

Connect

Semplifica, scala, raggiungi il successo: rendi il tuo IT a prova di futuro con AWS e Red Hat

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Agenda

- About AWS
- AWS + RedHat
- Operating Systems
- Containers + Virtual Machines
- Automation + Al
- Programs + Tools



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



Market dynamics and sentiments are shifting

TRADITIONAL WORKLOAD SENTIMENT AND MODERNIZATION MOMENTUM



of IT leaders face challenges long-term strategy

Source: PWC Survey



of organizations will run balancing short-term needs with containerized apps in production by 2027

Source: Gartner Research CTO Guide



of executives see the cloud as a critical factor in driving business transformation

> Source: Gartner Says More Than Half of Enterprise ng in Key Market Segments Will Shift to



of new digital workloads will be deployed on cloud-native platforms by 2025

Source: Gartner Press Release



of VMware customers are exploring alternative hosting options

Source: Gartner Community Poll as of



AWS and Red Hat

A PARTNERSHIP BUILT ON CONTINUOUS CUSTOMER INNOVATION





Customer benefits with AWS + Red Hat

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

Observations include:

69% reduction in unplanned downtime

40% reduction of overall IT costs

64%

reduction in mean time to resolution

43% reduction in security events

aws



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

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



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





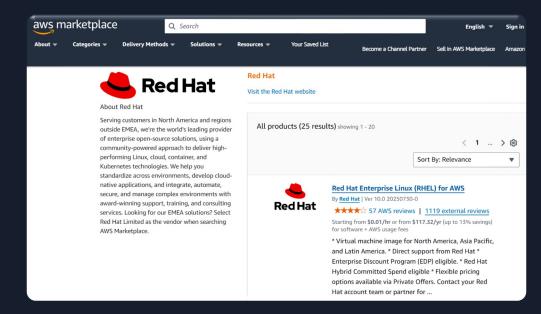
AWS Marketplace

MEET CUSTOMERS WHERE THEY ARE AND WANT TO BUY

- 70% reduction in solution discovery time
- 60% faster procurement processes
- 30% 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





FREE TRIALS

Get started with a free trial before committing to purchase.



USAGE-BASED SUBSCRIPTIONS

Pay for software and compute capacity by the second or hour with no long-term commitments.



FLEXIBLE CONSUMPTION MODELS

Ease into commitments



BRING YOUR OWN LICENSE

Migrate to AWS with your existing product licenses. Intended for pre-existing customers.



CONTRACTS

Make a monthly, annual, or multiyear payment and receive a discount.

PRIVATE OFFERS

Negotiate a custom price with a seller or Channel Partner. Accept the offer in AWS Marketplace.



FLEXIBLE PAYMENT SCHEDULER

Set a custom billing frequency with your seller.



Operating Systems



Red Hat Enterprise Linux on AWS

THE FOUNDATION FOR STABLE, SECURE, AND SCALABLE CLOUD OPERATIONS

Certified Compatibility

Optimized Performance

Built to deliver optimal performance on AWS infrastructure with pre-tuned images and AWS-specific performance profiles

Streamlined Subscription Management

Integrate with AWS License Manager for discovering and tracking RHEL instances, simplified subscription compliance, and cost management

Stability and Consistency

Unified Management Experience

Same tools for cloud/on-premises deployments
Simplified operations across environments
Streamlined workflow management

Backed by Industry Leaders

Joint support from AWS and Red Hat Integrated system protection Regular updates and maintenance

Cloud Capacity

Dynamic Infrastructure

Resizable compute capacity on demand Cost-effective scaling options Flexible deployment models

Seamless AWS Integration

Full integration with AWS services and features, including EC2 Elastic Load Balancing, Autoscaling Groups, CloudWatch, License Manager, Amazon S3, Elastic Block Store (EBS)



Containers+Virtual Machines



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

Joint support



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

Built for hybrid



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

Integration with AWS services



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



Build vs Buy

ROSA - A FULLY CONFIGURABLE, TURN-KEY APPLICATION PLATFORM

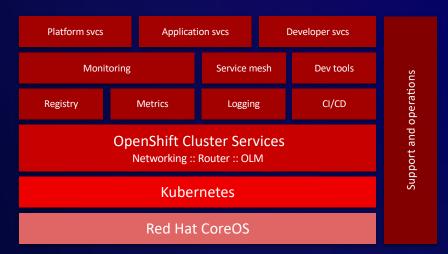
Do It Yourself - K8s

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



ROSA

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



Red Hat OpenShift Virtualization on ROSA

THE MODERN CHOICE FOR GENERAL-PURPOSE VIRTUALIZATION





VMs

Containers

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

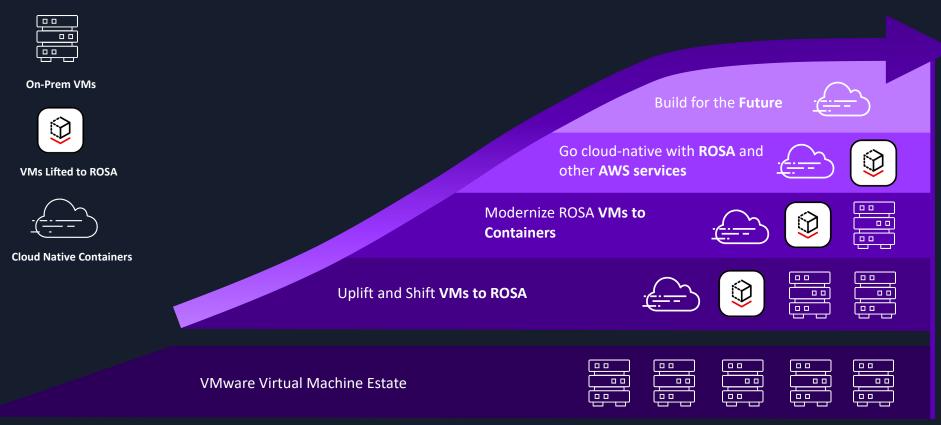
OpenShift upgrades are part of the

service



Virtual Machine Modernization Journey

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



15

State 4

Innovate

State 3

Refactor

State 2

Replatform

State 1

Uplift & Shift

State 0



With Red Hat OpenShift Virtualization on ROSA we were able to support bringing C•CURE's latest developments to a hybrid cloud environment that enables our customers to run the application consistently wherever works best for them.

Scott Stout, Director of Cloud Engineering
Johnson Controls

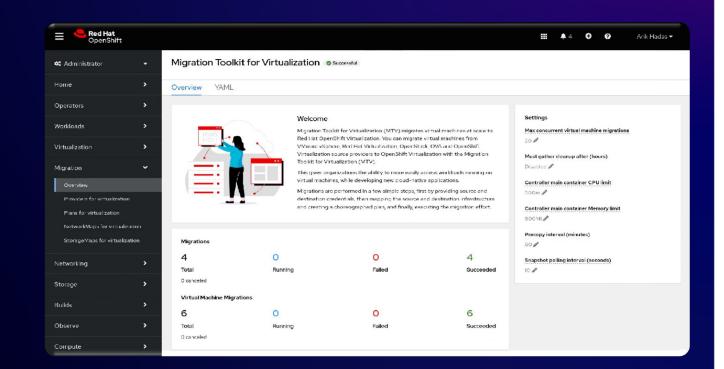
Johnson Control's Press Release



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





Automation + Al



Ansible is now fully-managed on AWS

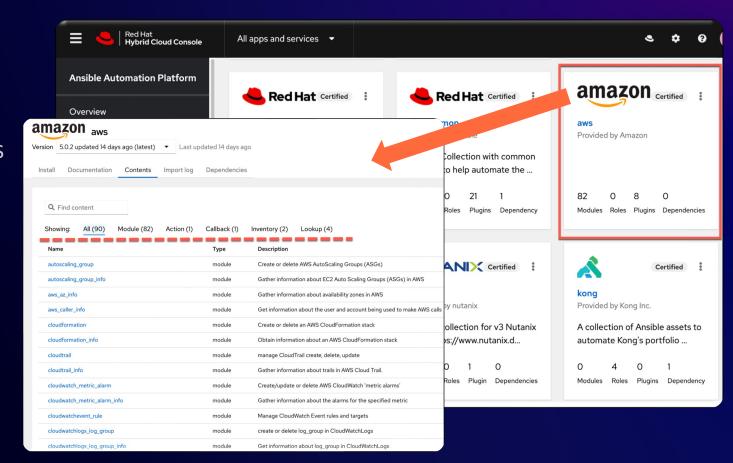
RED HAT ANSIBLE AUTOMATION PLATFORM SERVICE IS ON AWS MARKETPLACE





Red Hat Certified Collection for AWS

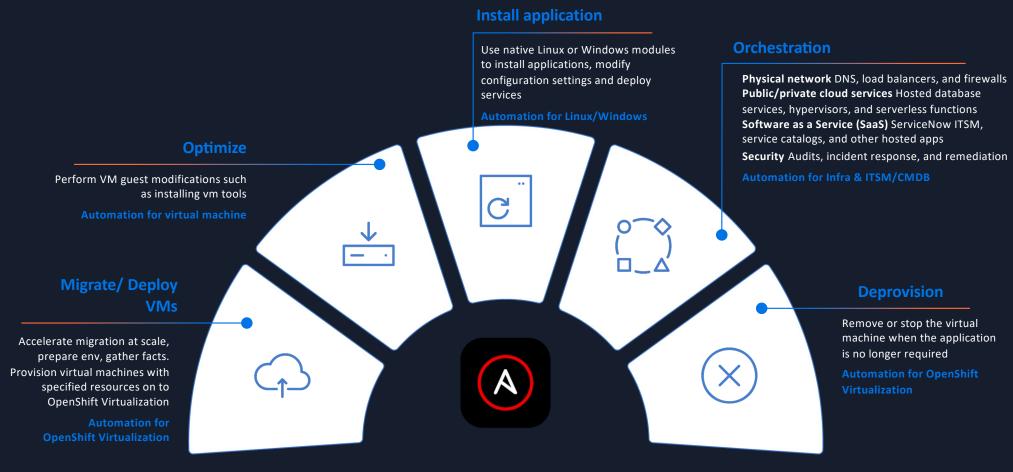
- Collection name: amazon.aws
- Numerous modules, inventory, and lookup plugins (90+)
- Simplifies automation against AWS resources
- Sample YAML code





Migrating VMs to ROSA

<u>AUTOMATING VM MIGRATIO</u>N AND DAY 2 OPERATIONS ON AWS WITH RED HAT ANSIBLE AUTOMATION PLATFORM

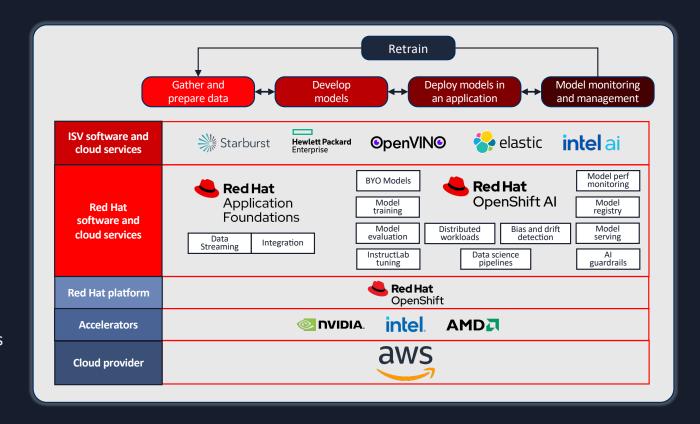




Scalable AI/ML Solutions: Red Hat OpenShift AI on AWS

STREAMLINED AI MODEL MANAGEMENT THROUGH A UNIFIED CLOUD INTERFACE

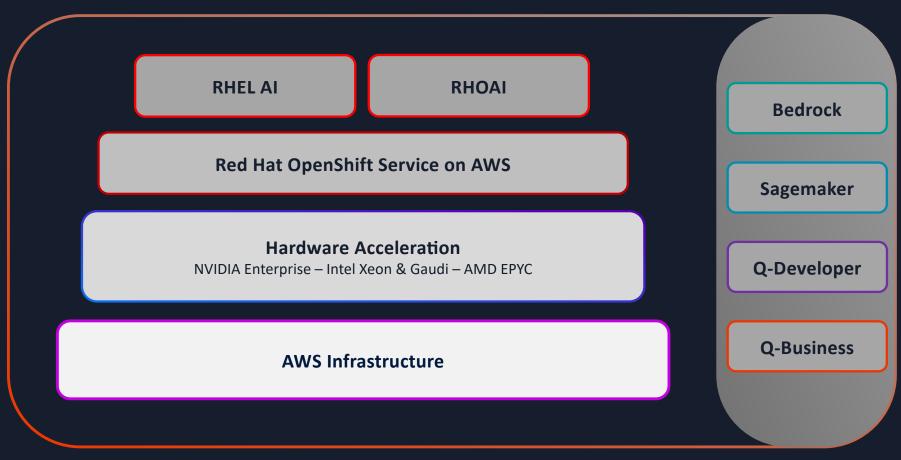
- Scalable AI workloads across dynamic AWS Cloud Infrastructure
- Automated AI model training, deployment and monitoring through data science pipelines
- Integrated with NVIDIA AI Enterprise for GPU Hardware Acceleration
- Compatible with Intel and AMD powered EC2 instances
- Conforms to security and compliance practices including role-based access control (RBAC)
- Features AI for bias detection and guardrails to protect organizations from harm





Foundation for the future - purpose-built for AI

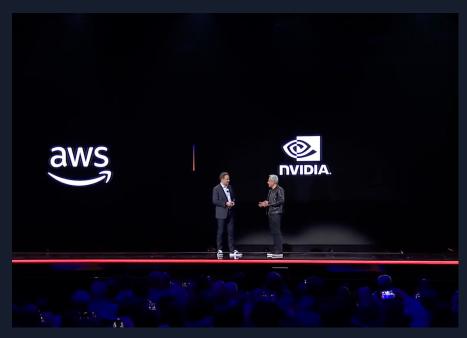
ADOPT AND SCALE AL





AWS for AI with NVIDIA AI Enterprise

COLLABORATING SINCE 2010 TO CONTINUALLY DELIVER LARGE-SCALE, COST-EFFECTIVE, AND FLEXIBLE GPU-ACCELERATED SOLUTIONS FOR CUSTOMERS



2.5X

Improved throughput on Llama 3.1 8B Instruct with NIM On

4X

Faster TTFT on Llama 3.1 8B Instruct with NIM On

2.2X

Faster ITL on Llama 3.1 8B Instruct with NIM On

NVIDIA's Development Tools



NIM, CUDA-X, and NeMo framework enable customization of pretrained Al models and streamline generative Al development

Enterprise-Grade Features



Continuous security monitoring, production releases with API stability, and cross-platform compatibility for cloud deployments

Comprehensive Al Frameworks



Supports PyTorch, TensorFlow, RAPIDS, TAO Toolkit, and specialized solutions like NVIDIA Clara for healthcare applications and more

Advanced Platform Capabilities



Features multilingual speech, real-time audio/video enhancement, and Al Workflows for accelerated solution deployment



Migration Programs & Tools

AWS Migration Acceleration Program (MAP)

AWS Migration Acceleration Program (MAP) is a comprehensive and proven cloud migration program that's the
result of AWS' experience migrating hundreds of customers. MAP consists of an agile-based migration
methodology, a global network of vetted partners, automation tools, a training path to up-skill staff, and financial
investment to help manage migration double bubble costs.

AWS VMware Migration Accelerator (VMA)

 Save costs with AWS Promotional Credits when you accelerate migrations of VMware Cloud on AWS workloads to Amazon EC2. Program to provide customers with AWS credits up to \$400 per VM that is migrated from VMware Cloud on AWS into AWS EC2

Red Hat Marketplace Promotion Private Offer Program (MPPOP)

Ask for Red Hat representative



Global portfolio of customers in 190 countries





LIONSGATE

DOW JONES







































































The New York Times











































































Next Steps

- **Chat** with us after the session
- Register for the ROSA Hands-on lab Rome, November 20th



Visit Red Hat and AWS Partnership page



- ▼ Visit Red Hat and IBM on AWS technical blog
 https://aws.amazon.com/blogs/ibm-redhat/
- **♥ Visit** Red Hat on AWS technical content



Red Hat on AWS



Thank you!

Domenica Siviglia









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