

Connect

How to manage your future RHEL estate

Red Hat Satellite Red Hat Lightspeed (Insights)







Tihomir (Tiho) Hadzhiev

RHEL Advocate tiho@redhat.com



Joe Padron

RHEL Advocate jpadron@redhat.com



Jesper Rooth

RHEL Platform lead EMEA jesper@redhat.com



Alessandro Rossi

RHEL Advocate alerossi@redhat.com





Juan van der Breggen

RHEL Advocate juanb@redhat.com



Red Hat Satellite and Red Hat Insights

Management meets observability

Red Hat management tools

Navigate Infrastructure Complexity



Insights

Gain a clear view across your
Red Hat deployments, helping
you better manage your
hybrid, on-premises, and
cloud environments.



Satellite

Enables you to improve the reliability, availability, security and compliance of your RHEL systems.



RHEL System Roles

A collection of supported
Ansible roles that ensure
consistent workflows and
streamline the execution of
manual tasks



AAP

Automate IT operations at scale with a consistent, repeatable approach to simplify complex environments.



Red Hat management tools

Which one do I need?



Use Insights if you

- don't want to set up your own infrastructure.
- want to use technologies to proactively protect and maintain your infrastructure
- make extensive use of public cloud infrastructure



Use Satellite if you

- require air gapped infrastructure
- need to comply with requirements that don't permit public cloud infrastructure
- make extensive use of vmware infrastructure (and other hypervisors)



RHEL System Roles are for

- creating standardized configurations that can be applied at scale
- ensuring your RHEL landscape conforms to a Standard Operating Environment
- automatically configuring complex applications



AAP if you

- need to automate complex, multi-step operational processes
- want a centralized platform to manage and scale automation
- require role-based access control, auditing, and scheduling for automation tasks



How Red Hat Satellite can help your business



Control what gets deployed, where and when



Maintain compliance
with security and
regulatory policies



Streamline patch and content lifecycle management



Support disconnected and hybrid infrastructure at scale

This helps you enforce consistency, security, and reliability across your RHEL environments - to help you gain full control over your infrastructure and reduce operational risk



Red Hat Satellite capabilities include



Advisor

Recommendations for misconfigurations and best practices to improve stability, performance & availability



Patch

Schedule and automate patch application across system groups to ensure consistent security and stability



Provisioning

Deploy your RHEL estate on bare-metal, virtual and cloud environments



Content management

Distribute and manage software content across your infrastructure



Host configuration

Standardize system configuration using host groups, activation keys, and parameter inheritance across managed systems



Subscriptions

Delivers visibility into Red Hat subscription status, usage trends and utilization across your infrastructure



Compliance

Monitors compliance with security baselines to report on and meet regulatory requirements at scale



How Red Hat Insights can help your business



Keep systems consistent and up to date.



Identify security and performance risks.



Minimize troubleshooting time.



Monitor and manage costs.

This helps you decrease the complexity of system, security, and cost management across your entire enterprise—to help you **optimize your operations and allow you to focus on business-critical priorities.**



Connected Capabilities of Red Hat Insights include



Advisor

Recommendations for misconfigurations and best practices to improve stability, performance & availability



Patch

Tracks applicable Red Hat errata across environments including security, bug fixes and enhancement advisories



Vulnerability

Identifies, prioritizes and reports on known security Common Vulnerabilities and Exposures (CVEs)



Images

Simplifies image customization via the creation of blueprints and deployment across hybrid environments.



Cost Management

Provides visibility into usage and cost trends across hybrid cloud environments



Subscriptions

Delivers visibility into Red Hat subscription status, usage trends and utilization across your infrastructure



Compliance

Monitors compliance with security baselines to report on and meet regulatory requirements at scale



Malware Detection

Scans for known malware using a curated signature database developed with IBM X-Force



How Red Hat Satellite can help your business



Control what gets deployed, where and when



Maintain compliance with security and regulatory policies



Streamline patch and content lifecycle management



Support disconnected and hybrid infrastructure at scale



Keep systems consistent and up to date.



Identify security and performance risks.



Minimize troubleshooting time.



Monitor and manage costs.





Today and tomorrow

What's available today and where we are going with it

Red Hat Satellite 6.17





Support for Red Hat Enterprise Linux 10

Inventory and manage systems running Red Hat Enterprise Linux 10



Image mode support

New support for provisioning, client management, and registry distribution for systems created with image mode for Red Hat Enterprise Linux



Support for Flatpak content

Simplify importing, managing, and deploying updates via containers with support for Flatpak content, including both custom packages and Red Hat-provided applications



Secure boot support

Enhance security during provisioning workflows on bare-metal, VMware vSphere, and Libvirt platforms



IPv6 support

Deploy Satellite in an IPv6 environment to help address the limitations of IPv4, including improved network efficiency and security



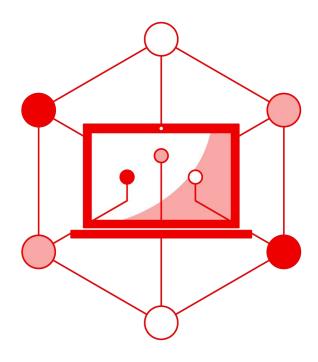
Red Hat Insights advisor

Get proactive risk detection and configuration recommendations without connecting directly to the internet via an on-premise extension (now available in tech preview)



Red Hat Insights advisor in Satellite

Analyze and remediate availability, performance, and security risks in disconnected environments





Use Insights advisor's business rules and logic—codified from decades of Red Hat Enterprise Linux expertise—to monitor system configurations, detect risks, and prescribe remediations without sending data off-premise

- Flexible options for installing and upgrading
- Separation, minimal access, and ultimate control for highly regulated industries and geographies
- Proactive recommendations catch problems early, minimizing downtime



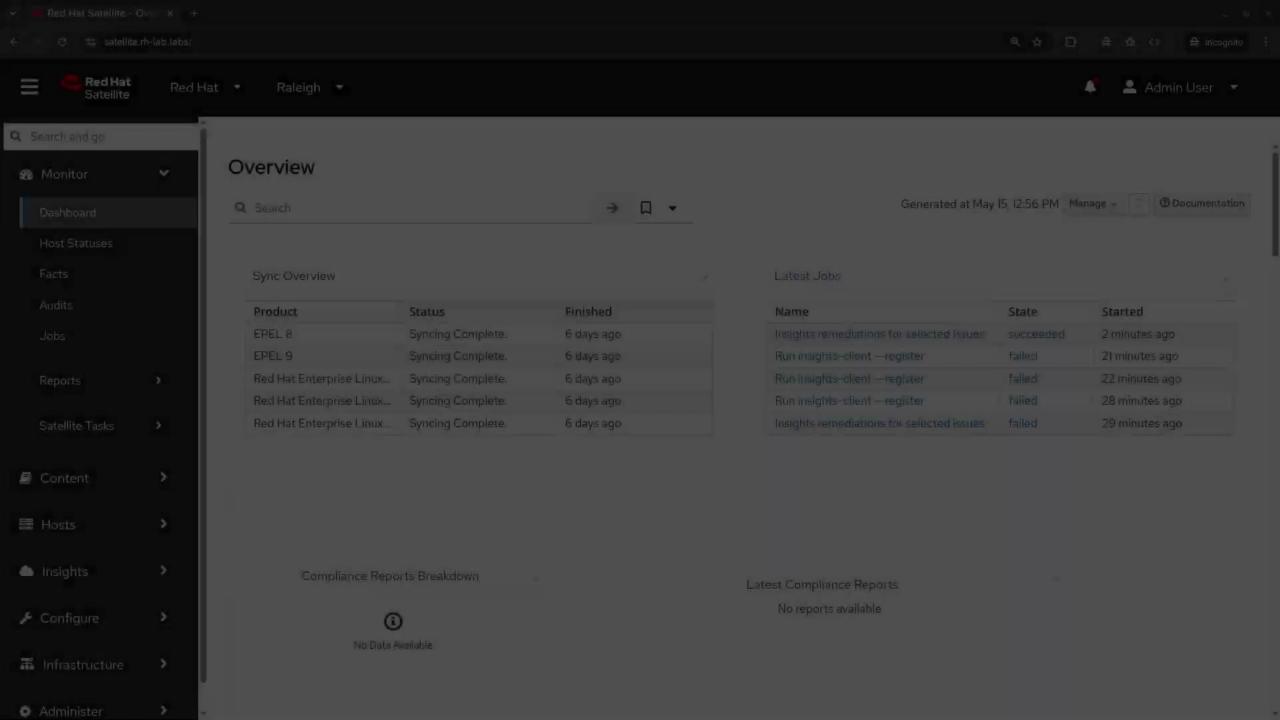
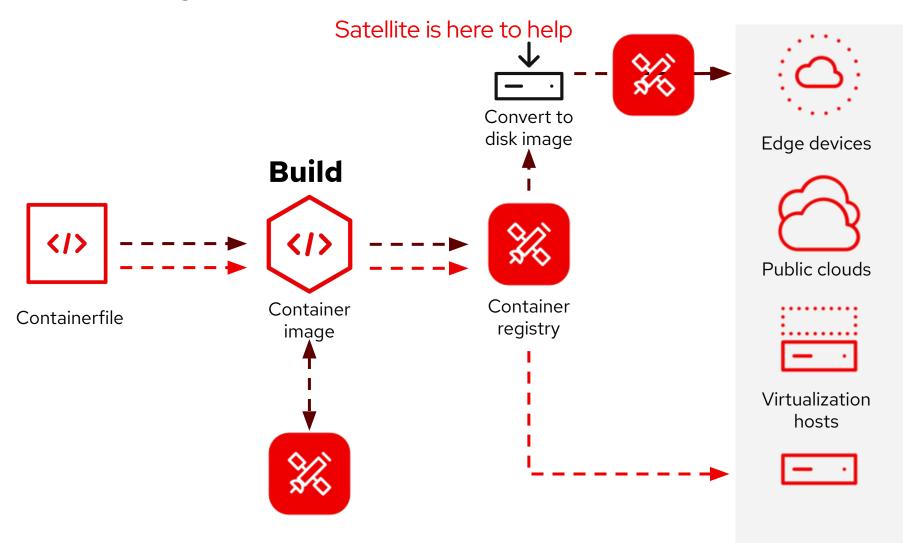


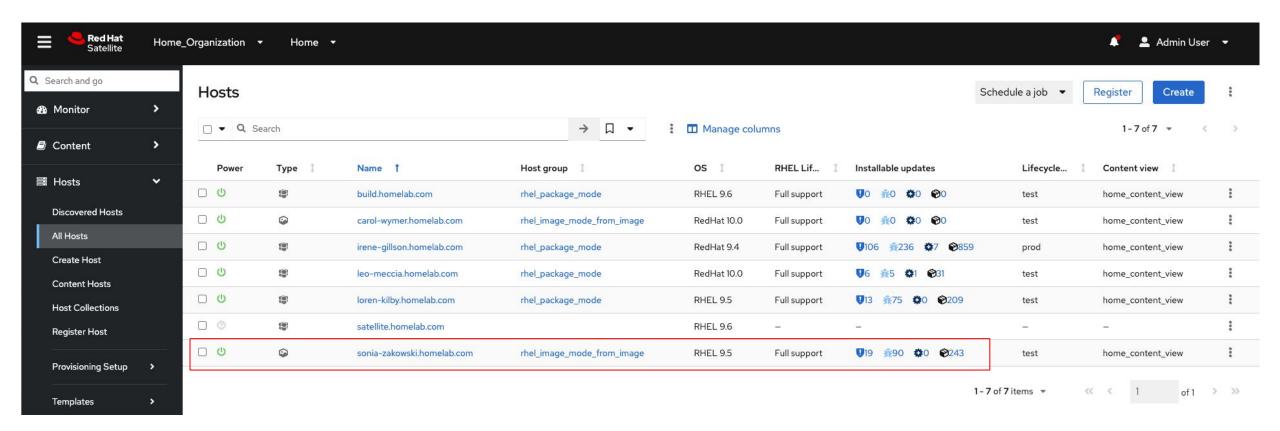
Image mode for Red Hat Enterprise Linux





Management overview

Same Satellite, another RHEL footprint!



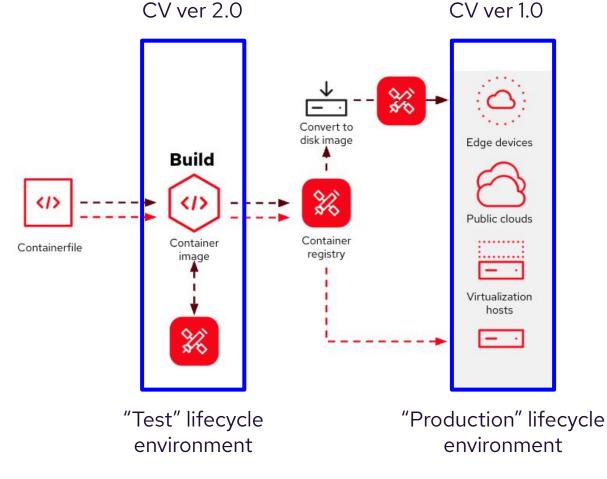


Updates

Getting your container image to the latest version

- Assuming your Build host is In Test" lifecycle environment
- Uses a separate content view or the content view being used gets promoted first to the testing environment
- Before building a new version of the container image is good idea to update the build host.
- While building the new version of the container image
 it is recommended to update packages till latest
 available as per the content view settings update
 container file (kind of prepare your patch !!!)

##update to latest RUN dnf update -y



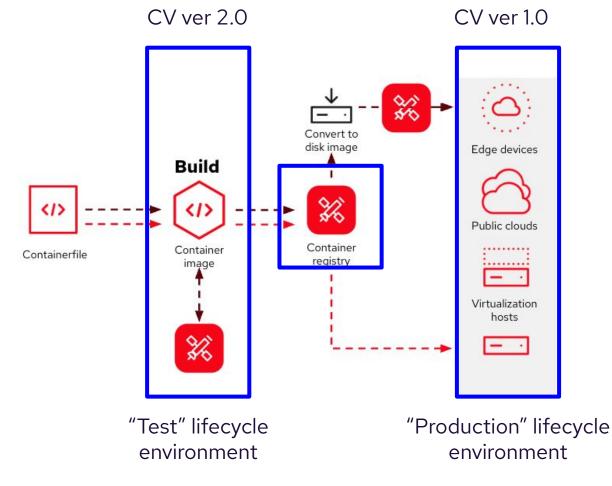
Updates

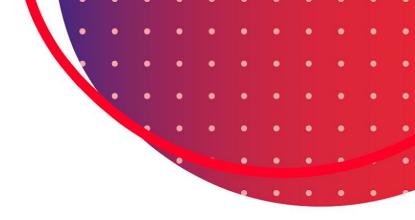
Making it available

- Once the image is ready, push it to Satellite
- Do not forget to promote the content view to production environment!
- At this moment your "patch" is ready to be deployed and consumed by all systems using the same container image and having access to the same content view
- Here's how you update those systems









Additional value included with your Red Hat Satellite subscription



Red Hat Offline Knowledge Portal

Now available with a Satellite subscription. A secure, offline version of our expert knowledge and product contents. Wherever you go, you can take the content you need to set up, run, and diagnose our products. And it's light enough to run at the edge! Meet the devs and get hands on demos at the Experience Zone.









Contains the content you need to set up, run, and diagnose our products:

- Product documentation
- Knowledgebase
- CVEs (content)
- Errata (content)
- Product Lifecycles
- Security Data API
- Pages from the Customer Portal
- Search Interface for All Content

Built for intentional disconnection or intervals of low or no bandwidth:

- Desktop at a work site that is air-gapped for security
- Closed circuit network on a ship at sea
- Phone at a remote cell tower
- Consulting firm laptop for client site visits without WiFi
- A Red Hat certification exam room

RHOKP is a single image appliance that is:

- Total is 7GB in size
- Runnable with Podman
- OpenShift ready



Red Hat Lightspeed Roadmap - RHEL

_					
\Box	_	_	_		-
\boldsymbol{L}		~	$\boldsymbol{\Box}$	П	١Т.
\mathbf{r}		۱.	•		

Red Hat Insights advisor in Red Hat Satellite - Tech Preview (<u>Blog</u>)

Insights Planning

Digital Roadmap

Q4 2025

Red Hat Insights rebranded to Red Hat Lightspeed

Insights MCP - Tech Preview

Red Hat Lightspeed in Red Hat Satellite

- Advisor (GA)
- Vulnerability (Tech

Preview)
Compliance integrated in Image Builder

1H 2026

Insights MCP - GA

Red Hat Lightspeed in Red Hat Satellite

- Vulnerability (GA)
- Compliance (Tech Preview)

Agentic Management demo

Partner YARA rules for Malware

LLM Augmentation of presented findings (Malware)

2H 2026

Additional LLM
Augmentation of findings

Red Hat Lightspeed in Red Hat Satellite

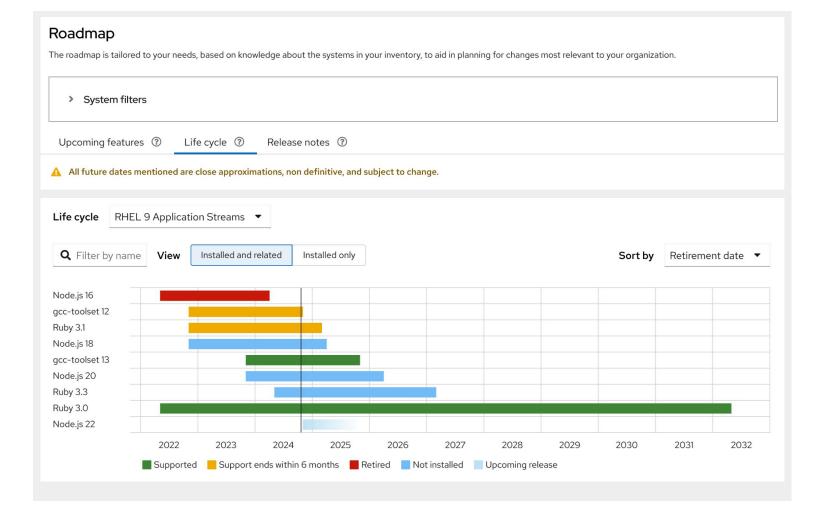
- Compliance (GA)

Cost Management
On-Premise within OpenShift
Plus

Potential commercial certifications for Red Hat Lightspeed Red Hat

Red Hat Enterprise Linux and AppStream life cycle information

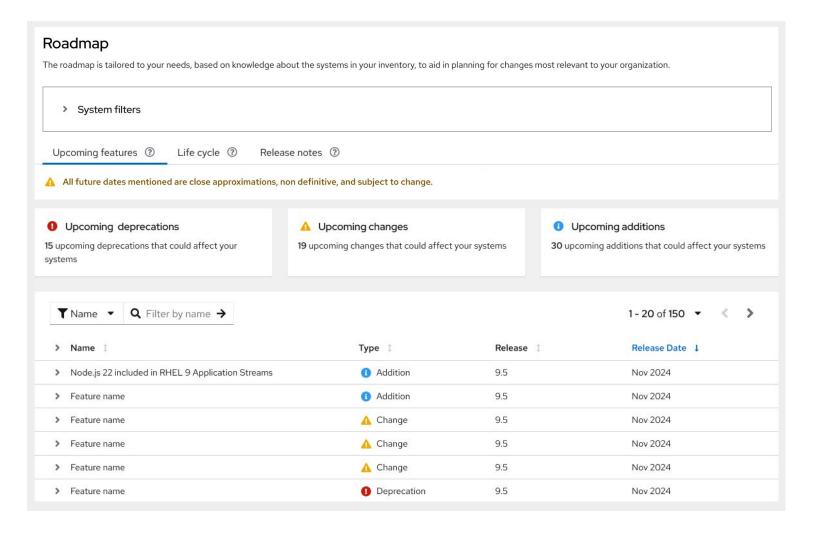
(Shift Left)





Red Hat Enterprise Linux roadmap

(Shift Left)





Red Hat Satellite Roadmap

Recent	Q4 2025	1H 2026	2H 2026
Satellite 6.17	Satellite 6.18	Satellite 6.19	Satellite future
Support for RHEL 10	Insights Vulnerability TP	Satellite containerisation	All Insights services on Satellite GA
RHEL Image mode	Dual stack IPv4-IPv6	Simple content Access manifests	Satellite on OpenShift
Flatpak	Multiple content views per host	Subscription reporting	More AI based use cases
IPv6	Foreman MCP*	Insights compliance	

Insights Advisor TP



Last minute Bonus!



For testing in a homelab environment only:

```
yaml

foreman:
    url: https://satellite.homelab.com
    username: admin
    password: <password>
    ssl_verify: false = Only for testing/
```

Where is the MCP Server Running?

- · If it's in a container, you need to mount the certificate into the container
- · If it's running locally, ensure the certificate path is accessible
- · Check the MCP server logs for more details about the configuration

Once you've configured the certificate correctly, I'll be able to query your systems and provide you with:

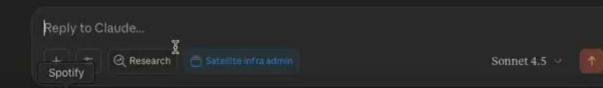
- · Complete host inventory
- · Operating system distributions
- · Content view assignments
- · Patch and errata status
- · Compliance reports
- · Host health and check-in status

Would you like help troubleshooting the certificate configuration, or do you need guidance on setting up the MCP server properly?





Claude can make mistakes. Please double-check responses





Thank you



linkedin.com/company/red-hat



facebook.com/redhatinc



youtube.com/user/RedHatVideos



twitter.com/RedHat

