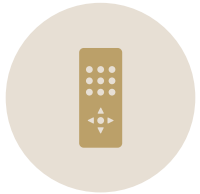
Azure Local May Be Right for You If...

You want to modernize infrastructure while maintaining on-premises control.

You're invested in Azure or Microsoft-based services already.



You're managing remote sites, edge environments, or need offline resilience.

You're looking to simplify SDN and storage management without steep learning curves.

You want to reduce reliance on traditional VMware licensing and pricing models.

You can handle a platform evolution and aren't dependent on VMware-exclusive tools.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