



Red Hat
Summit

Connect

**ROSA - Red Hat
OpenShift on AWS**
Discovery Session

Who?

Managed OpenShift Black Belts (MOBB) Mission

To remove customers' organizational, competitive, and technical blockers to enterprise-wide adoption of Managed OpenShift (ROSA, ARO, OSD)



Andrea Bozzoni

Senior Cloud Services Black Belt



Roberto Carratalá

Senior Cloud Services Black Belt

Agenda

- Today's business goals and blockers
- Benefits of OpenShift Cloud Services
- Value of an Turnkey Application Platform
- Overview of Red Hat OpenShift Service on AWS (ROSA)
- Operational Efficiency

Today's business goals and blockers

Today's business goals and blockers

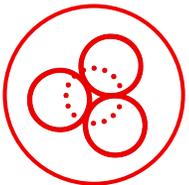
What are you trying to achieve?



Innovation at speed



Positive customer experiences that lead to growth and the ability to scale



Flexibility to adapt, business agility



What else are you trying to achieve?

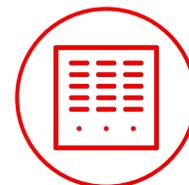
What's blocking you?



Limited time, resources & budget?



Complex implementations & integrations?



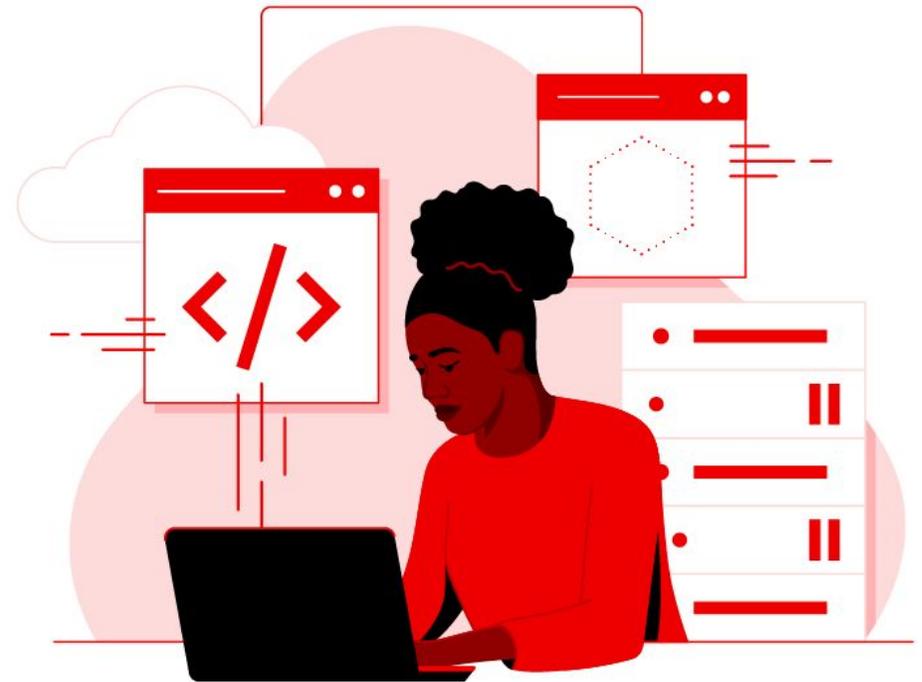
Legacy systems, or other hurdles to modernization?



What else might be a blocker for you?

Where do you want to spend your time?

“73.5% of technology leaders are outsourcing the implementation, maintenance and optimization of their cloud platforms...”



We can help.



Empower developers to innovate

Get applications, both new and modernized, to production sooner with a wide range of technologies and streamlined workflows.

Provide a cloud-like experience, everywhere

Have full-stack and automated operations on a consistent foundation for on-premises or hybrid cloud infrastructures.

Transform your people, process, culture

Continuous security, world-class support and professional services, and deep expertise from Red Hat..

64% of the top 25 companies on the Fortune Global 500 list use Red Hat OpenShift.

A consistent platform no matter how or where you run

Red Hat OpenShift cloud services—Fully managed, start quickly



Red Hat OpenShift Service
on AWS



Azure Red Hat
OpenShift



IBM **Cloud**

Red Hat OpenShift
on IBM Cloud



Google Cloud

Red Hat OpenShift
Dedicated

Self-Managed Red Hat OpenShift—Customer managed, for control and flexibility

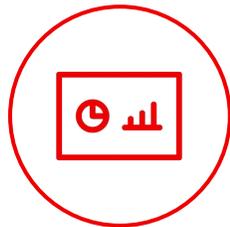


Red Hat
OpenShift

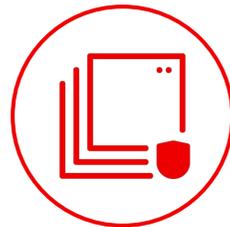
On **public cloud**, on-premises on **physical** or
virtual infrastructure, and at the **edge**

Benefits of OpenShift Cloud Services

How are Red Hat OpenShift cloud services different?



1st party, joint solutions with
leading cloud providers



Turnkey application
platform



Consistent hybrid cloud
experience

Red Hat OpenShift cloud services

A turnkey application platform with management and support from Red Hat and leading cloud providers



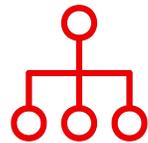
Accelerate time to value

Quickly build, deploy, and run applications that scale as needed.



Operational efficiency

Enhance operational consistency, efficiency and security with proactive management and support.



Focus on innovation

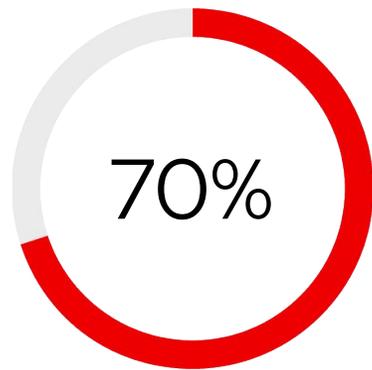
Simplify operations so your teams can refocus on innovation, not managing infrastructure.



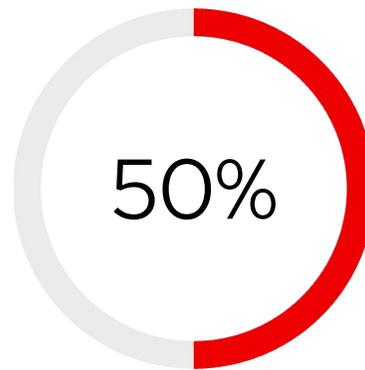
Hybrid cloud flexibility

Deliver a consistent experience on premises and in the cloud.

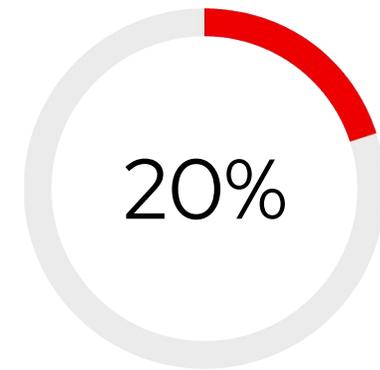
Improve **efficiency** and **productivity**



Shortened development cycle by 70%¹



50% improvement in operational efficiency¹



20% of developer time is recaptured¹

¹[The Total Economic Impact™ of Red Hat OpenShift Cloud Services by Forrester, "Jan. 2022.](#)

Value of an Turnkey Application Platform

“Do you want Kubernetes, or do you want a better way to build, deploy, and run apps at scale?”



Build and run a platform **VS** using a turnkey cloud service

“Batteries Included”

... but swappable

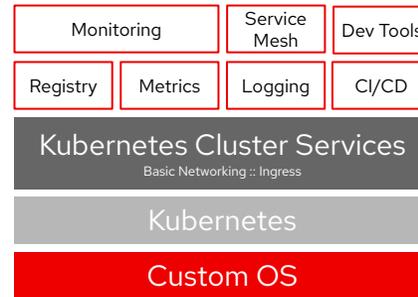
Individual components can be swapped out

Eg.

- Using AWS CloudWatch for logging on AWS
- Use specific cloud services or ISV offerings



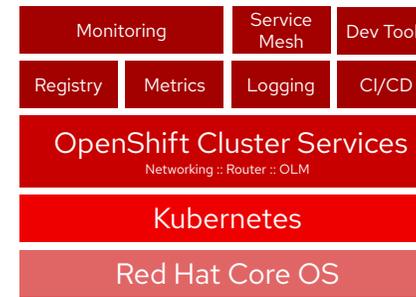
The Parts



xKS + 'native' services



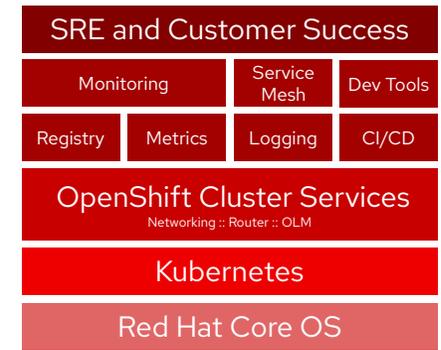
The Assembled Car



- Application Platform - Self-managed Red Hat OpenShift



The Car & Pit Crew

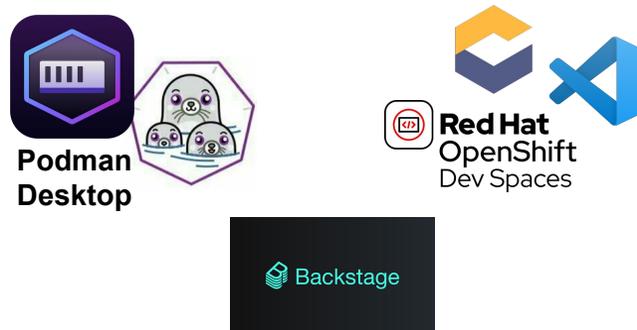


- Turnkey Application Platform - Red Hat OpenShift cloud services

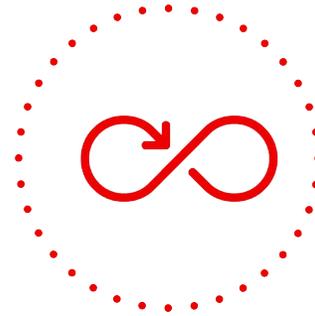
Cloud Native Apps Need More than Kubernetes



Developer Experience



Drive Developer Productivity



GitOps/DevOps App Modernization



Accelerate Application Delivery



Management & Security



Scale & Reduce Risk



OpenShift Pipelines



Built for Kubernetes

Cloud-native pipelines taking advantage of Kubernetes execution and, operational model and concepts.



Secure pipeline execution

Kubernetes RBAC and security model ensures security consistently across pipelines and workloads.



Scale on-demand

Pipelines run and scale on-demand in isolated containers, with repeatable and predictable outcomes.



Reduced complexity

Granular control over pipeline execution details on Kubernetes, to support your exact requirements.

Powered by  **TEKTON**

OpenShift GitOps



Multi-cluster config management

Declaratively manage cluster and application configurations across multi-cluster OpenShift and Kubernetes infrastructure with Argo CD.



Opinionated GitOps bootstrapping

Bootstrap end-to-end GitOps workflows for application delivery using Argo CD and Tekton with GitOps Application Manager CLI.



Automated Argo CD install & upgrade

Automated install, configurations and upgrade of Argo CD through OperatorHub.



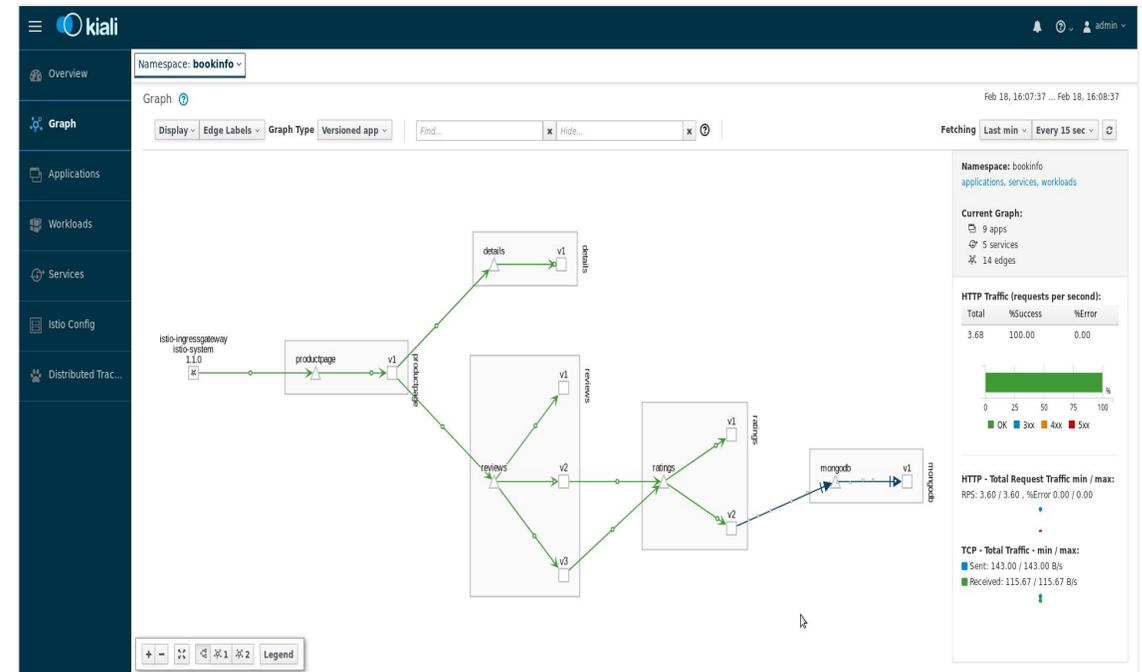
Deployments & environments insights

Visibility into application deployments across environments and the history of deployments in the OpenShift Console.

Powered by  argo

OpenShift Service Mesh

- ▶ Complete service mesh, including tracing and visualization capabilities, packaged for ease of use
- ▶ Policy-driven security with a dedicated network for service-to-service communications
- ▶ Available via OperatorHub



Overview of Red Hat OpenShift Service on AWS (ROSA)

OpenShift cloud services are 1st party, cloud native solutions.



Red Hat OpenShift
Service on AWS



Azure Red Hat
OpenShift



Red Hat OpenShift on
IBM Cloud



Integrated
Dev tools and cloud
native services



Joint
Support & Engineering



Automation and Day 2
Operations



Security and
compliance



Single invoicing,
utilize cloud
committed spend

Red Hat OpenShift Service on AWS

A turnkey application platform native to AWS



Focus on innovation

Simplify operations so your teams can refocus on innovation, not managing infrastructure.

Accelerate time to value

Quickly build, deploy, and manage applications that scale as needed.

Hybrid cloud flexibility

Deliver a consistent experience on premises and in the cloud.

Modern Application Computing Services Landscape

Application Platform

Accelerate and standardize application Management

Build your Own Application Platform



AWS Proton



AWS App Runner



EKS Blueprints



AWS X-Ray



Cloud Watch



Amazon Managed Prometheus

Turn-key Application Platform

ROSA



Red Hat OpenShift Service on AWS

Containers Orchestration

Deployment, scheduling, and scaling, containerized applications



Amazon Elastic Container Service (Amazon ECS)



Amazon Elastic Kubernetes Service (Amazon EKS)

Containers Infrastructure

Registry, Networking, CI/CD



Amazon Elastic Container Registry (Amazon ECR)



AWS Cloud Map



AWS App Mesh



AWS CodePipeline

Compute



Elastic Compute Cloud (Amazon EC2)



Fargate

Third-party tooling



sumo logic



Prometheus

Grafana





ROSA

Application Development AWS Controllers for Kubernetes on [Operator Hub](#)

AWS DynamoDB	AWS RDS	Amazon Aurora	Amazon API Gateway	AWS CodeCommit	AWS CodeBuild	AWS EventBridge

Application Monitoring

Cloud Watch

CI/CD

Amazon Elastic Container Registry (ECR)

Infrastructure

Amazon EC2	Amazon EBS	Amazon EFS	Amazon FSx	Amazon ELB	Amazon VPC	Route 53	AWS Private Link

Integrated
AWS
Services

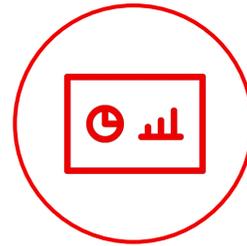
Operational Efficiency

Containers come with their own challenges



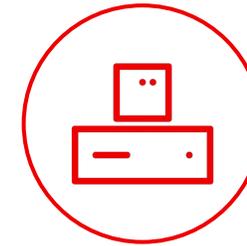
Container security

Image scanning, patching, and compliance.



Day 2 management

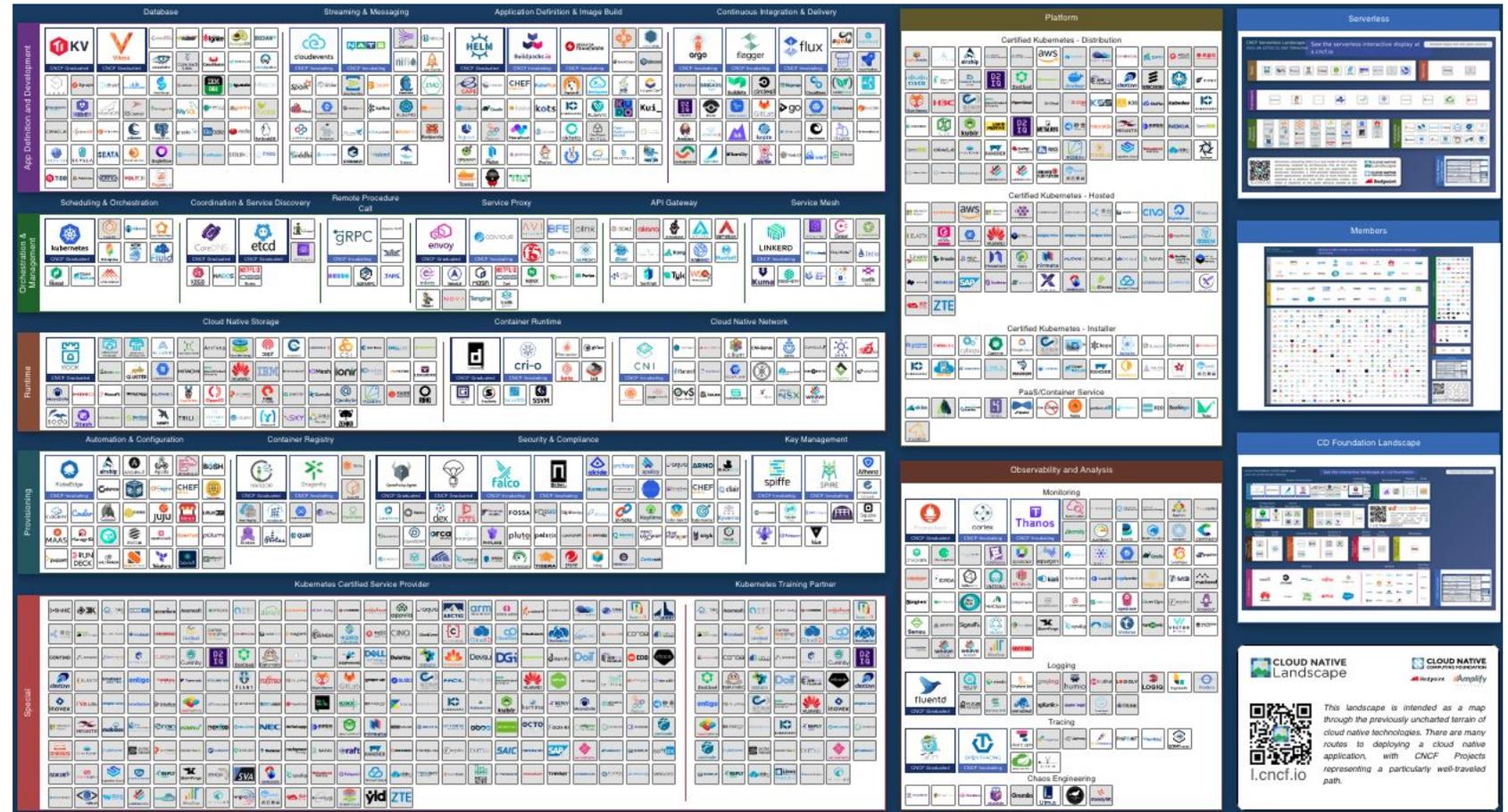
Install, upgrade, and maintain. Integrate existing enterprise technology.



Application delivery

Monitoring, metering, and management. Integrate existing developer tools.

The complexity of cloud native app dev



An opinionated platform for building, deploying and running applications

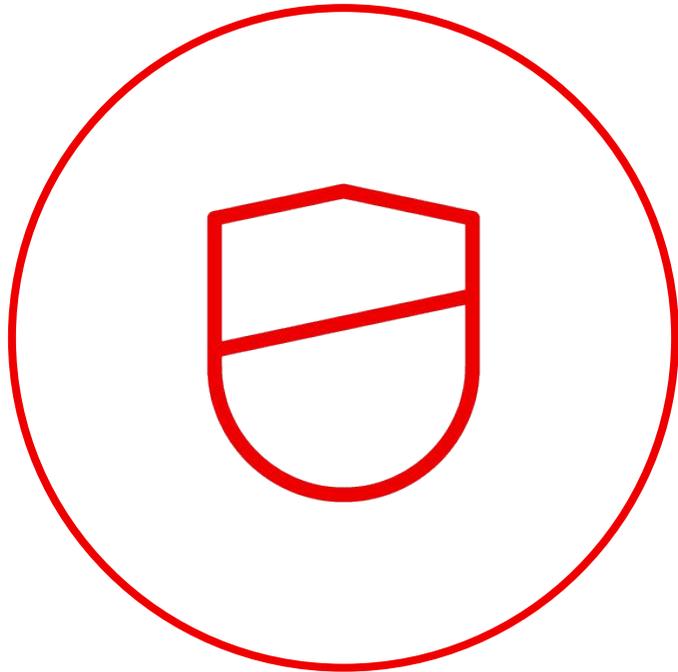


Service Mesh	App-Services	DB-Services
CI/CD	DNS	Authentication
Monitoring	Kubernetes	Automation
Logging	Registry	Security
Compute	Storage	Network

- ▶ Fully integrated and supported components
- ▶ Expert SRE and Customer Success support
- ▶ Abstracts away technical details
- ▶ Consistent experience across clouds

Move from 24x7 operations to 9-5 innovation

End-to-End support for your entire application platform



- ▶ OpenShift cloud services includes **full support for worker nodes**
 - Zero downtime upgrades
 - Proactive monitoring
 - Automated patching
 - **Compliance and certifications** extend to worker nodes
- ▶ **99.95%** financially backed SLA
- ▶ **24x7 joint support** from Red Hat and cloud provider
- ▶ Automation and **Day 2 Operations by global SREs**

Full Stack management from a global Site Reliability Engineering (SRE) team



Who are our SREs?

- ▶ Developers and systems engineers who know how to handle volume and a diversity of clusters.
- ▶ Uniquely offer both an engineering and development mindset.

SRE responsibilities

- ▶ Build solutions and features.
- ▶ Automate at scale.
- ▶ Day 2 operations: monitor, patch, and upgrade the platform.
- ▶ Work hand in hand with cloud providers and open source community.

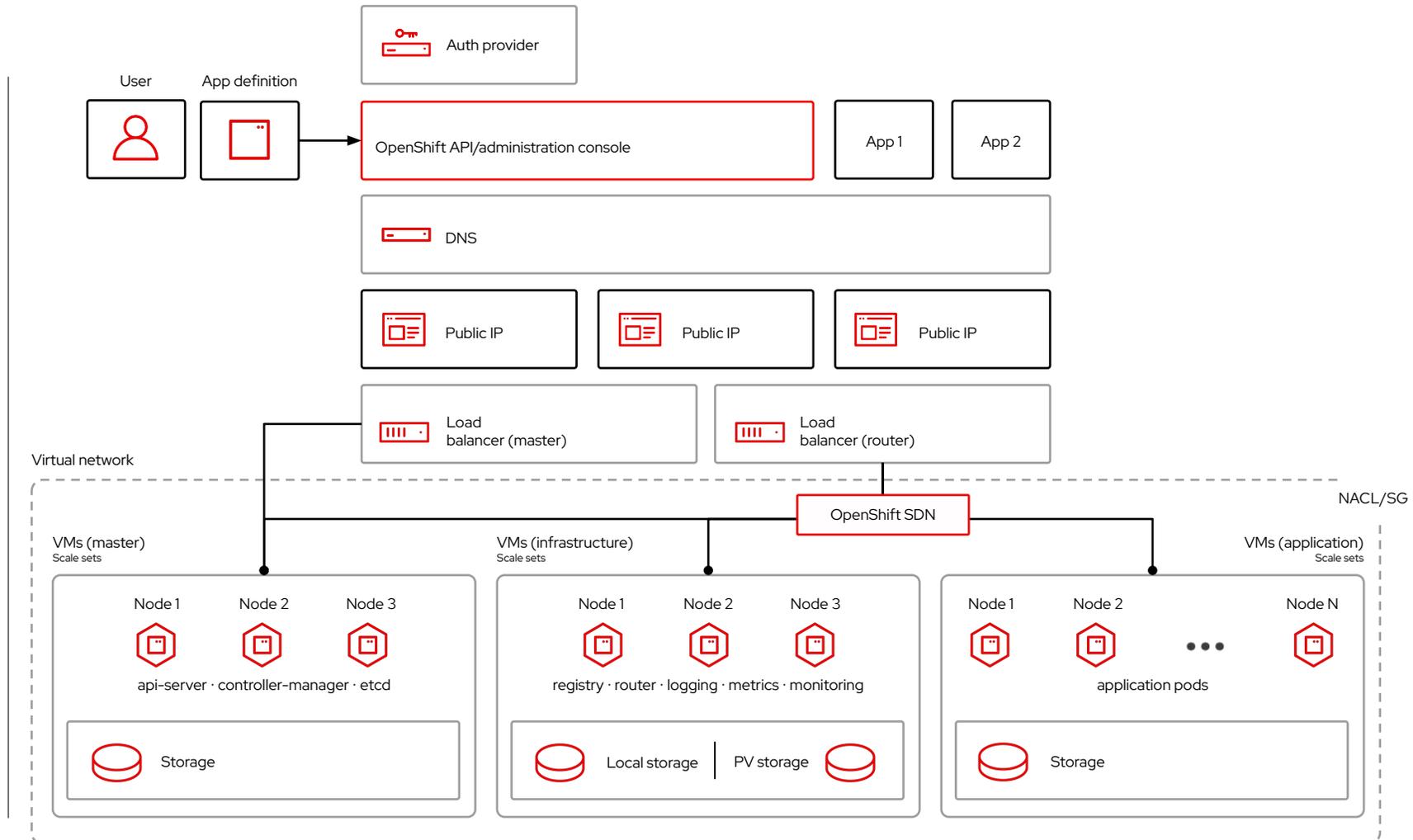
Customer benefits

- ▶ Accelerate application development and delivery through automation.
- ▶ Improve operational efficiency, security and resiliency.
- ▶ Refocus on innovation and core competencies.

Intricacy of 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 ■ Cloud provider & Red Hat



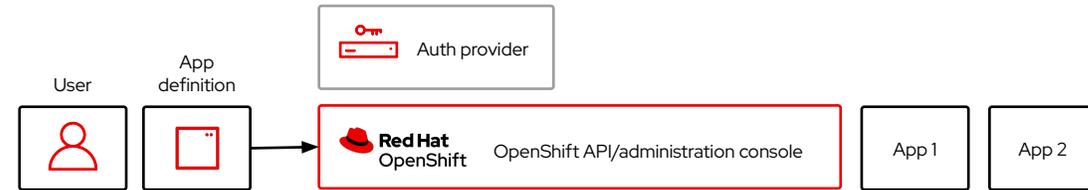
Simplify with fully managed ARO clusters

Red Hat OpenShift cloud services

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

■ Cloud provider and Red Hat



Let Red Hat & AWS...

Manage all your clusters.

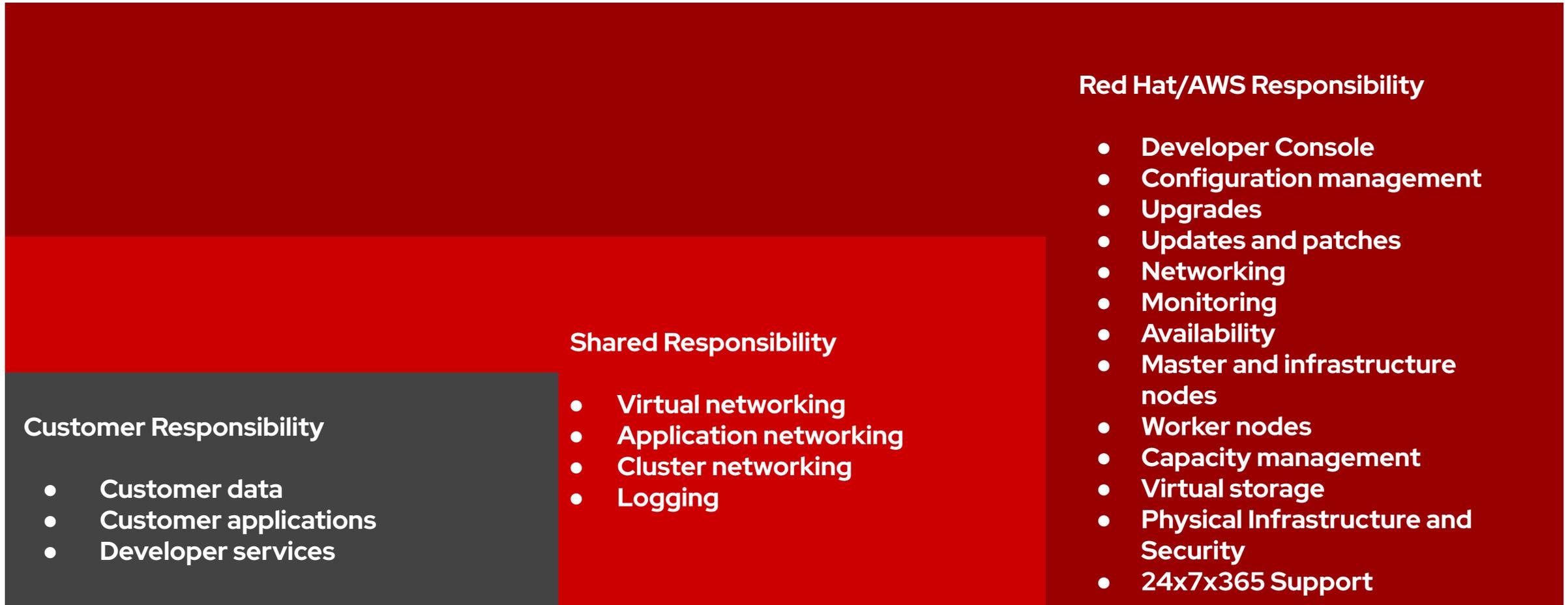
Monitor and operate your VMs.

Secure your nodes.

Manage environment patches.

You...

Red Hat OpenShift cloud services Simplified Responsibility Model



[Detailed OpenShift Dedicated Responsibility Assignment Matrix](#)

Red Hat OpenShift cloud services

Compliance and Certifications

Red Hat OpenShift Service on AWS (ROSA) OpenShift Dedicated (OSD)

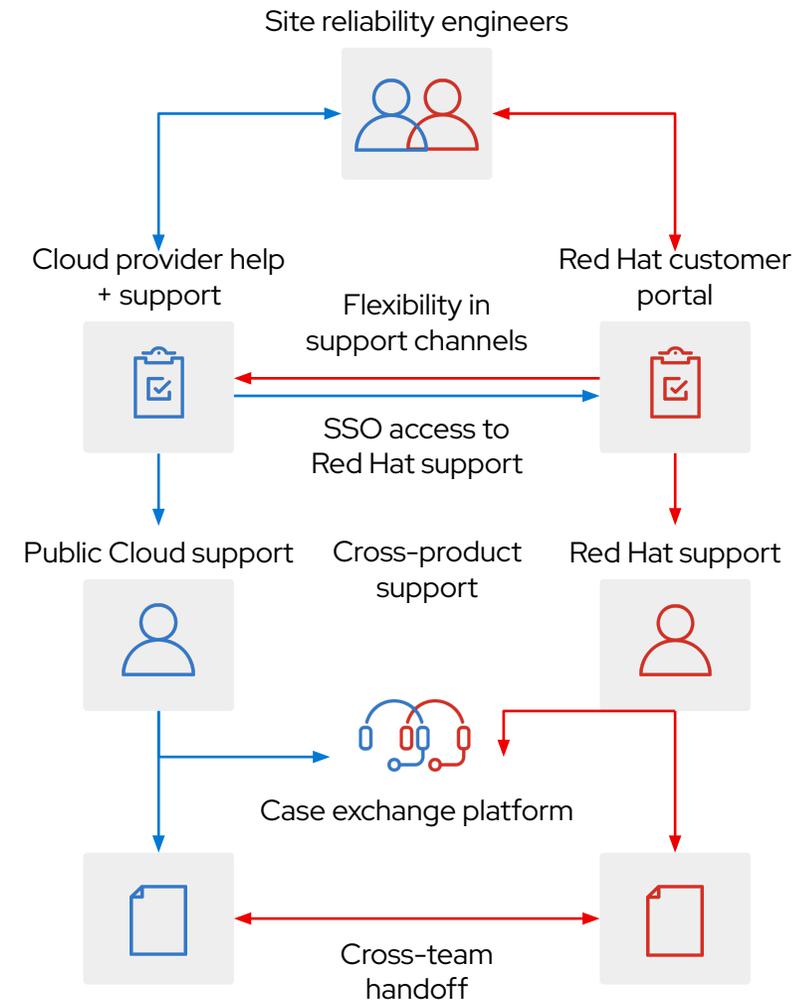
- PCI-DSS
- FedRamp High
- SOC2, SOC3
- HIPAA (ready)
- ISO 27001: 2013, ISO 27017: 2015, ISO 27018: 2019

[ROSA/OSD Compliance Source](#)

Integrated support

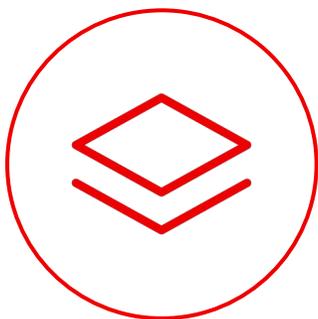
Jointly engineered, operated, and supported by Red Hat and our cloud partners

- ▶ 24x7 in-portal integrated support experience
- ▶ Colocated support with Red Hat onsite team
- ▶ Integrated case systems
- ▶ Red Hat and cloud provider security response team collaboration



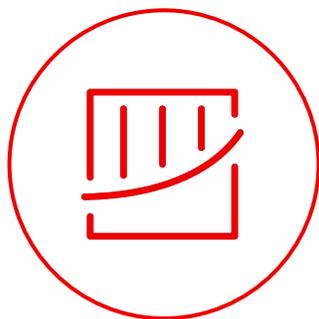
Red Hat OpenShift on AWS - ROSA

Build and scale applications with confidence. We do the rest.



Turnkey application platform

Platform is fully integrated with tools and technologies you need for cloud-native application development, deployment, and management.



Accelerate time to value

Get started quickly and enable your teams to focus on building apps rather than building and maintaining application platforms.



Expert management and support

Focus on your core business, leaving management, support, and operations of the platform to Red Hat and Microsoft

[Learn more.](#)

Red Hat
Summit

Connect

Domande?

Red Hat
Summit

Connect

Thank you