

# Kicking the Tires of Azure Arc



xenappE  
blogOC virtual expo

# Mike Nelson

Tweets

 mikenelsonio

Codes

 mikenelson-io

Works

Solutions Architect @  **PURE**STORAGE

Does

Advocate, Speaker, Mentor, Architect

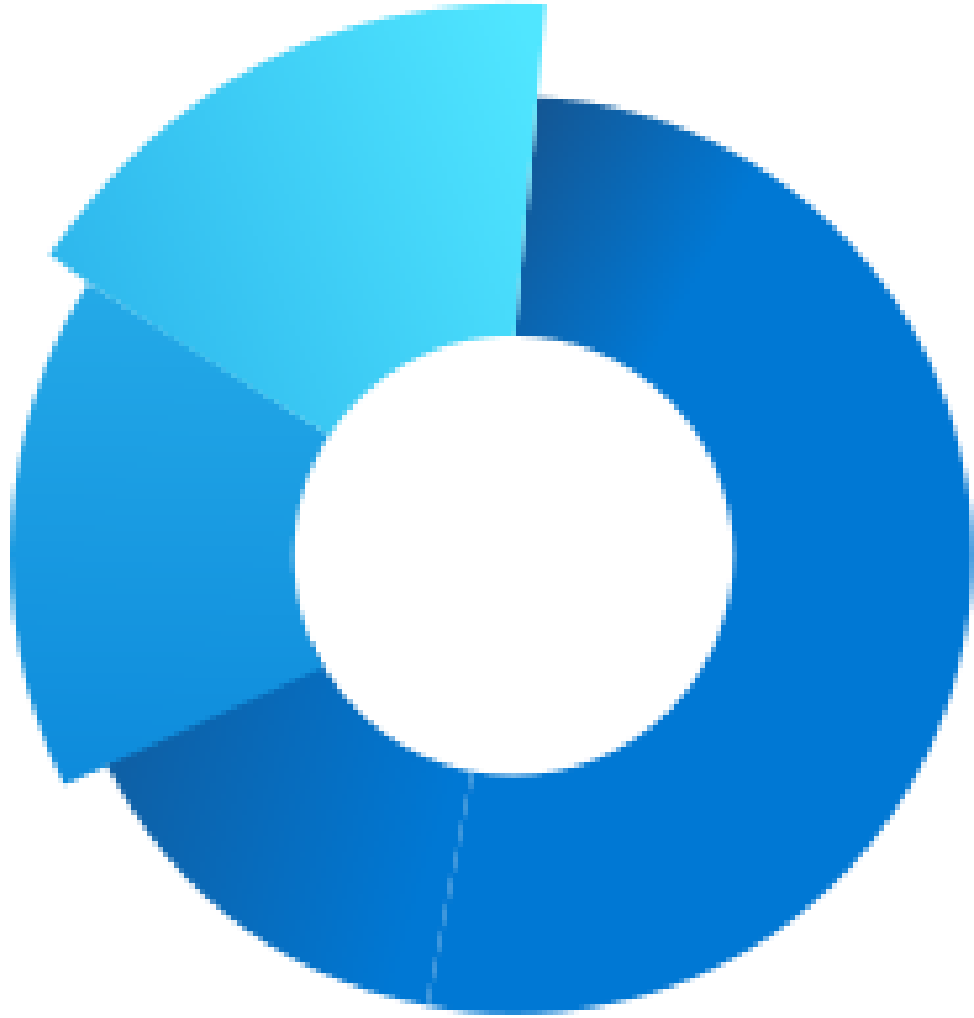
Likes

Cool Cloudy Things





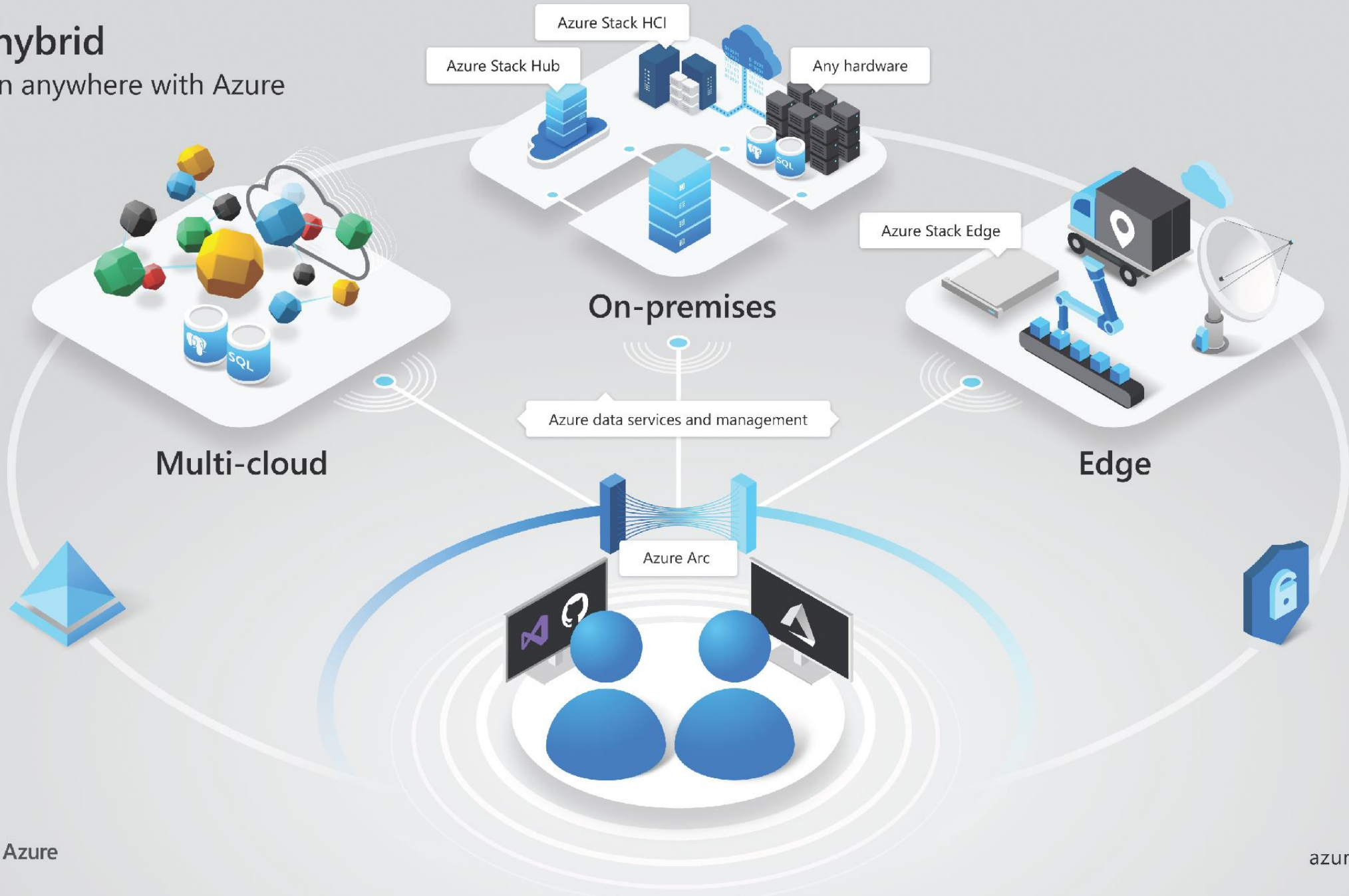




Azure Arc

# Azure hybrid

Innovation anywhere with Azure



# Azure Arc

Bring Azure services and management to any infrastructure



Run Azure data  
services anywhere



Extend Azure management  
across your environments



Adopt cloud  
practices on-premises



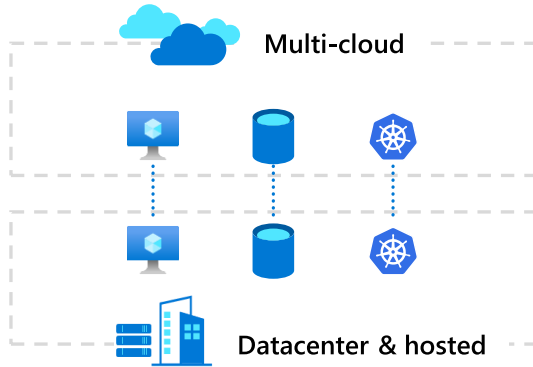
Implement Azure  
security anywhere

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Azure Arc is a set of technologies that extends Azure management and enables Azure services to run across on-premises, multi-cloud, and edge.

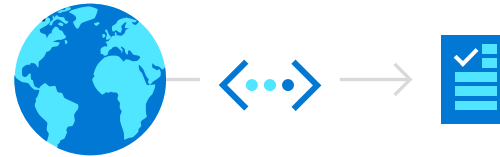
# Azure Arc

## Customer use cases



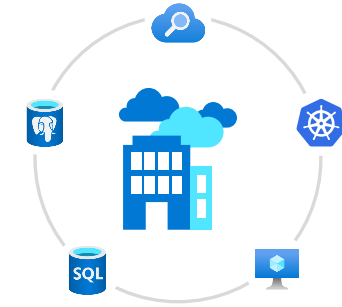
### Organize and govern across environments

Get Kubernetes clusters and servers that are sprawling across clouds, datacenters and edge under control by centrally organizing and governing from a single place.



### At-scale Kubernetes app management

Deploy and manage Kubernetes applications at scale across environments using DevOps techniques. Ensure that applications are deployed and configured consistently from source control, at scale.



### Run data services anywhere

Deploy and manage data services where you need it for latency or compliance reasons. Always use the most current technology and seamlessly manage and secure your data assets across on-premises, clouds and edge.



# What Arc really is

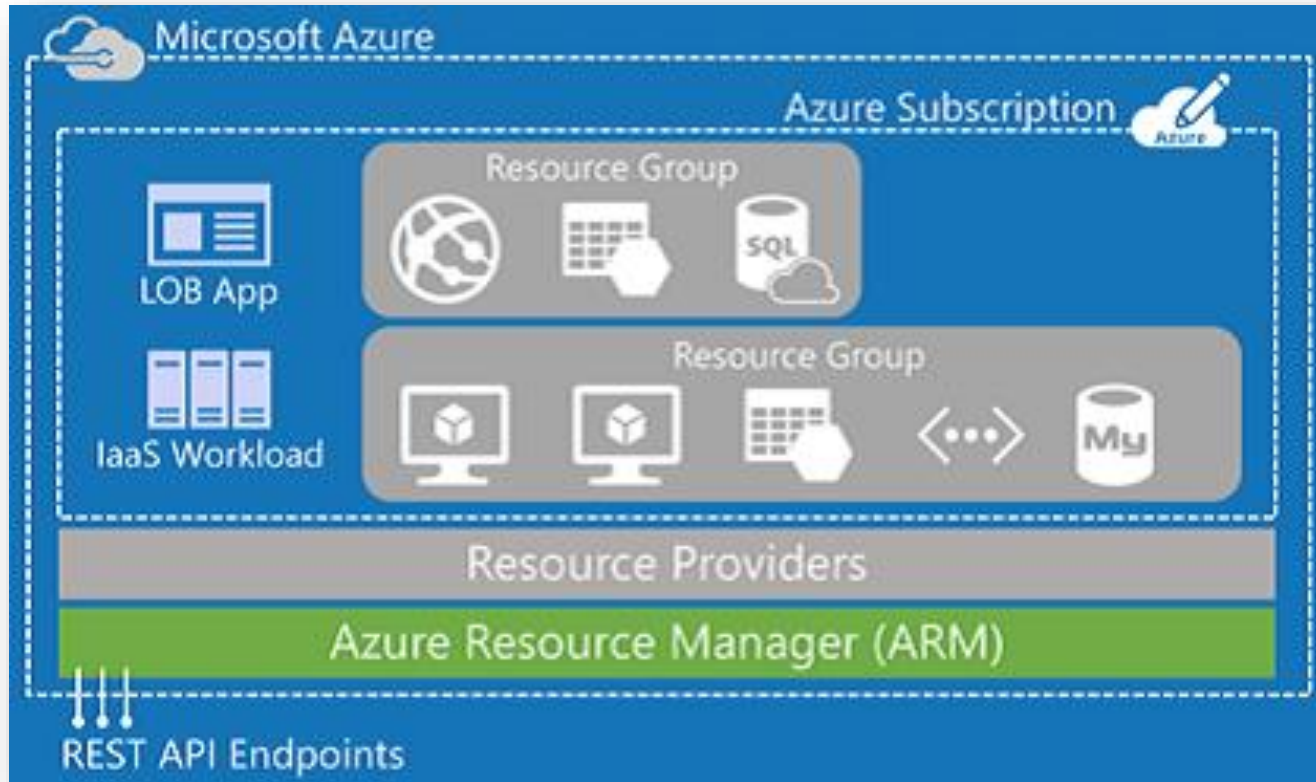


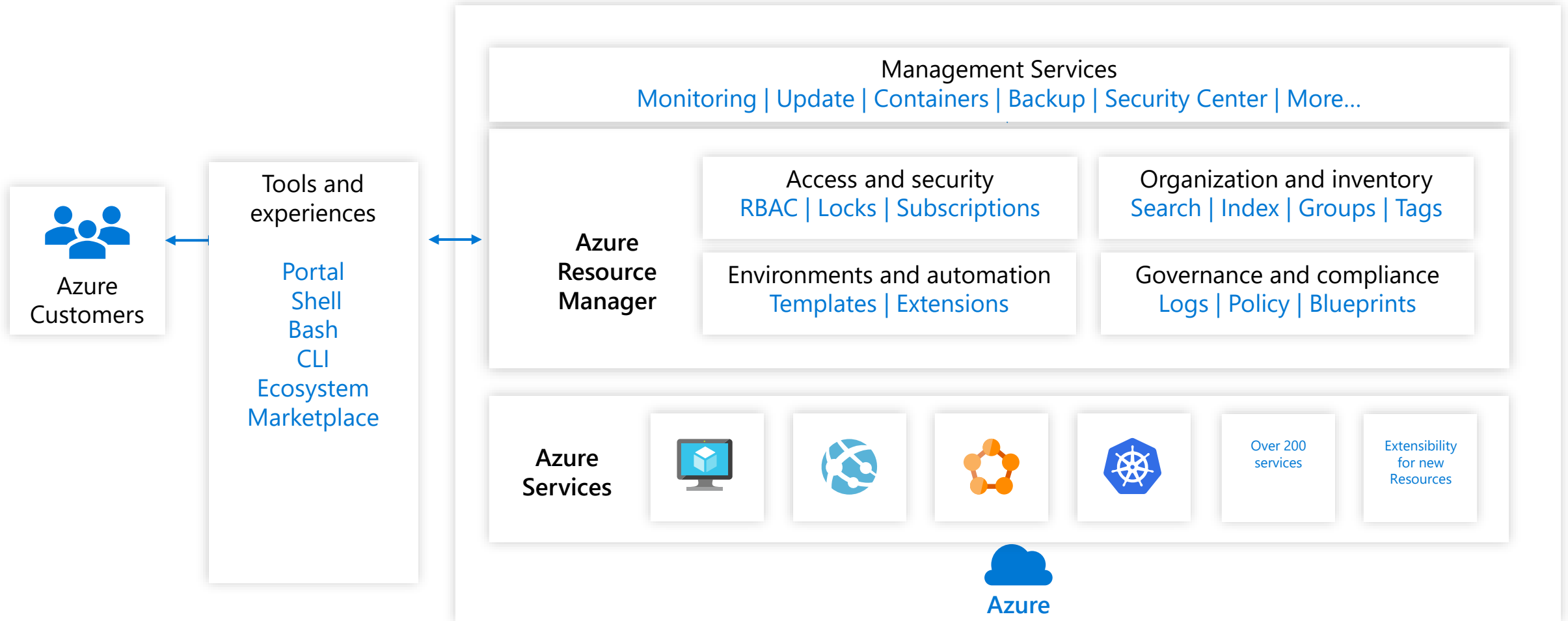
Image credit: Rick Rainey

- The Control Plane is ARM
- Resources provisioned by Resource Provider
- Extends RP's outside of Azure
- Add RP of "HybridCompute"
- Uses agent
- Once consumed, resource is extended



# Azure Management

Single Control Plane for Azure resources



# Setting up Servers

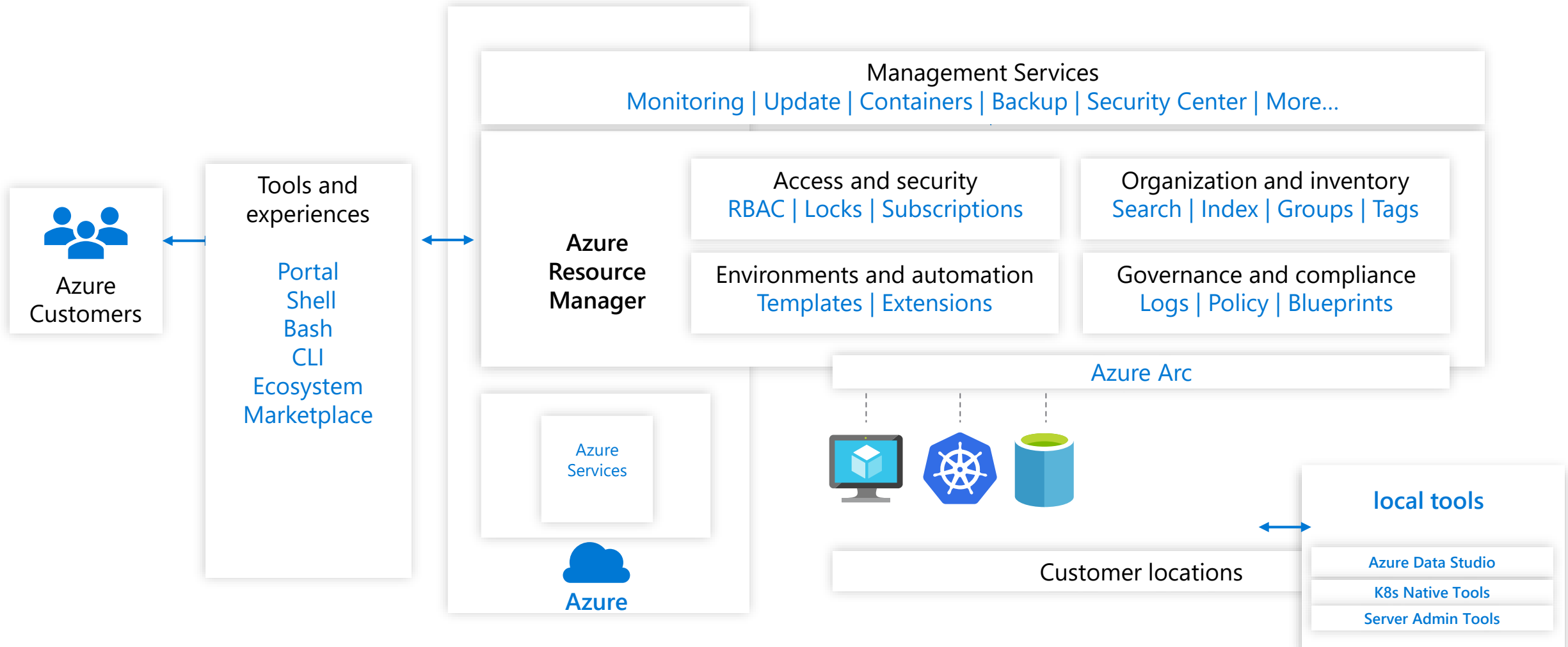


- Windows 2012 R2 and newer
- Ubuntu 16.04/18.04
- Ensure 443 outbound &
- Azure endpoints accessible
- Register RP's in subscription
- Connect via script/CLI/WAC
- Register machine
- \*Extra: Add OMS agent

```
Register-AzResourceProvider -ProviderNamespace Microsoft.HybridCompute  
Register-AzResourceProvider -ProviderNamespace Microsoft.GuestConfiguration
```

# Azure Management

Single Control Plane for resources everywhere



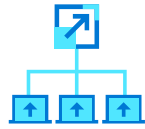
# Azure data services anywhere

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



## 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  
Use familiar tools



## Unmatched security

Advanced Data Security  
Azure Policy  
Role-based Access Control



## Cloud billing

Cloud billing on-premises  
Cost efficiency



Any hardware, any Kubernetes





# Azure data services anywhere at a glance

Apps and BI



Custom apps



BI



Analytics

Azure data services



...

Azure Arc management

Provisioning	Updates
HA/DR	Backup
Scaling	Diagnostics



Azure Security



Monitoring



Azure Site Recovery

Any Kubernetes



Kubernetes



OpenShift



AKS

Any hardware

OEM hardware

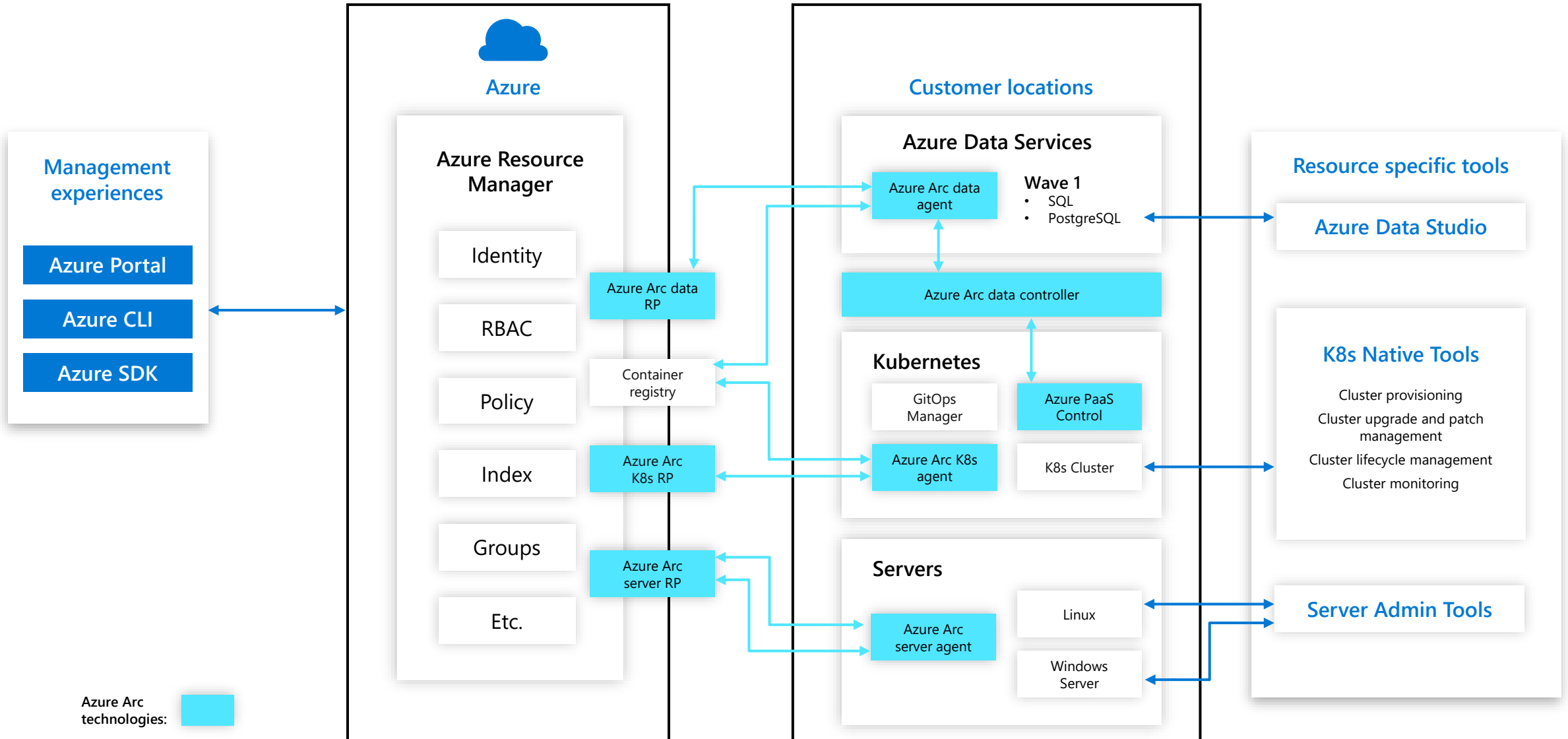
Azure Stack



Google Cloud Platform

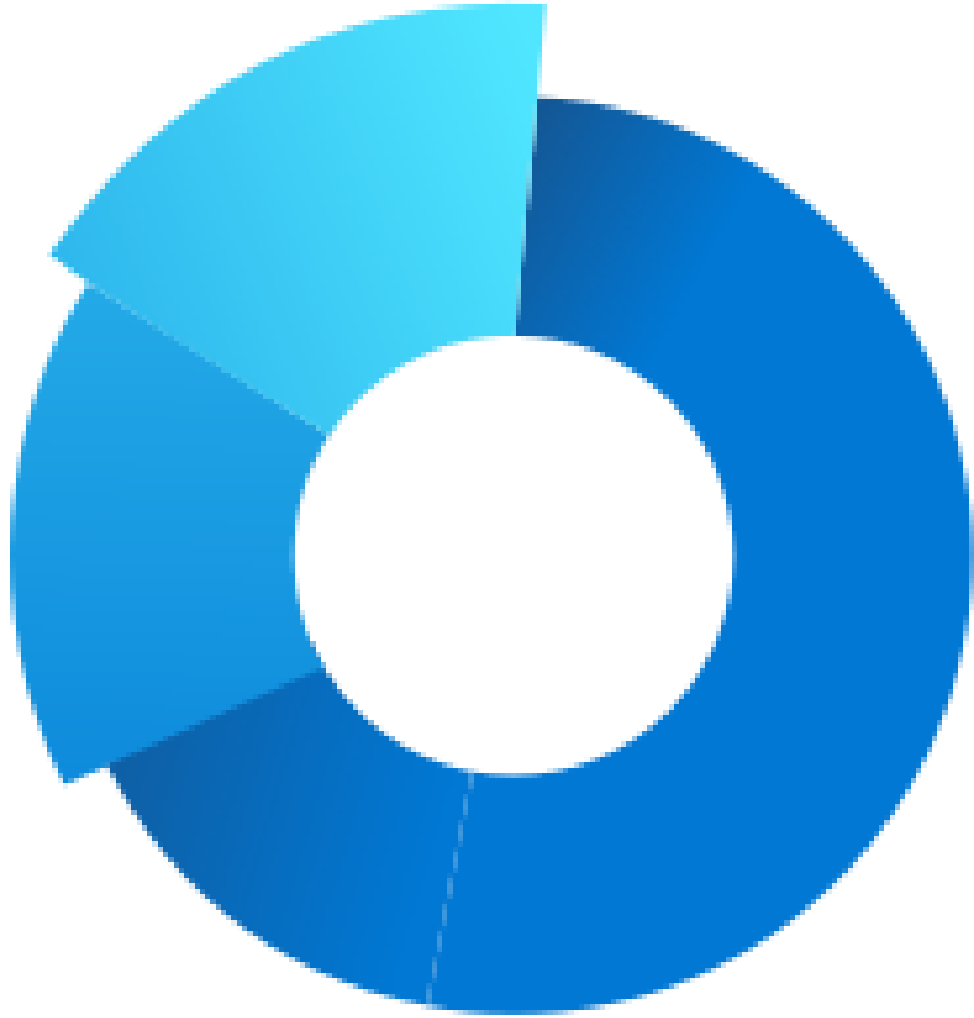


# Azure Arc



# The Possibilities

- Automation
- Cost management
- Security
- Backup/Restore/DR/DRaaS
- Key Vault
- ATP
- VMware Cloud
- ...and more



Demos