

# DotNet 2021

ONLINE TECH CONFERENCE

22<sup>nd</sup> June 2021

#DotNet2021

## Living in the Edge



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# DotNet 2021

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#DotNet2021





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# Customer environments and application requirements are evolving

## Single control plane with **Azure Arc**

How to govern and operate across disparate environments?

How to ensure security across the entire organization?

How to best enable innovation and developer agility?

How to meet regulatory requirements and overcome technical hurdles?

### 100's–1,000's of apps



VMs



Databases



Containers



Serverless



### Diverse infrastructure



Datacenters



Hosters



Branch offices



OEM hardware



IoT devices



Edge

### Multi-Cloud



Microsoft Azure

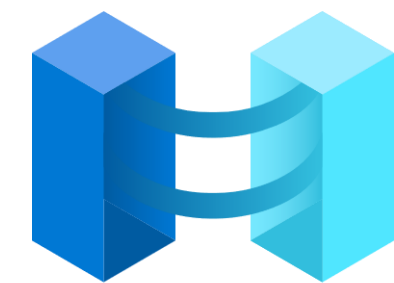


Google Cloud

ORACLE

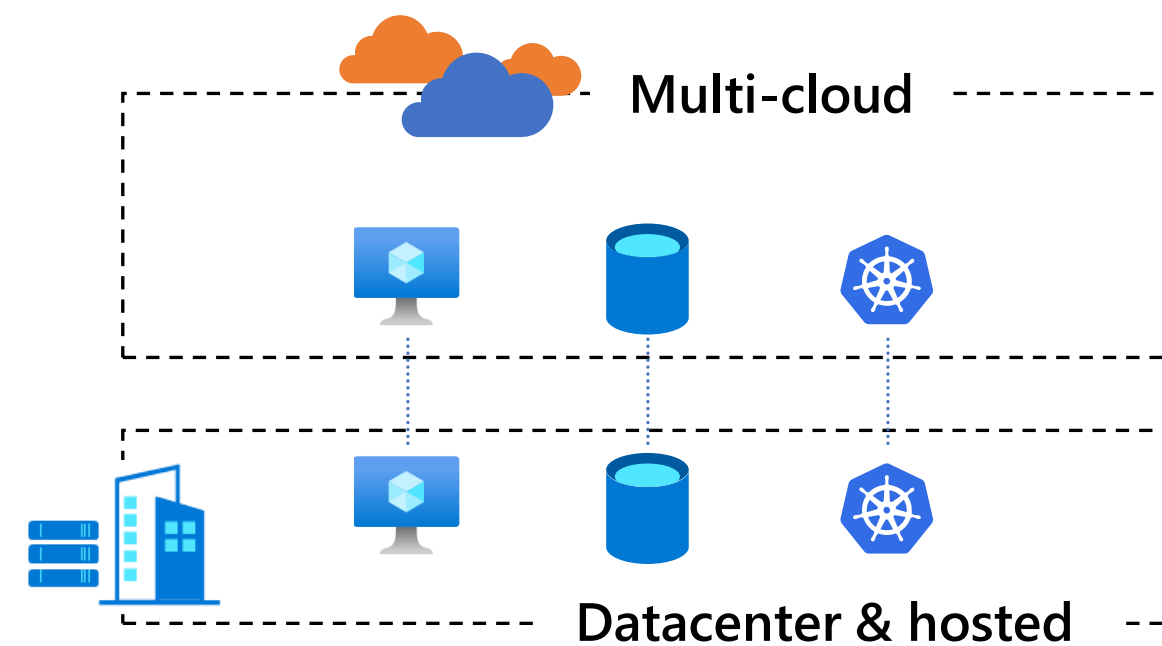


IBM Cloud

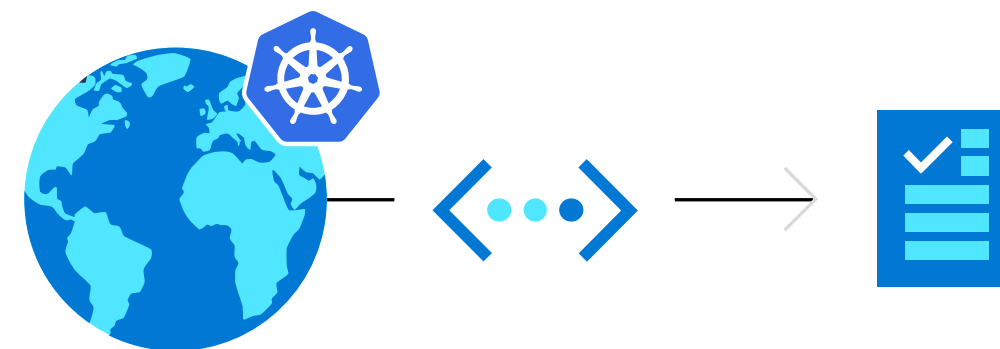


# Azure Arc

Extend Azure management and services anywhere



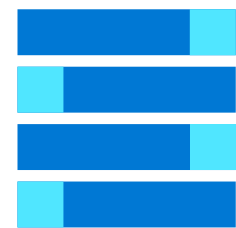
Gain central visibility,  
operations, and compliance



Build Cloud native apps  
anywhere, at scale



Run Azure data  
services anywhere



### Azure Arc enabled servers



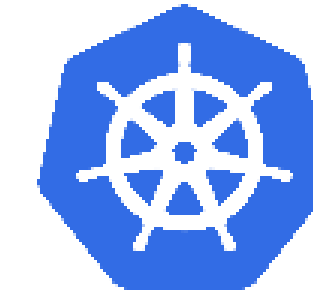
NOW AVAILABLE



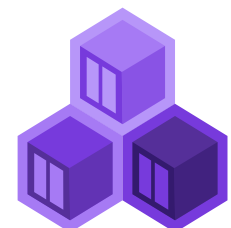
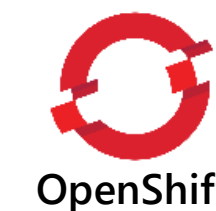
### Azure Arc enabled SQL Server



PUBLIC PREVIEW

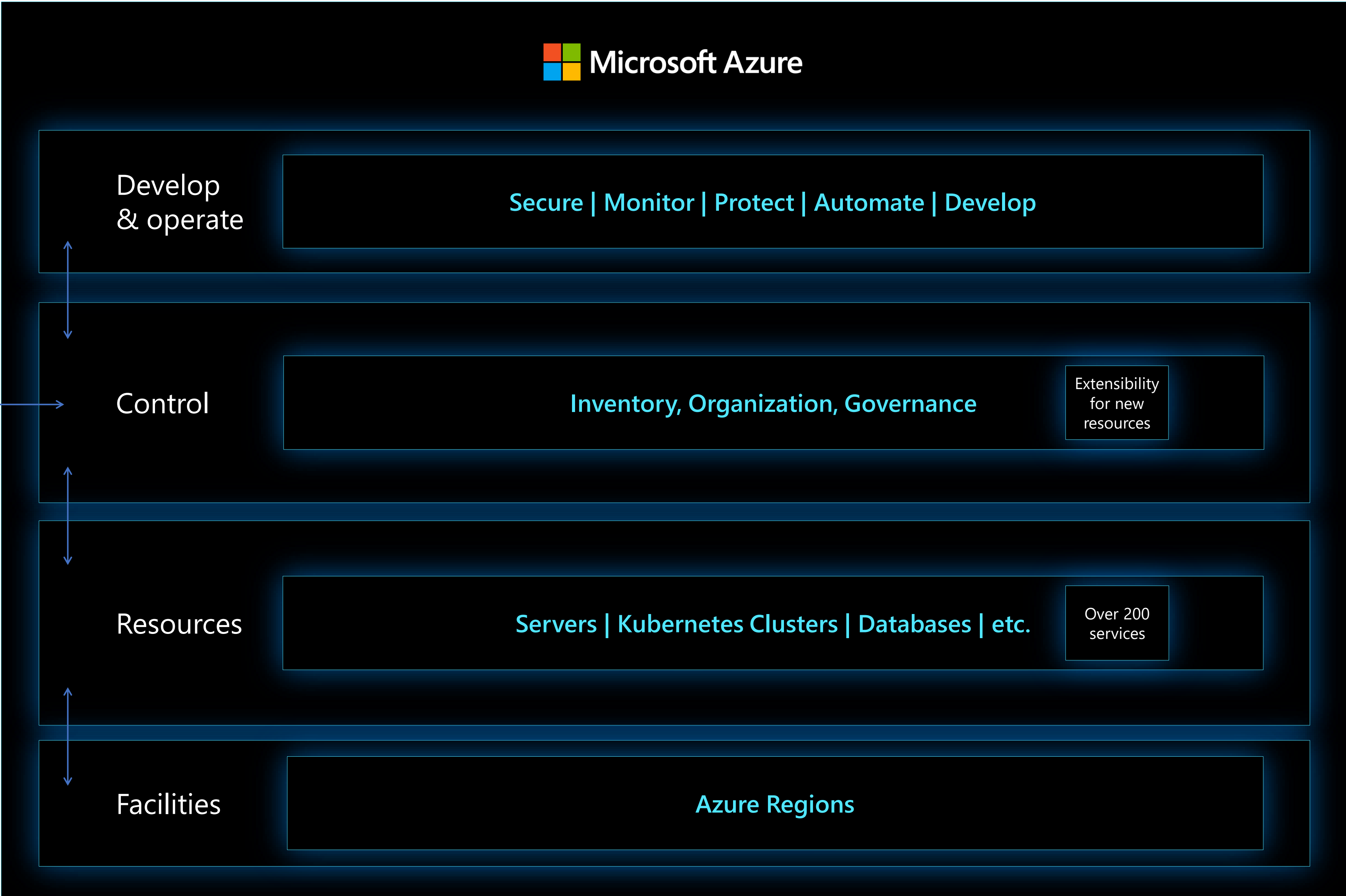
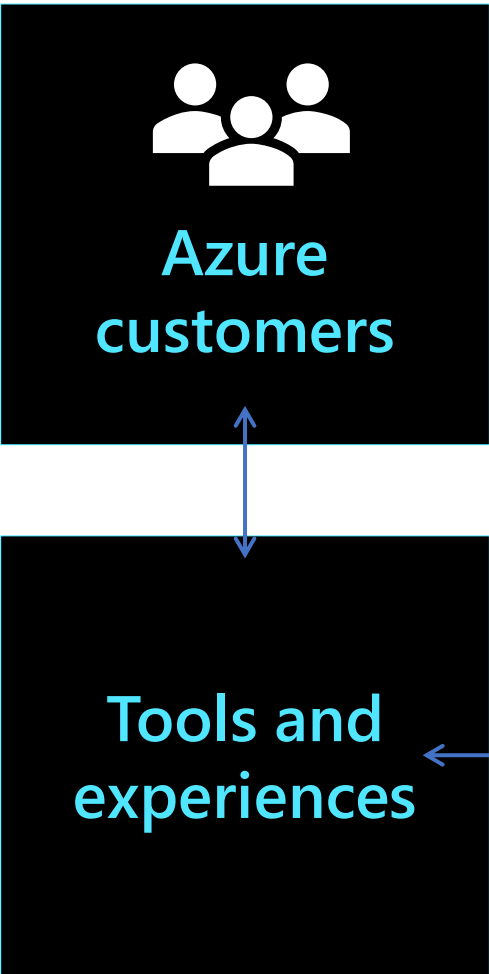


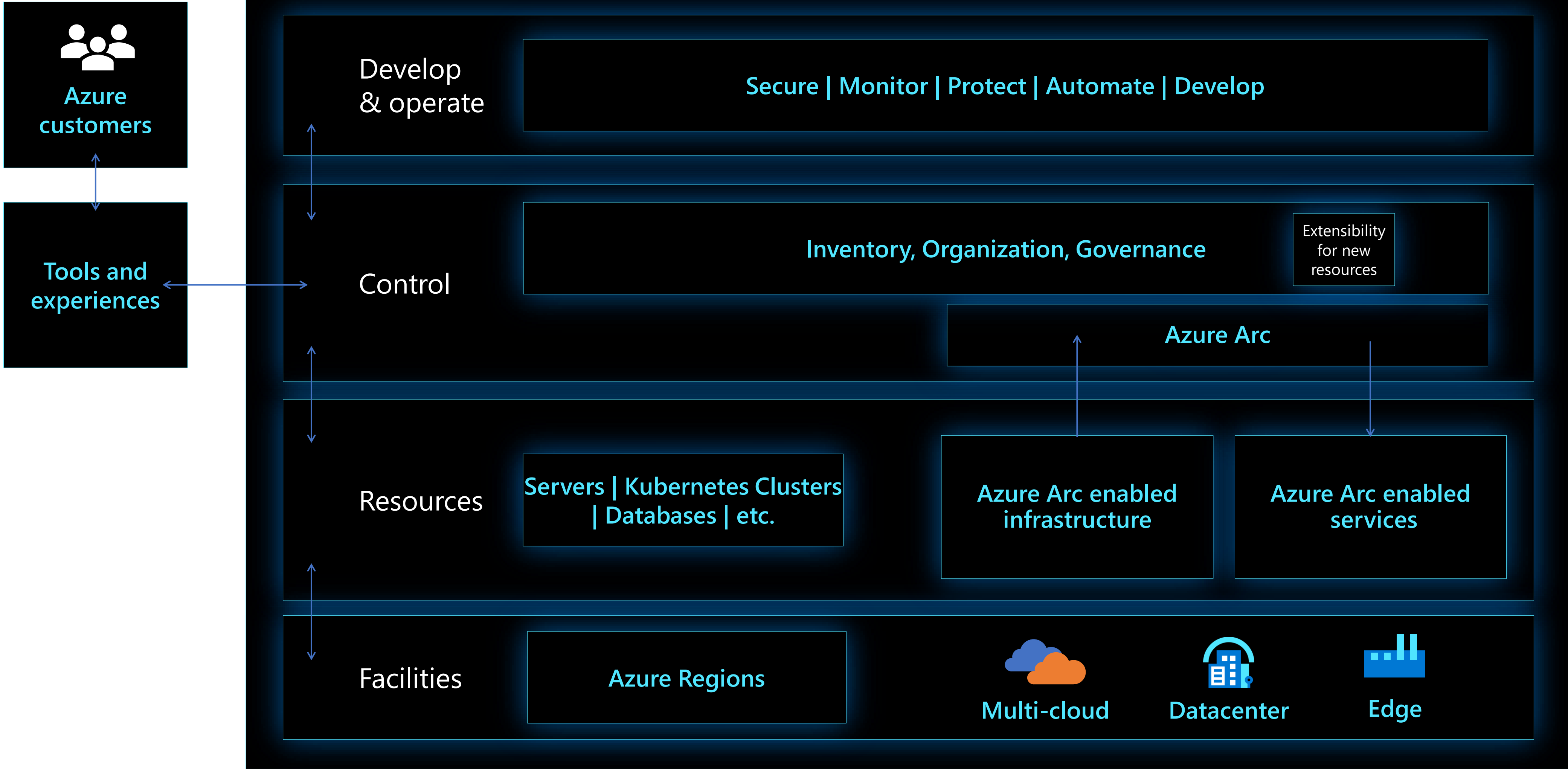
### Azure Arc enabled Kubernetes



AKS on Azure  
Stack HCI

NOW AVAILABLE



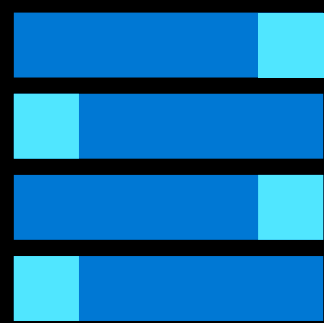




# ARC enabled Servers

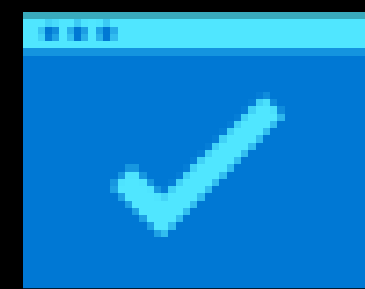
# Azure Arc enabled servers

Bring on-premises and multi-cloud servers to Azure with Azure Arc



## Reach

Linux and Windows  
VM and Bare-Metal  
Domain agnostic



## Organize and Inventory

At scale searchable inventory  
Unify management experience  
Consistent VM extensions  
Integrate with Azure Lighthouse



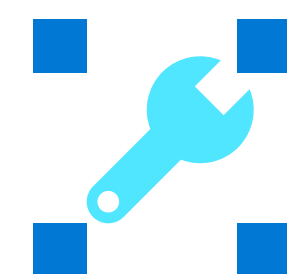
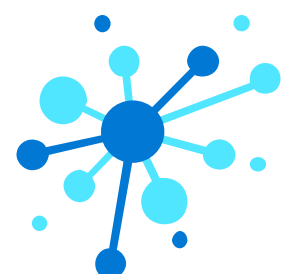
## Governance and Security

Built-in Azure policies  
Server security baselines  
Compliance across environments  
Centralized agent management –  
Monitoring, Security, Update  
Management



## Role-Based Operations

Central IT to manage  
at-scale operations  
Workload owners manage  
based on their access



# Azure Arc enabled servers

Azure Arc enabled servers are auto-enrolled with additional Azure services



## Additional services

Azure Policy

Azure Defender

Azure Sentinel

Azure Monitor

Change and inventory tracking

Update management

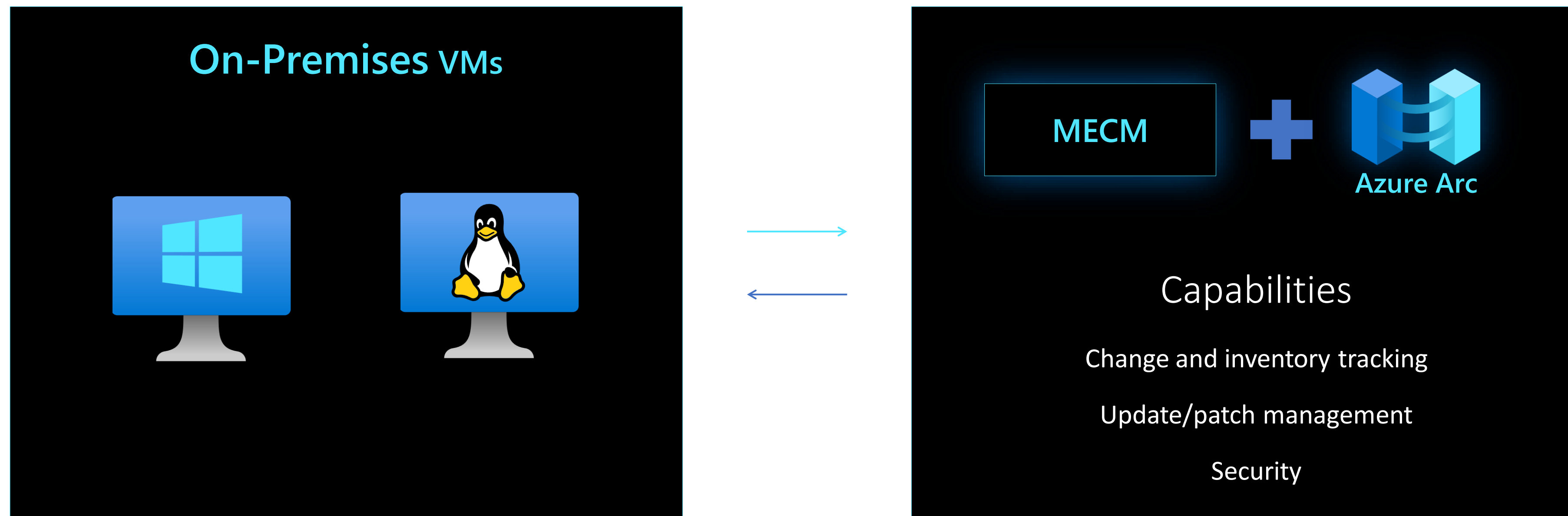
Azure Security Center

Just turn them on when you want to use them

# Azure Arc enabled servers

## The future of Microsoft Endpoint Configuration Manager (formerly SCCM)

The Azure management services enabled by Azure Arc can replace much of the functionality of MECM, but we recommend a gradual transition based on the use case. In some cases, MECM cannot be replaced yet.





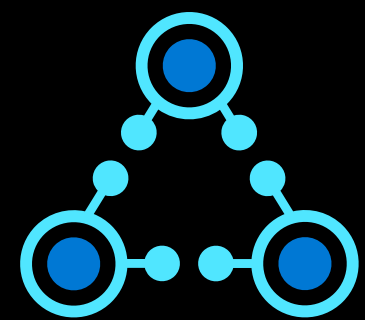
# **ARC enabled Servers**

## **Demo**

# ARC enabled Kubernetes

# Azure Arc enabled Kubernetes

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



## Connect

Support for multiple flavors  
Deploy to an existing cluster  
OSS ecosystem friendly



## Configure

Configure GitOps workflows  
Enforce desired state across clusters  
Cluster & Namespace support



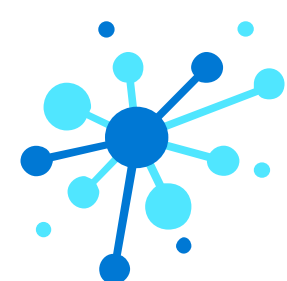
## Operate and Monitor

Azure Monitor Integration  
Health status reporting  
Cluster & App observability

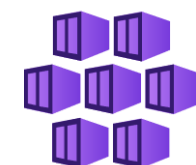


## Govern and Secure

Built-in Azure Policies  
Cluster security baseline  
Role-Based Access Control  
Compliance across environments



kubeadm



AKS



OpenShift

Any infrastructure, any Kubernetes

EKS



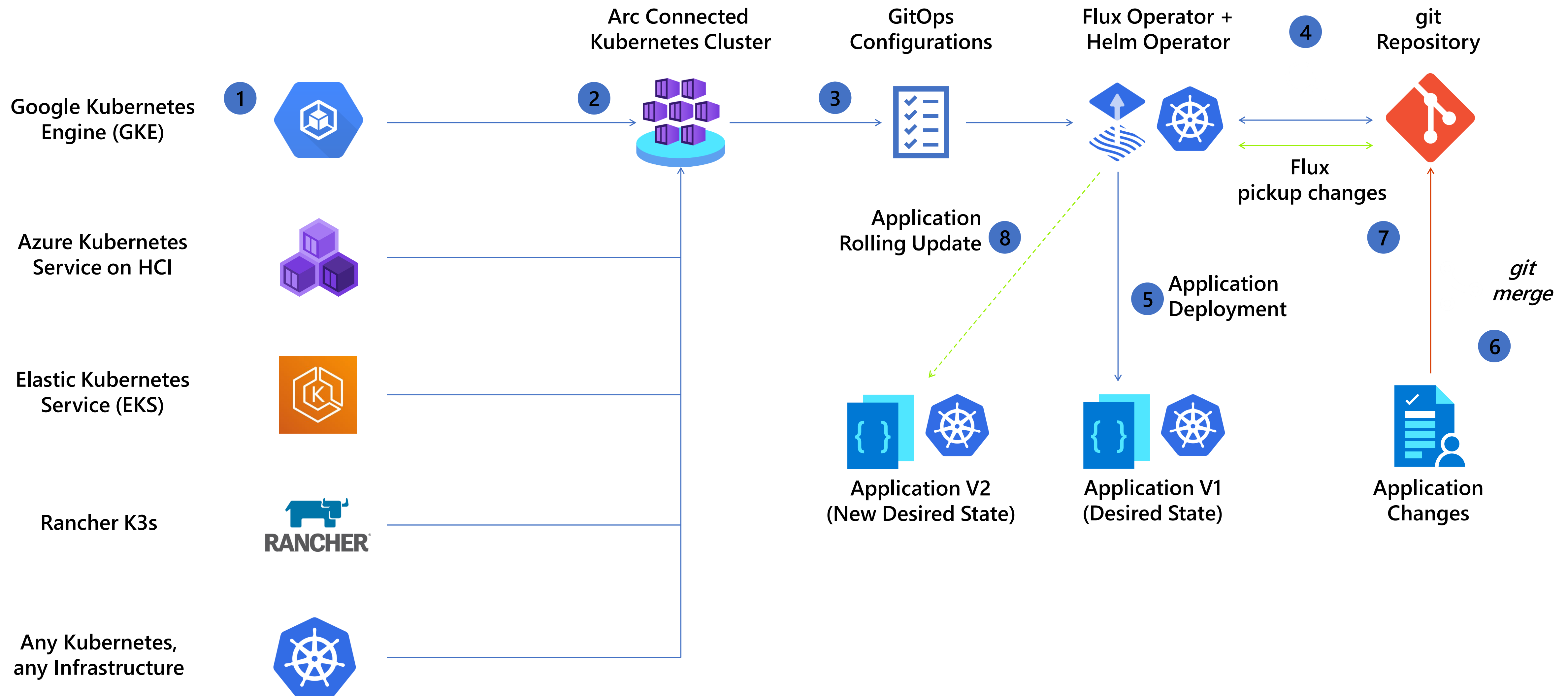
GKE



VMware Tanzu



# Azure Arc enabled Kubernetes GitOps Flow





# ARC enabled Kubernetes Demo

# ARC enabled data services

# Azure Arc enabled data services

PUBLIC PREVIEW

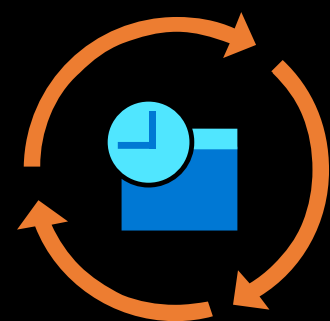
Bring Azure data services to on-premises, multi-cloud, and edge



Azure SQL Managed Instance

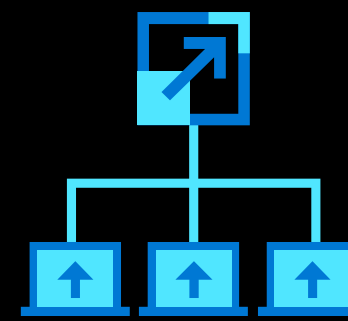
Azure Database for PostgreSQL Hyperscale

Disconnected support



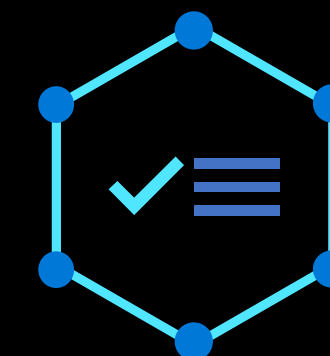
**Always current**

Automated updates  
Evergreen SQL  
Hyperscale on-premises



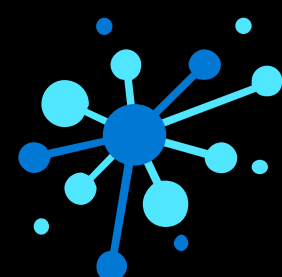
**Elastic scale**

Deploy in seconds  
Scale up, scale out  
Automation at scale



**Unified management**

Single view for on-prem and clouds  
Consistent workflows



Any hardware, any Kubernetes



# ARC enabled application services



## App Service

Quickly build, deploy, and manage web apps and APIs in any environment



## Functions

Build event-driven apps with built-in bindings and deploy the same code anywhere



## Logic Apps

Connect apps, data, and devices anywhere



## API Management

Manage APIs across all environments



## Event Grid

Manage routing of all events from any source to any destination





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## Thanks and ... See you soon!

Thanks also to the sponsors. Without whom this would not have been posible.

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