

RHUG Intro and Agenda

Agenda

- ▶ Introductions & Announcements
 - Richard Hofmeister
- ▶ Hosted Control Planes - Decoupling the Control Plane
 - Brian Dumont
- ▶ RHEL Highlights and Updates
 - Terry Bowling
- ▶ Red Hat Developer Hub - Building Developer Portals
 - Richard Hofmeister

Platform Release Schedule

All Dates Subject to Change

- ▶ OpenShift 4.15 : RELEASED
- ▶ ACM 2.10 : RELEASED
- ▶ Developer Hub 1.1 : RELEASED
- ▶ OpenShift 4.16 : Q2 2024
- ▶ MTV 2.6 : Q2 2024
- ▶ Quay 3.11 : Q2 2024
- ▶ Ansible Automation Platform 2.5 : Q2 2024
- ▶ RHEL 8.10 & 9.4 Beta : TODAY

Middleware Release Schedule

All Dates Subject to Change

- ▶ JBoss EAP 8.0 : RELEASED
- ▶ AMQ Streams 2.7 : Q2 2024
- ▶ 3scale 2.15 : Q2 2024
- ▶ Camel 4.4 : Q2 2024
- ▶ Keycloak 24.0 : Q2 2024
- ▶ Quarkus 3.2.11 : Q2 2024



What's new in Red Hat

OPENSIFT 4.15

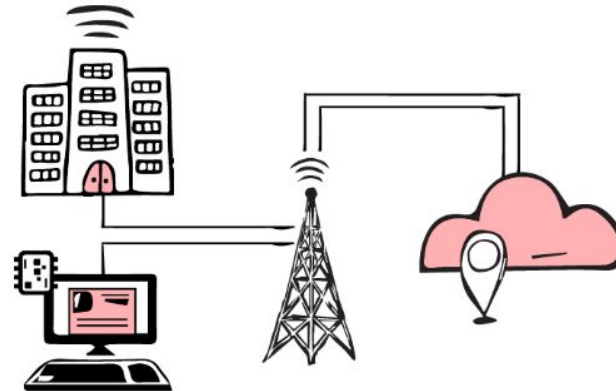
CORE

- OVN IPsec between OpenShift cluster and external provider
- Core/infrastructure networking metrics in Console
- Hosted Control Planes support for Virtual Hosts with Agent Provider (Tech Preview)
- Red Hat build of OpenTelemetry
- Power Monitoring (Tech Preview)



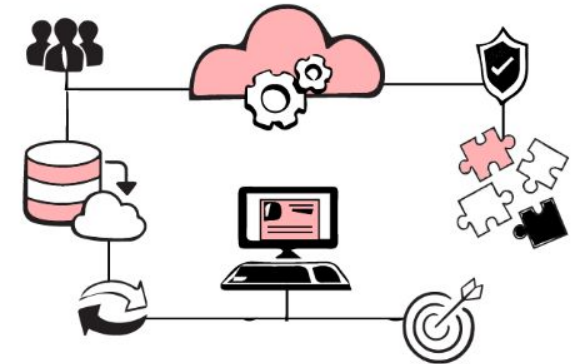
EDGE

- AWS Outposts and AWS Wavelength for latency sensitive applications
- Operator Lifecycle Manager on Red Hat Device Edge for simplified operator deployment
- Machine Vision on Arm with Red Hat Device Edge



VIRTUALIZATION

- Instance types for VM provisioning
- Metro DR with OpenShift Data Foundation
- Dynamic reconfiguration of NIC to a running VM



Red Hat Advanced Cluster Management for Kubernetes

What's New in RHACM 2.10 - **Governance, Risk, and Compliance**

```
apiVersion: policy.open-cluster-management.io/v1beta1
kind: OperatorPolicy
metadata:
  name: quay381policy
spec:
  remediationAction: enforce # or inform
  severity: medium
  complianceType: musthave # or mustnothave
  subscription:
    channel: stable-3.8
    name: project-quay
```

Note: API definition is subject to change upon release

- ▶ Policy compliance history (TP)
 - Track the compliance history for policies across the fleet.
- ▶ Enhanced OLM operator integration (TP)
 - New OperatorPolicy API provides a more native integration for installing and managing OLM operators at scale.
- ▶ Gatekeeper operator uplift to 3.14
 - Alignment with upstream and enhanced configurability of the operator.
- ▶ Improved debugging of policy violations
 - Provide a “diff” of the policy desired state vs actual state to easily understand why a cluster is non-compliant.



Power monitoring for Red Hat OpenShift

Technology Preview

- ▶ Technology Preview of **Power monitoring for Red Hat OpenShift**
- ▶ Monitor total energy consumed in your cluster during last 24 hours
- ▶ Shows breakdown of the **top power consuming namespaces**
- ▶ Exposes the most **power consuming containers and pods**
- ▶ Based on upstream project [Kepler](#)

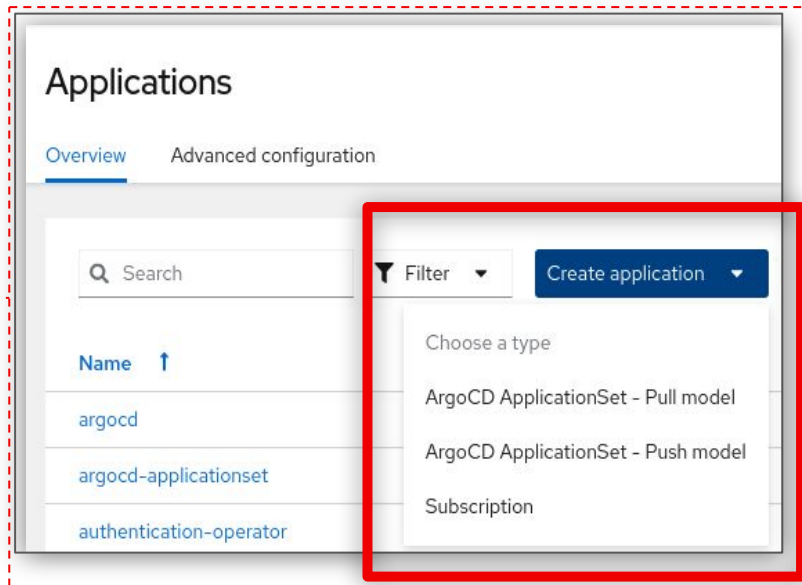


Dashboard	Apiserver	Period
API Performance	kube-apiserver	5m
etcd		etcd-mixin
Kubernetes / Compute Resources / Cluster		kubernetes-mixin
Kubernetes / Compute Resources / Namespace (Pods)		kubernetes-mixin
Kubernetes / Compute Resources / Namespace (Workloads)		kubernetes-mixin
Kubernetes / Compute Resources / Node (Pods)		kubernetes-mixin
Kubernetes / Compute Resources / Pod		kubernetes-mixin
Kubernetes / Compute Resources / Workload		kubernetes-mixin
Kubernetes / Networking / Cluster		kubernetes-mixin
Kubernetes / Networking / Namespace (Pods)		kubernetes-mixin
Kubernetes / Networking / Pod		kubernetes-mixin
Node Cluster		node-cluster-mixin
Node Exporter / USE Method / Cluster		node-exporter-mixin
Node Exporter / USE Method / Node		node-exporter-mixin
Power Monitoring / Overview		kepler-mixin
Power Monitoring / Namespace		kepler-mixin
Prometheus / Overview		prometheus-mixin

Red Hat Advanced Cluster Management for Kubernetes

What's New in RHACM 2.10 - Scale out **application deployments** with OpenShift GitOps; **Deploy and update clusters** with enhanced security; Leverage **fleet observability** for improved operations

- ▶ **Multicluster networking** (submariner) support for bare metal & RHOIC (aka ROKS) (TP)
- ▶ **ApplicationSet pull model** with OpenShift GitOps reaches GA

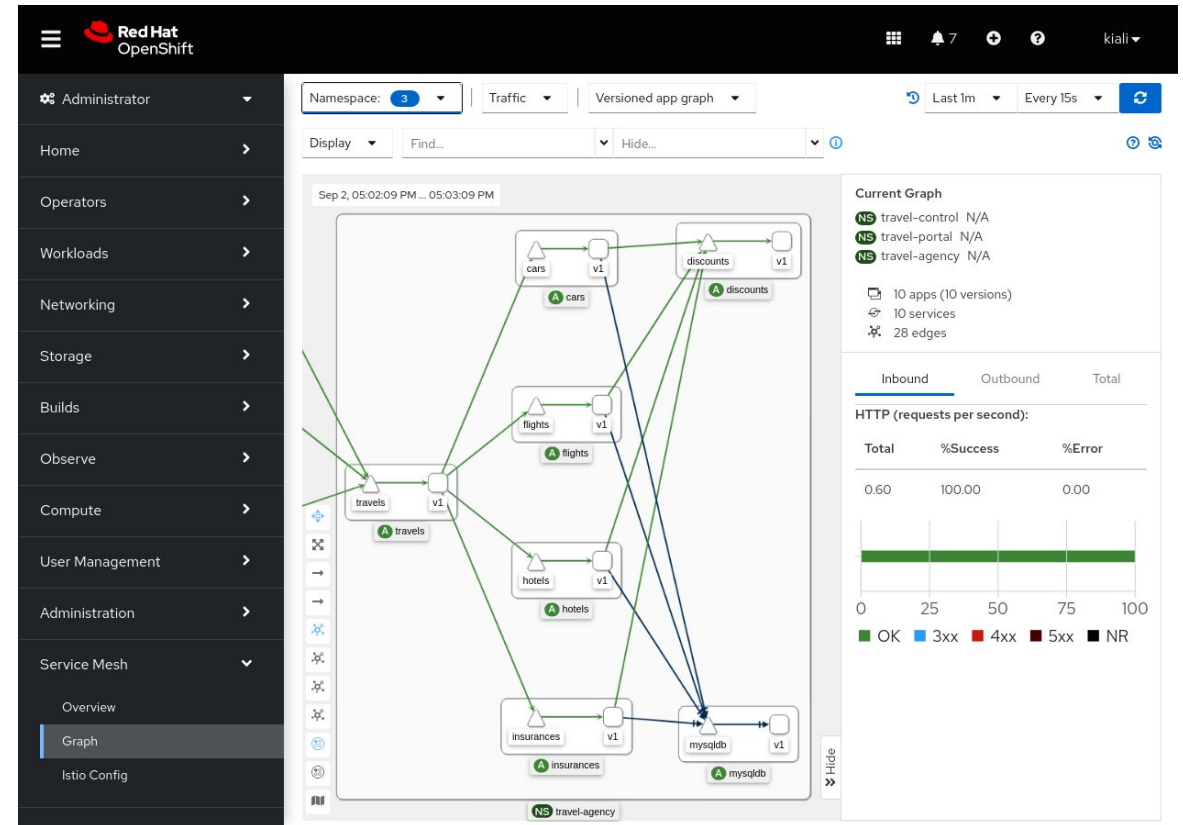


- ▶ **Cluster Lifecycle** enhancements:
 - RFE: Add authentication for HTTPS osImages content with the Assisted Installer
 - RFE: Allow managed cluster updates to use non-recommended versions
 - RFE: Allow managed OpenShift cluster version to be updated
 - Console support for Hosted Control Planes with OpenShift Virtualization platform
- ▶ **Observability** at scale enhancements:
 - ACM fleet view customization using data from search results
 - Hosted Control Planes hosting cluster capacity monitoring dashboard

OpenShift Service Mesh 2.5

Generally Available

- ▶ OpenShift **Service Mesh 2.5**:
 - ▶ Based on **Istio 1.18** and **Kiali 1.73**
 - ▶ GA Support for Service Mesh on **Arm clusters**
 - ▶ GA of OpenShift Service Mesh Console plugin
 - ▶ Certificate Revocation Lists (CRL) for gateways
 - ▶ GA of zipkin, opentelemetry and envoyOtelAls extension providers
 - ▶ Support for tracing with the **Tempo** operator
 - ▶ Developer preview of IPv4/IPv6 Dual-Stack
- ▶ “Sail Operator” – Updated Developer Preview of OpenShift **Service Mesh 3**:
 - ▶ See [update blog post](#) – Dec 2023
- ▶ [Kiali on RH Developer Hub Dev Preview](#)



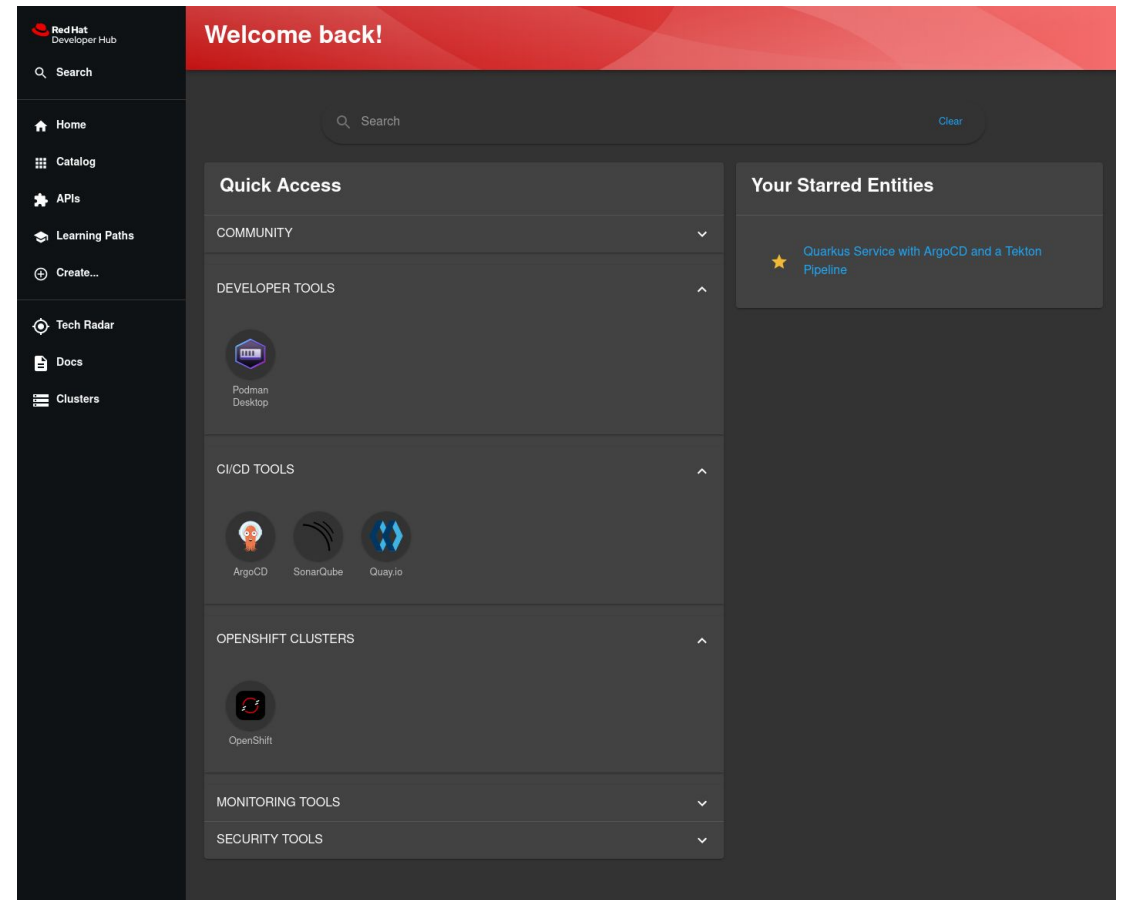
OpenShift GitOps

- ▶ OpenShift GitOps **1.12** coming in March
 - ▶ Includes **Argo CD 2.10**
 - ▶ Small footprint GitOps + MicroShift support - TP
 - ▶ Argo CD CLI support - TP
 - ▶ Notifications goes GA
 - ▶ OpenShift Routes support in Rollouts - TP
- ▶ OpenShift GitOps **1.11** released December includes
 - ▶ Includes **Argo CD 2.9**
 - ▶ Dynamic shard rebalancing - TP
 - ▶ Gitlab SCM provider now supports self-signed certs

Red Hat Developer Hub 1.1

Generally Available

- ▶ **RBAC UI:** Ability to manage role-based access controls (RBAC) using the web interface
- ▶ **RHDH Operator:** Red Hat Developer Hub Operator is now generally available (GA)
- ▶ **New Backend system:** Migration of the Red Hat Developer Hub to the new Backstage backend system
- ▶ **Backstage update:** Red Hat Developer Hub is now based on the upstream Backstage project v1.23.4
- ▶ **EKS Support:** Support for Elastic Kubernetes Services
- ▶ **AKS Support:** Support for Azure Kubernetes Services
- ▶ **Supported plugins:** Supported plugins in Red Hat Developer Hub 1.1
- ▶ Support for viewing installed plugins using the web interface





We are excited to Red Hat Ansible Automation Platform 2.4, which continues to build on our core promise to help customers “**Create, Manage, and Scale**” their automation.

The 2.4 release includes a number of new features and capabilities, along with Technology Previews of several experience enhancements on our product roadmap.

Ansible Automation Platform 2.4 is built to be trusted, flexible, and easy to use - **while offering customers more.**

More value from existing technology investments.

More ecosystem content and integrations.

More efficiency.

More control.

More ways to automate.

More possibilities.

New things you'll find in this release:

- ▶ [Event-Driven Ansible - now generally available!](#)
- ▶ [Collection repository management](#)
- ▶ [Validated content integration](#)
- ▶ [Ansible-builder 3.0](#)
- ▶ [Platform install support for ARM](#)

Features in Technology Preview:

- ▶ [Platform install support for Linux on Power and Z](#)
- ▶ [Centralized UI features](#)

Red Hat Summit

A AnsibleFest



May 6-9, 2024

Colorado
Convention Center

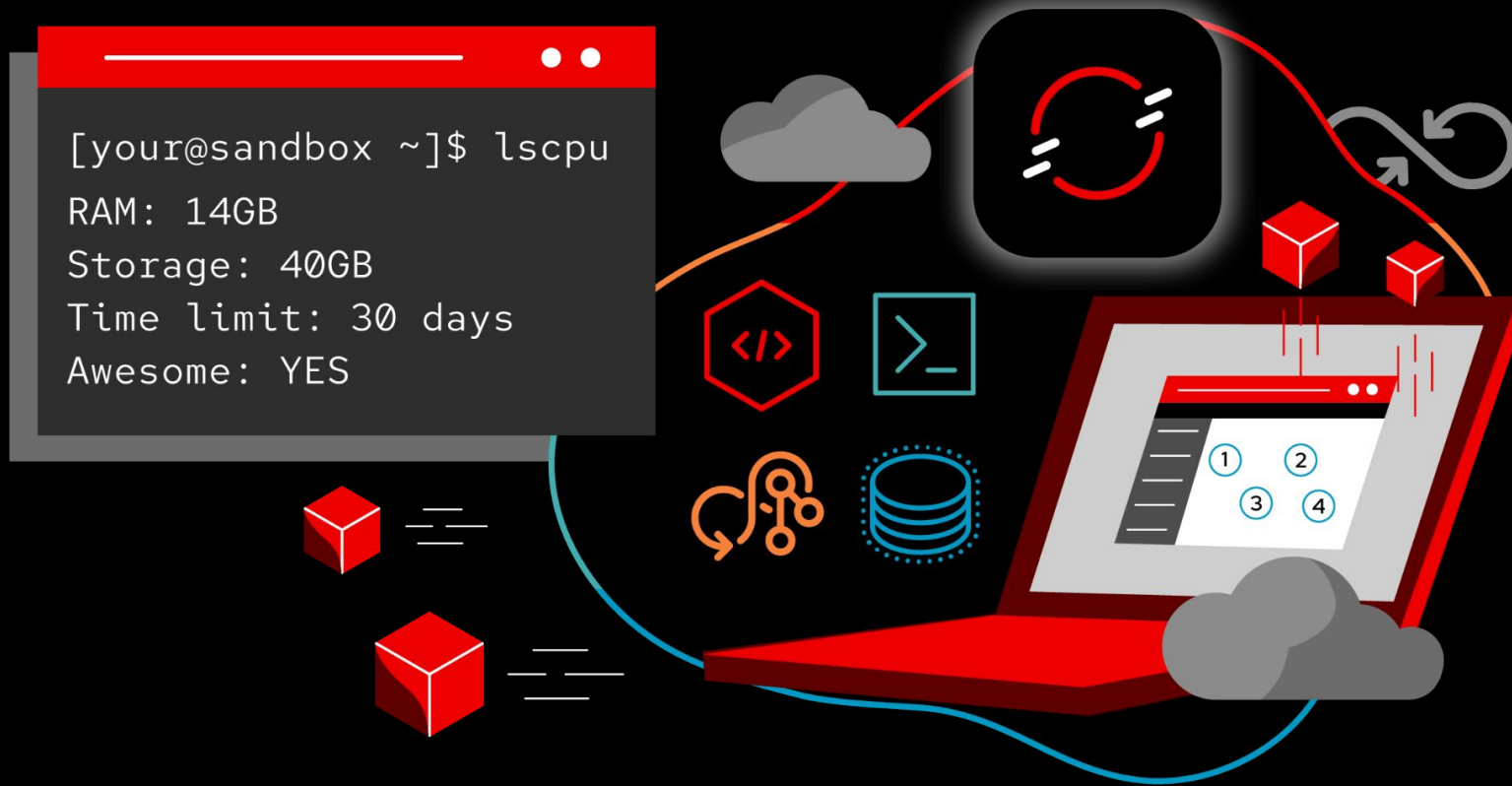
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- Serverless



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RED.HT/MI-RHUG



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Quarter	Speaker	Topic	Slide Deck
Q4 - 2022	Richard Hofmeister	Agenda	pdf
	Brian Dumont	Using the Insights API to apply Compliance Profiles	pdf
	Richard Hofmeister	Application Modernization With Konveyor	pdf
	Patrick Regan	What's New in RHEL 9	pdf
	Brad Krumme	Enterprise Architecture Patterns	pdf
Quarter	Speaker	Topic	Slide Deck
Q3 - 2022	Brian Dumont	Enterprise Automation	pdf
	Alan Patrick	Red Hat Satellite	pdf
	Jay Ryan	Managing Complex Workloads in a Kubernetes Native Environment	pdf
	David Brugger	Empowering Event Driven Architectures Across the Hybrid Cloud	pdf
	Andy Block	Introduction to GitOps and Secrets Management	pdf