



Connect

Modernize Everything: VMs and Containers on One Platform



Microsoft Azure



Red Hat

Johan Kardell, Microsoft
Robert Åkerblom, Red Hat



Red Hat



Microsoft

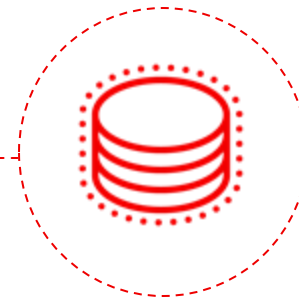
Why is now a good time to start (or accelerate) your app modernization?



Innovation drives opportunity. AI is changing the way we operate.



Increase reliability and mitigate risks.



Scale in the hybrid cloud.

Azure Red Hat OpenShift

A jointly supported, turnkey application platform native to Azure.



- Comprehensive application platform
- Hybrid cloud flexibility
- Fully managed Day 2 operations
- Integrate with Azure services
- Consistent updates and patches
- Single invoice and draw down on MACC

65%
Shortened dev
cycle¹

50%
Improved operational
efficiency¹

¹ "The Total Economic Impact™ of Red Hat OpenShift Cloud Services by Forrester," Mar. 2024.

Components of an Application Platform

Application developers need more than Kubernetes to be productive



Developer Tools



CI/CD
GitOps



Service mesh



Monitoring



Logging

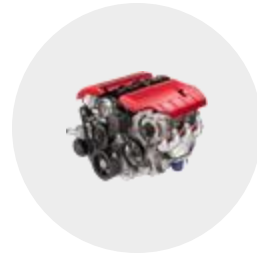
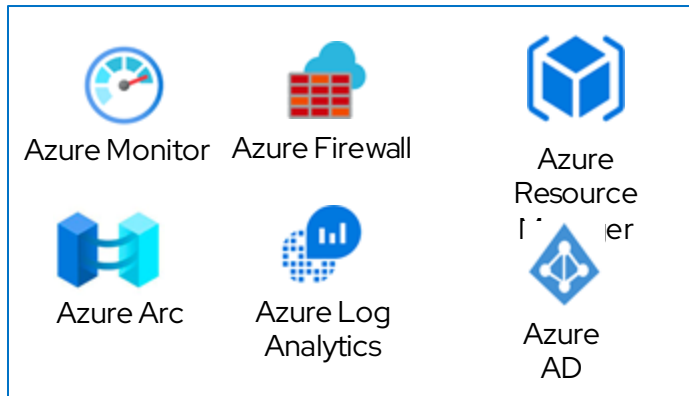


Container
Registry

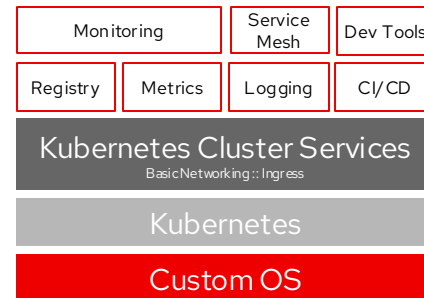
Kubernetes

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

Use your tool of choice with integrated Azure components.



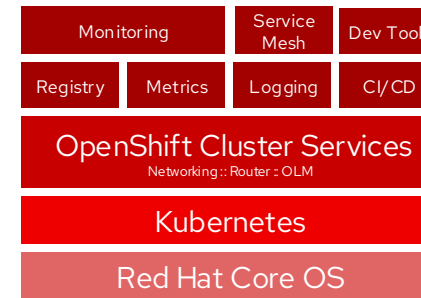
The Parts



DIY



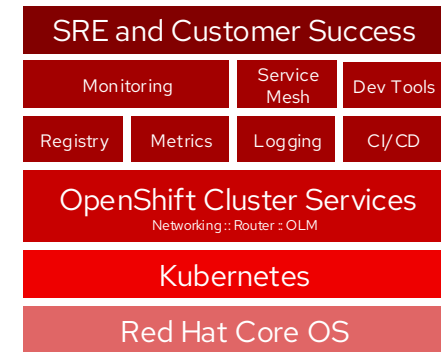
The Assembled Car



- Application Platform -
Self-managed Red Hat OpenShift



The Car & Pit Crew



- Turnkey Application Platform -
Azure Red Hat OpenShift

The Red Hat and Microsoft partnership

Creating choice and flexibility.

- ▶ Trusted global partners
- ▶ Flexible hybrid cloud deployments
- ▶ Simplified container technologies
- ▶ Interoperable AppDev capabilities
- ▶ Collaborative engineering
- ▶ Rigorous security
- ▶ Unified management
- ▶ Integrated support

95%

of Fortune 500 companies
use Microsoft Azure

90%

of Fortune 500 companies
rely on Red Hat

Red Hat® Enterprise Linux® on Microsoft Azure
Azure Red Hat OpenShift®
Ansible on Microsoft Azure
Microsoft SQL Server on RHEL and Microsoft Azure
Microsoft SQL Server big data clusters on OpenShift
RHEL for SAP Solutions on Azure
JBoss EAP
Microsoft Azure Arc

Azure Red Hat OpenShift is a joint, 1st party Azure solution.



Integrated Dev tools and
cloud native services



Joint
Support & Engineering



Security, resilience
and compliance

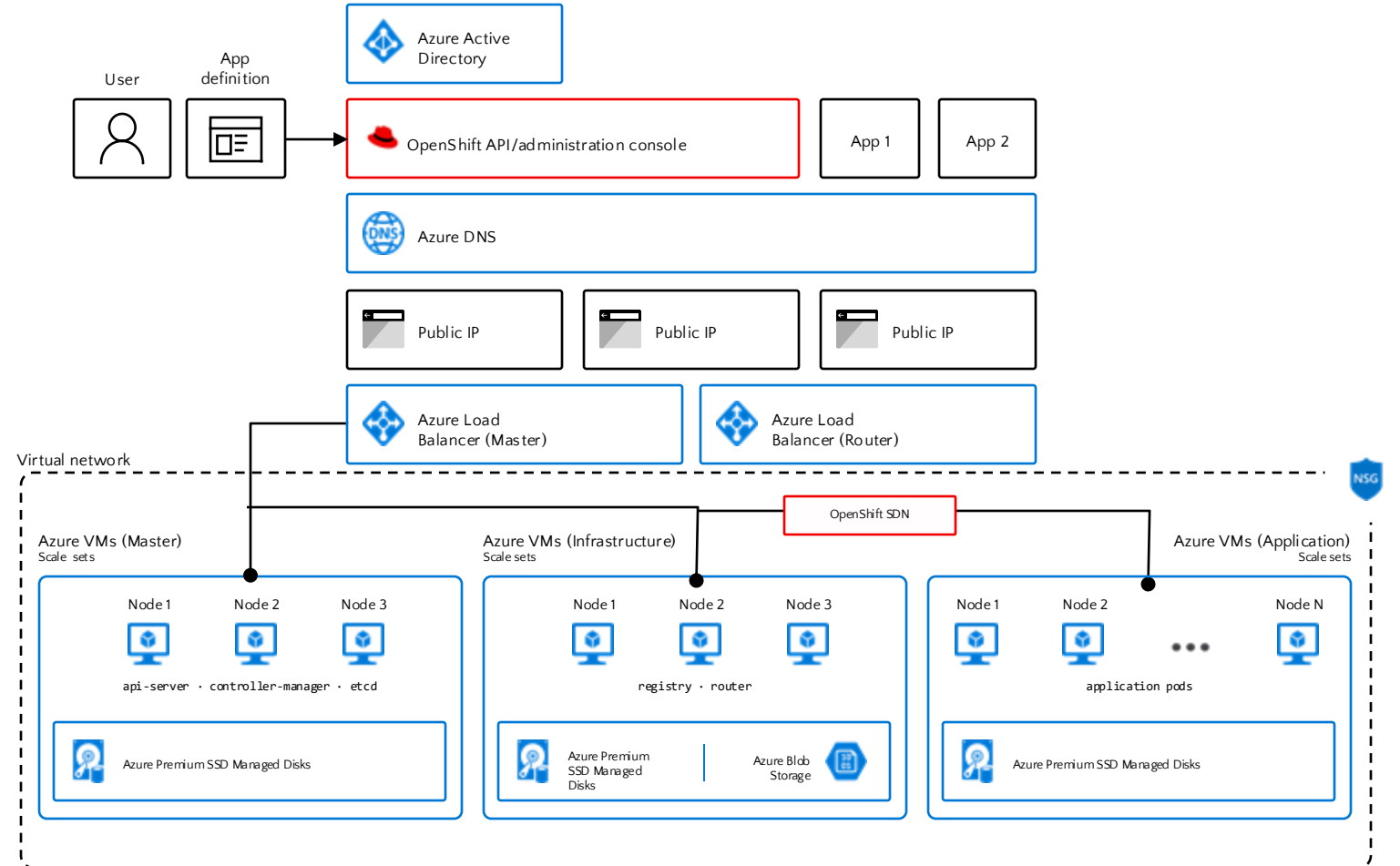


Single invoicing, utilize
cloud committed spend

Running your own Kubernetes 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	■

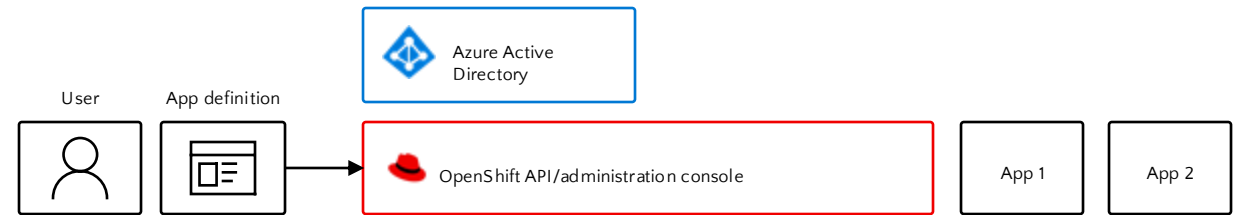
■ Customer ■ Microsoft and Red Hat



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



Let Microsoft and Red Hat...

Manage all your clusters.

Secure your nodes.

Monitor and operate your VMs.

Manage environment patches.

OpenShift Virtualization Public Preview

Public preview



OpenShift Virtualization on Azure Red Hat OpenShift (ARO)

Run VMs and containers together. Simplify modernization. Accelerate cloud adoption.

Migrate Virtual Machines
seamlessly

Modernize applications
at your pace

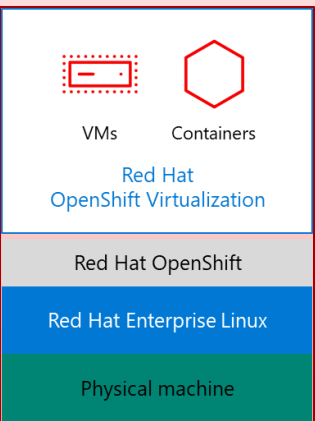
Unified management for
VMs and containers

What is OpenShift and OpenShift Virtualization?



Red Hat OpenShift

- Kubernetes platform for container orchestration and app development and deployment
- Built-in tools for CI/CD, monitoring, logging, and security



OpenShift Virtualization

- Capability for running VMs alongside containers
- Based on KubeVirt open-source project
- Uses the trusted RHEL KVM hypervisor
- No additional OpenShift subscriptions cost

Key Use Cases

Migrate Virtual Machines Seamlessly

Move traditional VMs to OpenShift without rewriting

Modernize Applications at Your Pace

Gradually refactor monolithic apps
Run legacy and cloud-native together

Unified Management for VMs and Containers

Single platform for all workload types w/ consistent tools, security, and governance

Operational Efficiency

No extra licensing
Pay only for VM compute
Leverage OpenShift investments and skills

Red Hat is a Gartner MQ Leader in both **Container Management & Cloud Application Platforms**.

Challenge: Move 60+ applications to Azure RedHat Openshift in 4 months



Problem: Limitations in the outsourced Openshift environment due to shared environment.

- **From:** On-premises OpenShift Container Platform clusters in datacenters.
- **Issue:** Bug in underlying infrastructure making platform unstable



Solution

- **Azure Red Hat OpenShift** on Azure – 60+ apps, 1700 PODs -> Azure Sweden Central
- **Migration decision:** Taken in December 2023, deadline April 2024.
- **Project style:** Highest priority and all hands on deck- approach



Result

- **Flexibility:** 3-year project completed **ahead of schedule**
- **Autonomy:** For container team, self-service & onboarding
- **Cost:** At least 50% saving on infrastructure, 1Mkr -> 460tkr / month, future annual 6-7Mkr



Today

- **Sucess:** more than 100 applications running in Azure Redhat Openshift, more to come
- **Team:** 4 engineers at Folksam to operate, develop and onboard
- **Features:** Cost control, self-service, IaC pipelines and 24/7 support



Who

Folksam offers insurance, pension and savings.

Established 1925 from the merge of Samarbetet and Folket companies. KPA a part on the company in 2000.

Wide range of technologies, from Mainframe to public cloud



banco bradesco



Challenge

- ▶ Large on-prem infra which required frequent updates, and difficult to scale and sync
- ▶ Long release cycles which delayed innovation

Solution:

- ▶ Running a hybrid cloud infra with OpenShift on-prem and Azure Red Hat OpenShift

Results

- ▶ Improved delivery
 - 96% reduction in provisioning time
 - Zero downtime
 - Zero blocking due to capacity resources
 - 3k+ deployments in 1 year
- ▶ Reduced resources managing infrastructure
- ▶ On-demand scalability
- ▶ Quick ramp utilizing a known platform



" We don't need to worry about managing basic components. One year ago, a cluster would take days to provision. Now [with Azure Red Hat OpenShift], the same cluster only takes a few hours to provision which represents a **96% time reduction to provision clusters.**"

Renato Bettini
Container Platform Engineering Specialist,
Banco bradesco



Getting started is easy.

Try Azure Red Hat OpenShift
with a PoC



red.ht/Level-Up

Watch the Azure Red Hat
OpenShift interactive tour



red.ht/AROWalkthrough

Explore the Azure Red Hat
OpenShift Learning Path



red.ht/azure-path

Next steps

Invent with purpose

1	Envisioning workshop	Define strategy and desired outcomes using Microsoft Cloud Adoption Framework
2	Assessment	Assess your estate & plan your migration and modernization journey with tooling, guidance, and recommendations
3	Pilot and proof of value	Gain confidence and see technical proof with expert support from Microsoft and partners
4	Programs and guidance	Securely move your estate to the cloud with confidence, proven best practices & funding to accelerate



Connect

Thank you



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facebook.com/redhatinc



youtube.com/user/RedHatVideos



twitter.com/RedHat