Red Hat
Smart Management

Red Hat Smart Management

What's new in Red Hat Satellite 6.7

Brian Dumont
Sr. Solution Architect

Red Hat

Who Am I

- Red Hat Sr. Solution Architect for over 2 years
- Cover the Michigan market from Lansing, MI
- Co-chair the Michigan RHUG's
- Spent nearly 25 years in the IT Channel architecting and selling IT solutions throughout Michigan, Indiana, Ohio and Chicagoland
- Red Hat Certified Engineer
- Ansible Certified Specialist
- Satellite Certified Specialist

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Red Hat Smart Management

Red Hat

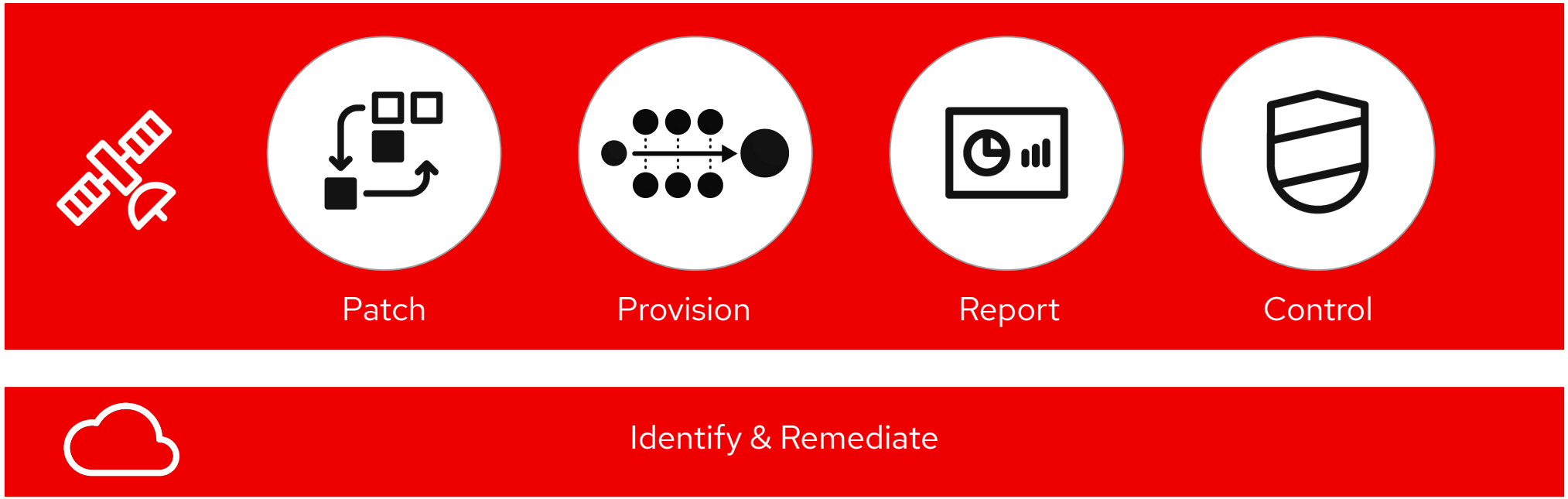
Smart Management enables you to improve the reliability, availability, security and compliance of your RHEL systems, running on any platform, while reducing TCO and repetitive tasks

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

Red Hat

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?

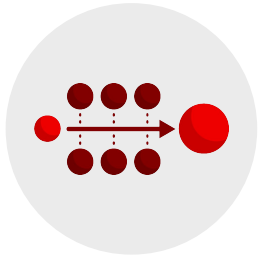
No Problem.

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.

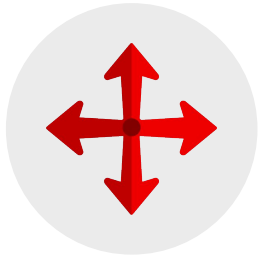
*Smart Management subscriptions are based on 2-socket systems, same as RHEL. A 4 socket system would require 2 Smart Management subscriptions. Talk to your sales rep for full details.

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 integration with Red Hat Insights

Red Hat

Red Hat Insights

Now included with all Red Hat Enterprise Linux subscriptions

Buy

Red Hat
Enterprise Linux

Get

Red Hat
Insights

PREDICT RISK. GET GUIDANCE. STAY SECURE.

PREDICTIVE I.T. ANALYTICS

AUTOMATED EXPERT ASSESSMENT

SIMPLE REMEDIATION

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New and improved Red Hat Insights

Still included with Red Hat Enterprise Linux subscription, now with more value.

New and expanded services provide additional security and operational efficiency

To better manage infrastructure sprawl, reduce risk, and support stretched IT personnel

*Active subscriptions versions 6.4 & higher

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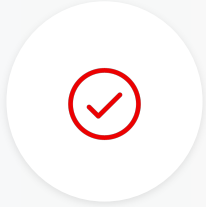
Overview of expanded Red Hat Insights services

Advisor

Availability, performance, stability, and security risk analysis

Vulnerability

Remediate 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

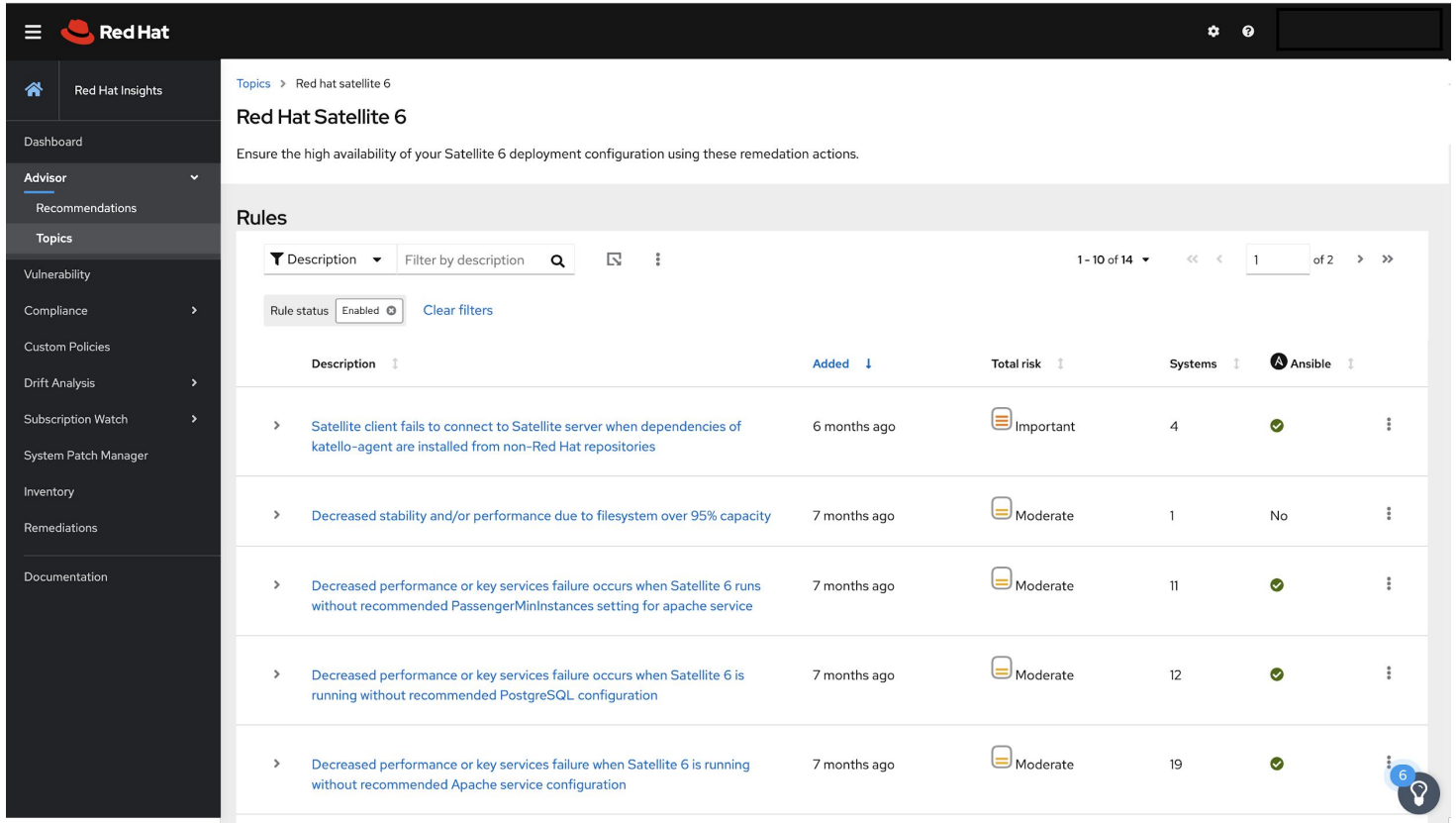
Define and monitor against your own policies to identify misalignment

Patch

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

Red Hat

Insights Topic for Satellite



Red Hat

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

Insights is visibility into your environment

Smart Management helps you turn Insights into action.

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Satellite 6.7 New Features

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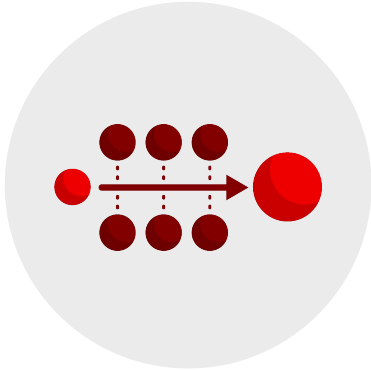
Satellite 6.7 theme

New and improved integrations as well as security and content management enhancements

Integrations

Security



Content Management

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

Integrations

Integrations with cloud.redhat.com, RHEL, and Ansible.

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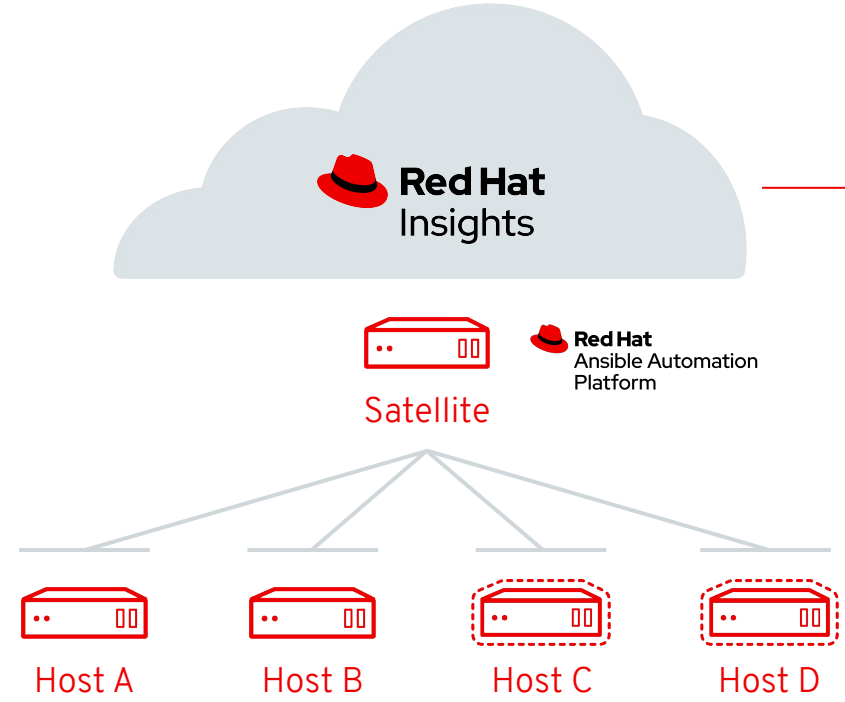
Insights Integration

Cloud Connector

Ability to create a remediation in Insights and run it using Satellite.

Build and run playbooks in Red Hat Satellite

Prior to Satellite 6.7



Advisor Service Only

- Satellite connects to cloud.redhat.com
- User creates playbook through Satellite
- Playbook is run by Satellite

Red Hat

What is Cloud Connector?

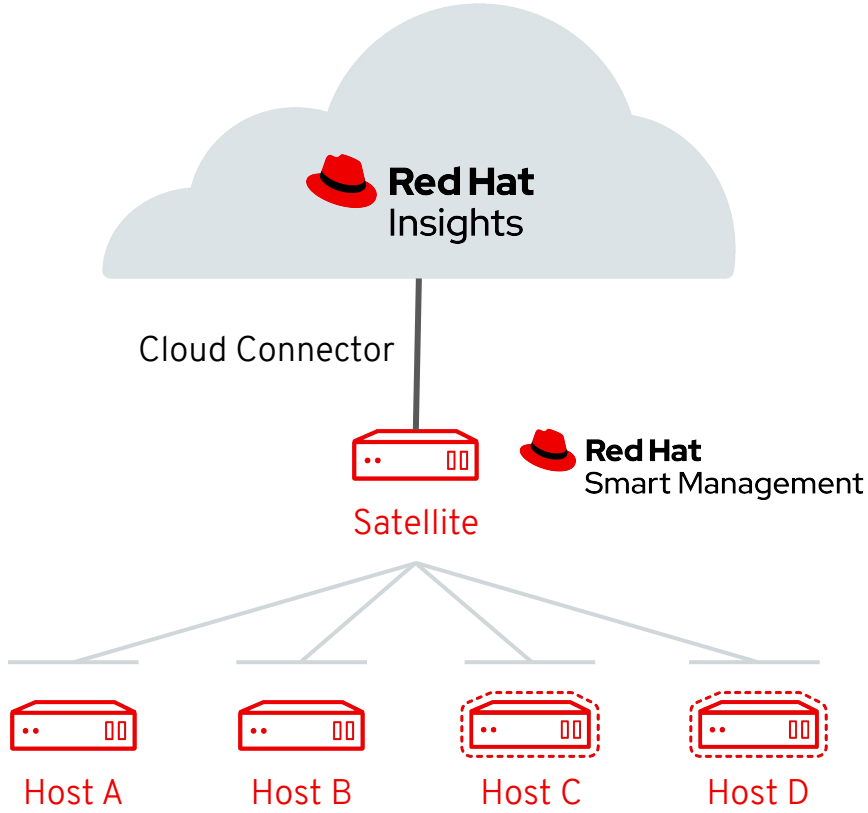
Using Red Hat Insights and Smart Management you can easily identify risks, Vulnerability, and Compliance issues in your environment and fix them via your trusted Satellite infrastructure with the click of a button.

- 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

New Feature in Satellite 6.7

Includes the ability to run playbooks created by:

- Advisor
- Vulnerability
- Compliance
- Patch



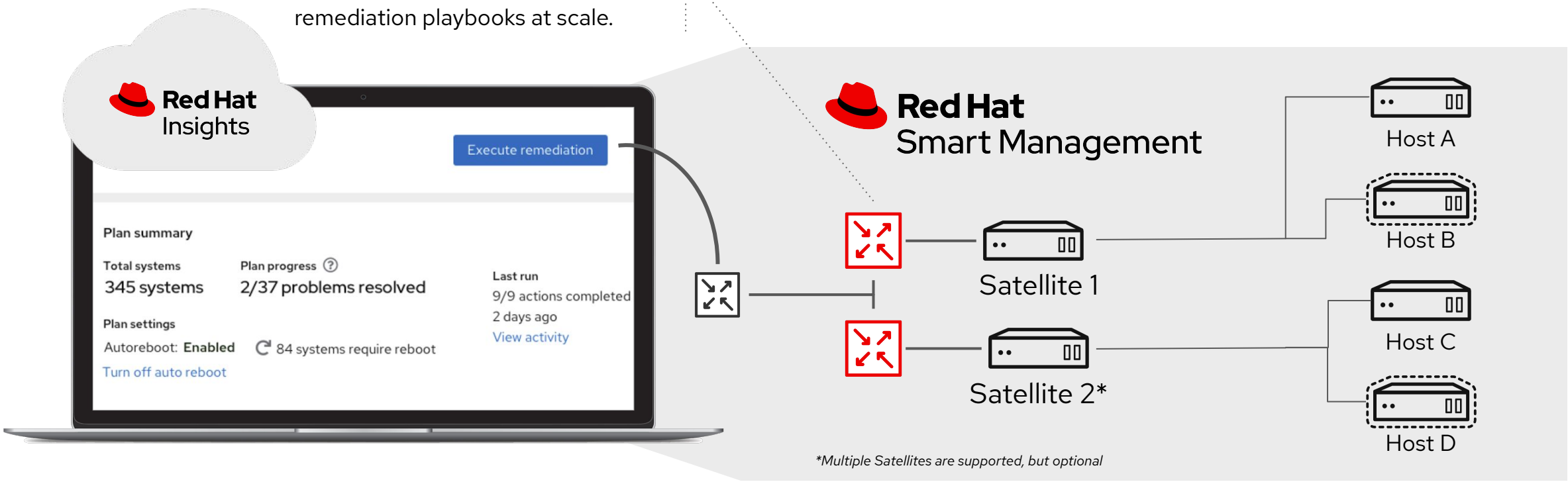
Red Hat

Introducing Cloud Connector

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

Cloud Connector

Connects your federated Satellite infrastructure to Insights to execute remediation playbooks at scale.



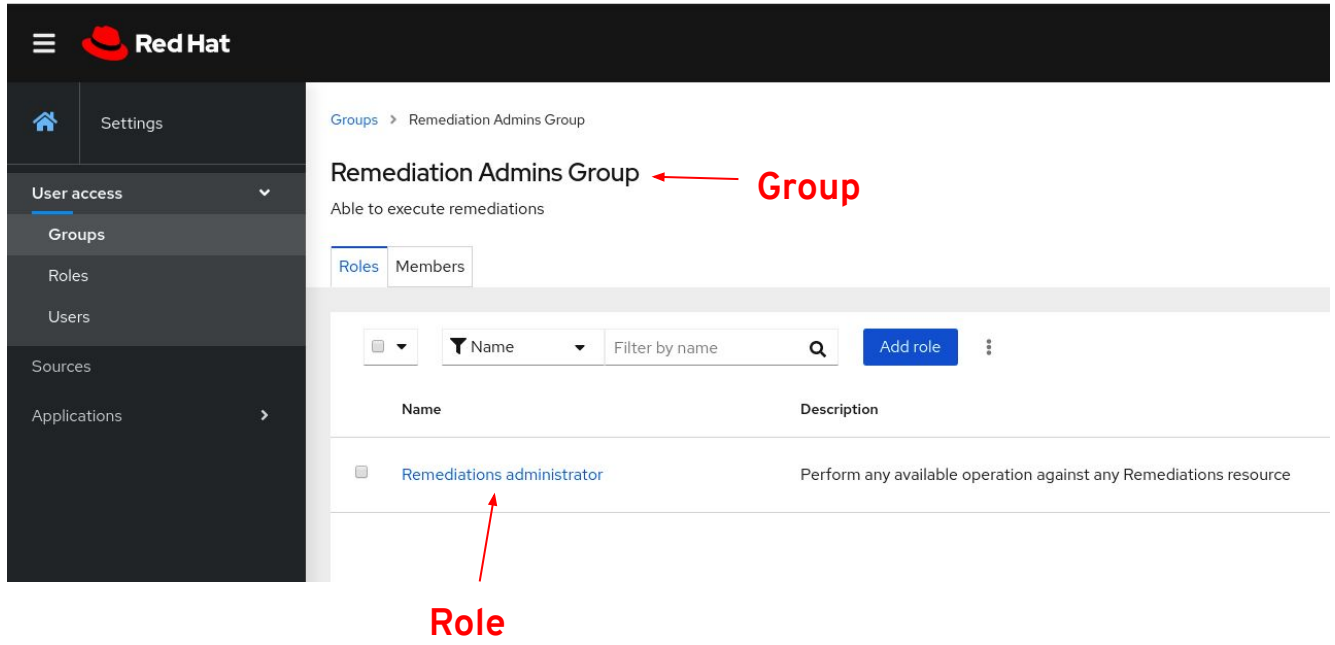
Red Hat

Cloud Connector Configuration

Red Hat

Prepare cloud.redhat.com

- You must have permissions to create and execute playbooks from the Red Hat Insights Remediations service.
  a. Create a Group in cloud.redhat.com for users authorized to execute remediations
  b. Give that Group the “Remediation Administrator” Role
  c. Add Users to that group



https://access.redhat.com/documentation/en-us/red_hat_insights/2020-04/html-single/remediating_issues_across_your_red_hat_satellite_infrastructure_using_red_hat_insights/index?lb_target=production

Red Hat

Prepare Hosts and Satellite

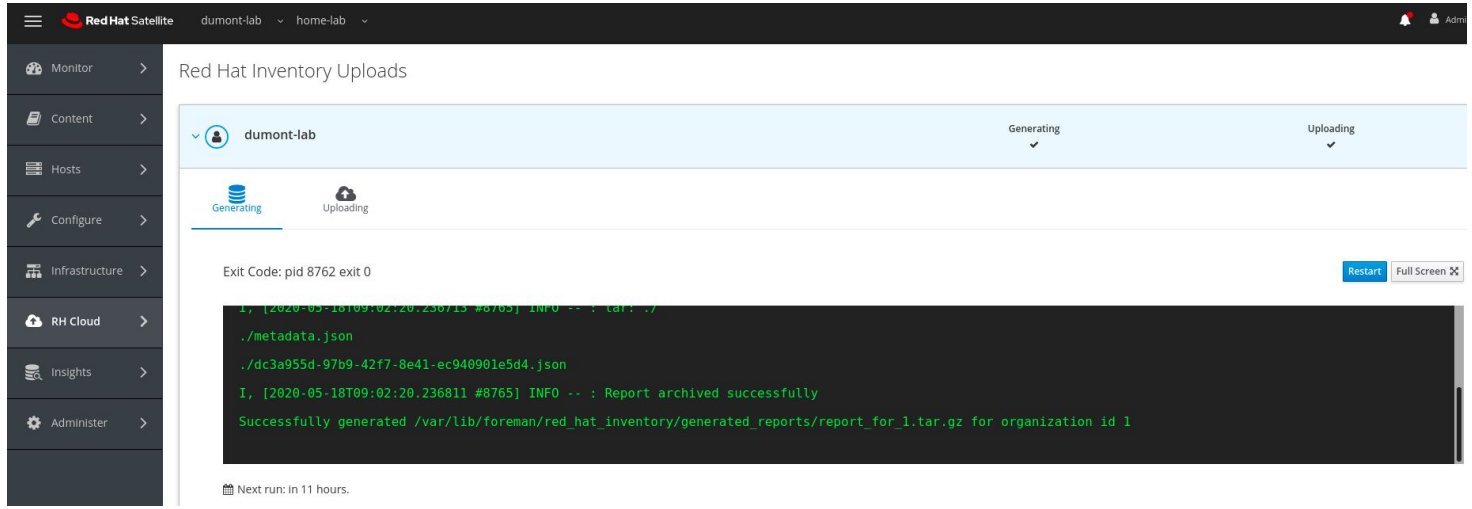
Standard Steps for Insights

- Only hosts in organizations with a valid Red Hat certificate can be connected to cloud.redhat.com
- Register your hosts to Satellite using an activation key to attach Red Hat subscriptions
- **Enable remote execution on your hosts so that Satellite can run remediation playbooks on them**
- Install and Register your hosts with Insights
  - yum install insights-client (RHEL 7 and below)
  - insights-client --register

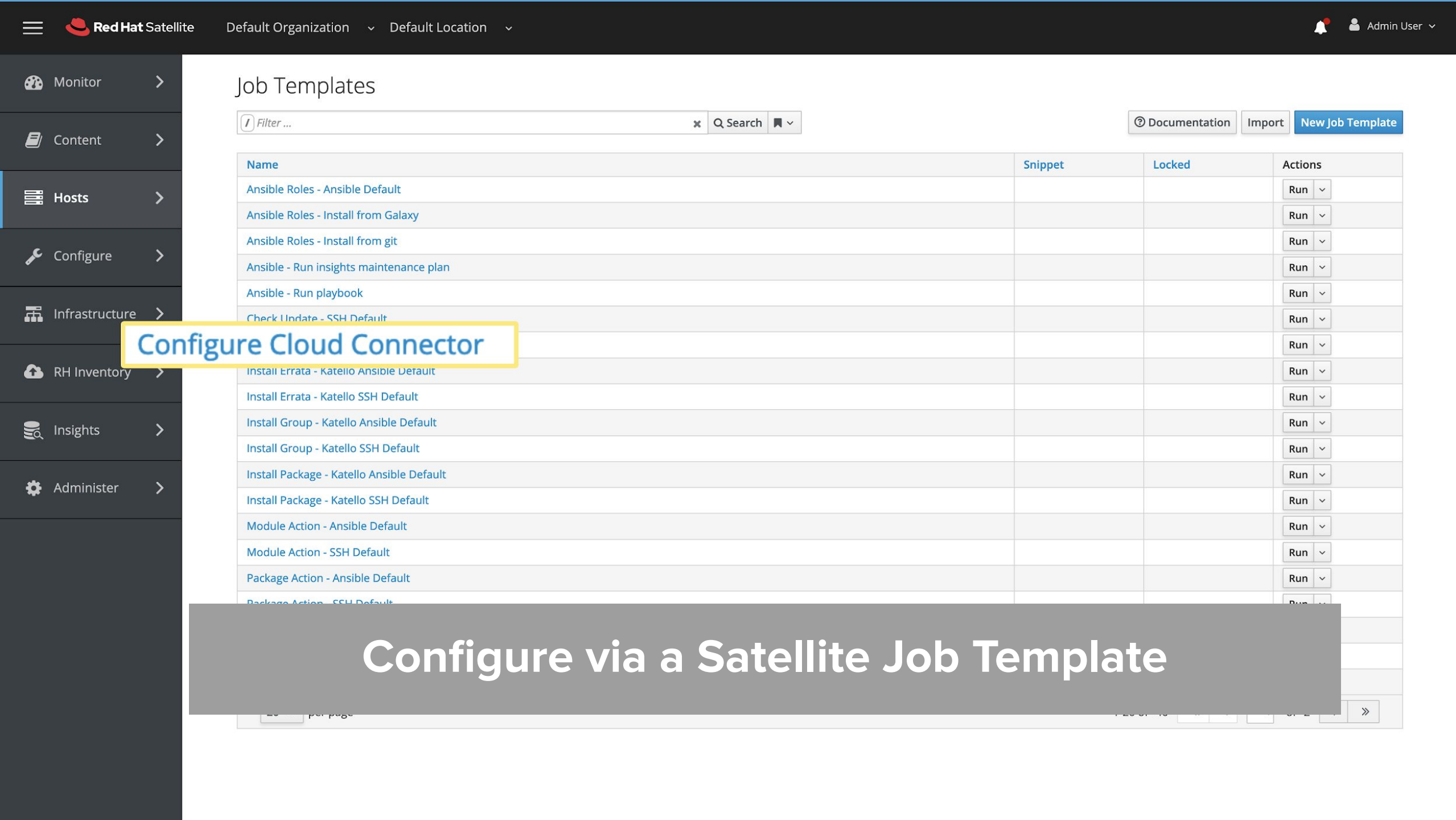
New steps for connecting to cloud.redhat.com

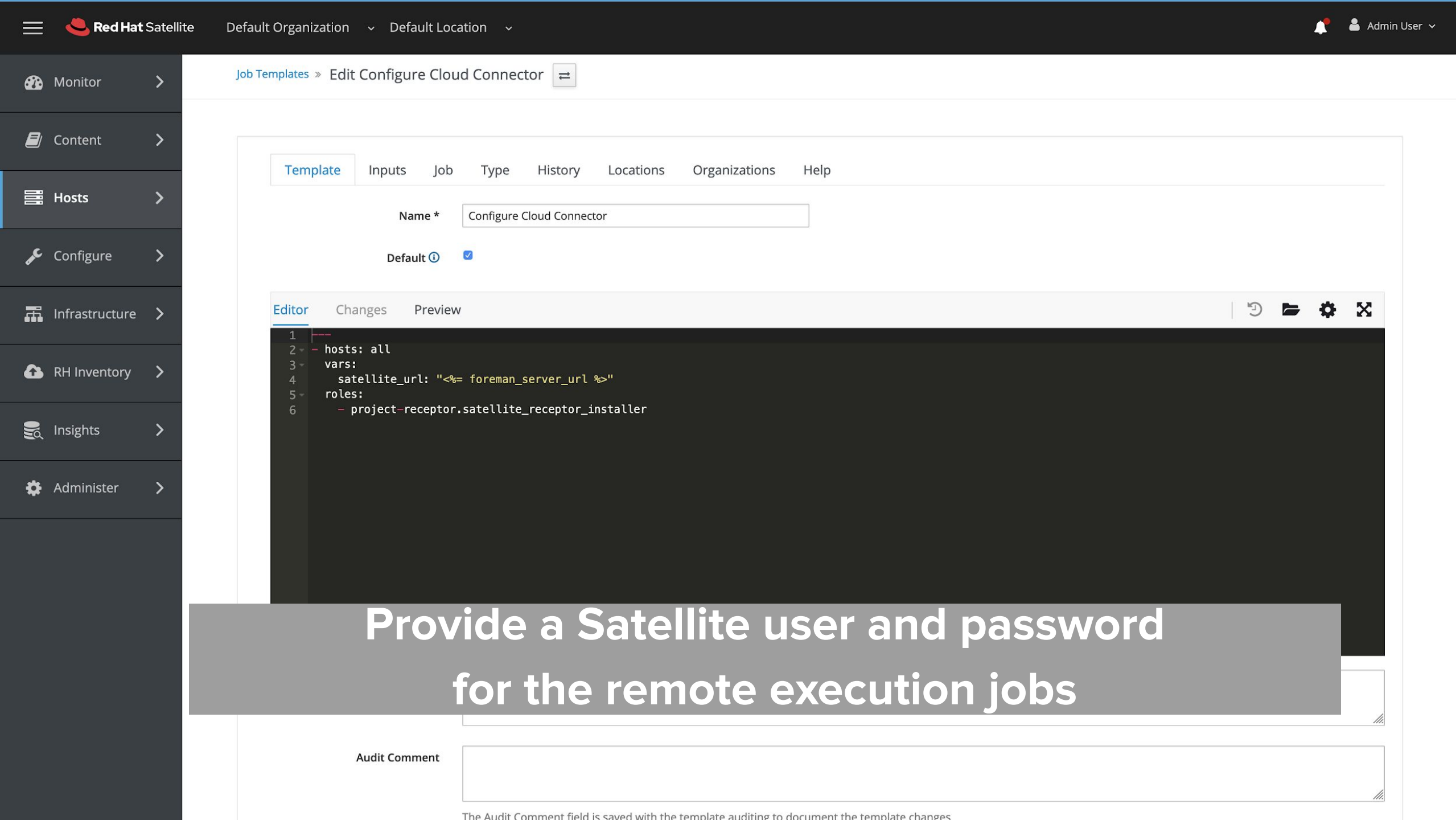
- Satellite must be version 6.7 or later.
- Upload the Inventory using the Inventory Plugin

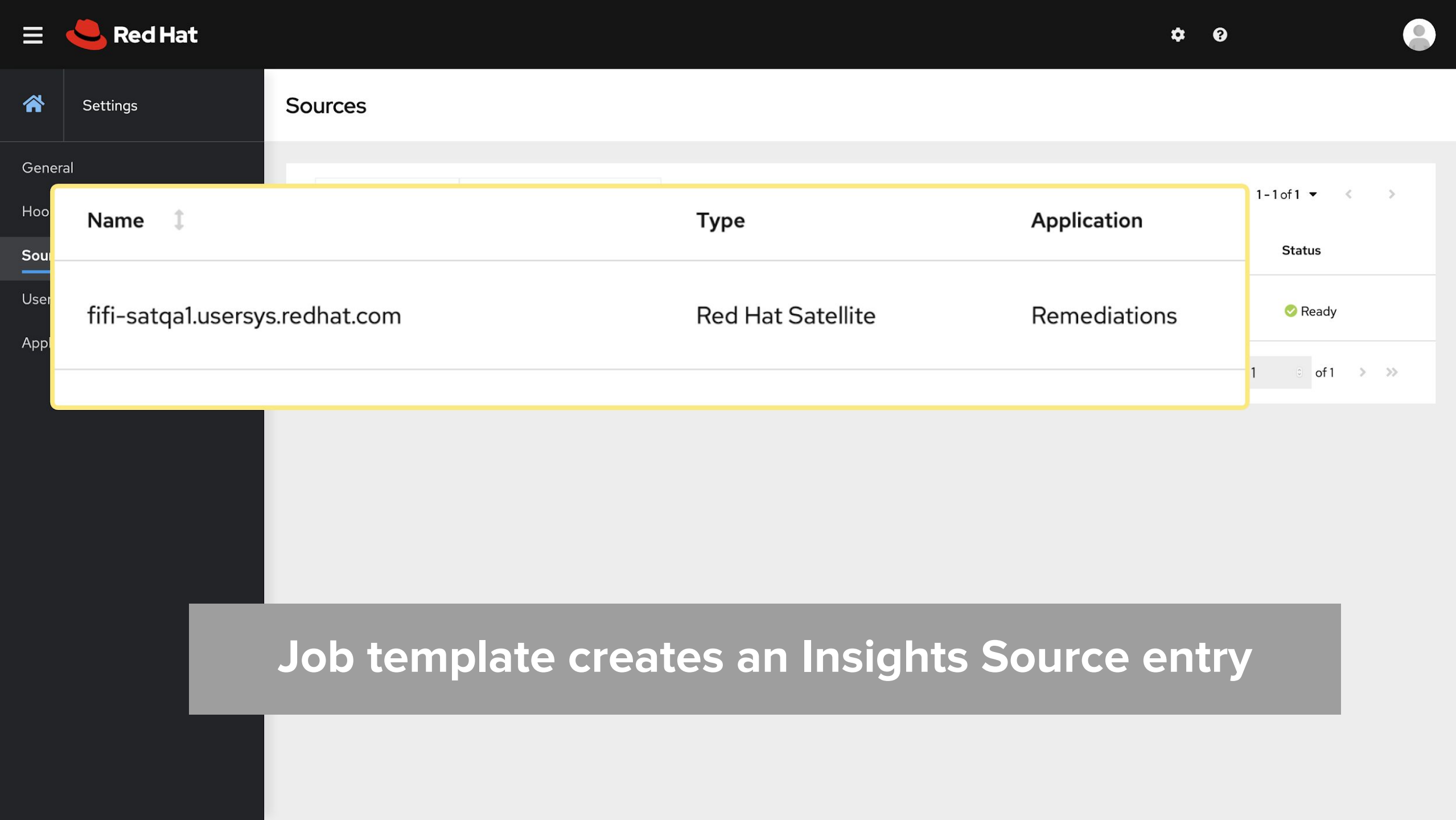
```
# satellite-installer \
--enable-foreman-plugin-inventory-upload \
--foreman-proxy-plugin-remote-execution-ssh-install-key true
```

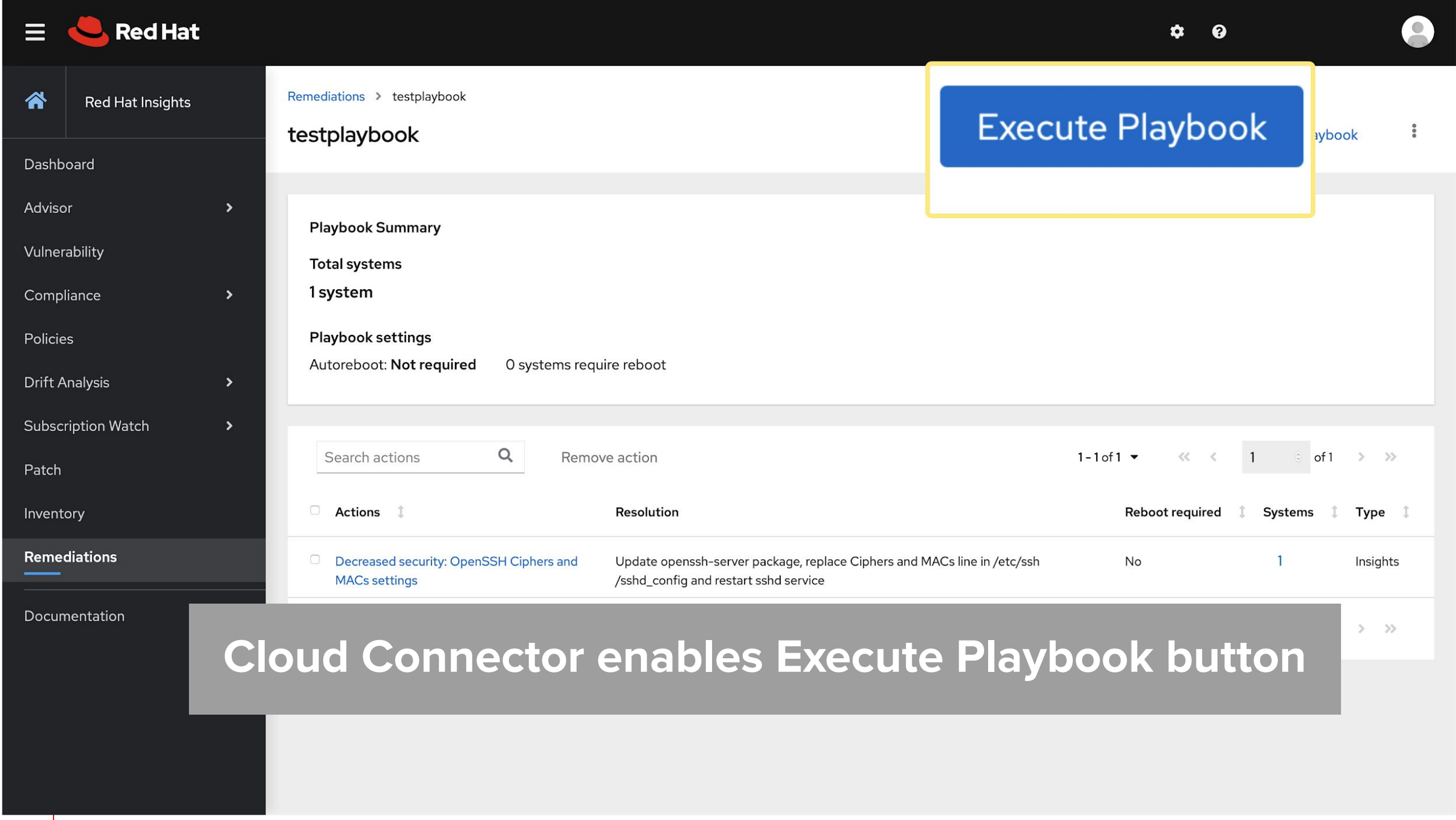


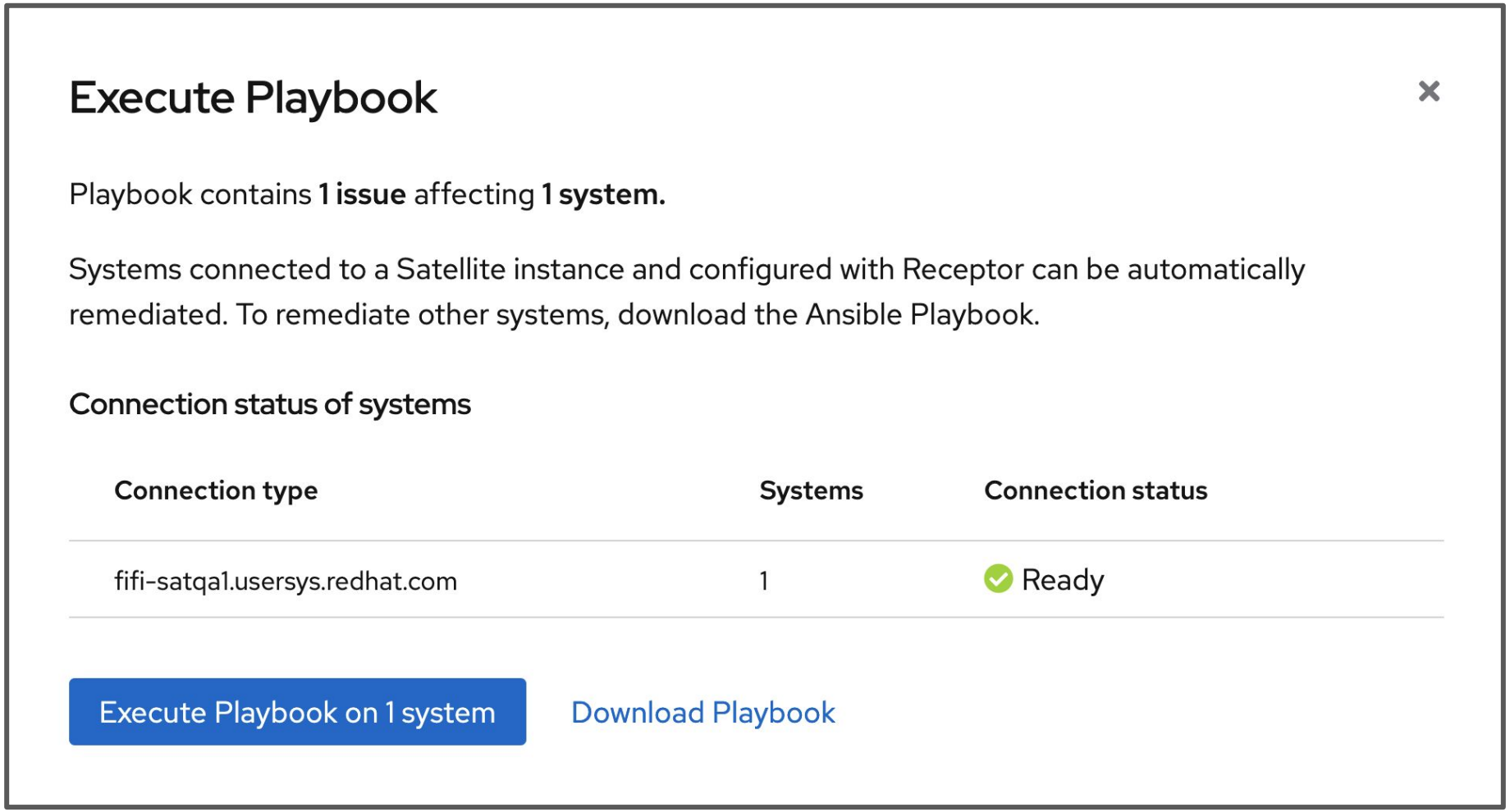
Red Hat


Red Hat Satellite
Default Organization
Default Location
Admin User
Monitor
Content
Hosts
Configure
Infrastructure
RH Inventory
Insights
Administer
Job Templates
Filter ...
Search
Documentation
Import
New Job Template
Name
Snippet
Locked
Actions
Ansible Roles - Ansible Default
Ansible Roles - Install from Galaxy
Ansible Roles - Install from git
Ansible - Run insights maintenance plan
Ansible - Run playbook
Check Update - SSH Default
Install Errata - Katello Ansible Default
Install Errata - Katello SSH Default
Install Group - Katello Ansible Default
Install Group - Katello SSH Default
Install Package - Katello Ansible Default
Install Package - Katello SSH Default
Module Action - Ansible Default
Module Action - SSH Default
Package Action - Ansible Default
Run
Configure Cloud Connector
Configure via a Satellite Job Template


Red Hat Satellite
Default Organization
Default Location
Admin User
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


Red Hat
Settings
Sources
General
Hoo
Sou
User
Appl
Name
Type
Application
Status
1 - 1 of 1
fifi-satqa1.usersys.redhat.com
Red Hat Satellite
Remediations
Ready
1
of 1
Job template creates an Insights Source entry


Red Hat
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
Actions
Resolution
Reboot required
Systems
Type
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



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

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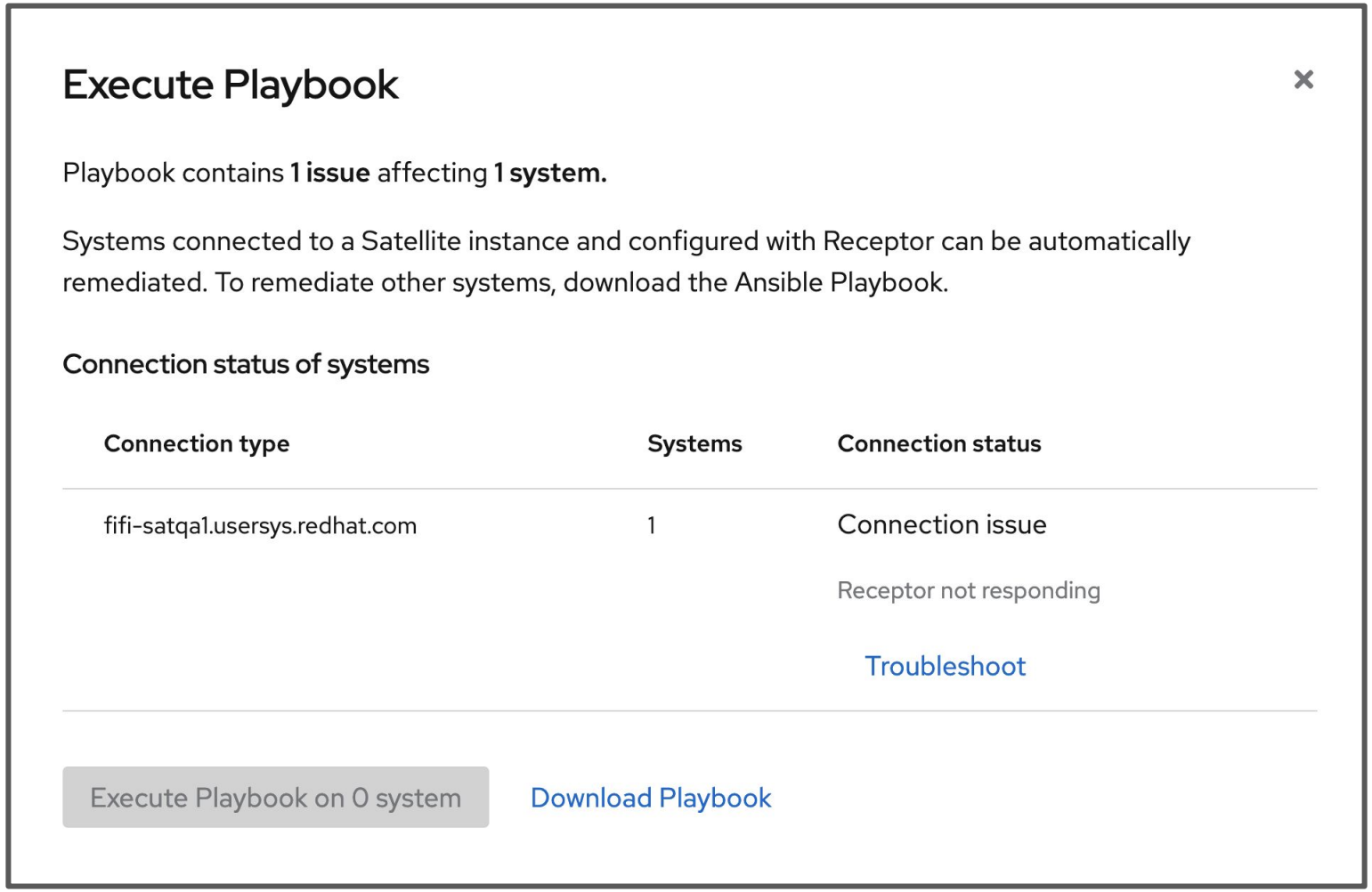

If there are issues, a message will be displayed

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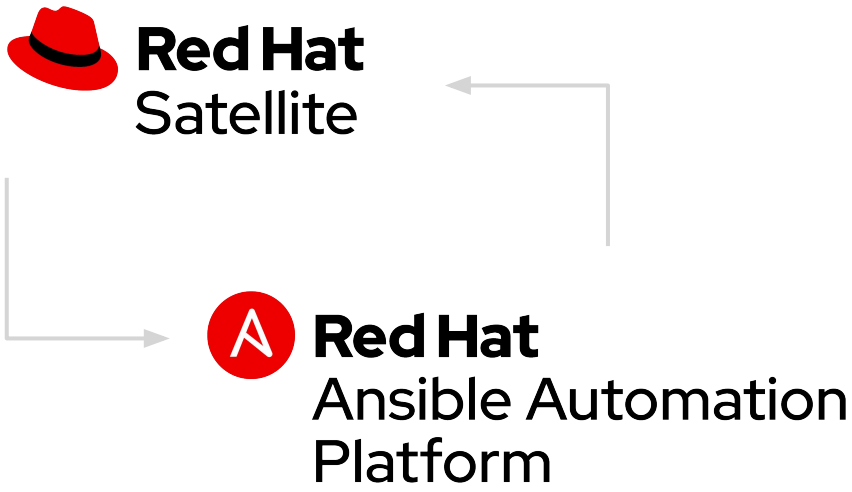
Other Integration Enhancements

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

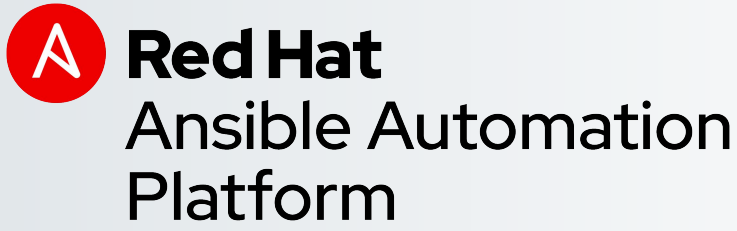
Remote Execution
Run Ansible Playbooks inside of Satellite

Deploy Insights using Ansible
Install Insights on all your hosts

RHEL System Roles
Deploy RHEL System Roles to hosts managed by Satellite

Automation enhancements

Continuing improvements with Red Hat Ansible® Automation Platform



Improved Performance for Dynamic Inventory

Better performance of inventory update in Ansible Tower

Ansible Enhancements

Under the covers enhancements for better Ansible integration

Security

Enhancements to security

Red Hat

Security enhancements

User impersonation

See what another users sees

HTTP proxy update

Simplified HTTP Proxy
Ability to enable the proxy on a per repo basis

Common Access Card support via Red Hat Single Sign On

TECH PREVIEW

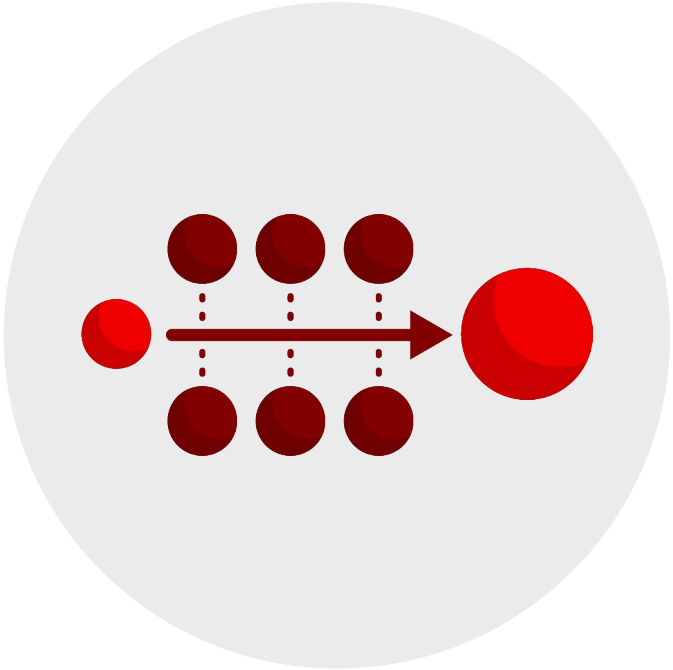
Support for Common Access Card (CAC) with Red Hat Single Sign On

Content Management

Enhancements to content management

Red Hat

Content Management enhancements



Entitlement Reporting

New report template for entitlement reporting

Ability to import and export templates

New UI to initiate import or export of templates from git or local disk.

Support for uploading source RPMs

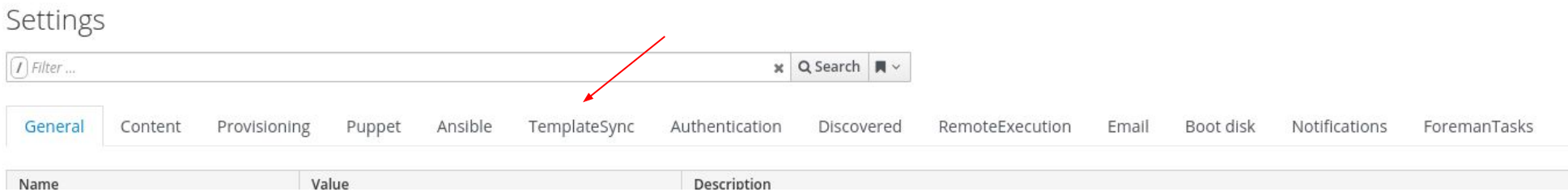
Adding support for source RPMs via API and CLI

Configuring Template Sync

Enable Template Sync

```
# satellite-installer --enable-foreman-plugin-templates
```

Administer → Settings



Other Steps - Follow the steps in Synchronizing Templates Using the Satellite API - Specifically:

- The template sync api call uses the foreman user ssh key in /usr/share/foreman/.ssh/
  - Ensure you Configure your SCM with the ssh key from /usr/share/foreman/.ssh/
  - I used the "Deploy Keys" feature in Github
- Accept the host key from your SCM as the foreman user before running any imports or exports

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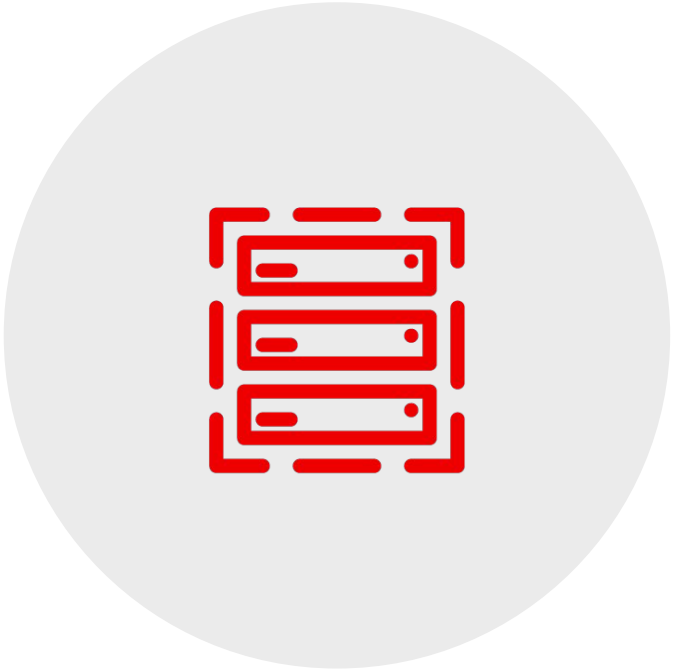
Provisioning

Enhancements to provisioning

Red Hat

Provisioning enhancements



Azure Support

Support for provisioning hosts in Microsoft Azure

Google Compute Engine enhancements

Added CLI and API endpoints for Google Compute Engine

Performance and Scale

Enhancements to performance and scale

Red Hat

Performance and Scale enhancements

Improved tuning assistant
Making it easier to tune Satellite to meet your needs.

Task performance improvements
Continuing performance improvements, with a focus on tasks in Satellite.

Little Bites

Small things that make a big difference.

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Additional Red Hat Enterprise Linux Integrations

Web Console Integration

Ability to open the Web Console for a specific host inside Satellite

System Purpose Enhancements

Ability to use Activation Keys with system purpose

Module Stream Enhancements

Ability to filter on modules in Content Views
Ability to incrementally update a Content View

Little Bites

Run Remote Execution jobs in a randomized order

Option to run remote execution jobs in a randomized order to help better spread the load when running multiple jobs against a large number of hosts

Usability improvements

Updated login page
Better alignment with Patternfly

Red Hat Satellite Upgrade

Red Hat

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

Satellite 5.x to 6.7

- Read the Transitioning Guide and FAQ to help plan the migration from Satellite 5 to Satellite 6
- Reach out to your account manager to discuss consulting options

Note: Satellite 5.8 will be end of life as of May 31, 2020

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

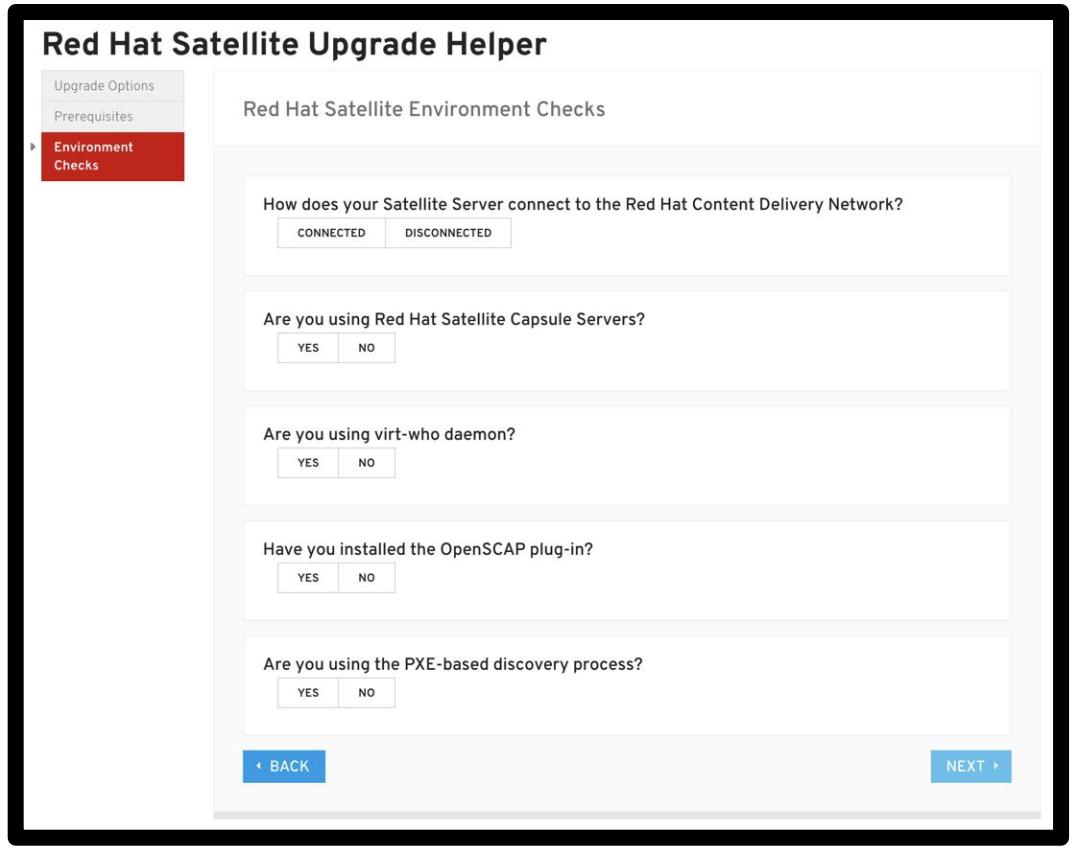
Red Hat Satellite Upgrade Helper

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

Tool designed to help you upgrade from:

- 6.3 to 6.4
- 6.4 to 6.5
- 6.5 to 6.6
- 6.6 to 6.7

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



Next Steps & Resources

Where to go to learn more

Red Hat

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.

Red Hat

Next steps

Using Satellite 5.8 or earlier?

Satellite 5.8 goes end-of-life (EOL) May 31, 2020.
Older versions are already EOL.

Move to the latest version of Satellite 6.

Using Satellite 6.4 or earlier?

Satellite 6.4 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/

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
- Satellite 6.5 Reporting Engine Video

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.

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twitter.com/RedHat

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