



Azure Stack HCI

An adaptive cloud realization of distributed compute with low latency and central cloud management

Updated January 2024

Agenda

-
- Accelerating transformation
 - Microsoft adaptive cloud approach
 - What is Azure Stack HCI and what it's used for
 - Security overview
 - What's new in the latest Azure Stack HCI release
 - Generally Available: Azure Virtual Desktop for Azure Stack HCI
 - Customer momentum
 - Hardware form factors
 - Licensing and how to buy Azure Stack HCI
 - Resources

Accelerating transformation



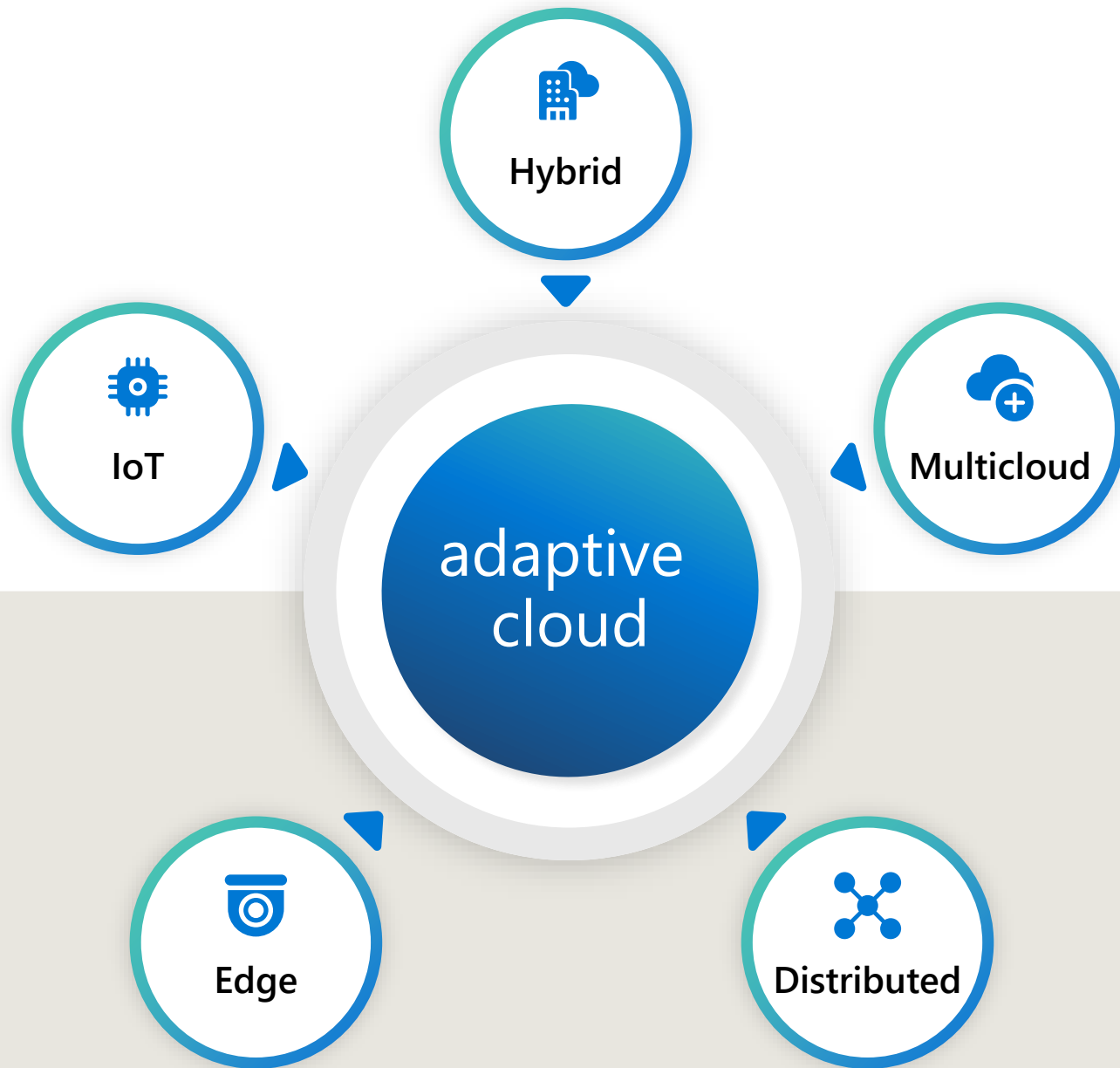
Get control of
sprawling strategies



Foster IT, Dev, and OT
collaboration



Maximize new and
existing investments



Advancing **hybrid** cloud to **adaptive** cloud

Thrive in dynamic environments by unifying teams, sites, and systems across hybrid, multicloud, edge, and IoT.



adaptive
cloud



Operate with AI-enhanced
central management & security

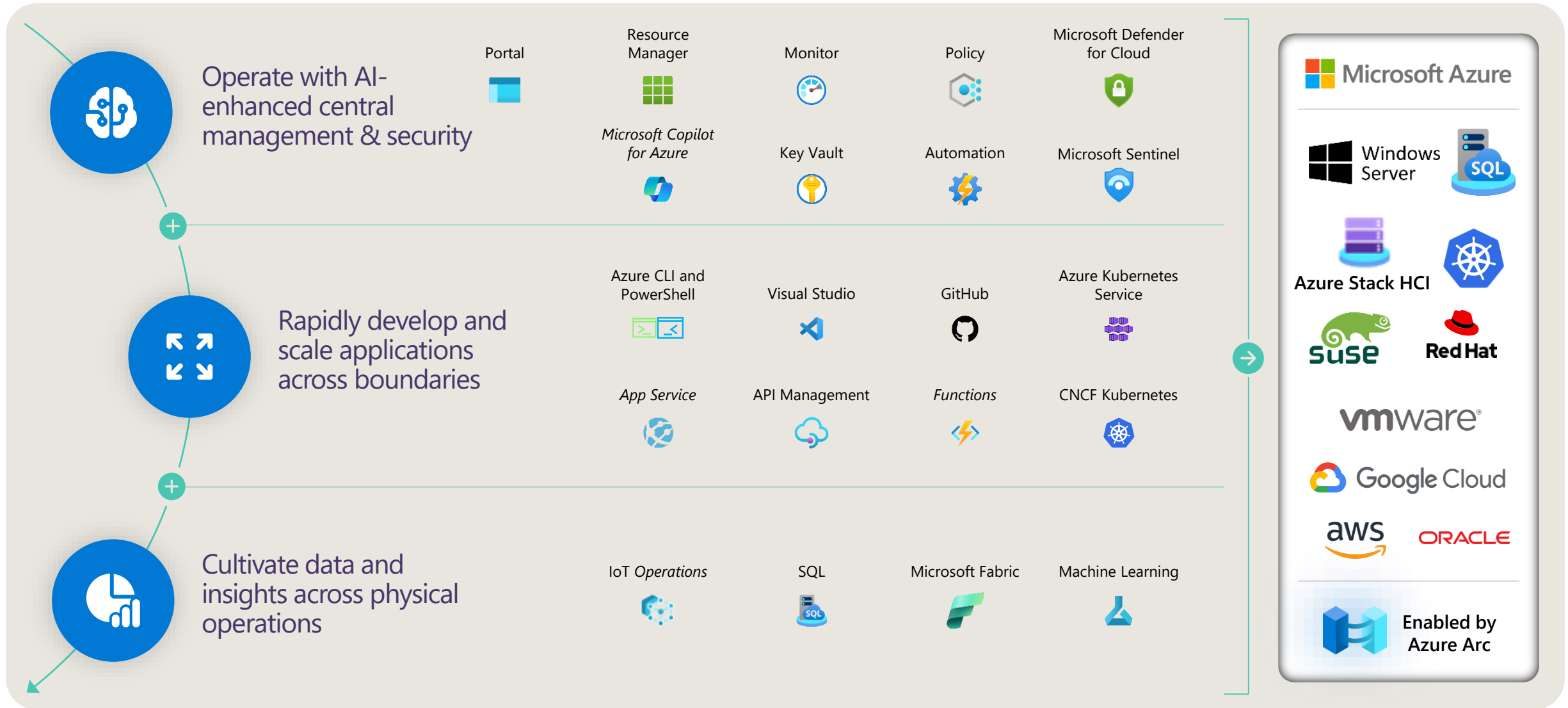


Rapidly develop and scale
applications across boundaries



Cultivate data and insights
across physical operations

Enabling adaptive cloud with Azure Arc



*Preview

An adaptive cloud strategy with cloud native drives innovation and growth

Organizations that harness data, the cloud, and AI outperform their peers¹

~**2x** operating margin

\$100M additional operating income



50%

Developer efficiency



Speed

Deploy in minutes



Cost

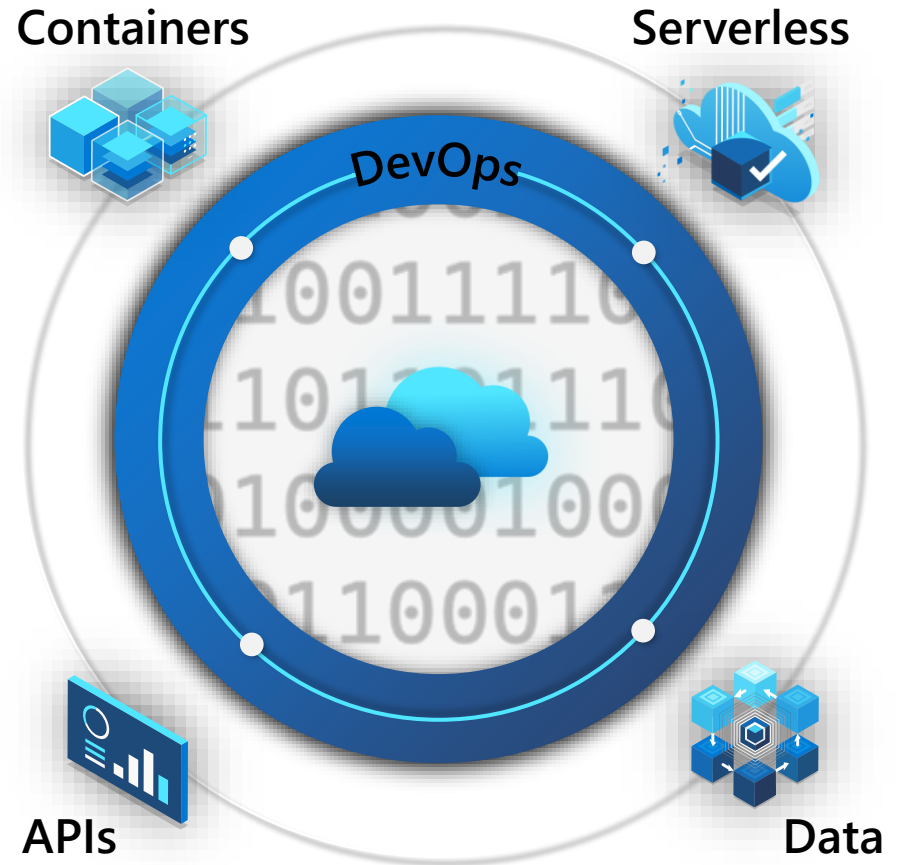
Infrastructure

What is cloud-native?

Scale to meet any demand

Achieve greater resiliency

Deliver better apps faster



Azure cloud-to-edge infrastructure

Connect, manage and operate on any infrastructure with consistent and familiar tools



Reach

Windows and Linux
VM and bare metal
At scale searchable
inventory



Configure

Consistent VM extensions
Centralized agent
management—
monitoring, security,
update management



Govern

Built-in Azure policies
Compliance across
environments
Audit and enforce
OS settings



Secure

Azure Active Directory
Managed Identity
Server security baselines
Role-based access control

Azure Stack HCI

What is it and what is it used for?

Azure Stack HCI

Modern infrastructure to deploy cloud native solutions anywhere



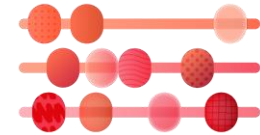
Cloud native
anywhere



Secure and run all
workloads from
cloud to edge



Familiar
management and
operations



Deploy with flexible
options at the right
price/performance
point

When to use Azure Stack HCI

Distributed compute anywhere for low latency with central cloud management



Affordably run intelligent edge and remote branch office solutions



Industry-best performance for SQL Server databases



Deploy cloud native apps and Azure Arc enabled services through tight integration with AKS on-prem



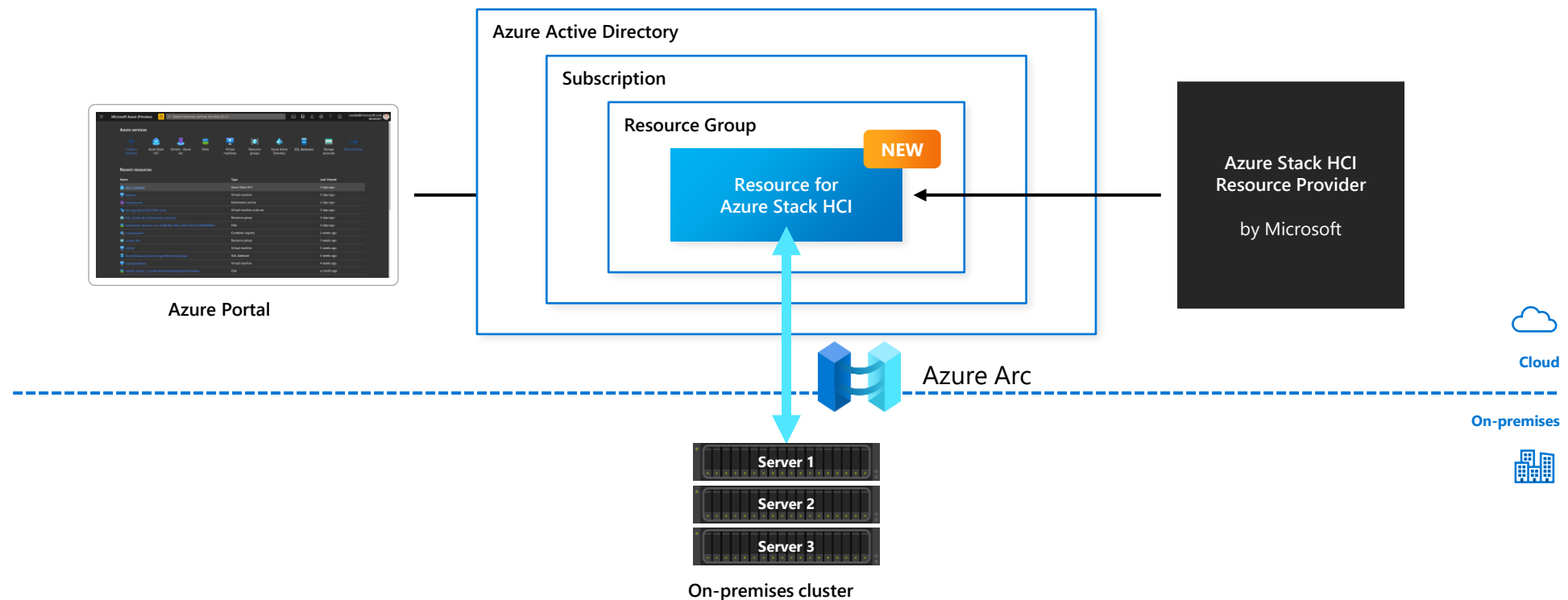
Best in class virtual desktop experience with Azure Virtual Desktop for Azure Stack HCI

Simplify hybrid with native Azure integration

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

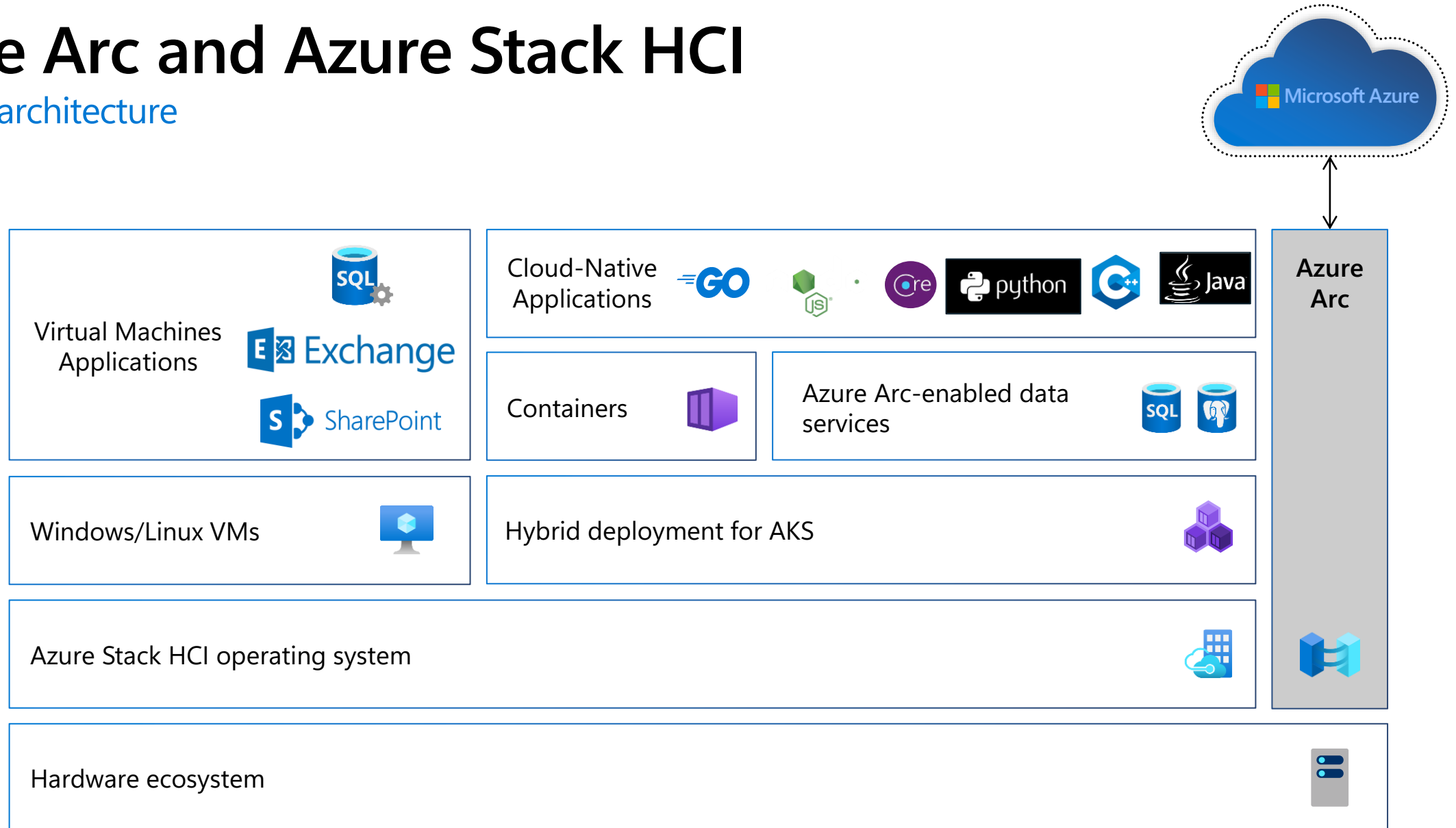
Visibility in the Azure portal and foundation for hybrid management

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



Azure Arc and Azure Stack HCI

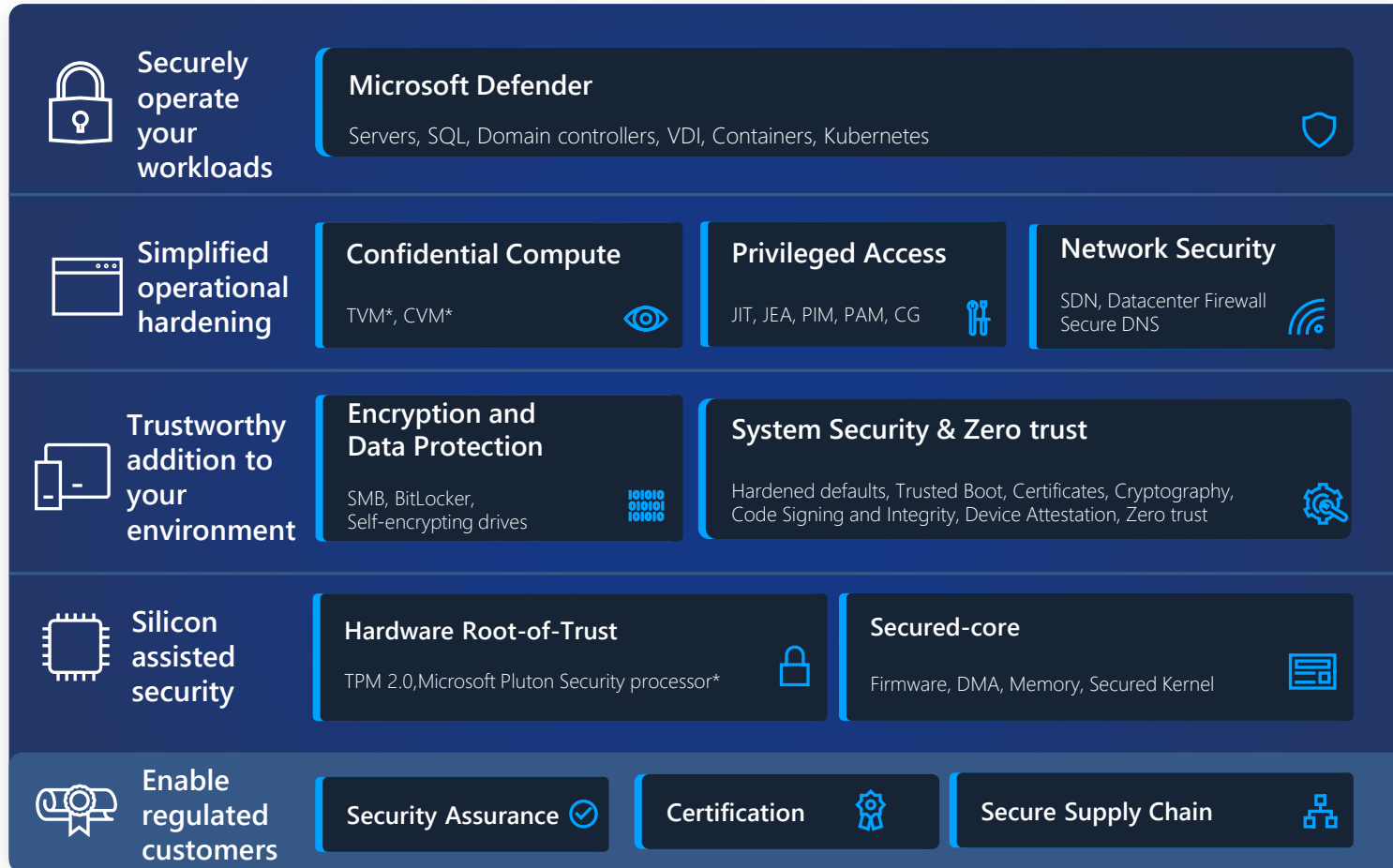
Platform architecture



Azure Stack HCI

Security Overview

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 Stack HCI security 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.

Azure Stack HCI

New Feature Release Overview

**Now
Available**

What's new

1. Simpler, repeatable deployment
2. Update management
3. VM extensions including Microsoft Defender for Cloud
4. New Site manager construct in Azure Arc to help organize resources
5. Improvements to core stack and hypervisor
6. Stronger security posture
7. Support for Azure Virtual Desktop for Azure Stack HCI production workload

Generally Available Now
Azure Virtual Desktop for Azure Stack HCI

Azure Virtual Desktop for Azure Stack HCI now generally available



- Designed for customers who need **secure on-premises virtualized apps and desktops**
- Combines the **benefits of Azure Virtual Desktop and Azure Stack HCI**
- Customers can **deploy in their datacenters to extend their on-premises infrastructure** to Azure
- All while enjoying many of the **key benefits of Azure Virtual Desktop on Azure**, such as **Azure portal, Windows 11 and Windows 10 multi-session**



Customer momentum

Azure Stack HCI customer momentum



“Our Azure Stack HCI deployment has delivered a savings of roughly £400,000 a year on power and cooling alone compared with the C7000 blades we were running.”

**Scott Robertson,
Principal Enterprise
Architect for
Foundation Technology
Co-op Group**

[Read the story](#)



“Tapping into Azure, we now have a very Rolls Royce kind of system for a similar cost to what we were paying for the average family car.”

**Gavin Lacey, Group
Chief Operating Officer
CHPK Property and
Construction
Consultants**

[Read the story](#)



“We wanted to manage our whole environment with a single solution. That’s what we got with Azure Stack HCI—the flexibility to run workloads in the cloud or on-premises and decide at each moment where we want our resources.”

**Marc Colman, IT
Infrastructure Manager
Picanol Group**

[Read the story](#)



“By moving to Azure Stack HCI, we’ve gone from three full racks of hardware down to less than half a rack. We had a big, power-hungry infrastructure before, but now we can run more efficiently and cost-effectively.”

**Ewan Campbell,
Technical and Delivery
Lead Officer
Fife Council**

[Read the story](#)



“We’ve verified energy savings and reduced our carbon footprint since deploying Azure Stack HCI, which is not only a cost saving for our company—it’s important sustainability legislation that we must follow.”

**Roland Reiter: Chief
Information Officer
Franz Morat Group**

[Read the story](#)

Hardware form factors

The image features a solid blue background. A thick orange line curves from the bottom left towards the center. A thick pink line curves from the center towards the top right. At the bottom, there is a gradient of colors from purple to blue.

Multiple form factors from various partners for any environment



Remote Office Branch Office

Tower form factor-for no rack environments



Edge computing scenarios

Super small footprint for edge scenarios-can be ruggedized



Datacenter modernization

Industry rack mounted servers in various height-for datacenter modernization



Workload flexibility

Composable architecture and blade server for ultimate in provisioning and workloads flexibility

Azure Stack HCI Solution Categories



Premier Solutions

Turnkey Azure Stack HCI 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 Stack HCI Catalog](#) to discover the current hardware solutions available to fit your edge needs

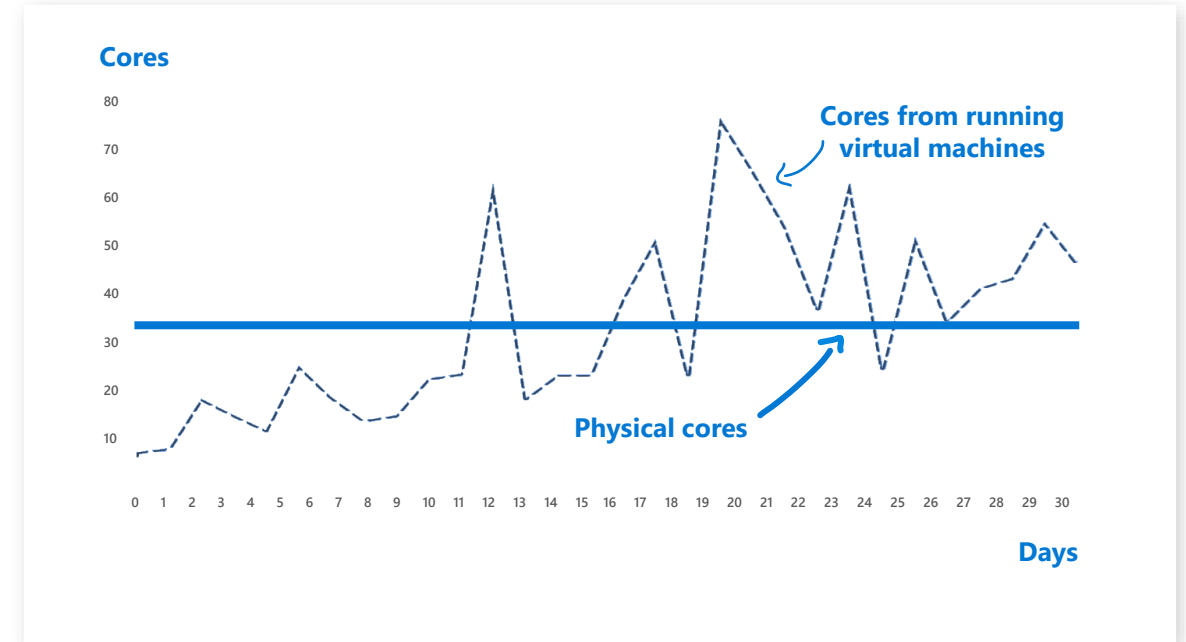
Licensing

The image features a solid blue background. A thick orange line starts from the bottom left and curves upwards and to the right. A thick pink line follows a similar path, starting from the bottom left and curving more sharply to the right. At the bottom of the image, there is a horizontal gradient from purple on the left to blue on the right.

What does Azure Stack HCI charge for?

USD \$10/month
per physical processor core*

**Does not include Guest OS licensing*



Predictable

Doesn't vary with consumption, more VMs doesn't cost more



Simple

No math with memory, storage, or network ingress/egress



Efficient

Virtualize efficiently, with higher v-to-p density

Azure Stack HCI delivers simplicity and flexibility for licensing aka.ms/azurestackhcupricing



What you want to run:

Linux applications
Open-source software

What you buy:

OEM HW

+

Azure Stack HCI

Nothing else from Microsoft
See provider if fees apply



What you want to run:

A few Windows Server
roles or applications
persistent licensing

What you buy:

Validated OEM HW

+

Azure Stack HCI

+

Windows Server 2022
Standard(s)



What you want to run:

Unlimited Windows Server
roles or applications
persistent licensing

What you buy:

Validated OEM HW

+

Azure Stack HCI

+

Windows Server 2022
Datacenter



What you want to run:

Unlimited Windows Server
roles or applications
guest subscription licensing

What you buy:

Validated OEM HW

+

Azure Stack HCI

+

Latest Windows Server
subscription guest licensing

Host:
Subscription

Guest:
Perpetual or
subscription

Expanding Azure Hybrid Benefits to the edge

Each 16-core license covers:



Windows Server 2016

+

Software Assurance

On-prem



Windows Server ++

OR

Latest




AHB for Azure Stack HCI

Exchange for Azure Stack HCI cores

+

Cloud




AHB for Azure

Reduced WS VM pricing (base compute only) for either:

- 2 instances of <8 cores
- 1 instance of <16 cores

+

Containers



AHB for AKS

16 vCPU of AKS on either:

- Azure Stack HCI
- Windows Server

Latest

What are the benefits for Azure Stack HCI?

1 core license entitles you to use 1 physical core of HCI at no additional cost

What licenses are eligible?

Windows Server Datacenter 2016 or later with active Software Assurance

(Note for AKS-HCI/WS: either Standard/DC)

Are existing deployments eligible?

Yes!

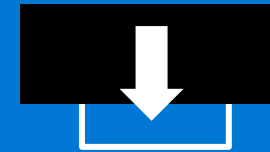
How to try Azure Stack HCI



Buy a validated hardware solution from a trusted partner or check with your solution provider if existing hardware can be supported

[Browse solutions](#)

AND



Install Azure Stack HCI software with a free 60-day trial

[Download software](#)

Please note:

1. An Azure subscription is required to complete the full set-up on your server hardware
2. Integrated systems (and some validated nodes) come with Azure Stack HCI software pre-installed

Microsoft Learning Paths

Learn new skills and discover the power of Azure Stack HCI with step-by-step guidance



[Azure Stack HCI Foundations](#)

Modules:

- [Introduction to Azure Stack](#)
- [Introduction to Azure Stack HCI core technologies](#)
- [Plan and deploy Azure Stack HCI](#)
- [Integrate Azure Arc and Azure Stack HCI](#)



[Operate and Maintain Azure Stack HCI](#)

Modules:

- [Manage Azure Stack HCI clusters](#)
- [Integrate Azure services with Azure Stack HCI](#)
- [Manage Azure Stack HCI virtual machine workloads](#)
- [Manage Azure Kubernetes Service on Azure Stack HCI](#)



[Advanced learn modules for administrators](#)

Modules:

- [Implement Datacenter Firewall and Software Load Balancer on Azure Stack HCI](#)
- [Plan for and deploy SDN infrastructure on Azure Stack HCI](#)

Resources

Read

Azure Stack HCI Product Page azure.com/hci

Azure Stack HCI Security Book aka.ms/ashcisecuritybook

Azure Arc-enabled Infrastructure on Intel Whitepaper aka.ms/arcinfraonintelwhitepaper

Azure hybrid solutions sustainability Whitepaper aka.ms/hybridsustainabilitywp

Azure hybrid solutions sustainability infographic aka.ms/hybridsustainabilityinfographic

Secure your hybrid cloud with Intel Whitepaper aka.ms/securehybridcloudwhitepaper

Secure your hybrid cloud with Intel infographic aka.ms/securehybridcloudinfographic

Watch

Extend your cloud with Azure Stack HCI (youtube.com)

Azure hybrid solutions sustainability aka.ms/hybridsustainabilityvideo

Security [Securing Azure Stack HCI with Azure Defender & Secured-core](#)

Demo: [Retail Edge Transformation with Azure Hybrid](#)

Azure Virtual Desktop for Azure Stack HCI [Azure hybrid updates - YouTube](#)

Product tour of Azure Stack HCI using WAC aka.ms/deployhciwithwac

Disaster Recovery with Stretch Clustering aka.ms/stretchclustervideo

Technical roadmap feature videos [Kernel Soft Reboot](#) [Every Node Arc-Enabled](#) [Intent Driven Networking](#) [GPU Management](#) [Multi-cluster Monitoring](#) [Automatic Virtual Machine Activation](#)

Do

Download the free Azure Stack HCI 60-day trial aka.ms/hci-download-sw

Get started with the Azure Stack HCI Trial aka.ms/evaluate-hci

Visit Tech Docs to see how it all works aka.ms/hci-docs

Visit the Azure Stack HCI Catalog aka.ms/azurestackhccatalog

Visit the Azure Stack HCI SI partner catalog to find partners for deployment support aka.ms/arcsi

Get training:

[Azure Stack HCI foundations - Learn | Microsoft Docs](#)

[Operate and maintain Azure Stack HCI - Learn | Microsoft Docs](#)

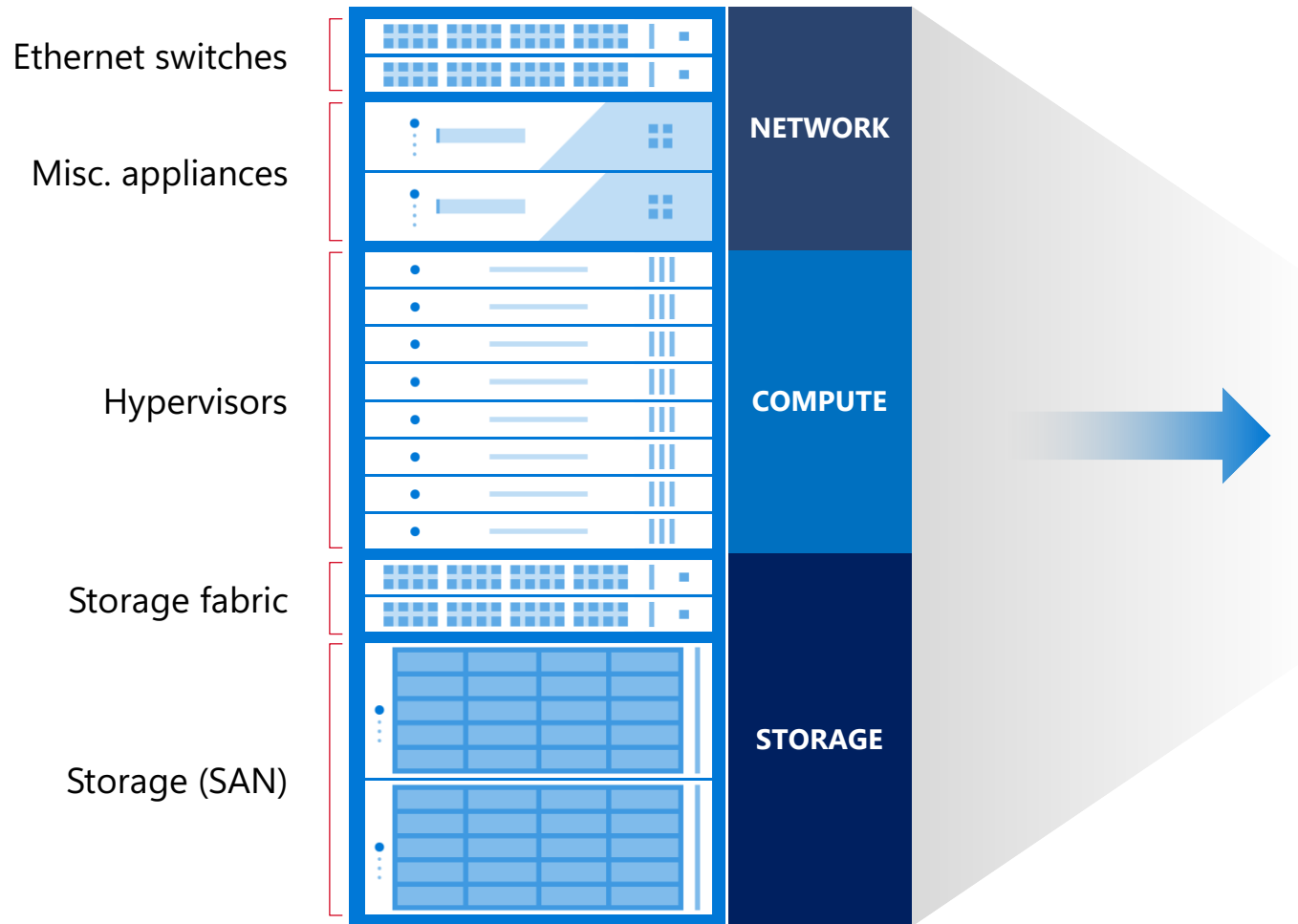
[Azure Arc-enabled Infrastructure Technical Event Series - Events | Microsoft Learn](#)



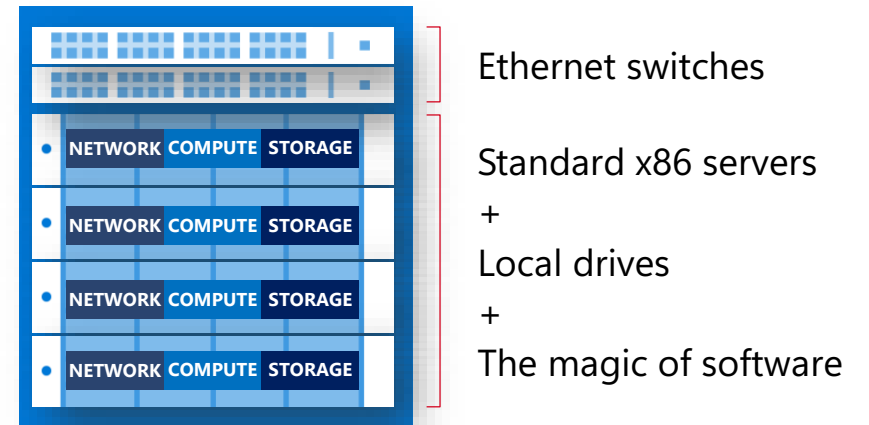
Thank you

Azure Arc-enabled infrastructure leverages hyperconvergence

Legacy "three tier" infrastructure



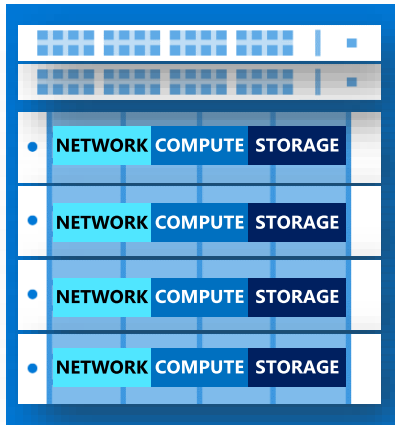
Hyperconverged infrastructure (HCI)



HCI is a software-defined, unified system that combines all the disparate and siloed elements of a traditional datacenter

HCI: proven, popular way to enable hybrid cloud

Hyperconverged infrastructure (HCI)



- Eases migration of data, VMs, and workloads
- Offers agility for digital transformation
- Software-defined HCI supports flexible deployment & unified management across on-premises & public cloud sites