RHUG Intro and Agenda

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AnsibleFest

Red Hat Summit

Unlock what's next.

Boston, MA | May 19-22, 2025



Red Hat

Agenda

- Introductions & Announcements
  - Richard Hofmeister
- Platform Operating Model
  - Anupam Sengupta
- Managing RHEL in a Kubernetes World
  - Shane McDowell
- Data Services for Modern Applications with IBM Fusion
  - Eyal Abraham

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Platform Release Schedule

All Dates Subject to Change

- OpenShift 4.18 : RELEASED
- Microshift 4.18 : RELEASED
- OpenShift Serverless 1.35 : RELEASED
- ACS 4.7: RELEASED
- ACM 2.13: RELEASED
- OpenShift Gitops 1.16 : Q2 2025
- OpenShift Pipelines 1.18 : SOON™
- RHEL 10: Q2 2025
- RHEL 9.6: Q2 2025
- Satellite 6.17: Q2 2025
- AAP 2.6 : Q3 2025

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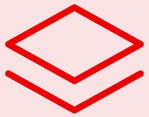
Middleware Release Schedule

All Dates Subject to Change

- Migration Toolkit for Applications 7.2 : RELEASED
- Streams for Apache Kafka 2.9.0: RELEASED
- Quarkus 3.15 : RELEASED
- OpenShift Service Mesh 3.0 : RELEASED
- Podman Desktop 1.17 : RELEASED
- 3scale 2.16 : Q2 2025
- Debezium 3.0 : Q2 2025
- Red Hat build of Apache Camel 4.10 : Q2 2025

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Red Hat OpenShift 4.18 Highlights



Core

- Enhanced User Defined Networks including BGP for UDN
- Operator Lifecycle Management v1
- oc-mirror v2 with Helm charts and proxy support
- OpenShift on bare metal in Google Cloud Platform (GA)
- OpenShift on Oracle Cloud: bare metal shapes on OCI (GA), Oracle Cloud@Customer and Oracle Private Cloud Appliance



Virtualization

- OpenShift Virtualization Engine
- VM friendly networking with User Defined Networks
- VM storage migration (GA)
- OpenShift Virtualization in Google Cloud Platform (TP)
- OpenShift Virtualization in Oracle Cloud Infrastructure (TP)



Security

- Secret Store CSI Driver (GA)
- Streamline secrets handling with Secret Store CSI Driver in OpenShift GitOps and OpenShift Pipelines workflows
- Secure OpenShift Service Mesh secrets with cert-manager (TP)
- Automated certificate recovery after cluster hibernation

GA: Generally Available
TP: Technology Preview
VM: virtual machines

red.ht/whatsnew

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The **next-gen** Operator **L**ifecycle **M**anager → **OLM v1** (Now **Generally Available**)

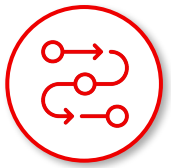
Operator Framework

OLM v1: a **streamlined**, **secure**, and **automated** management experience



Simpler and Automated Management

Consolidated API and **declarative workflows** for easier **GitOps integration** and **zero-touch provisioning** (ZTP), reducing human error.



Enhanced Update Control

Control over **desired versions** for updates, including optional **automatic Z-stream updates** for critical security patches.



Increased Reliability

Continuous reconciliation and **opt-in rollbacks**, ensuring **proactive issue resolution** and improved reliability.



Tightened Security

User-provided **ServiceAccounts** for **installing** and **upgrading** content, **improving** the overall **security posture**.

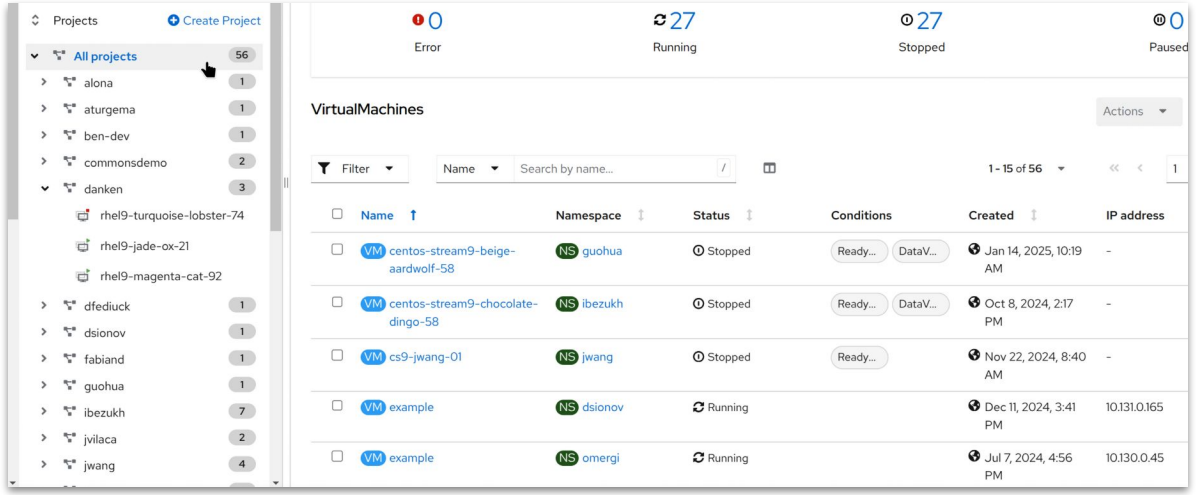
ⓘ The classic OLM, OLM v0, remains fully supported throughout OpenShift 4's lifecycle.

OpenShift Virtualization Highlights

Modernize your operations with comprehensive lifecycle and infrastructure management

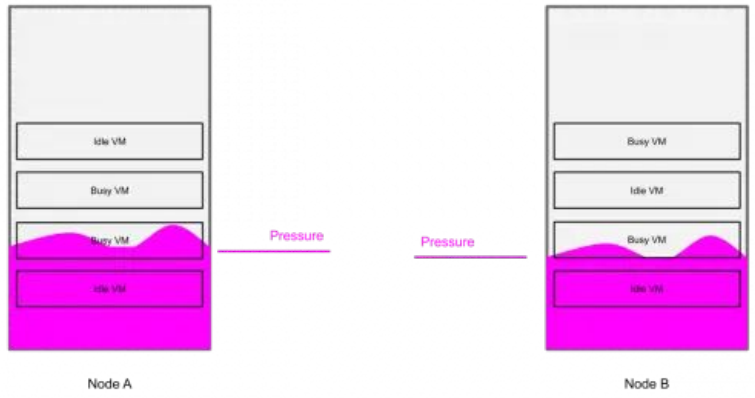
Flexible Infrastructure

- Native network isolation for VMs with User-defined primary network
- Easier to configure VM networking for AWS and ROSA
- Dynamically reconfigure VM storage with Storage Live Migration in production environments
- Wider public cloud support (TP)
  - Google Cloud Platform
  - Oracle Cloud Infrastructure



Improved infrastructure optimization

- Automatic VM workload balancing based on actuals
- Easier golden image provisions across multiple clusters



Simplified VM Management

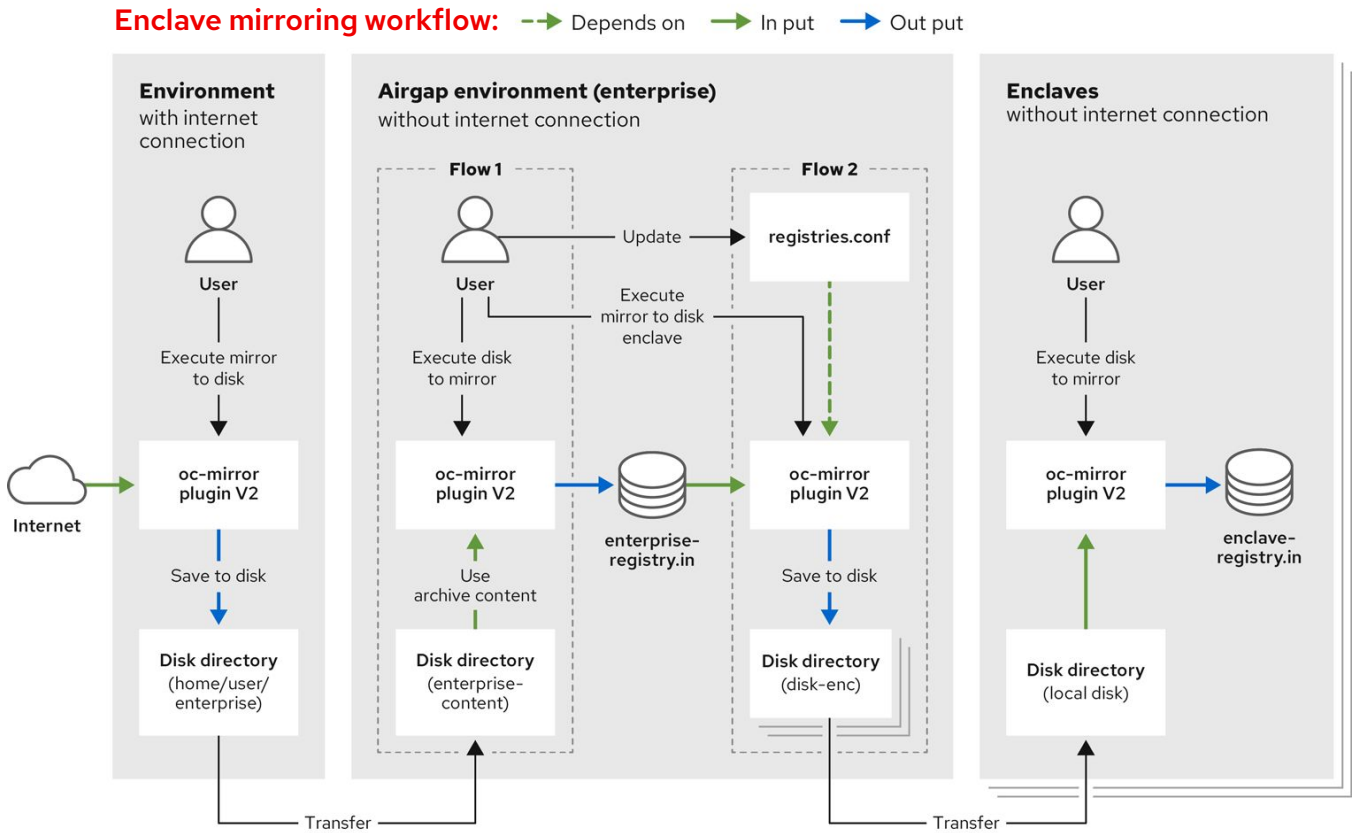
- Virtualization Admin inventory tree view
- Fast reliable migration MTV performance recommendations

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Watch demo videos to learn more about oc-mirror v2 (Now Generally Available)

OpenShift oc-mirror

oc-mirror v2: Supercharging Restricted Environments



Enhanced Security

Support **enclave environments**, providing secure and isolated mirroring for **most sensitive workloads**.

Granular Image Deletion

Precisely manage **image deletion** in your mirror registry to **optimize storage**.

Faster Performance with Intelligent Caching

Reduced mirroring times, **bandwidth consumption**, and improved efficiency.

Helm Chart Support

Mirror Helm charts (including **in enclaves**) for simplified application management.

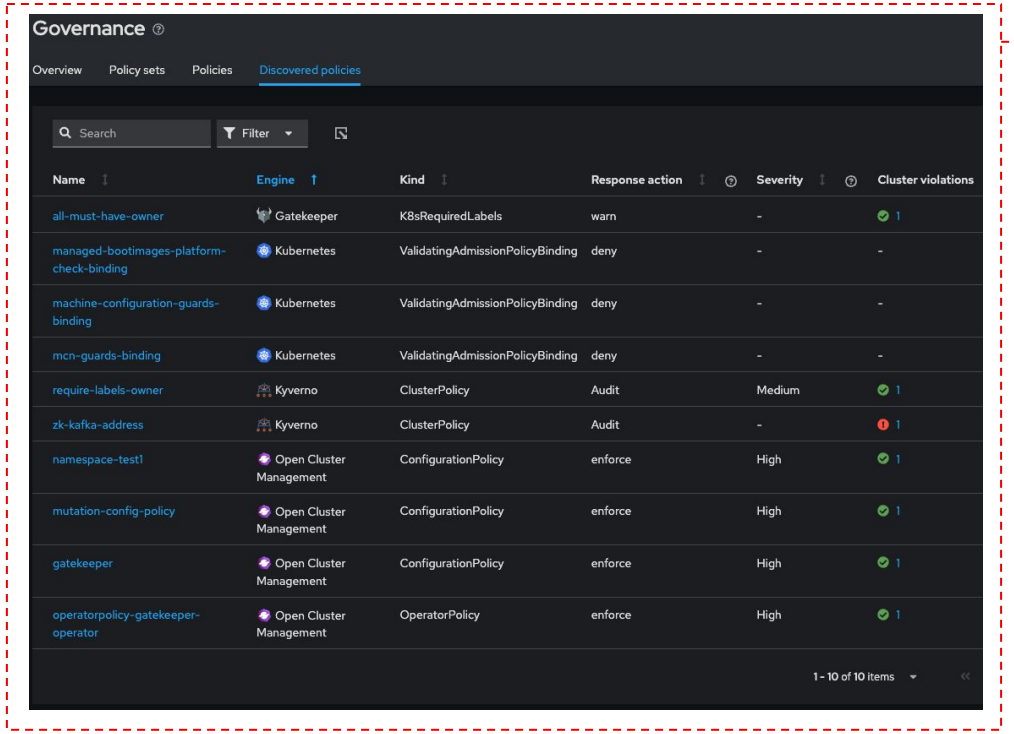
Proxy Support

Leverage **existing proxies** and **pull-through caches** in your infrastructure, optimizing efficiency.

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Red Hat Advanced Cluster Management for Kubernetes

What's New in RHACM 2.13 - Policy-based Governance



Kyverno and ValidatingAdmissionPolicy in Governance UI

(Note: Red Hat support for Kyverno as a run-time policy engine is not being offered)

- Automated discovery of Kyverno and Kubernetes ValidatingAdmissionPolicies deployed across the fleet.
- View Kyverno resource audit violations, generated resources, image verification violations, and mutated objects.

(TP) Tools for testing Open Cluster Management policies

- Leverage the policytools CLI "dryrun" command to create automated tests for policies and integrate them into a CI pipeline for increased pre-deployment validation.

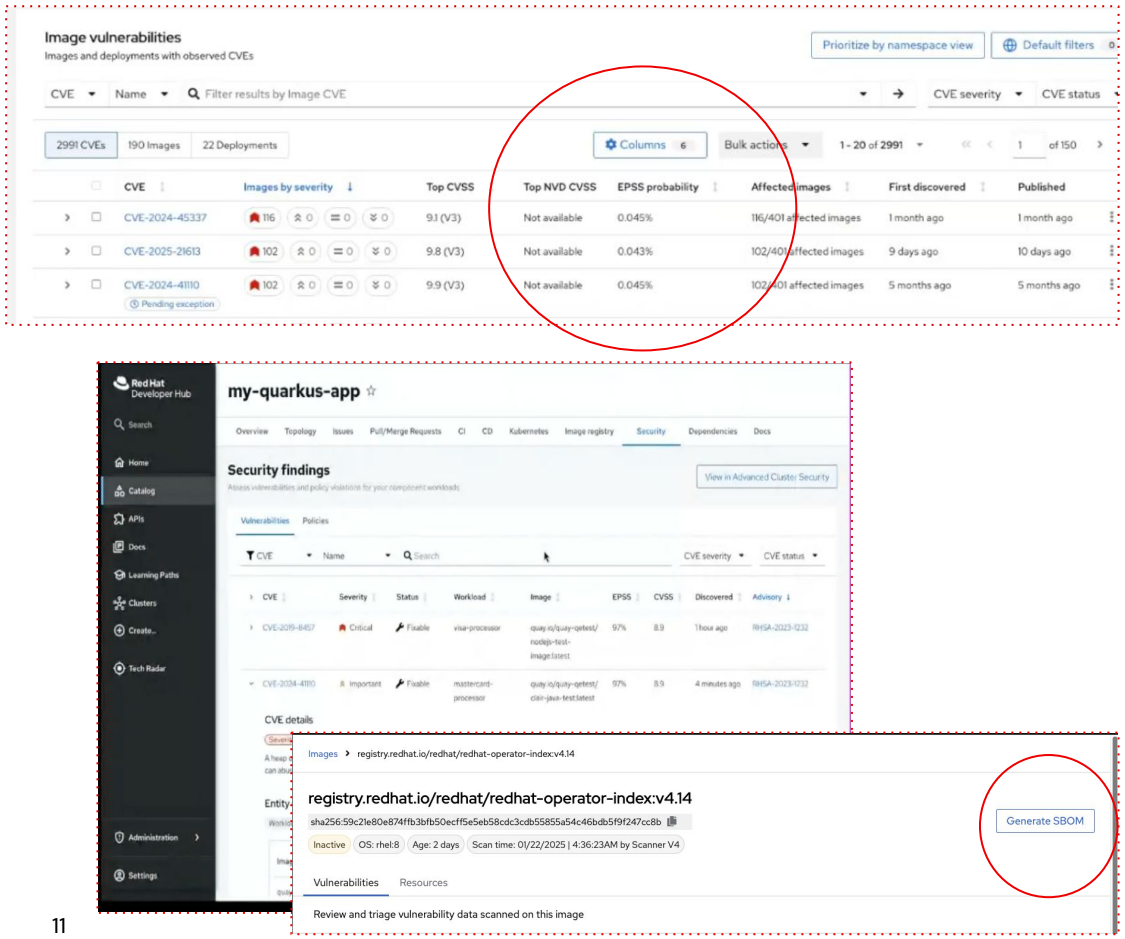
Gatekeeper operator uplift to 3.18

- Alignment with latest version available in the upstream community.

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Red Hat Advanced Cluster Security for Kubernetes

ACS 4.7 Highlights



Vulnerability Management

- **SBOM Generation** based on scanned container images (SBOM type Analyzed) (Tech Preview)
- **Enriched Vulnerability Data with EPSS Score**
- **Integration with ServiceNow** Container Vulnerability Response Application (April 2025)
- **Integration with Red Hat Developer Hub** (Tech Preview)

Platform

- **Auto-renewal of Internal certificates** for Secured clusters
- Short-lived **OIDC credential from Microsoft Entra ID** for m2m auth
- Integration with **Azure services** using **workload Identity**

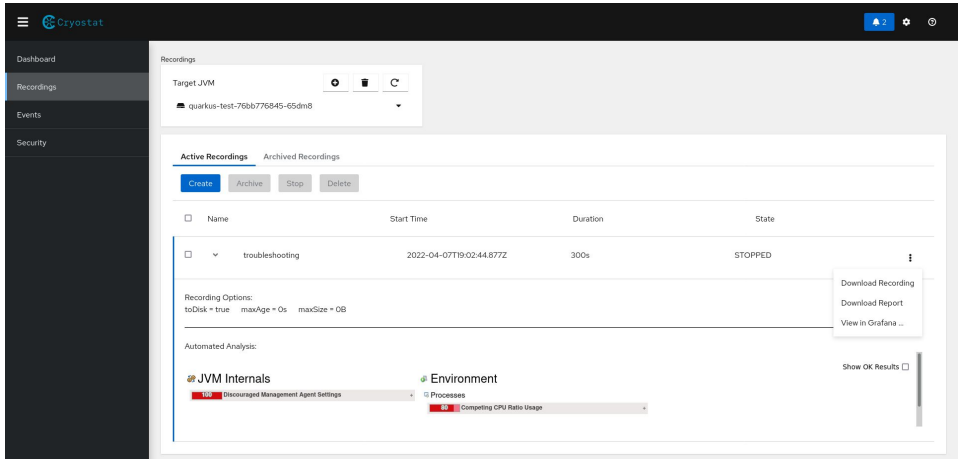
** Note: Released UI may have some differences

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Red Hat build of Quarkus

What's New in 3.15

- Improved integration with Red Hat Developer Hub
- Security improvements
  - Auto generated TLS certificates for development
  - Easier configuration
- Front end development improvement
  - WebBundler (NPM integration)
  - HTMX support
  - WebComponents
- Java Flight Recorder extension for monitoring containerized Java app stats on OpenShift with Cryostat



Cryostat Automated Analysis Report



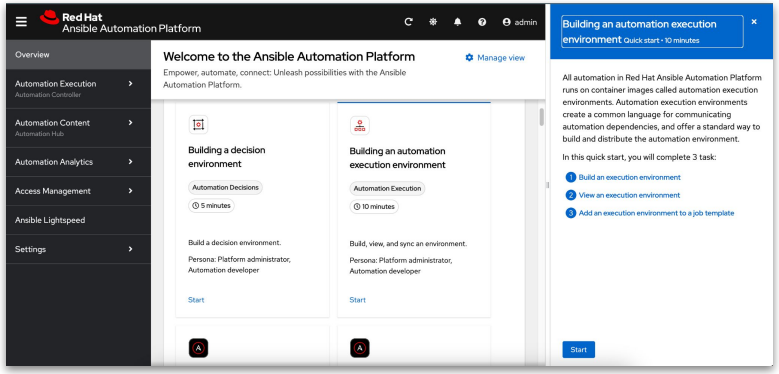
Cryostat Grafana dashboard

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Red Hat Ansible Automation Platform | **Our latest release**

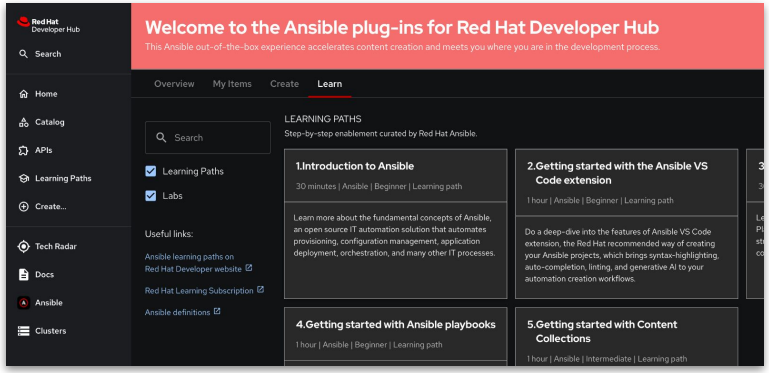
Ansible Automation Platform 2.5

Ease of Use



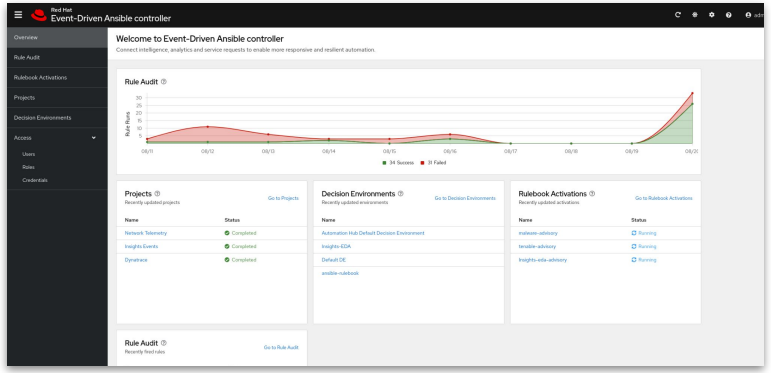
- Unified UI
- Containerized installation
- Ansible quick starts
- New collections for managing AAP

Scaling Automation



- Ansible development tools
- Ansible Lightspeed with IBM watsonx Code Assistant enhancements
- Ansible plug-ins for Red Hat Developer Hub

Mission Critical Platform



- New and enhanced ecosystem collections + partnerships across all domains
- Enhancements to Event-Driven Ansible:
  - New event streams for simplified event routing
  - High availability + scalability
  - Integrated RBAC, SSO + authentication, and credential management

AAP roadmap | 1H 2025

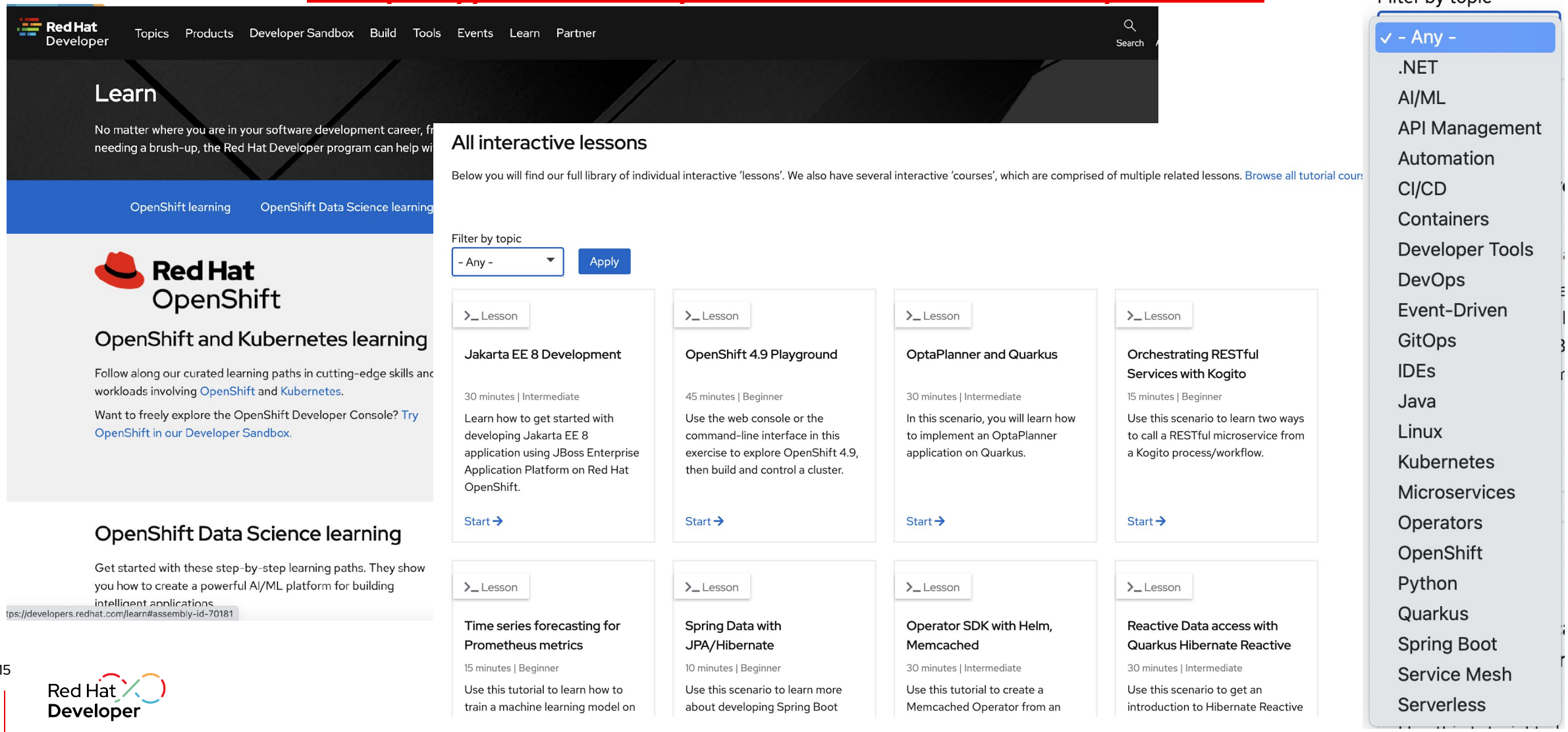
Red Hat Summit AnsibleFest

Product pillar *Primary users*	January	February	March	April	May
	Iterative platform improvements via cadenced releases (every 6/8 weeks)				
Core platform experience Automation Team, SysAdmins, SREs, Network engineers		Updated Deployment Topologies		AAP available in Developer Sandbox	Additional validated content use cases	Self-service end to end Automation use cases & Enhanced Content Management
Cloud native automation Platform engineers Cloud architects			Extended Hyperscaler Collections	Ansible on Azure Upgrades to 2.5 Additional AAP Service AWS Region Support	AAP Service Private Link Support	AAP Service Multi-Region Business Continuity	AAP Service EDA Support
Accelerating with GenAI Developers, Automation engineers	'AAP Docs' Chatbot Cloud Service	On-Premise Playbook Gen/Exp in VS Code		AAP Chatbot On-Premise with Openshift AI & RHELAI	RCA + Remediation of Job Failures	Browser-based developer workspaces	
Analytics, reporting + compliance Enterprise architects, Platform Admins, LOB					Improved AAP analytics to count managed nodes directly and indirectly	Policy as Code (*Policy Runtime Enforcement*)

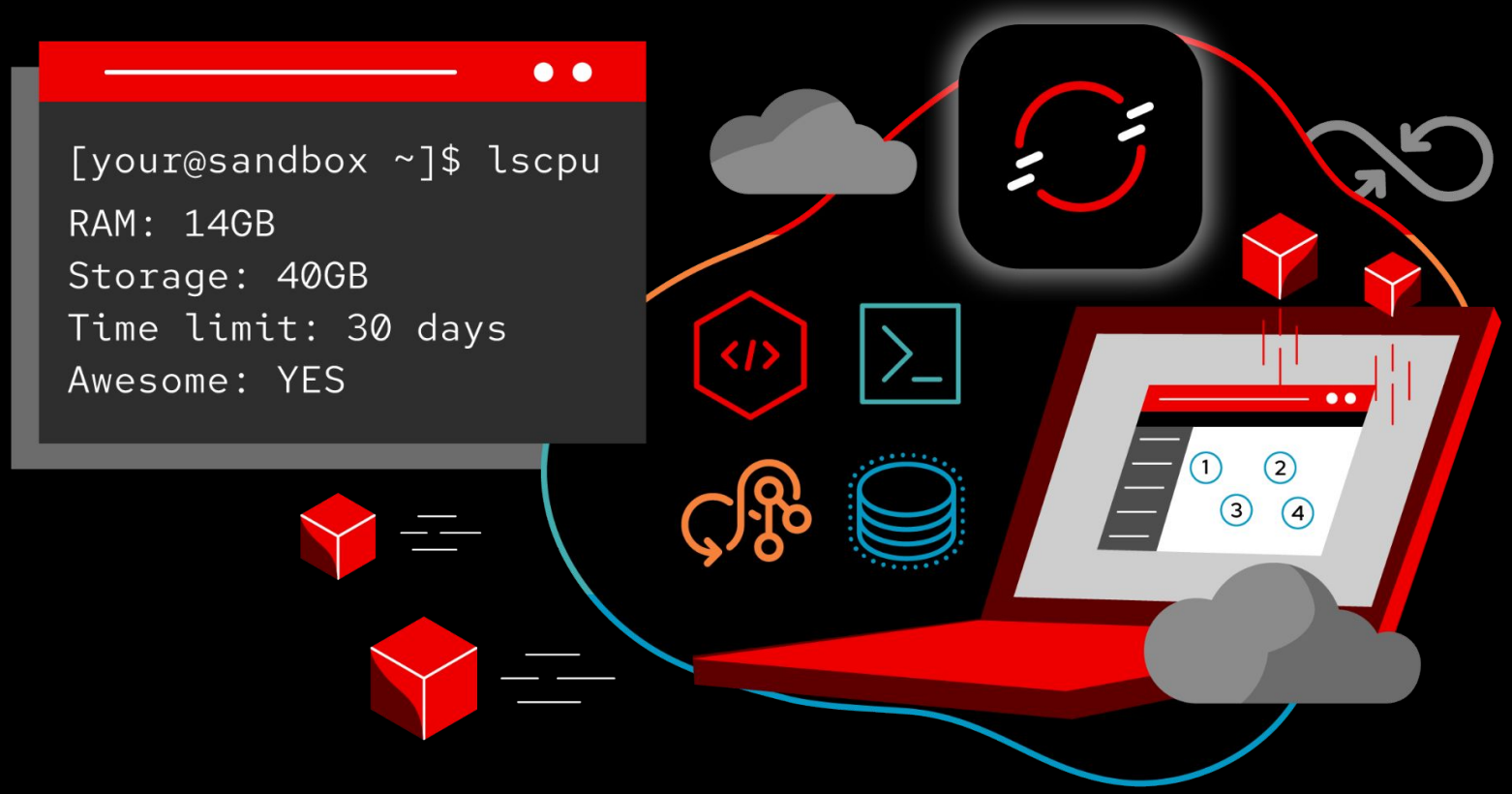
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Q4 - 2022	Richard Hofmeister	Agenda	pdf
	Brian Dumont	Using the Insights API to apply Compliance Profiles	pdf
	Richard Hofmeister	Application Modernization With Konveyor	pdf
	Patrick Regan	What's New in RHEL 9	pdf
	Brad Krumme	Enterprise Architecture 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

