

# Red Hat Satellite 6.7

# **Release Notes**

Product notes, new features, and known bugs for Red Hat Satellite.

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Product notes, new features, and known bugs for Red Hat Satellite.

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# **Abstract**

This document contains product notes, brief descriptions of new features, and known bugs for Red Hat Satellite.

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# **CHAPTER 1. INTRODUCTION**

Red Hat Satellite is a system management solution that enables you to deploy, configure, and maintain your systems across physical, virtual, and cloud environments. Satellite provides provisioning, remote management and monitoring of multiple Red Hat Enterprise Linux deployments with a single, centralized tool.

Red Hat Satellite Server synchronizes the content from Red Hat Customer Portal and other sources, and provides functionality including fine-grained life cycle management, user and group role-based access control, integrated subscription management, as well as advanced GUI, CLI, or API access.

Red Hat Satellite Capsule Server mirrors content from Red Hat Satellite Server to facilitate content federation across various geographical locations. Host systems can pull content and configuration from the Capsule Server in their location and not from the central Satellite Server. The Capsule Server also provides localized services such as Puppet Master, DHCP, DNS, or TFTP. Capsule Servers assist you in scaling Red Hat Satellite as the number of managed systems increases in your environment.

# 1.1. SATELLITE 6 COMPONENT VERSIONS

Red Hat Satellite is a combination of a number of upstream projects. For the full details of the major projects included, and the version of those projects included in each major and minor release of Red Hat Satellite, see Satellite 6 Component Versions.

# 1.2. RED HAT SATELLITE AND PROXY SERVER LIFE CYCLE

For an overview of the life cycle phases for Red Hat Network Satellite and Red Hat Satellite and the status of support for these products, see Red Hat Satellite and Proxy Server Life Cycle.

# 1.3. RED HAT SATELLITE FAQ

For a list of frequently asked questions about Red Hat Satellite 6, see Red Hat Satellite 6 FAQ.

# **CHAPTER 2. CONTENT DELIVERY NETWORK REPOSITORIES**

This section describes the repositories required to install Red Hat Satellite 6.7.

You can install Red Hat Satellite 6.7 through the Content Delivery Network (CDN). To do so, configure **subscription-manager** to use the correct repository for your operating system version and variant.

Run the following command to enable a CDN repository:

# subscription-manager repos --enable=reponame

Run the following command to disable a CDN repository:

# subscription-manager repos --disable=reponame

The following sections outline the repositories required by Red Hat Satellite 6.7. When one of these repositories is required to install a package, the steps to enable the required repositories are included in the documentation.

# 2.1. RED HAT SATELLITE, CAPSULE, AND MAINTENANCE

The following table lists the repositories for Satellite Server, Capsule Server, and Satellite Maintenance.

Table 2.1. Red Hat Satellite, Capsule, and Maintenance

Repository Name	Repository Label
Red Hat Satellite 6.7 (for RHEL 7 Server) (RPMs)	rhel-7-server-satellite-6.7-rpms
Red Hat Satellite 6.7 (for RHEL 7 Server) (ISOs)	rhel-7-server-satellite-6.7-isos
Red Hat Satellite Capsule 6.7 (for RHEL 7 Server) (RPMs)	rhel-7-server-satellite-capsule-6.7-rpms
Red Hat Satellite Maintenance 6 (for RHEL 7 Server) (RPMs)	rhel-7-server-satellite-maintenance-6-rpms

# 2.2. RED HAT SATELLITE TOOLS

The following tables list the repositories for Red Hat Satellite Tools.

Table 2.2. Red Hat Satellite Tools for Red Hat Enterprise Linux 5

Repository Name	Repository Label
Red Hat Satellite Tools 6.7 (for RHEL 5 Server - ELS) (RPMs)	rhel-5-server-els-satellite-tools-6.7-rpms
Red Hat Satellite Tools 6.7 (for RHEL 5 for System Z - ELS) (RPMs)	rhel-5-for-system-z-els-satellite-tools-6.7-rpms

Table 2.3. Red Hat Satellite Tools for Red Hat Enterprise Linux 6

Repository Name	Repository Label
Red Hat Satellite Tools 6.7 (for RHEL 6 Desktop) (RPMs)	rhel-6-desktop-satellite-tools-6.7-rpms
Red Hat Satellite Tools 6.7 (for RHEL 6 Server) (RPMs)	rhel-6-server-satellite-tools-6.7-rpms
Red Hat Satellite Tools 6.7 (for RHEL 6 Server - AUS) (RPMs)	rhel-6-server-aus-satellite-tools-6.7-rpms
Red Hat Satellite Tools 6.7 (for RHEL 6 Workstation) (RPMs)	rhel-6-workstation-satellite-tools-6.7-rpms
Red Hat Satellite Tools 6.7 (for RHEL 6 for System Z) (RPMs)	rhel-6-for-system-z-satellite-tools-6.7-rpms
Red Hat Satellite Tools 6.7 (for RHEL 6 for IBM Power) (RPMs)	rhel-6-for-power-satellite-tools-6.7-rpms
Red Hat Satellite Tools 6.7 (for RHEL 6 for Scientific Computing) (RPMs)	rhel-6-for-hpc-node-satellite-tools-6.7-rpms

Table 2.4. Red Hat Satellite Tools for Red Hat Enterprise Linux 7

Repository Name	Repository Label
Red Hat Satellite Tools 6.7 (for RHEL 7 Desktop) (RPMs)	rhel-7-desktop-satellite-tools-6.7-rpms
Red Hat Satellite Tools 6.7 (for RHEL 7 Server) (RPMs)	rhel-7-server-satellite-tools-6.7-rpms
Red Hat Satellite Tools 6.7 (for RHEL 7 Server - EUS) (RPMs)	rhel-7-server-eus-satellite-tools-6.7-rpms
Red Hat Satellite Tools 6.7 (for RHEL 7 Server - Update Services SAP Solutions) (RPMs)	rhel-7-server-e4s-satellite-tools-6.7-rpms
Red Hat Satellite Tools 6.7 (for RHEL 7 Server - TUS) (RPMs)	rhel-7-server-tus-satellite-tools-6.7-rpms
Red Hat Satellite Tools 6.7 (for RHEL 7 Server - AUS) (RPMs)	rhel-7-server-aus-satellite-tools-6.7-rpms
Red Hat Satellite Tools 6.7 (for RHEL 7 Workstation) (RPMs)	rhel-7-workstation-satellite-tools-6.7-rpms

Repository Name	Repository Label
Red Hat Satellite Tools 6.7 (for RHEL 7 for System Z) (RPMs)	rhel-7-for-system-z-satellite-tools-6.7-rpms
Red Hat Satellite Tools 6.7 (for RHEL 7 for System Z - EUS) (RPMs)	rhel-7-for-system-z-eus-satellite-tools-6.7-rpms
Red Hat Satellite Tools 6.7 (for RHEL 7 for IBM Power) (RPMs)	rhel-7-for-power-satellite-tools-6.7-rpms
Red Hat Satellite Tools 6.7 (for RHEL 7 for IBM Power - EUS) (RPMs)	rhel-7-for-power-eus-satellite-tools-6.7-rpms
Red Hat Satellite Tools 6.7 (for RHEL 7 for IBM Power LE) (RPMs)	rhel-7-for-power-le-satellite-tools-6.7-rpms
Red Hat Satellite Tools 6.7 (for RHEL 7 for IBM Power LE - EUS) (RPMs)	rhel-7-for-power-le-eus-satellite-tools-6.7-rpms
Red Hat Satellite Tools 6.7 (for RHEL 7 for IBM Power LE - Update Services SAP Solutions) (RPMs)	rhel-7-for-power-le-e4s-satellite-tools-6.7-rpms
Red Hat Satellite Tools 6.7 (for RHEL 7 for Scientific Computing) (RPMs)	rhel-7-for-hpc-node-satellite-tools-6.7-rpms
Red Hat Satellite Tools 6.7 (for RHEL 7 for Scientific Computing - EUS) (RPMs)	rhel-7-for-hpc-node-eus-satellite-tools-6.7-rpms

Table 2.5. Red Hat Satellite Tools for Red Hat Enterprise Linux 8

Repository Name	Repository Label
Red Hat Satellite Tools 6.7 for RHEL 8 x86_64 (RPMs)	satellite-tools-6.7-for-rhel-8-x86_64-rpms
Red Hat Satellite Tools 6.7 for RHEL 8 s390x (RPMs)	satellite-tools-6.7-for-rhel-8-s390x-rpms
Red Hat Satellite Tools 6.7 for RHEL 8 ppc64le (RPMs)	satellite-tools-6.7-for-rhel-8-ppc64le-rpms
Red Hat Satellite Tools 6.7 for RHEL 8 aarch64 (RPMs)	satellite-tools-6.7-for-rhel-8-aarch64-rpms
Red Hat Satellite Tools 6.7 for RHEL 8 x86_64 - Extended Update Support (RPMs)	satellite-tools-6.7-for-rhel-8-x86_64-eus-rpms

Repository Name	Repository Label
Red Hat Satellite Tools 6.7 for RHEL 8 IBM z Systems - Extended Update Support (RPMs)	satellite-tools-6.7-for-rhel-8-s390x-eus-rpms
Red Hat Satellite Tools 6.7 for RHEL 8 Power, little endian - Extended Update Support (RPMs)	satellite-tools-6.7-for-rhel-8-ppc64le-eus-rpms
Red Hat Satellite Tools 6.7 for RHEL 8 ARM 64 - Extended Update Support (RPMs)	satellite-tools-6.7-for-rhel-8-aarch64-eus-rpms
Red Hat Satellite Tools 6.7 for RHEL 8 x86_64 - Update Services SAP Solutions (RPMs)	satellite-tools-6.7-for-rhel-8-x86_64-e4s-rpms
Red Hat Satellite Tools 6.7 for RHEL 8 Power, little endian - Update Services SAP Solutions (RPMs)	satellite-tools-6.7-for-rhel-8-ppc64le-e4s-rpms

# CHAPTER 3. KEY CHANGES TO THE DOCUMENTATION SET

The following notable changes were made to the Red Hat Satellite documentation set for this release:

# Configuring Virtual Machine Subscriptions in Red Hat Satellite

Configuring Virtual Machine Subscriptions in Red Hat Satellite has replaced the Virtual Instances Guide. The content has been reworked to improve readability and ease-of-use when using virt-who to manage host-based subscriptions.

# **Content Management Guide**

A new section on specifying HTTP proxies for individual repositories has been added: Changing the HTTP Proxy Policy for a Repository

# **Managing Hosts**

A new chapter on using report templates to monitor hosts has been added: Using Report Templates to Monitor Hosts

The Running Jobs on Hosts section has been reworked for readability and to add information about how Satellite selects Capsules for remote execution:

Running Jobs on Hosts

# **CHAPTER 4. TECHNOLOGY PREVIEW FEATURES**



#### **IMPORTANT**

Technology Preview features are not supported with Red Hat production service-level agreements (SLAs) and might not be functionally complete. Red Hat does not recommend using them for production. These features provide early access to upcoming product features, enabling customers to test functionality and provide feedback during the development process. For more information, see Red Hat Technology Preview Features Support Scope.

The following features are available as Technology Previews in Red Hat Satellite:

# Container-native Virtualization plug-in

Provisioning virtual machines with Container-native Virtualization.

# Kernel execution (kexec) template

Kernel execution template for PXE-less boot methods.

## Tracer

Integration with the Tracer tool, which monitors running processes and identifies if they need to be restarted due to package updates or similar activities.

# Common Access Card (CAC) authentication

CAC authentication in Satellite through Red Hat Single Sign-On.

# **CHAPTER 5. RELEASE INFORMATION**

These release notes highlight technology preview items, recommended practices, known issues, and deprecated functionality to be taken into consideration when deploying this release of Red Hat Satellite 6. Notes for updates released during the support lifecycle of this Red Hat Satellite 6 release will appear in the advisory text associated with each update.

## 5.1. ENHANCEMENTS

This release of Red Hat Satellite 6 features the following enhancements:

#### BZ#1201146

With the introduction of Azure provisioning support, you can create a compute resource for Azure and provision new hosts on Azure from the Satellite web UI, API, or Hammer CLI.

#### BZ#1215390

If your Satellite deployment includes more than 5000 hosts, you can now use satellite-installer to configure Satellite with predefined tuning profiles to improve the performance of Satellite. Note that you cannot use tuning profiles on Capsule.

#### BZ#1378442

Support has been added for uploading the SRPM file type content using the Satellite API or Hammer CLI.

#### BZ#1474311

For improved task management and monitoring, a number of web UI enhancements have been added to the **Monitor** > **Tasks** window in the Satellite web UI. To help identify and track potential issues with long-running tasks, a **Duration** column has been added (BZ#1474311). Buttons have been added to allow for bulk cancelling or resuming of tasks (BZ#1269673, BZ#1777908).

## BZ#1568046

You can now select an HTTP proxy policy for individual repositories. The proxy policy specifies whether to use no proxy, the globally configured proxy, or a specific proxy.

#### BZ#1597246

You can now choose to randomize the order in which remote execution jobs are executed on hosts, helping to reduce the load when running a large number of remote execution jobs on a large number of hosts.

#### BZ#1607550

This release includes a new reports API to improve the performance of Ansible Tower inventory integration.

#### BZ#1662492

You can use the new Entitlements report template to monitor which entitlements are consumed by hosts that you manage with Satellite.

## BZ#1694093

To improve performance, if Event and Monitor tasks stop for any reason, they are restarted automatically. If the automatic restart fails, an alert is triggered. Furthermore, if multiple instances of the Event and Monitor tasks are running, they now stop automatically and only one instance of each task runs.

#### BZ#1698154

You can now import and export templates in the Satellite web UI at Hosts > Sync Templates. After you click Submit, the web UI displays a new page with the status of the import or export.

#### BZ#1698158

You can now set System Purpose attributes in an activation key, so that hosts registered using that activation key have their System Purpose set automatically.

#### BZ#1698181

You can now access a Red Hat Enterprise Linux host's Web Console directly from the Satellite web UI. Navigate to Hosts > All Hosts, click the name of the host, then click Web Console. The host's Web Console opens and automatically authenticates using SSH. Note that you must first enable Web Console access using satelliter-installer.

#### BZ#1718077

The template editor UI has been updated with usability improvements.

#### BZ#1718988

You can now create content view filters based on AppStreams, and incrementally update a content view with AppStreams and its dependencies.

#### BZ#1721848

Support has been added to the Google Compute Engine (GCE) compute resource for Hammer CLI and API endpoints.

#### BZ#1732056

Satellite 6.7 uses separate settings to configure default download policies for Red Hat and custom repositories: **Default Red Hat Repository download policy** and **Default Custom Repository download policy**. The default value for the **Default Red Hat Repository download policy** setting is **on\_demand**. The default value for the **Default Custom Repository download policy** setting is **immediate**. These settings affect newly synchronized repositories. To review the default settings after an upgrade, in the Satellite web UI, navigate to **Administer** > **Settings** and click the **Content** tab.

#### BZ#1734808

For improved Ansible performance and stability, ansible-runner is now the only available Ansible implementation. The ansible-playbook implementation is no longer available.

## BZ#1814595

Previously, password hashing in Satellite used SHA1. As part of this release, new installations of Satellite 6.7 use bcrypt for password hashing.

Users who upgrade from Satellite 6.6 to 6.7 continue to have SHA1 for password hashing until users change their passwords. As part of your upgrade to Satellite, consider enforcing password updates for all users.

To change the bcrypt cost value that you want to use for password hashing, in the Satellite web UI, navigate to **Administer** > **Settings**, click the **Authentication** tab, and edit the **BCrypt password cost** setting.

Changes to the bcrypt cost value are implemented after the next password change. Note that while higher values are safer, higher bcrypt cost values have a performance impact on API and UI logins.

# 5.2. TECHNOLOGY PREVIEW

The items listed in this section are provided as Technology Previews. For further information on the scope of Technology Preview status, and the associated support implications, refer to <a href="https://access.redhat.com/support/offerings/techpreview/">https://access.redhat.com/support/offerings/techpreview/</a>.

#### BZ#1571210

Technology Preview support has been added for Common Access Cards (CAC) authentication in Satellite through Red Hat Single Sign On.

# 5.3. KNOWN ISSUES

These known issues exist in Red Hat Satellite 6 at this time:

#### BZ#1619274

UEFI HTTP boot is currently not supported in Satellite. The templates may appear in the Satellite UI as functionality is added, but these should not be used until the feature is supported.

#### BZ#1713401

When you apply the OSPP security policy to a Red Hat Enterprise Linux 8 system during provisioning, the katello-ca-consumer package cannot be installed from Satellite Server. Therefore, the system cannot be registered as a content host. As a workaround, after the system is provisioned, install the katello-ca-consumer with the following command and then register the system manually:

# rpm -Uvh --nodigest --nofiledigest http://satellite.example.com/pub/katello-ca-consumer-latest.noarch.rpm

#### BZ#1720369

Entering the following command can lead to broken symlinks for repository metadata. Do not enter this command until BZ#1720369 is resolved.

# foreman-rake katello:delete\_orphaned\_content RAILS\_ENV=production

If you have broken symlinks, regenerate the yum repository metadata.

#### BZ#1814361

If you have changed a Satellite hostname by running the **satellite-change-hostname** command with the **--skip-dns** option and then try to change the hostname again, the operation fails. This happens because the **satellite-change-hostname** command expects that the dynamic DNS files contain the current hostname, however running the **satellite-change-hostname** command with the **--skip-dns** option does not change the dynamic DNS files.

To fix this issue, after changing the hostname once with the **--skip-dns** option, change the hostname again to the initial hostname that matches the DNS record without the **--skip-dns** option. Then, change the hostname with the **--skip-dns** option again.

#### BZ#1816699

If all of a Red Hat account's organizations include both custom subscriptions and Red Hat subscriptions, and you added the custom subscriptions first, the "Configure Cloud Connector" Ansible playbook will not detect the account number and will fail to configure a Cloud Connector for that account. To work around this issue, add the Red Hat subscriptions before adding the custom subscriptions.

# BZ#1821256

If a remote execution job fails with the error message "The only applicable Capsule is down", run **katello-service restart** on Satellite Server and run the job again.

# 5.4. DEPRECATED FUNCTIONALITY

The items in this section are either no longer supported, or will no longer be supported in a future release.

#### BZ#1789834

The background download policy is deprecated and will be removed in a future release. At removal time, repositories that are set to the background download policy will be converted to the immediate download policy.

## BZ#1789838

The following management operations of OSTree and Puppet content types are deprecated and will be removed in a future release:

- Creating OSTree and Puppet repositories
- Synchronizing OSTree and Puppet repositories
- Adding repositories of OSTree and Puppet content types to Content View.
- Publishing and promoting the Content Views containing repositories of OSTree and Puppet content types across life cycle environments.

#### BZ#1789845

Smart Variables are deprecated and will be removed in a future release. Smart Variables were introduced as a workaround before parameterized Puppet classes existed. You must use Smart Class Parameters with parameterized Puppet classes to pass values from Satellite to Puppet.

#### BZ#1791654

The /api/config\_templates/ API endpoint is deprecated in Satellite 6.7 and will be removed in Satellite 6.8. Use the /api/provisioning\_templates/ API endpoint instead.

#### BZ#1791656

The /api/hosts/:id/status API endpoint is deprecated in Satellite 6.7 and will be removed in Satellite 6.8. To get the configuration status for hosts, use the more specific /api/hosts/:id/status/configuration API endpoint instead.

## BZ#1791658

The /api/reports/ API endpoint is deprecated in Satellite 6.7 and will be removed in Satellite 6.8. Use the /api/config\_reports/ API endpoint instead.

#### BZ#1791659

The API parameter **use\_puppet\_default** that is used with smart class parameters and overrides is deprecated in Satellite 6.7 and will be removed in Satellite 6.8. Use the **omit** API parameter instead.

#### BZ#1791663

The API parameters **name** and **resource\_type** that is used with the /api/permissions/ API endpoint are deprecated in Satellite 6.7 and will be removed in Satellite 6.8. Use the the **search** parameter with **name = my\_permission\_name** or **resource\_type = my\_resource\_type** values instead.

#### BZ#1791665

The **uuid** API parameter that is used with the /api/compute\_resources/ API endpoint is deprecated in Satellite 6.7 and will be removed in Satellite 6.8. Use the **datacenter** API parameter instead.

#### BZ#1713222

The **--environment** and **--environment-id** options of the **hammer** command are deprecated because of confusion between lifecycle and Puppet environments. Use the **--lifecycle-environment** or **--puppet-environment** options instead.

#### BZ#1798154

The Katello agent is deprecated and will be removed in a future release. Transition your workloads to using the remote execution feature.

# 5.5. REMOVED FUNCTIONALITY

#### BZ#1591908

To improve performance and prevent the storage of unnecessary data, which led to reported problems with disk overflow, the **cp\_events** table has been removed from the Candlepin database. The corresponding **Events** tab that was located in the Satellite web UI at **Hosts > Content Hosts > hostname > Subscriptions** has been removed.

# BZ#1806548

The **katello-remove** command that uninstalled Satellite and Capsule Servers has been removed.