



# Red Hat Insights - Compliance Service

Automating your Compliance Needs with Insights  
and Ansible

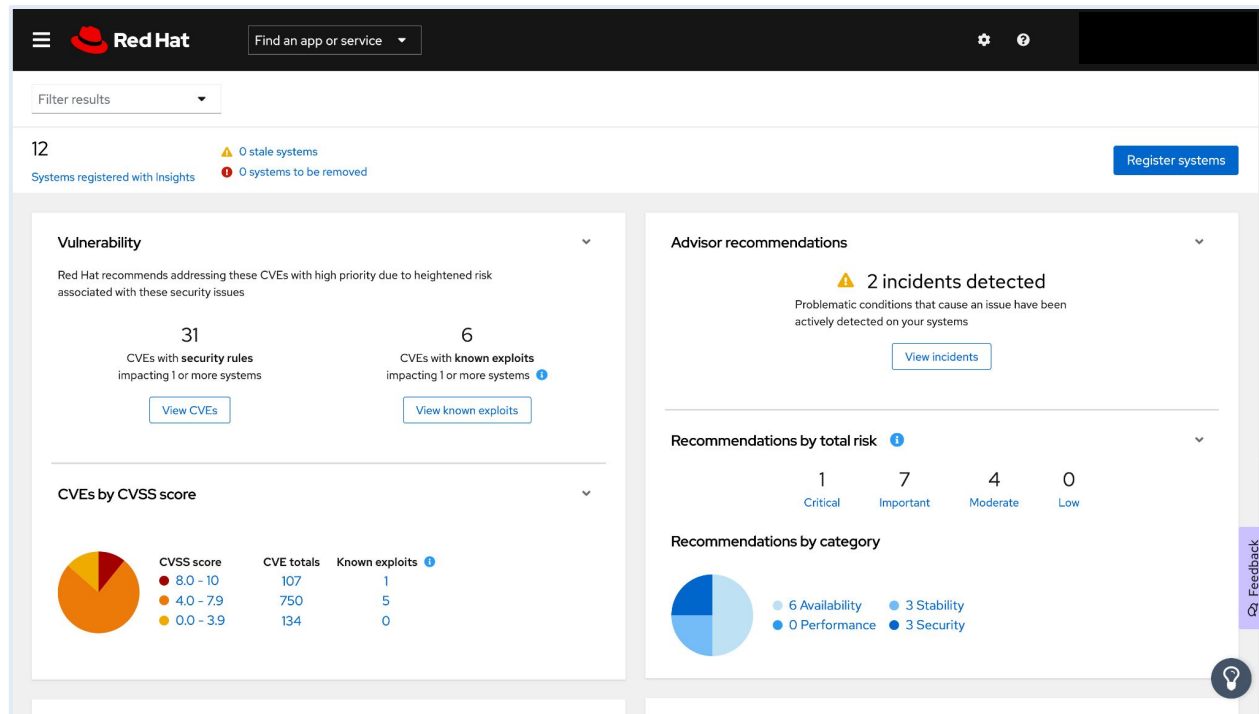
Brian Dumont

Lt Principal Solution Architect

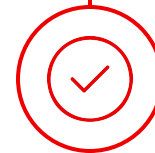


# What is Red Hat Insights?

Helping you better manage your hybrid and cloud environments



**Predicting risks**



**Recommending actions**



**Analyzing costs**

# What does Red Hat Insights do?

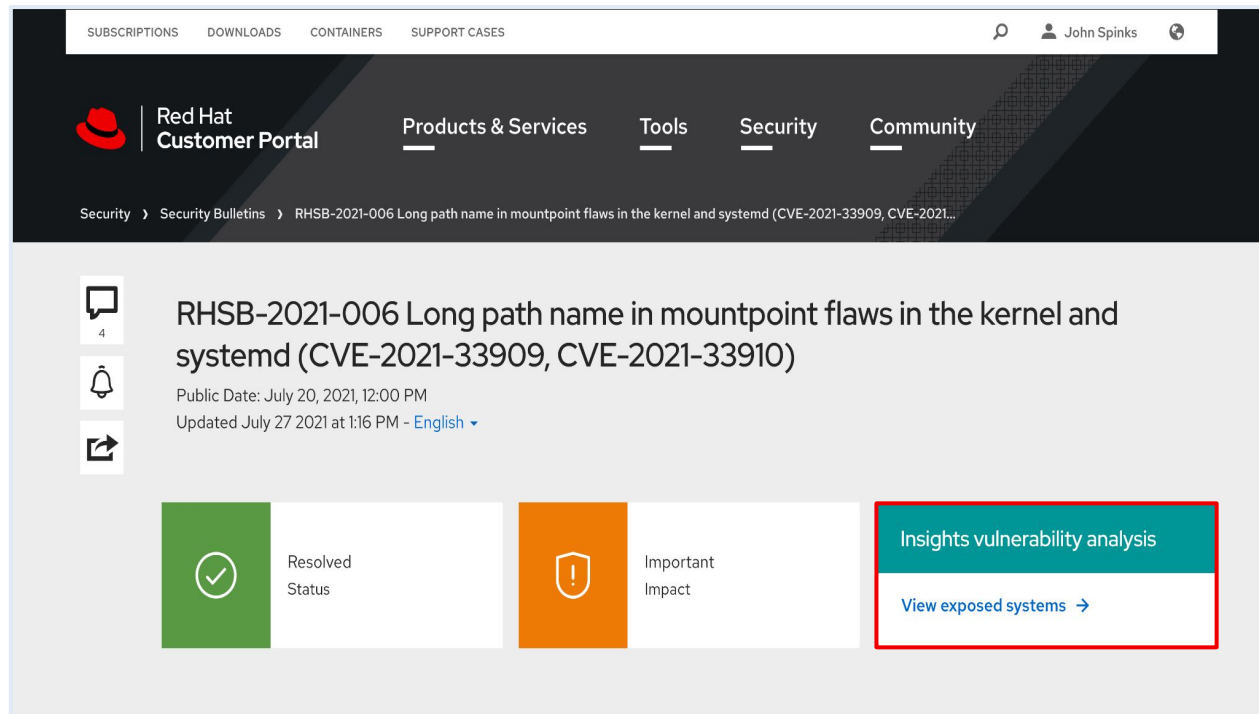
A cloud analytics platform that helps you better manage your hybrid and cloud environments



- 
- ▶ **Gathers** configuration and utilization data from your Red Hat® products
  - ▶ **Analyzes** the data based on Red Hat knowledge and expertise
  - ▶ **Generates** and prioritizes insights for you to take action

# How does Red Hat Insights help me?

Use Red Hat's expertise and knowledge to evaluate your systems



Red Hat subscriptions include knowledge of:



**>1 Million**  
Customer support cases



**>1,000**  
Red Hat support personnel



**>115,000**  
Knowledge base and  
solution articles

# How does Red Hat Insights help me?

Use Red Hat's expertise and knowledge to evaluate your systems



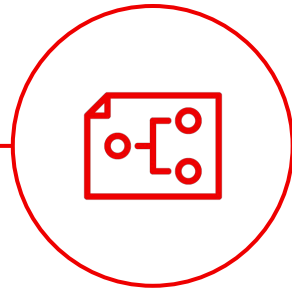
- ▶ Configuration review to make sure systems are setup correctly
- ▶ Easily identify interoperability issues from the hypervisor or cloud, through the OS, and through the application stack
- ▶ Centralized view of all CVEs, patches, and compliance risks
- ▶ Identify drift to make sure systems are the same
- ▶ Know how many subscriptions you are using in seconds

# How does it benefit my business?



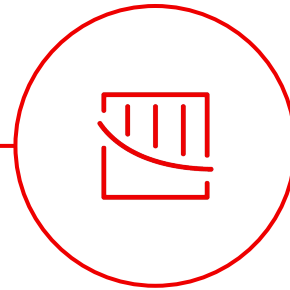
## Understand

Clearly understand your security risk profile



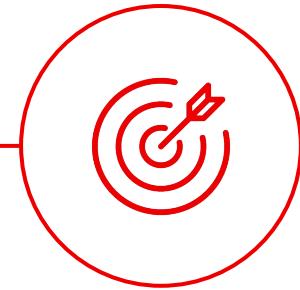
## Plan

Stay ahead of critical operational issues



## Reduce

Time to find and resolve issues from hours to minutes



## Innovate

Free up resources to focus on innovation and new capabilities

# Modernized management with analytics and automation



## Red Hat Insights

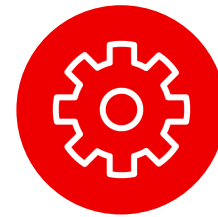
- 96% reduction in time to **detect** known risks to availability, performance, stability, and security
- 26% reduction in administrator steps to **detect** these known risks
- 88% less time to track **patch** status for all systems in environment, versus manual scripted workflow
- 1m 24s to **discover** vulnerabilities in a 100-VM environment, versus over 15m when performed manually
- 91% less task completion time to **address** a vulnerability
- 69% reduction in time to detect a **policy** violation

Red Hat Insights focuses on 3 themes



## **Business**

Track and optimize spending



## **Operations**

Improve stability and performance



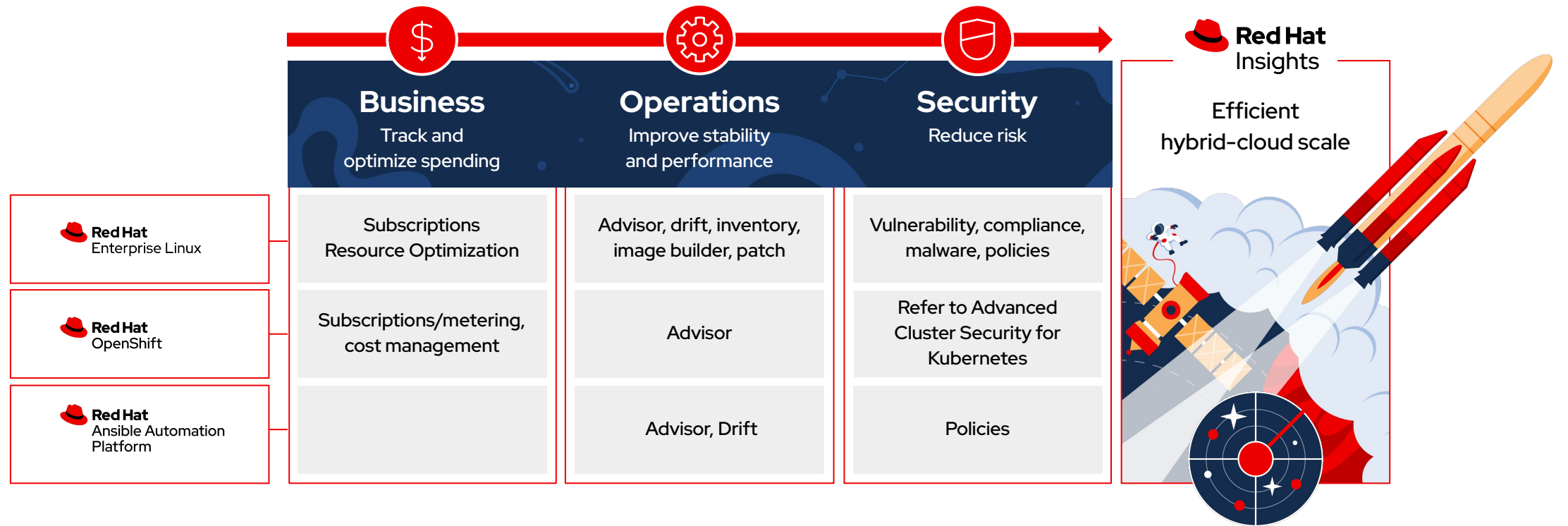
## **Security**

Reduce risk



# Red Hat Insights

Aligning themes to services across platforms



## Hybrid cloud console Access at [cloud.redhat.com](https://cloud.redhat.com)

The dashboard features a dark sidebar navigation menu with the following items: Home, Application Services, OpenShift, Red Hat Enterprise Linux, and Ansible Automation Platform. The main content area is divided into three sections: App services, RHEL, and Ansible Automation Platform. Each section contains summary cards with counts and labels. Below these are two detailed sections: Red Hat Insights and Recommendations.

Category	Item	Count
App services	Kafka Instances	0
	Connected systems	39
	Stale systems	17
RHEL	Ansible Platform C...	1
	Collections	110
	Partners	55

### Red Hat Insights

Gain increased visibility into your hybrid cloud deployments so you can improve performance and increase security. [Learn more.](#)

**RHEL** 2

- [View 2 incidents](#)  
Insights has identified 2 incidents affecting your systems.
- [Create a remediation playbook](#)  
Fix issues identified by Insights on your systems.

### Recommendations

- [Get started with RHOSAK](#)  
Learn how to create and use a Kafka instance.
- [Download and install the Application Services CLI](#)  
Get started using your managed Kafka instances.
- [Get started with Quarkus apps and Streams for Apache Kafka](#)  
Learn how to connect to your Kafka instance from a Quarkus application.
- [Try Red Hat OpenShift API Management](#)  
Deploy, monitor, and control APIs throughout their entire life cycle.
- [Get started with Red Hat OpenShift API Management](#)  
Deploy, monitor, and control APIs throughout their entire life cycle.
- [View Automation Services Catalog orders](#)  
You have (0) recent orders.

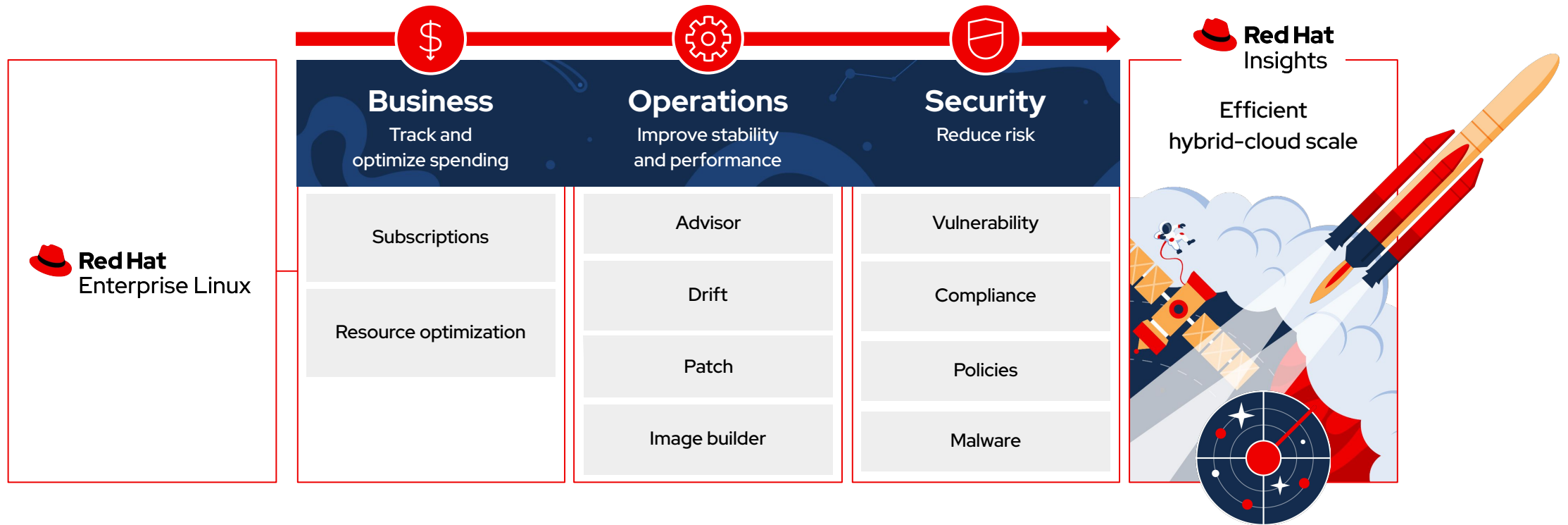
---

# Red Hat Insights

for Red Hat  
Enterprise Linux

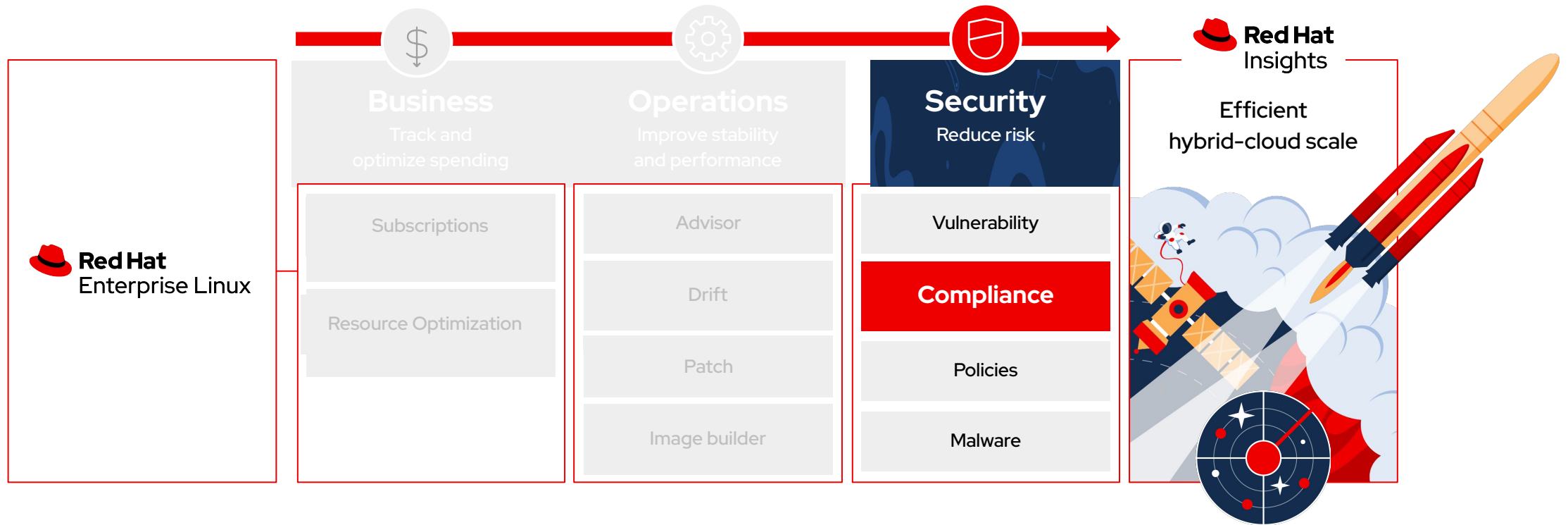
# Red Hat Insights for Red Hat Enterprise Linux

For all your hybrid-cloud challenges



# Red Hat Insights for Red Hat Enterprise Linux

For all your hybrid-cloud challenges



# Compliance

Assess and monitor regulatory “compliance at scale”

- ▶ Easy to use policy creation and custom tailoring across many systems
- ▶ Compliance reports quickly highlight overall compliance level
- ▶ Highlight unsupported configs with OpenSCAP and RHEL so that you can address and get accurate reporting
- ▶ Includes remediation playbooks for many common compliance issues

## What's New - Q2 2022:

- Show systems not uploading in policy reports

# Compliance: Assess and monitor regulatory compliance, built on OpenSCAP



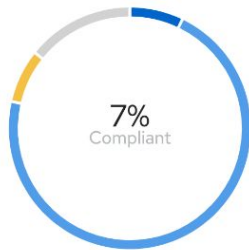
Filter by status ▾

Compliance > Reports > Report: PCI-DSS v3.2.1 Control Baseline for Red Hat Enterprise Linux 8

## Report: PCI-DSS v3.2.1 Control Baseline for Red Hat Enterprise Linux 8

[Download PDF](#) [Delete report](#)

PCI-DSS v3.2.1 Control Baseline for Red Hat Enterprise Linux 8



- 1 system compliant
- 10 systems non-compliant
- 1 system not supported ?
- 2 systems never reported ?

### Policy details

**Operating system** RHEL 8  
**Compliance threshold** 90.0%  
**Business objective** To be in compliance with all the things  
[View policy](#)

⚠ 1 systems not supported ?

0 selected ▾		Name ▾	Filter by name 🔍	Remediate	🔗	1 - 14 of 14 ▾	<	>
	Name ↑	Tags	SSG version ↑	Failed rules	Compliance score	Last scanned		
<input type="checkbox"/>	<a href="#">dur-rhc00.hcc-lab.com</a> RHEL 8.1	🏷️ 0	⚠ 0.157	65	Unsupported	46 minutes ago	⋮	
<input type="checkbox"/>	<a href="#">dur-rhc03.hcc-lab.com</a> RHEL 8.4	🏷️ 0	0.154	6	🟢 92%	45 minutes ago	💡 8	⋮

Feedback

---

# Red Hat Insights

## for Red Hat Enterprise Linux

**Advanced capabilities**



# Remediation

Built in playbooks for remediation provided by several Insights services

- ▶ Any Insights user can download playbooks
- ▶ Smart Management customers can execute the playbooks via Satellite or Remote Host Configuration (RHC)
- ▶ Ansible Automation Platform can sync playbooks from Insights

## Remediations: Create Red Hat Ansible remediation playbooks to resolve the issues that Red Hat Insights finds

Filter results ▾

### Remediations



Search playbooks 🔍

Download playbook



1 - 8 of 8 < >

#### SUDO Fix

Last modified: 20 days ago

Systems Complete actions  
4 ✓ 1 of 1

#### CVE-2021-3543

Last modified: 1 month ago

Systems Complete actions  
6 ✓ 1 of 1

#### glib2 patch

Last modified: 1 month ago

Systems Complete actions  
1 ✓ 1 of 1

#### glib2 - 206

Last modified: 1 month ago

Systems Complete actions  
1 ✓ 1 of 1

#### AWS-kdump

Last modified: 2 months ago

Systems Complete actions  
1 ✓ 1 of 1

#### RHEL7 - RHSA-2021:1469

Last modified: 2 months ago

Systems Complete actions  
2 ✓ 1 of 1

#### rhctest

Last modified: 2 months ago

Systems Complete actions  
0 ✓ 0 of 0

#### SUDO\_Fix

Last modified: 3 months ago

Systems Complete actions  
2 ✓ 1 of 1

Feedback



# Execute playbook: Use cloud connector to fix the things that Red Hat Insights finds, directly from Red Hat Insights

The screenshot displays the Red Hat Insights interface for 'Q3 Patches'. A modal dialog titled 'Execute playbook' is open, providing details about the actions and systems affected. The background interface shows a summary of 12 systems with 0/3 issues resolved, and a table of actions with their respective system counts and reboot requirements.

**Execute playbook**

Playbook contains 3 actions affecting 12 systems.

> [About remote execution with Cloud connector](#)

Executed Ansible Playbooks run on eligible systems with Cloud Connector. The playbook will be pushed immediately after selecting "Execute playbook". If the playbook has "Auto reboot" on, systems requiring reboot to complete an action will reboot.

[Learn more about Cloud Connector](#)

**Connection status of systems**

Connection type	Systems	Connection stat...
satellite.demoredhat.com	7	✔ Ready
Direct connection	5	✔ Ready

[Execute playbook on 7 systems](#) [Download playbook](#)

**Q3 Patches**

Total systems: 12 systems  
Autoreboot: ✔ Enabled [Turn off](#)

0/3 Issues resolved

**Do more with your Find it Fix it capabilities**  
Configure your systems with Cloud Connector to fix systems across all your Satellite instances.  
[Learn how to configure](#)

**Actions** | Systems | Activity

Search  Remove action

Actions	Reboot required
<input type="checkbox"/> RHBA-2021:2590 Apply RHBA-2021:2590	✔ Yes
<input type="checkbox"/> RHBA-2021:2810 Apply RHBA-2021:2810	✔ Yes 2 Patch 0/2 remediated
<input type="checkbox"/> RHBA-2021:2811 Apply RHBA-2021:2811	✔ Yes 2 Patch 0/2 remediated

1 - 3 of 3 of 1 7

---

# Red Hat Insights Compliance Demo

**Getting started with Red Hat Insights and OpenSCAP for compliance reporting**

<https://www.redhat.com/en/blog/getting-started-red-hat-insights-and-openscap-compliance-reporting>

**Red Hat Compliance service and the Red Hat Insights API**

<https://www.redhat.com/en/blog/red-hat-compliance-service-and-red-hat-insights-api>

# Demo Setup

## Automation Steps During Provisioning Process



- ▶ Provision VM and assigned label/tag indicating what type of compliance policy should be assigned



- ▶ Run the ***Insights-Client*** role to install and register Insights

```
- include_role:  
  name: redhat.insights.insights_client
```



- ▶ Run the **Insights-Compliance** role to install the OpenSCAP packages
  - Install task only

```
tasks:  
  - name: install insights compliance  
    import_role:  
      name: redhat.insights.compliance  
      tasks_from: install
```

# Demo Steps

Help keep me honest

1. Show how to create compliance policy in Insights
2. Execute an Ansible Automation Platform workflow that:
  - a. Assigns a host to a compliance policy
  - b. Runs the Insights-compliance scan on the hosts
3. Show the compliance reports in console.redhat.com
4. Demonstrate how to remediate the deficiencies

Github repo: [https://github.com/bdumont01/insights\\_api\\_project.git](https://github.com/bdumont01/insights_api_project.git)

Ansible blog: [When localhost isn't what it seems in Red Hat Ansible Automation Platform 2](#)

---

# Hybrid Cloud Console Settings

Insights is hosted on the  
Hybrid Cloud Console

# My User Access

Simple View of your permissions to Hybrid Cloud Console services

- ▶ Shows your roles and permissions to all services

What's New - Q2 2022:





# My User Access

Select applications to view your personal permissions.

## OpenShift

Clusters

Subscriptions

Cost Management

## Red Hat Enterprise Linux

Advisor

Compliance

Drift

Image Builder

Patch

Vulnerability

Policies

Subscriptions

## Not subscribed

## Ansible Automation Platform

Automation Hub

Automation Services Catalog

Insights

## Your Red Hat Enterprise Linux permissions

Filter by application

1 - 24 of 24

Application	Resource type	Operation
drift	*	*
inventory	*	read
compliance	*	*
inventory	*	read
patch	*	*
inventory	*	read
policies	*	*

# User Access

## Role Based Access Control (RBAC) for the Hybrid Cloud Console

- ▶ Visibility into users on your account (Read only)
- ▶ View and create roles
- ▶ View and create groups.
- ▶ Assign users to groups

### What's New - Q2 2022:

- Default admin access group
- Notifications integration



# Groups



Filter by name



Create group



1 - 5 of 5



Name



Roles

Members

Last modified



[Default access](#)

16

All

19 May 2021



[Default admin access](#)

0

0

11 days ago



[Limited Access Group](#)

2

1

52 minutes ago



[TMM\\_Admin\\_Group](#)

38

17

23 Feb 2022



[Viewer Group](#)

13

1

23 Feb 2022



1 - 5 of 5



1

of 1



Feedback



# Sources

Sources are how we connect with public cloud providers and other services or tools to collect information.

- ▶ Connect to a cloud provider to enable
  - OpenShift Cost Management
  - RHEL Management
- ▶ Depending on the cloud provider this may also
  - Unlock gold images
  - Enable auto registration
  - Allow for more granular tracking of subscription utilization

## What's New - Q2 2022:

- Notifications integration
- Satellite 6.11 Cloud Connector improvements
- RHEL Management for GCP (already supported for Azure and AWS)



# Sources

Cloud sources

Red Hat sources

## I connected to cloud. Now what?

### Use gold images

Connecting to Amazon Web Services or Microsoft Azure unlocks automatic access to Red Hat gold images. View gold images in your provider console.

[Use Red Hat gold images on AWS](#)

[Use Red Hat gold images on Microsoft Azure](#)

[Learn more about Red Hat gold images](#)

### Explore Red Hat Insights

Use RHEL instances in the cloud and gain other value-add services, such as predictive analytics.

[Learn more about Red Hat Insights](#)

[Enable additional Insights services](#)

### Track usage with Subscriptions

Use the Subscriptions service to monitor account-level summaries of your Red Hat subscription profile.

[Learn more about Subscriptions](#)

[Go to Subscriptions](#)

Name Filter by Name

Add source

1 - 4 of 4

Name	Type	Connected applications	Date added	Status
<a href="#">RH_AWS</a>	Amazon Web Services	Cost Management RHEL management	3 months ago	Available
<a href="#">Azure_TMM</a>	Microsoft Azure	RHEL management	11 months ago	Unknown
<a href="#">TMM-MBU-cost</a>	Amazon Web Services	Cost Management	1 year ago	Available
<a href="#">AWS_TMM</a>	Amazon Web Services	RHEL management	1 year ago	Available

# New Resources

## Videos:

### Overview Videos:

- [Red Hat Insights Overview](#)

### Webinars & Livestreams

- March 30, 2022 - [Comprehensive awareness and proactive solutions for government agencies and departments](#)
- October 20, 2021 - [RHEL Presents Livestream E23 - Insights Vulnerability Service](#)
- November 3, 2021 - [Level Up Hour - Insights](#)
- November 4, 2021 - [Insights for Ansible Convergence webinar](#)

### Customer Success Stories

- [YouTube Playlist for Red Hat Insights](#)

## Blogs/ Analyst Reports / Press Releases:

### Red Hat Blogs:

- [Finding and using disabled recommendations in Red Hat Insights Advisor](#)
- [Self-healing infrastructure with Red Hat Insights and Ansible Automation Platform](#)
- [Red Hat Insights and the delivery of a new security recommendation](#)

### Infographic:

- [Boost your operations with Red Hat Insights](#)

### Analyst Reports:

- [Graybar Boosts IT Infrastructure Automation and Management with Red Hat Enterprise Linux](#)
- [Save administrator time and effort by activating Red Hat Insights](#)
- [Achieving Intelligent DevOps How Open Source Software and Linux Fit into Today's DevOps and Digital Business Initiatives](#)
- [Red Hat Insights predictive analytics for Red Hat Enterprise Linux](#)





# Boost your IT operations

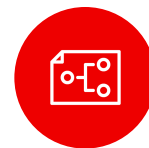
Go to [cloud.redhat.com](https://cloud.redhat.com) today



Get access to our product page:  
<http://redhat.com/insights> »



Read our blog:  
<https://www.redhat.com/en/blog/channel/red-hat-insights> »



Go to Red Hat Insights:  
[cloud.redhat.com](https://cloud.redhat.com) »

# Thank you

Red Hat is the world's leading provider of enterprise open source software solutions. Award-winning support, training, and consulting services make Red Hat a trusted adviser to the Fortune 500.



[linkedin.com/company/red-hat](https://www.linkedin.com/company/red-hat)



[youtube.com/user/RedHatVideos](https://www.youtube.com/user/RedHatVideos)



[facebook.com/redhatinc](https://www.facebook.com/redhatinc)



[twitter.com/RedHat](https://twitter.com/RedHat)