# Red Hat & Microsoft Better together

Making our joint-customer successful
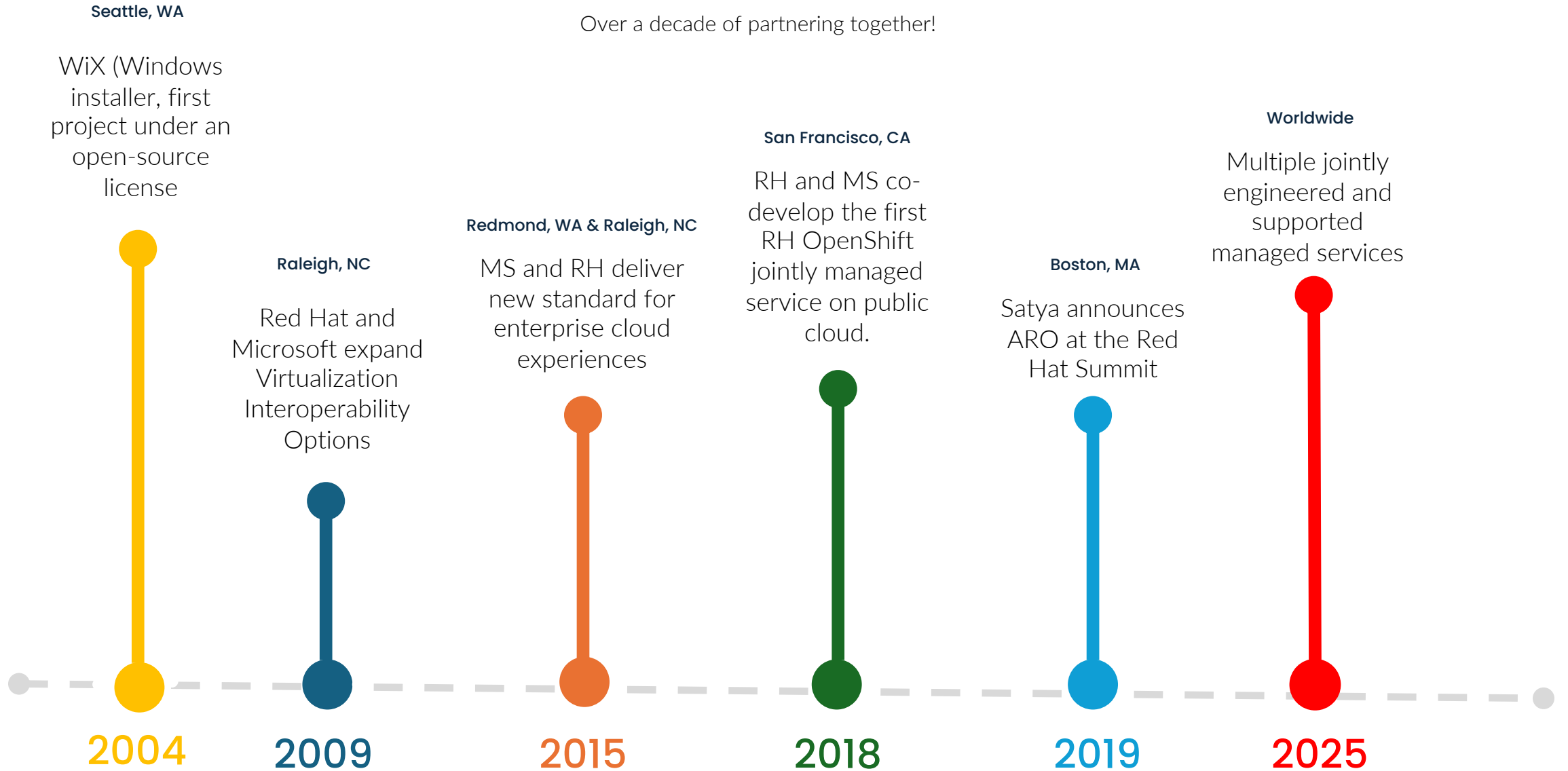
# The strategic partership

Red Hat | Microsoft

# The History

Over a decade of partnering together!

**Seattle, WA**

WiX (Windows installer, first project under an open-source license

**Raleigh, NC**

Red Hat and Microsoft expand Virtualization Interoperability Options

**Redmond, WA & Raleigh, NC**

MS and RH deliver new standard for enterprise cloud experiences

**San Francisco, CA**

RH and MS co-develop the first RH OpenShift jointly managed service on public cloud.

**Boston, MA**

Satya announces ARO at the Red Hat Summit

**Worldwide**

Multiple jointly engineered and supported managed services

**2004**    **2009**    **2015**    **2018**    **2019**    **2025**

# Why choose Red Hat and Microsoft?

## Combining solutions from two market leaders

Trusted global partners

Integrated solutions

Collaborative support

Engineering collaboration

Advanced security

Red Hat | Microsoft

# One more thing...

**Better Together**

**Making our joint-customer successful in their journey!**

Red Hat | Microsoft

# The solutions

Red Hat | Microsoft

# Our joint solutions

Red Hat® Enterprise Linux® on Microsoft Azure

Red Hat OpenShift® on Microsoft Azure

Microsoft SQL Server on Red Hat Enterprise Linux and Microsoft Azure

Microsoft SQL Server big data clusters on Red Hat OpenShift

Red Hat Ansible Automation Platform on Azure

Red Hat Enterprise Linux for SAP Solutions on Microsoft Azure

And….. AI !

# Build an AI platform for E2E AI lifecycle management

**Azure Red Hat OpenShift**

Trusted, comprehensive and consistent hybrid application platform for managing the entire application lifecycle

**Red Hat OpenShift AI**

Open hybrid AI/ML platform, built on top of OpenShift, to create and deliver AI-enabled apps securely at scale across hybrid-clouds

**Azure AI services**

Harness the power of Microsoft's fully managed AI services to drive innovation and transformation

# What is Azure RedHat Openshift?

# Build and run a platform **VS** using Azure Red Hat OpenShift

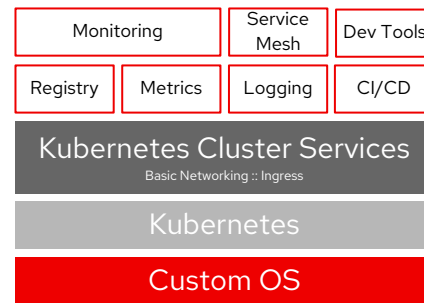## Use your tool of choice with integrated Azure components.

- Azure Monitor
- Azure Firewall
- ARM
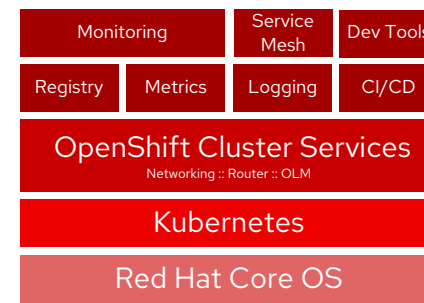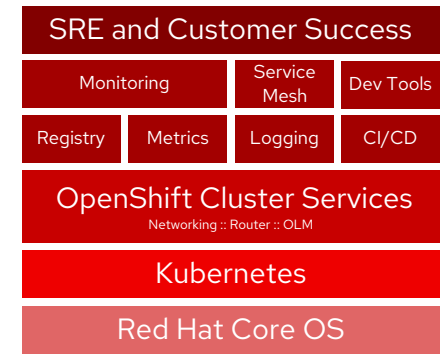- Azure Arc
- Azure Log Analytics
- Azure AD

And more.

### The Parts

| Monitoring | Service Mesh | Dev Tools |
|---|---|---|
| Registry | Metrics | Logging | CI/CD |

**Kubernetes Cluster Services**
Basic Networking :: Ingress

**Kubernetes**

**Custom OS**

**DIY**

### The Assembled Car

| Monitoring | Service Mesh | Dev Tools |
|---|---|---|
| Registry | Metrics | Logging | CI/CD |

**OpenShift Cluster Services**
Networking :: Router :: OLM

**Kubernetes**

**Red Hat Core OS**

**- Application Platform -**
**Self-managed Red Hat OpenShift**

### *The Car & Pit Crew*

**SRE and Customer Success**

| Monitoring | Service Mesh | Dev Tools |
|---|---|---|
| Registry | Metrics | Logging | CI/CD |

**OpenShift Cluster Services**
Networking :: Router :: OLM

**Kubernetes**

**Red Hat Core OS**

Microsoft Azure

**- Turnkey Application Platform -**
**Azure Red Hat OpenShift**

Red Hat

# Azure Red Hat OpenShift

**Red Hat** | **Microsoft**

Jointly engineered, operated, and supported by Microsoft and Red Hat with an integrated support experience

**Faster time to value**
Empower developers, and quickly deploy and scale applications in minutes, enabling a focus on innovative applications, not managing infrastructure.

**Reduce complexity**
Fully managed OpenShift throughout the stack, 24x7 expert SRE joint support, and an industry-leading 99.95% SLA.

**Enterprise-grade operations, security, and compliance**
Run your apps on the Red Hat OpenShift security-hardened Kubernetes platform built on world-class Azure infrastructure. Compliant with PCI DSS, HITRUST, FedRAMP, SOC2 Type 2, and ISO 27001.

**Red Hat** | **Microsoft**
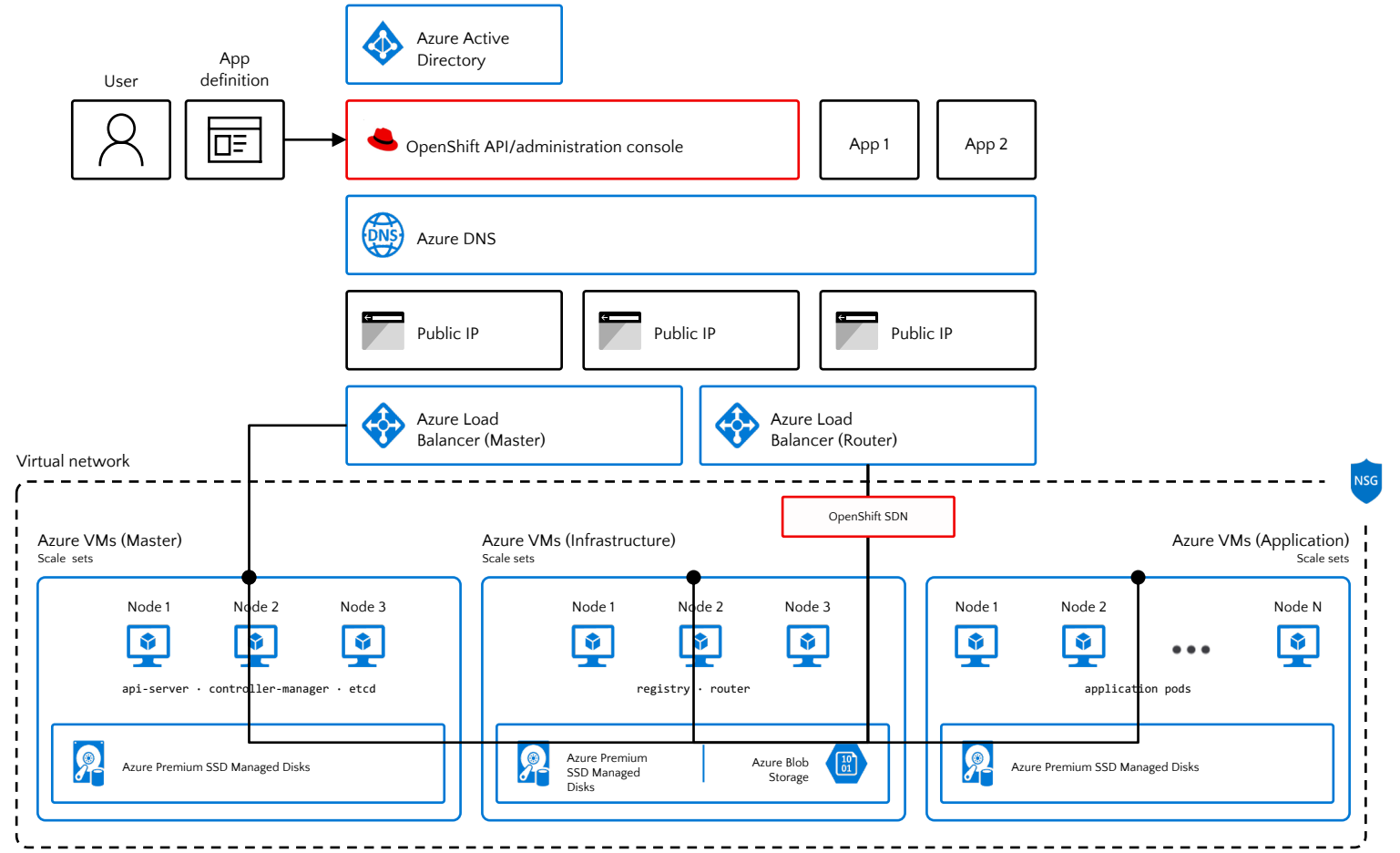
# Streamline innovation and operations

- Flexible, self-service deployment
- Create fully managed OpenShift clusters in minutes
- Cluster node scaling
- Scale on demand to meet resource demand
- Persistent storage volumes
- Azure Disk is preconfigured as the default storage class, providing dynamically provisioned Premium SSD's on-demand

- Azure Active Directory integration
- Use Azure Active Directory to control access to your cluster with an integrated sign-on experience
- Fully managed clusters
- Master, infrastructure, and application nodes are managed by Microsoft and Red Hat; plus, no VMs to operate, and no patching required
- Unified support
- Jointly engineered, operated, and supported by Microsoft and Red Hat with an integrated support experience

- Virtual network integration
- Deploy your cluster into a new VNet, then use
- VNet peering to connect to your existing VNet and on-premises networks
- High availability
- Multiple masters and infrastructure nodes help ensure your cluster has no single point of failure

- Regulatory compliance
- Azure Red Hat OpenShift is compliant with SOC, ISO, PCI DSS, HIPAA, and more
- First-party Azure service
- Clusters are deployed into your Azure subscription and included on your Azure bill

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# Running your own Red Hat OpenShift cluster

Responsibilities

| | |
|---|---|
| User management | ⬜ |
| Project and quota management | ⬜ |
| Application life cycle | ⬜ |
| Cluster creation | ⬜ |
| Cluster management | ⬜ |
| Monitoring and logging | ⬜ |
| Network configuration | ⬜ |
| Software and security updates | ⬜ |
| Platform support | 🔺 |

⬜ Customer    🔺 Microsoft and Red Hat

User

App definition

Azure Active Directory

OpenShift API/administration console

App 1    App 2

Azure DNS

Public IP    Public IP    Public IP

Azure Load Balancer (Master)

Azure Load Balancer (Router)

Virtual network

NSG

OpenShift SDN

**Azure VMs (Master)**
Scale sets

Node 1    Node 2    Node 3

api-server · controller-manager · etcd

Azure Premium SSD Managed Disks

**Azure VMs (Infrastructure)**
Scale sets

Node 1    Node 2    Node 3

registry · router

Azure Premium SSD Managed Disks    Azure Blob Storage

**Azure VMs (Application)**
Scale sets

Node 1    Node 2    Node N

application pods

Azure Premium SSD Managed Disks

Red Hat | Microsoft

# Fully managed clusters with Azure Red Hat OpenShift

Responsibilities

| | |
|---|---|
| User management | Customer |
| Project and quota management | Customer |
| Application life cycle | Customer |
| Cluster creation | Microsoft and Red Hat |
| Cluster management | Microsoft and Red Hat |
| Monitoring and logging | Microsoft and Red Hat |
| Network configuration | Microsoft and Red Hat |
| Software and security updates | Microsoft and Red Hat |
| Platform support | Microsoft and Red Hat |

Customer    Microsoft and Red Hat

User    App definition

Azure Active Directory

OpenShift API/administration console

App 1    App 2
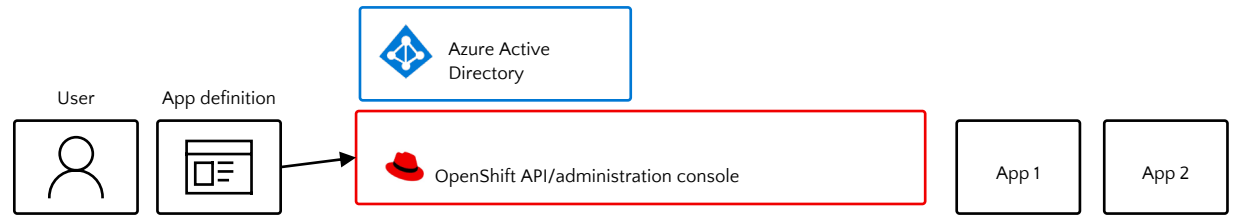
## Let Microsoft and Red Hat...

Manage all your clusters.    Monitor and operate your VMs.

Secure your nodes.    Manage environment patches.

Red Hat | Microsoft

# ARO Landing zone



Azure Red Hat OpenShift reference architecture

# What is in it for you?
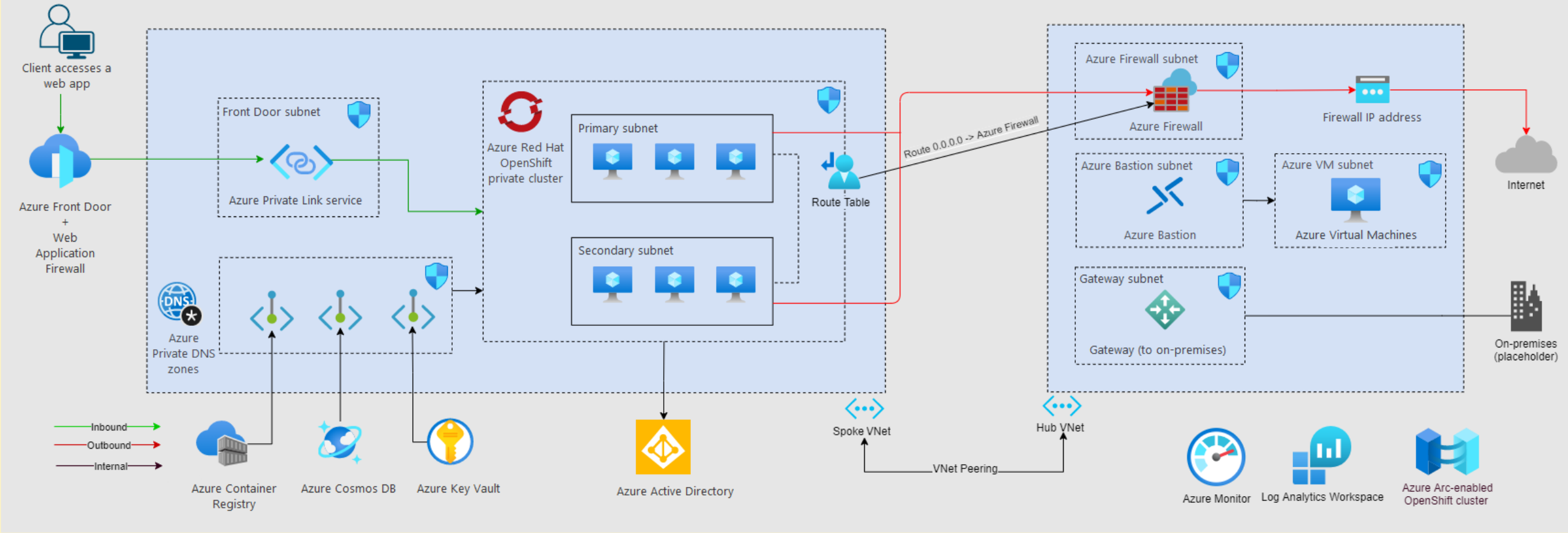
# Value for the customer

Focus on the business

Innovate faster

One platform, Hybrid

Easier deployment

Developer experience

Security at it finest

Reduce cost

Enterprise pro-active support

# Let's look at the future!

# Looking forward

**IBM Software on ARO**

**Confidential containers**

**OpenShift Virtulization on ARO**

**Continuous investment from both companies**

**Red Hat AI + Azure AI**

**Hosted Control-plane for ARO**

# Customer stories!

100's of Enterprise customer running ARO successfully in production

# Alpega customer video

# Key Take-aways

Easy to start

Easy to master

Focus on the business

Joint support & engineering RH/MSFT

First-party service

Happy to help!

Visit the Microsoft booth ☺