Microsoft

Azure Arc

Innovate anywhere with Azure

Customer aspirations

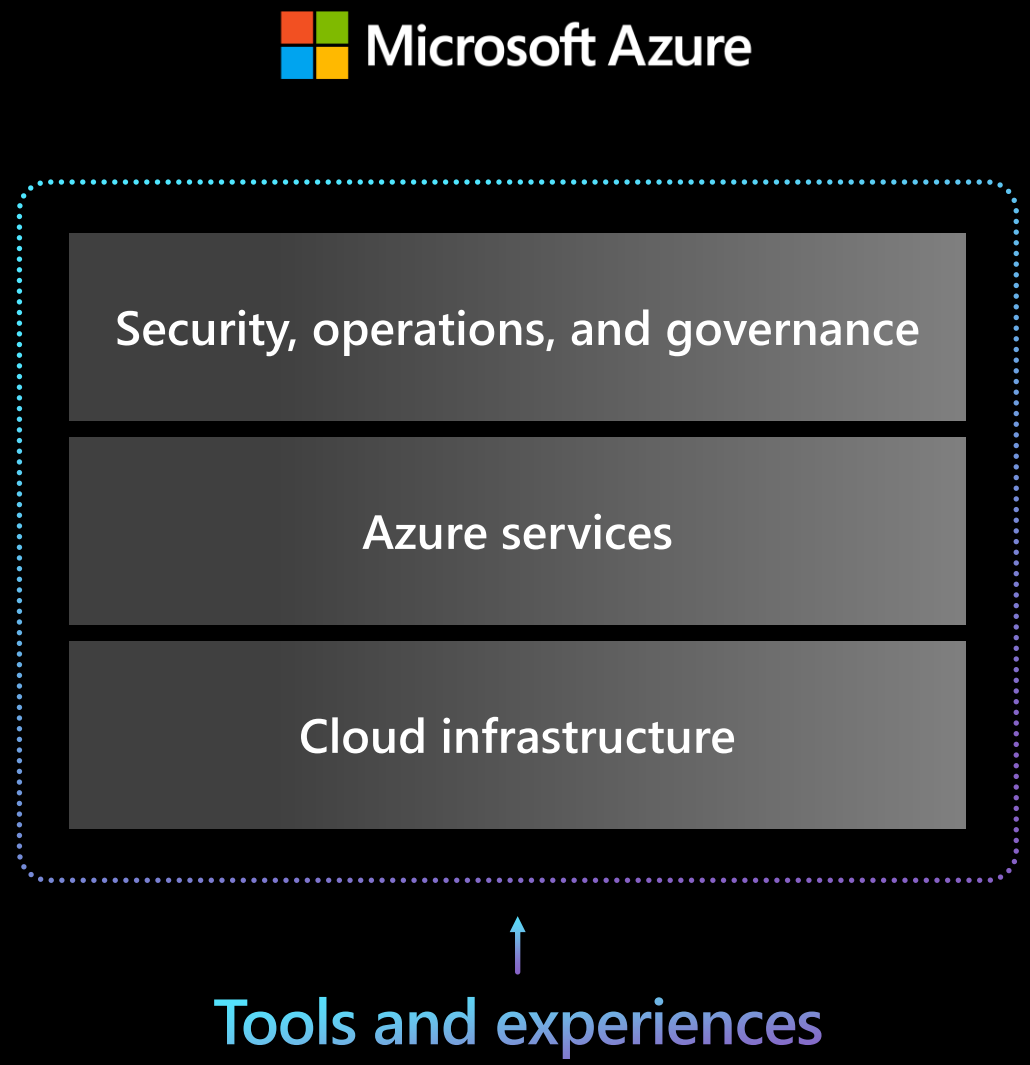
- Accelerate application development

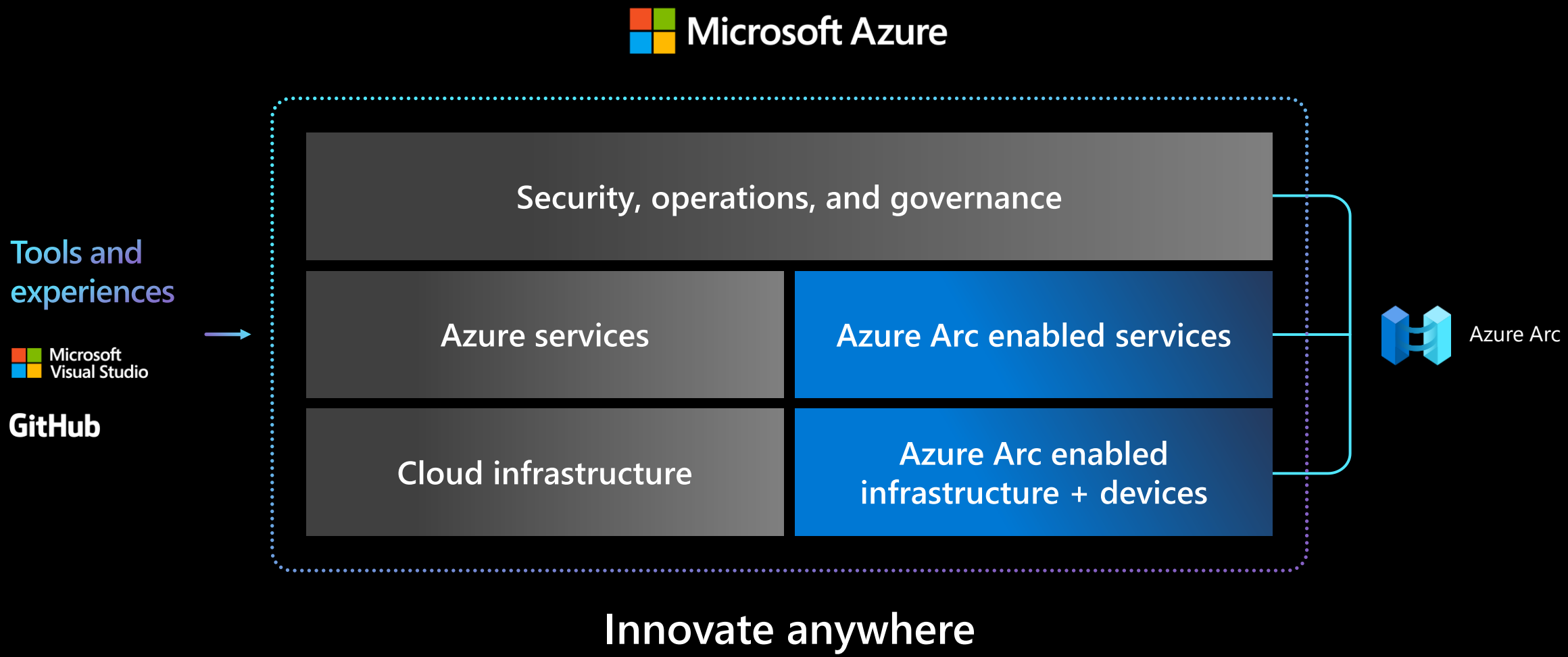
- Secure and govern distributed digital estate

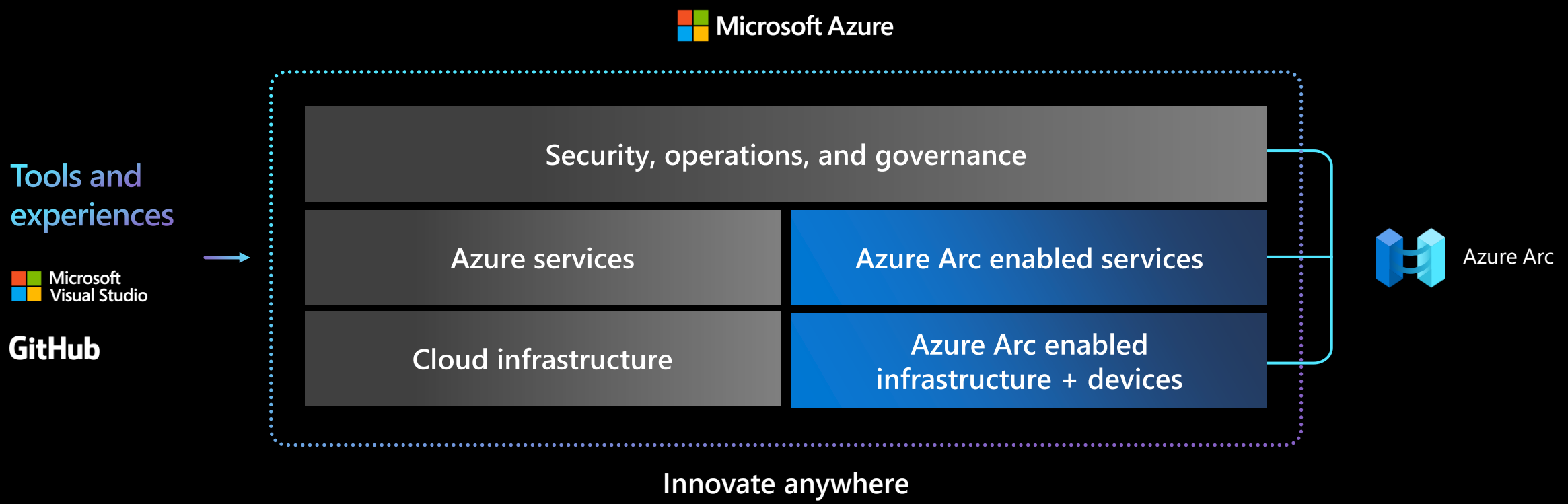
- Deliver products as a service

- Transform data into new products

- Meet changing regulations


Microsoft Azure
Security, operations, and governance
Azure services
Cloud infrastructure
Tools and experiences


Microsoft Azure
Security, operations, and governance
Tools and experiences
Microsoft Visual Studio
GitHub
Azure services
Azure Arc enabled services
Cloud infrastructure
Azure Arc enabled infrastructure + devices
Azure Arc
Innovate anywhere



Cloud regions

50+ Azure regions
Multicloud

Regional edge

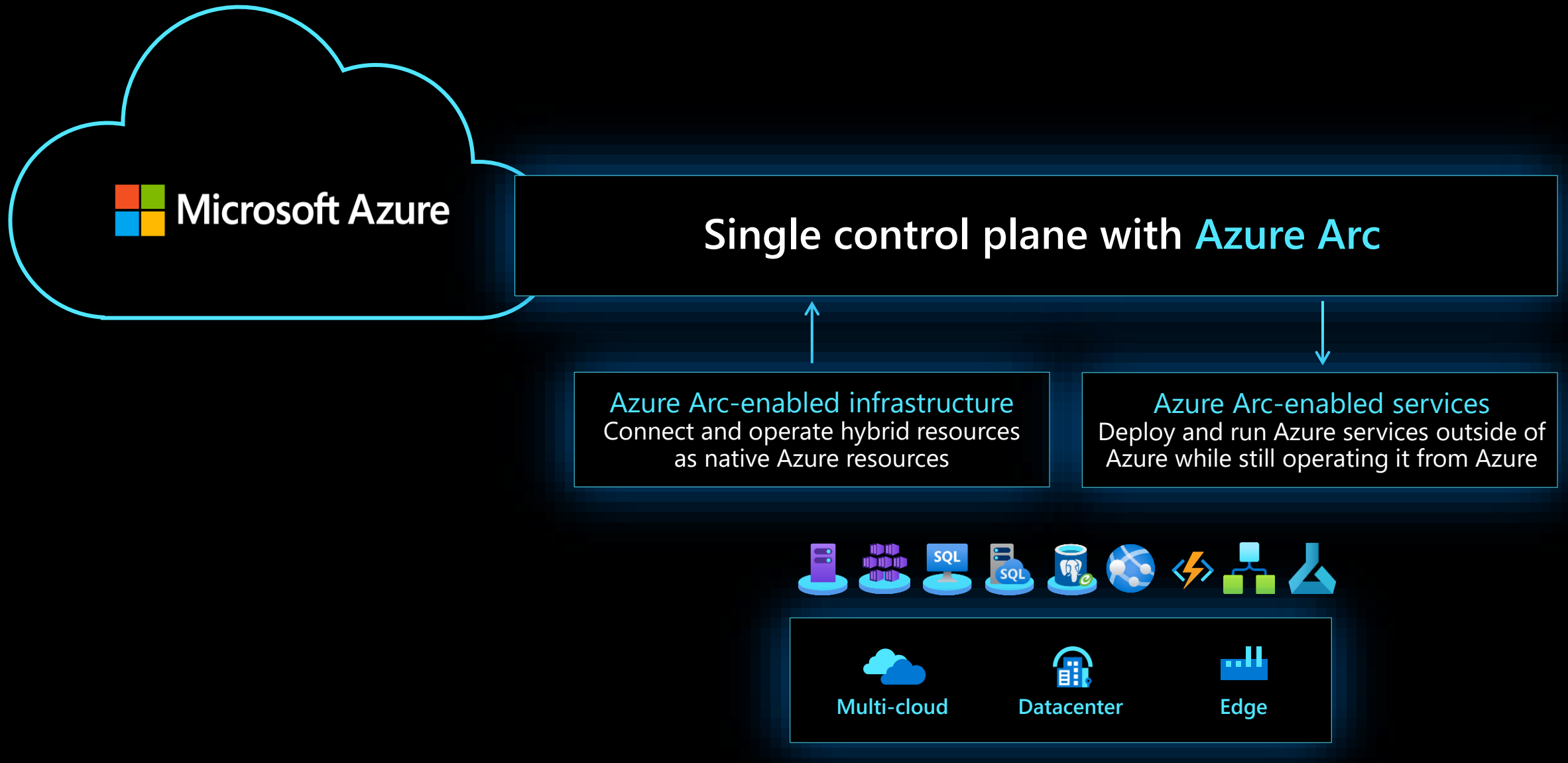
Operator DC
Co-Lo provider

IT edge

Customer DC
Branch office

IoT edge

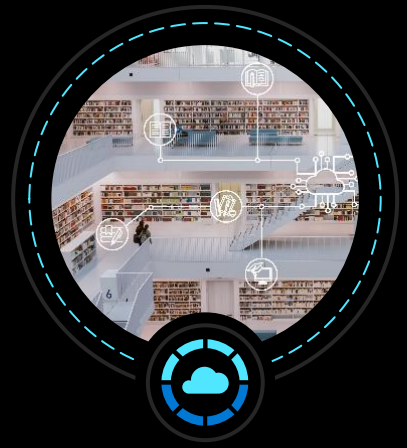
Factory floor
Retail store
Field production


Microsoft Azure
Single control plane with Azure Arc
Azure Arc-enabled infrastructure
Connect and operate hybrid resources as native Azure resources
Azure Arc-enabled services
Deploy and run Azure services outside of Azure while still operating it from Azure
SQL
SQL
Multi-cloud
Datacenter
Edge

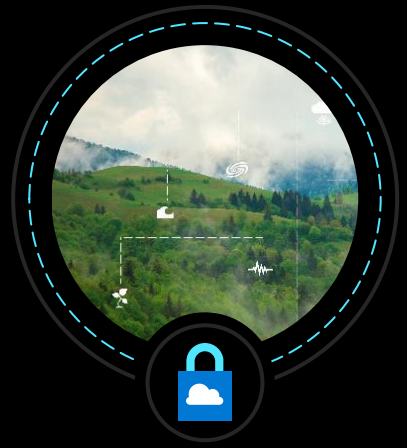
Innovate anywhere with Azure

Azure Arc

Develop cloud native, operate anywhere



Harness data insights from cloud to edge

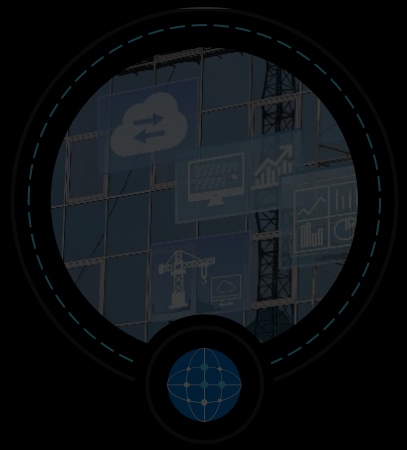


Secure and govern across environments

Flexibly meet regulatory and connectivity needs

Innovate anywhere with Azure

Azure Arc



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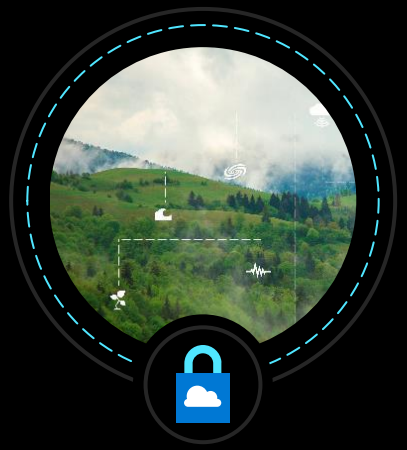


Secure and govern across environments

Flexibly meet regulatory and connectivity needs

Secure and govern across environments

Harden your Security Posture, detect threats to protect your workloads

Monitor your infrastructure and applications end-to-end to proactively detect, diagnose and resolve issues

Conform to key compliance standards and enforce organizational policies

Secure and govern across environments

Harden your Security Posture, detect threats to protect your workloads

Monitor your infrastructure and applications end-to-end to proactively detect, diagnose and resolve issues

Conform to key compliance standards and enforce organizational policies

Microsoft Defender for Cloud

Microsoft Sentinel

Azure Monitor

Azure Policy

Azure Arc-enabled servers

Azure Arc-enabled SQL servers

Azure Arc-enabled VMware vSphere VMS

Azure Arc-enabled Kubernetes

Azure Stack HCI

On-premises, multicloud, and edge

Azure IoT

Azure Arc-enabled servers

GENERALLY AVAILABLE

Bring Azure capabilities to your on-premises and multicloud servers with Azure Arc

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

Any infrastructure, familiar tools

Azure hybrid data manageability for SQL Server

Manage, govern, and protect your SQL Server from Azure

Manage all your SQL estate using Azure

- **Single view** of all SQL Servers deployed on-premises, in Azure and other cloud
- **Fully automated technical assessment** for SQL Server – no additional cost

Control and govern your entire data estate

- **Central insights and governance** across all SQL Servers with Microsoft Purview
- Purview access policies readily available for SQL Servers on-premises

Protect all your data using Azure security

- Protect your on-premises data using **Microsoft Defender** for Cloud
- Secure identities with **Single Sign-On** and **Azure Active Directory***

Easy connection enabled by Azure Arc for existing SQL Servers without migration

**SQL Server 2022 required for Azure Active Directory. All other features supported on SQL Server 2012, 2014, 2016, 2017, and 2019.*

Azure Arc-enabled VMware vSphere PREVIEW

Provision and Manage VMware VMs from Azure using Azure Arc

Virtual Machine Lifecycle

Perform full lifecycle management such as create, resize, and delete on VMware VMs from Azure

Self-Serve Operations

Use Azure RBAC to enable teams and workload owners to provision and manage VMs on demand

Single Pane View

Browse your VMware VMs from your data centers and AVS along with your Azure VMs

Discover and onboard existing VMware VMs to Azure

Azure Management services

Perform governance, monitoring, update management, security at scale using rich Azure management services like Azure Monitor, Security Center and others

⟵ VMware vSphere environments hosted in your datacenter or on Azure VMware Solutions ⟶

Azure Arc-enabled Kubernetes

GENERALLY AVAILABLE

Connect, manage, and operate Kubernetes clusters and applications running anywhere using Azure Arc

AKS on Azure Stack HCI or Windows Server

Multiple 3P Kubernetes flavors supported

Deploy apps and configurations at-scale with GitOps

Secure, govern, and monitor all your clusters, from Azure

AKS

Kubernetes

OpenShift

EKS

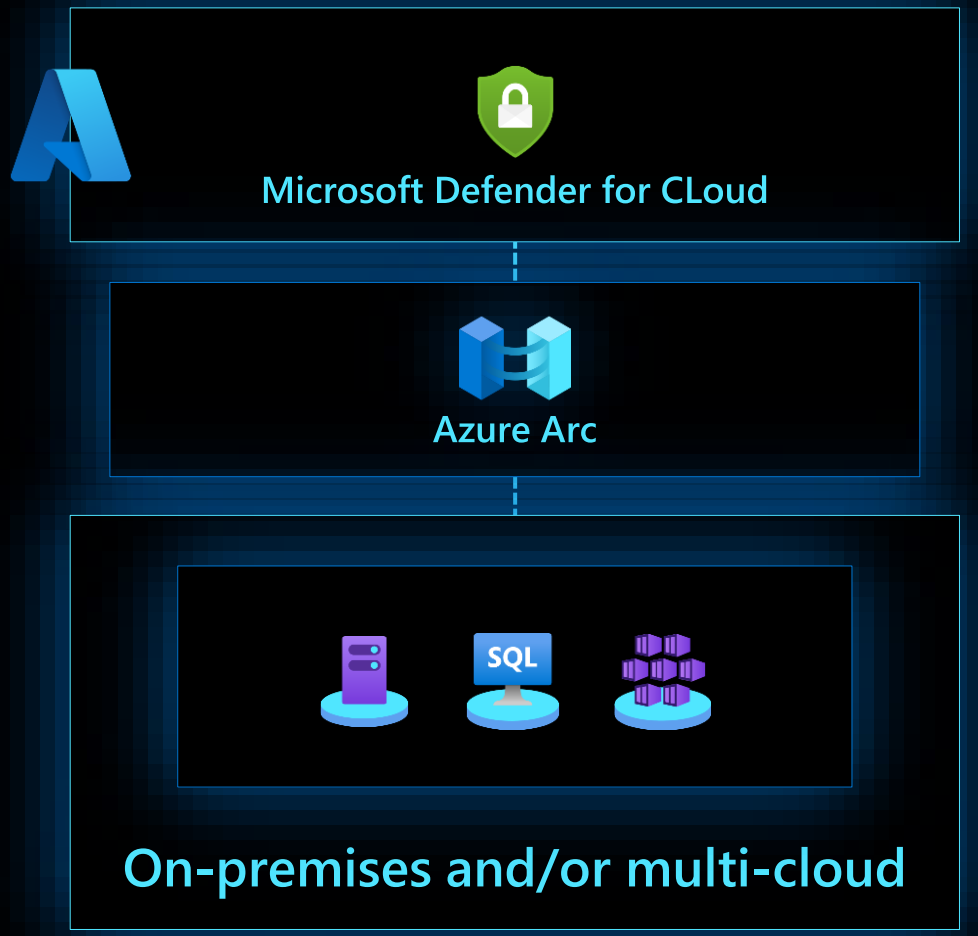
GKE

VMware Tanzu

Microsoft Defender for Cloud

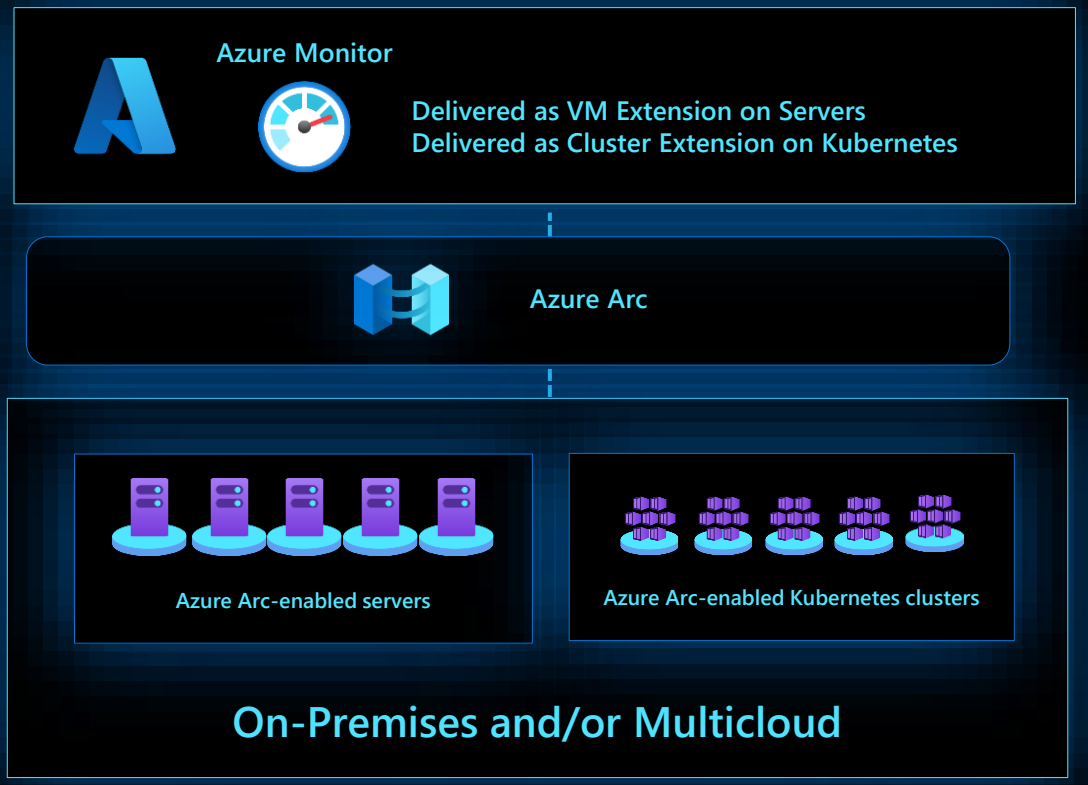
Assess, secure, and defend your hybrid and multicloud workloads

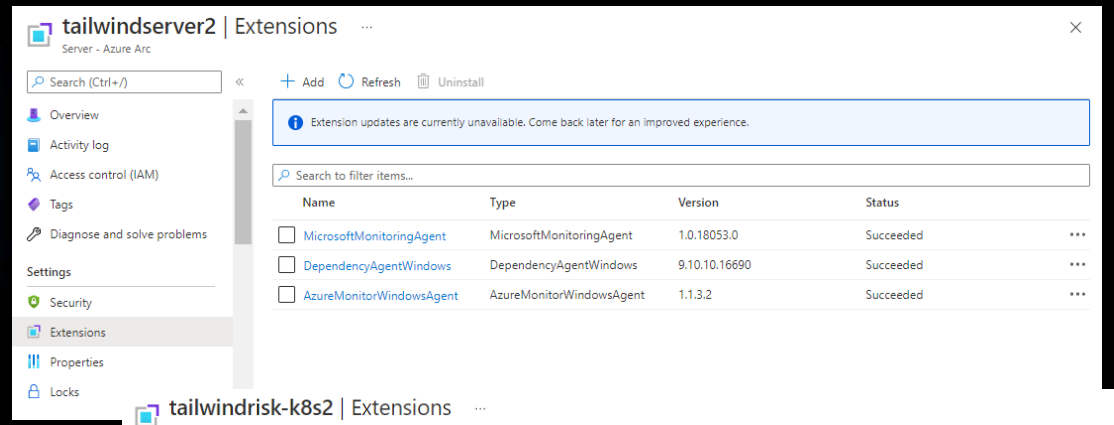
- **Continuously assess.** Understand your current security posture, identify and track vulnerabilities. Get a bird's eye-view of your security posture with Secure Score
- **Secure.** Harden connected resources and services by following customized and prioritized recommendations with Azure Security Benchmark
- **Defend.** Detect and resolve threats to those resources and services. With prioritized **security alerts**, focus on what matters the most and surface to the right audience

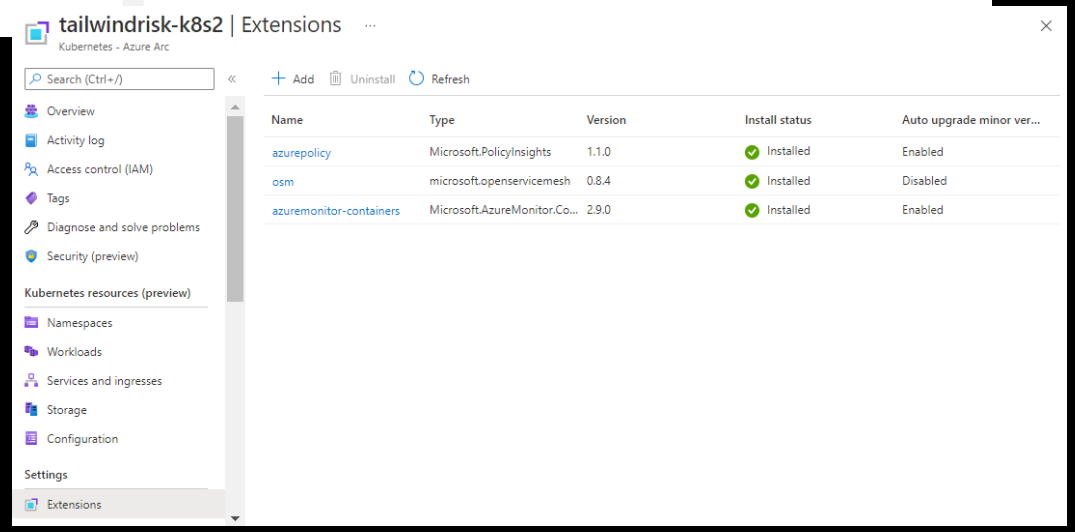


Deploy Azure Monitor seamlessly

Use VM and Cluster Extensions to easily deploy to Servers and Kubernetes anywhere





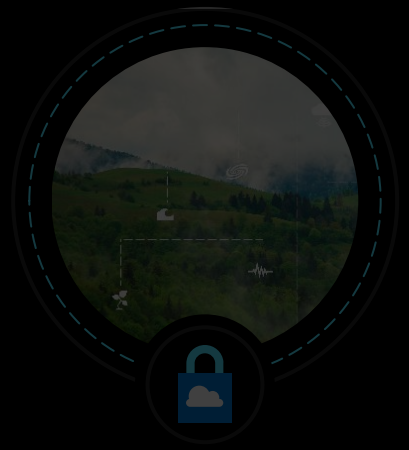


Innovate anywhere with Azure

Azure Arc

Develop cloud native, operate anywhere

Harness data insights from cloud to edge



Secure and govern across environments

Flexibly meet regulatory and connectivity needs

Develop cloud native, operate anywhere

Build and modernize to cloud-native apps on any Kubernetes

Bring cloud data management to any infrastructure

Consistent GitOps and policy driven deployment on any Kubernetes

Integrate Azure Security, governance and monitoring into your DevOps toolkit

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Azure Arc-enabled Kubernetes

Azure Arc-enabled SQL Managed Instance

Azure Arc-enabled PostgreSQL

Azure Stack HCI

vmware aws

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GKE

VMware Tanzu

Azure Arc-enabled data services

Bring cloud data management to any infrastructure

GENERALLY AVAILABLE Azure Arc-enabled SQL Managed Instance—Business Critical

PREVIEW Azure Arc-enabled PostgreSQL

Supports all connectivity modes

Always up to date
Automated updates
No downtime, evergreen

Multi-layer security
Comprehensive encryption
Azure RBAC & Policy

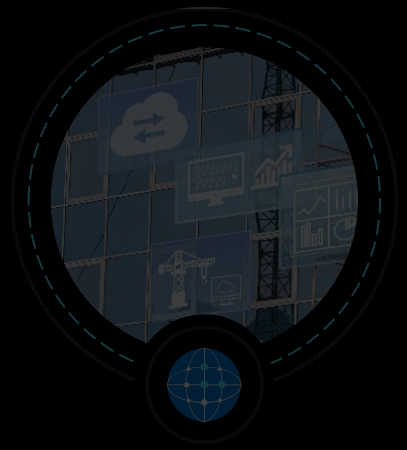
Elastic scale
Scale up and down
Pay for what you use

Simplified DevOps
Deploy in seconds
Built in HA/DR

Any infrastructure

Innovate anywhere with Azure

Azure Arc



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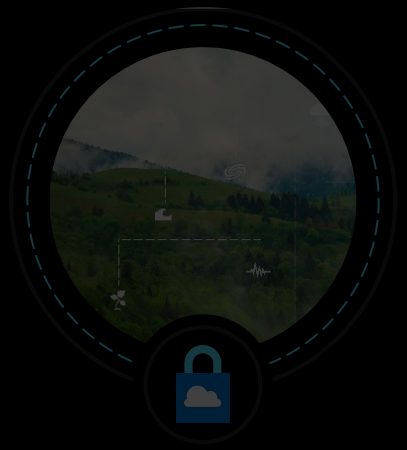


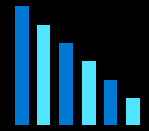
Secure and govern across environments

Flexibly meet regulatory and connectivity needs

Harness data insights from edge to cloud

Accelerate innovation via cloud data and AI capabilities to build next-gen apps and gain fast, continuous insights

Improve operational efficiency and reduce IT overhead through cloud automations and consistent management



Reduce risk exposure through integrated multi-layer security and data governance solutions

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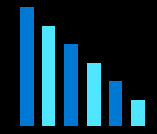

Reduce risk exposure through integrated multi-layer security and data governance solutions

Azure Arc-enabled SQL Managed Instance

Azure Arc-enabled PostgreSQL

Azure Arc-enabled Machine Learning

Azure Stack HCI

vmware

aws

On-premises, multicloud, and edge

Azure IoT

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Elastic scale
Scale up and down
Pay for what you use

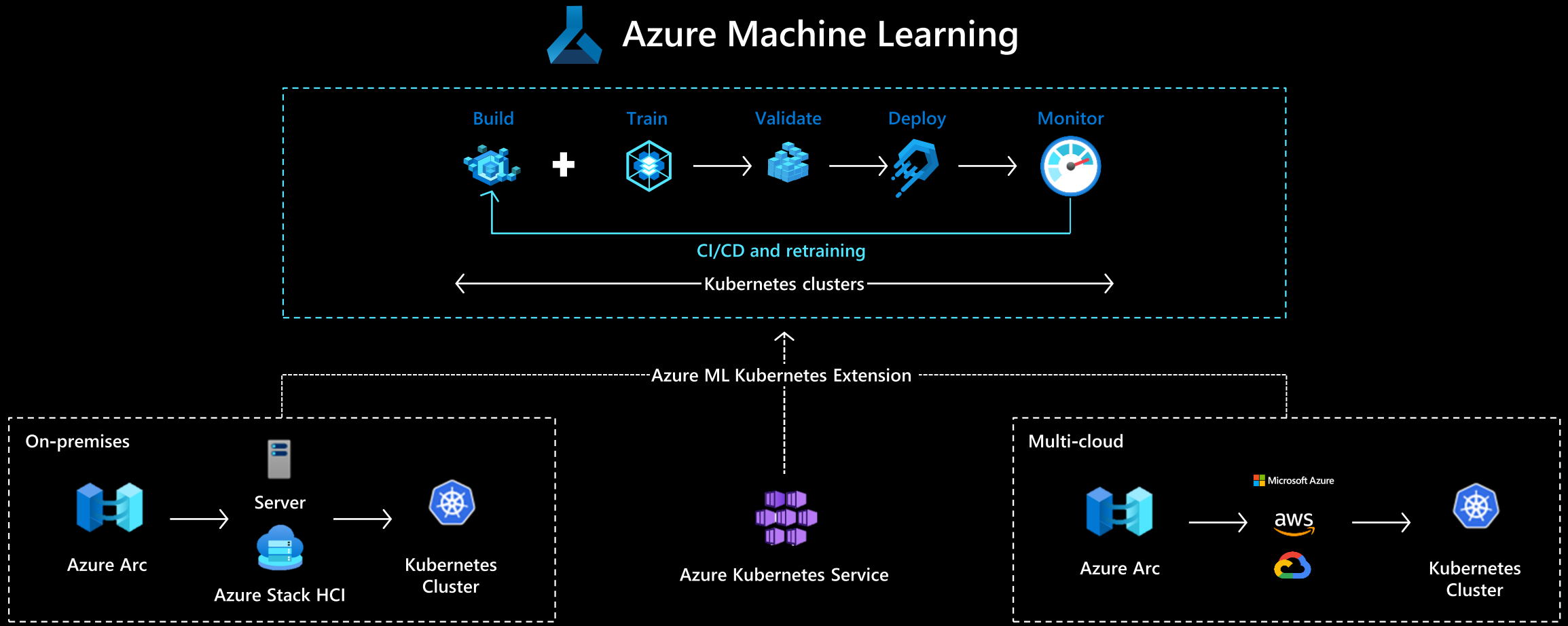
Simplified DevOps
Deploy in seconds
Built in HA/DR

Any infrastructure

Azure Arc-enabled machine learning

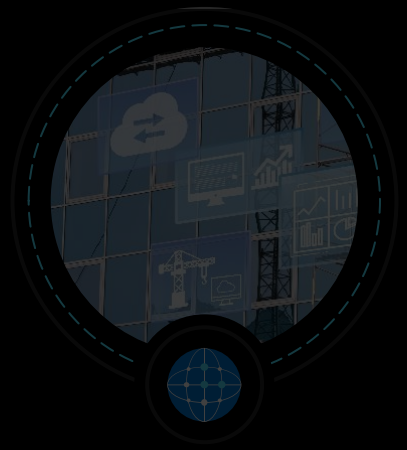
GENERALLY AVAILABLE

Bring fully operationalized machine learning to on-premises and multicloud



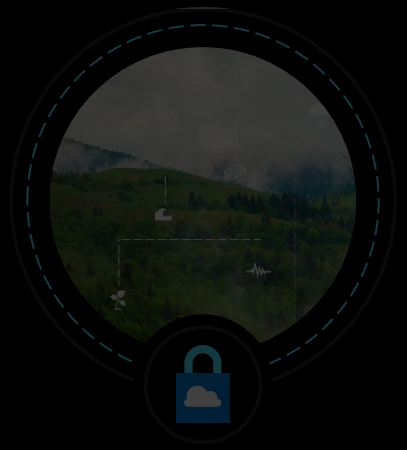
Innovate anywhere with Azure

Azure Arc



Develop cloud native, operate anywhere

Harness data insights from cloud to edge



Secure and govern across environments

Flexibly meet regulatory and connectivity needs

Flexibly meet regulatory and connectivity needs

Meet data residency and sovereignty

Simplify edge computing

Fully or intermittently connected

Flexibly meet regulatory and connectivity needs

Meet data residency and sovereignty

Simplify edge computing

Fully or intermittently connected

Azure Arc

Azure Stack HCI

vmware

aws

Azure IoT

Azure Private MEC

On-premises, multicloud, and edge

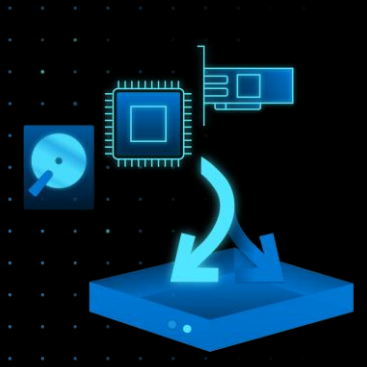
Azure Stack HCI

Modern subscription for flexible, familiar hyperconverged infrastructure

Azure hybrid by design

Enterprise scale and price performance

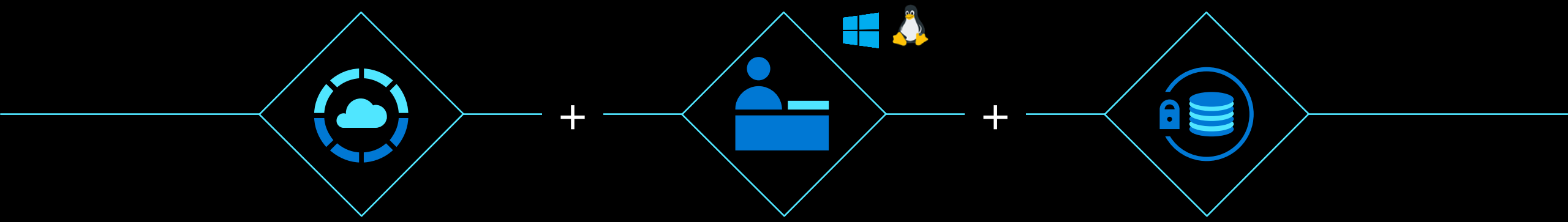
Familiar management and operations



Choice of deployment options

AKS on Azure Stack HCI and Windows Server

Familiar Kubernetes application platform available on Azure Stack HCI and Windows Server



Azure hybrid by design

AKS-consistent Kubernetes cluster management

Easy AKS deployment on Azure Stack HCI

Built-in Azure Arc capability

Best platform for .NET apps on-premises

Support for both Linux and Windows applications

Differentiated container solution for Windows

Local administration with Windows Admin Center

Built-in security

Secure and trusted platform

Single and consistent identity

Always up-to-date like Azure

Azure Virtual Desktop for Azure Stack HCI (preview)

Extending the benefits of cloud-managed VDI to on-premises

Modernize your app and virtual desktop infrastructure

Fully managed, cloud-hosted VDI management plane

Deliver Windows 10 to any device

Windows 10 and 11 Enterprise multi-session with seamless Microsoft Office and Microsoft Teams experience

Optimal performance with full control

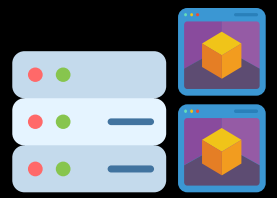
Direct access to local session hosts with RDP Shortpath

Centralized management for Azure Virtual Desktop

Azure Virtual Desktop | **Azure Virtual Desktop session hosts** | **End-user devices**

Centralized management from the Azure portal

Azure IaaS VMs



Azure Stack HCI VMs on-premises (preview)

Windows

macOS

Linux

HTML5

Azure Arc pricing model

Azure Policy—guest configuration
Azure Monitor
Azure Defender
Azure Sentinel
Backup
Log Analytics
GitOps management for Kubernetes
Application Insights
Config and Change Management

- SQL Managed Instance (preview, GA on 7/30)
- PostgreSQL Hyperscale (preview)
- Azure Machine Learning (preview)
- App Service, Functions, Logic Apps, APIM, Event Grid (preview)

Control plane functionality:
Tagging, management groups, activity logs, templates, Resource Graph, RBAC

*Pricing for Azure Arc-enabled services and additional management services is consistent with Azure pricing. Services are available at no cost during preview.

Azure Arc pricing details

		Azure Resource	Azure Arc Resource
Azure Arc control plane functionality (for both Arc-enabled servers and Kubernetes)	Onboarding, Resource organization in the Azure Portal, Tagging, Searching and Indexing, RBAC and Automation through Templates	Free	Free
Add-on management services (for both Arc-enabled servers and Kubernetes)	Azure Monitor, Azure Defender, Azure Sentinel	Refer to the pricing for the specific service in the Azure Pricing calculator	Priced similar to Azure resources. Refer to the specific service in the Azure Pricing calculator
Azure Arc-enabled servers	Azure Policy guest configuration (includes Azure Automation change tracking, inventory, state configuration)	Free	$6/Server/Month
Azure Arc-enabled Kubernetes	Kubernetes Configuration (GitOps)	N/A	First 6 vCPUs are free, $2/vCPU/month thereafter*
Azure Arc-enabled application services	App Service, Functions, Logic Apps, APIM, Event Grid	Refer to Azure pricing calculator	Free in preview. Pricing to be disclosed at GA
Azure Arc-enabled data services	SQL Managed Instance	Refer to Azure pricing calculator	Pricing varies by product tier. See next slide for details.
	PostgreSQL Hyperscale	Refer to Azure pricing calculator	Free in preview. Pricing to be disclosed at GA

*If the Arc-enabled Kubernetes cluster is on Azure Stack Edge, AKS on Azure Stack HCI (>=April 2021 update), or AKS on Windows Server 2019 Datacenter (>=April 2021 update), then the Kubernetes configuration is included at no charge. More information on this can be found on the docs page.

Thank you