



TechTalks

Red Hat Summit Boston

Marc Sheermohamed - Openshift & Virtualization

Adnan Drina - Red Hat AI platform

Maxim Burgerhout - Ansible Enterprise Automation

Juan van der Breggen - Red Hat Enterprise Linux

Bart Schurer - Senior Manager Account Solution Architects

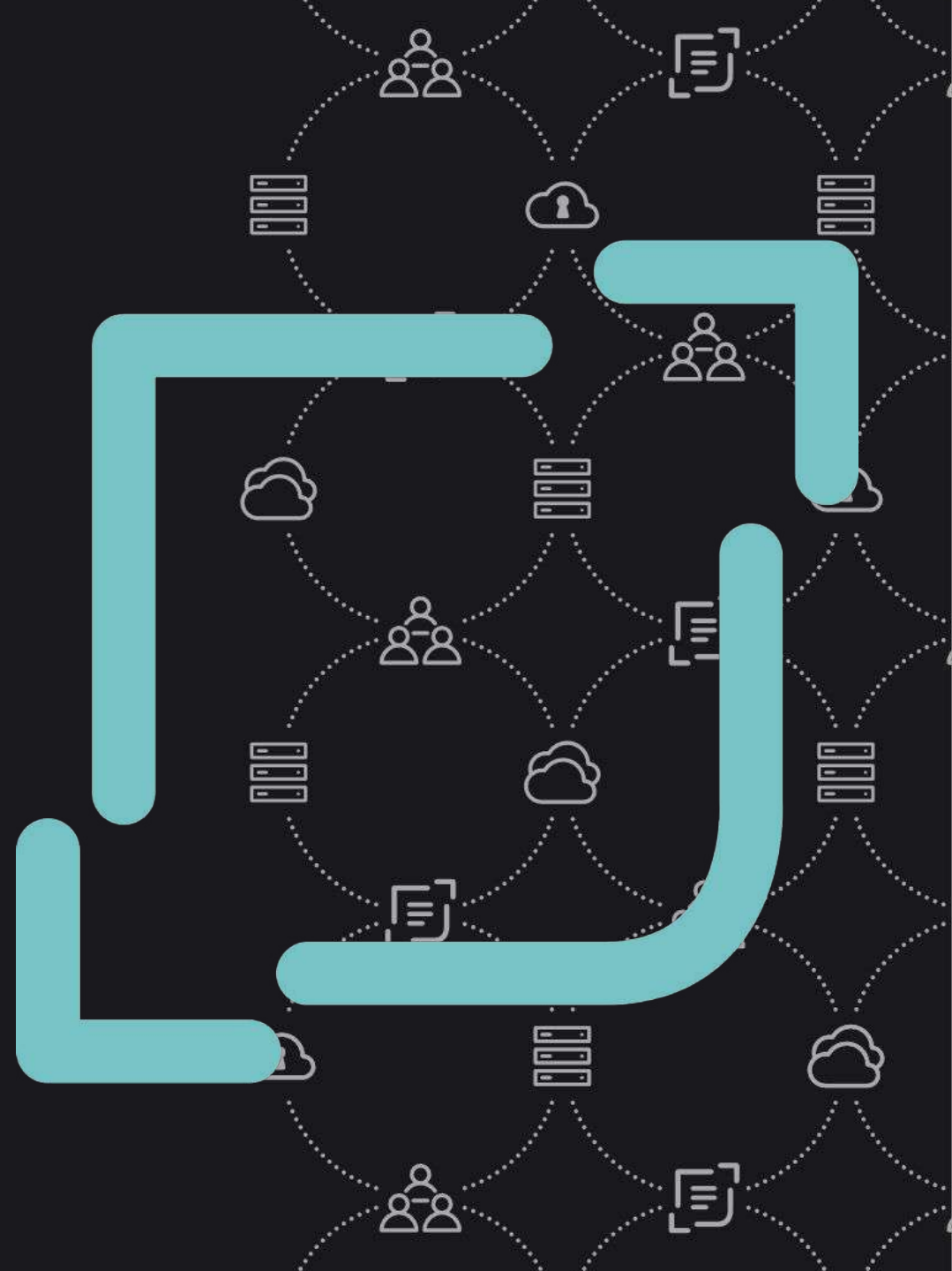


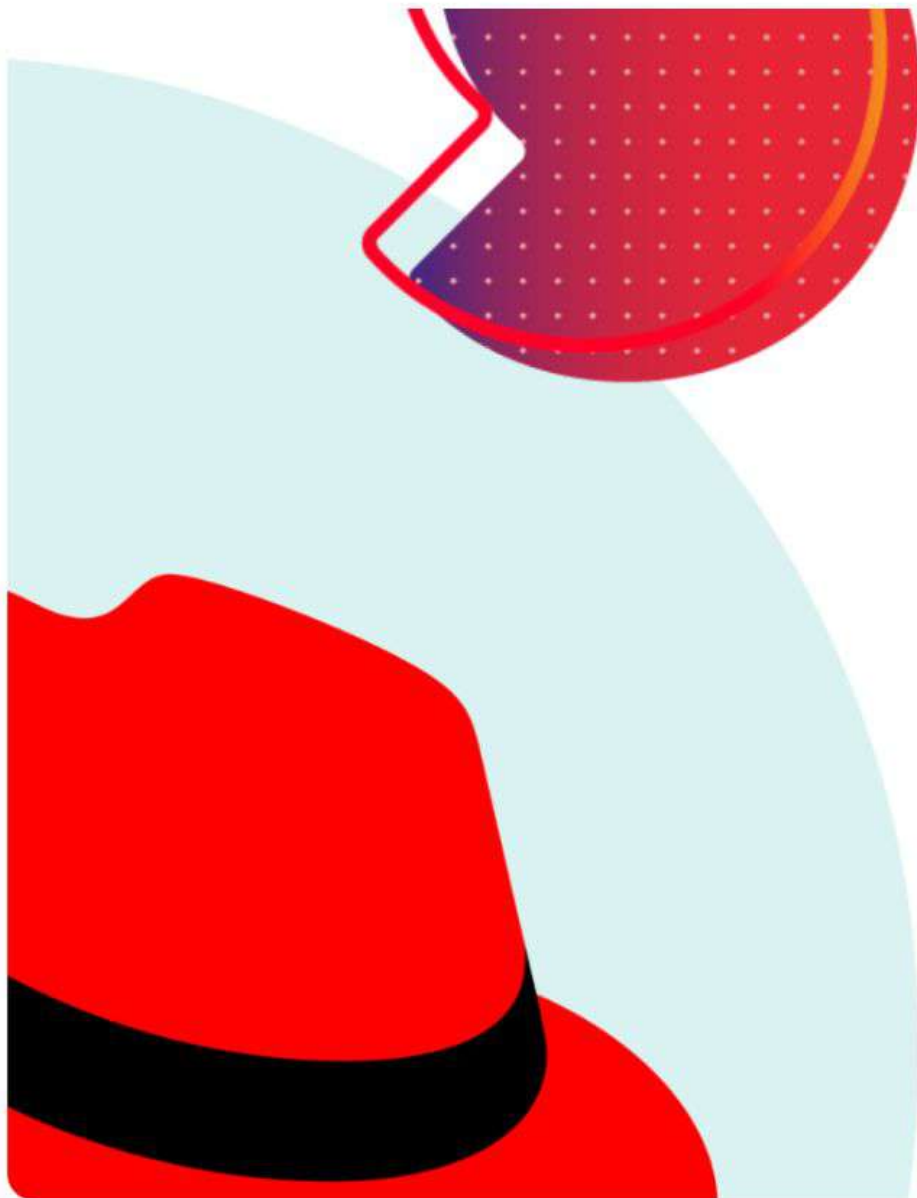


TechTalks

Red Hat Summit Boston 2025

- Presentation of Highlights
- Panel Q&A





May 19-22, 2025

Boston, MA



"Enterprise AI and modern infrastructure"

Agenda at a glance

SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY
Power Training	Power Training	Summit keynote	Summit keynote	Briefing Center
	Briefing Center	Briefing Center	Briefing Center	
	Community Day	Executive Exchange	Press/analyst program	Sessions/labs
		Sessions/labs	Sessions/labs	
Evening events	Expo hall	AnsibleFest keynote	Partner ecosystem keynote	
	Kickoff party (Expo)	Expo networking reception	Lansdowne Street receptions	

7000+ attendees (Customers & RH partners)

454 sessions

CBC (Customer Briefing Center) sessions

Expo hall

Networking events

Key announcements

Numerous breakout sessions, labs, customer presentations

The presentation panel for this session

Marc Sheermohamed - Openshift & Virtualization

Adnan Drina- Red Hat AI platform

Maxim Burgerhout - Ansible Enterprise Automation

Juan (John) van der Breggen - Red Hat Enterprise Linux



TechTalks

Openshift Platform

Marc Sheermohamed
Specialist Solution Architect



OpenShift at Summit: Themes



Developer experience and platform engineering.



Virtualization



Lightspeed



Zero Trust

OpenShift at Summit: Themes



Developer experience and platform engineering.



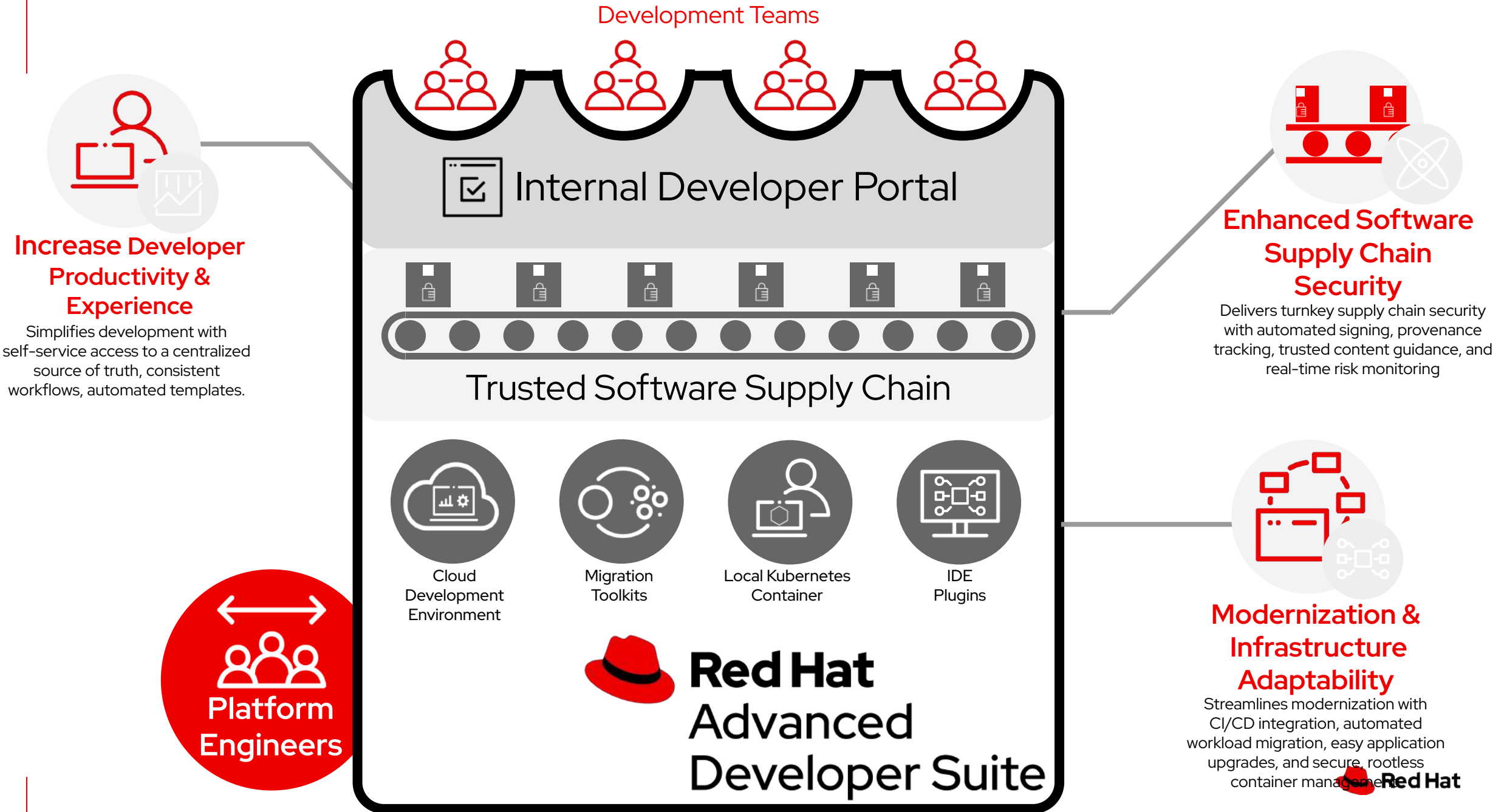
Virtualization



Lightspeed



Zero Trust





IDP: Internal
Developer Portal



Red Hat
Developer Hub



AI/Kube Developer
Desktop Experience :
Podman Desktop



Migration toolkits



Development
Tools
IDE Plugins
Red Hat OpenShift
Dev Spaces



Trusted Software
Supply Chain



Red Hat
Trusted
Artifact Signer



Red Hat
Trusted Profile
Analyzer



AI Enablement



Developer Lightspeed

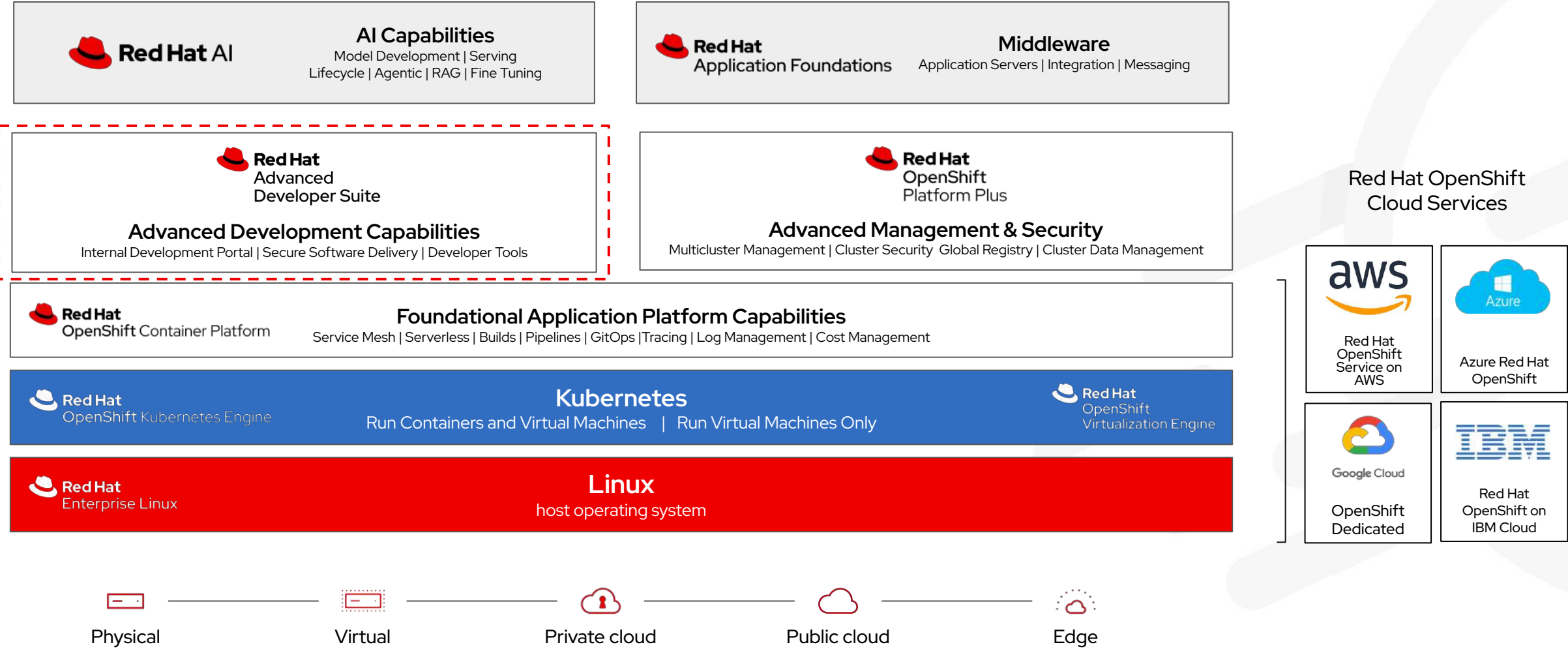


Podman Desktop AI Lab

Red Hat Developer
Hub AI Integration

Developers:
quickly and securely deliver applications

Platform engineers:
provide a good DevEx while still
enforcing operational controls and
compliance



Application Workload

Updates



- ▶ **Improvements to Service Mesh 3.0**

Sidecar-less “ambient” mode, lightweight Argo CD multi-cluster GitOps control plane

- ▶ **Red Hat build of Quarkus 3.20**

Improved WebSocket handling, UBI 9 by default (UBI 8 still supported), MicroProfile REST Client 4.0, OpenTelemetry Logging Support

- ▶ **Red Hat Trusted Artifact Signer 1.2**

Supported on RHEL 9.4+ using Ansible, monitor through Cockpit, better auditing controls

- ▶ **Red Hat Trusted Application Pipeline 1.5**

Azure Pipelines as CI provider, tighter namespace-scoped security, quality-of-life improvements to install & update

OpenShift at Summit: Themes



Developer experience and platform engineering.



Virtualization



Lightspeed



Zero Trust

OpenShift Virtualization at Summit 37 public logos, 14 customers sessions,
2 customer keynotes, 28 partner session



Key themes for OpenShift Virtualization



OpenShift Virtualization is available across major cloud providers

Migrate VMs to the cloud

Modernize and build new
apps with cloud-native
tech



Generally Available on
Red Hat OpenShift
Service on AWS and
self-managed
OpenShift on AWS



Public preview of
Azure Red Hat
OpenShift



Technical preview on
OpenShift Dedicated
and self-managed
OpenShift on Google
Cloud Platform



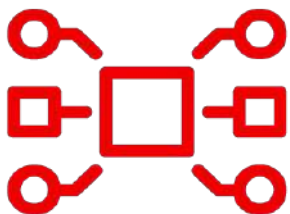
Generally available on
Red Hat OpenShift
on IBM Cloud



Technical preview on
OpenShift on OCI

OpenShift Virtualization

Updates



► IBM and Arctera storage announcements

Both companies offer different approaches to reuse existing Fibre Channel or iSCSI enterprise-storage arrays, resulting in an abstraction layer that interacts (CSI) with OpenShift.

► ROSA improvements

Embedded Windows licensing on EC2 nodes, RHEL cost saving 30-60% small VMs, Advanced Cluster Manager (ACM) in AWS marketplace.

► Red Hat and AMD strategic collaboration

Aim to deliver: improved performance on AMD GPUs, multi GPU support, better upstream development in vLLM ecosystem.

► Virtualization available on IBM Z and IBM LinuxONE (TP)

Combine the reliability, security and massive processing power with container and VM orchestration of OpenShift.

OpenShift at Summit: Themes



Developer experience and platform engineering.



Virtualization



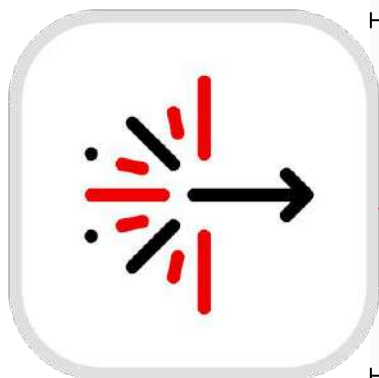
Lightspeed



Zero Trust

Generative AI experience for virtual admins

OpenShift Lightspeed



Help where you need it


Integrated directly into the Red Hat OpenShift web console


Troubleshoot, investigate, and learn more


Provides assistance with troubleshooting and investigating cluster resources

Generative AI

Powerful, pluggable LLMs combined with the latest OpenShift documentation

 **OpenShift Lightspeed** Clear chat

 **You**
how do i migrate a VM

 **OpenShift Lightspeed**
To migrate a virtual machine (VM) in OpenShift, you can use the Migration Toolkit for Virtualization. Here are the steps to initiate live migration using the web console:

1. Navigate to Virtualization -> VirtualMachines in the web console.
2. Select the VM you want to migrate.
3. Click on "Migrate" from the Options menu beside the VM.
4. Click "Migrate" again to confirm.

Please note that only cluster administrators can initiate a live migration, although all users can see the Migrate action.

Alternatively, you can also initiate live migration using the command line by creating a VirtualMachineInstanceMigration object for the VM and applying it with `oc create -f <migration_name>.yaml` command.

Remember that certain conditions must be met for successful migration, such as having an available node supporting CPU model if your VM is configured with a host model CPU. Let me know if there's anything else I can help with!

Related documentation

[Exporting virtual machines](#) [Initiating and canceling live migration](#) [Cloning VMs](#)

2 more

OpenShift at Summit: Themes



Developer experience and platform engineering.



Virtualization



Lightspeed



Zero Trust

Security

Updates



- ▶ **Red Hat Zero Trust Workload Identity Manager (Tech Preview)**

Based on SPIFFE/SPIRE upstream, a trusted framework to assign identities to applications across different clouds.

- ▶ **Red Hat OpenShift and HashiCorp Vault integrations**

Lots of options and good practices available now, announcement mostly on a joint roadmap that will be delivered

- ▶ **Post Quantum Cryptography (PQC) in Red Hat OpenShift**

Test-PQC in RHEL 10, quantum safe options expected spring 2026, mitigations in 2025

- ▶ **Zero trust and sovereignty for cloud-native and AI workloads**

Not a product but a set of principles and controls based on policy-as-code framework: automation, observability, data residency, network segmentation, identity and workload management,

Summary



Zero trust

Red Hat Zero Trust Workload Identity Manager (TP)

Based on SPIFFE/SPIRE upstream and allows for workload attestation based on user identity across resources on hybrid clouds.

Red Hat OpenShift and IBM Vault integrations

Coming soon, integrations with popular secret exchange interfaces within the CNCF eco-system for out of the box use with OpenShift.

Confidential computing and post-quantum crypto

Red Hat OpenShift Service Mesh intent to support RHEL post-quantum crypto end of 2025. Attestation support in OpenShift for confidential containers (TP).



Developer experience and platform engineering

Red Hat Advanced Developer Suite (GA)

Combines developer portal, trusted software supply chain tools, and templates to enable AI workflows from Red Hat AI.



Lightspeed

Red Hat OpenShift Lightspeed (GA)

Leverage AI service endpoints for an integrated user experience within OpenShift that will lower the cost of ownership and allow users and administrators to be effective with their OpenShift platform.



Virtualization

Customer and ecosystem momentum

At Summit, 37 public logos | 14 customers sessions | 2 customer keynotes | 28 partner session

Major public clouds announce support

AWS, Google (TP), Azure (TP), Oracle, and IBM are now locations to run OpenShift Virtualization.

IBM Z support

OpenShift Virtualization supported on IBM Z (Tech Preview)

Legacy storage support

IBM Fusion Access (TP) and Arctera InfoScale (TP) release support for solutions that allow customers to use their existing investments in fiber channel and iSCSI storage solutions.



TechTalks

Red Hat AI Platform

Adnan Drina
Specialist Solution Architect



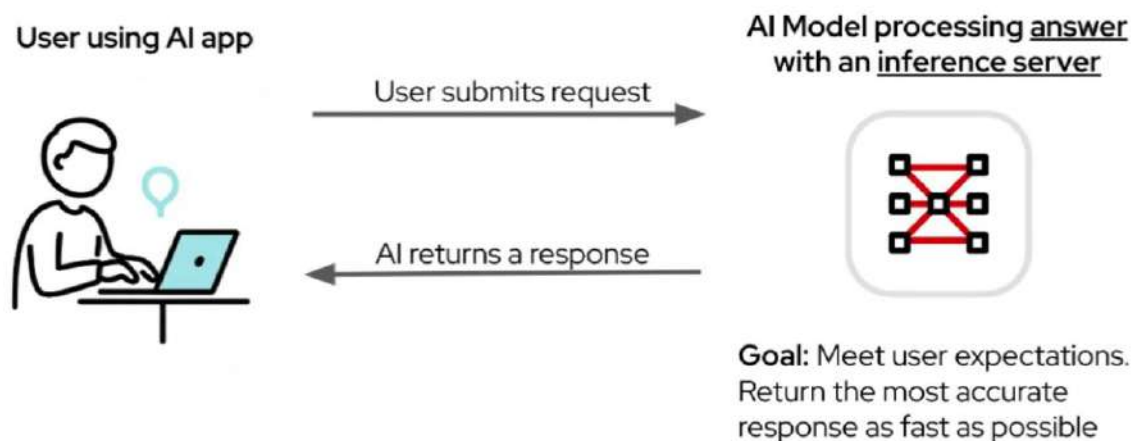
Product and community announcements

- ▶ **Red Hat AI Inference Server**
- ▶ **Red Hat AI platform updates**
 - Neural Magic integration
 - Model repository and validation
- ▶ **llm-d**

Introducing Red Hat AI Inference Server

Gain consistent, fast and cost-effective inference at scale

What is inferencing?



Inferencing refers to the process where the AI model uses what it learned during training to deliver real-time answers.

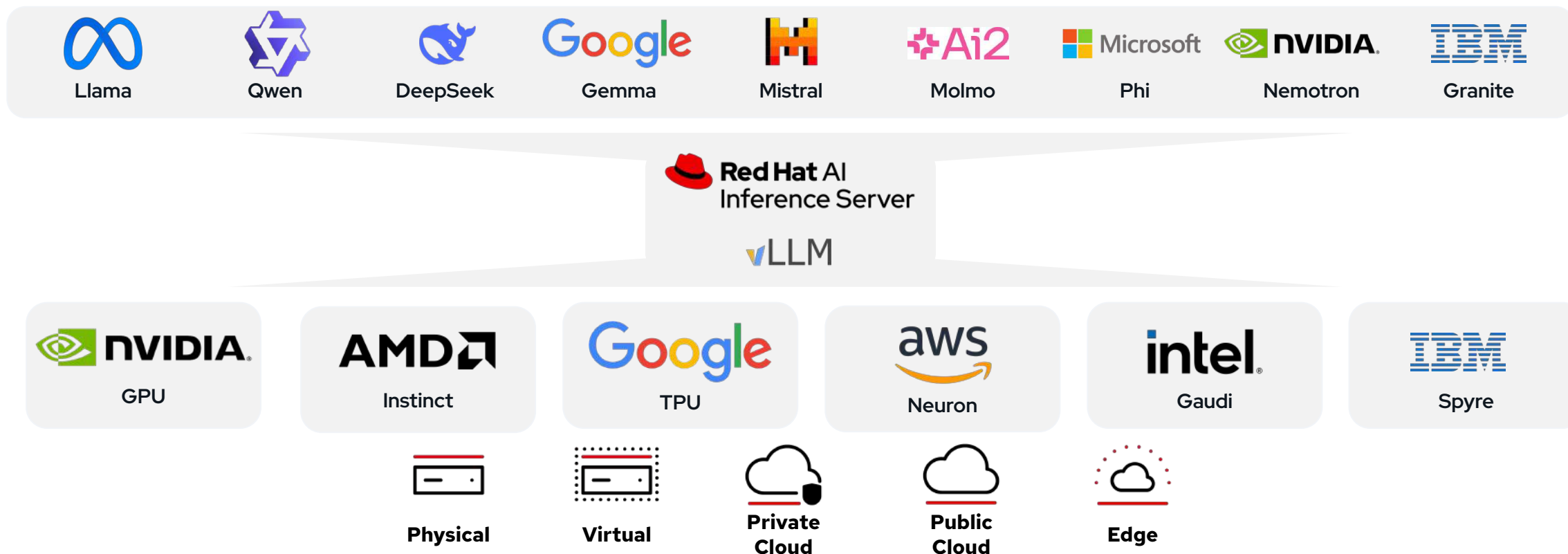
Why is inference important?

- **Fine-tuning is periodic** and repeated to align on new data
- **Inference is 24/7** and scales based on user demand

Inference process is crucial for users to receive quick responses and to handle multiple users at once.

Introducing Red Hat AI Inference Server

vLLM connects model creators to accelerated hardware providers

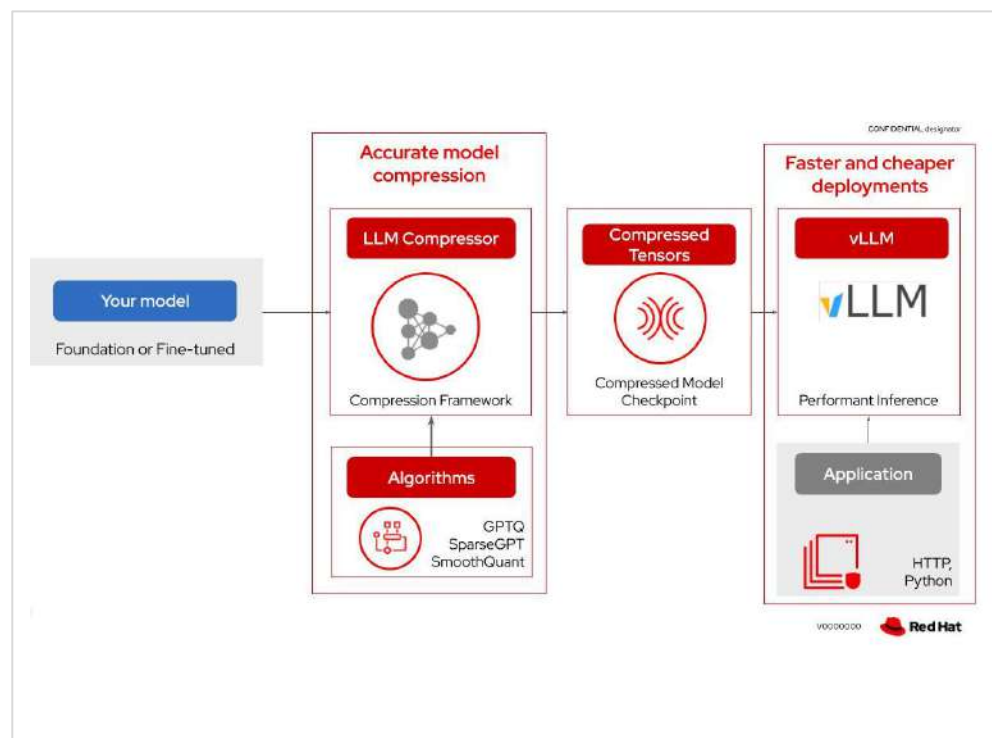


Single platform to run any model, on any accelerator, on any cloud

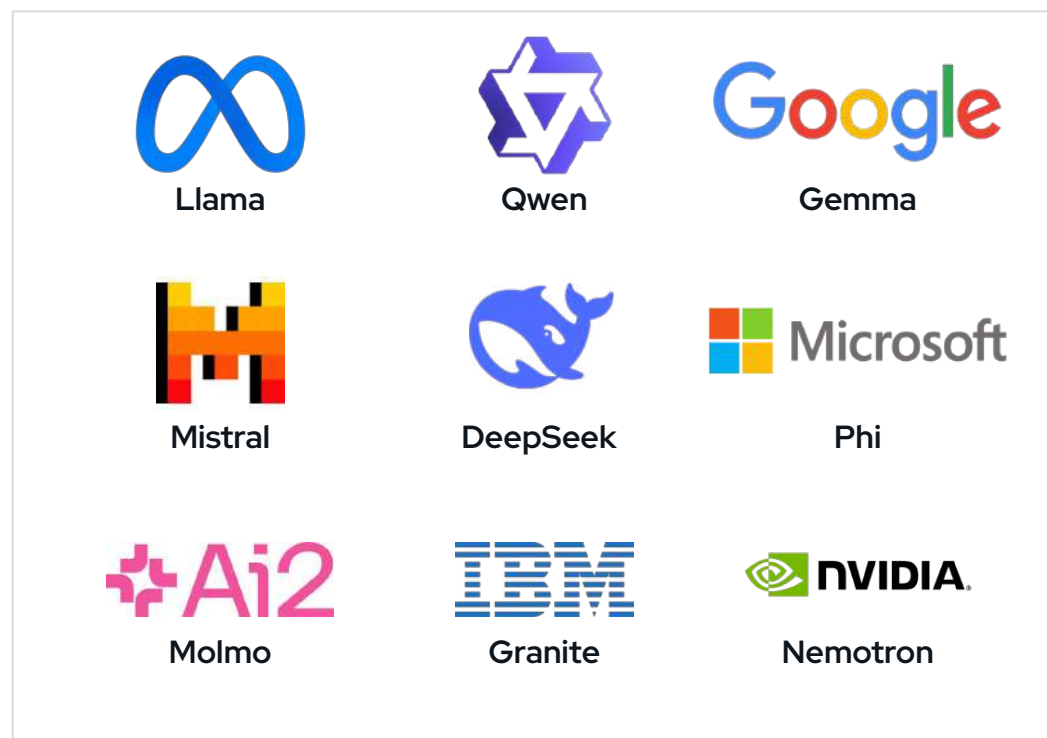
Introducing Red Hat AI validated models

A comprehensive set of model optimization capabilities to drive operational efficiencies

LLM Compression Tools



Third-party validated and optimized models



Introducing Red Hat AI repository on Hugging Face

A collection of third-party validated and optimized large language models

Broad Collection of models



Llama



Qwen



Gemma



Mistral



DeepSeek



Microsoft

Phi



Molmo



Granite



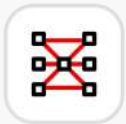
Nemotron

Validated models



- ▶ Tested using realistic scenarios
- ▶ Assessed for performance across a range of hardware
- ▶ Done using GuideLLM benchmarking and LM Eval Harness

Optimized models



- ▶ Compressed for speed and efficiency
- ▶ Designed to run faster, use fewer resources, maintain accuracy
- ▶ Done using LLM Compressor with latest algorithms

Hosted on the [Red Hat AI repository on Hugging Face](#)

Cut GPU costs with inference optimized models.

Announcing open source project llm-d

A new open source project developed to power distributed generative AI inference at scale



llm-d: a Kubernetes-native high-performance distributed LLM inference framework



TechTalks

Enterprise Automation platform

Maxim Burgerhout
Principal Account Solution Architect



New Ansible Content Collections

Red Hat Ansible
Lightspeed
intelligent
assistant

Policy
enforcement

Enhanced user
experience

Something,
something...

Red Hat Ansible Content Collections: new and updated

Managing Ansible Automation Platform


- > Use Ansible Playbooks to configure and manage AAP with new and updated content collections for automating your automation'
- > Use a standardized gitops 'as-code' approach to provide both automation content and platform configuration

New/updated **certified** content for platform configuration:

- > **ansible.hub** for Automation Hub
- > **ansible.eda** for Event Driven Ansible controller **updated**
- > **ansible.controller** for Automation controller **updated**
- > **ansible.platform** for configuration of centralized platform services **new**

New or updated **validated** content:

- > **Infra.aap_configuration** **new**

**Red Hat**

Certified
Signed

platform

Provided by Red Hat

A collection of roles to manage Ansible automation platform ...

16	0	19	0
Modules	Roles	Plugins	Dependencies

**Red Hat**

Certified
Signed

ai

Provided by Red Hat

Manage Red Hat AI

4	1	2	0
Modules	Role	Plugins	Dependencies



Validated
Signed

ai

Provided by Red Hat

AI orchestration for infrastructure operations

0	1	0	4
Modules	Role	Plugins	Dependencies

New Ansible Content Collections

Red Hat Ansible
Lightspeed
intelligent
assistant

Policy
enforcement

Enhanced user
experience

Something,
something...

Red Hat Ansible Content Collections: updates and enhancements (Q1) Partners

General updates

- > **4** new partner collections certified
- > Over **80+** collections updated

New Partner or expanded
Collections:

- Microsoft IIS
- Ansible.windows
- Dynatrace One Agent
- Juniper Apstra
- Nautobot

Infrastructure / OS

- > Extended support for **Microsoft Windows Server** for OpenSSH
- > Support for **Nokia SR Linux** devices automation

Infrastructure / OS

- > Extended support for **Microsoft Windows Server**, including automation of Windows and IIS use cases
- > New **Validated Content** for activities related to the VMware to OpenShift Virtualization Migration (in pilot for services engagements)
- > New **Validated Content** for OpenShiftSDN migration to **OVN Kubernetes**

Virtualization

- > Extended support for **VMWare**, leveraging both SOAP and REST APIs.

Networking + Edge

- > New multi vendor **Validated Content** collections for configuration backups, network inventory report, and health-checks
- > Support for **Juniper Apstra** integration with OCP leveraging EDA capabilities
- > New **Validated** content for F5 covering Proactive Security scenarios with EDA.

Cloud

- > Improved **AWS** capabilities around VPC, EC2 management, and autoscaling modules
- > Support for **Azure ARC** Resources



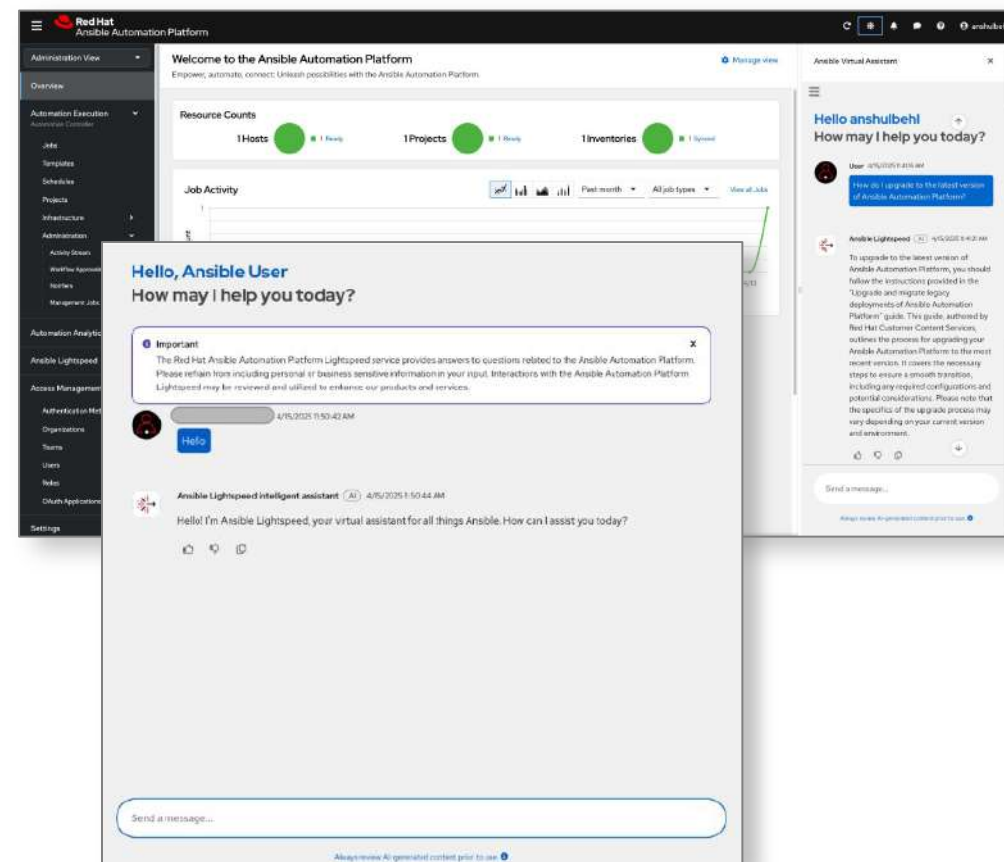
Introducing the Red Hat Ansible Lightspeed **intelligent assistant**

The Ansible administrator who never takes a day off

Tech
Preview

PLATFORM ASSISTANCE

- Intuitive **chat assistant** embedded directly into Ansible Automation Platform UI
- Contextual support for **faster troubleshooting, platform onboarding, and the day-to-day management** of automation.
- Includes links to references and resources for **source validation** and **accelerated learning**.
- Flexible model connectivity: Red Hat AI or 3rd-party models
- **Example prompts:**
 - "What is an execution environment?"
 - "How do I upgrade to the latest version of Ansible Automation Platform?"
 - "How do I activate Ansible Lightspeed with watsonx Code Assistant?"



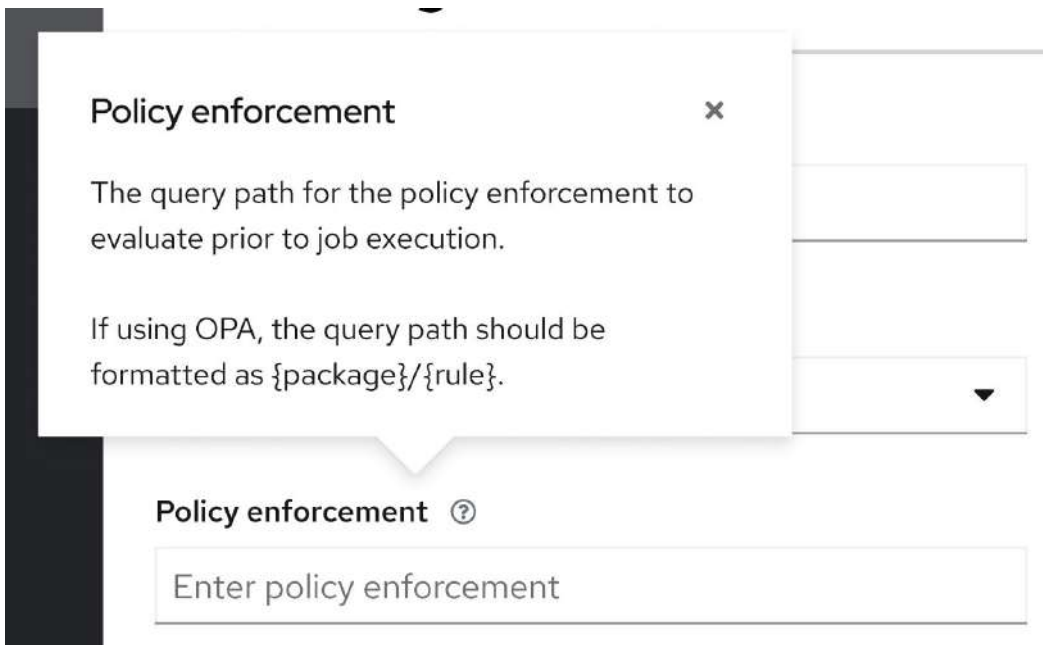
ONBOARD FASTER

REDUCE FRUSTRATION / FRICTION

SIMPLIFY PLATFORM ADMINISTRATION

Why policy enforcement and why now?

Control, predictability, and operational confidence



Operate within boundaries for AIOps
to ensure the best outcomes.



Focus on compliance is accelerating
so you must meet requirements across ITOps
even as they grow and expand.



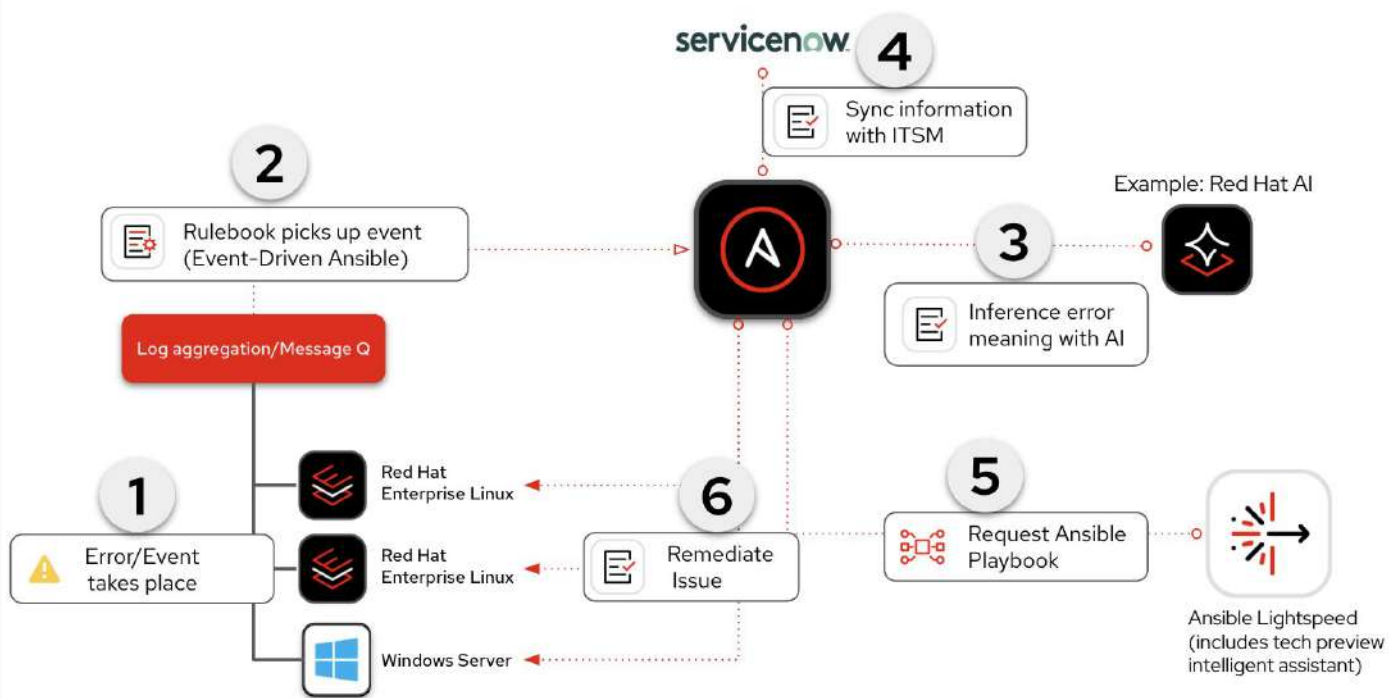
Reduce risk
minimize security issues, outages and downtime
through operational controls.



Automate with discipline
control and provide boundaries for scaling
enterprise automation scenarios.

AI use case example with *Ansible Lightspeed*

Closed-loop AI automation: Windows and Linux



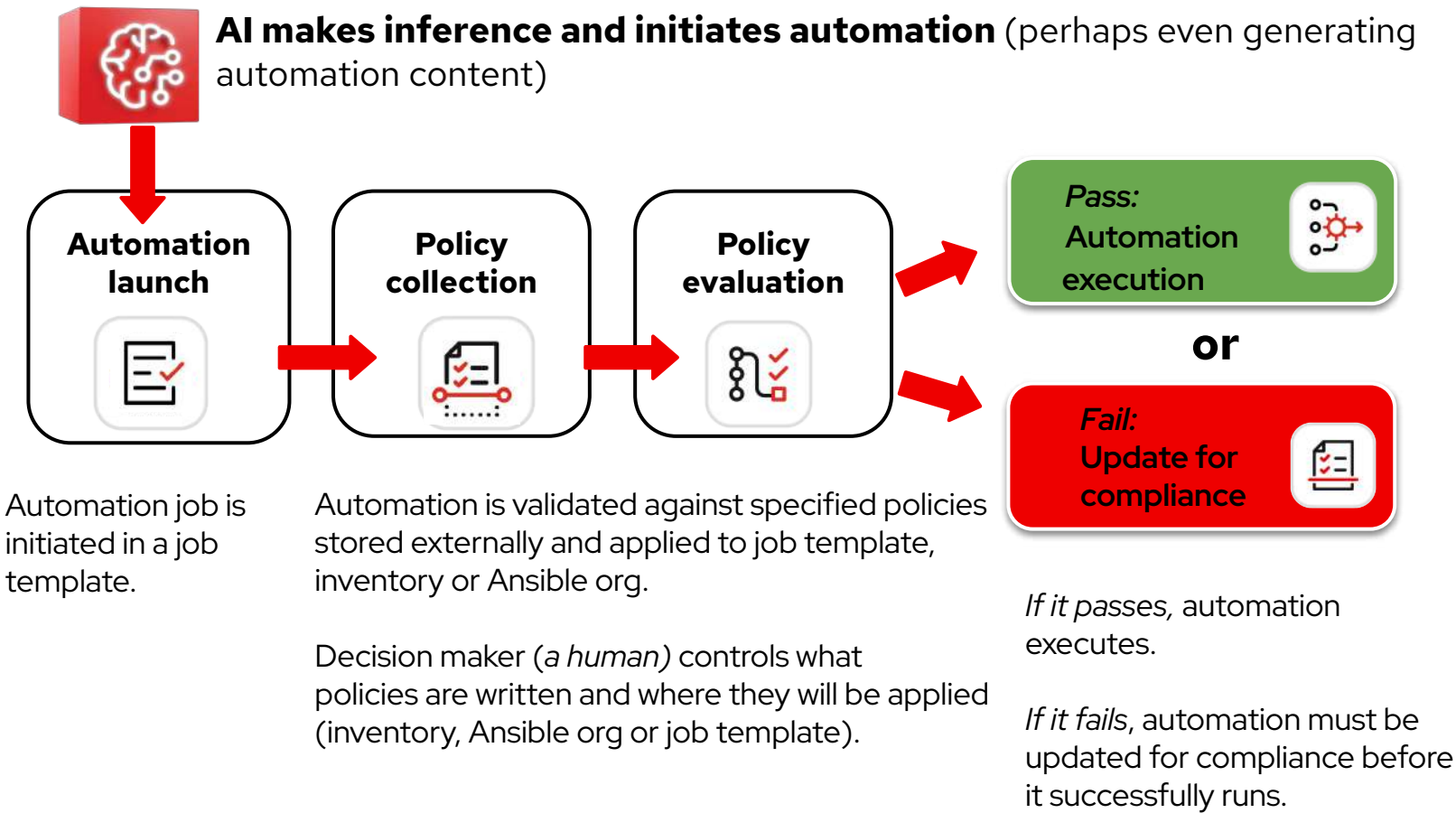
RESILIENCE

- ✓ Maximize observability and AIOps investments with seamless integration.
- ✓ Decrease time spent diagnosing and manually responding to errors.
- ✓ Shift from reactive to proactive model.
- ✓ Reduce downtime and MTTR by detecting and reacting to emerging issues.
- ✓ Minimize manual intervention and human error.
- ✓ Address skills gaps with automated playbook generation and intuitive virtual assistant embedded directly into UI.

[View Red Hat Knowledgebase here.](#)

AI use case example with *policy enforcement* feature

Policy enforcement for AI



TRUST

- ✓ **Control** what AI-driven automation is able to do prior to completion.
- ✓ Improve **compliance**, auditability, and AI outcomes.
- ✓ Tightly align event-driven automated responses **to company policies**.

[View Red Hat Knowledgebase here.](#)

Policy enforcement at automation runtime

Key policy enforcement use cases



AI and AIOps

- ✓ Set boundaries around inventories and event-driven automation.
- ✓ Stay aligned to compliance mandates.
- ✓ Move fast on AI Infrastructure, while operating within safeguards.



Security and compliance

- ✓ Apply policies across ITOps.
- ✓ Control which users or user types can take actions.
- ✓ Time-box automation, for example shut it down during incident investigation.



CloudOps

- ✓ Prevent provisioning of new cloud resources by specific users or within specific dynamic inventory groups.
- ✓ Enforce naming standards.
- ✓ Prevent use of mismatched automation and inventory (e.g., prod credentials with dev instances).

Core Platform User Interface

User Interface Improvement

- Show Ansible Automation Platform version on About page.
- Editable rulebook activations!!11one

Enhanced login experience

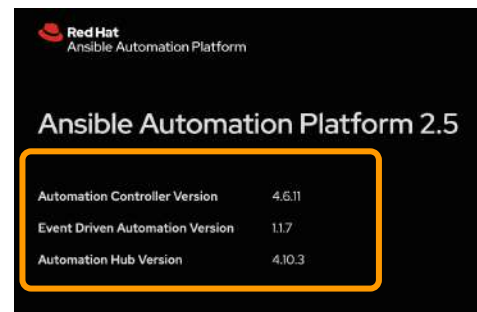
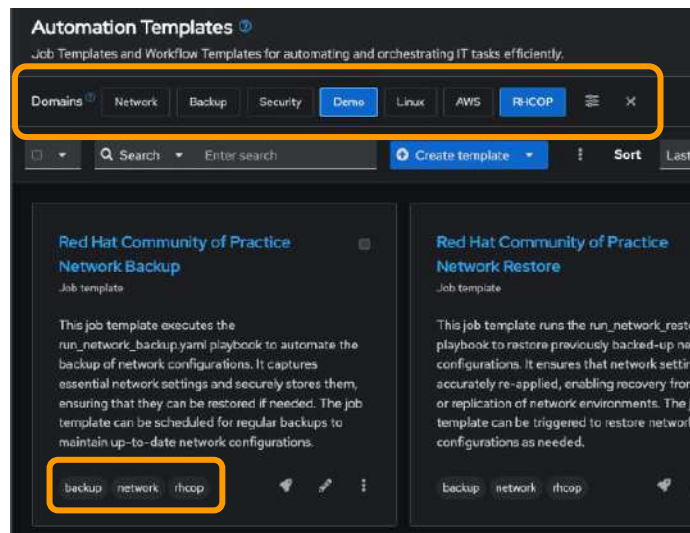
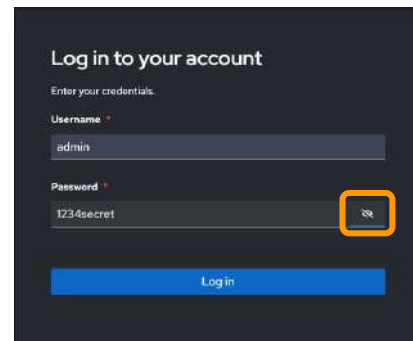
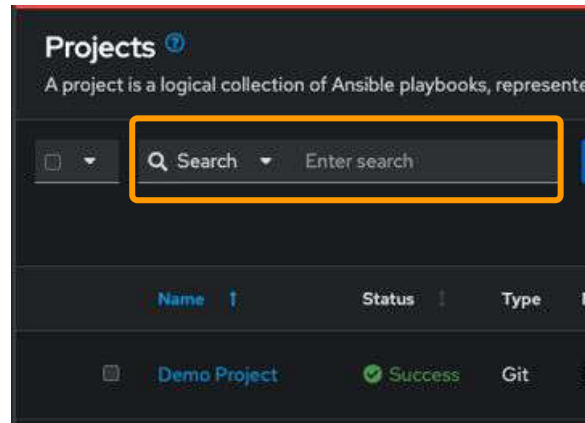
- Show password button on automation controller login screen.

Better search experience

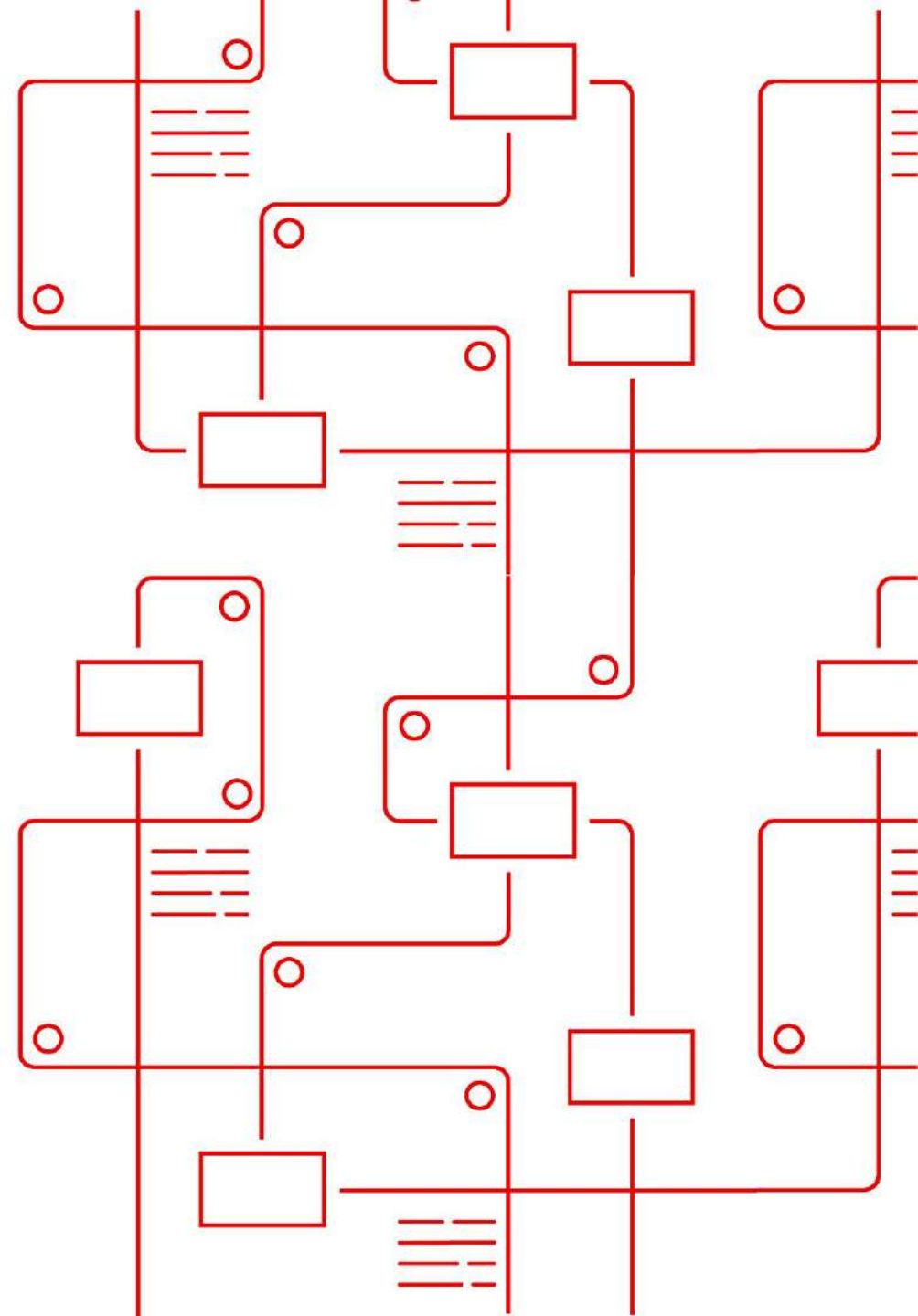
- Optimized search functionality for job templates.
- Domain picker/filtering by labels.

Survey update

- Add a button to show and hide contents in survey password fields.

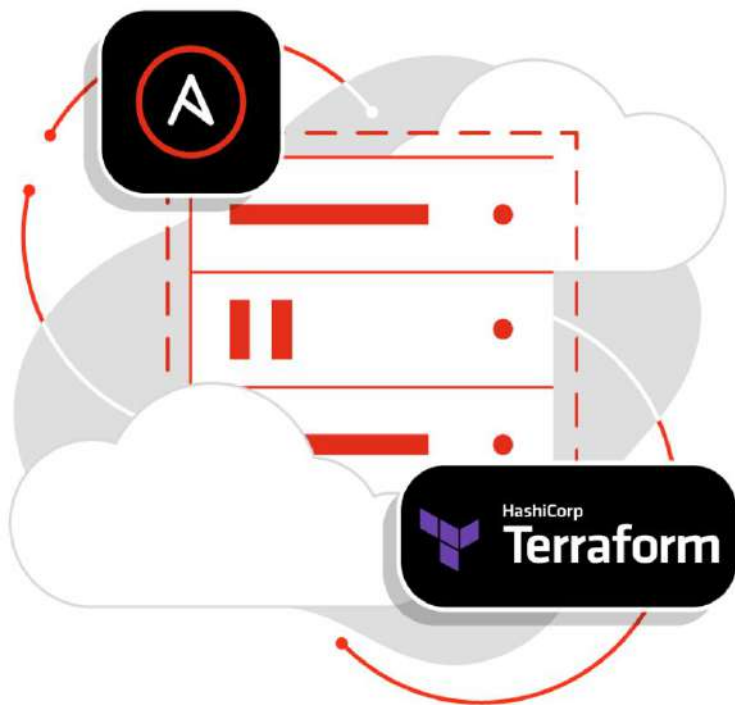


To create something, something...



Ansible Automation Platform Certified Content Collection for Terraform

Available now:



- ▶ Enables an Ansible automation playbook to initiate a Terraform automation workflow (plan) allowing AAP users to create combine workflows
- ▶ Automates the management and provisioning of infrastructure as code using Terraform and AAP, as the primary automation platform, to automate configuration and life cycle management of cloud infrastructure
- ▶ Review Terraform plan output before applying it in a workflow for approval before infrastructure is deployed by Terraform and configured by AAP
- ▶ Update AAP Inventory with resources created by Terraform

Coming soon:

- ▶ Certified integration with Terraform Enterprise planned

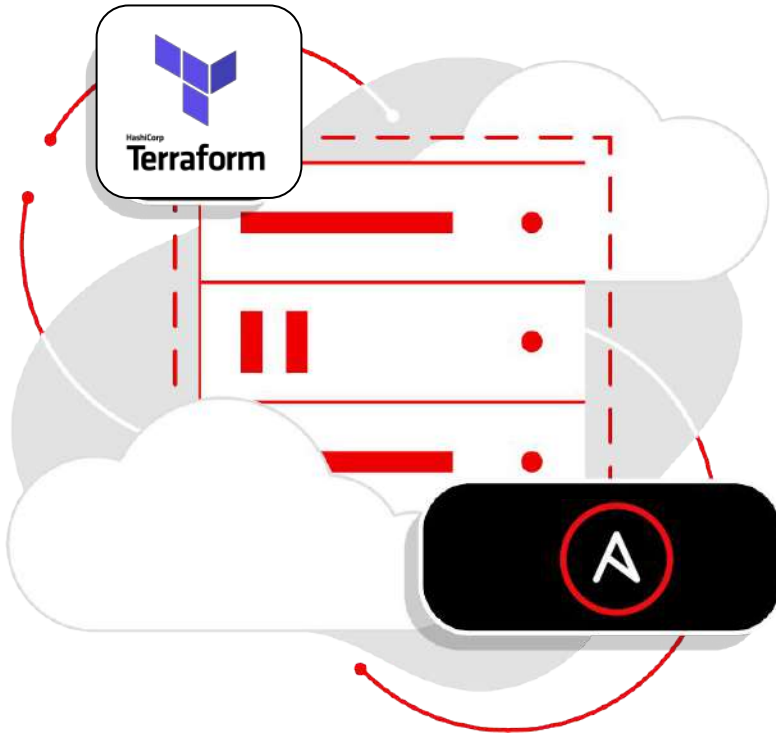
Terraform Certified Provider for Ansible Automation Platform

Available now:

- ▶ Provides the capability for AAP to perform Day 2 automation on Terraform provisioned resources and coordinating all infrastructure with Terraform provisioned resources.
- ▶ Integrates Terraform with AAP automation jobs, enhancing scalability and providing additional options beyond Terraform's immutable infrastructure automation.
- ▶ Uses the AAP API to launch and manage automation jobs.
- ▶ Fully supported by Red Hat
- ▶ Update AAP Inventory with resources created by Terraform

Coming soon:

- ▶ Updated Terraform provider for Ansible Automation Platform with HashiCorp to support Terraform Enterprise





TechTalks

Red Hat Enterprise Linux 10

Juan (John) van der Breggen



Red Hat Enterprise Linux 10 will help you...



Address the Linux skills gap

with decades of Red Hat's Linux knowledge and expertise



Contain drift and accelerate delivery

with container tools and technologies



Make better decisions at build time

when it's typically easier and cheaper to make changes



Resist security attacks from hackers

when quantum computers become prevalent



Leverage Red Hat Enterprise Linux as a trusted AI foundation

with an extensive ecosystem of trusted partners and tools



Addressing the Linux skills gap

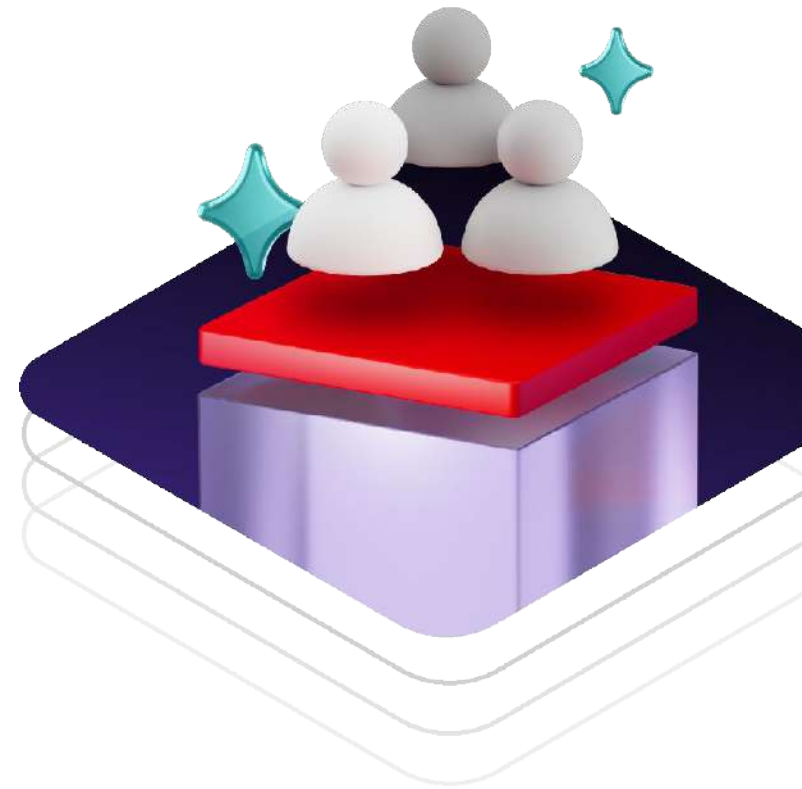
with decades of Red Hat's Linux knowledge and expertise

Red Hat Enterprise Linux Lightspeed

combines decades of Red Hat Enterprise Linux expertise with AI technologies to proactively inform and simplify how both newer and experienced IT professionals build, deploy, and manage Red Hat Enterprise Linux.

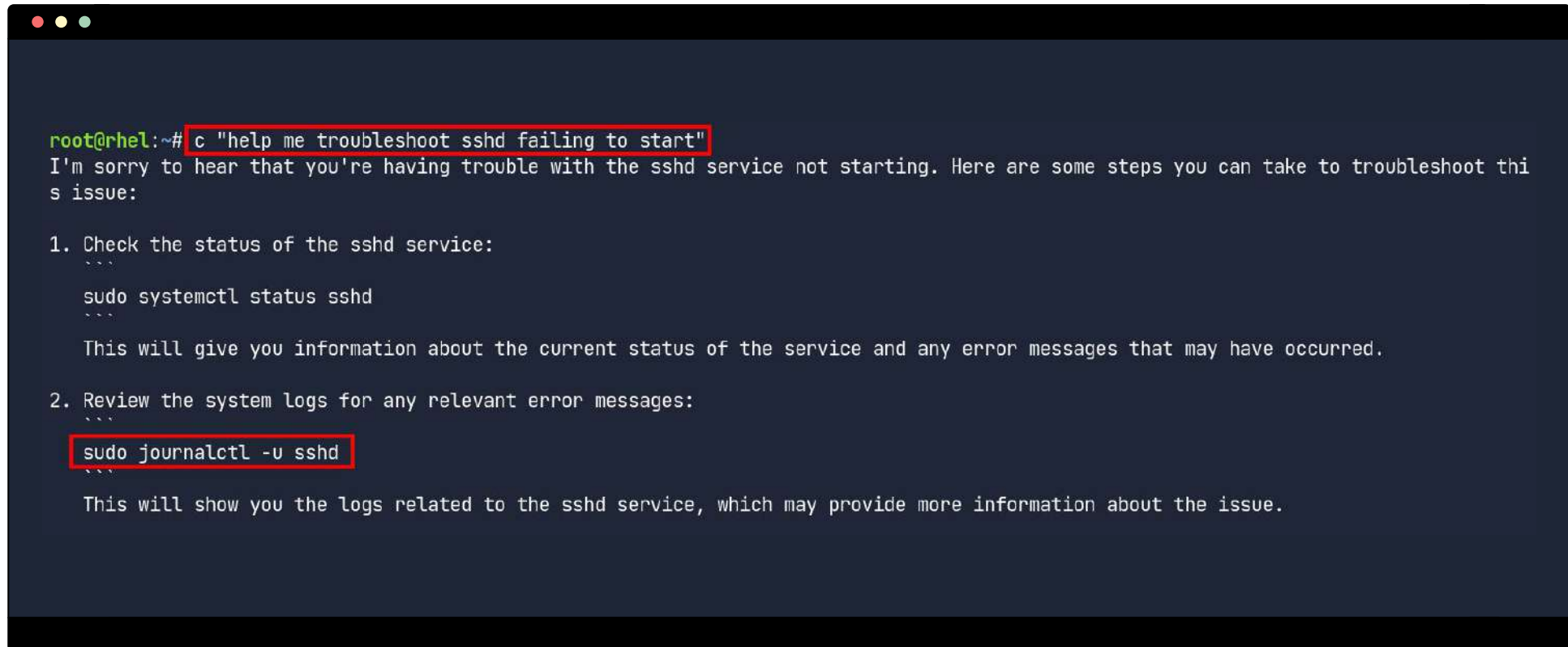
- ▶ Use plain language to simplify the way you interact with Red Hat Enterprise Linux
- ▶ Make better decisions with recommendations and actionable guidance

Simplify tasks. Amplify results.



A new command line assistant

Powered by Red Hat Enterprise Linux Lightspeed



```
root@rhel:~# c "help me troubleshoot sshd failing to start"
I'm sorry to hear that you're having trouble with the sshd service not starting. Here are some steps you can take to troubleshoot this issue:

1. Check the status of the sshd service:
...
sudo systemctl status sshd
...

This will give you information about the current status of the service and any error messages that may have occurred.

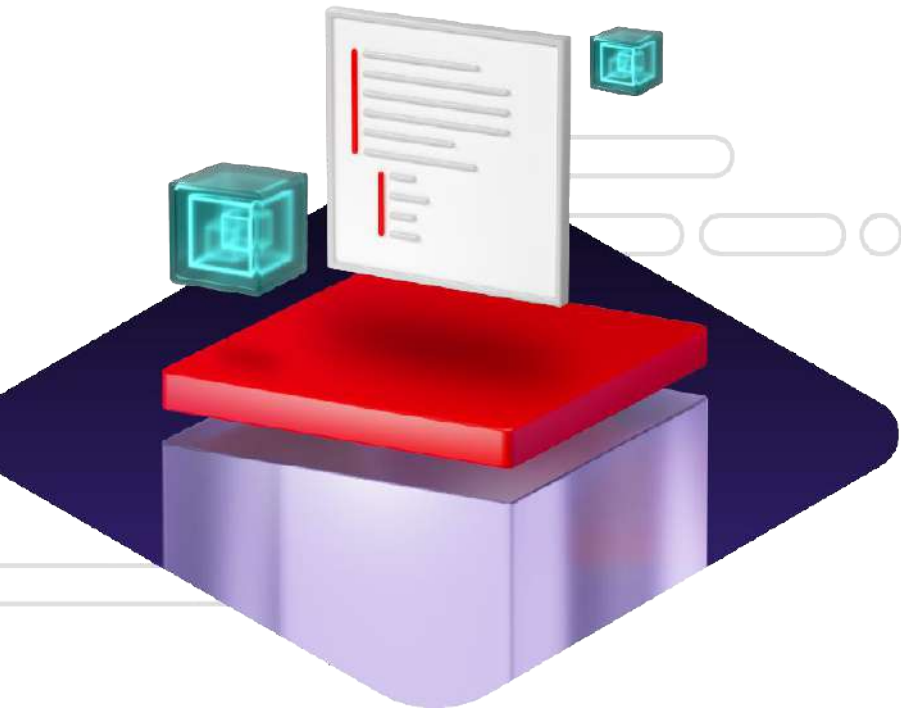
2. Review the system logs for any relevant error messages:
...
sudo journalctl -u sshd
...

This will show you the logs related to the sshd service, which may provide more information about the issue.
```



Contain drift and accelerate delivery

using container tools and technologies



With image mode for Red Hat Enterprise Linux, you can:

- ▶ **Speed time to market**
using DevOps and CI/CD practices, which now include the OS
- ▶ **Streamline operations**
by automating updates and rollbacks—just like your smartphone
- ▶ **Enhance security**
by reducing your attack surface with immutable system images
- ▶ **Simplify appliance creation**
by combining the OS with apps and drivers for faster development and delivery

Because systems should be as easy to update as smartphones



Make better decisions at build time

when it's typically easier and cheaper to make changes



- ▶ “Shift left” with new capabilities in Red Hat Insights
 - Package recommendations powered by Red Hat Enterprise Linux Lightspeed
 - Red Hat Insights planning (Lifecycle and roadmap details)
- ▶ Use pre-hardened images with image mode to drastically reduce time required for configuring, domain-join etc.
 - Applying guardrails at build time helps users remain secure and compliant
- ▶ Securely build and automatically generate SBOM artifacts to easily prove a secure supply chain process

Smart from the start. Fast to the finish.



Resist security attacks from hackers

when quantum computers become prevalent

- ▶ Red Hat Enterprise Linux 10 is the first enterprise Linux distribution to be **post-quantum capable** with new quantum-resistant algorithms (and more to come) so you can prepare now for future compliance mandates

- OpenSSL
- ML-KEM (FIPS 203)
- ML-DSA (FIPS 204)

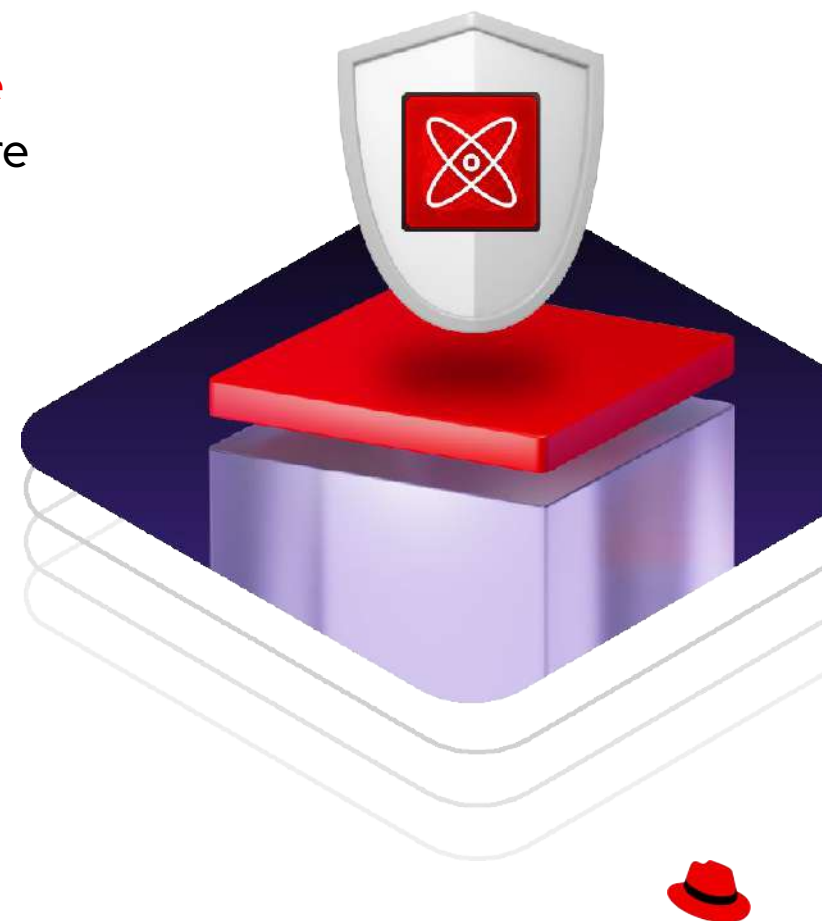
- ▶ A new FIPS module

simplifies development of FIPS-compliant app deployments on containers, VMs or bare metal

- ▶ FIPS cryptographic standards can be validated separately

meaning CVE fixes related to Open SSL or crypto libraries can be done *without* requiring a new FIPS validation certificate (average time to obtain is >300 days!)

The best defense is a strong partner.



Leverage Red Hat Enterprise Linux as a trusted AI foundation

with an extensive ecosystem of trusted partners and tools



- ▶ Get new AI advances faster, with safety and trust
 - New Partner Validation Program for the latest AI hardware/software
 - New Extensions Repository for community content that is trusted by Red Hat
- ▶ Experiment with and develop AI capabilities easily and efficiently
 - Simplify management of containerized applications with Podman Desktop
 - Use foundational building blocks like the Postgres Vector Database Extension to improve the accuracy of Generative AI and planned support for Model Context Protocol (MCP) to add agentic capabilities
 - Streamline deployment of pre-configured base images with image mode
- ▶ Optimize data storage and security
 - Protect data in use with confidential computing support

Wait less to put AI to work.



Accelerate cloud adoption

Red Hat Enterprise Linux optimized for the cloud

Focus on initiatives that move your business forward,
rather than spending time on operational functions

- ▶ Benefit from seamless integration uniquely designed to work with each cloud provider's services
- ▶ Leverage integrated management tools to speed operations
- ▶ Apply built-in cloud-specific configurations that ensure performance, integration, and observability for your cloud-based workloads
- ▶ Deploy a stable surface to build on without having to worry about the underlying technology

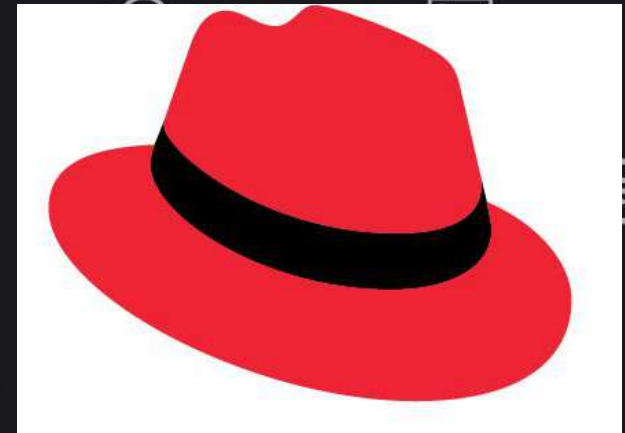
Optimize for efficiency in the cloud





TechTalks

Ask the panel



Summit 2025

<https://www.redhat.com/en/blog/everything-we-announced-red-hat-summit-2025>

<https://www.youtube.com/@redhat>

Summit 2026

May 11-14, 2026 | Atlanta - Georgia



Upcoming events to mark in your agenda



Open Source Summit Europe

(Red Hat is global sponsor)
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Red Hat Summit: Connect 2025

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