



Red Hat Smart Management

Main Slide Deck

NOTE: This deck will be updated in place for subsequent releases.

HOW TO USE THIS SLIDE DECK

This slide deck is not meant to be used as a whole.

Create your own copy by clicking: File > Make a copy

Then delete any slides you don't need.

We'll try to keep the slides in a logical order, but there will certainly be some overlap in the deck as we add more in depth materials

If you have feedback or slides to contribute, please make a comment in the deck or email:

satellite@redhat.com

Related Slide Decks

As the Satellite team creates slide decks based off of this Master deck, we will link to ones that can easily be reused here.

This might help to save you additional time.

These slide decks are linked to this master and should be up to date.

[Red Hat Insights Main Deck](#)

[What's New in Smart Management and Satellite 6.8](#)

Note: If you need a roadmap update for your customer please reach out to the product management team at: smartmanagement@redhat.com

Archived Slide Decks

Links to the older slide decks

As new versions of the slides are created, we move the older slides to an archived deckas not to lose anything

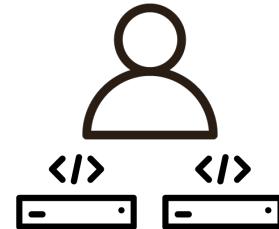
[Smart Management and Sat 6.7 Main Deck](#)

[Satellite 6.6 Main Deck](#)

[Satellite 6.5 Main Deck](#)

Real World Challenges

Gartner: Customers losing \$300,000 per hour on average due to IT downtime



Manage sprawl

More infrastructure and complexity than ever to manage

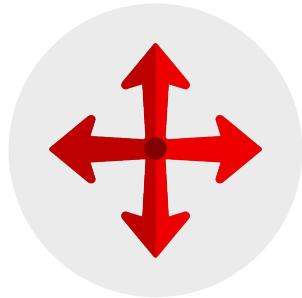
Reducing risk

Lack of proactive assessment and management of known issues creates exposure

Limited resourcing

Teams are stretched and lacking Linux skills being asked to do more with flat or decreasing budgets

How do you currently manage your IT environment?



Do your processes scale?

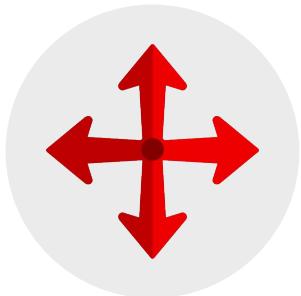


Are you confident you can
quickly respond?



Are your systems compliant?

Red Hat Smart Management can help



Do your processes scale?



Increase efficiency



Are you confident you can
quickly respond?



Address security easily



Are your systems compliant?



Audit and remediate systems

Red Hat Smart Management

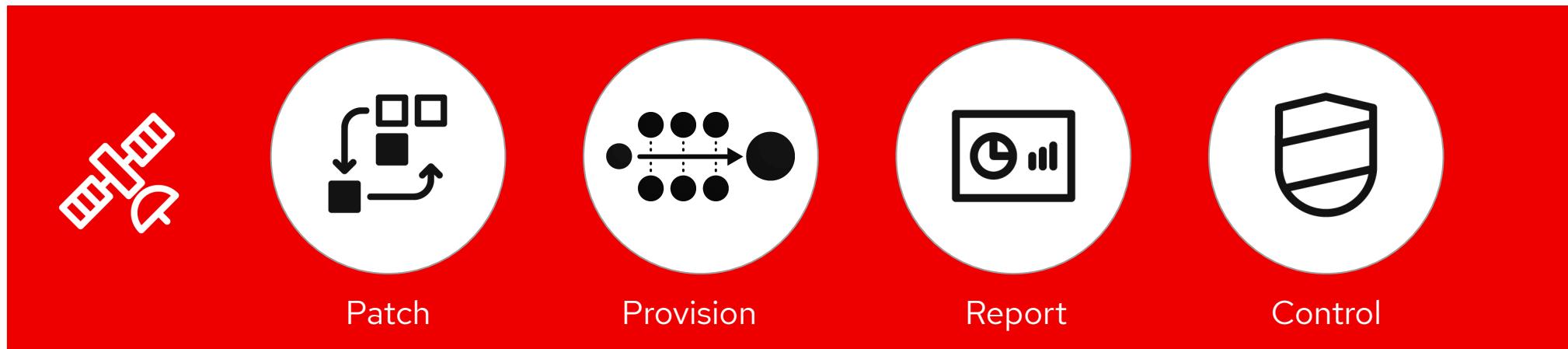
Smart Management enables you to improve the reliability, availability, security and compliance of your RHEL systems, running on any platform, while reducing TCO and repetitive tasks

Smart Management for Red Hat Enterprise Linux

Combine the powerful infrastructure capabilities of Red Hat Satellite with the simplicity of cloud management

Improve operational efficiency by 28%*

Overcome scale, skill, and security gaps



*Source: [Satellite IDC Business Value Whitepaper](#)

What's included with Smart Management?

As of April 2020, Smart Management includes:



Red Hat Satellite



Cloud Connector

Additional functionality coming in future releases

Introduction to Cloud Connector

Cloud Connector



Cloud Connector

Cloud Connector manages the communication between Satellite and Red Hat Insights at cloud.redhat.com and enables push-button remediation from Insights.

Red Hat Insights

Included with all Red Hat Enterprise Linux subscriptions

Buy

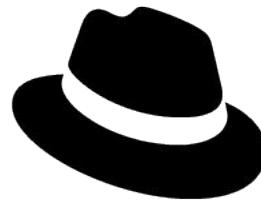


Red Hat
Enterprise Linux

Get



Red Hat
Insights



Red Hat Insights

PREDICT RISK. GET GUIDANCE. STAY SECURE.

PREDICTIVE I.T. ANALYTICS

AUTOMATED EXPERT ASSESSMENT

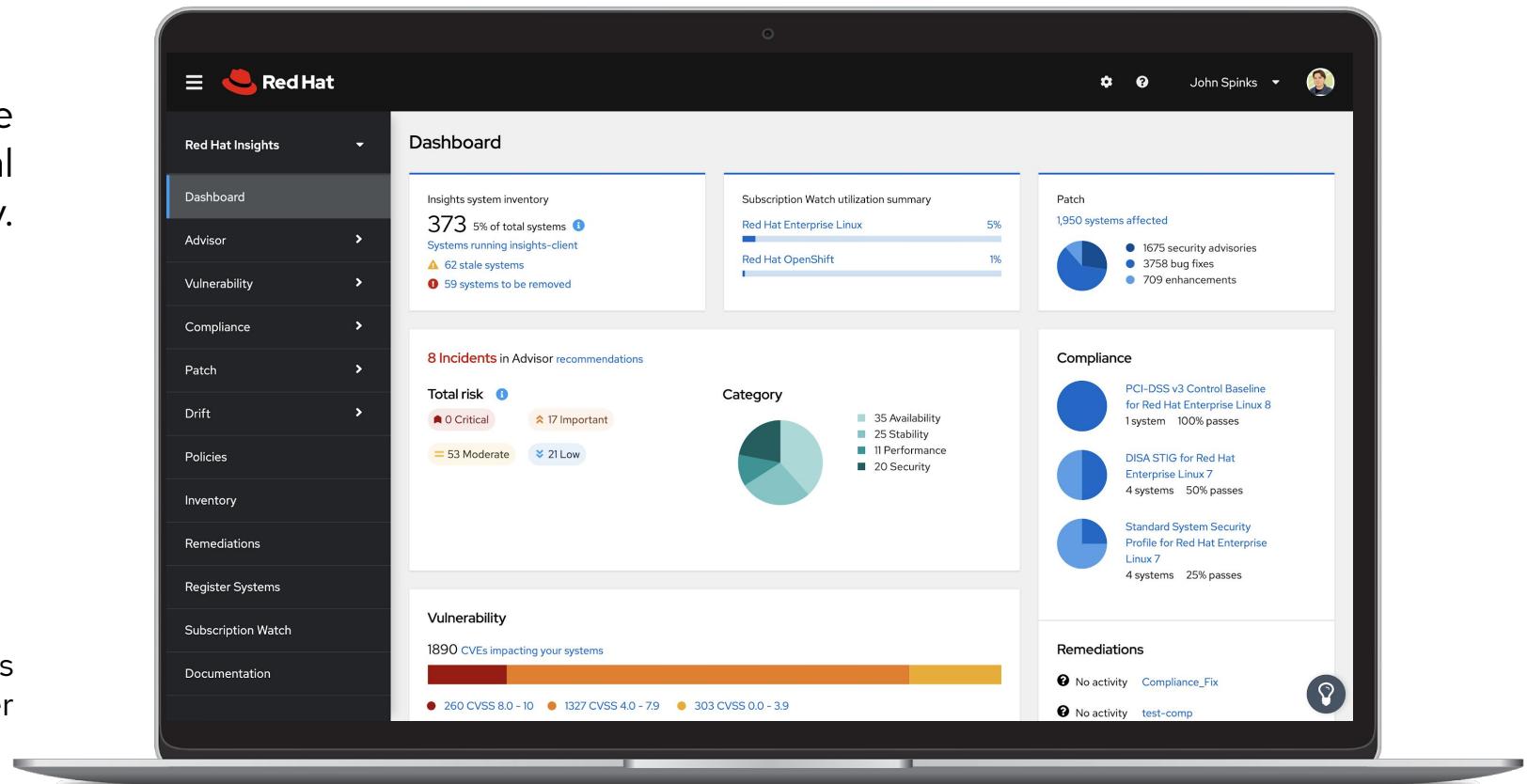
SIMPLE REMEDIATION

Red Hat Insights

Included with Red Hat Enterprise Linux subscription, now with more value

New and expanded services provide additional security and operational efficiency.

*Active RHEL subscriptions versions 6.4 & higher



Red Hat Insights Services



Advisor

Availability, performance, stability, and security risk analysis



Vulnerability

Assess Common Vulnerabilities and Exposures (CVEs) with advisories



Compliance

Assess and monitor compliance, built on OpenSCAP



Subscriptions

Track progress of your Red Hat subscription usage efficiently and confidently



Drift

Create baselines and compare system profiles



Policies

Define and monitor against your own policies to identify misalignment



Patch

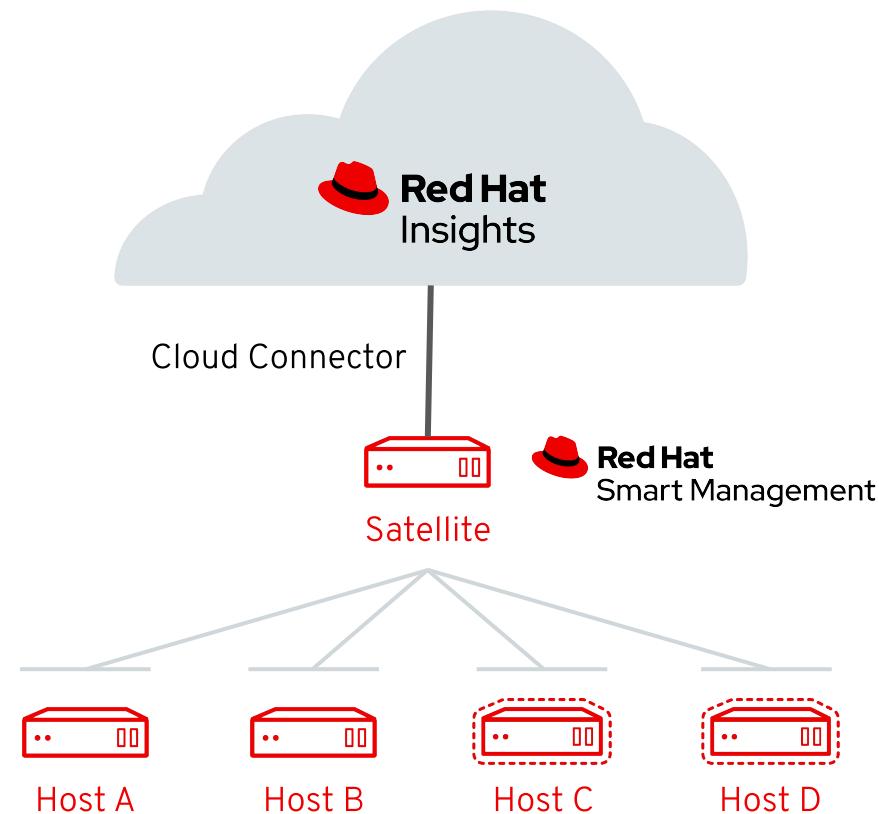
Analyze for Red Hat product advisory applicability to stay up to date

What is Cloud Connector?

Using Red Hat Insights and Smart Management you can easily identify risks, Vulnerability, and Compliance issues in your environment and fix them via your trusted Satellite infrastructure with the click of a button.

- Connects your Satellite infrastructure to cloud.redhat.com
- Create playbooks via Insights and run them using existing Satellite and Capsules
- Included with your Smart Management subscription

For more information, refer to the intro [blog](#) or [video](#)



Red Hat Insights

Dashboard

Advisor

Vulnerability

Compliance

Patch

Drift

Policies

Inventory

Remediations

Register Systems

Subscription Watch

Documentation

Remediations > CVE-2020-10713

CVE-2020-10713

[Download playbook](#) Put Insights into action

Enable push-button remediation across your hybrid cloud environment with Red Hat Smart Management.

[Learn more](#)

Playbook summary

Total systems

102 systems

Playbook settings

Auto reboot: **Enabled** 2 systems require reboot[Turn off auto reboot](#)**Without a Smart Management subscription**

You can only download the playbooks from Insights

Actions

Activity

Search actions



Remove action

1 - 1 of 1

<< < > >>

1

of 1

 Actions ↑

Resolution

Reboot requ...

Systems

Type

 CVE-2020-10713

Upgrade packages affected by CVE-2020-10713

102

Vulnerability

CVE-2020-10713

[Execute playbook](#)[Download playbook](#) *ⓘ* 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](#)

Playbook summary

Total systems

102 systems

Playbook settings

Auto reboot: **Enabled** 6 systems require reboot[Turn off auto reboot](#)**With a Smart Management subscription,
but Cloud Connector is not configured**Execute playbook button is shown, but not available since
Cloud Connector isn't set up[Actions](#) [Activity](#)[Search actions](#)[Remove action](#)

1 - 1 of 1



1

of 1



<input type="checkbox"/> Actions ↑	Resolution	Reboot requ...	Systems ↑	Type ↑
<input type="checkbox"/> CVE-2020-10713	Upgrade packages affected by CVE-2020-10713	✓	102	Vulnerability

CVE-2020-10713

[Execute playbook](#)[Download playbook](#)

⋮

Playbook summary

Total systems

102 systems

Playbook settingsAuto reboot: **Enabled** 102 systems require reboot[Turn off auto reboot](#)**With Cloud Connector configured**

Execute playbook button is available and issues can be fixed through Satellite.

Actions**Activity**

Search actions



Remove action

1 - 1 of 1



1

of 1

 Actions ↑

Resolution

Reboot requ...

Systems

Type

 CVE-2020-10713

Upgrade packages affected by CVE-2020-10713



102

Vulnerability

1 - 1 of 1



1

of 1



Execute playbook

Execute → Pre-flight check → Remediation

Clicking the execute playbook button performs a pre-flight check to validate that all hosts selected are connected via a Satellite.

If a host isn't connected, or if the connection is not working, manually remediation will need to be performed.

Execute playbook



Playbook contains 1 action affecting 101 systems.

Systems connected to a Satellite instance and configured with Receptor can be automatically remediated. To remediate other systems, download the Ansible Playbook.

Connection status of systems

Connection type	Syste...	Connection status
ip-172-31-38-54.us-eas...	7	Ready
wallsat67.usersys.redh...	1	Ready
Satellite 5a6f8d67-cc3...	4	Cannot remediate - Satellite not configured Satellite not registered for Playbook execution
dell-per320-3.gsslabs.p...	2	Connection issue Receptor not responding
dhcp145-118.rdu.redhat...	1	Connection issue Receptor not responding
Direct connection	80	Cannot remediate - Direct connection. Connect your systems to Satellite to automatically remediate. Learn how to connect

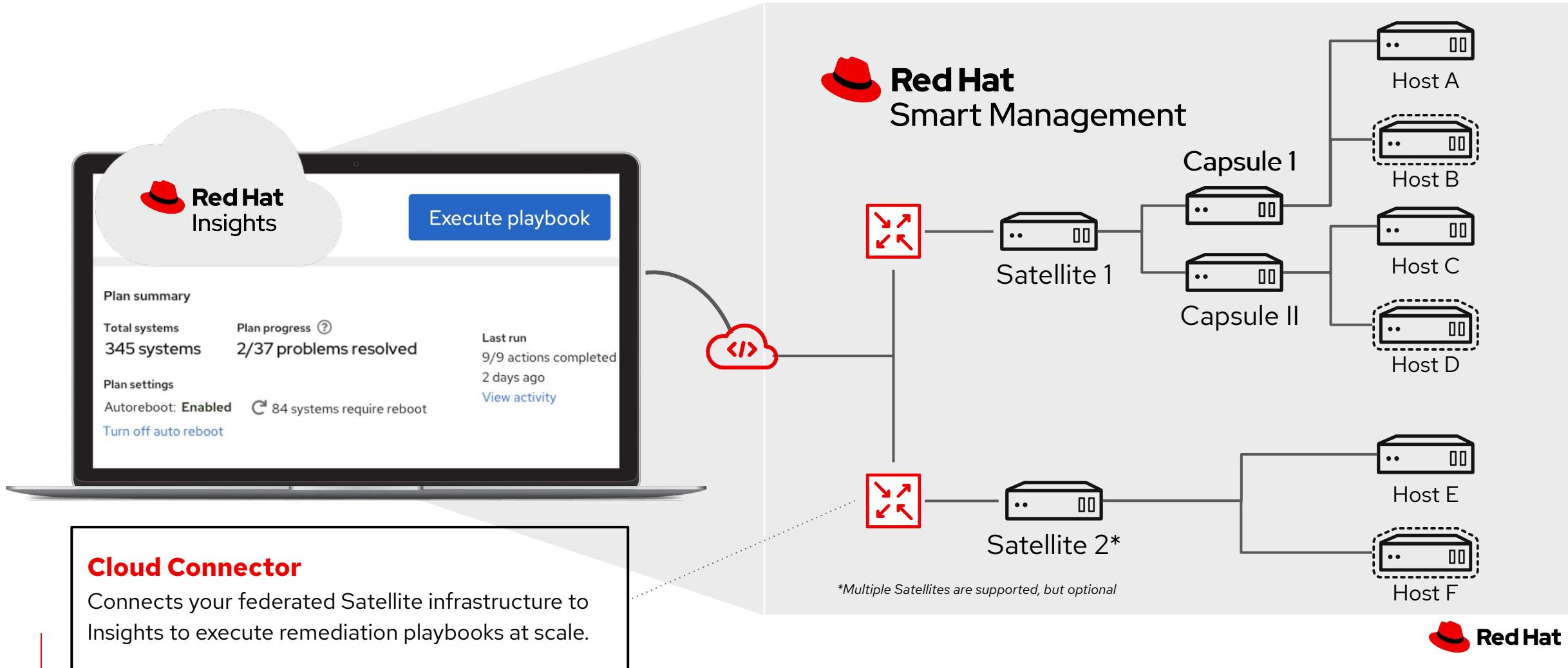
Execute playbook on 8 systems

Download playbook



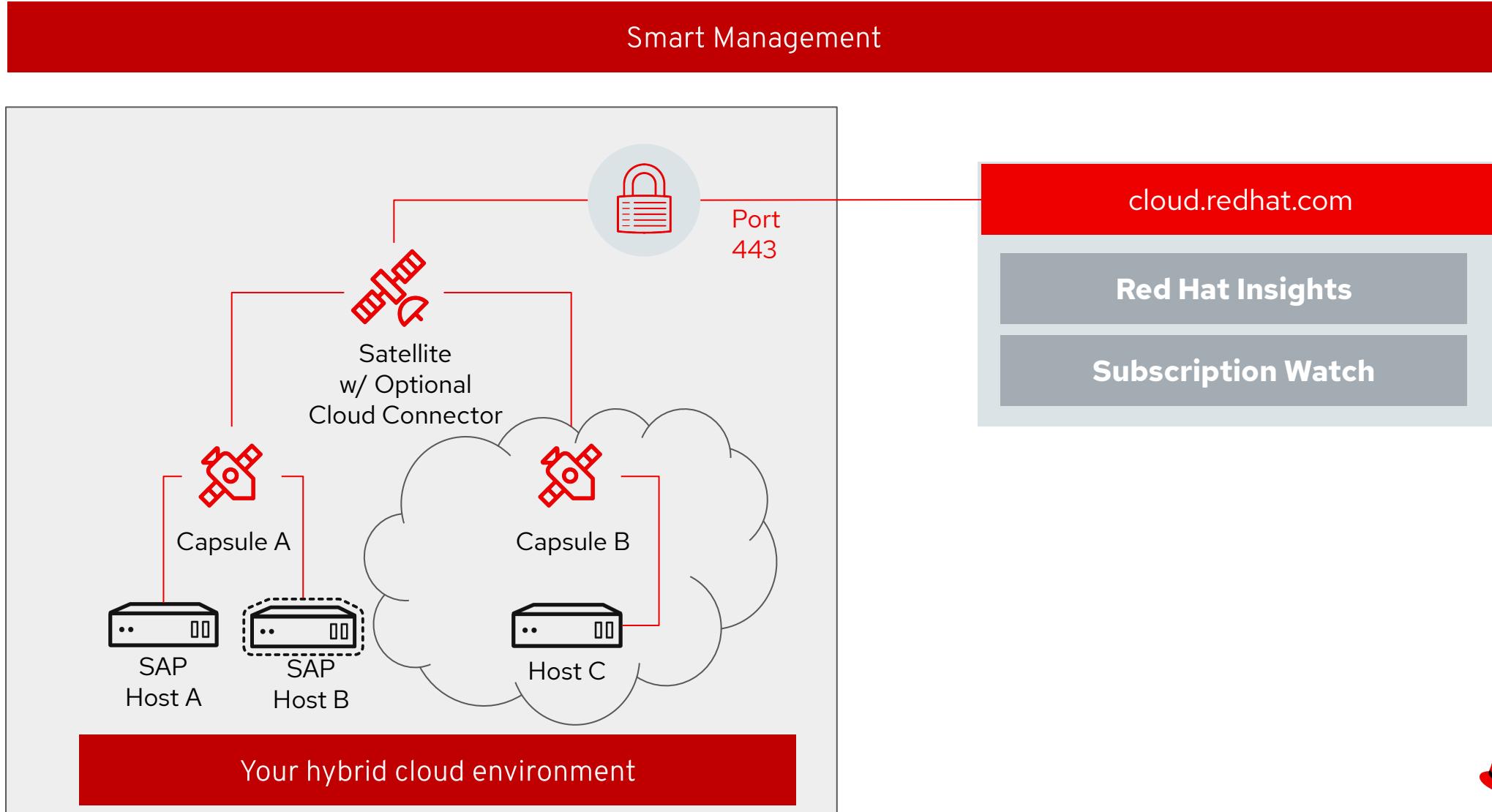
Red Hat Smart Management Cloud Connector

Smart Management subscription enables push-button remediation of issues identified by Insights



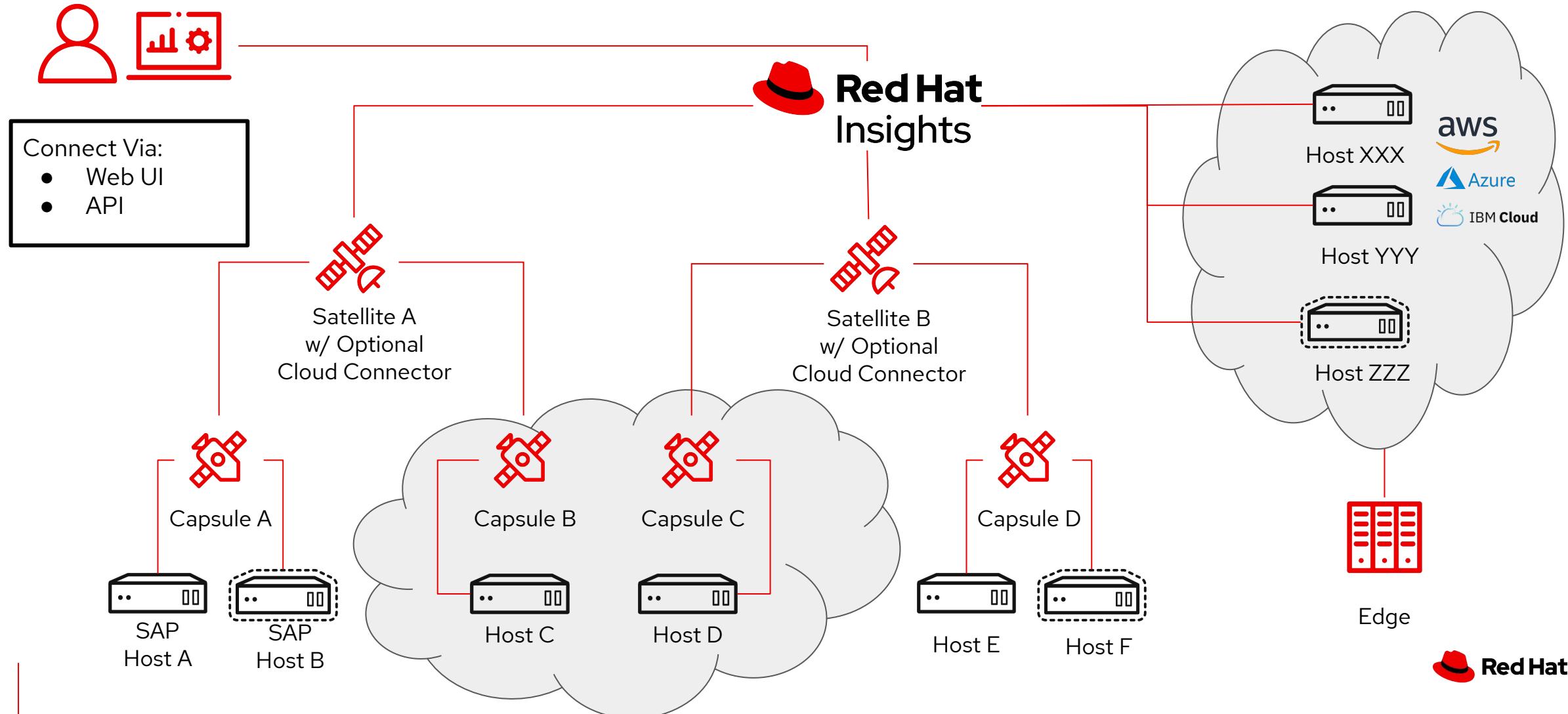
Insights and Smart Management

Smart Management subscription enables push-button remediation of issues identified by Insights.



Insights and Smart Management

Use Insights to get a centralized view of all hosts in your environment, even across multiple Satellites

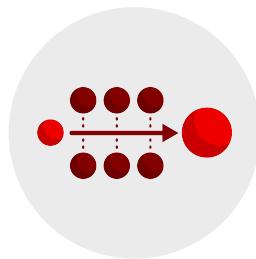


Introduction to Satellite

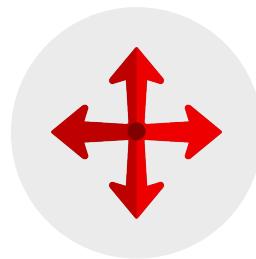
Why Red Hat Satellite?



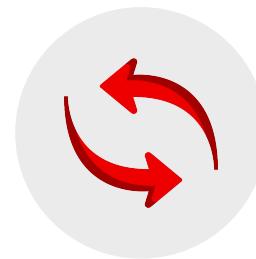
Manage Red Hat®
infrastructure



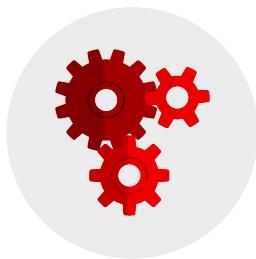
Streamlined
content management



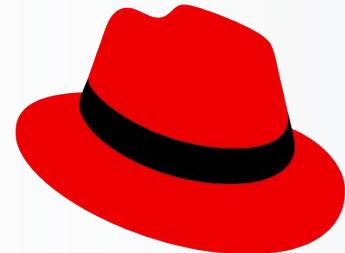
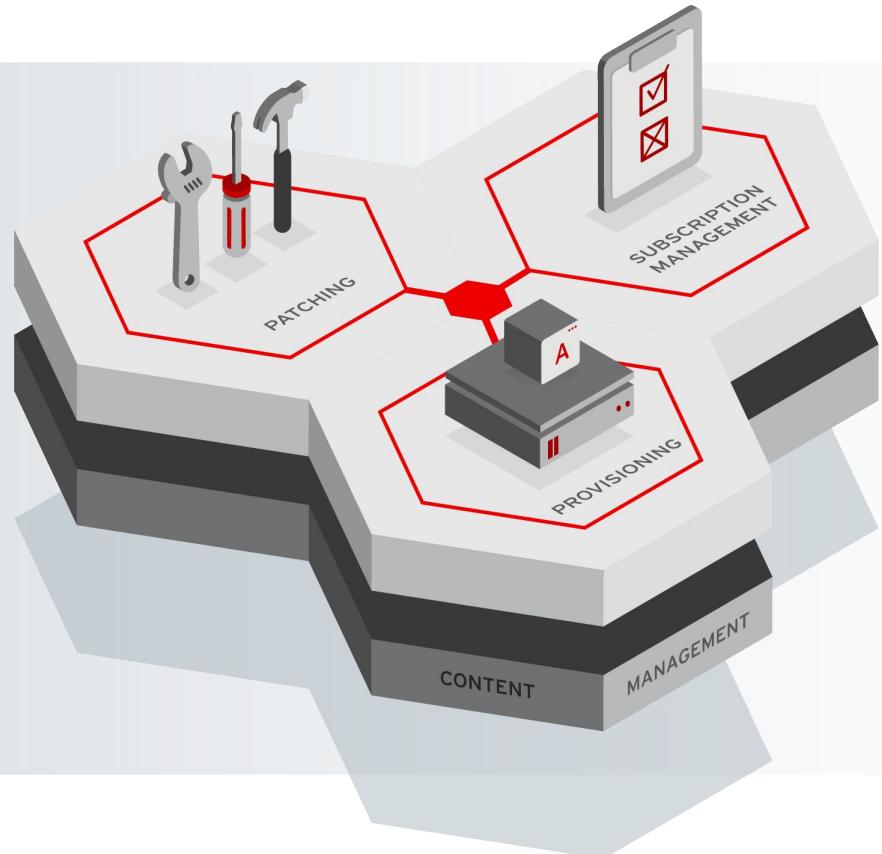
Developed to scale



Simplified
system integration

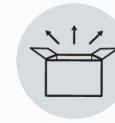
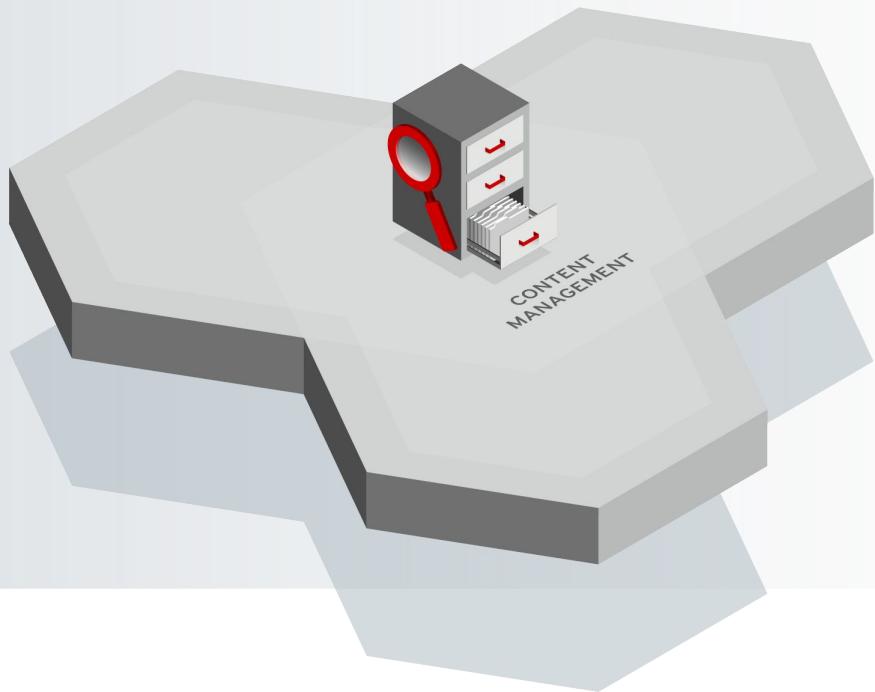


Enhanced drift
and configuration
management

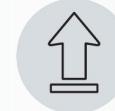


Red Hat Satellite

Content Management



Content Repository any type of content made available to any host

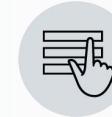
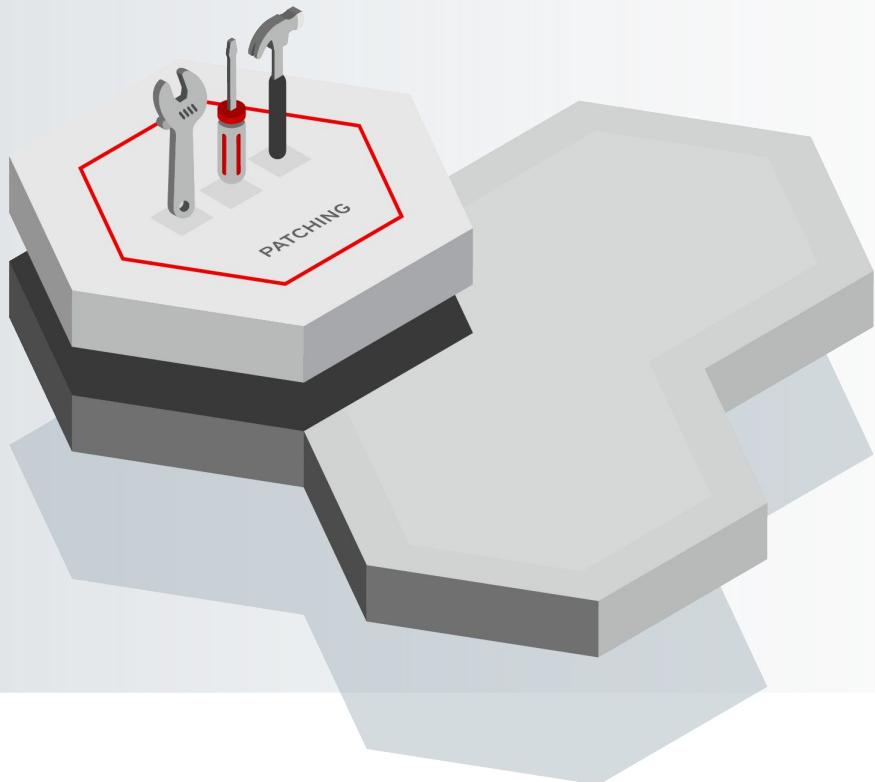


Curation of content prior to distribution



Distribution of content as close as possible to the end point.

Patch Management



Report on hosts that need updates, fixes, or enhancements

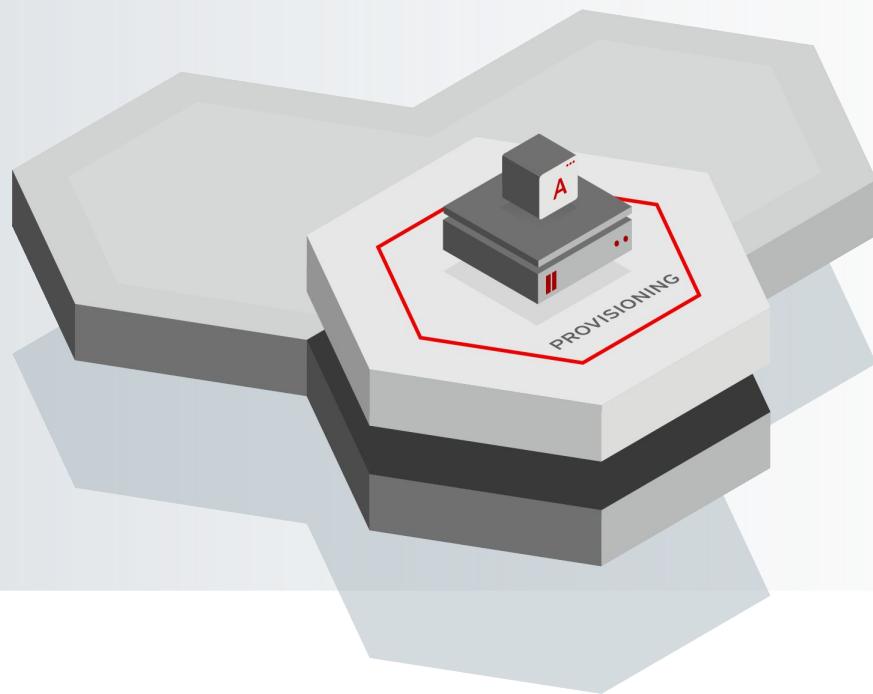


Group homogeneous systems so that you can easily work with them



Respond quickly to patching requirements using scalable automation

Provisioning Management



Provision to bare metal, virtual, private, and public clouds

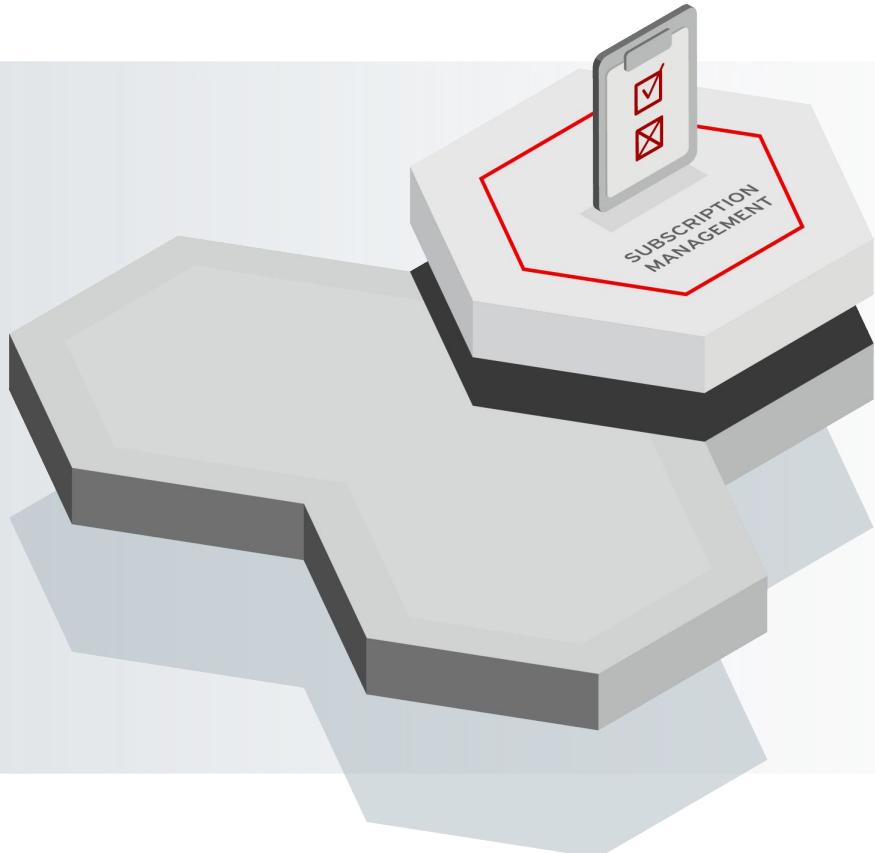


Import non-provisioned hosts



Automate using Ansible roles to perform post-provisioning steps

Subscription Management



Centrally manage subscription usage

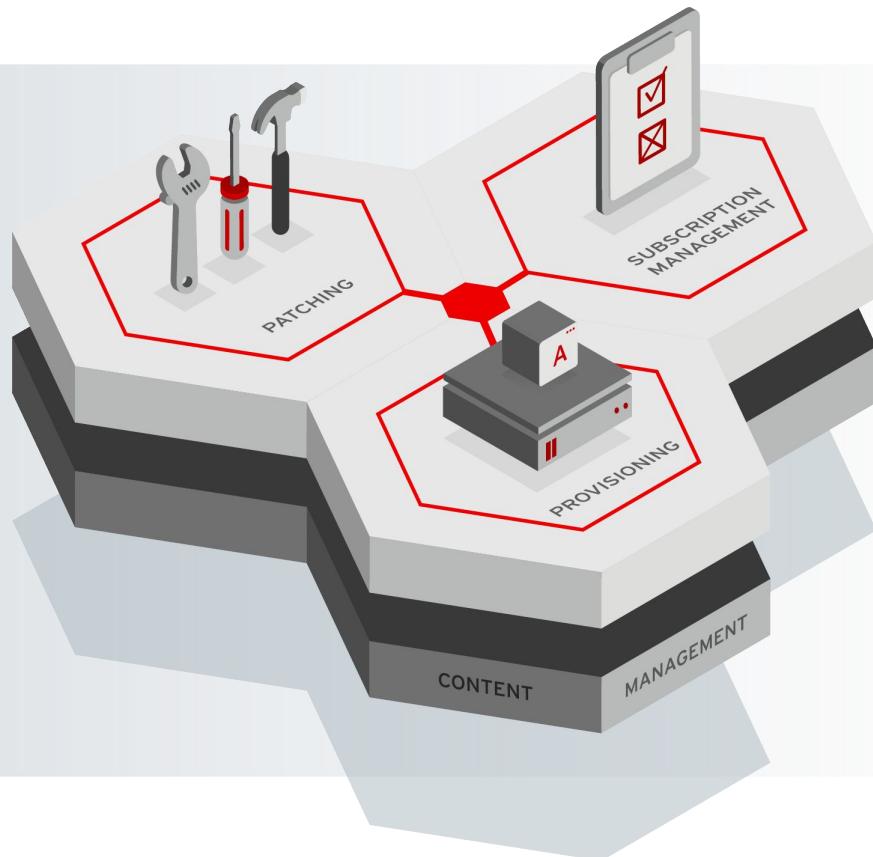


Maintain accurate inventory and utilization information



Report on subscription consumption

Additional Satellite Capabilities



Configuration Management using Ansible



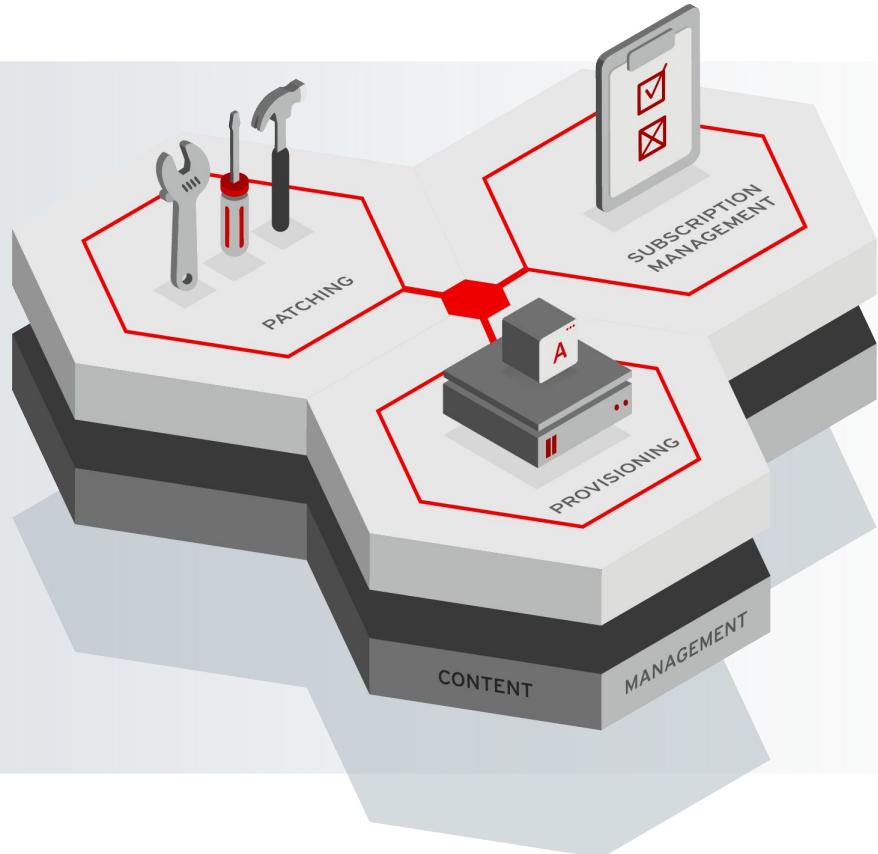
Automation through integration with Ansible Tower



Compliance using OpenSCAP policies



Red Hat Satellite



Standard Operating Environment hosts are the same across your environment



Reliable and Resilient Using Red Hat Insights



Secure your systems are patched, up to date, and compliant with security policies



Confidence in your subscription utilization

IDC ROI Study of Red Hat Satellite

A single system administrator using Red Hat Satellite can manage more Red Hat Enterprise Linux servers and cut administration costs.

KEY RESULTS:

416%

5 year ROI

28%

Reduction in
total cost of operations

6 MONTH

Payback period

56%

More efficient patching

78%

Faster deployment of new VMs

56%

More efficient IT
infrastructure management

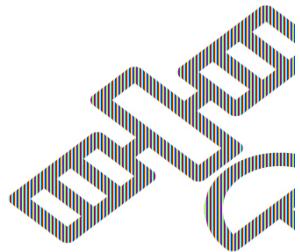
*Source: [Satellite IDC Business Value Whitepaper](#)



How Satellite Works

Deployment Models

Red Hat Satellite components



Red Hat Satellite Server

- Facilitates multi tenant services
- Offers on-premise repository management
- Gives user and group role-based access control (RBAC)
- Delivers powerful user interfaces (GUI, API, and CLI)*
- Exports content to other Satellite servers



Red Hat Capsule Server

- Allows scaling of your Satellite environment
- Provides local content, provisioning, and integration services
- Discovers new physical and virtual machines

*Graphical user interface (GUI), application program interface (API), and command line interface (CLI)

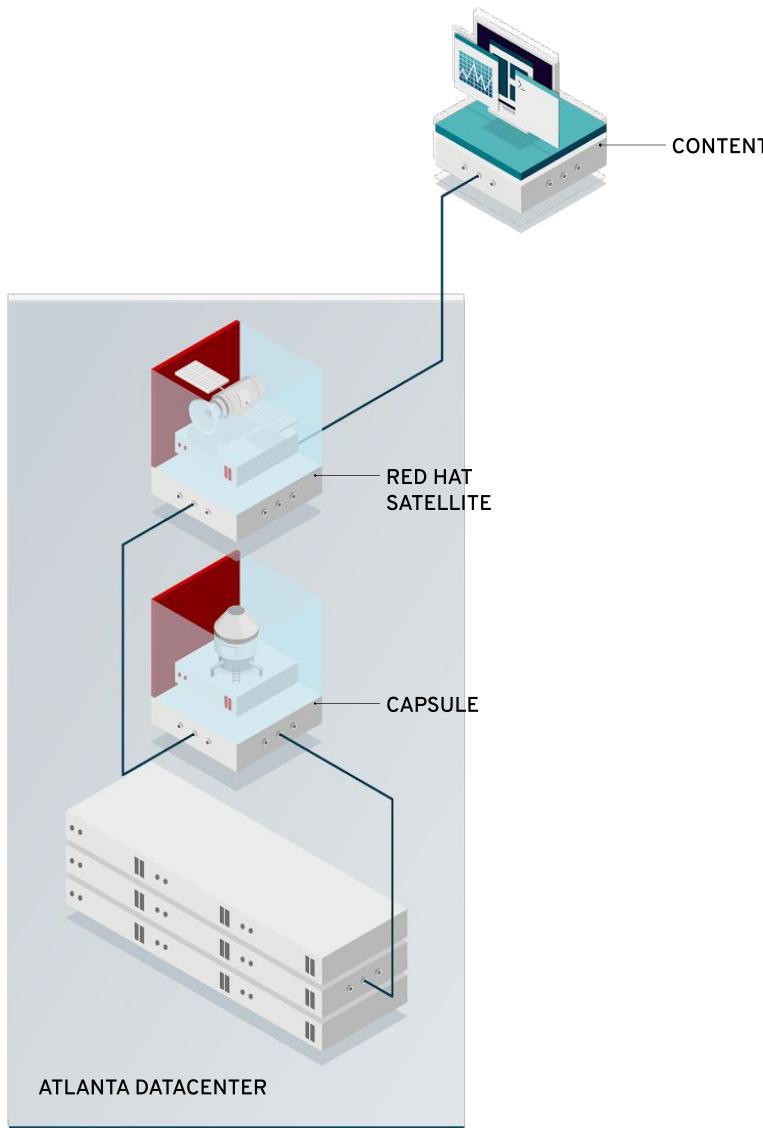


Improve scalability
and automation with
capsule servers.

Red Hat® Satellite

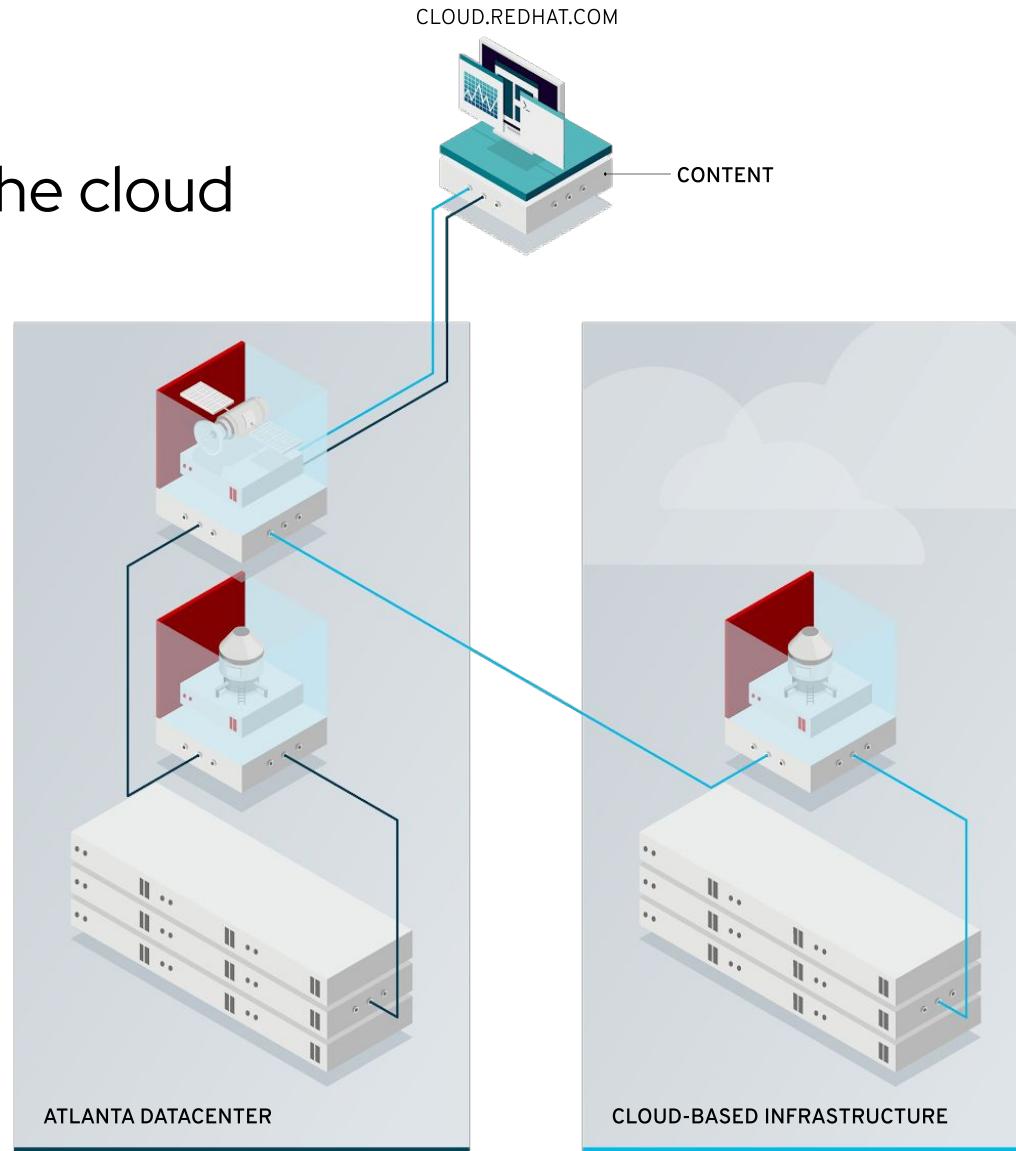
Simple Scenario

CLOUD.REDHAT.COM



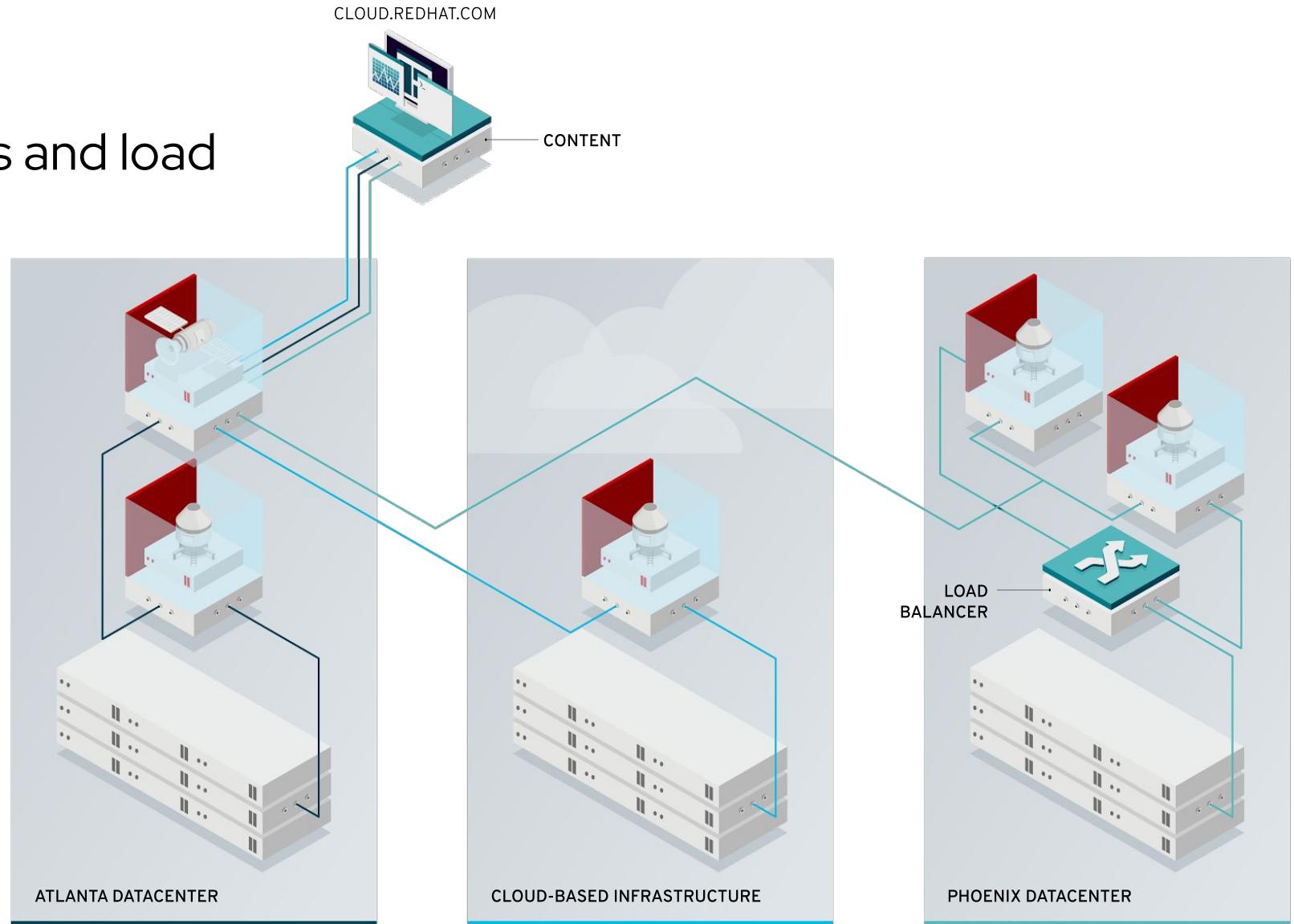
Red Hat Satellite

On-premise and in the cloud

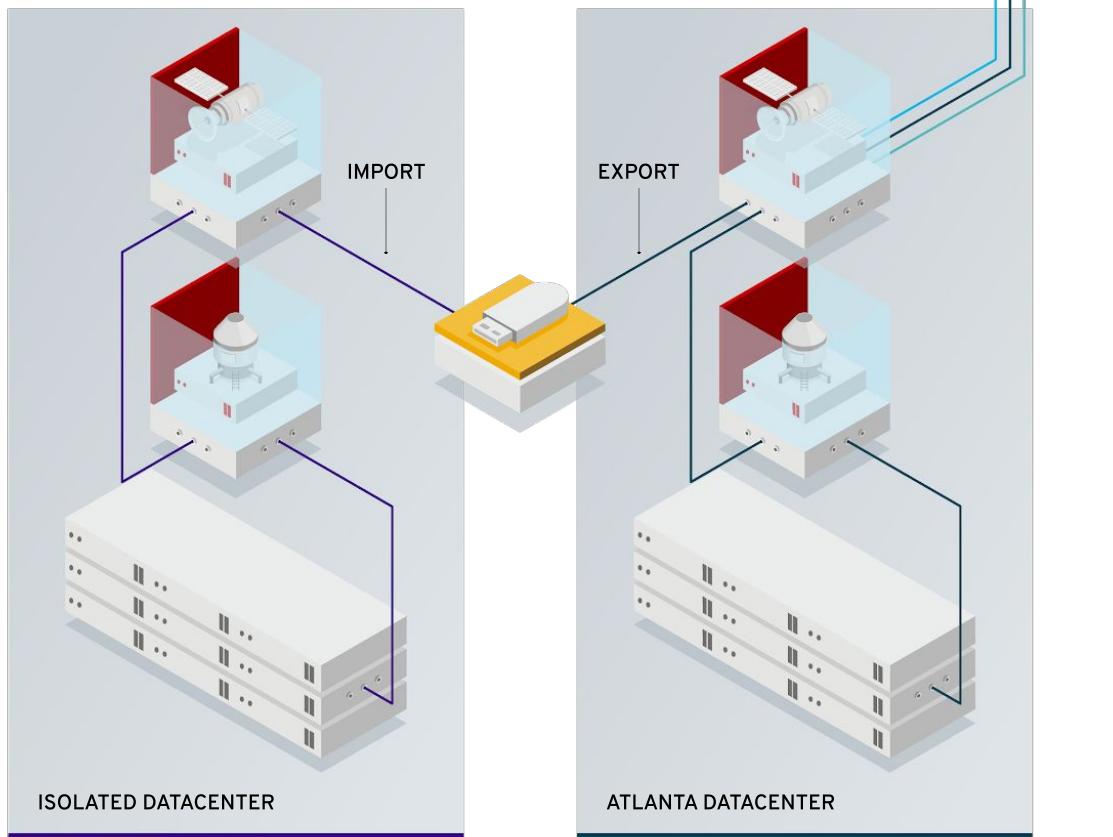


Red Hat Satellite

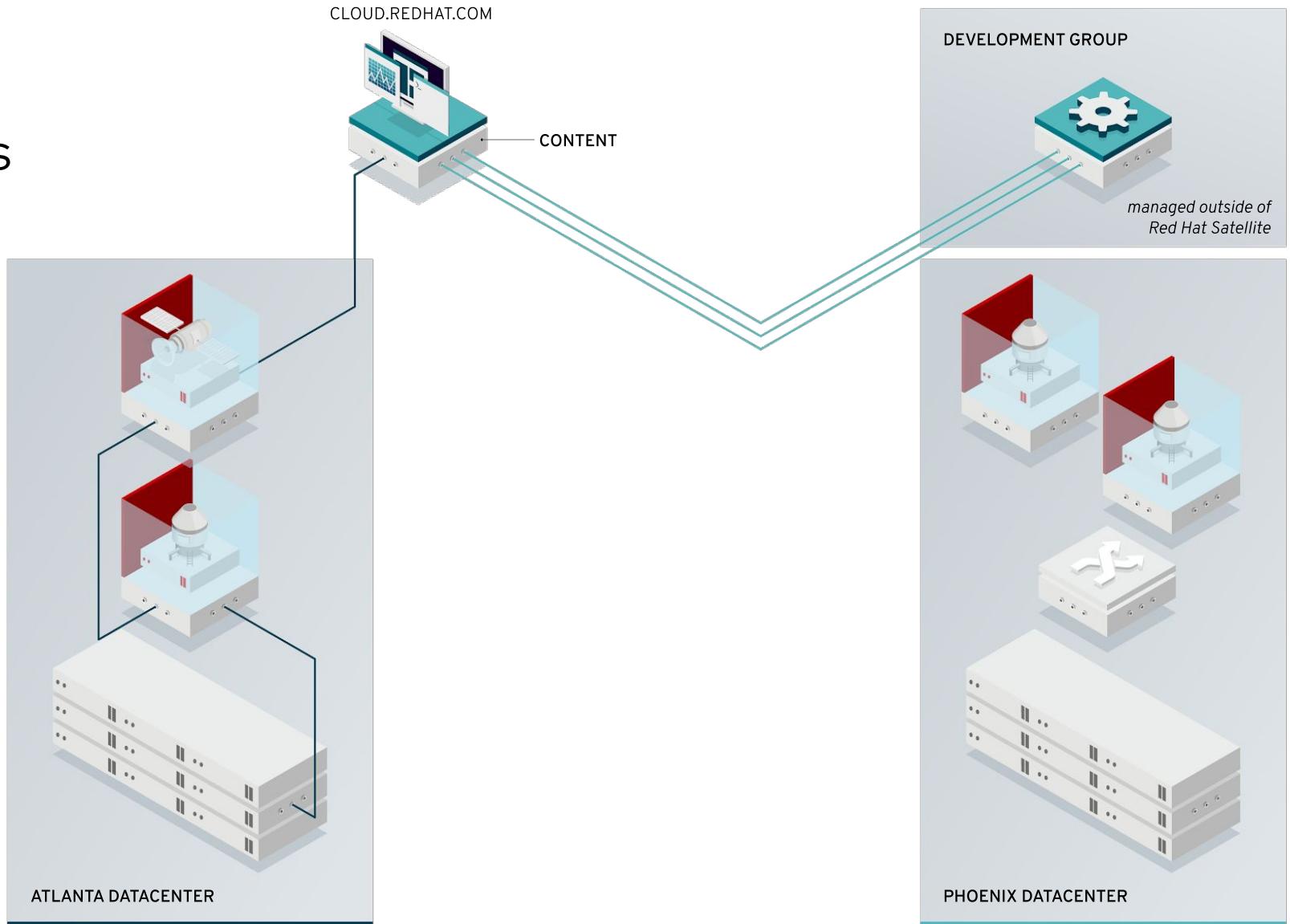
Multiple Datacenters and load balanced capsules



Red Hat Satellite in an air-gapped environment

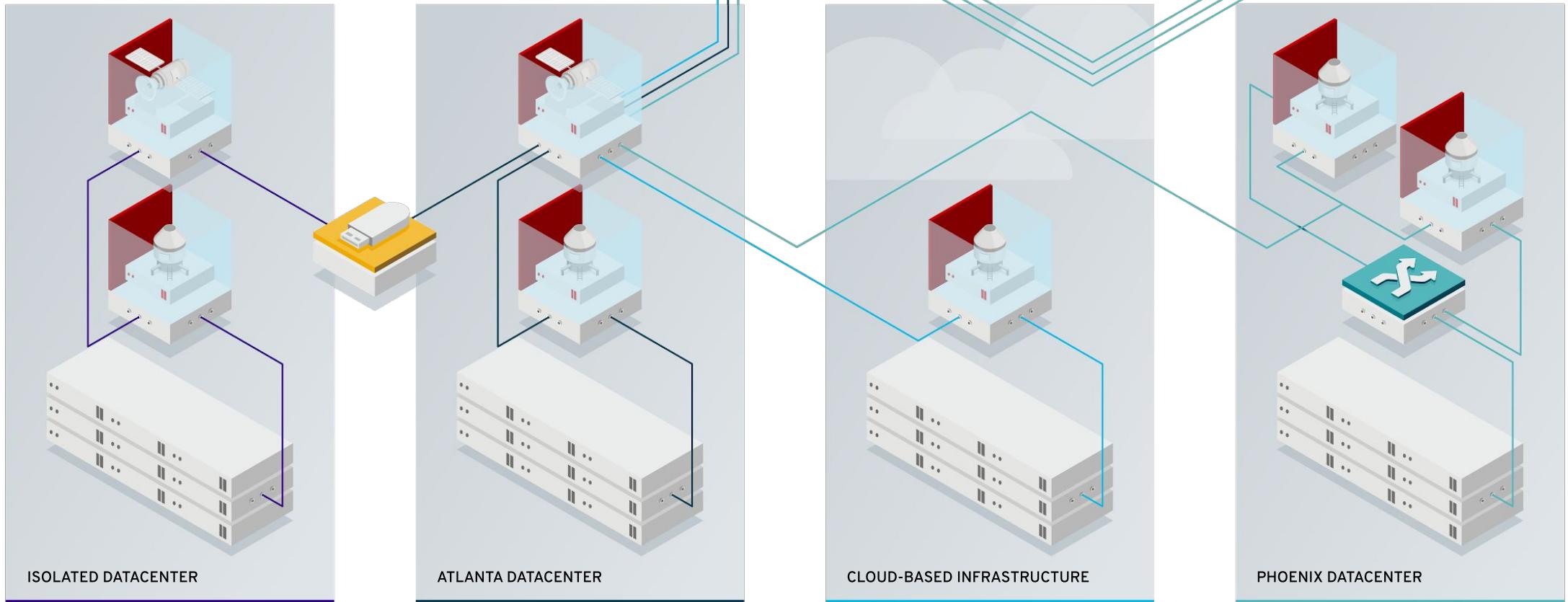


Red Hat Satellite with Red Hat Insights



Red Hat Satellite

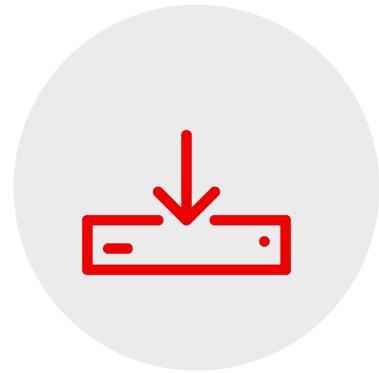
Support for your
complex environments



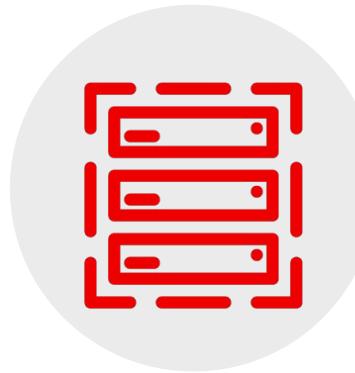
Satellite 6.8 New Features

Satellite 6.8 theme

Focus on Satellite and Capsule upgrade improvements, expanded provisioning options, and IPv6 support



Upgrade
Improvements



Provisioning



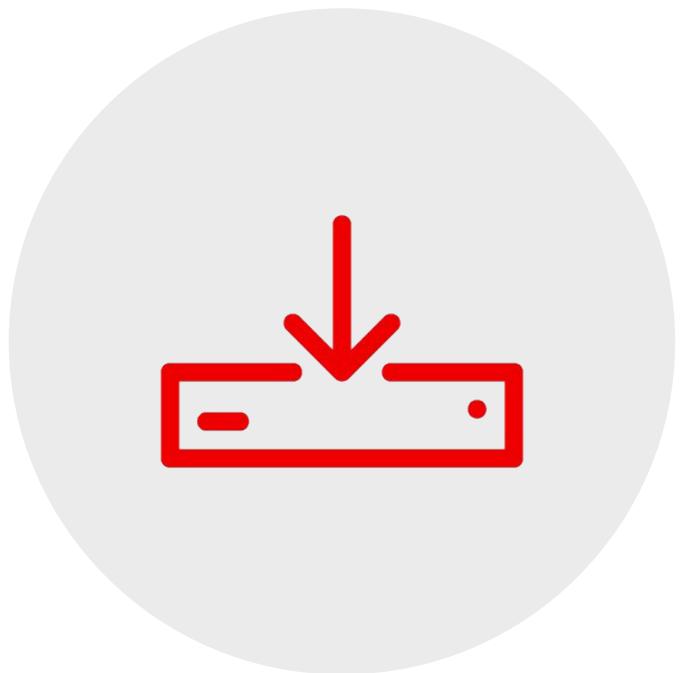
IPv6 Support

Red Hat Satellite and Satellite Capsule Servers must be installed on a Red Hat Enterprise Linux® 7 Host

Upgrade Improvements

Making Satellite upgrades
easier than ever.

Upgrade Improvements



Independently upgrade Satellite and Capsules

Upgrade the Satellite during one maintenance window and the Capsule(s) during a later maintenance window.

Capsule Upgrade Automation

Introduces a remote execution job that will automate the upgrade of the capsule infrastructure.

Satellite-maintain on Capsules

Capsule servers use the same Satellite-maintain processes that the Satellite server uses.

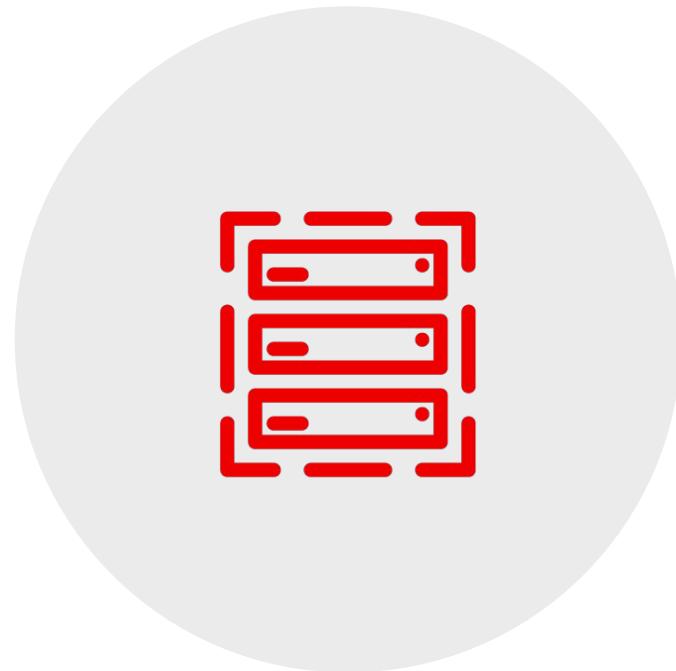
Self-updating Foreman-maintain

The foreman-maintain package updates itself when you run the Satellite upgrade or upgrade-check commands.

Provisioning

Enhancements to
provisioning

Provisioning enhancements



HTTP UEFI Support

Support for UEFI HTTP Provisioning

Azure Compute Resources improvements

Adds ability to attach additional volumes in the VM and support for multiple network interfaces. Includes support for RHEL bring your own subscription (BYOS) Gold Images

Azure Support for custom images

Support for shared custom images

IPv6 Support

Full support for IPv6

IPv6 Support



IPv6 support

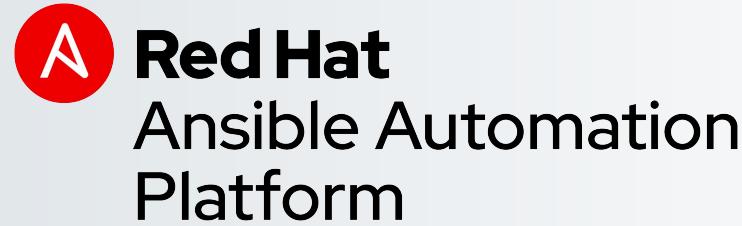
Support for IPv6 for Satellite and Capsules

Automation Enhancements

Additional Automation
support

Automation enhancements

Continuing improvements with Red Hat Ansible® Automation Platform



Red Hat Satellite Ansible Collection

Satellite Collection in Ansible Automation Hub or via RPM which include Ansible modules for interacting with the Satellite API.

RHEL Management Enhancements

Additional RHEL support

RHEL Management enhancements



**Red Hat
Enterprise
Linux**

Upgrades with LEAPP

Satellite can use Remote Execution to start the LEAPP process to upgrade a host to RHEL 8.

Awareness of if a reboot is needed using Traces

Traces will let you know if a system needs to be rebooted after an update, as well as details on which processes require the reboot.

With 6.8 Traces is moving out of Tech Preview into fully supported status.

Security

Enhancements to security

Security enhancements



Common Access Card support via Red Hat Single Sign On

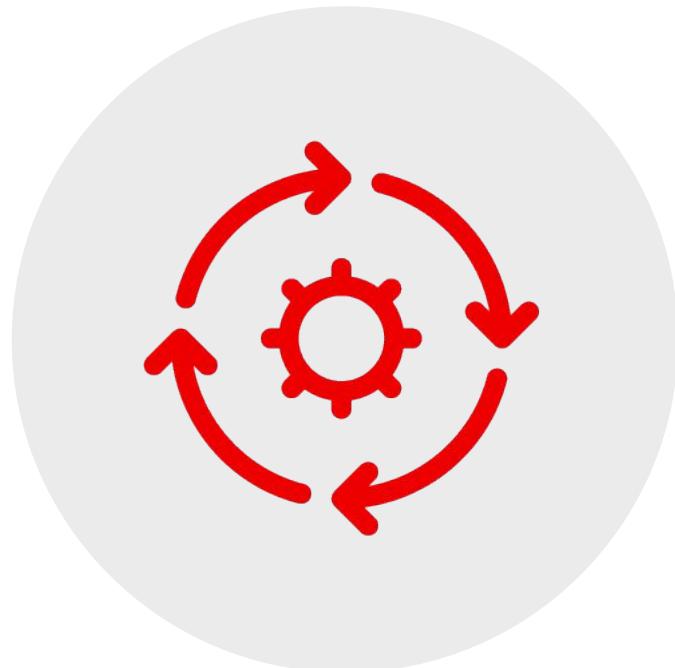
Support for Common Access Card (CAC) with Red Hat Single Sign On

Introduced in 6.7 as Tech Preview, this feature is fully supported in Satellite 6.8.

Technology Updates

Updates to components
that are under the covers

Technology Updates



Ansible Update

Upgrade underlying Ansible to 2.9

Puppet Update

Update underlying Puppet to Puppet 6

PostgreSQL Update

Upgrade underlying PostgreSQL to version 12

Little Bites

Small things that make a
big difference.

Little Bites



Performance and Scale Improvements

Always working to improve performance and scalability

Usability improvements

Opt-in email notification of subscription expiration

Tasks cleanup button

Insights plugin improvements

Cloud Connector Improvements

Red Hat Satellite Upgrade

Continuous Upgrade Improvements

- Standardized on Satellite-maintain for upgrade
- Includes pre and post upgrade checks
- Implemented version locking to avoid unexpected package updates
- Lots of focus over the last several releases on upgrade performance
- Satellite team has invested in automated QE testing of upgrades

If concerned about upgrades, open a [proactive support ticket](#) prior to your upgrade

More details are on the [Satellite blog](#).

Red Hat Satellite Upgrade Information

Satellite 6.x to 6.7

- ▶ Follow the Upgrading and Updating Red Hat Satellite Guide

Product docs page: https://access.redhat.com/documentation/en-us/red_hat_satellite/

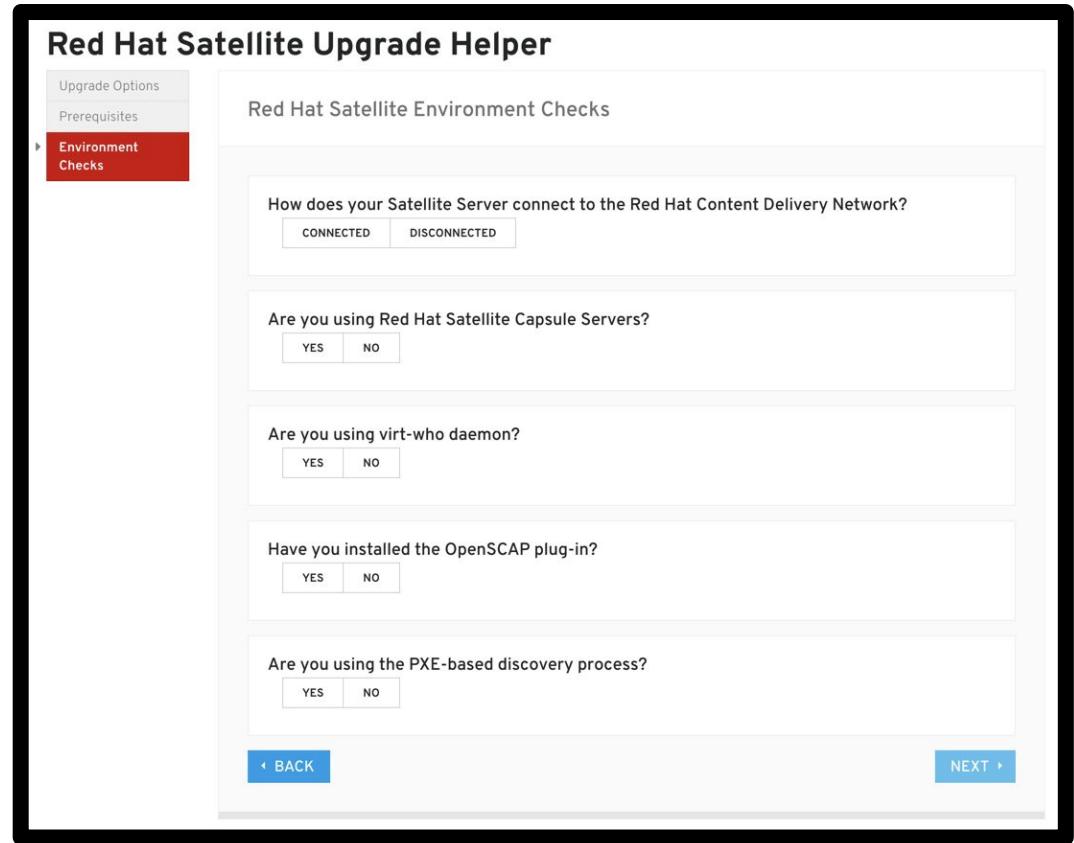
Red Hat Satellite Upgrade Helper

<https://access.redhat.com/labsinfo/satelliteupgradehelper>

Tool designed to help you upgrade from:

- ▶ 6.4 to 6.5
- ▶ 6.5 to 6.6
- ▶ 6.6 to 6.7
- ▶ 6.7 to 6.8

Upgrade helper presents upgrade steps and includes extra steps to help prevent any known issues.



Red Hat Satellite integration with Red Hat Insights

Links to related Insights material

For Insights resources see:

Insights Master deck:

<https://docs.google.com/presentation/d/1fassacJLiBXCORsLXFa671XsApT-MPmDNs-RPvMulPs/edit?usp=sharing>

Internal Smart Management Technical assets not otherwise captured here:

<https://mojo.redhat.com/docs/DOC-1197201>

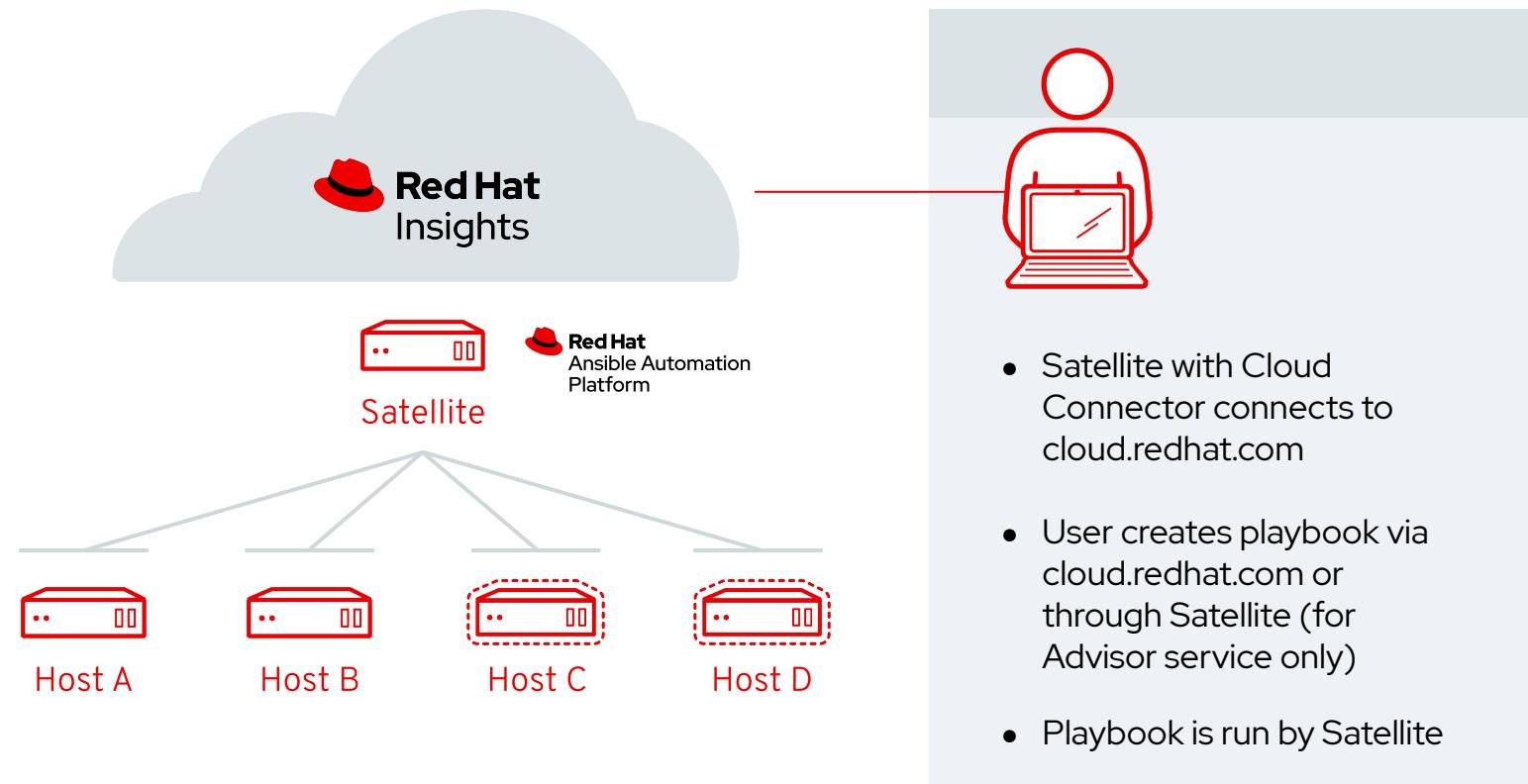
Note: Links are internal Red Hat links - Partners may not be able to access.



Why use Satellite and Insights together?

- Insights uses Satellite as a proxy automatically
- Satellite has Advisor service integrated in the Satellite UI
- Insights has rules specific to Satellite to keep Satellite running its best
- When used with Cloud Connector, you can fix Insights issues from cloud.redhat.com

Build and run playbooks in Red Hat Satellite



Insights Topic for Satellite

The screenshot shows the Red Hat Insights web interface. The left sidebar has a dark theme with the Red Hat logo and navigation links: Home, Red Hat Insights, Dashboard, Advisor (selected), Recommendations, Topics, Vulnerability, Compliance, Custom Policies, Drift Analysis, Subscription Watch, System Patch Manager, Inventory, Remediations, and Documentation. The main content area is titled "Red Hat Satellite 6" and displays a message: "Ensure the high availability of your Satellite 6 deployment configuration using these remediation actions." Below this is a section titled "Rules". The "Rules" table has columns: Description, Added (sorted by date), Total risk, Systems, and Ansible. There are 14 rules listed, with the first five shown in detail:

Description	Added	Total risk	Systems	Ansible
Satellite client fails to connect to Satellite server when dependencies of katello-agent are installed from non-Red Hat repositories	6 months ago	Important	4	✓
Decreased stability and/or performance due to filesystem over 95% capacity	7 months ago	Moderate	1	No
Decreased performance or key services failure occurs when Satellite 6 runs without recommended PassengerMinInstances setting for apache service	7 months ago	Moderate	11	✓
Decreased performance or key services failure occurs when Satellite 6 is running without recommended PostgreSQL configuration	7 months ago	Moderate	12	✓
Decreased performance or key services failure when Satellite 6 is running without recommended Apache service configuration	7 months ago	Moderate	19	✓
... (remaining 9 rules)	... (remaining 9 dates)	... (remaining 9 risk levels)	... (remaining 9 system counts)	... (remaining 9 Ansible status)



Red Hat Satellite 6

Ensure the high availability of your Satellite 6 deployment configuration using these remediation actions.

Rules

Description ▾ Filter by description

1 - 10 of 14 ▾

<< < > >>

1

of 2

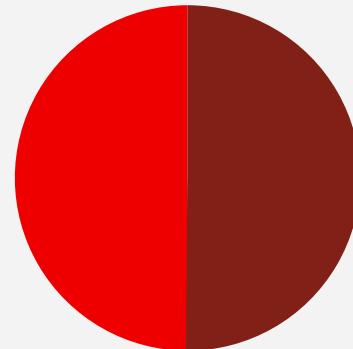
Description	Added	Total risk	Systems	An Ansible	⋮
Satellite client fails to connect to Satellite server when dependencies of katello-agent are installed from non-Red Hat repositories	6 months ago	Important	4		⋮
Decreased stability and/or performance due to filesystem over 95% capacity	7 months ago	Moderate	1	No	⋮
Decreased performance or key services failure occurs when Satellite 6 runs without recommended PassengerMinInstances setting for apache service	7 months ago	Moderate	11		⋮
Decreased performance or key services failure occurs when Satellite 6 is running without recommended PostgreSQL configuration	7 months ago	Moderate	12		⋮
Decreased performance or key services failure when Satellite 6 is running without recommended Apache service configuration	7 months ago	Moderate	19		6



Satellite, Subscription Watch & Simple Content Access

Subscription Watch

Simple Content Access



*Like chocolate and peanut butter:
good separately, but better together.*

*Subscription Watch brings new transparency in reporting for
customers using Simple Content Access*

Customers can use either, neither, or (ideally) BOTH!

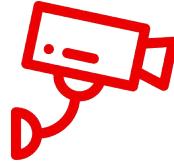
Simple Content Access:

Current enforced subscription model

Overview of simple content access

How to enable and provide governance

Current Enforced Subscription Model



Mediocre Enforcement

Enforcement fails to block or over-blocks content for a number of complex reasons.

Ineffective enforcement leads to insecurity and frustration.



Operationally Inflexible

Defined entitlement pools limit operational agility.

These pools complicate common, simple tasks like hardware migrations.

A ***little more*** or a ***little less*** can be a ***big deal***.



Contractually Complex

Purchasing more subscriptions or different subscriptions creates new entitlement pools, making the complex tooling even more complex.

Co-terming fragmentation can and may exist for the procurement/accounting persona.

OVERVIEW

Simple Content Access

Simple content access is simply a technical facility to make it easier to use the items which customers have paid to use.

As an attribute set on a Red Hat Satellite manifest, this changes how Satellite behaves with regards to entitlements.

When enabled, simple content access:

- ❑ Eliminates the requirement of entitlements being attached to systems registered to a Satellite infrastructure.
 - ❑ Those systems have access to whatever content is in their repositories (or Content View)
 - ❑ At least one corresponding subscription must exist within a the relative Satellite organization.
- ❑ Moves enforcement and governance from Red Hat Subscription Management tooling to activation keys and content views.
- ❑ Is a feature of Red Hat Satellite 6 (and in the future, Red Hat Subscription Management), and can be enabled on a per-manifest basis by an Organization Administrator.
- ❑ Does not affect your Red Hat contracts.

Note: At this time, customers in APAC must submit a request through their Sales team in order to enable SCA.

OVERVIEW

Simple Content Access



Simple Content Access IS

A tool to easily use Red Hat products that have already been purchased

Available for customers using Red Hat Satellite 6.5+

Has governance via the use of activation keys and content views



Simple Content Access IS NOT

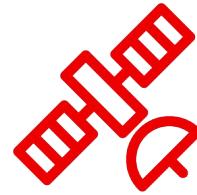
Contract Impacting

An 'all-you-can-eat' contract

Able to provide access to products not yet purchased

Note: At this time, customers in APAC must submit a request through their Sales team in order to enable SCA.

How to enable and provide governance

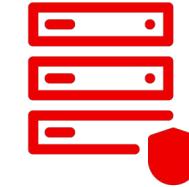


Satellite Connected/Disconnected

Globally enable Simple Content Access in Red Hat Subscription Manager

Locally enable one or more Satellite manifest to use Simple Content Access

Refresh manifest in Red Hat Satellite



Red Hat Subscription Management

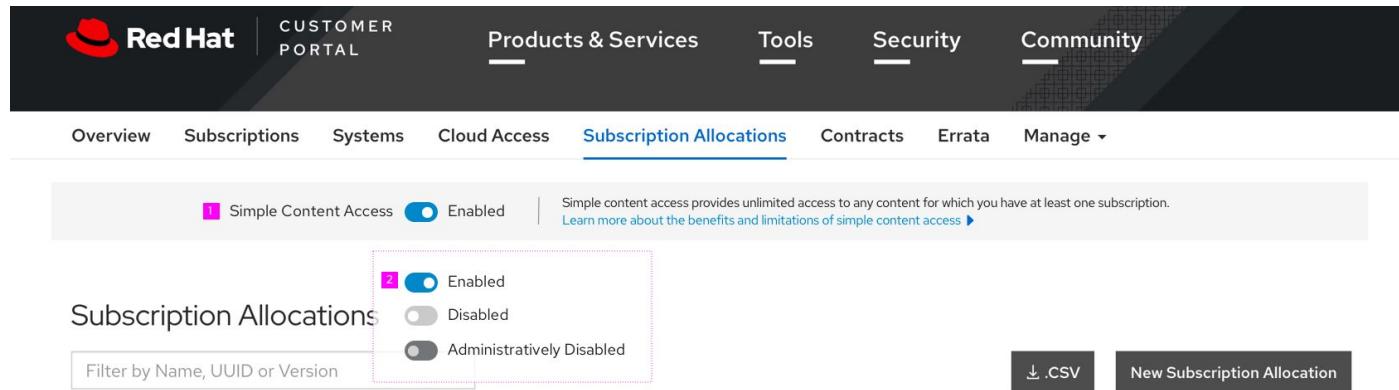
** Not yet available **

Note: At this time, customers in APAC must submit a request through their Sales team in order to enable SCA.

Enabling Simple Content Access

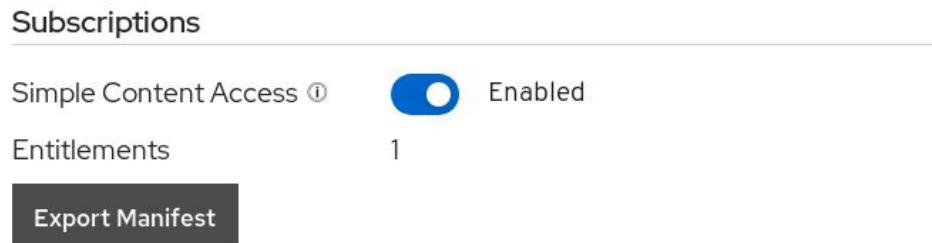
1) Enable Globally: Before Simple Content Access can be made available on specific Subscription Allocations it must be enabled at the global / account level.

- https://access.redhat.com/management/subscription_allocations



The screenshot shows the Red Hat Customer Portal interface. At the top, there's a navigation bar with links for Products & Services, Tools, Security, and Community. Below the navigation bar, a sub-navigation menu includes Overview, Subscriptions, Systems, Cloud Access, Subscription Allocations (which is underlined to indicate it's the active page), Contracts, Errata, and Manage. In the main content area, there's a section titled 'Subscription Allocations'. Within this section, there's a sub-section for 'Simple Content Access' with a toggle switch labeled 'Enabled'. A status message below the toggle says: 'Simple content access provides unlimited access to any content for which you have at least one subscription.' There are also buttons for '.CSV' and 'New Subscription Allocation'.

2) Enable Locally: Choose an allocation from the list above and enable on each desired manifest.



The screenshot shows the 'Subscriptions' page. It features a header 'Subscriptions' and a section for 'Simple Content Access' with a toggle switch set to 'Enabled'. Below this, there's a section for 'Entitlements' showing a count of '1'. At the bottom of the page is a prominent 'Export Manifest' button.

3) Refresh Manifest on Satellite: As with any manifest update, in order for it to take effect on the Satellite, each updated manifest requires a refresh.

How to enable and provide governance

Activation Keys > RHEL8

Activation Key reference: [Satellite Content Management Guide](#)

This activation key may be used during system registration. For example:
subscription-manager register --org="Operations" --activationkey="RHEL8"

Basic Information

Name:	RHEL8
Description:	
Host Limit:	100

System Purpose

Service Level:	
Usage Type:	
Role:	Red Hat Enterprise Linux Server
Add ons:	

Activation Key Content

Release Version: 8
Environment:

Content View: RHEL8

Note: At this time, customers in APAC must submit a request through their Sales team in order to enable SCA.

Indicates SCA is enabled

Subscription Watch:

Overview of subscription watch

Requirements

Data Collection

OVERVIEW

Subscription Watch

Subscription watch is a SaaS tool that provides unified reporting of subscription utilization across a hybrid infrastructure, including physical, virtual, on-premise, and cloud.

Subscription watch provides:

- ❑ A single pane view of historic, account-wide, subscription utilization
- ❑ An at-a-glance impression of both an account's remaining subscription capacity measured against the total paid subscription threshold
- ❑ Available as a part of the cloud.redhat.com SaaS tool suite

Note: Currently available for Red Hat Enterprise Linux and Red Hat OpenShift Container Platform

OVERVIEW Subscription Watch



Subscription Watch IS

A tool that allows you to see utilization on premise and in the cloud

SaaS-based

Focused on data analytics

Minimal in setup time

Included at no additional cost

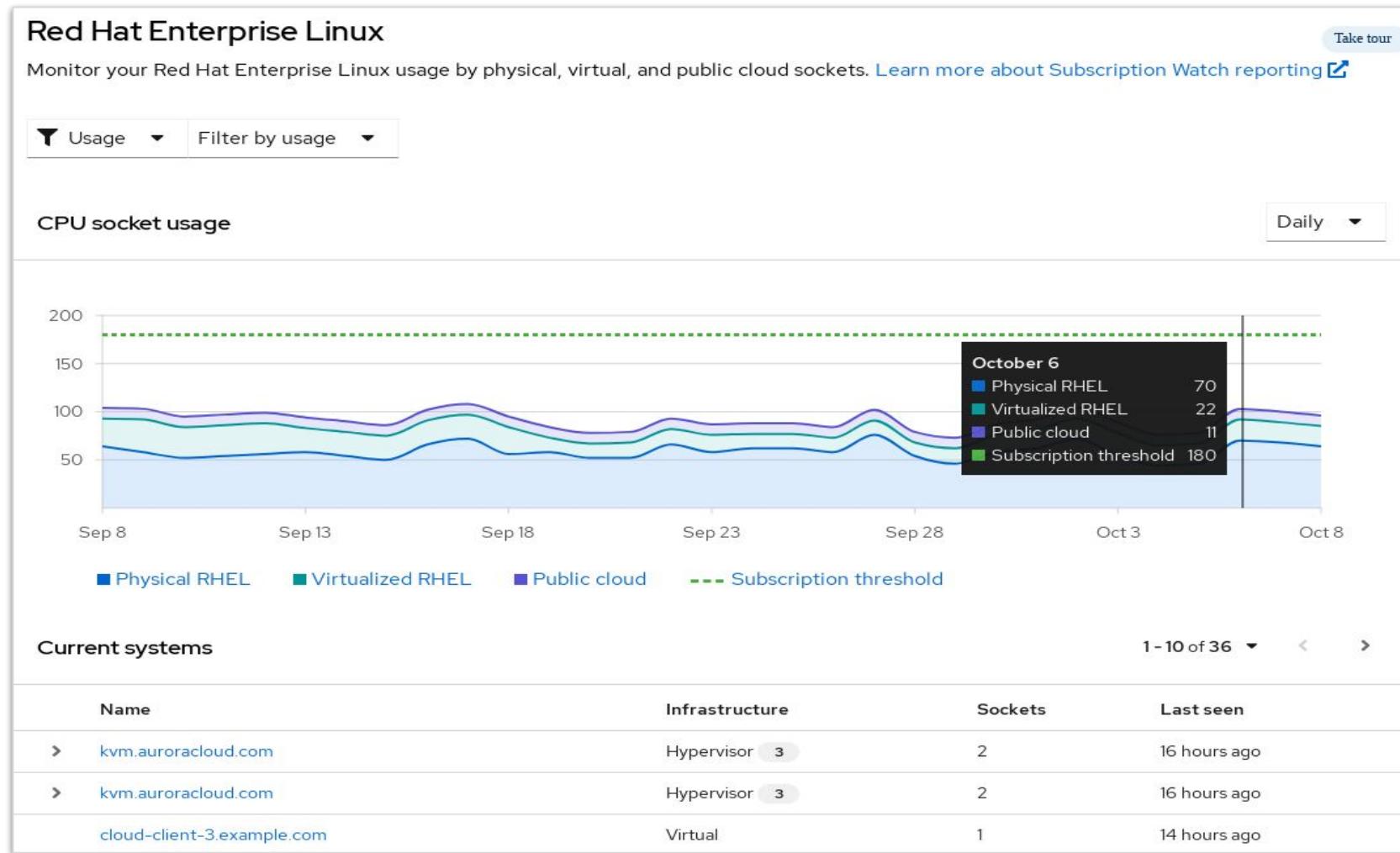


Subscription Watch IS NOT

A billing dashboard

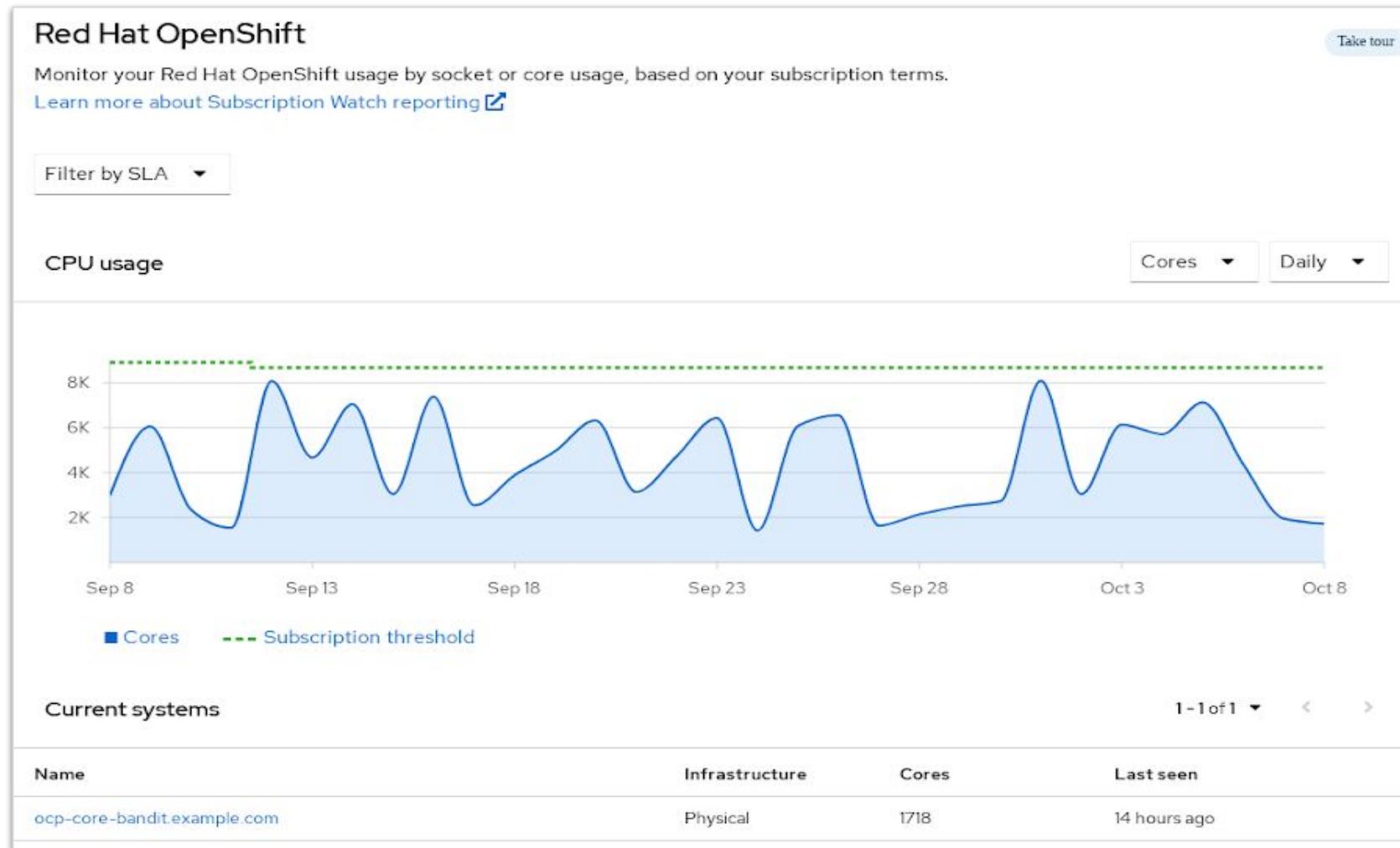
An on-demand purchasing program

Product Breakdown: Subscription Watch



<https://cloud.redhat.com/subscriptions/rhel-sw>

Product Breakdown: Subscription Watch



<https://cloud.redhat.com/subscriptions/openshift-sw>

Subscription Watch Requirements



Red Hat Enterprise Linux

One or more of the following are required for reporting data to subscription watch:

- ❑ Red Hat Satellite version(s) 6.5+
 - ❑ **Satellite Inventory Plugin** must be installed, for most instances, to provide accurate routing, logging, and deduplication of results. The inventory plug-in supports both **connected** and **disconnected** customers
- ❑ Red Hat Insights
- ❑ Red Hat Subscription Management



Red Hat OpenShift Container Platform

- ❑ Red Hat OpenShift Container Platform version(s) 4.1+ managed with the monitoring stack tools and Red Hat OpenShift Cluster Manager.
- ❑ Red Hat OpenShift Container Platform version 3.11 with RHEL nodes managed by Insights, Satellite, or Red Hat Subscription Management.

Subscription Watch Data Collection Policies

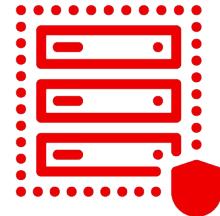


Extremely Minimal Dataset

We collect a small subset of the Insights payload.

Attributes related to:

- How to ID a system
- Installed product
- System size



All Information is Encrypted

From the time collected on the client server to transmission to the cloud.redhat.com platform



Responsible Data Governance

Well-defined access policies to the data you submit.

Data Gathered and Used By Subscription Watch



Data Remains for a Short Period of Time

We've implemented inventory age-out policies. Old systems are deleted after 30 days

Simple Content Access and Subscription Watch resources

Simple Content Access

- <https://access.redhat.com/articles/simple-content-access>
- <https://access.redhat.com/articles/5136481>

Subscription Watch

- <https://access.redhat.com/articles/subscription-watch>

How to Buy Smart Management

How do I get a Smart Management subscription?

Are you new to RHEL or renewing subscriptions?

- Buy RHEL + Smart Management SKUs

Are you adding Smart Management to existing RHEL subscriptions?

- Buy Smart Management SKU

Are you a SAP on RHEL user?

- RHEL for SAP SKU includes Smart Management already

Talk to your Red Hat sales representative about the correct SKU to buy



What do I get for Satellite with Smart Management?

SKU MCT3718 - Satellite Infrastructure Subscription

Includes 50 of any combination of Satellite or Capsule Servers.

This enables you to scale out your Satellite deployment to best suit your needs.

- Need a Satellite for Test/Dev?
- Need a Capsule in the cloud?
- Need load-balanced Capsules?
- Need an air-gapped synchronization host?

No Problem.

Note: You must purchase one Smart Management subscription for every system managed with Satellite*
Have 1,000 systems 2-socket systems? Purchase 1,000 Smart Management subscriptions.

*Smart Management subscriptions are based on 2-socket systems, same as RHEL. A 4 socket system would require 2 Smart Management subscriptions. Talk to your sales rep for full details.





IT Development Manager...

Needs

Has

Buys

Needs:

- Production Satellite
- Production Capsule

10, two-socket RHEL systems

Ten Smart Management Subscriptions which gives:

- Any combination of 50 Satellite or Capsule Servers
- Cloud Connector

Needs:

- Production Satellite
- Capsule in the cloud
- Load Balanced capsules in each datacenter

1K, two-socket RHEL systems

1K Smart Management Subscriptions which gives:

- Any combination of 50 Satellite or Capsule Servers
- Cloud Connector

*Smart Management subscriptions are based on 2-socket systems, same as RHEL. A 4 socket system would require 2 Smart Management subscriptions. Talk to your sales rep for full details.

RHEL Subscription for the Satellite and Capsule hosts are included with Smart Management.



Next Steps & Resources

Where to go to learn more

Enable Insights!

Included with your Red Hat Enterprise Linux subscriptions

GET STARTED WITH RED HAT INSIGHTS



Register

Register your systems with the Red Hat Insights client



Review

Identify the connected RHEL hosts you are interested in analyzing.



Remediate

View your results at cloud.redhat.com or via Satellite integration.

Next steps

Using Satellite 6.5 or earlier?



Satellite 6.5 and older versions are EOL.



Move to the latest version of Satellite 6.

Use the Upgrade Helper to plan your upgrade:

<https://access.redhat.com/labs/satelliteupgradehelper/>

Red Hat Smart Management:

Additional resources and next steps

Learn more about Red Hat Smart Management

Visit the Smart Management product page

<https://red.ht/2EBAC26>

Visit the FAQ

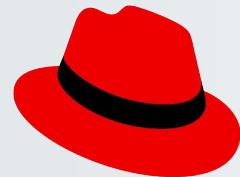
<https://www.redhat.com/en/resources/smart-management-faq>



▶ Watch the [intro video](#).



▶ Read the [Smart Management blog](#).



Red Hat Satellite

Satellite resources

- [Red Hat Satellite blog](#)
 - [Red Hat Satellite product page](#)
 - [Red Hat Satellite customer portal](#)
 - [Red Hat Satellite documentation](#)
 - [Red Hat Consulting offering: Transition to Red Hat Satellite 6](#)
-

Satellite training and videos

NEW COURSE

- [RH053: Satellite Technical Overview \(also available on Udemy\)](#)
- [RH403: Red Hat Satellite 6 Administration](#)

Red Hat Internal Notes

- Smart Management and Satellite are now part of the RHEL Community of Practice (CoP)
 - <https://mojo.redhat.com/community/communities-at-red-hat/infrastructure/rhel-ecosystem>
- Writing up a how-to or blog or creating a video or similar content that could be customer facing?
 - Check out the blog bounty program: <https://mojo.redhat.com/docs/DOC-1085668>
 - Product content and get paid 50 Reward Zone points.
- Enablement sessions, videos, and other links posted on the Insights & Smart Management with Satellite Technical Assets mojo:
<https://mojo.redhat.com/docs/DOC-1197201>

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



Alternate Slides

Cloud Connector Configuration - Step-by-step

-  Monitor >
-  Content >
-  Hosts >
-  Configure >
-  Infrastructure >
-  RH Inventory >
-  Insights >
-  Administer >

Job Templates

Configure Cloud Connector

Configure via a Satellite Job Template

x ▼

[Documentation](#) [Import](#) [New Job Template](#)

Name	Snippet	Locked	Actions
Ansible Roles - Ansible Default			<button>Run ▾</button>
Ansible Roles - Install from Galaxy			<button>Run ▾</button>
Ansible Roles - Install from git			<button>Run ▾</button>
Ansible - Run insights maintenance plan			<button>Run ▾</button>
Ansible - Run playbook			<button>Run ▾</button>
Check Update - SSH Default			<button>Run ▾</button>
Install Errata - Katello Ansible Default			<button>Run ▾</button>
Install Errata - Katello SSH Default			<button>Run ▾</button>
Install Group - Katello Ansible Default			<button>Run ▾</button>
Install Group - Katello SSH Default			<button>Run ▾</button>
Install Package - Katello Ansible Default			<button>Run ▾</button>
Install Package - Katello SSH Default			<button>Run ▾</button>
Module Action - Ansible Default			<button>Run ▾</button>
Module Action - SSH Default			<button>Run ▾</button>
Package Action - Ansible Default			<button>Run ▾</button>
Package Action - SSH Default			<button>Run ▾</button>

 Monitor > Content > Hosts > Configure > Infrastructure > RH Inventory > Insights > Administer >Job Templates » Edit Configure Cloud Connector 

Template

Inputs

Job

Type

History

Locations

Organizations

Help

Name *

Configure Cloud Connector

Default 

Editor

Changes

Preview

```
1 ---  
2 - hosts: all  
3 - vars:  
4   satellite_url: "<%= foreman_server_url %>"  
5 - roles:  
6   - project-receptor.satellite_receptor_installer
```

Provide a Satellite user and password
for the remote execution jobs

Audit Comment

The Audit Comment field is saved with the template auditing to document the template changes.



Settings

Sources

General

Hoo

Sou

User

App

Name	Type	Application	Status
fifi-satqa1.usersys.redhat.com	Red Hat Satellite	Remediations	Ready

Job template creates an Insights Source entry



Red Hat Insights

Dashboard

Advisor

Vulnerability

Compliance

Policies

Drift Analysis

Subscription Watch

Patch

Inventory

Remediations

Documentation

Remediations > testplaybook

testplaybook

Execute Playbook

Playbook Summary

Total systems**1 system**

Playbook settings

Autoreboot: **Not required**

0 systems require reboot

Search actions



Remove action

1-1 of 1



1



of 1



<input type="checkbox"/> Actions	Resolution	Reboot required	Systems	Type
<input type="checkbox"/> Decreased security: OpenSSH Ciphers and MACs settings	Update openssh-server package, replace Ciphers and MACs line in /etc/ssh/sshd_config and restart sshd service	No	1	Insights

Cloud Connector enables Execute Playbook button

Execute Playbook

x

Playbook contains **1 issue** affecting **1 system**.

Systems connected to a Satellite instance and configured with Receptor can be automatically remediated. To remediate other systems, download the Ansible Playbook.

Connection status of systems

Connection type	Systems	Connection status
fifi-satqa1.usersys.redhat.com	1	 Ready

[Execute Playbook on 1 system](#)

[Download Playbook](#)

Prior to executing the playbook a check will be performed to make sure the connection is ready

Execute Playbook

X

Playbook contains **1 issue** affecting **1 system**.

Systems connected to a Satellite instance and configured with Receptor can be automatically remediated. To remediate other systems, download the Ansible Playbook.

Connection status of systems

Connection type	Systems	Connection status
fifi-satqa1.usersys.redhat.com	1	Connection issue Receptor not responding Troubleshoot

Execute Playbook on 0 system

[Download Playbook](#)

If there are issues, a message will be displayed

Smart Management buying transition

Satellite and Smart Management buying transition

Before March 1, 2018	Starting March 1, 2018	Starting May 1, 2019	Starting May 1, 2020
<p>Red Hat Satellite</p> <p>Purchase one or more of the following:</p> <ul style="list-style-type: none">• Red Hat Satellite Server• Red Hat Satellite Capsule Server• Smart Management add-on <p>Red Hat Insights:</p> <p>Purchase the Insights add-on separately</p>	<p>Red Hat Smart Management: Red Hat Satellite + Red Hat Insights</p> <p>Buy or renew a single Smart Management SKU and get a single Insights and the Satellite Infrastructure SKU (MCT3718) which grants 50 of any combination of Satellites and Satellite Capsule Servers.</p>	<p>Red Hat Smart Management = Red Hat Satellite + cloud management services for Red Hat Enterprise Linux</p> <p>Insights included in all supported Red Hat Enterprise Linux subscriptions.</p> <p>Smart Management continues to provide Satellite infrastructure and now includes Software-as-a-service (SaaS)-based cloud management services for Red Hat Enterprise Linux.</p>	<p>Red Hat Smart Management includes Red Hat Satellite and cloud connector</p> <p>Access to Satellite infrastructure and enhanced abilities to run actions from cloud.redhat.com</p> <p>Red Hat Insights:</p> <p>Included with your RHEL subscription and includes additional cloud services</p>

Support for Cloud providers in Satellite

As of Red Hat Satellite 6.7:

Running Satellite in the cloud typically means one of these three things:

Cloud provider	Can I run Satellite in this cloud provider?*	Can I manage hosts in this cloud provider?	Can I provision hosts in this cloud provider?
			
			
 Compute Engine			
			
			

AWS includes AWS Cloud for Government
Azure includes Microsoft Azure for Government

*Cloud providers not listed require a support exception
Where Satellite is mentioned, Capsules are also supported.

Lifecycle Environments

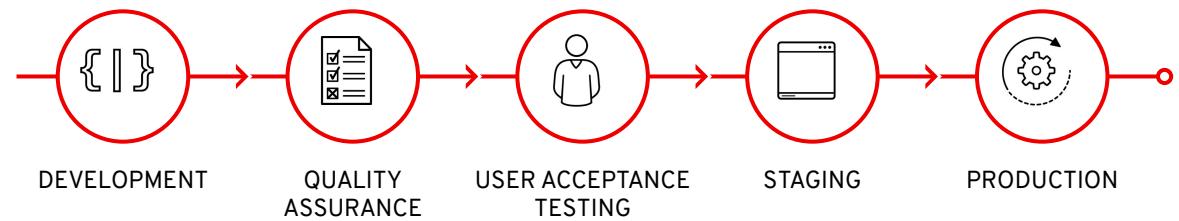
Life-cycle environments

In this sample environment, we have 2 promotion paths:
1 for SAP systems, and 1 for the rest.

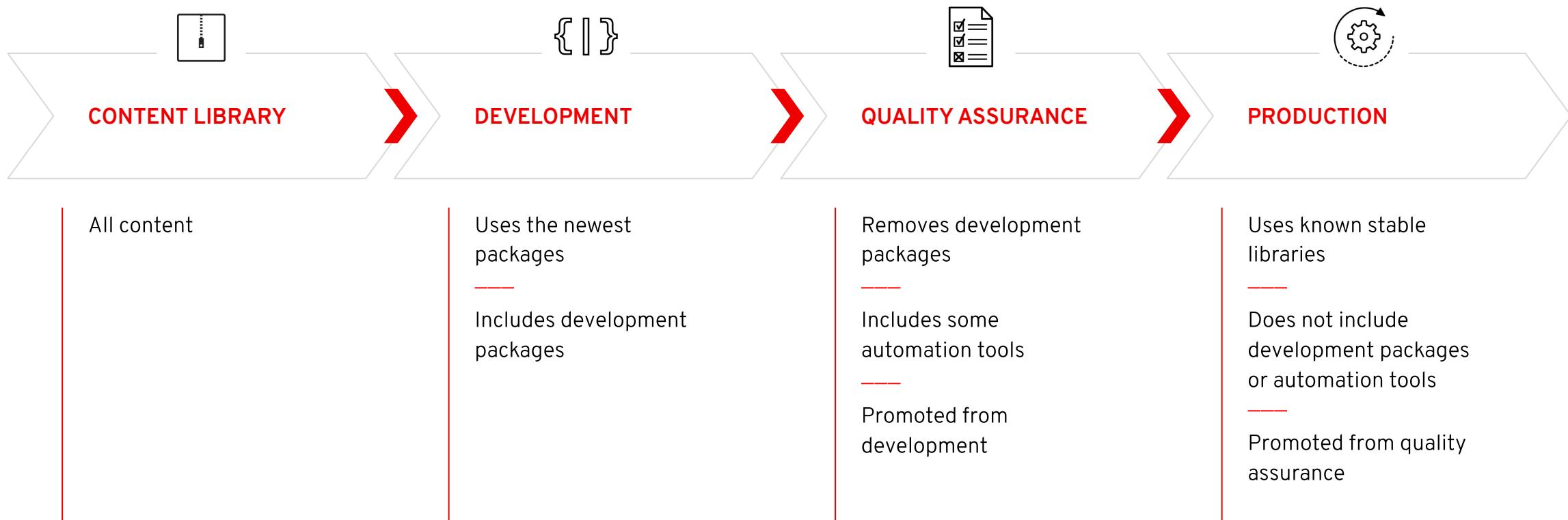
Most servers:



SAP environments:



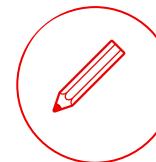
Life-cycle environments



Content Views

Content views

A content view (CV) is a managed selection of content that contains 1 or more repositories with optional filtering.



Custom subset

Define specific versions of software



Activation keys

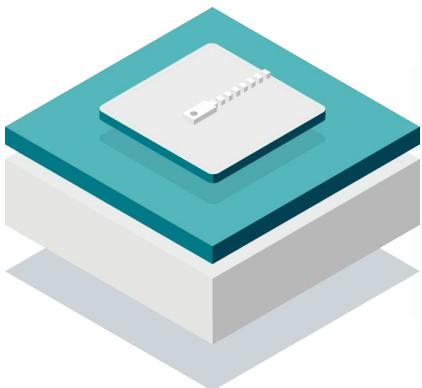
Enable and disable content views as needed



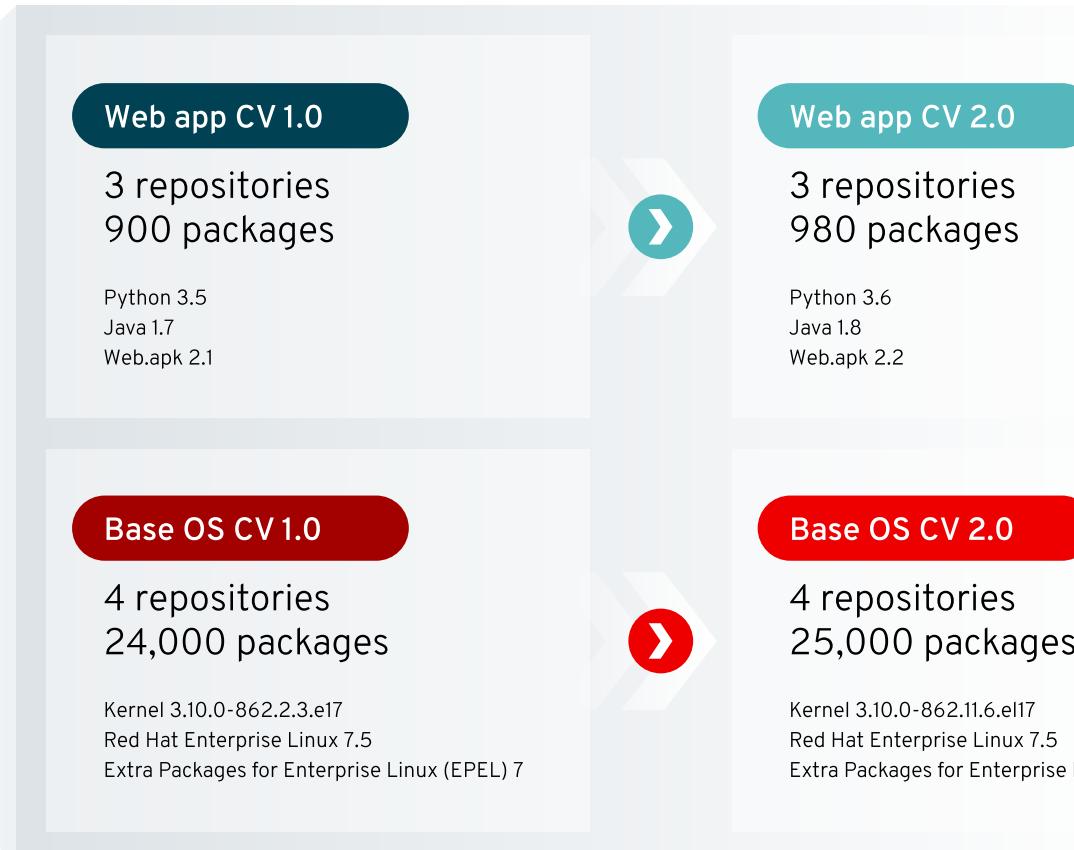
Composite content views

Made up of multiple content views

Content views

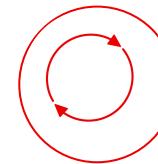


Content library



Composite content view

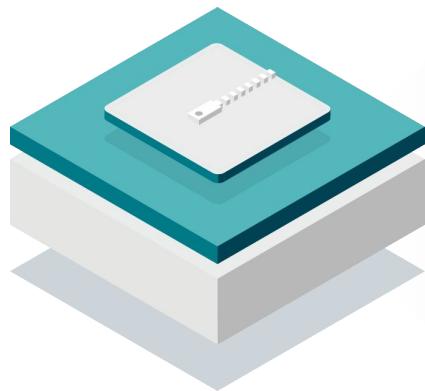
Composite content views (CCV) are made up of multiple content views, rather than individual repositories.



Auto-publish

These can be auto-published when any component content view is published

Composite content views



Content library



Software Deployment

Using content views,
composite content views,
and life-cycle
environments

Software deployment



Supply Chain Security

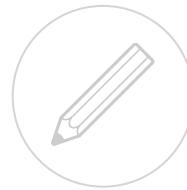
It all starts with the code -
how do you make sure it
hasn't been tampered with?

Supply chain security

Out of millions of projects, Red Hat identifies those that are critical for modern enterprises.

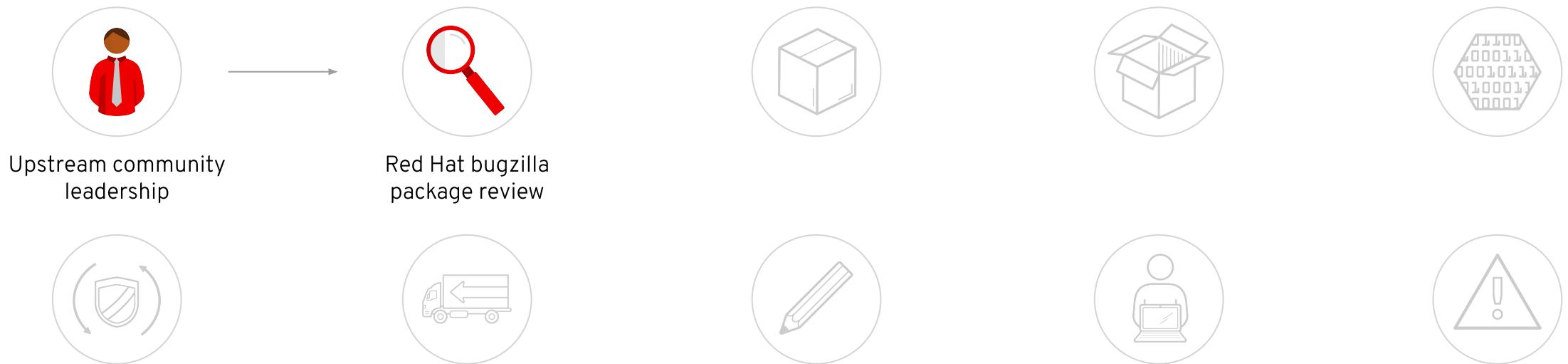


Upstream community
leadership



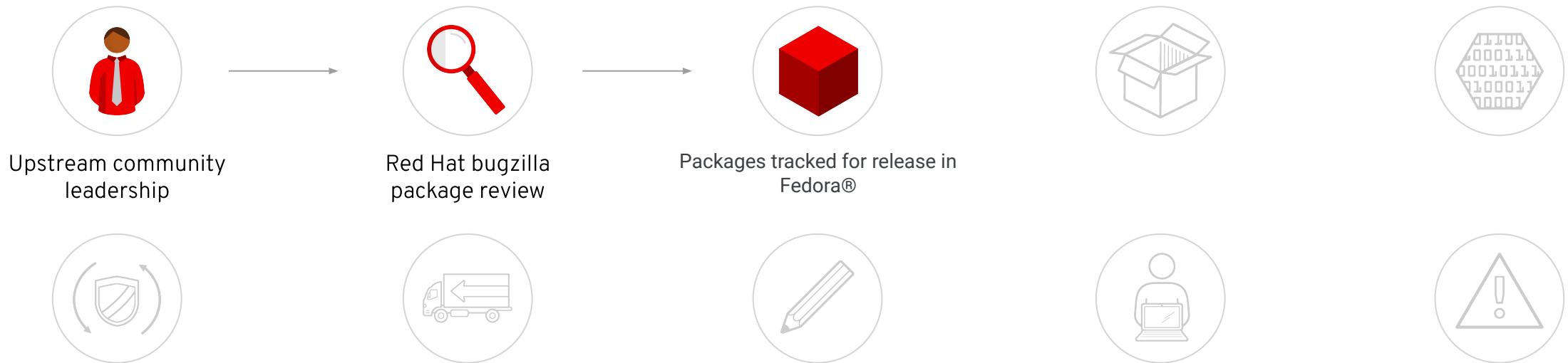
Supply chain security

A subset of projects is selected for the community distribution called Fedora.



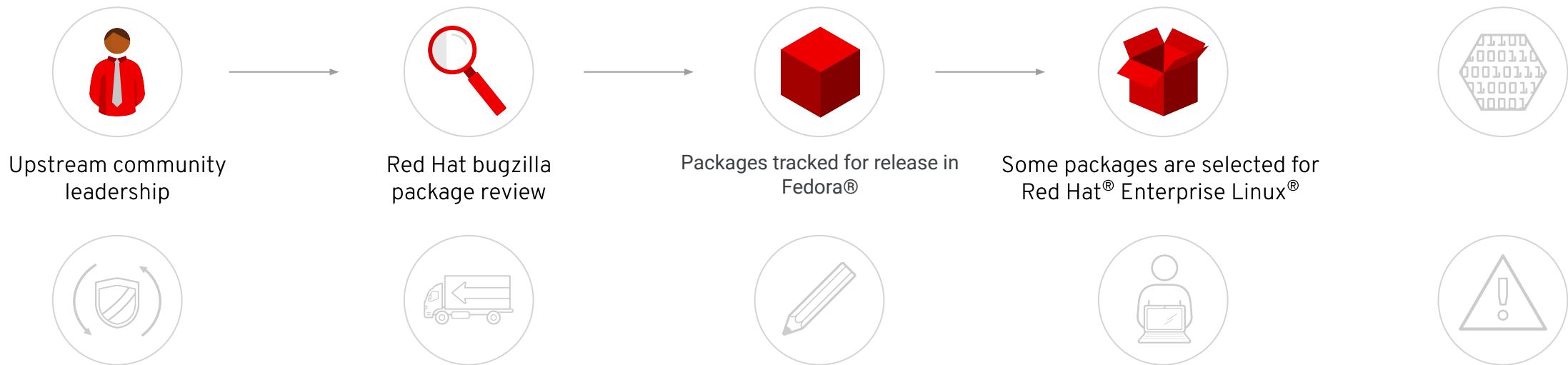
Supply chain security

Fedora creates an environment where projects can be integrated and stabilized.



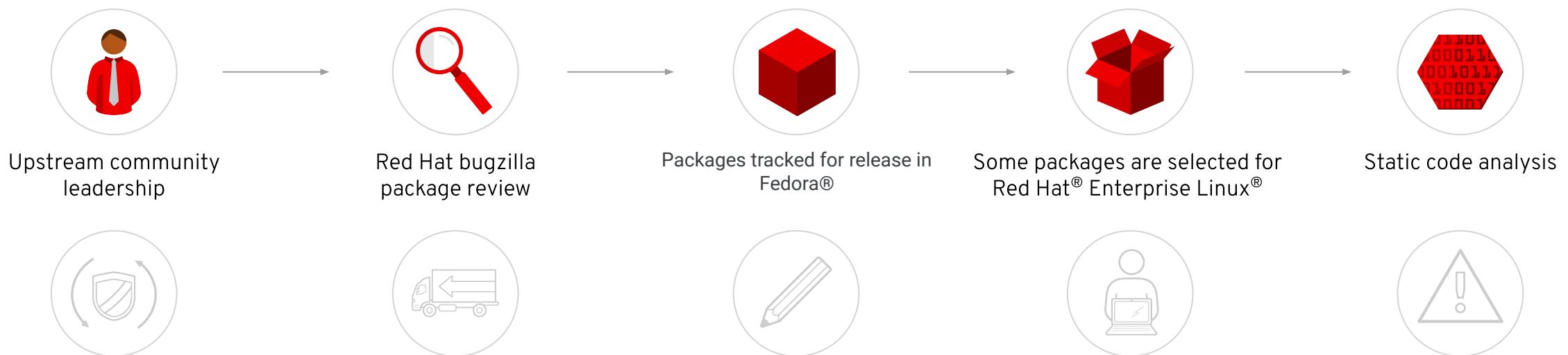
Supply chain security

The package is thoroughly analyzed and the used crypto libraries are critically reviewed.



Supply chain security

Code is scanned and issues are identified and addressed to prevent security flaws. Issues are reported and addressed via upstream open source projects.



Supply chain security

ASLR, PIE, and RELRO flags set for stack protection.*



*Address Space Layout Randomization (ASLR), Position-Independent Execution (PIE), and RELOCATION Read-Only (RELRO) flags

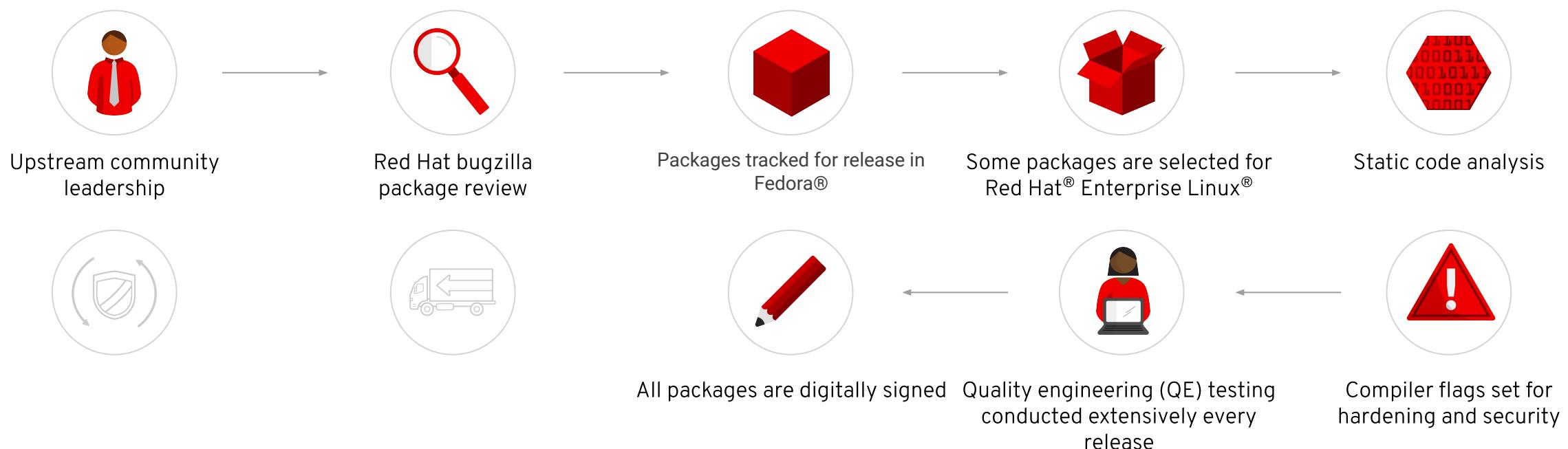
Supply chain security

Multiple tiers of testing are conducted, including low-level functional, system-level, and cross-product testing



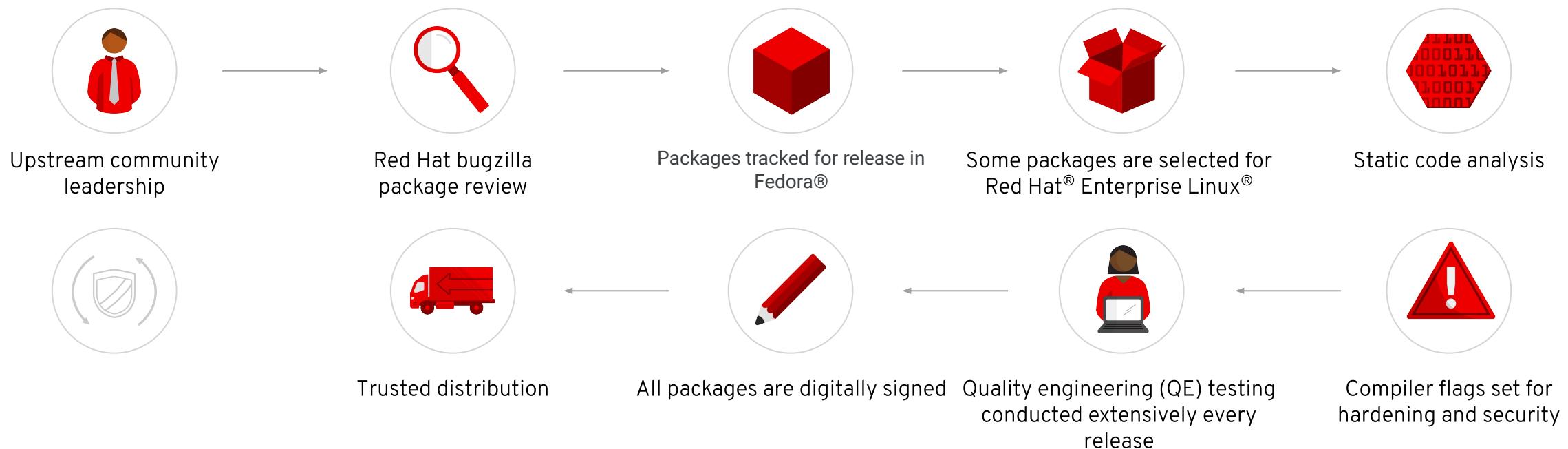
Supply chain security

Repeatable build pipeline with digitally signed output provides the origin and consistency of packages

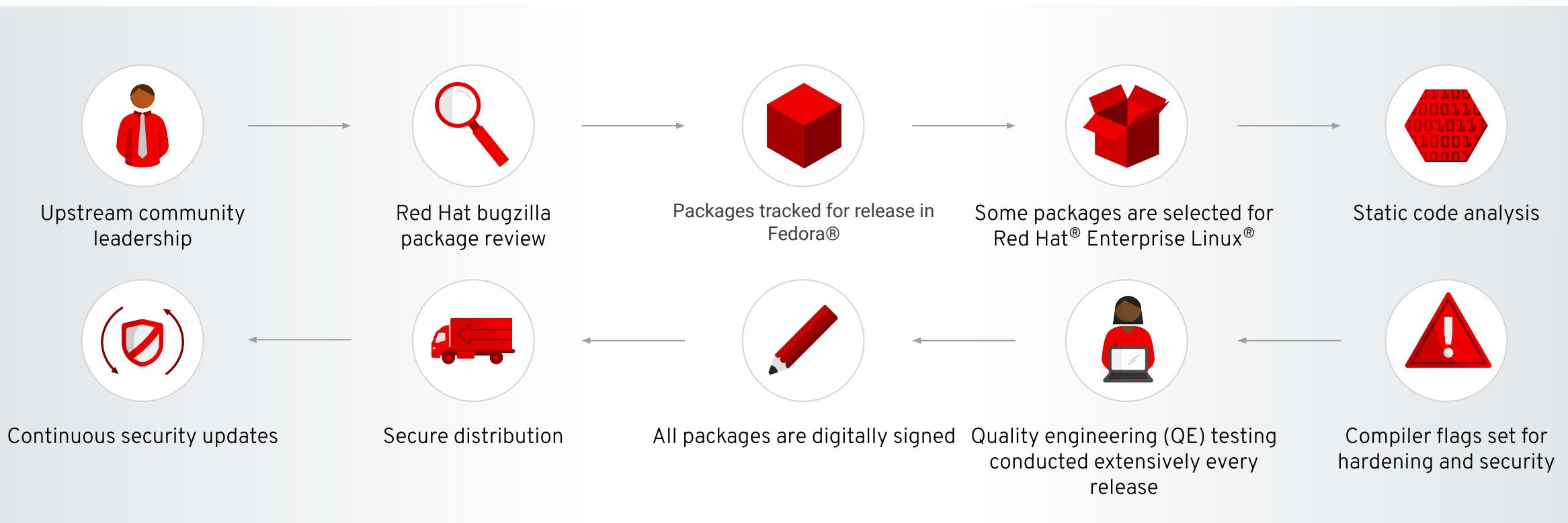


Supply chain security

Delivery via pipelines that provide guarantees of the consistency and source of the content



Supply chain security



Red Hat Satellite - Trusted Supply Chain

Ensuring that content
makes it from Red Hat to
your systems without
being tampered with.

Trusted software supply chain



RPM package



Red Hat CDN



Entitlement certificate



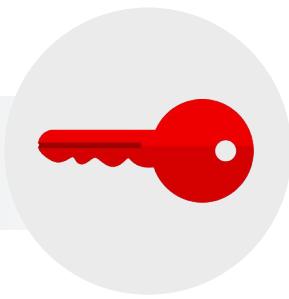
Satellite server



Hosts

Every RPM package is signed with a gnu privacy guard (GPG)key.

Trusted software supply chain



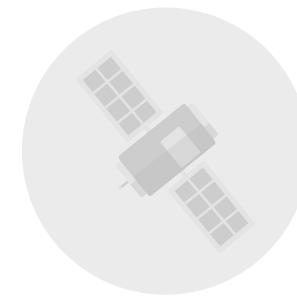
RPM package



Red Hat CDN



Entitlement certificate



Satellite server



Hosts

Every RPM package is signed with a GPG key.

Each package or content type is pushed to the Red Hat content delivery network (CDN).

Trusted software supply chain



RPM package

Red Hat CDN

Entitlement certificate

Satellite server

Hosts

Every RPM package is signed with a GPG key.

Each package or content type is pushed to the Red Hat CDN.

Access to the package requires a Red Hat-issued entitlement certificate.

Trusted software supply chain



-
- Every RPM package is signed with a GPG key.
 - Each package or content type is pushed to the Red Hat CDN.
 - Access to the package requires a Red Hat-issued entitlement certificate.
 - Satellite verifies the packages have not been modified by comparing the checksums.

Trusted software supply chain



-
- Every RPM package is signed with a GPG key.
 - Each package or content type is pushed to the Red Hat CDN.
 - Access to the package requires a Red Hat-issued entitlement certificate.
 - Satellite verifies the packages have not been modified by comparing the checksums.
 - Client tools also verify checksums and verify GPG signature matches.

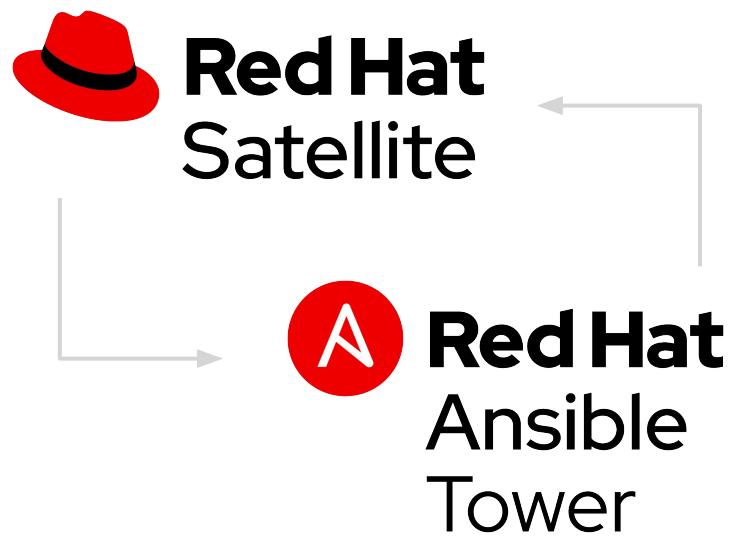
Satellite & Ansible

More info

How Satellite and Ansible
work together

Satellite and Ansible Tower integration

Documented best practices to help optimize use of both products



By integrating Red Hat Satellite with Red Hat Ansible® Tower, administrators can now perform the following functions:

Dynamic inventory

Allows Ansible Tower to use Satellite as a dynamic inventory source

Provisioning callbacks

Allows systems provisioned via Satellite to “callback” to Ansible Tower so that playbook runs can happen post-provisioning

A TOWER PROJECTS INVENTORIES TEMPLATES JOBS

admin

SETTINGS / CREDENTIALS / EDIT CREDENTIAL

Example.com Satellite credentials

DETAILS PERMISSIONS

* NAME ? Example.com Satellite credentials

DESCRIPTION ? Example.com Satellite credentials

ORGANIZATION Red Hat's Management BU Example.com

* CREDENTIAL TYPE ? Red Hat Satellite 6

TYPE DETAILS

* SATELLITE 6 URL ? https://sat.example.com

* USERNAME admin

* PASSWORD REPLACE ENCRYPTED

CANCEL SAVE

CREDENTIALS 9

SEARCH KEY + ADD

NAME	KIND	OWNERS	ACTIONS
Machine	Machine	admin, Red Hat's Management BU	

PROVISIONING CALLBACKS

A definition straight from the Tower documentation

Provisioning callbacks are a feature of Tower that allow a host to initiate a playbook run against itself, rather than waiting for a user to launch a job to manage the host from the tower console.

Provisioning Templates

kickstart

Search

Create Template

Build PXE Default

Documentation

Name	Host Group / Environment	Kind	Snippet	Locked	Actions
Kickstart default		Provisioning template			<button>Clone</button>
Kickstart default iPXE		Provisioning template			<button>Clone</button>
Kickstart default PXEGrub		Finish template			<button>Clone</button>
Kickstart default PXEGrub2		iPXE template			<button>Clone</button>
Kickstart default PXELinux		PXEGrub template			<button>Clone</button>
Kickstart default PXELinux		PXEGrub2 template			<button>Clone</button>
Kickstart default user data		PXELinux template			<button>Clone</button>
kickstart_ifcfg_bonded_interface		User data template			<button>Clone</button>
kickstart_ifcfg_bond_interface				✓	<button>Clone</button>
kickstart_ifcfg_generic_interface				✓	<button>Clone</button>
kickstart_ifcfg_get_identifier_names				✓	<button>Clone</button>
kickstart_networking_setup				✓	<button>Clone</button>

POST-PROVISIONING CALLBACK

PXELinux global default

PXELinux template

20 per page

1-18 of 18

<< < 1 of 1 > >>

Monitor >

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Administer >

Provisioning Templates > Edit Kickstart default

Template

Inputs

Type

Association

History

Locations

Organizations

Help

Warning! This template is locked. You may only change the associations. Please [clone](#) it to customize.

x

Name *

Kickstart default

Default

Editor

Changes

Preview



```
261 <% if salt_enabled %>
262 <%= snippet 'saltstack_setup' %>
263 <% end -%>
264
265 <% if @host.operatingsystem.name == 'OracleLinux' && host_param_true?('disable-uek') -%>
266 # Uninstall the Oracle Unbreakable Kernel packages
267 yum -t -y remove kernel-uek*
268 sed -e 's/DEFAULTKERNEL=kernel-uek/DEFAULTKERNEL=kernel/a' -i /etc/svcsconfia/kernel
```

snippet('ansible_provisioning_callback') %>

```
274 touch /tmp/foreman_built
275 <%= section_end -%>
276
277 <%#
278 The last post section halts Anaconda to prevent endless loop
279 %>
280 <% if (is_fedora && os_major < 20) || (rhel_compatible && os_major < 7) -%>
281 %post
```

Description

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Administer >

Provisioning Templates

Filter ...



Search



▼

Create Template

Build PXE Default

Documentation

Name	Host Group / Environment	Kind	Snippet	Locked	Actions
Alterator default		Provisioning template			
Alterator default finish		Finish template			
Alterator default PXELinux		PXELinux template			
alterator_pklist					
ansible_provisioning_callback					
ansible_tower_callback_script					
ansible_tower_callback_service					
Atomic Kickstart default		Provisioning template			
AutoYaST default		Provisioning template			
AutoYaST default iPXE		iPXE template			
AutoYaST default PXELinux		PXELinux template			
AutoYaST default user data		User data template			
AutoYaST SLES default		Provisioning template			
Boot disk iPXE - host		Boot disk embedded template			
built					
chef_client					

POST-PROVISIONING CALLBACK

20 ^ per page

1-20 of 101

<< < 1 of 6 > >>

Monitor

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Provisioning Templates » Edit ansible_provisioning_callback



Template

Inputs

Type

Association

History

Locations

Organizations

Help

Warning! This template is locked. You may only change the associations. Please [clone](#) it to customize.

Name *

ansible_provisioning_callback

Default ⓘ

Editor

Changes

Preview



```
1 <%#
2 kind: snippet
3 name: ansible_provisioning_callback
4 model: ProvisioningTemplate
5 snippet: true
6 -%>
7 <% if host_param_true?('ansible_tower_provisioning') -%>
8 <%
9   rhel_compatible = @host.operatingsystem.family == 'Redhat' && @host.operatingsystem.name != 'Fedora'
10  os_major = @host.operatingsystem.major.to_i
11  has_systemd = (@host.operatingsystem.name == 'Fedora' && os_major >= 20) || (rhel_compatible && os_major >= 7)
12 -%>
13 <% if has_systemd -%>
14 <%= save_to_file('/etc/systemd/system/ansible-callback.service',
15 | | | | | snippet('ansible_tower_callback_service')) %>
16 # Runs during first boot, removes itself
17 systemctl enable ansible-callback
18 <% else -%>
19 # Assume systemd is not available
20 <%= save_to_file('/root/ansible_provisioning_call.sh', snippet('ansible_tower_callback_script')) %>
21 (chmod +x /root/ansible_provisioning_call.sh; crontab -u root -l 2>/dev/null; echo "@reboot /root/ansible_provisioning_call.sh" ) | crontab -u ro
22 <% end -%>
```

Description

```
1 <%#
2 kind: snippet
3 name: ansible_provisioning_callback
4 model: ProvisioningTemplate
5 snippet: true
6 -%>
7 <% if host_param_true?('ansible_tower_provisioning') -%>
8 <%
9   rhel_compatible = @host.operatingsystem.family == 'Redhat' && @host.operatingsystem.name != 'Fedora'
10  os_major = @host.operatingsystem.major.to_i
11  has_systemd = (@host.operatingsystem.name == 'Fedora' && os_major >= 20) || (rhel_compatible && os_major >= 7)
12 -%>
13 <% if has_systemd -%>
14 <%= save_to_file('/etc/systemd/system/ansible-callback.service',
15 | | | snippet('ansible_tower_callback_service')) %>
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17 systemctl enable ansible-callback
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20 <%= save_to_file('/root/ansible_provisioning_call.sh', snippet('ansible_tower_callback_script')) %>
21 (chmod +x /root/ansible_provisioning_call.sh; crontab -u root -l 2>/dev/null; echo "@reboot /root/ansible_provisioning_call.sh" ) | crontab -u ro
22 <% end -%>
```

POST-PROVISIONING CALLBACK

Monitor >

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Administer >

Provisioning Templates

Filter ...



Search



Create Template

Build PXE Default

Documentation

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Alterator default finish		Finish template			
Alterator default PXELinux		PXELinux template			
alterator_pklist					
ansible_provisioning_callback					
ansible_tower_callback_script					
ansible_tower_callback_service					
Atomic Kickstart default		Provisioning template			
AutoYaST default		Provisioning template			
AutoYaST default iPXE		iPXE template			
AutoYaST default PXELinux		PXELinux template			
AutoYaST default user data		User data template			
AutoYaST SLES default		Provisioning template			
blacklist_kernel_modules					
bmc_nic_setup					
Boot disk iPXE - generic host		Boot disk embedded template			
Boot disk iPXE - generic static host		Boot disk embedded template			
Boot disk iPXE - host		Boot disk embedded template			
built					
chef_client					

20 ^ per page

1-20 of 101



1

of 6



Monitor >

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Provisioning Templates » Edit ansible_tower_callback_service ⇄

Template

Inputs

Type

Association

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Help

Warning! This template is locked. You may only change the associations. Please [clone](#) it to customize.

x

Name *

ansible_tower_callback_service

Default ⓘ

Editor

Changes

Preview



```
1 <%#
2 kind: snippet
3 name: ansible_tower_callback_service
4 model: ProvisioningTemplate
5 snippet: true
6 -%>
7 [Unit]
8 Description=Provisioning callback to Ansible Tower
9 Wants=network-online.target
10 After=network-online.target
11
12 [Service]
13 Type=oneshot
14 ExecStart=/usr/bin/curl -k -s --data "host_config_key=<%= host_param('ansible_host_config_key') -%>" https://<%= host_param('ansible_tower_fqdn') %>
15 ExecStartPost=/usr/bin/systemctl disable ansible-callback
16
17 [Install]
18 WantedBy=multi-user.target
19 |
```

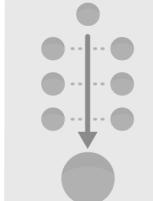
Description

```
1 <%#  
2 kind: snippet  
3 name: ansible_tower_callback_service  
4 model: ProvisioningTemplate  
5 snippet: true  
6 %>  
7 [Unit]  
8 Description=Provisioning callback to Ansible Tower  
9 Wants=network-online.target  
10 After=network-online.target  
11  
12 [Service]  
13 Type=oneshot  
14 ExecStart=/usr/bin/curl -k -s --data "host_config_key=<%= host_param('ansible_host_config_key') -%>" https://<%= host_param('ansible_tower_fqdn') %>  
15 ExecStartPost=/usr/bin/systemctl disable ansible-callback  
16  
17 [Install]  
18 WantedBy=multi-user.target
```

POST-PROVISIONING CALLBACK

```
1 <%#  
2 kind: snippet  
3 name: ansible_tower_callback_service  
4 model: ProvisioningTemplate  
5 snippet: true  
-%>  
6 [Unit]  
7 Description=Provisioning callback to Ansible Tower  
8 Wants=AnsibleTower.service  
9 After=AnsibleTower.service  
10 ExecStart=/usr/bin/curl -k -s --data "host_config_key=<%=  
11 host_param('ansible_host_config_key') -%>" https://<%=  
12 host_param('ansible_tower_fqdn') -%>/api/v2/job_templates/<%=  
13 host_param('ansible_job_template_id') -%>/callback/  
14 ExecStop=/usr/bin/curl -k -s --data "host_config_key=<%=  
15 host_param('ansible_host_config_key') -%>" https://<%=  
16 host_param('ansible_tower_fqdn') -%>/api/v2/job_templates/<%=  
17 host_param('ansible_job_template_id') -%>/cancel/  
18 [Install]  
Wants=AnsibleTower.service
```

POST-PROVISIONING CALLBACK



Satellite / Ansible Integration

Basic Ansible capabilities are now part of Satellite



Satellite has integration with Ansible for the purposes of remote execution and desired state management

Remote Execution

Run Ansible Playbooks inside of Satellite

Deploy Insights using Ansible

Install Insights on all your hosts

RHEL System Roles

Deploy RHEL System Roles to hosts managed by Satellite

Ansible & Satellite

While Satellite has Ansible capabilities built in, Ansible Tower is still critical for enterprise automation

Satellite's use of Ansible is for RHEL-specific purposes

- Ansible Playbooks can be executed against managed RHEL hosts
- Ansible Roles provide desired state
- Automation will be limited to RHEL use cases only

Satellite connected to Ansible Tower

- For enterprise-wide, open-ended IT orchestration and automation
- Management of non-RHEL systems alongside RHEL systems
- Automate Satellite actions alongside other enterprise requirements

Red Hat Satellite Deployment Considerations

Use your Smart Management subscription to its fullest

Every Smart Management subscription includes MCT3718 which gives quantity 50 of any combination of Satellite and Capsules.

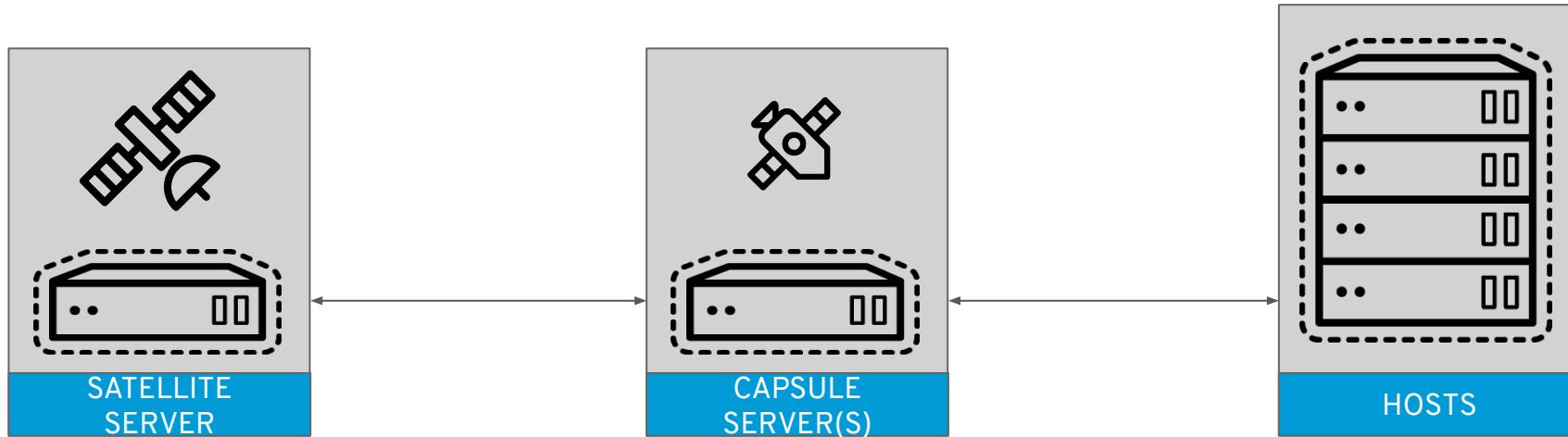
This enables you to increase the scale of your Satellite environment and to setup Test, Development, and similar Satellite environments.

Production is not and should never be your development or test environment - your use subscription to its fullest and deploy the architecture that you need.

Exception: 50 is enough for 97%+ of Satellite customers.

If you need more than 50, just contact your account representative.

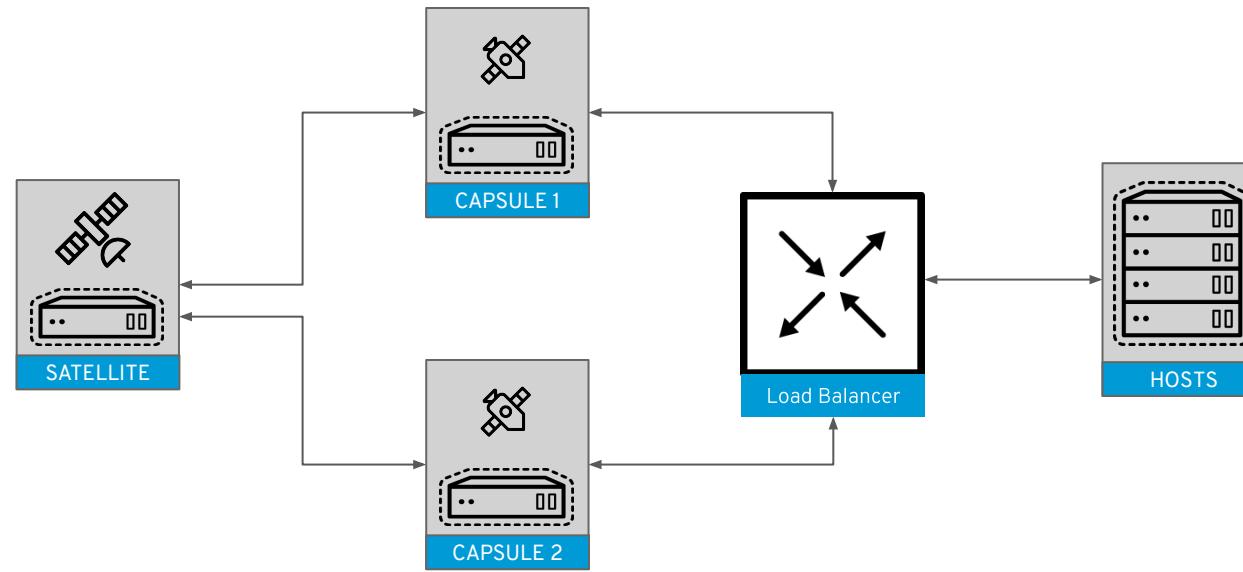
Connect Hosts to Capsules; Connect Capsules to Satellite



Why does this matter? This deployment model allows for scalability and with load balanced capsules a level of redundancy.

Exception: Very small environments (50 or less systems) may only want to use a single Satellite

Use Load Balanced Capsules



Why does this matter? Increases resilience of the Satellite infrastructure. With load balanced capsules all functions will work if a single capsule becomes unavailable.

If the Satellite becomes unavailable all features except registration is available from the capsules

Exception: Small environments that want to minimize infrastructure.

Note: Using custom certs in this configuration is supported but can be tricky.

Red Hat Satellite - Upstream Projects

Red Hat Satellite - Upstream Projects

 FOREMAN	https://theforeman.org/	Provides lifecycle management
 pulp	https://pulpproject.org/	Provides content management
 KATELLO	https://theforeman.org/plugins/katello/	Provides provisioning management
 CANDLEPIN	https://www.candlepinproject.org/	Provides subscription management
 A	https://www.ansible.com/	Provides Automation for single host operations
 puppet	https://puppet.com/	Provides Automation for single host operations

Red Hat Satellite - Upstream Evolution



Satellite Roadmap

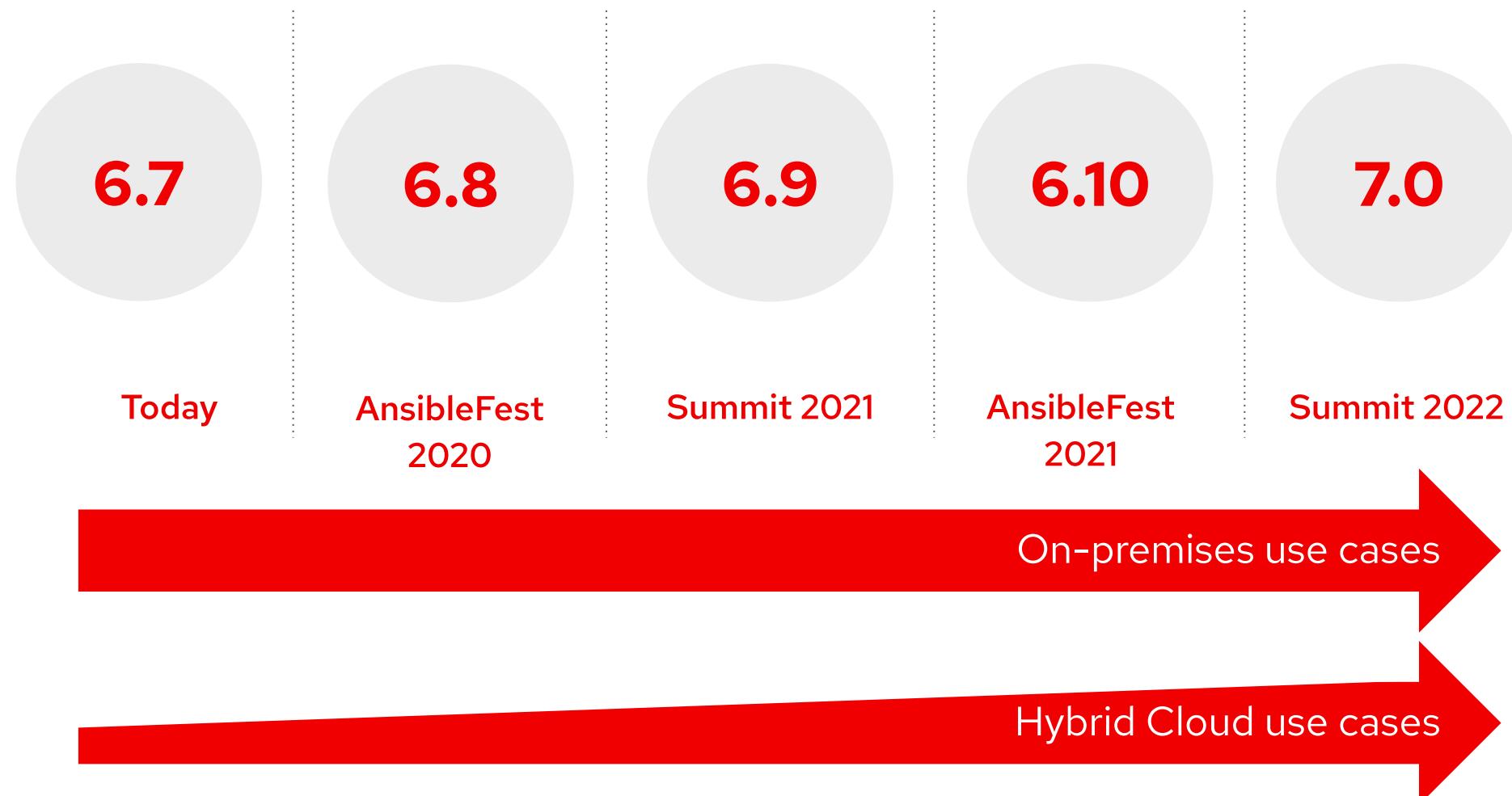
For a detailed roadmap discussion please email the product team at satellite@redhat.com

This information is for discussion purposes only and is subject to change without prior notice and the roadmap contained herein is not guaranteed to be up to date.

The content set forth herein does not constitute in any way a binding or legal agreement or impose any legal obligation or duty on Red Hat.

Red Hat Satellite

Continuing the Red Hat Enterprise Linux Journey to the Hybrid Cloud



Red Hat Satellite near-term roadmap

Candidate features - Subject to change

Satellite 6.9

Expected Summit 2021

- Insights + SubWatch by default
- Simple Content Access (SCA) on by default
- SCA Workflow improvements
- Insights Point of Presence - simple install, simplify
- REX, Self maintaining Satellite
- Enhancements to inventory upload
- Schema Consistency and Obfuscation
- Call-to-Action with Remediation from Insights
- System Purpose Improvements

Satellite 6.10

Expected AnsibleFest 2021

- Pulp 3 migration
- N-1 Support - Satellite on 6.10 and Capsule on 6.10 or 6.9
- Removal of MongoDB
- Foreman Webhooks
- Content view import/export improvements
- Content publication workflow simplification.

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the roadmap contained herein is not guaranteed to be up to date.

