

Monoliths to microservices: App Transformation

Hands-on Technical Workshop Overview



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 <u>Spring Boot</u>, <u>Thorntail</u>, <u>Eclipse Vert.x</u>, and <u>Node.js</u> to implement cloud native microservices and replace monolithic functionality.
- Developing and deploying using <u>Azure Red Hat OpenShift</u>, <u>Red Hat Runtimes</u>, 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 OPENSHIFT

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

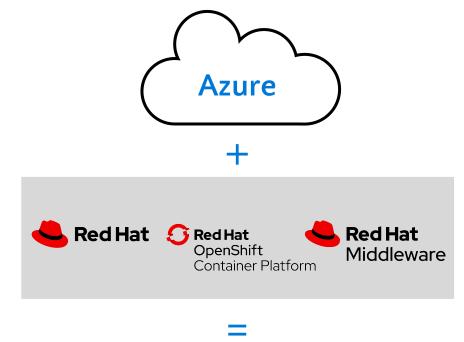
3:00PM-3:15PM

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





Azure Red Hat OpenShift

Engineered Better Together



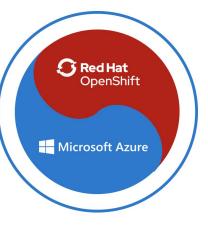


Jointly engineered, operated, and supported by Microsoft and Red Hat with an integrated support experience



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



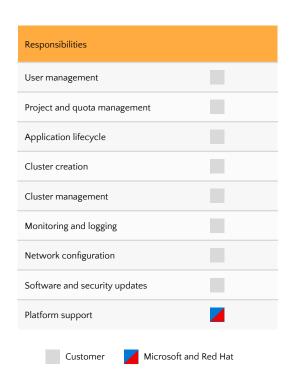
Enterprise-grade operations, security, and compliance

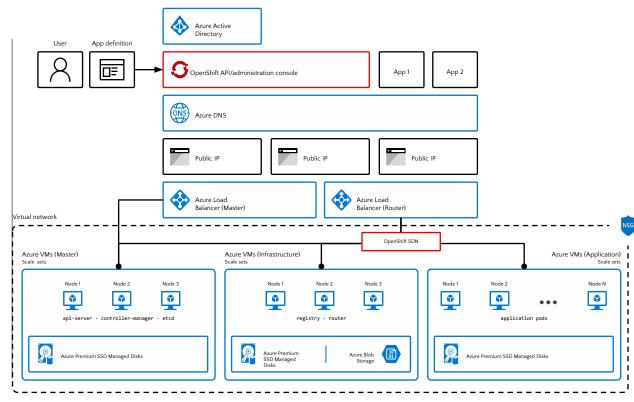
SLA: 99.9%, 24*7 premium support

SOC, ISO, PCI DSS and HIPAA regulatory compliance (coming soon)



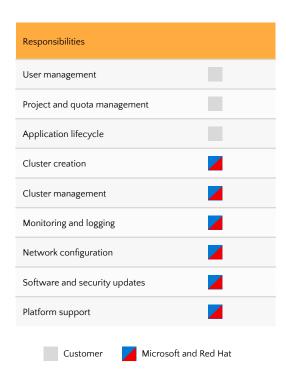
Running your own Red Hat OpenShift cluster

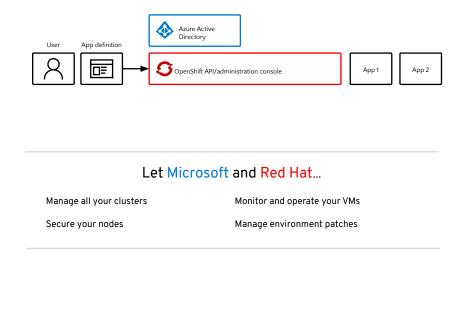






Simplify cluster operations with Azure Red Hat OpenShift







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





























Key takeaways

- Microsoft + Red Hat are the trusted & leading partners in your Digital Transformation Journey
- Microsoft + Red Hat have deep collaboration from joint engineering, global reach and integrated co-located support.
- 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



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