



# Red Hat Enterprise Linux 10

## 新特性概覽

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# 關於我

## 現職 Red Hat 資深架構師

負責為台灣地區客戶提供企業級架構規劃與技術諮詢服務，專注於建構高安全性與高效能的系統解決方案。

## 核心專長

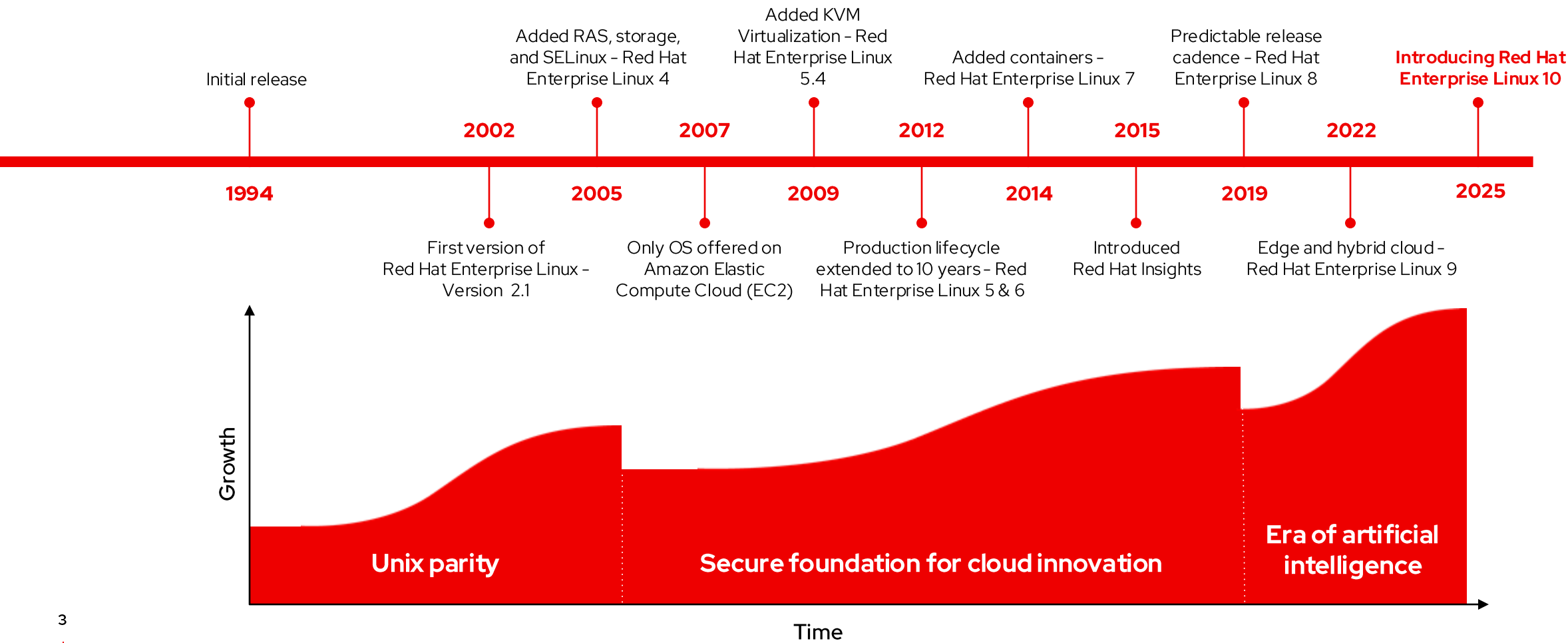
- 雲端架構設計與遷移 - 企業雲端轉型策略規劃與實施
- 混合雲整合 - 雲地整合架構設計與部署
- 容器化應用平台 - Kubernetes、OpenShift 等容器平台規劃建置
- Java 企業應用系統 - 大型 Java 應用系統 Jboss & WebLogic 架構設計與優化
- 服務導向架構 (SOA) - 微服務架構分析與設計
- 資料庫技術 - 關聯式資料庫設計、優化與管理

## 職涯經歷

擁有超過 20 年的 IT 產業經驗，曾任職於多家國際知名科技公，包含AWS、台灣微軟、美商甲骨文公司 etc 公司產品經理、技術經理與資深諮詢顧問等職



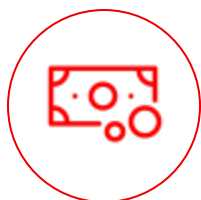
# Over a quarter century of innovation



# Red Hat: Tried. Tested. Trusted.

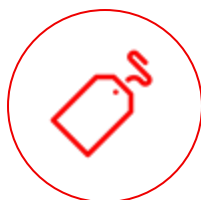
Red Hat Enterprise Linux has been at the heart of every infrastructure trend for a quarter century

## In the Fortune Global 500



**100%**

of commercial banks



**100%**

of retail companies



**100%**

of telecom companies



**100%**

of media/tech companies



## Partner Ecosystem

- ▶ Over 4,500 [ISVs](#)
- ▶ Over 5,500 [IHVs](#)
- ▶ Over 1,400 [cloud providers](#)



# Red Hat Enterprise Linux 10 addresses these market forces



Tight resource  
constraints

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Accelerated  
cloud adoption

---



Security  
threats

---



Artificial  
Intelligence

---

# 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

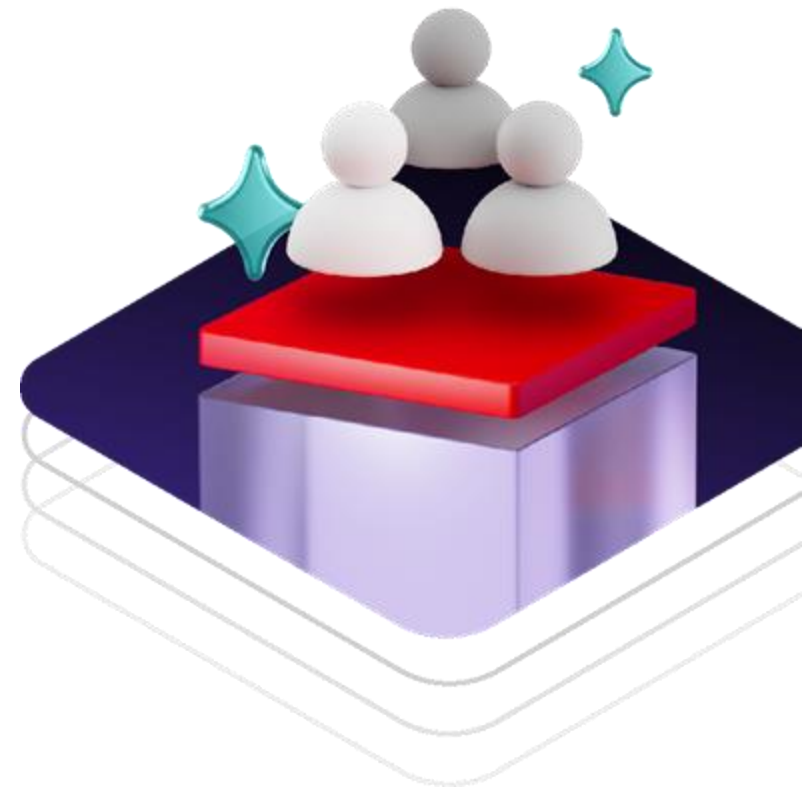
with decades of Red Hat's Linux knowledge and expertise

## 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.





# Red Hat Enterprise Linux Lightspeed vision



## Unlock Red Hat's expertise

Provide Red Hat's decades of Linux experience to help your workloads succeed



## Proactive guidance

Proactively provide relevant information and guidance to make customers' lives easier



## Level up skills

Makes Red Hat Enterprise Linux easier to use, secure, tune, and troubleshoot for both new and experienced users





# 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:

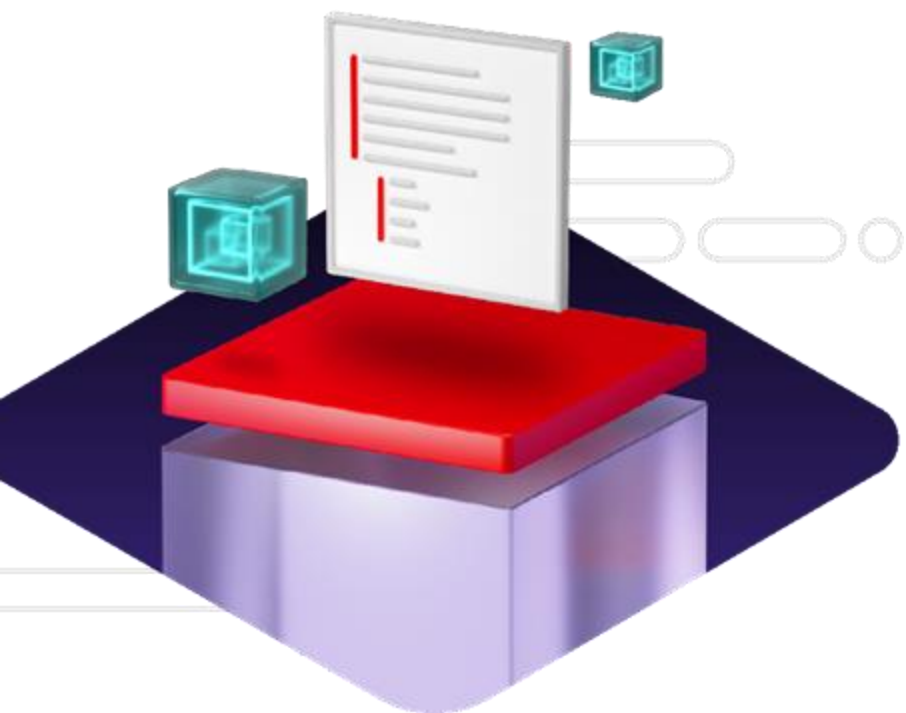
1. Check the status of the sshd service:
...
sudo systemctl status sshd
...
This will give you information about the current status of the service and any error messages that may have occurred.

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



# “I want it to work like my smartphone”

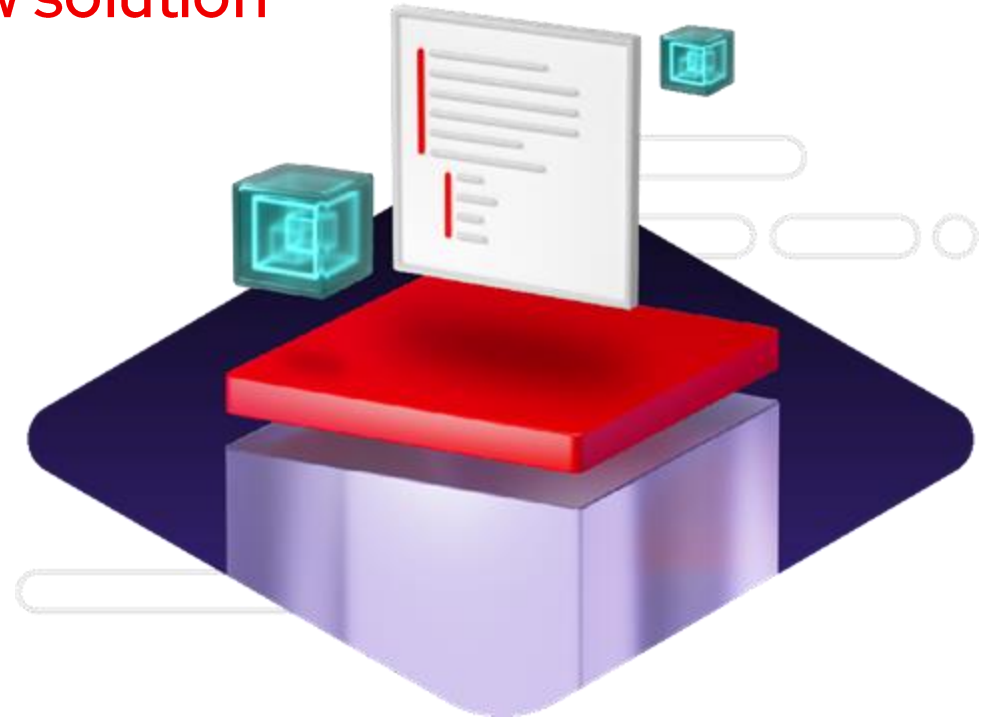
## Factors that drove the search for a new solution

- ▶ Pain over regulatory process of CVEs
- ▶ Smaller footprint | decreased surface area of attack
- ▶ Enhanced security | hardened platform
- ▶ Quick turn around | lower downtime
- ▶ Easy rollbacks

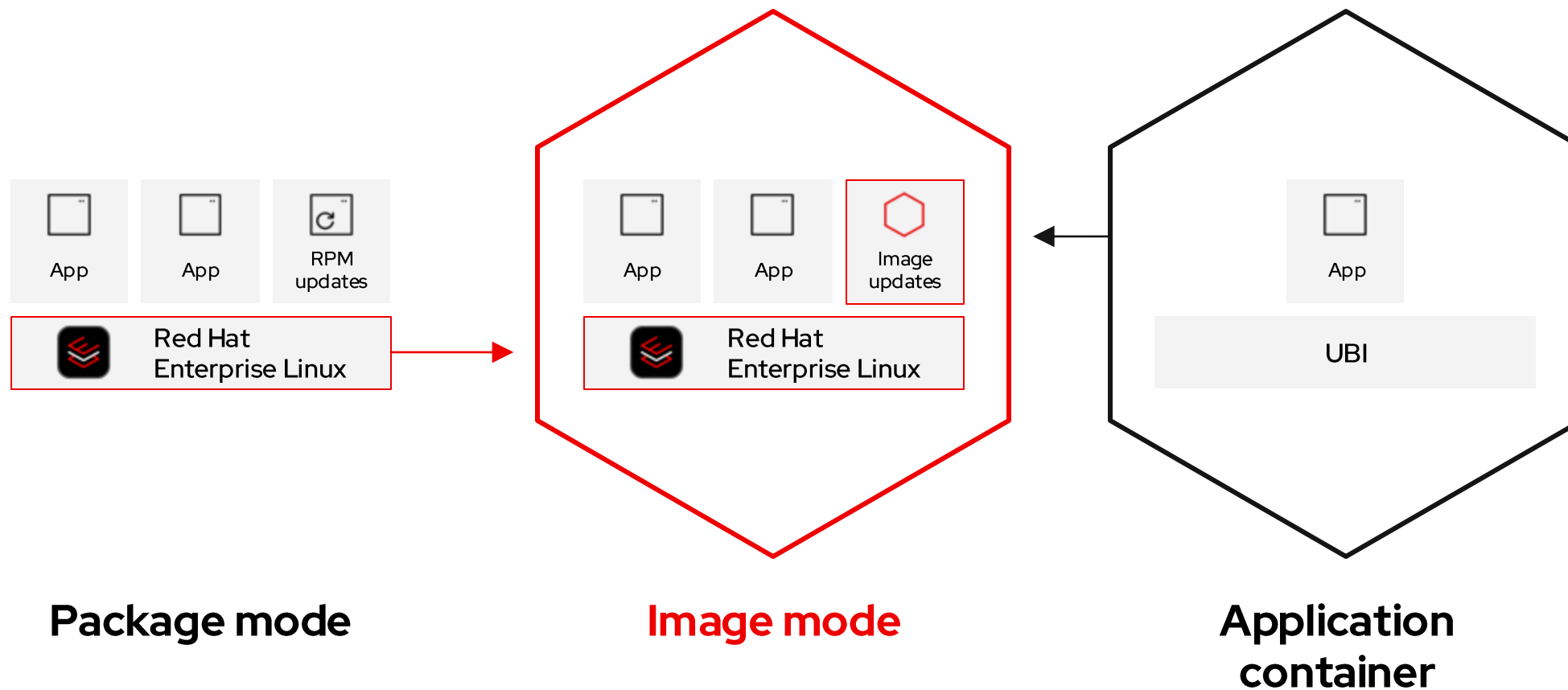
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FSI early adopter

Image mode for Red Hat Enterprise Linux



# Standardizing and innovating with containers



# Standardizing and innovating with containers

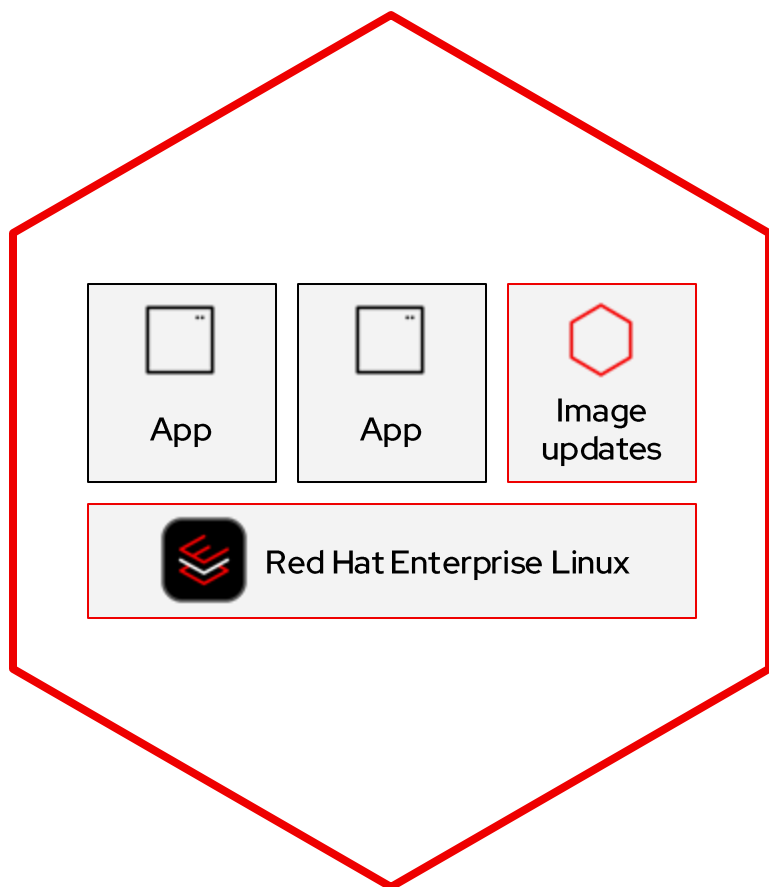


Image mode for Red Hat Enterprise Linux is a simple, consistent approach to build, deploy and manage the operating system using container technologies.

Now you can manage the operating system with the same tools and workflows as applications, promoting a common experience and language across teams.



# Image mode for Red Hat Enterprise Linux

A container-native workflow for the life cycle of a system

```
FROM rhel10/rhel-bootc:latest

RUN dnf install -y [software]
[dependencies] && dnf clean
all

ADD [application]
ADD [configuration files]

RUN [config scripts]
```

## Build

Define your entire system—OS, applications, and dependencies—with just a bootc base image and container file. Leverage your existing container tools and pipelines for rapid image creation and testing.

## Deploy

Easily convert to VM/cloud images, deploy on bare metal via the Red Hat Enterprise Linux installer, or even reinstall on existing cloud images using bootc.

## Manage

Engineered for modern GitOps and CI/CD workflows. Fully drive and automate systems via pipelines or scale control through Red Hat Insights, Satellite, and Ansible.



# Management with Red Hat Insights

Visibility and reporting made simple

## Inventory is easy

Image mode systems appear in inventory like package based systems

## Registration is simple

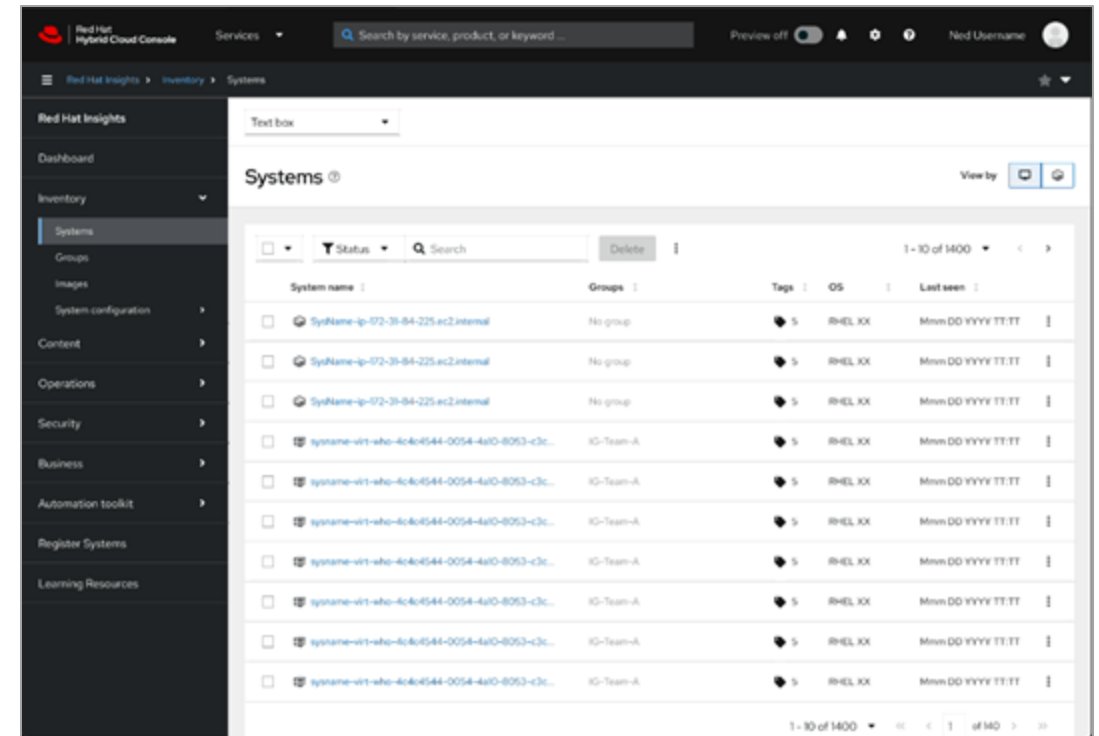
Activation keys can be baked into images via Containerfile, allowing auto registration to Insights at boot time

## Insights has insights

Image mode systems can be scanned for security and operational recommendations

## Updates are flexible

Image mode systems can be updated to new versions of images or remediated based on image-specific recommendations





# 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.



# Make better decisions at build time

available in Red Hat Insights (Shift Left)



## Future roadmap information

Discover what's on the future Red Hat Enterprise Linux roadmap, including planned new AppStream releases and info on significant changes coming to Red Hat Enterprise Linux



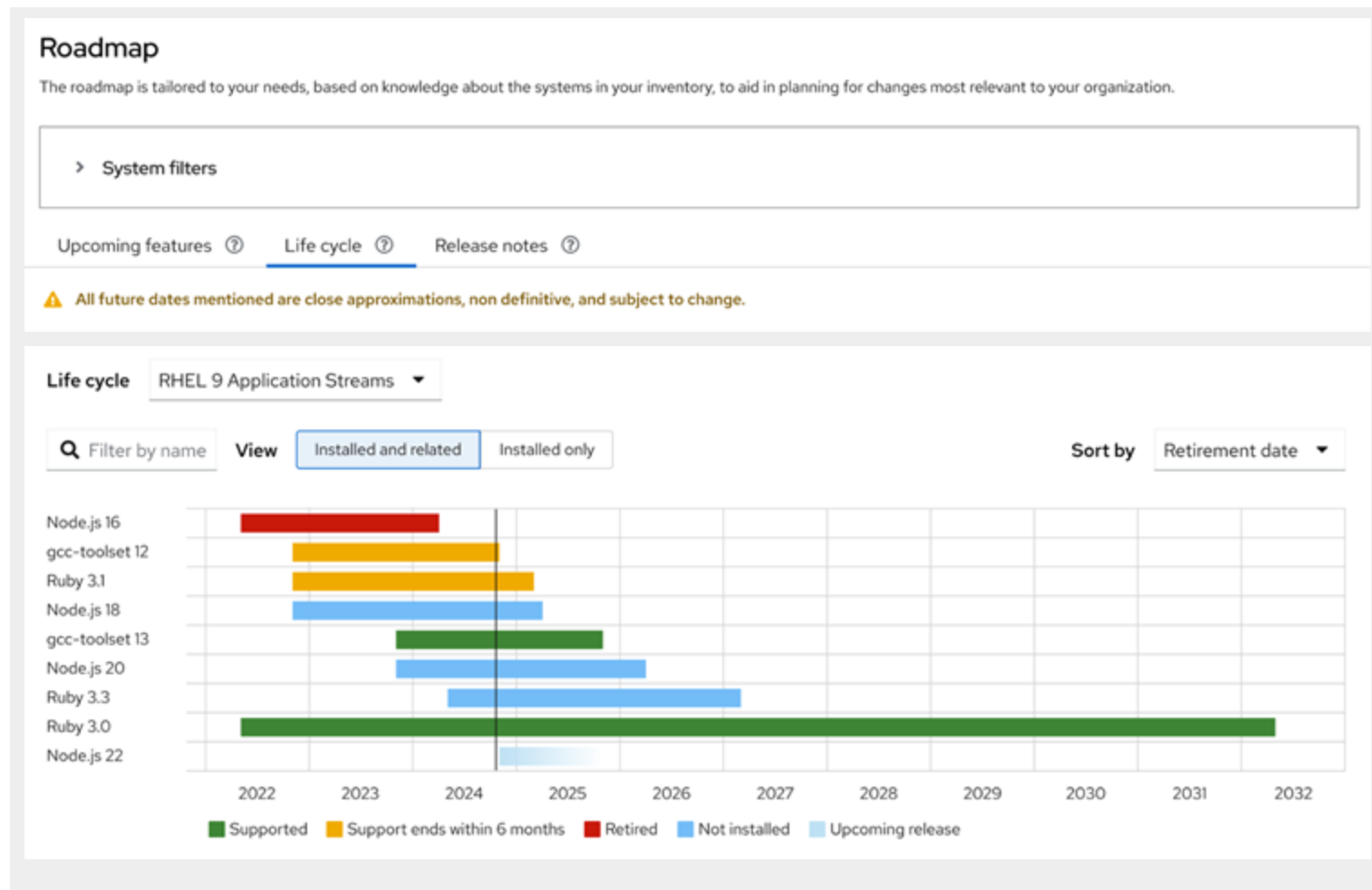
## Red Hat Enterprise Linux and AppStream lifecycle information

Allows customers to easily evaluate their environment to understand if the AppStreams and Red Hat Enterprise Linux minor releases they are using are supported, and provides customers the ability to plan ahead for upgrades



# Red Hat Enterprise Linux and AppStream life cycle information

(Shift Left)



# Red Hat Enterprise Linux roadmap

(Shift Left)

### Roadmap

The roadmap is tailored to your needs, based on knowledge about the systems in your inventory, to aid in planning for changes most relevant to your organization.

> System filters

Upcoming features ⓘ Life cycle ⓘ Release notes ⓘ

⚠ All future dates mentioned are close approximations, non definitive, and subject to change.

#### ⓘ Upcoming deprecations

15 upcoming deprecations that could affect your systems

#### ⚠ Upcoming changes

19 upcoming changes that could affect your systems

#### ⓘ Upcoming additions

30 upcoming additions that could affect your systems

▼ Name

🔍 Filter by name →


1 - 20 of 150 < >

> Name ⓘ	Type ⓘ	Release ⓘ	Release Date ⓘ
> Node.js 22 included in RHEL 9 Application Streams	ⓘ Addition	9.5	Nov 2024
> Feature name	ⓘ Addition	9.5	Nov 2024
> Feature name	⚠ Change	9.5	Nov 2024
> Feature name	⚠ Change	9.5	Nov 2024
> Feature name	⚠ Change	9.5	Nov 2024
> Feature name	ⓘ Deprecation	9.5	Nov 2024




# Insights image builder package recommendations

(Shift Left)


Package name	Description	Package repository	Support
<input checked="" type="checkbox"/> realmd	Kerberos realm enrollment service	 Red Hat repository	Supported

RHEL Lightspeed provides intelligent tools to improve the productivity and efficiency of teams using RHEL.

1 of 1 > >>

✓  Recommended Red Hat packages Powered by RHEL Lightspeed ?

Other users commonly add these packages with the ones you selected.

Package name	Description	Package repository	
adcli	Active Directory enrollment	 Red Hat repository	<a href="#">Add all packages</a>
			<a href="#">Add package</a>



# New developer features and enhancements

With RHEL 10 and 9.6, the following features and enhancements are now available

## PHP 8.3

### Faster application execution

New core language features, Argon2 password algorithm support, and new error and exception handling classes.

## Git 2.47

### Improve speed and efficiency of Git operations

New support for the reftable backend, introduces pseudo-merge bitmaps, and adds incremental multi-pack indexes.

## Maven 3.9

### Improve overall performance of the project build

Several general fixes and improvements and several backports from the Maven 4 line.

## NGINX 1.26

### Offers faster HTTP request handling

Various bug fixes and new enhancements including HTTP/2 support on a per-server basis, virtual servers with stream module, and more.

## MySQL 8.4

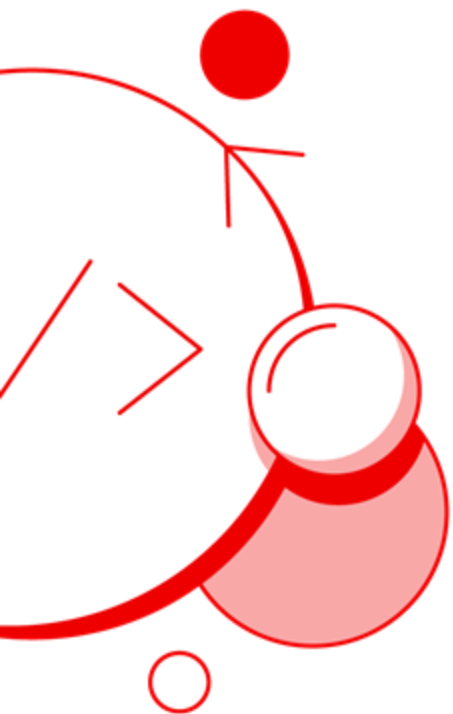
### Enhanced performance and scalability

New enhancements to password management, new authentication improvements and Version-Compatible backups compatible with older MySQL versions.

## WSL

### Seamless integration between Windows and Linux

Run a RHEL development on Windows without having to spin up a traditional virtual machine.



# 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

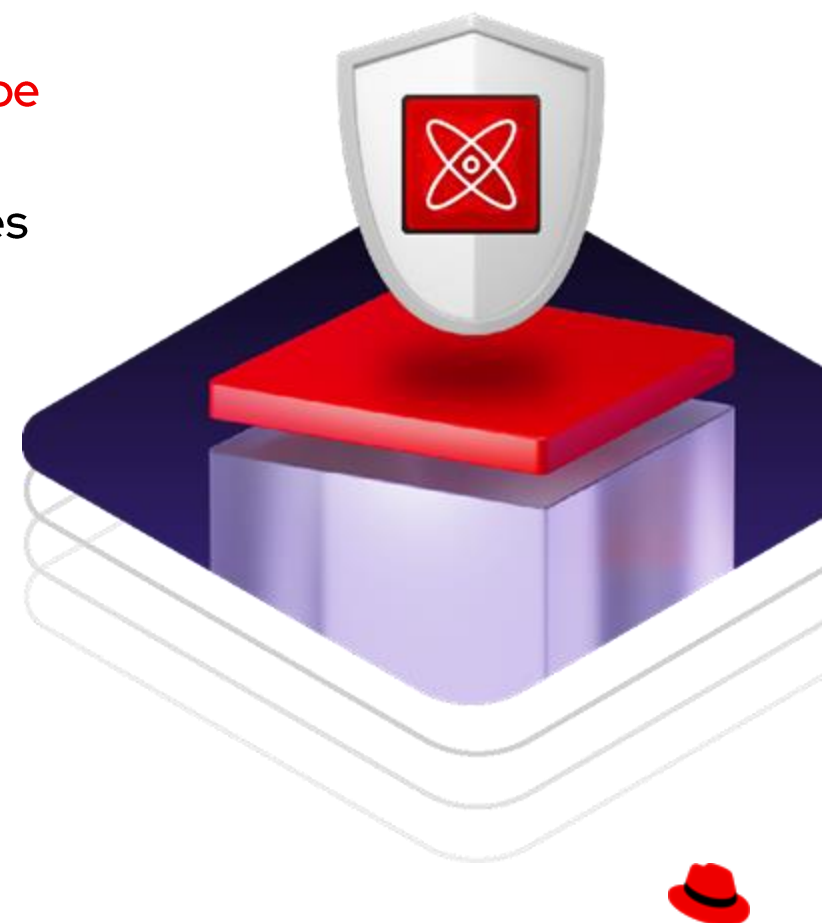
- OpenSSL
- ML-KEM (FIPS 203)
- ML-DSA (FIPS 204)

- ▶ 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!)

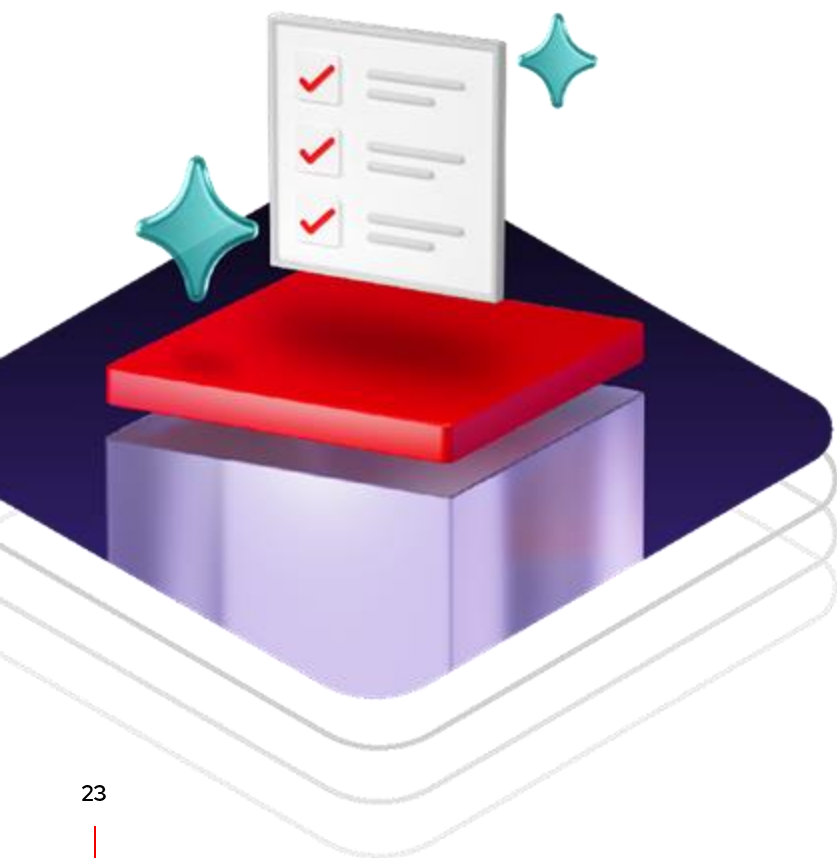


The best defense is a strong partner.



# 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.



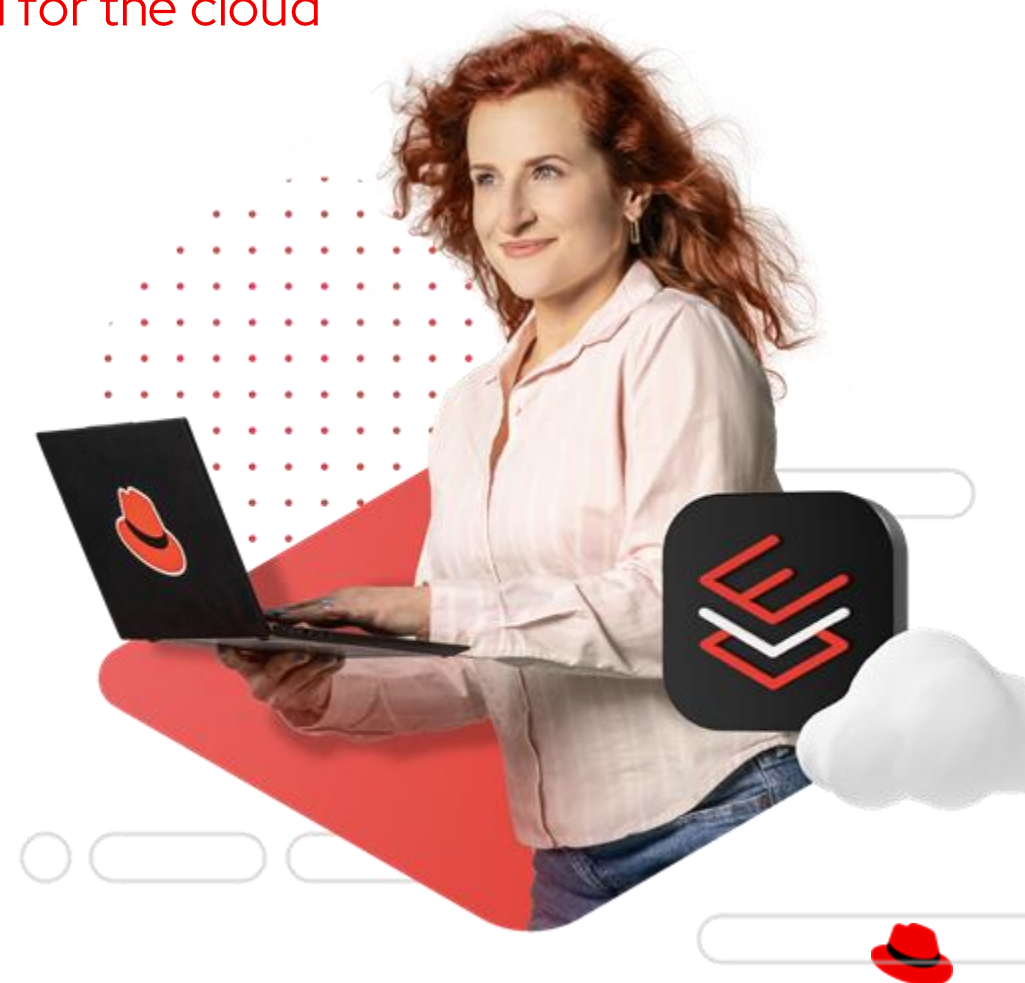
# Accelerate cloud adoption

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



# Cloud-optimized Red Hat Enterprise Linux

Built specifically for AWS, Microsoft Azure, and Google Cloud



## Pre-tuned, ready to run image

Deploy a Red Hat Enterprise Linux image that is deeply integrated into the cloud provider's fabric, pre-configured for performance with cloud provider-specific profiles.



## Enhanced observability and reporting

See your Red Hat Enterprise Linux estate along with the rest of your services in your cloud provider dashboard for a more unified view of your usage.



## Increased security from boot to runtime

Secure boot and image attestation ensure customer workloads run on the latest top-down security technologies from image boot through runtime.



# Cloud-optimized Red Hat Enterprise Linux

Built specifically for AWS, Microsoft Azure, and Google Cloud



## Integrated cloud management tooling

Pre-configured with each cloud provider's specific tools, enabling "ready to run" management on your cloud of choice.



## Deployment options to contain drift

Image mode simplifies the building, deployment and management of Red Hat Enterprise Linux with container tools and technologies and allows for automated updates and rollbacks – just like your smartphone.



# 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



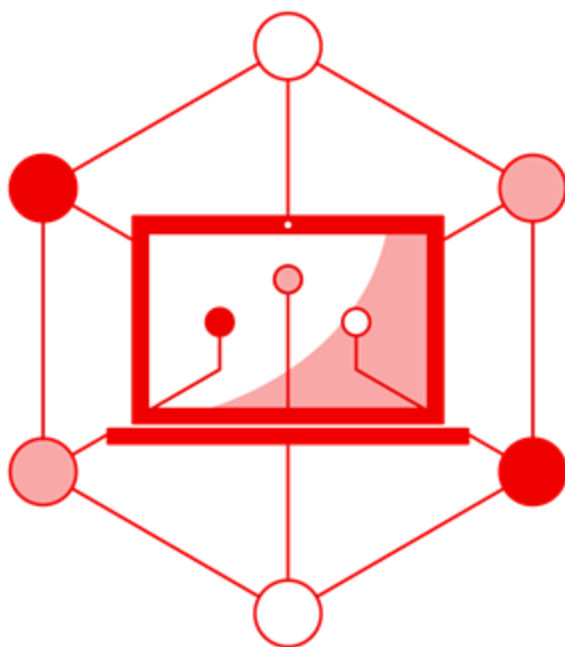
## Red Hat Insights advisor

**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



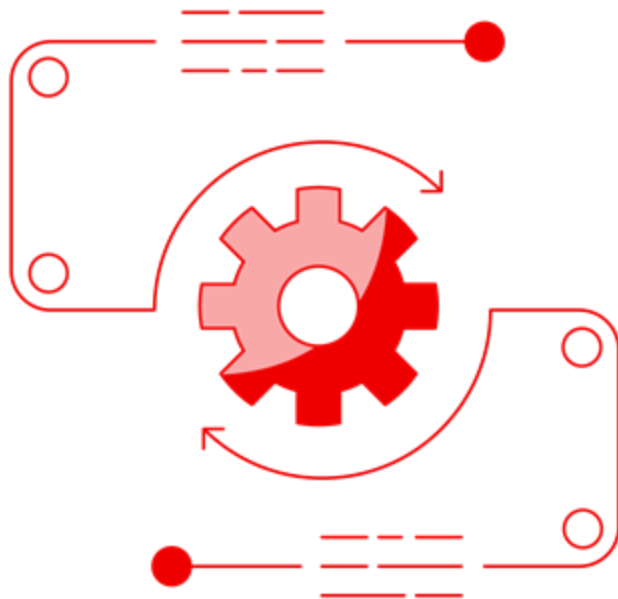
Use Insights advisor's business rules and logic—codified from decades of Red Hat Enterprise Linux expertise—to **monitor system configurations, detect risks, and prescribe remediations without sending data off-premise**

- ▶ 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



# Red Hat Enterprise Linux Security Select Add-on

Accelerate the rate at which organizations receive requested Red Hat Enterprise Linux CVE fixes



## Increases the rate at which organizations receive requested CVE fixes

- ▶ Organizations can now purchase Red Hat Enterprise Linux Security Select 10-pack Add-On of CVE fixes associated with their ELS or EEUS/EUS subscriptions, allowing for fixes upon request.
- ▶ Individual Red Hat Enterprise Linux Security Select Single Add-Ons for CVE fixes beginning with CVE 11 and onward can be ordered at a valued price.
- ▶ An ELS/EEUS subscription is necessary to qualify for the Red Hat Enterprise Linux Security Select Add-On.
- ▶ Organizations may acquire this offering like ELS, and it can be back-dated to align with the start date of their EUS/ELS subscription.
- ▶ The Red Hat Enterprise Linux Security Select Add-On provides a Service Level Agreement (SLA) of 90 days.
- ▶ Only available with a Premium Red Hat Enterprise Linux subscription





# RISC-V developer preview

Early access to the combination of Red Hat Enterprise Linux and RISC-V

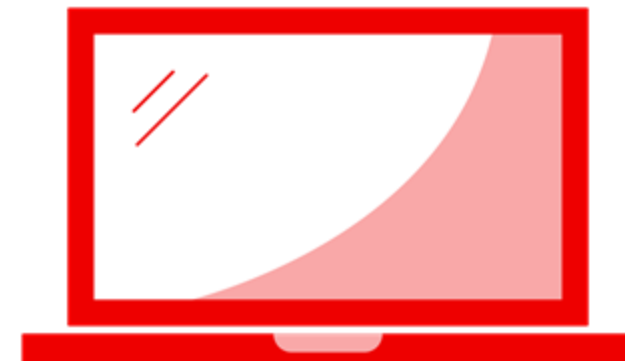
## Red Hat Enterprise Linux 10 with RISC-V technology benefits:

- ▶ Provides an open source CPU design solution to enable organizations to build CPU silicon without licenses or royalties
- ▶ Red Hat Enterprise Linux and RISC-V as developer preview is now available on the popular high performance board SiFive [HiFive P550](#) processor
- ▶ Red Hat Enterprise Linux with RISC-V delivers innovation through technology, packaged in a secure, reliable, and usable way for the enterprise



### What is “Developer Preview?”

Developer Preview is provided to expose features from upstream communication allowing developer to explore and interact with new capabilities.



# Red Hat Enterprise Linux extensions repository

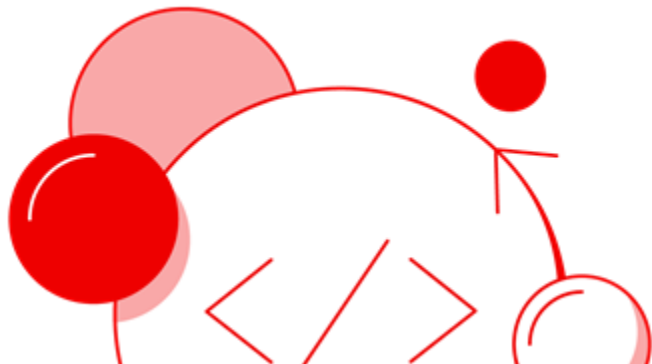
High-quality software in a convenient location with minimal maintenance requirements

The Red Hat Enterprise Linux extensions repository includes developer tools, open source libraries, and niche utilities that make Red Hat Enterprise Linux valuable to developers and system administrators



## These packages will be:

- ▶ Efficient process to access high value packages
- ▶ Validated by Red Hat
- ▶ Community-supported, having gone through Red Hat's Secure Supply Chain
- ▶ Consumable and manageable within the Red Hat ecosystem





# 智慧化管理與自動化實踐

Jason Wang  
Sr. Solutions Architecture  
Red Hat Taiwan





## Simplify deployment and administration

A user-friendly web interface designed to manage and monitor the health and status of your local and remote systems while helping you accomplish complex tasks.



# Common OS automation and management challenges



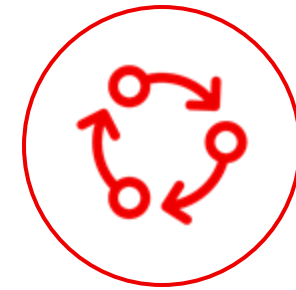
## Deployment complexity

Consistent configuration and controls should be considered before deploying into production



## Expertise

Managing ever expanding complex infrastructures requires a lot of knowledge and effort to ensure success



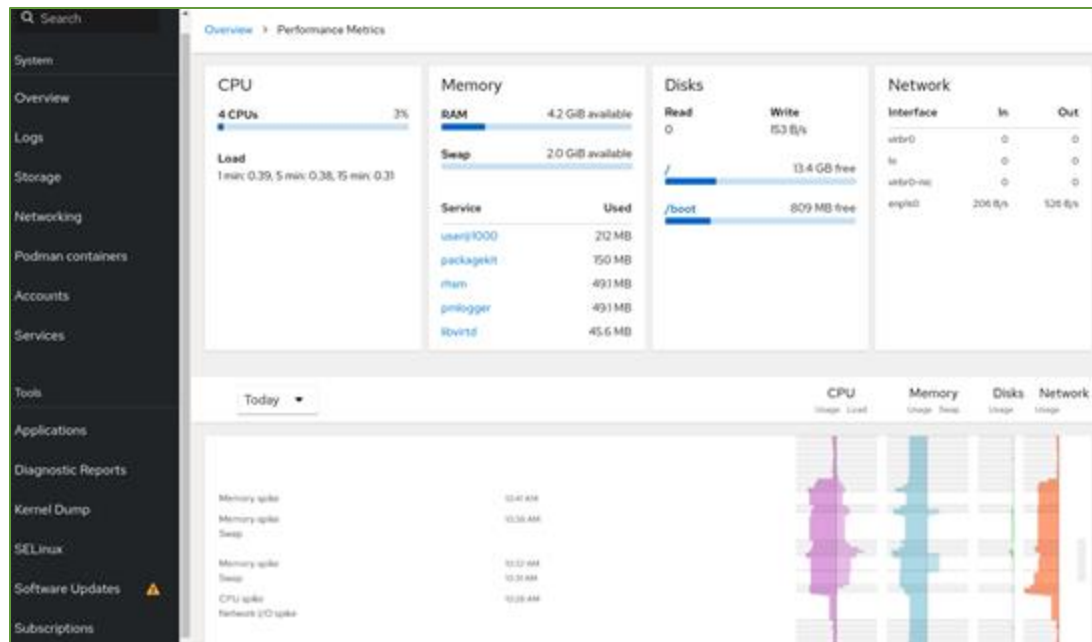
## Manual administration

Administrative and ongoing maintenance tasks take significantly longer to complete without automation



# Red Hat Enterprise Linux web console

A web-based management interface to simplify deployment, daily administration, and complex tasks



- ▶ **Access** a quick and convenient system overview from a centralized web interface
- ▶ **Perform** common tasks as well as complex operations to reduce the burden on system administrators
- ▶ **Monitor** and track system performance details around CPU, memory, disk, and network usage
- ▶ **Manage** and monitor systems both locally and remotely for increased efficiency and flexibility



# Most common use cases for the web console

Simplified Red Hat Enterprise Linux administration that is intuitive, robust, and extendable



## Daily administration

Save time using a web interface rather than complex commands

- Increase filesystem size
- Manage firewall
- Administer user accounts
- Restart services
- View logs
- Install system updates



## Off-hours SysAdmin

Access after hours and during on-call situations

- Use a mobile device web browser
- View system logs
- Monitor system health
- Troubleshoot and resolve issues



## New to RHEL

Simplify complex activities for non-experienced admins

- Perform tasks without command line knowledge
- Employ an intuitive and easy to use web interface



## Performance

View key metrics to optimize and tune system performance

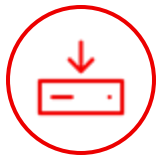
- Monitor local system performance
- Manage performance profiles
- Track CPU, disk, memory, and more





# Red Hat Enterprise Linux automation and management benefits

Simplified administration in the open hybrid cloud.



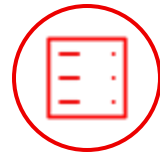
Leverage automated, repeatable built-in management workflows



Consistently deploy systems across your complex hybrid infrastructure



Close any admin expertise gaps and overcome lack of resources



Ensure configuration and mitigate risk by automating system setup



Reduce the time spent analyzing and validating OS security patches



Spend less time on persistent security settings with security at scale



# Daily administration

Save time using a centralized location for manual tasks

The screenshot shows the Red Hat Enterprise Linux web console interface. The top navigation bar includes the user 'brian@rhel92', 'Administrative access', 'Help', and 'Session' settings. The left sidebar contains a search bar and a list of system management categories: System, Overview, Logs, Storage, Networking (selected), Podman containers, Virtual machines, Accounts, Services, Tools, Applications, Diagnostic reports, Kernel dump, SELinux, and Software updates. The main content area is titled 'Networking > Firewall'. It shows the Firewall status as 'Enabled' with a note: 'Incoming requests are blocked by default. Outgoing requests are not blocked.' There is an 'Add new zone' button. Below this, two firewall zones are listed: 'Public zone' and 'Libvirt zone'. Each zone has a table of allowed services and ports. The 'Public zone' interface is 'enp1s0' and the 'Libvirt zone' interface is 'virbr0'. Both zones have 'Allowed addresses' set to 'Entire subnet'. Each zone has an 'Add services' button.

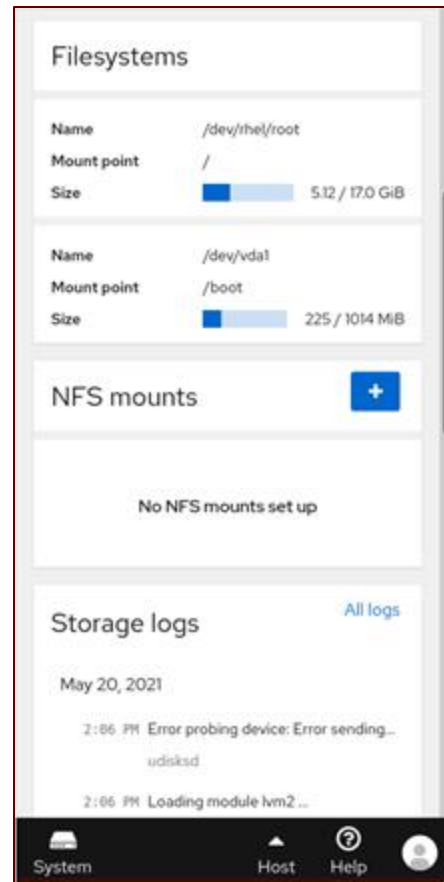
Zone	Interface	Allowed addresses	Service	TCP	UDP
Public zone	enp1s0	Entire subnet			
			ssh	22	
			dhcpv6-client		546
			cockpit	9090	
Libvirt zone	virbr0	Entire subnet			
			dhcp		67
			dhcpv6		547
			dns	53	53
			ssh	22	
			tftp		69

- ▶ Increase filesystem size
- ▶ Manage firewall
- ▶ Administer user accounts
- ▶ Restart services
- ▶ View logs
- ▶ Install system updates



# Off Hours SysAdmin

Easily access for after hours and on-call situations

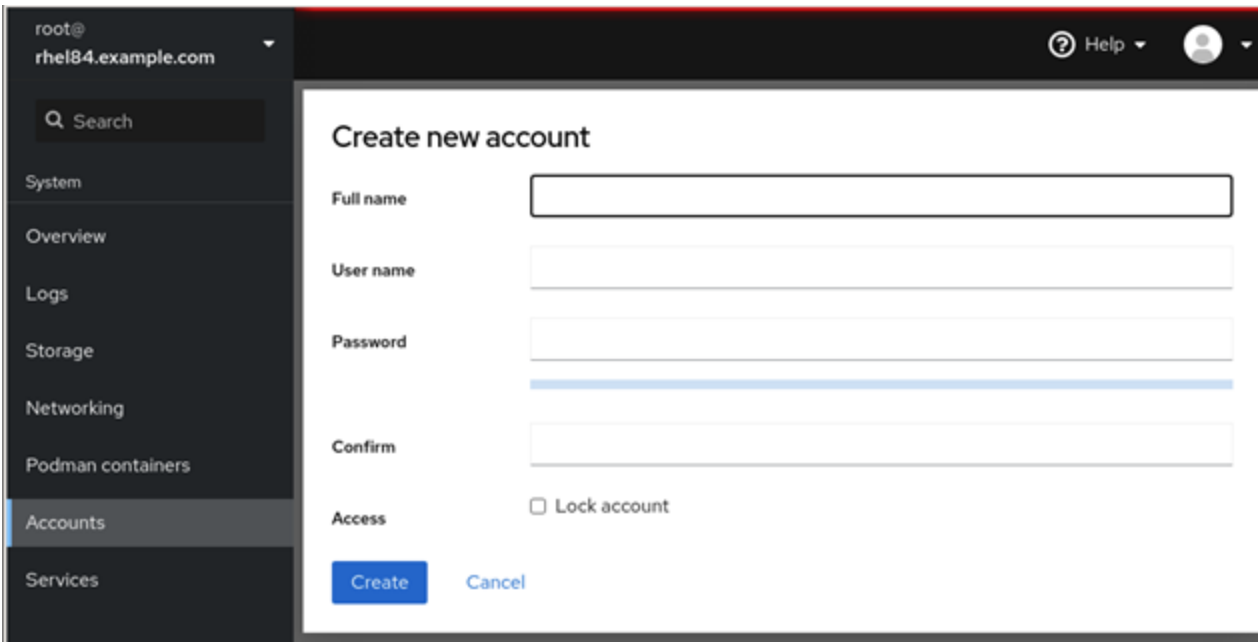


- ▶ Use a mobile device web browser
- ▶ View system logs
- ▶ Monitor system health
- ▶ Troubleshoot and resolve issues



# New to Linux?

Simplify complex activities for non-experienced admins



The screenshot displays the Red Hat Enterprise Linux web console interface. On the left is a dark sidebar with a search bar and a menu containing 'System', 'Overview', 'Logs', 'Storage', 'Networking', 'Podman containers', 'Accounts' (highlighted), and 'Services'. The main content area is titled 'Create new account' and contains the following fields: 'Full name', 'User name', 'Password' (with a strength indicator bar), and 'Confirm'. Below these fields is an 'Access' section with a checkbox for 'Lock account'. At the bottom are 'Create' and 'Cancel' buttons. The top of the console shows the user 'root@rhel84.example.com' and a 'Help' link.

- ▶ Perform tasks without command line knowledge
- ▶ Leverage an intuitive and easy to use web interface



# Cockpit (web console) system role

Manage and configure the RHEL web console at scale

```
---
- hosts: node1 node2
  vars:
    cockpit_packages:
      - cockpit-session-recording
      - cockpit-podman
      - cockpit-storaged
    cockpit_config:
      Session:
        IdleTimeout: 15
        Banner: /etc/issue

  roles:
    - rhel-system-roles.cockpit
```

- ▶ Deploy web console across environment
- ▶ Specify which Cockpit packages should be installed
- ▶ Configure cockpit.conf configuration items
- ▶ Configure TLS certificates for web console
- ▶ Supports RHEL 9, RHEL 8, and RHEL 7 hosts



# Red Hat Enterprise Linux Lightspeed



Assistive technology which utilizes artificial intelligence and leverages decades of Red Hat Enterprise Linux expertise to proactively **inform and simplify** how both novice and experienced IT professionals build, deploy, and manage Red Hat Enterprise Linux.

- Simplifies the way you interact with Red Hat Enterprise Linux by using **plain language** rather than complex commands
- Helps you make better tuning and troubleshooting decisions with **recommendations and actionable guidance**



brian@rhel:~ — ssh brian@rhel



[brian@rhel ~]\$

# Red Hat Lightspeed Portfolio

Generative AI-powered services to help your teams be more productive



## Red Hat Ansible Lightspeed

Accelerate automation content creation with Ansible-specific model recommendations that promote accuracy, trust, and adherence to Ansible best practices.



## Red Hat OpenShift Lightspeed

An integrated natural language assistant that makes OpenShift easier to use for all user's skill levels with suggestions and step-by-step guidance to increase productivity and assist with troubleshooting.



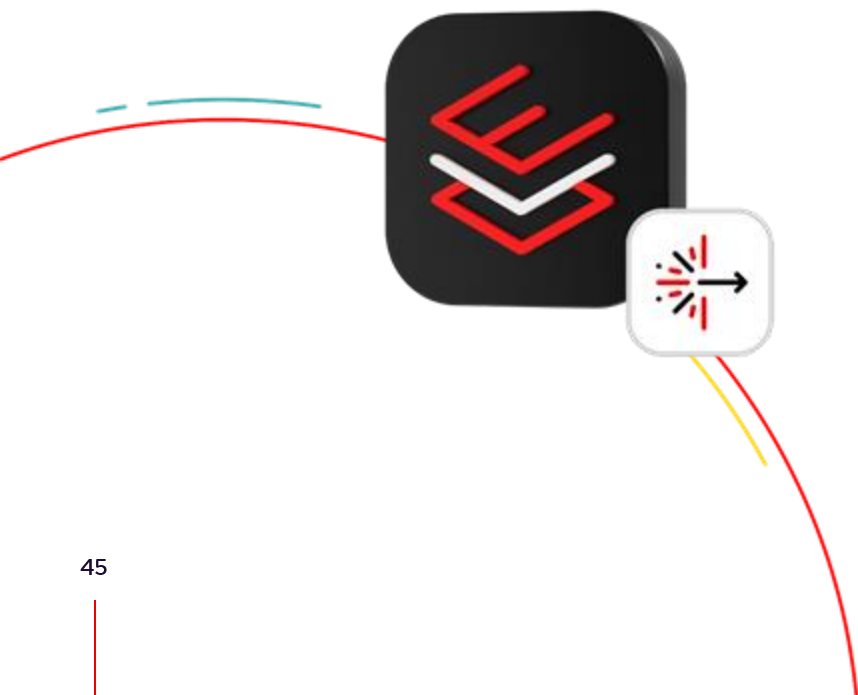
## Red Hat Enterprise Linux Lightspeed

Assistive technology which utilizes artificial intelligence and leverages decades of Red Hat Enterprise Linux expertise to proactively inform and simplify how both novice and experienced IT professionals build, deploy, and manage RHEL.





# Red Hat Enterprise Linux Lightspeed vision and goals



## Artificial Intelligence

Harnesses the power of AI to help  
increase productivity



## Unlock Red Hat's expertise

Provide Red Hat's decades of  
Linux experience to help your  
workloads succeed



## Level up skills

Makes Red Hat Enterprise Linux easier  
to use, secure, tune, and troubleshoot  
for both new and experienced users



## Proactive guidance

Proactively provide relevant  
information and guidance

# RHEL Lightspeed features

Image builder package  
recommendations



Command line assistant



# RHEL Lightspeed features

Image builder package  
recommendations

Command line assistant



## Recommendations

Image Builder analyzes selected packages and recommends related, relevant packages to also be included



- 1 Image output
- 2 Target Environment
  - Amazon Web Services
- 3 Optional steps
  - Register
  - Compliance
  - File system configuration
  - Repository snapshot
  - Custom repositories
  - Additional packages
  - Timezone
  - Locale
  - First boot script configuration
- 4 Details
- 5 Review

## Image output

Images enables you to create customized blueprints, create custom images from the blueprints, and push them to target environments

[Documentation](#)

### Release \*


Red Hat Enterprise Linux (RHEL) 9

### Architecture \*

x86\_64

### Select target environments \*

#### Public cloud



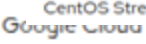
Amazon Web Services

Red Hat Enterprise Linux (RHEL) 9  
Full support ends: May 2027 | Maintenance support ends: May 2032


Red Hat Enterprise Linux (RHEL) 8  
Full support ends: May 2024 | Maintenance support ends: May 2029

Red Hat Enterprise Linux (RHEL) 10 Beta


CentOS Stream 9



Google Cloud Platform



Microsoft Azure



Oracle Cloud Infrastructure

#### Private cloud

##### ☒ VMware vSphere

☒ Open virtualization format (.ova) ?

☐ Virtual disk (.vmdk) ?

##### Other

☒ Virtualization - Guest image (.qcow2)

☐ Bare metal - Installer (.iso)

☒ WSL - Windows Subsystem for Linux (.tar.gz)

Next

Back

Cancel

## Versions of RHEL

Update confidential designator here

- RHEL 10 latest
- RHEL 9 latest
- RHEL 8 latest
- CentOS Stream 9

## Supported Cloud Partners

- Amazon Web Services (AWS EC2)
- Google Cloud Platform (GCP)
- Microsoft Azure
- Oracle Cloud Infrastructure (OCI)

## Hybrid-Cloud Image Types


- VMware vSphere platform (.vmdk)
- Virtual guest (.qcow2)
- Red Hat OpenShift-Virt
- Red Hat OpenStack
- RHEL installer (.iso)
- Microsoft WSL2

## Configuration options


- Simple auto-registration
- Security Compliance Policies
- Insights Compliance integrations
- Filesystems and Storage Volume
- Custom repositories
- Package selections
- Firstboot scripting
- Extend configurations with cloud-init

# Insights image builder package recommendations



1-1 of 1 < >

Package name	Description	Package repository	Support
<input checked="" type="checkbox"/> adcli	Active Directory enrollment	 Red Hat repository	Supported

1-1 of 1 << < 1 of 1 > >>

☒  Recommended Red Hat packages Powered by RHEL Lightspeed ⓘ

Other users commonly add these packages with the ones you selected.

Package name	Description	Package repository	
python3-sssdconfig	SSSD and IPA configuration file manipulation classes and functions	 Red Hat repository	<a href="#">Add all packages</a> <a href="#">Add package</a>
realmd	Kerberos realm enrollment service	 Red Hat repository	<a href="#">Add package</a>



# RHEL Lightspeed features

Image builder package  
recommendations

Command line assistant

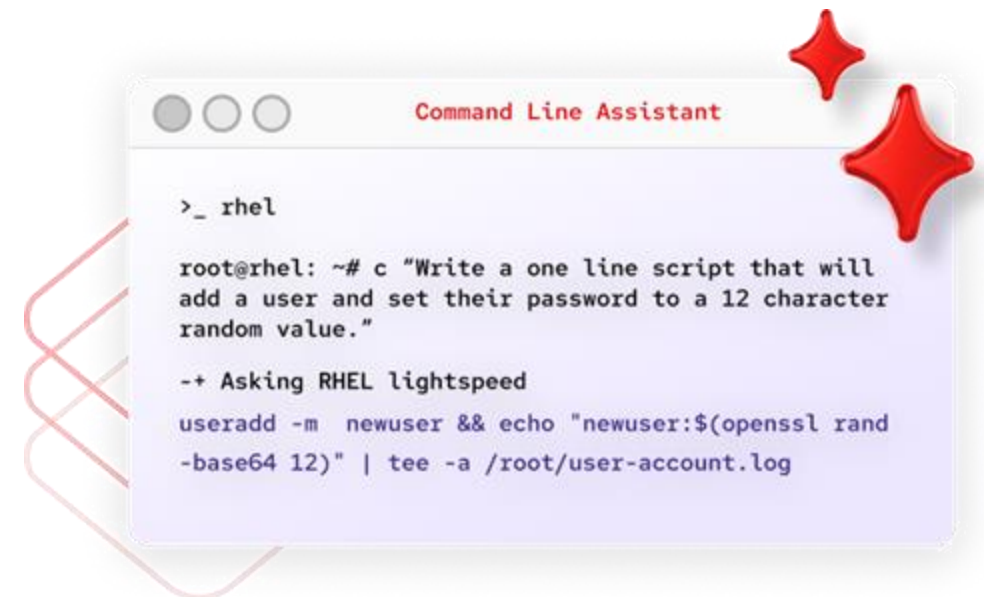


# Experience an AI enabled command line

The command line assistant is an optional generative AI assistant available directly in the RHEL command line interface. It can help you more easily manage, troubleshoot, and work with your systems.

## With the command line assistant, you can:

- Ask and receive answers to RHEL-related questions in plain language.
- Gain access to information from the RHEL documentation and Red Hat knowledgebase
- Get assistance with troubleshooting configuration issues, deciphering log entries, and more.



# Why use the command line assistant?

Solve problems faster



Learn and improve your skills



Help address Linux skills gap





# Why use the command line assistant?

Solve problems faster

Learn and improve your skills

Help address Linux skills gap



## On call assistant

It's 2am and there's a problem.

The command line assistant is there with you, providing recommendations and actionable guidance to help you



## Help with deciphering logs and errors

Run in to an error you haven't seen before? See something confusing in a log? Ask the command line assistant for help



## Access Red Hat knowledge

The command line assistant incorporates knowledge from resources such as the RHEL documentation and Red Hat knowledgebase



# Why use the command line assistant?

Solve problems faster

Learn and improve your skills

Help address Linux skills gap



## What's the command for that again?

Use the command line assistant to help refresh your memory of commands you don't frequently use



## Learn new skills

Ask the command line assistant if there are other methods to complete a task that might be more efficient



# Why use the command line assistant?

Solve problems faster

Learn and improve your skills

Help address Linux skills gap

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According to a [Red Hat-sponsored IDC study](#)<sup>1</sup>  
*"organizations [are] struggling to hire the Linux skill sets they need to operate and support their expanding fleet of distributions, which opens them up to further risk around security, compliance and application downtime."*



Resources available to  
RHEL Lightspeed that help  
it with answering questions



### RHEL documentation

RHEL 9 documentation and release  
notes



### Red Hat knowledgebase

RHEL 9 verified knowledge base  
solutions



### CVE info

RHEL 9 related CVE's



### Errata info

RHEL 9 related errata

# Use-cases

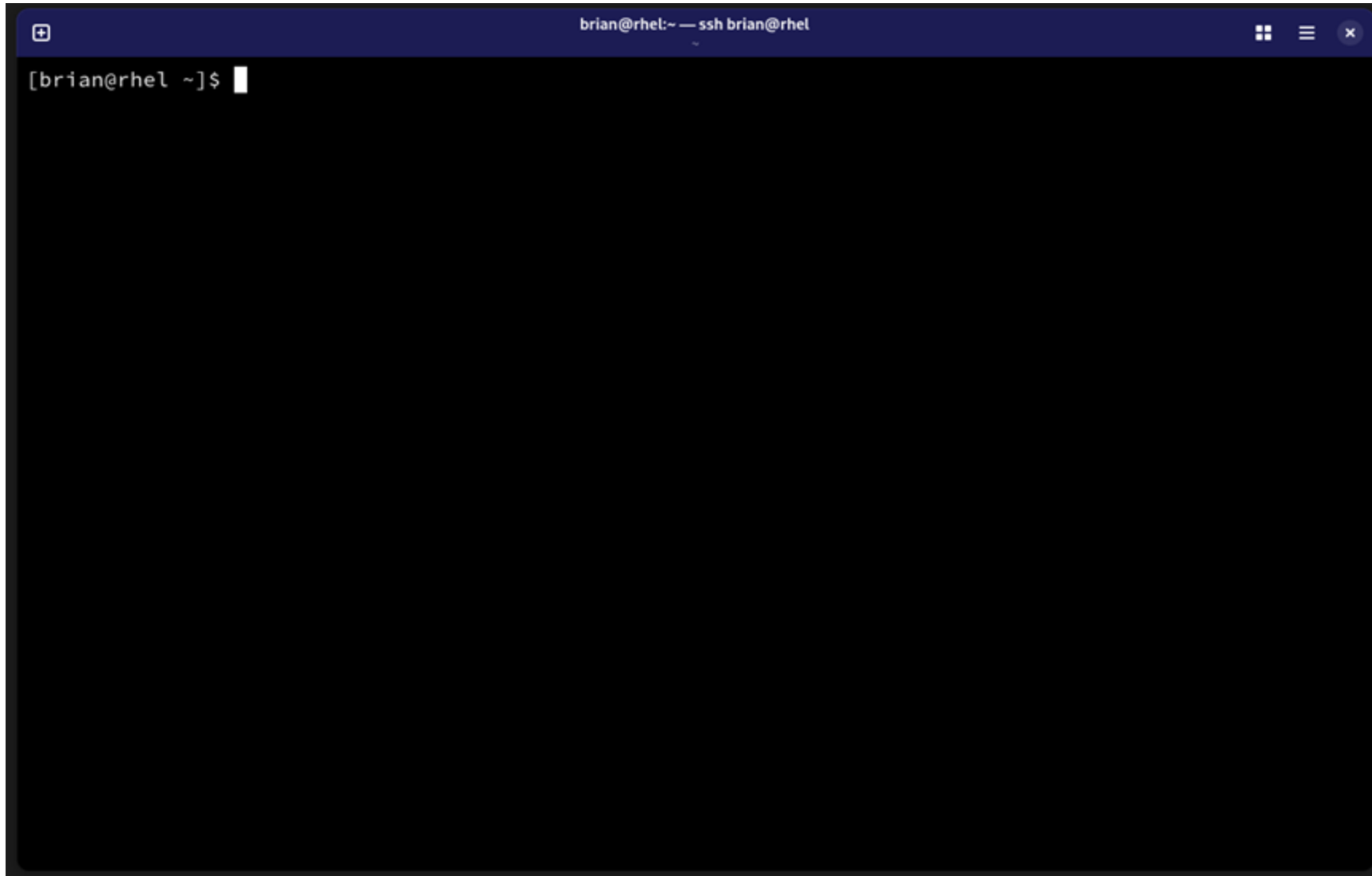
# How to access the command line assistant

**The speed of light is denoted with the "c" character**

**The RHEL Lightspeed command line assistant is accessed with the "c" command**



## Find relevant info from the Red Hat knowledgebase



## Attaching files to the command line assistant





## Piping data to the command line assistant



# --enable-capture mode



# What you need to use the command line assistant

RHEL Lightspeed is included as part of the value of a RHEL subscription



## RHEL 10.0+ / 9.6+ system

The command line assistant is available on 9.6 and 10.0 or later systems



## RHEL subscription

Registered system with active RHEL subscription



## Connectivity

Ability to use a connected experience

