Red Hat Satellite 6.10

Release Notes

Product notes, new features, and known issues for Red Hat Satellite.
Red Hat Satellite 6.10 Release Notes

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Abstract

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

CHAPTER 1. INTRODUCTION ........................................................................................................ 3
  1.1. SATELLITE 6 COMPONENT VERSIONS ........................................................................... 3
  1.2. RED HAT SATELLITE AND PROXY SERVER LIFE CYCLE .................................................. 3
  1.3. RED HAT SATELLITE FAQ ............................................................................................. 3

CHAPTER 2. CONTENT DELIVERY NETWORK REPOSITORIES ............................................ 4
  2.1. RED HAT SATELLITE, CAPSULE, AND MAINTENANCE ................................................. 4
  2.2. RED HAT SATELLITE TOOLS ....................................................................................... 4

CHAPTER 3. KEY CHANGES TO THE DOCUMENTATION SET .............................................. 7

CHAPTER 4. TECHNOLOGY PREVIEW FEATURES ............................................................... 8

CHAPTER 5. RELEASE INFORMATION .................................................................................... 9
  5.1. MAJOR CHANGES ........................................................................................................ 9
  5.2. ENHANCEMENTS ....................................................................................................... 9
  5.3. KNOWN ISSUES ........................................................................................................ 11
  5.4. DEPRECATED FUNCTIONALITY ................................................................................ 12
  5.5. REMOVED FUNCTIONALITY ...................................................................................... 12
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 share content across various geographical locations. Host systems can pull content and configuration from the Capsule Server in their location instead of 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 several upstream projects. For 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.

You can install Red Hat Satellite 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. The documentation includes the steps for you to enable a repository when that repository is required to install a package.

2.1. RED HAT SATELLITE, CAPSULE, AND MAINTENANCE

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

<table>
<thead>
<tr>
<th>Repository Name</th>
<th>Repository Label</th>
</tr>
</thead>
<tbody>
<tr>
<td>Red Hat Satellite 6 (for RHEL 7 Server) (RPMs)</td>
<td>rhel-server-7-satellite-6.10-rpms</td>
</tr>
<tr>
<td>Red Hat Satellite 6 (for RHEL 7 Server) (ISOs)</td>
<td>rhel-server-7-satellite-6.10-isos</td>
</tr>
<tr>
<td>Red Hat Satellite Capsule 6 (for RHEL 7 Server) (RPMs)</td>
<td>rhel-server-7-satellite-capsule-6.10-rpms</td>
</tr>
<tr>
<td>Red Hat Satellite Maintenance 6 (for RHEL 7 Server) (RPMs)</td>
<td>rhel-7-server-satellite-maintenance-6-rpms</td>
</tr>
</tbody>
</table>

2.2. RED HAT SATELLITE TOOLS

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

<table>
<thead>
<tr>
<th>Repository Name</th>
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</tr>
</thead>
<tbody>
<tr>
<td>Red Hat Satellite Tools 6 (for RHEL 6 Desktop) (RPMs)</td>
<td>rhel-6-desktop-satellite-tools-6.10-rpms</td>
</tr>
<tr>
<td>Red Hat Satellite Tools 6 (for RHEL 6 Server) (RPMs)</td>
<td>rhel-6-server-els-satellite-tools-6.10-rpms</td>
</tr>
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<td>--------------------------------------------------------------------------------</td>
<td>----------------------------------------</td>
</tr>
<tr>
<td>Red Hat Satellite Tools 6 (for RHEL 6 Workstation) (RPMs)</td>
<td>rhel-6-workstation-satellite-tools-6.10-rpms</td>
</tr>
<tr>
<td>Red Hat Satellite Tools 6 (for RHEL 6 for System Z) (RPMs)</td>
<td>rhel-6-for-system-z-satellite-tools-6.10-rpms</td>
</tr>
<tr>
<td>Red Hat Satellite Tools 6 (for RHEL 6 for IBM Power) (RPMs)</td>
<td>rhel-6-for-power-satellite-tools-6.10-rpms</td>
</tr>
<tr>
<td>Red Hat Satellite Tools 6 (for RHEL 6 for Scientific Computing) (RPMs)</td>
<td>rhel-6-for-hpc-node-satellite-tools-6.10-rpms</td>
</tr>
</tbody>
</table>

Table 2.3. Red Hat Satellite Tools for Red Hat Enterprise Linux 7

<table>
<thead>
<tr>
<th>Repository Name</th>
<th>Repository Label</th>
</tr>
</thead>
<tbody>
<tr>
<td>Red Hat Satellite Tools 6 (for RHEL 7 Desktop) (RPMs)</td>
<td>rhel-7-desktop-satellite-tools-6.10-rpms</td>
</tr>
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<td>rhel-7-for-hpc-node-satellite-tools-6.10-rpms</td>
</tr>
<tr>
<td>Red Hat Satellite Tools 6 (for RHEL 7 for IBM Power LE) (RPMs)</td>
<td>rhel-7-for-power-le-satellite-tools-6.10-rpms</td>
</tr>
</tbody>
</table>

Table 2.4. Red Hat Satellite Tools for Red Hat Enterprise Linux 8

<table>
<thead>
<tr>
<th>Repository Name</th>
<th>Repository Label</th>
</tr>
</thead>
<tbody>
<tr>
<td>Red Hat Satellite Tools 6 for RHEL 8 s390x (RPMs)</td>
<td>satellite-tools-6.10-for-rhel-8-s390x-rpms</td>
</tr>
<tr>
<td>Red Hat Satellite Tools 6 for RHEL 8 ppc64le (RPMs)</td>
<td>satellite-tools-6.10-for-rhel-8-ppc64le-rpms</td>
</tr>
<tr>
<td>Repository Name</td>
<td>Repository Label</td>
</tr>
<tr>
<td>-----------------------------------------------------</td>
<td>-------------------------------------------------------</td>
</tr>
<tr>
<td>Red Hat Satellite Tools 6 for RHEL 8 x86_64 (RPMs)</td>
<td>satellite-tools-6.10-for-rhel-8-x86_64-rpms</td>
</tr>
<tr>
<td>Red Hat Satellite Tools 6 for RHEL 8 aarch64 (RPMs)</td>
<td>satellite-tools-6.10-for-rhel-8-aarch64-rpms</td>
</tr>
</tbody>
</table>
CHAPTER 3. KEY CHANGES TO THE DOCUMENTATION SET

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

**Monitoring Guide**

The *Monitoring Guide* has been temporarily removed from the Red Hat Satellite documentation set while it is being updated for future versions.

**Conscious Language Initiative**

Red Hat is committed to replacing problematic language in our code, documentation and web properties. We are beginning with these four terms: master, slave, blacklist, and whitelist. Because of the enormity of this endeavor, these changes will be implemented gradually over several upcoming releases. For more details, please see our [CTO Chris Wright’s message](mailto:CTOChrisWright@redhat.com).
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:

OVAL / CVE Reporting Support

Satellite now includes the ability to scan systems for vulnerabilities using the OVAL standard data feed provided by Red Hat. `foreman_openscap` contains the API to upload the OVAL content used to trigger the OVAL oscap scans. The results are parsed for CVEs and sent to Satellite which then generates reports of managed hosts and the CVEs that effect them.

Container-native virtualization plugin

Provisioning virtual machines with Container-Native Virtualization.

Kernel execution (kexec) template

Kernel execution template for PXE-less boot methods.
CHAPTER 5. RELEASE INFORMATION

These release notes highlight technology preview items, recommended practices, known issues, and deprecated functionality you must take 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. MAJOR CHANGES

This release of Red Hat Satellite 6 features the following major changes:

Registry and port changes

Previously, the Satellite server used two registries, one on port 5000 and another on port 443. With 6.10, the registry on port 5000 is no longer used. The registry used on port 443 continues to apply for both Satellite and Capsule.

For a complete list of supported ports and firewall requirements, see:

- [Ports and Firewalls Requirements in Installing Satellite Server from a Connected Network](#)
- [Ports and Firewalls Requirements in Installing Satellite Server from a Disconnected Network](#)
- [Ports and Firewalls Requirements in Installing Capsule Server](#)

Change from Pulp 2 to Pulp 3

At Satellite 6.10 Pulp 2 is replaced by Pulp 3. Upgrading Satellite from 6.9 to 6.10 also migrates Pulp content, however this can take some considerable time. [Preparing to Migrate Content to Pulp 3](#) supplies a procedure to pre-migrate Pulp content from Pulp 2 to Pulp 3 to save time before you upgrade.

5.2. ENHANCEMENTS

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

Ability to support Azure GovCloud

Support has been added for client management using Azure GovCloud for isolated environments.

Satellite Air-Gapped and Disconnected

Satellite provides command-line utilities to support users in disconnected environments. Typically, this involves a Satellite at an internet-connected site and a Satellite at a disconnected site with no internet connectivity.

Satellite 6.10 provides a new command line to support moving content from the connected site to the disconnected site. The new interface provides several enhancements and improvements over previous support. The new command line continues to provide the ability to export content from a Satellite and then import it into another Satellite.

When exporting content, you can export the Library, a Content View Version, or a single repository and choose to export either fully or incrementally. The `incremental` option only exports content not previously exported. In addition, you can choose to have the content exported to a single file or multiple files of a limited size.

When importing content, the CLI also creates missing resources and associations based upon the exported content. This includes creation of repositories and content views.
Exposé Ansible Collections for Sync Only on Connected Satellite

Satellite 6.10 introduces management of Ansible Collections in disconnected environments, where a Red Hat Automation Hub is also deployed. In this deployment configuration, both a connected and disconnected site exist. Both sites have Satellite and an Automation Hub deployed. The connected site has internet connectivity and the disconnected site does not.

Satellite Ansible Collections support enables a user at the connected site to create a repository pointing to the Automation Hub at that site. They can then synchronize their collections to this repository. When synchronized, use the Satellite command-line interface to export the content in a format that can then be taken to the disconnected site. When at the disconnected site, use the Satellite command-line interface to import content into the disconnected Satellite. The Automation Hub at the disconnected site can then consume the content.

Foreman_webhooks replaces foreman_hooks

Satellite 6.10 replaces the foreman_hooks plugin with foreman_webhooks to simplify integration with external systems to Satellite through their APIs. When specific events occur in Satellite, a user-defined webhook is triggered. An example would be the use of a webhook to populate the Ansible Tower inventory on completion of host provisioning, or triggering an Ansible job in Tower, after the repository has been synchronized in Satellite.

Personal Access Tokens

Personal Access Tokens are a means of authentication introduced in a previous version of Satellite. In this release, a new UI has been added so you can create PATs easily, expire them, or monitor their last use time. You can find the UI in your account settings under the Personal Access Tokens tab.

Playbook Signatures

From Satellite 6.10, remediation playbooks originating from console.redhat.com contain additional signatures that are verified by Satellite before their execution. The remediation is not performed if the signature is invalid. This provides an additional layer of security.

Satellite Convert2RHEL support

Satellite adds support to automate the Convert2RHEL operation for non-Red Hat Enterprise Linux hosts that you want to convert to a supported version of Red Hat Enterprise Linux.

Satellite 6.10 Server works with Satellite 6.9 Capsules

Satellite 6.10 can function with Satellite 6.9 Capsules. However, customers are encouraged to upgrade their Capsules as soon as possible to ensure the best performance and scale.

Ability to visually represent systems registered and in sync with Insights

Satellite now has user interface indicators to show when your hosts are both registered and in sync with Red Hat Insights.

Ability to configure Pulp timeouts

Satellite now has the ability to define how long it will hold a connection to a URL during synchronization of content before timing out. If users experience timeout errors while syncing content they can increase this value in the settings to match the availability of remote resources. Setting the value too high can prevent Satellite from automatically detecting when a remote resource is not releasing the connection. If this occurs the synchronization can take a considerable time.

Red Hat Insights Plugin removed

Functionality that was available under the Insights menu option has now been directly integrated into the Hosts > All Hosts user interface to unify the experience of recommending and remediating actions for the hosts managed in Satellite.

Ability to verify if required packages are installed as part of the pre-upgrade check
Satellite can now verify if the **satellite** or **satellite-capsule** packages are present on the server during the pre-upgrade check.

**Ability to unset environmental variables when the installer is running**

Satellite now unsets the **http_proxy** environmental variables within the installer environment for the duration of the installation process.

**Ability to turn backups on and off when cleaning up tasks from database**

Satellite no longer backs up tasks by default. You can now enable or disable tasks backup by setting `satellite-installer --foreman-plugin-tasks-backup` to **true** or **false**.

```
# satellite-installer --foreman-plugin-tasks-backup false
```

**NOTE**

For upgrades, task backups are enabled by default. You can disable the task backups with the following command:

```
# satellite-installer --foreman-plugin-tasks-backup false
```

**Advanced options when registering a host**

Satellite user interface under **Hosts > Register Host** now allows more fine-grained settings for the host registration command and displays inherited values.

### 5.3. KNOWN ISSUES

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

**Upgrade considerations concerning Pulp migration and future RHEL**

See Upgrade paths in the Upgrading and Updating Red Hat Satellite guide.

**RHEL8 systems with OSPP applied cannot install the katello-ca_consumer package from Satellite 6.5**

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. As a result, the system cannot be registered as a content host. As a workaround, after the system is provisioned, install **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#1713401**

**Increased use of memory by Pulp 3 workers during repository synchronization**

During repository synchronization, Pulp 3 workers exhibit higher memory use when compared to Pulp 2 workers. As a result, Out of Memory or heavy swapping can occur when syncing several large repositories concurrently.

**BZ#1994397**

**Pulp - Syncing repositories with HTTPS proxy set ends with warning**

Syncing repositories with HTTPS proxy set ends with warning **Katello::Errors::Pulp3 Error Only HTTP proxies are supported**. A workaround is to use plain HTTP proxy or an HTTP proxy that is upgraded to HTTPS using the HTTP CONNECT method.

**BZ#1993917**
Content View promotion performance
Promoting a Content View with filters for a large repository may take noticeably longer than under Pulp 2.
BZ#1995232

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

environment_id parameter
The `environment_id` parameter is deprecated for promoting a content view with API. The new `environment_ids` replaces it.

Bootstrap.py
The `bootstrap.py` script that was used to register a host to Satellite Server or Capsule Server has been replaced with the `curl` command created with the global registration template.

Katello-agent
Katello-agent is deprecated in this version and will be removed in the next release. Transition your workloads to use the remote execution feature.

katello-ca-consumer Package
The katello-ca-consumer package is deprecated in this version and will be removed in a future release. Use the global registration template for registering a host to Satellite.

Puppet Run API
The puppet run API endpoint `/api/hosts/:id/puppetrun`, the built in apidoc, and the CLI command are deprecated in this version of Satellite. They will be removed in the next version.

Content ISOs on the CDN
Content ISOs previously hosted at redhat.com for import into Satellite Server have been deprecated in this version and will be removed in the next version of Satellite. Export and Import of synchronized content is improved as part of Satellite 6.10. Red Hat recommends that this be used instead of Content ISOs.

5.5. REMOVED FUNCTIONALITY

RHEV API v3
The RHEV API v3 was deprecated in Satellite 6.9. It has been removed in this version of Satellite.

pulp-puppet-module Builder
Puppet Content Management and `pulp-puppet-module` builder were deprecated in Satellite 6.9. They have been removed in this version of Satellite. Existing synchronized Puppet repositories will be removed from Satellite. Upon upgrade to Satellite 6.10, Puppet repositories will be deleted if any of the following conditions are met:

- If there are any Puppet repositories in Library lifecycle environment.
- If there are Puppet repositories in unpublished Content Views. For further details, see What will happen to Puppet content on Satellite server after upgrade to Satellite 6.10?

OSTree and Puppet Content Type
The following management operations of OSTree and Puppet content types was deprecated in Satellite 6.9 and have been removed in this version of Satellite:

- 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.

**Delta RPM (drpm) Support**
Delta RPM (drpm) support was deprecated in Satellite 6.9. It has been removed in this version of Satellite.

**Red Hat Access Insights plugin**
The Red Hat Access Insights plugin was deprecated in Satellite 6.9. It has been removed in this version of Satellite.

**Background Download Policy for Repositories**
The option to set Download Policy = Background has been removed in this release. If you use this setting, the upgrade process updates those repositories to Download Policy = Immediate. As a result, repository synchronizations might take longer. This is because a synchronization will not be considered complete until all content has been downloaded.

**Foreman Hooks**
Foreman Hook functionality was deprecated in Satellite 6.9. It has been removed in this version of Satellite.

**Generic and Host Bootdisks**
Generic and host bootdisks were deprecated in Satellite 6.9. They have been removed in this version of Satellite and are disabled in both UI and CLI. Use Full Host Bootdisk, which is based on SYSLINUX/Grub2 bootloaders and works on all RHEL certified hardware. The VMWare auto bootdisk attaching feature now also uses Full Host Disk.

**hammer content-view version export and hammer content-view export-legacy**
As part of the Satellite Air Gapped and Disconnected enhancements, there are changes to the Satellite command-line interface, including the removal of commands.
The commands removed are:

- **hammer content-view version export**
  In Satellite 6.10, this command has been replaced with **hammer content-export complete version** and **hammer content-export incremental version**.

- **hammer content-view version export-legacy**
  In Satellite 6.10, this command has been removed.

A replacement command to generate exported content in the same format does not exist. However, the command-line enables content export content from a Satellite and import to another Satellite. For more information on functionality provided by Satellite 6.10, see Synchronizing Content Between Satellite Servers.