



Red Hat



Microsoft Azure

Monoliths to microservices: App Transformation

Hands-on Technical Workshop Overview



Red Hat

What you will learn

- Industry trends around enterprise application development
- Red Hat's approach to application modernization
- How to discuss migration and modernization with your customers or managers
- Migrating an existing legacy Java™ EE app to [Red Hat JBoss Enterprise Application Platform](#) on [OpenShift](#).
- Using modern frameworks like [Spring Boot](#), [Thorntail](#), [Eclipse Vert.x](#), and [Node.js](#) to implement cloud native microservices and replace monolithic functionality.
- Developing and deploying using [Azure Red Hat OpenShift](#), [Red Hat Runtimes](#), and DevOps processes.
- The benefits and challenges with microservices, including use cases for reactive microservices.
- Preventing and detecting issues in a distributed system.
- Pros and cons with different packaging techniques for microservices

Agenda

9:00AM–9:30AM

WELCOME & INTRO

9:30AM–10:30AM

MOVING EXISTING APPS TO THE CLOUD

10:30AM–11:15AM

DEVELOPER INTRO TO OPENSIFT

11:15AM–11:30AM

BREAK

11:30AM–12:30PM

MONOLITHS TO MICROSERVICES PART 1

12:30PM–1:00PM

LUNCH

1:00PM–2:00PM

MONOLITHS TO MICROSERVICES PART 2

2:00PM–3:00PM

REACTIVE MICROSERVICES WITH ECLIPSE VERT.X

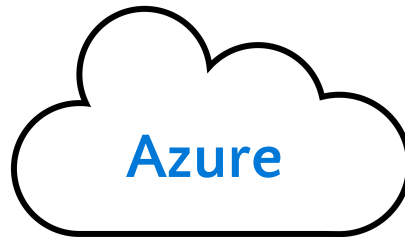
3:00PM–3:15PM

WRAP-UP AND CLOSING REMARKS

The cloud is where open enterprise innovation happens

In a cloud world—where organizations are looking at open source to drive agility and deliver apps more quickly—security and management remain top of mind

Through this partnership, Microsoft adds value to your Red Hat investments in Azure, wherever you are in your cloud journey



+



Red Hat



Red Hat
OpenShift
Container Platform



Red Hat
Middleware

=



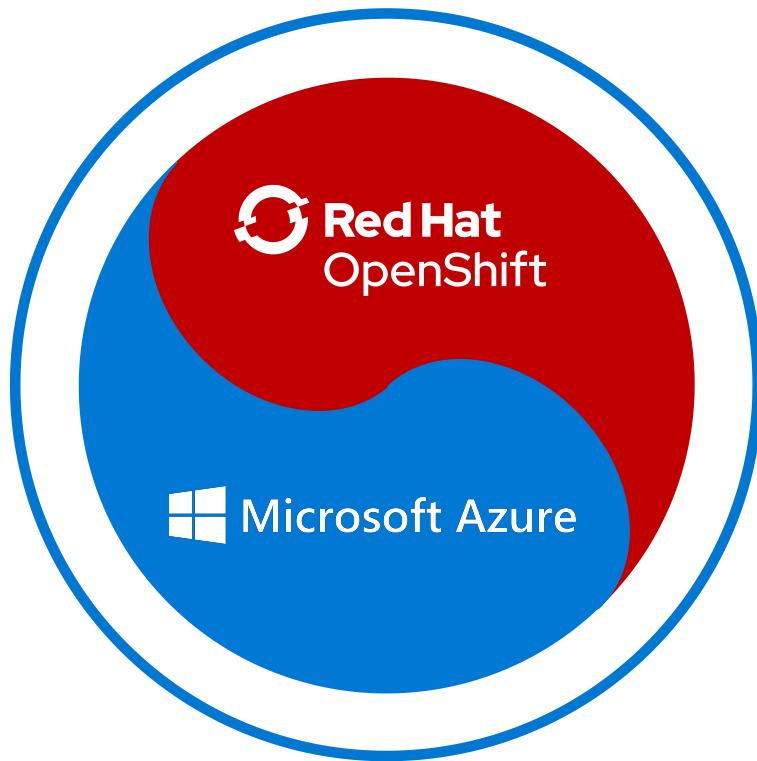
Azure Red Hat OpenShift

Engineered Better Together

Empower
developers to
innovate

Trusted
Enterprise
Kubernetes

Unified Support



Azure Red Hat OpenShift



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



Empower developers to innovate

Support for traditional, cloud native & serverless tools
Easily connect to hundreds of Azure services



Scale on-demand. Pay as you go










Scale as your application demand changes
Leverage your Azure monetary commits



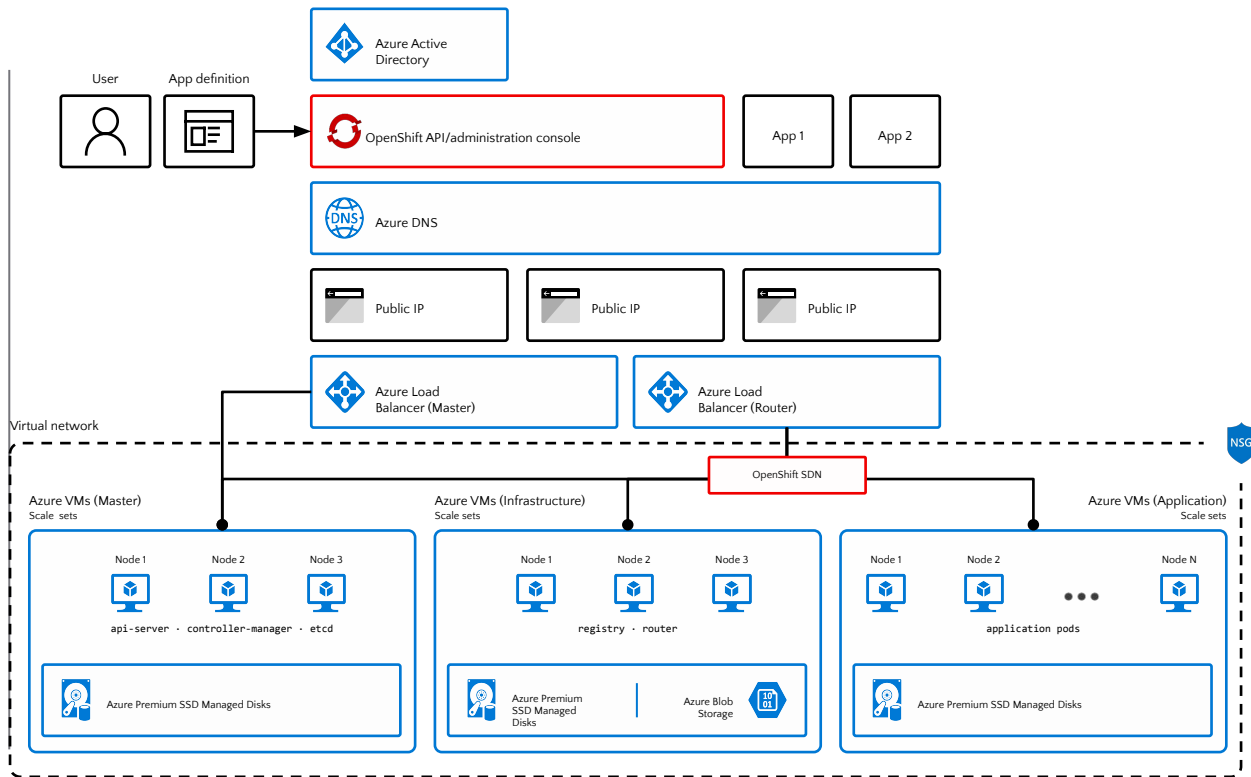
Enterprise-grade operations, security, and compliance

SLA: 99.9%, 24*7 premium support
SOC, ISO, PCI DSS and HIPAA regulatory compliance (coming soon)

Running your own Red Hat OpenShift cluster

Responsibilities	
User management	
Project and quota management	
Application lifecycle	
Cluster creation	
Cluster management	
Monitoring and logging	
Network configuration	
Software and security updates	
Platform support	

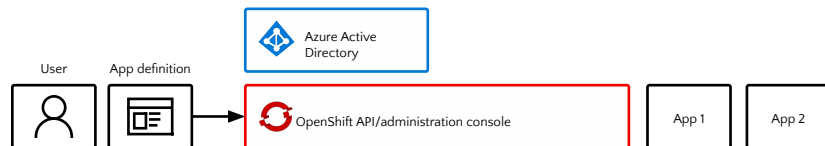
 Customer  Microsoft and Red Hat



Simplify cluster operations with Azure Red Hat OpenShift

Responsibilities	
User management	Customer
Project and quota management	Customer
Application lifecycle	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

Monitor and operate your VMs

Secure your nodes

Manage environment patches

Azure Red Hat OpenShift features

-  Flexible, self-service deployment
Create fully managed OpenShift clusters in minutes
-  Cluster node scaling
Easily add or remove compute nodes to match resource 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
-  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
-  First party Azure service
Clusters are deployed into your Azure subscription and included on your Azure bill
-  Persistent storage volumes
Azure Disk is pre-configured as the default storage class, providing dynamically provisioned Premium SSD's on-demand
-  Unified support
Jointly engineered, operated, and supported by Microsoft and Red Hat with an integrated support experience
-  Regulatory compliance
Azure Red Hat OpenShift is compliant with SOC, ISO, PCI DSS, HIPAA, and more (Coming soon)

Red Hat on Azure customers

More customer stories @ customers.microsoft.com - redhat.com/success-stories



software defined mainframe®



Key takeaways

- 1 Microsoft + Red Hat are the trusted & leading partners in your Digital Transformation Journey
- 2 Microsoft + Red Hat have deep collaboration from joint engineering, global reach and integrated co-located support.
- 3 Continuing to evolve based on your needs



+



=



Prerequisites

- Laptop with recent browser:
 - Chrome, Firefox, Internet Explorer/Edge 10+, or Safari 9+ installed
- Are a Java developer, architect, or developer team lead interested in learning more about the latest technologies for modern application development
- Working knowledge of Java programming
- Familiarity with Linux container technology and concepts

Thank you



LinkedIn: [linkedin.com/company/red-hat](https://www.linkedin.com/company/red-hat)

YouTube: [youtube.com/user/RedHatVideos](https://www.youtube.com/user/RedHatVideos)

Facebook: [facebook.com/redhatinc](https://www.facebook.com/redhatinc)

Twitter: twitter.com/RedHatNews

Google+: plus.google.com/+RedHat



LinkedIn: [linkedin.com/company/microsoft/](https://www.linkedin.com/company/microsoft/)

YouTube: [youtube.com/user/MSCloudOS](https://www.youtube.com/user/MSCloudOS)

Facebook: [facebook.com/microsoftazure/](https://www.facebook.com/microsoftazure/)

Twitter: twitter.com/azure

Azure Friday: channel9.msdn.com/Shows/Azure-Friday

Azure | Channel 9: channel9.msdn.com/Blogs/Azure