RHUG Intro and Agenda

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Agenda

- Introductions & Announcements
  - Richard Hofmeister
- Ansible 101
  - Brad Krumme
- Working with Platforms
  - Dan Mikita

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Platform Release Schedule

All Dates Subject to Change

- OpenShift 4.21 : RELEASED
- Red Hat Edge Manager 1.0 : RELEASED
- AAP 2.7 : Q2 2026
- RHEL 9.8 : Q2 2026
- RHEL 9.9 : Q4 2026
- RHEL 10.2 : Q2 2026
- RHEL 10.3 : Q4 2026
- Red Hat Satellite 6.19 : Q2 2026
- Red Hat AI 3.4 : SOON™
- ACM 2.16 : SOON™
- Quay 3.17 : SOON™
- OpenShift 4.22 : Q2 2026

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Middleware Release Schedule

All Dates Subject to Change

- Migration Toolkit for Virtualization 2.11 : RELEASED
- Red Hat Build of Podman Desktop 1.0 : RELEASED
- Build for Red Hat OpenShift 1.7 : RELEASED
- Red Hat OpenShift Service Mesh 3.3 : SOON™
- Data Grid 8.6 : SOON™
- Project Hummingbird : Early Access
- Developer Hub 1.9 : RELEASED
- Red Hat build of Apache Camel 4.18 : Q2 2026
- OpenJDK 25 : RELEASED
- OpenShift Dev Spaces 3.26 : RELEASED
- Quarkus 3.33 : Q2 2026

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Upcoming ELS/EUS Dates

- RHEL 9.0 EEUS ends May 31, 2026
- RHEL 9.4 EUS ends April 30, 2026
- OpenShift 4.16 EUS Term 2 : June 28, 2026
- OpenShift 4.18 EUS Term 1 : Aug 26, 2026
- Debezium 2.x : April 17, 2026 (EOL)
- Streams for Apache Kafka 2.x : September 30, 2026 (EOL)
- Red Hat Fuse 7 ELS 1 : June 30, 2026

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Red Hat Summit 2026

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Red Hat OpenShift 4.21 Highlights

AI

- Kueue 1.2 KubeFlow Trainer v2, pending workloads
- JobSet (GA)
- Attribute Based GPU Allocation (DRA)
- Namespace Controlled Admin Access (DRA)
- Prioritized Alternatives (DRA Device Requests)

Core

- Dynamic Scaling (Hosted Control Planes)
- Autoscaling to/from zero (Hosted Control Planes)
- OpenShift on VMware Cloud Foundation 9 (GA)
- OpenShift on Oracle Database Appliance (GA)
- Confidential Containers (Azure and Azure Red Hat OpenShift GA)

Virtualization

- Cross Cluster Live VM Migration
- IPv6-only control plane and secondary network (GA)
- OpenShift Virtualization on Google Cloud bare metal (GA)
- Streamline virtualization and localnet UI flows
- AI powered VM insights and troubleshooting UI

DRA: Dynamic Resource Allocation
GA: Generally Available
VM: Virtual Machine

red.ht/whatsnew

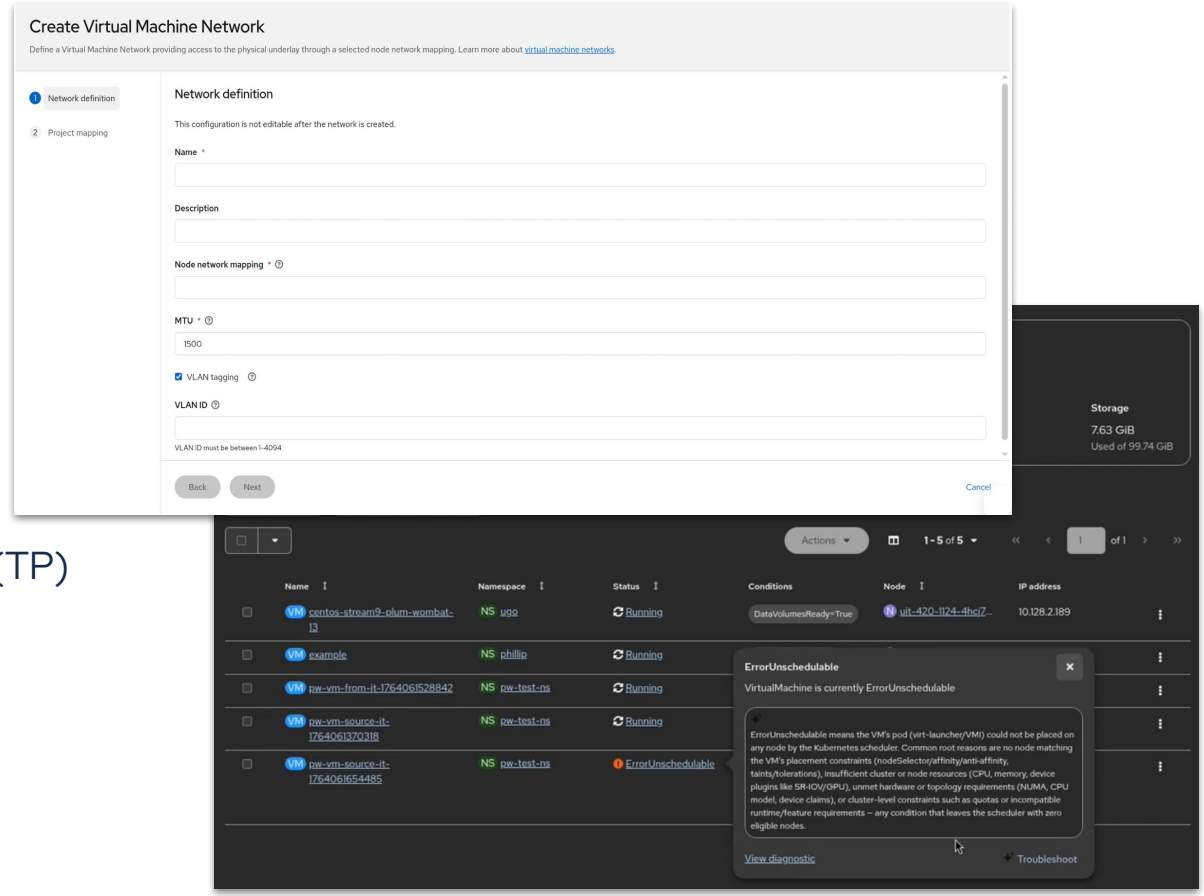
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OpenShift Virtualization Highlights

Modernize your operations with comprehensive lifecycle and infrastructure management

Simplified VM admin Management

- Multi-cluster VM operations and management
- Physical Network Creation User Interface
- Virtual VM Network Creation Wizard
- Integrated Gen AI Lightspeed information into the UI flows for troubleshooting
- Support for UI plugins for 3rd party integration



Optimize your infrastructure

- Cross-cluster VM live migration from MTV and RHACM (GA)
- Storage agnostic Change Block Tracking for Incremental Backup (TP)
- MIG vGPUs for VMs
- OpenShift Virtualization on Google Cloud bare metal (GA)
- Eject/Insert CD-ROM (TP)
- Windows Server Failover Cluster with multipath failover support

Networking Enhancements

- IPv6 single-stack for control plane and secondary networks (GA)
- Import of VMs connected to an overlay network

Product Managers: Peter Lauterbach, Ronen Sde-Or, Martin Tessun

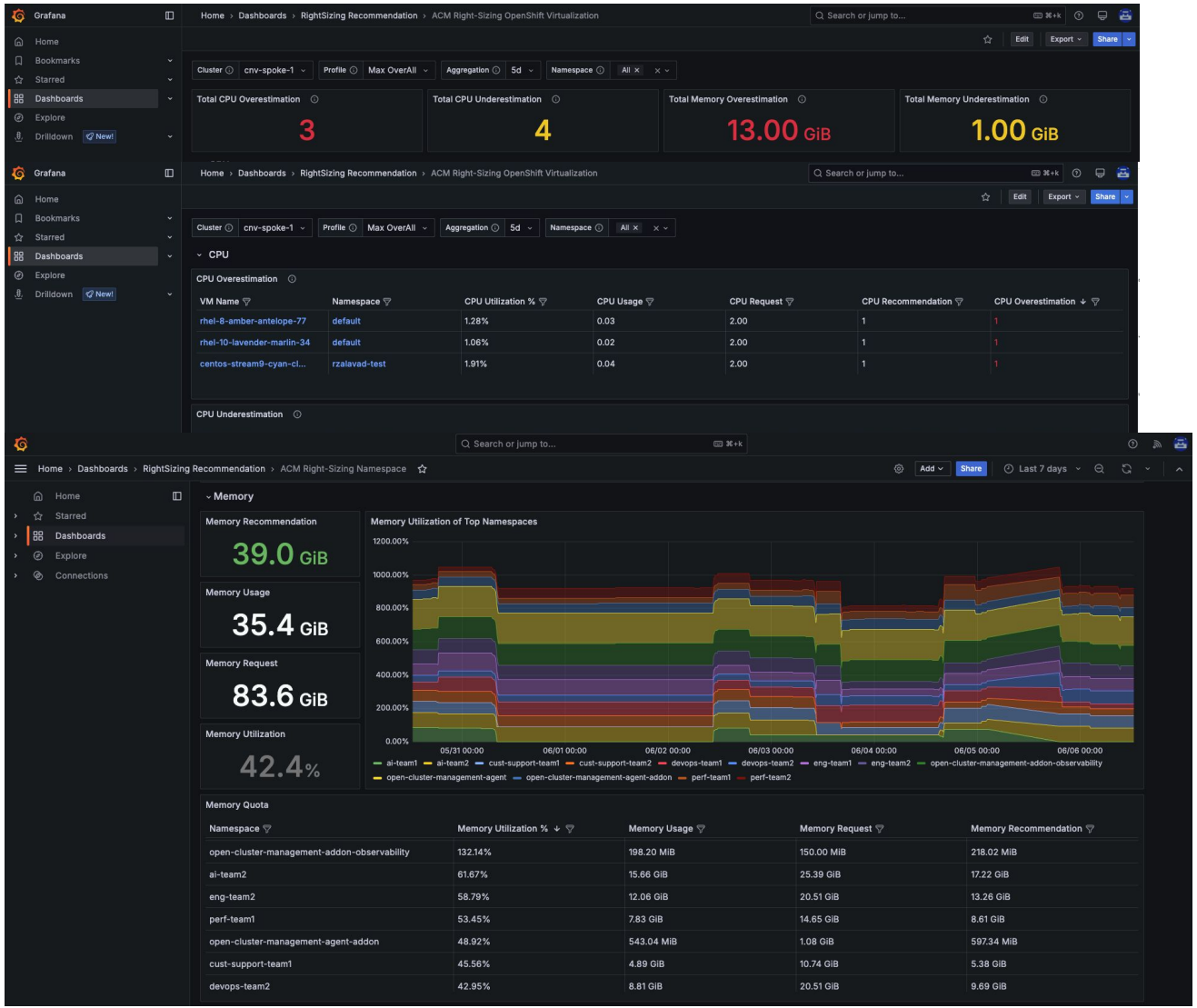
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Right Sizing Recommendations

Generally Available with **Red Hat Advanced Cluster Management 2.16**

- **Right sizing recommendations at the namespace, cluster & virtual machine levels** A multi-layer optimization feature designed to help users reconcile the gap between **requested** resources and **actual** consumption.
- **Ensure better performance across workloads** It prevents over-provisioning, which leads to idle and wasted resources, and under-provisioning, which causes performance degradation and application instability (**CPU** & **Memory**-based recommendations).
- **Leverage MultiClusterObservability (MCO)** Make use of dedicated Grafana dashboards in **RHACM** console.

CPU overestimation/underestimation - VM Level, cluster level & namespace level:



Product Managers: Vanessa Martini, Christian Stark

Hosted Control Planes

HCP on Azure

Developer Preview support on Azure. Run hosted control planes and node pools on Azure natively (self-managed, not ARO)

Control Plane Autoscaling in ROSA HCP

Scale automatically based on actual Kube API Server memory usage (`VerticalPodAutoscaler`) ensuring optimal performance and reducing over-provisioning costs.

Scale specialized node pools to zero in ROSA HCP

Set min-replicas to 0 on specialized node pools (GPU, batch, high-memory) they automatically scale up when workloads are scheduled and down to zero when idle, reducing costs for bursty workloads.

X86 Control Plane and ARM Nodes

Improved matrix for supported architectures with this combo

Append Global Pull Secret in ROSA HCP

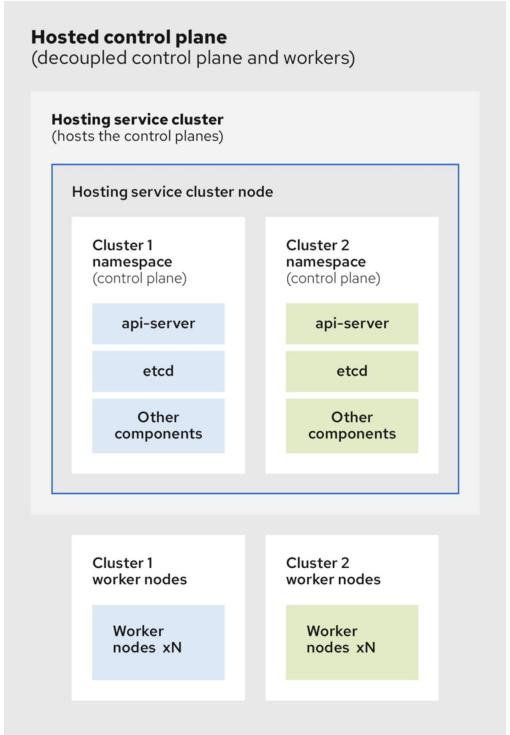
Users can provide custom pull secrets that automatically merge with the cluster's Global Pull Secret, enabling access to both custom and service-managed registries without requiring configurations by the SREs

ARO HCP

During this release we added **15 features** to ARO HCP in our way to make it available later this year

Configure Ingress Route

Specify the `endpointPublishingStrategy` (e.g. `LoadBalancer`) directly in the HostedCluster CR.



* Hosted Control Planes is shipped in the HyperShift Operator included in RHACM, released about 6 weeks after the GA of OCP 4.21

Product Manager: Ramon Acedo, Linh Nguyen

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Red Hat Advanced Cluster Security for Kubernetes

4.10 highlights

KEY updates



***Tech Preview*:Vulnerability Management in ACS for Virtual Machines running on OpenShift Virtualization platform**
.extends ACS vulnerability scanning to RHEL virtual machines, allowing security teams to detect and manage VM image and runtime vulnerabilities



***Tech Preview*: File Activity Monitoring** provides essential visibility for by tracking sensitive node files and allowing users to enforce security policies and receive instant violation alerts.



***Tech Preview*: RHACS Plugin in OpenShift Console for Vulnerability Management**
Integrates vulnerability data directly into the OpenShift console for easier risk management



Policy Criteria for "Days since CVE fixed"
prioritize remediation efforts based on the age of a vulnerability fix



Base Image Separation of Duties
Enforce trusted base images and clearly separate base-layer vulnerabilities from application-layer vulnerabilities.

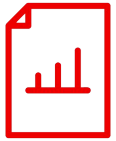
MORE updates



***Dev Preview*: Stackrox MCP Server & lightspeed integration**
Users can ask security questions in natural language to get a personalized, AI-driven answer that instantly identifies if a CVE affects their environment



Single-Stack and Dual-Stack IPv6 ACS in modern IPv6 enabled enviornments



Global NodeSelector and Tolerances Support for Central Config Allows operators to configure where the Central component runs



Cluster Registration Secret GA Allows secure registration of clusters to RHACS Central



***Dev Preview*: SBOM scanning and Vulnerability report generation**
.allows detecting vulnerabilities early via SBOM files in SPDX 2.3 format for secure software development lifecycle

Product Manager: Maria Simon

Red Hat Quay 3.17

Scaling the Telco/Edge, Enforcing Tag Stability, and Hardening the Security Foundation



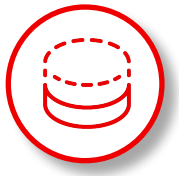
Organization Mirroring: The "Scale Unlock"

Automate replication for massive environments. **Mirror entire organizations** or **Harbor projects** in one step, **removing** the friction of manual, **per-repository configuration**.



Immutable Image Tags

Hard enforcement for those who prefer the **readability of tags** over digests. Use regex policies to **lock specific tags**, **ensuring** stable human-readable **references** remain **unchanged** and **protected**.



Sparse Manifests: Enabling Efficient Mirroring

Enables **storage/bandwidth optimization** for disconnected clusters. Quay supports client tools to **sync only** the **architectures you need** while **preserving digest integrity**.



Hardened UBI 9 Minimal Foundation

Quay is now **re-platformed** on **UBI 9 Minimal**. This transition ensures a **FIPS-ready** stack with a significantly smaller footprint, **reducing** both **security risks** and **CVE alerts**.

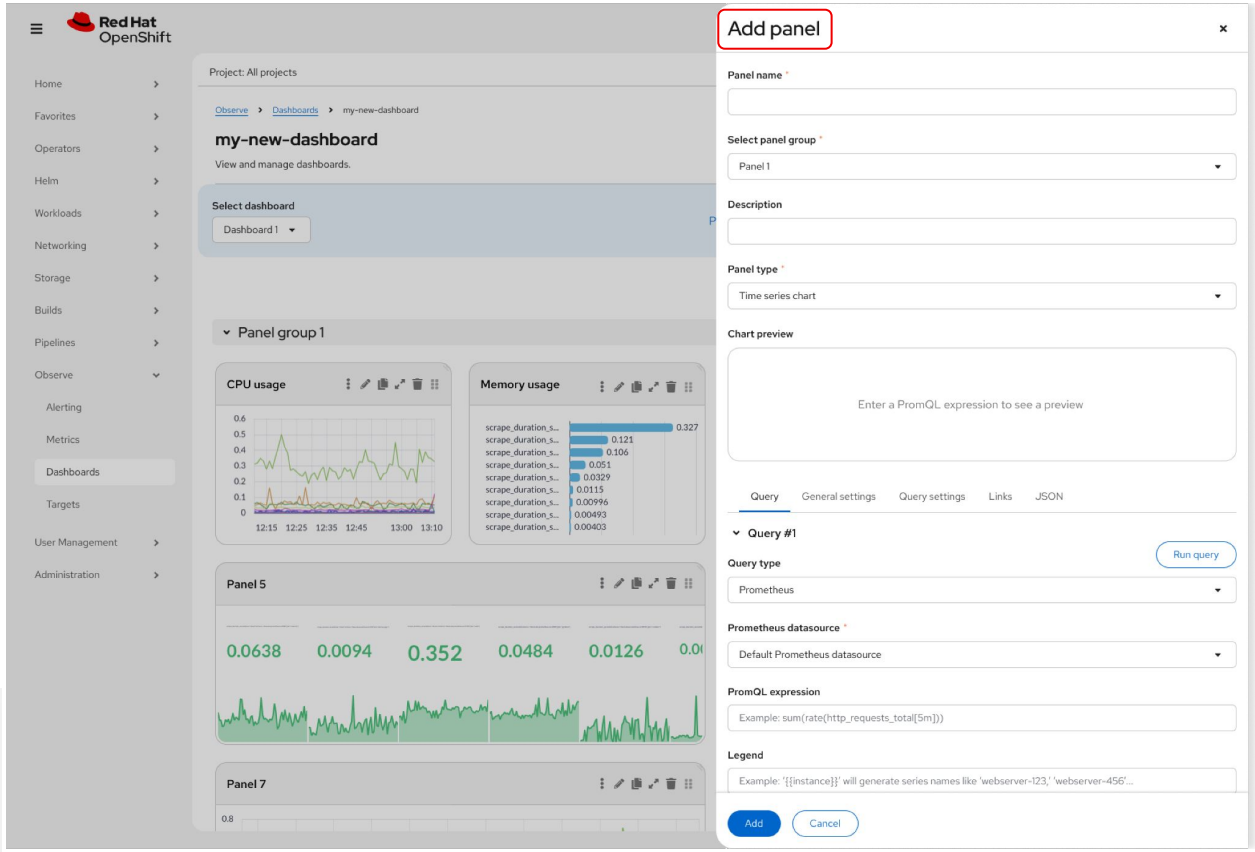
Product Manager: Tony Wu

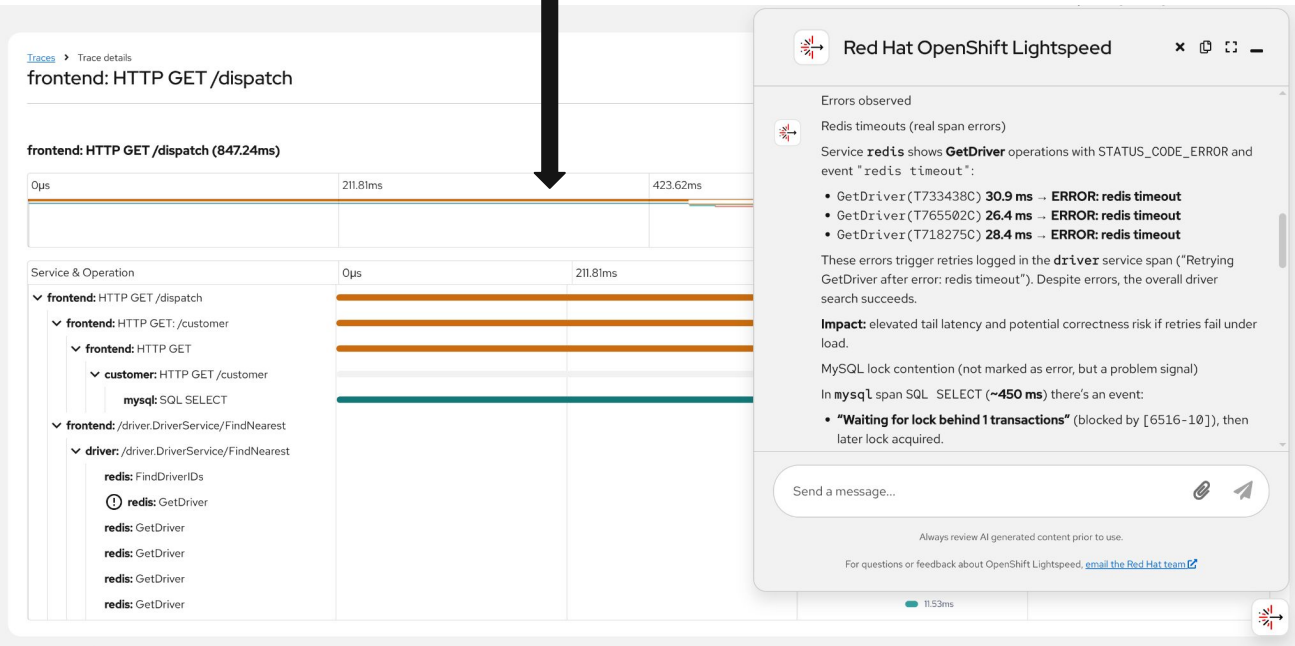
Cluster Observability Operator

COO 1.4

New Features

- **Customizable dashboards** in OCP/ACM console - powered by **Perses (TP)**
- **AI Trace Summarizer (DP)**





Product Managers: Vanessa Martini, Roger Floren

Observability

OpenShift Monitoring



OpenShift 4.21

New Prometheus / Prometheus operator

- Steps into supporting full UTF8
- Enhanced OTLP Metrics ingestion
- PromQL / TSDB performance improvements
- Increased involvement in the monitoring upstream projects

Improvements

- Thanos Ruler retention now aligns with user workload Prometheus by default
- Monitoring stack **components** updated
  - Prometheus Operator: 0.87.1
  - Prometheus: 3.7.3
  - kube-state-metrics: 2.17.0
  - node-exporter: 1.10.2
  - thanos: 0.39.2

Product Manager: Roger Floren

Observability

OpenShift Logging

Logging 6.5

Log Collection

- OpenTelemetry Log Export for Advanced Correlation

Log Storage

- Loki - Add Flexibility to Persistent Volumes
- Support for Alternative Authentication Gateways

Product Manager: Jamie Parker

Red Hat

Observability

Application Observability & Integrations



Distributed Tracing 3.9

Red Hat Build of OpenTelemetry

- GA Components:
  - Metricsstarttime Processor
  - Filter Processor
  - Transform Processor
- Managed OpenTelemetry experience for new users

Distributed Tracing

- Upgrade to Tempo 2.9
  - Performance improvement for TraceQL searches

Product Manager: Jamie Parker

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Red Hat Developer Hub

Streamlined DevX and accelerated onboarding using centralized tools and docs.

RHDH 1.8 Highlights:

- New Scorecard plugin provides insights into project health and compliance metrics (DP)
- Templates/Scaffolder versioning support
- Notifications are sent or PR opened when the template has been updated.
- Localization support & French translations
- Quickstart added for the “Developer” persona
- Developer Lightspeed is now based on Llama-stack for greater flexibility (DP)
- MCP Server in Red Hat Developer Hub for AI access to catalogs and techdocs (DP)
- Openshift AI Connector for RHDH syncs AI assets with the RHDH catalog (DP)
- RHDH Dynamic Plugin Factory to help with plugin development (DP)

RHDH Release Notes

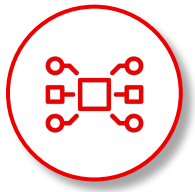
Product Manager: Christophe Fargette

OpenShift Dev Spaces

Versions 3.24 and 3.25 are now available

Red Hat OpenShift Dev Spaces 3.25 is based on Eclipse Che 7.111





Nested Container Support (Podman Run Capabilities)

Running Containers in Dev Spaces is now natively supported, allowing for Podman run capabilities while removing the need for workarounds such as Kubedock.



SSH Local to Remote for VS Code IDEs (Tech Preview)

Developers can now use Dev Spaces with their local VS Code based editors such as VS Code, Cursor, and Kiro. Additionally, using local to remote with VS Code allows the use of microsoft store extensions instead of OpenVSX



Use Multiple Jetbrains Workspaces Simultaneously

You can now connect to multiple Dev Spaces workspaces simultaneously by using the JetBrains Gateway plugin. Previously, the plugin restricted you to a single active connection.



Set Default Container Requests and Limits in CR

Admins can now globally configure default resource requests and limits for all workspace containers in the Che Cluster CR. Additionally, the default per workspace PVC size has been increased to 10gi

Product Manager: Mokhtar Alarhabi



Red Hat build of Quarkus

What's New in 3.27

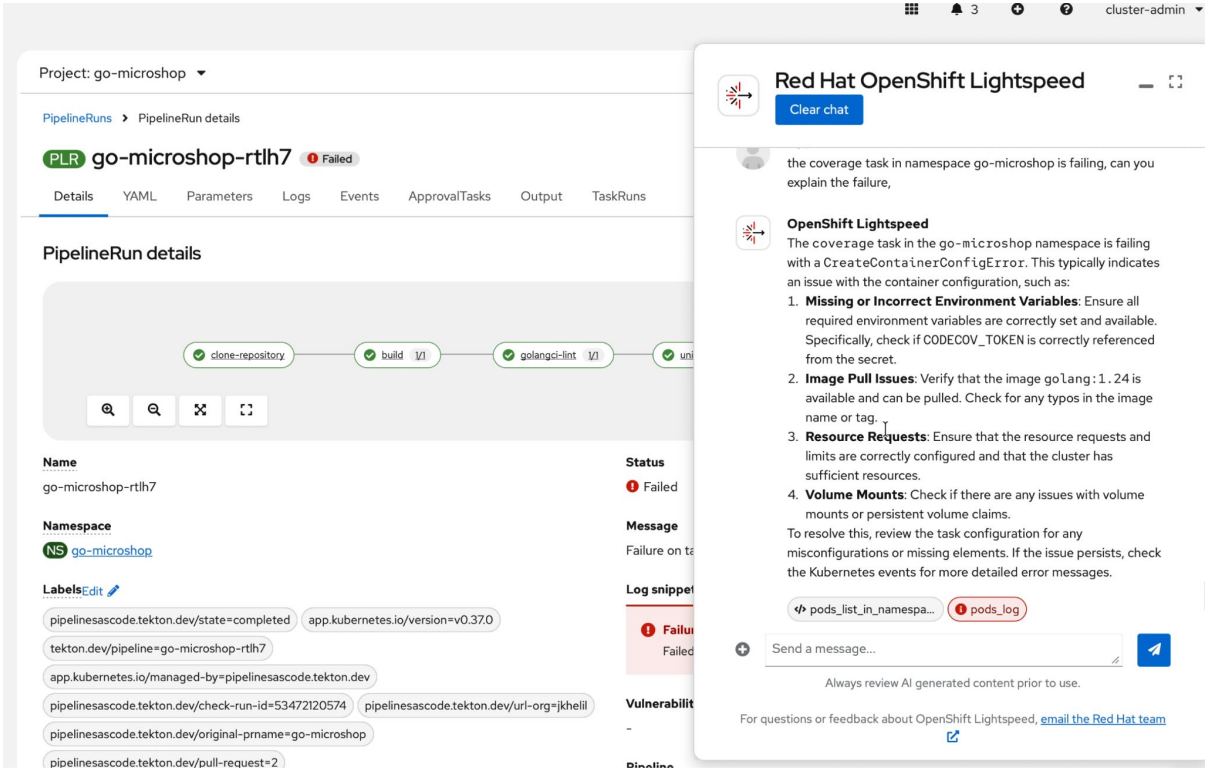
- **Red Hat build of Quarkus 3.27 (Release Summary)**
  - Upgrade to Hibernate ORM 7, Hibernate Reactive 3 and Hibernate Search 8
  - Subscription aware tooling (CLI, code.quarkus, etc)
  - Chappie - AI-powered assistant to improve dev experience
    - assistant module to talk to extensions
- planning stages for Quarkus/RHBQ 4 (late '26/early '27)

PMM: Jeff Beck

Builds & Pipelines

OpenShift Pipelines 1.21

- Debug Pipeline Runs with OpenShift LightSpeed in **Dev Preview**
- Event-driven Pruner and Tekton Cache in **Generally Available**
- Hardened controllers and webhook containers: readOnlyRootFilesystem set to true
- Override individual TaskRun timeouts within a PipelineRun
- Enhanced Resolver caching minimizes external API calls
- Fine-grained retention policies for PipelineRuns and TaskRuns



Builds for OpenShift 1.7

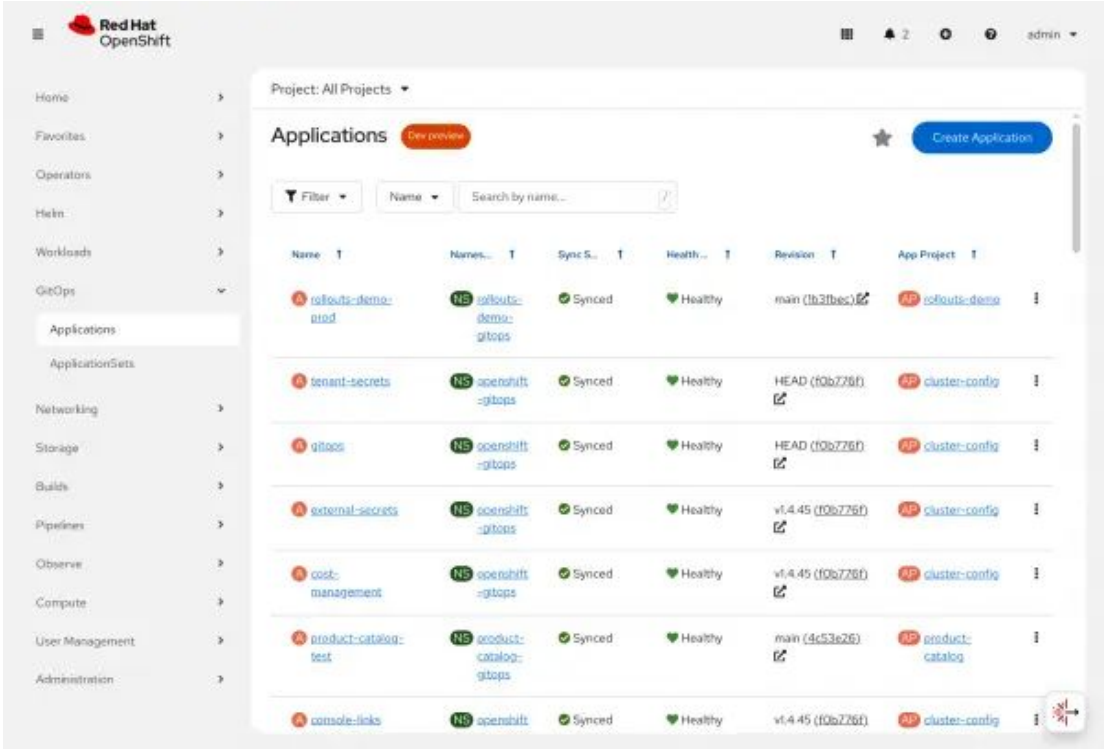
- BuildConfig to Shipwright migration guide available

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OpenShift GitOps

OpenShift GitOps **1.19** release highlights:

- Argo CD 3.1.9, Argo Rollouts 1.8.3, and Argo CD Agent 0.5.1
- **Argo CD Agent-based architecture - GA**
- Argo CD Image Updater - TP
- Enhanced control over image pull policies
- Delegated notification management
- Configurable resource limits for plugins
- Deprecation of openshift-gitops-argocd-cli RPMS



Product Manager: Sho Weimer

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OpenShift oc-mirror **v2**



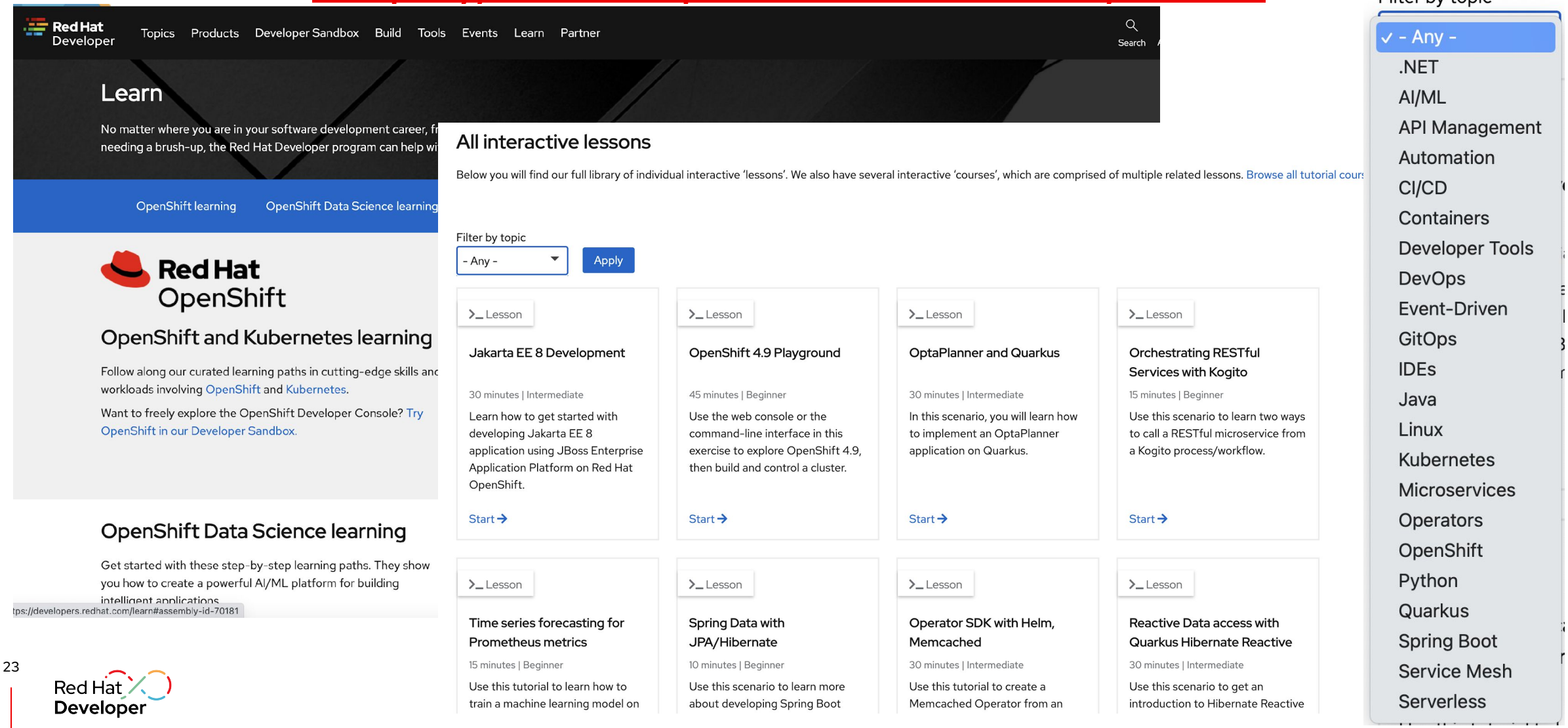
- Mirror Signatures by default
  - `oc-mirror v2` **will mirror cosign sigstore signatures for container images by default** now.

- oc-mirror will require explicit use of flags `--v1` or `--v2`
  - To ensure a stable migration path from the deprecated v1 tool, users are now asked to specify the version explicitly to avoid workflow ambiguity.

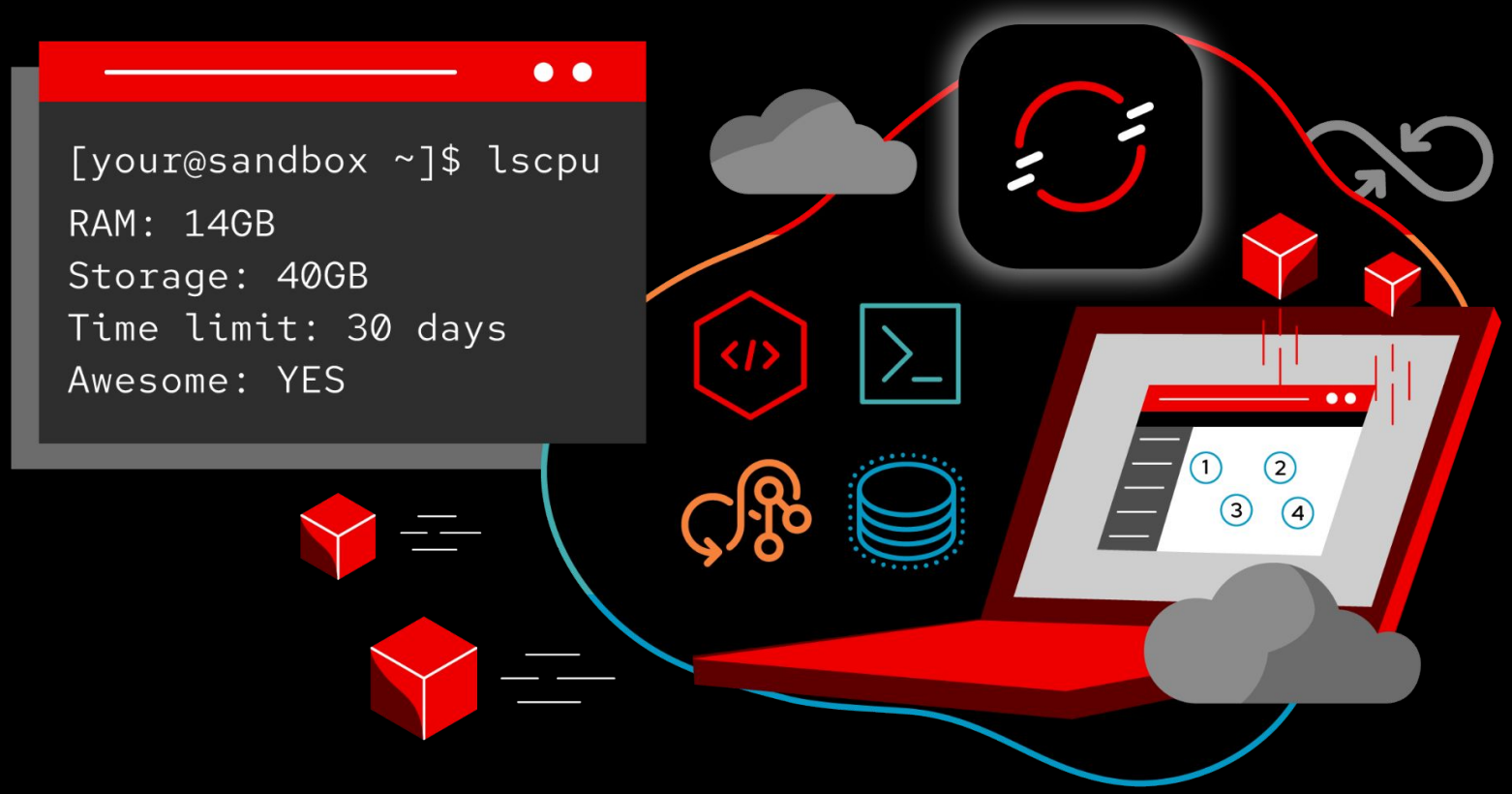
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Quarter	Speaker	Topic	Slide Deck
Q4 - 2022	Richard Hofmeister	Agenda	pdf
	Brian Dumont	Using the Insights API to apply Compliance Profiles	pdf
	Richard Hofmeister	Application Modernization With Konveyor	pdf
	Patrick Regan	What's New in RHEL 9	pdf
	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