# Accelerate Your Cloud Journey with Red Hat and AWS

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## Agenda

**About AWS** 

AWS + RedHat

Compute

Containers

Programs & Tools



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#### **About AWS**

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## **Show of hands**



Model: Amazon Nova Canvas 1.0 Prompt: crowd in an auditorium in front of a stage with aws branding, raising hands, questions asked



## **About AWS**

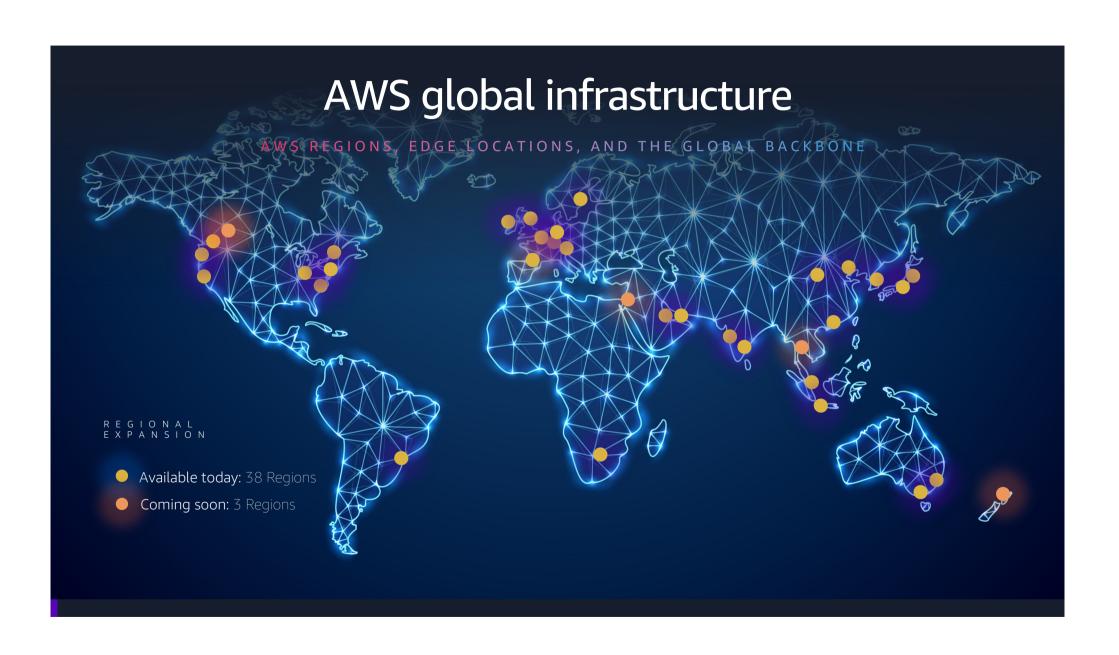
"Well-architecting The Cloud since 2006"



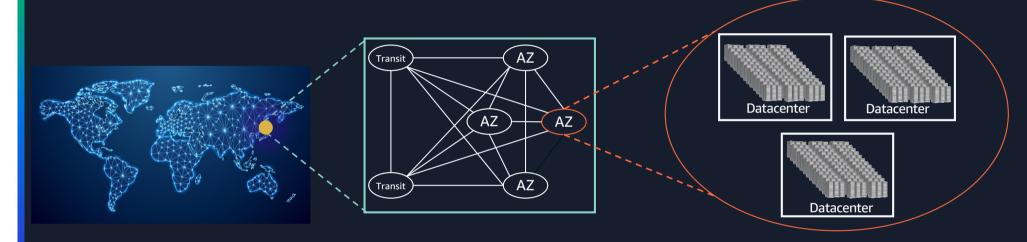
## How do customers benefit from the cloud?

Agility	Teams can experiment and innovate quickly and frequently
Cost Savings	Only pay for what you use, leveraging economies of scale
Elasticity	Easily scale up or down with the needs of the business
Innovation	Focus on business differentiators, not infrastructure
Global Footprint	Extensive, reliable, and secure global cloud infrastructure





## **AWS** Region design



#### **Global Presence**

120 Availability Zones38 Regions700+ Points of Presence

#### **AWS Region**

A Region is a physical location around the world where we cluster data centers. We call each group of logical data centers an Availability Zone.

#### AWS Availability Zone (AZ)

**Availability Zones** consist of one or more discrete data centers, each with redundant power, networking, and connectivity, housed in separate facilities.



### **AWS Local Zones**

RUN LATENCY-SENSITIVE APPLICATIONS AT THE EDGE USING AWS INFRASTRUCTURE AND SERVICES



LOW LATENCY

Extends AWS infrastructure services, APIs, and tools to where customers need them to support low-latency applications



FULLY MANAGED

Fully owned, managed, and supported by AWS



CITIES

New type of AWS infrastructure that places AWS compute, storage, networking, and select AWS services closer to where your end users are located



## Why AWS?



## AWS Availability Zone Design

38 AWS Regions 120 AWS Availability Zones



## TCO Price Reductions

134 Price Reductions Since 2006



#### Resilient Infrastructure

Gartner Magic Quadrant Worldwide Leader for Cloud Infrastructure as a Service



#### AWS Inferentia

**Hardware Innovation** 

Recognized as the Most Innovative Cloud Provider; Exclusive Purpose-Built Hardware

and AWS Trainium

Al chips built for price performance
of model training & serving



#### Amazon CloudFront

700+ Points of Presence, 100+ cities, 50+ countries



## Breadth & Depth

200+ fully featured services support any cloud workload



## **Sustainable Operations**

Match 100% of the electricity we consume with renewable energy



#### **AWS Graviton**

Powerful & efficient custombuilt Arm-based processors



#### **AWS Nitro System**

Reduces costs of virtualization & maximizes server resources delivered to your EC2 instances

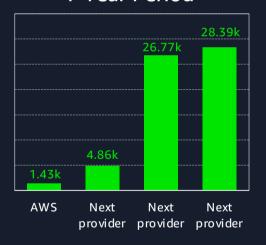


### Customers choose AWS for Resiliency & Availability

AND AWS IS THE LONGEST-RUNNING GARTNER MAGIC QUADRANT LEADER - 15 YEARS

#### Financial Impact of Downtime

Total (public) incident hours by provider over 1-Year Period



\$2.5B

Annual Fortune 1000 application downtime costs

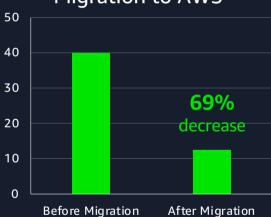
\$474K

Average cost/hr of downtime

\$1M

Cost/hr of a critical application failure

Source: IDC: <u>Annual Fortume 1000 application downtime costs Study</u> Ponemon Institute: <u>Cost of Data Center Outages</u>, <u>updates and stats</u> Unplanned Downtime Over 1-Year Pre & Post Migration to AWS



<u>The Business Value of Migration to Amazon Web</u> Services, The Hackett Group, February 2022

Futurum Cloud Downtime Incident Report - April 10, 2024



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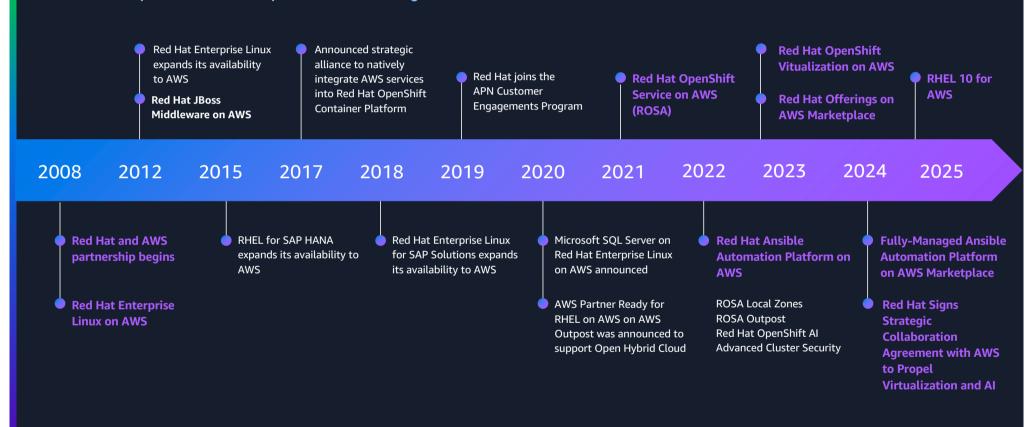
Containers

Programs & Tools



### **AWS and Red Hat**

Empowering organizations to accelerate innovation with a comprehensive hybrid cloud platform that combines the flexibility of AWS with the power of Red Hat open-source technologies



## **AWS and Red Hat's benefits**

**Forrester** conducted a Total Economic Impact (TEI) study on **ROSA** 

Observations include:

60-70%

reduction in development time

486%

return on investment (ROI)

50%

improvement in operational efficiency

20%

of developer time recaptured







**Nucleus** studied enterprise organizations' journey from on-premises to the AWS Cloud

Observations include:

69%

reduction in unplanned downtime

40%

reduction of overall IT

64%

reduction in mean time to resolution

43%

reduction in security events

Red Hat OpenShift Service on AWS enables innovation and agility for modern business



Visit <u>AWS Cloud Economics Center</u> to further understand value of AWS





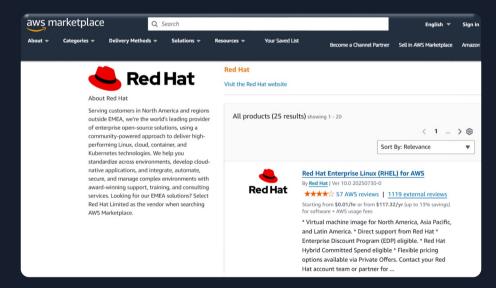
## **AWS Marketplace**

#### MEET CUSTOMERS WHERE THEY ARE AND WANT TO BUY

- 70 percent reduction in solution discovery time
- 60 percent faster procurement processes
- 30 percent acceleration in time-to-market with deployment efficiencies
- 10% cost savings
- Ability to have custom pricing and a single bill
- AWS License Manager now supports license type conversions for AWS Marketplace products
- All your favorite Red Hat listings



#### The Total Economic Impact Of AWS Marketplace





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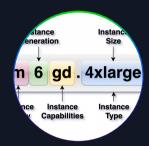
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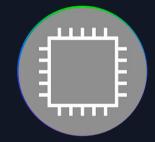
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## Compute at AWS in a nutshell



over 850 compute instance types



30b+ instances launched since 2006



100m+ instances launched every day

Broadest choice of processors and architectures (intel, amd, graviton, appleM1)

## **Customer challenges**

Inconsistent, disparate systems impede application performance

## Application deployment speed and agility

Traditional infrastructure and operations can limit application delivery and performance and business agility

## **Application** performance

Legacy applications may not function with the same performance on the cloud

## **Environment** consistency

Legacy operating systems can introduce inconsistencies between on-premises and cloud deployments, making it difficult to achieve security and compliance requirements



## **Organisational scenarios**

RHEL Hybrid

#### Same look & feel

Reuse licenses

Pay per second pricing

Burst to cloud

Hardening in the cloud

Commercial Linux

#### **Compliance and security**

Hardened images

Single point of purchase

Optimize workloads

HA/DR

Polyglot OS Setups

#### Linux one of the estate

Mix of OS's for various needs

Managed services in the cloud



### **Features of RHEL on AWS**

Consistently runs across physical, virtualized, cloud, and container environments



#### Flexible app environment

Bridge production stability and developer agility by delivering the latest in stable development tools, technologies, and frameworks



#### Secure foundations

Military-grade security technologies

– from network firewall control to secure
containers for application isolation – to help
prevent intrusions and protect your data



#### **High performance**

Meet demanding performance requirements across diverse areas like computational scalability, application performance, and database throughput



#### Reliable platform

Gain the reliability and support that frees you to deliver business benefits through technology, instead of managing downtime and system updates

## Flexible deployment options

#### Commercial Linux distribution for AWS



#### **AWS Marketplace**

Purchase Red Hat Enterprise Linux via AWS Marketplace in yearly or on-demand subscriptions



#### **Red Hat Cloud Access**

Easily move existing Red Hat subscriptions from on-premises to AWS environments through the Red Hat Cloud Access

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## Why Red Hat OpenShift Service on AWS



Red Hat OpenShift Service on AWS is a turnkey application platform that reduces operational complexity, allowing developers to focus on building and scaling applications that add more value to the business, go to market faster, and get more from their cloud investment.

#### **Consolidated billing**



- Use your existing AWS commitment/EDP to use Red Hat OpenShift
- Get a single unified bill from AWS for both Red Hat OpenShift and AWS consumption

#### **Built for hybrid**



- Consistent OpenShift experience across clouds and on-premises
- Runs on bare metal and VMs
- Mitigates customer concerns about cloud lock-in

#### Joint support



- Integrated support systems
- Contact Red Hat or AWS support
- Foundation based on RHEL with decades of enterprise IT knowledge and experience

#### **Integration with AWS services**



 Build containerized applications that integrate natively with more than 170+ AWS cloud services

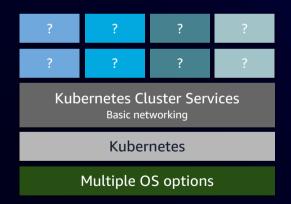


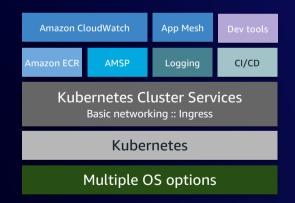
#### DIY K8s

- Full assembly required
- Unmanaged
- No defaults
- No integrations

#### **Amazon EKS**

- Some assembly required
- Managed cluster
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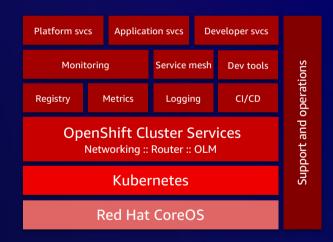
- Some assembly required
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#### **ROSA**

- No assembly required
- Managed platform stack
- Opinionated defaults
- Supported set of integrations











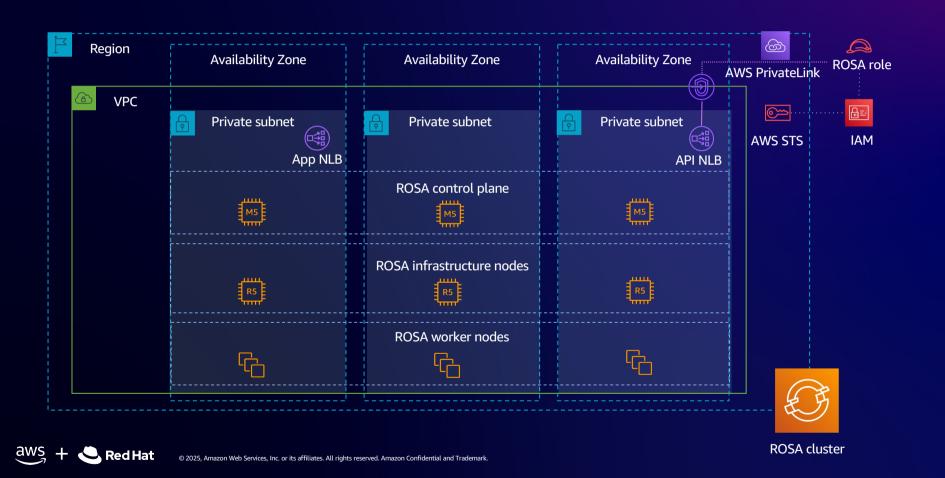


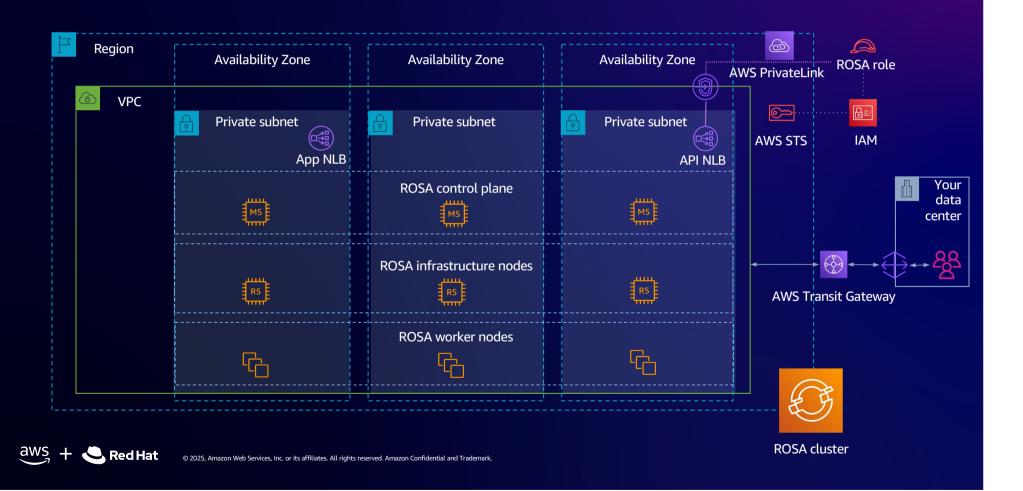


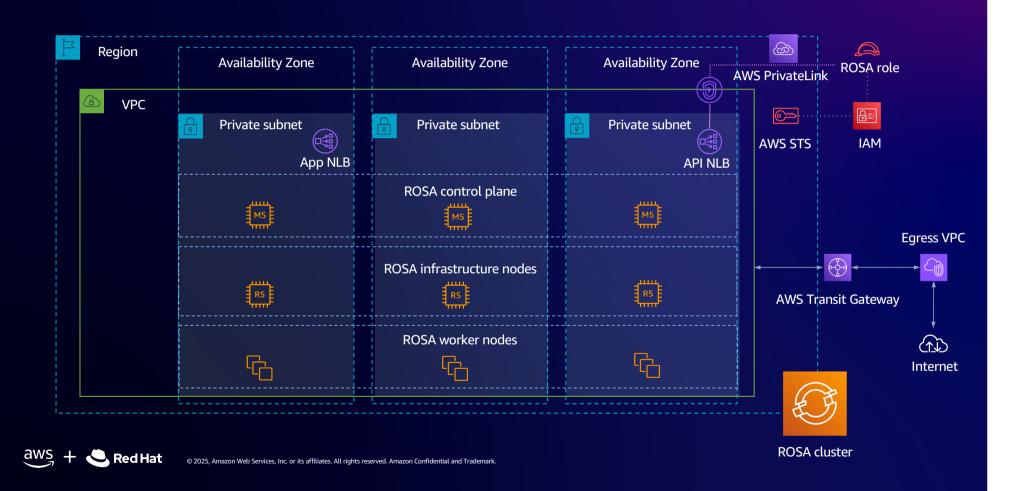












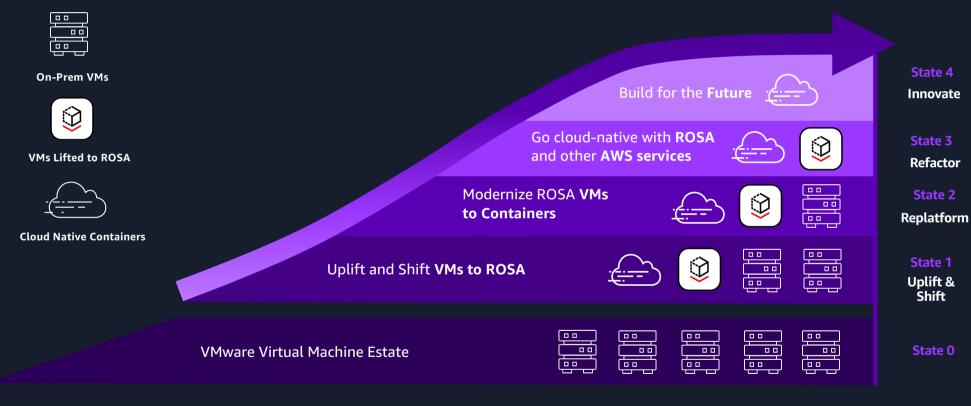




How do Customers benefit from all this?

## Virtual Machine Modernization Journey

RED HAT AND AWS MEET YOU WHERE YOU ARE WITH ALL THE TOOLS YOU NEED



## Red Hat OpenShift Virtualization on ROSA

THE MODERN CHOICE FOR GENERAL-PURPOSE VIRTUALIZATION



Red Hat
OpenShift Virtualization

Red Hat OpenShift OCP

Red Hat Enterprise Linux

**Physical machine** 

#### **Unified platform**

for virtual machines and containers\*

#### Consistent management

tools, interfaces, and APIs incl. ACM and AAP integrations

#### Performance and stability

of Linux, KVM, and qemu

#### Healthy open source community

the KubeVirt project is a top 10 CNCF active project, with 200+ contributing companies

#### Diverse ecosystem

of Red Hat & partner operators

#### Included feature

of all OpenShift subscriptions

#### **Includes Autoscaling**

allows for adjusting cluster resources on demand

#### **Supports Microsoft Windows**

guests through Microsoft SVVP

#### Inbound guest migration

using Ansible Automation Platform + Migration Toolkit for Virtualization, Training, and Consulting

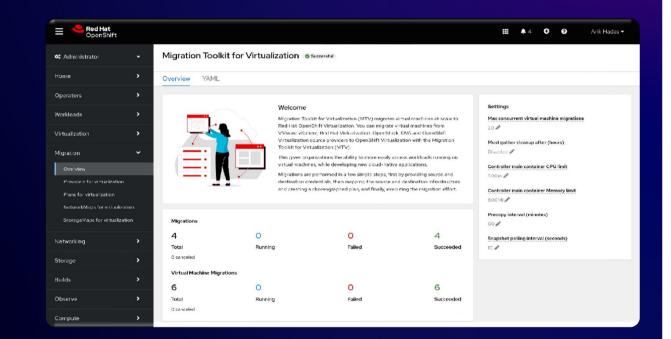
### Virt admin focused training DO316, EX316

OpenShift upgrades are part of the service

## Red Hat Migration toolkit for virtualization (MTV)

INCLUDED FEATURE IN ROSA

- Easy migration of virtual machines Linux and Windows
- Migrate virtual machines to OpenShift Virtualization in a few simple steps
- Provide source and destination credentials, map infrastructure, and create migration plans



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## Migration programs & tools

#### MIGRATE AND MODERNIZE WITH CONFIDENCE

<u>OLA License & Storage Assessment</u> – Delivering OLA insights to a customer increases the win rate from 45.5% to 72.4% and capturing storage improves the opportunity to optimize and migrate.

<u>MAP</u> – Once VMware workloads are in an AWS environment; it will secure the overall deal and support modernization and other sales motions. MAP offers new incentives for VMware workloads.

<u>VMware Migration Accelerator (VMA)</u> – a program to provide customers with AWS credits up to \$400 per VM that is migrated from VMware Cloud on AWS into AWS EC2

<u>VMware Modernization Program (VMP)</u> – provides cash to qualified partners to assess and migrate workloads from VMware Cloud on AWS to AWS native services

<u>VMC Customer Obsession Initiative (VMCCO)</u> – VMCCO is targeted at enterprise customers and VMW deals >\$2M ARR, where existing funding mechanisms are insufficient to win.

<u>AWS Migration Assessment with Containers</u> – designed to help AWS customers make faster and smarter migration decisions when migrating their on-premises container workloads to AWS

<u>DRIVE for VMware Assessment</u> – transforms the migration planning process from months to minutes, providing customers with immediate clarity to VMW licensing changes.



# **!** Next steps

- **Chat** with us after the session
- **Engage** ask your AWS representative about incentives for Migrations
- Learn by diving into our digital assets



https://aws.amazon.com/partners/redhat/

• Register for the ROSA Virtual Workshop

Secure Software Development with Red Hat OpenShift on AWS (ROSA)

October 28, 2025 1:00 PM – 2:30 PM ET

#### Virtual event

Secure software development with Red Hat OpenShift Service on AWS (ROSA)



# Thank you!

