Red Hat Satellite 6.1

Release Notes

Edition 2
Red Hat Satellite 6.1 Release Notes

Edition 2

Red Hat Satellite Documentation Team
Abstract

This document contains product notes, brief descriptions of new features, and known bugs for Red Hat Satellite 6.1. You can find more detailed information on the Customer Portal at
# Table of Contents

**CHAPTER 1. NEW FEATURES AND ENHANCEMENTS** ........................................... 3
  1.1. ERRATA MANAGEMENT 3
  1.2. CONTAINER MANAGEMENT 3
  1.3. PROVISIONING 3
  1.4. SUPPORT FOR DISCONNECTED ENVIRONMENTS 3
  1.5. SCAP OPERATIONS 3
  1.6. ENHANCED BARE-METAL DISCOVERY 4
  1.7. ACTIVE DIRECTORY GROUPS FOR USER ROLES 4
  1.8. VIRTUALIZATION AGENT (VIRT-WHO) 4

**CHAPTER 2. PRODUCT NOTES** ................................................................. 5
  2.1. API 5

**CHAPTER 3. KNOWN ISSUES** ................................................................. 6
  3.1. API ISSUES 6
  3.2. ACTIVATION KEYS 7
  3.3. CAPSULE ISSUES 7
  3.4. CLI ISSUES 10
  3.5. CLIENT AND AGENT ISSUES 13
  3.6. CONTAINER MANAGEMENT ISSUES 14
  3.7. CONTENT VIEW ISSUES 15
  3.8. CONFIGURATION MANAGEMENT 15
  3.9. CONTENT MANAGEMENT ISSUES 16
  3.10. ERRATA MANAGEMENT 17
  3.11. HOST GROUP 18
  3.12. INSTALLER ISSUES 18
  3.13. PROVISIONING ISSUES 22
  3.14. PULP ISSUES 25
  3.15. REGISTRATION ISSUES 27
  3.16. SELINUX ISSUES 28
  3.17. UPGRADE ISSUES 28
  3.18. USER AND ROLE ISSUES 29
  3.19. WEB INTERFACE (WEB UI) ISSUES 29
  3.20. OTHER KNOWN ISSUES 30

**APPENDIX A. REVISION HISTORY** ......................................................... 32
CHAPTER 1. NEW FEATURES AND ENHANCEMENTS

This chapter introduces new features in Red Hat Satellite 6.1, and links to further information.

1.1. ERRATA MANAGEMENT

Review and apply errata to a single host or to an entire collection, and the workflow is now cleaner, simpler, and easier. Identify which systems need errata, check errata by content repository, and manage notifications.

See https://access.redhat.com/articles/1446123 for more information.

1.2. CONTAINER MANAGEMENT

Complete life cycle management for Linux containers, the same way you handle other content repositories. Satellite 6.1 can synchronize containers from Docker Hub, Red Hat, or your own customer repository. Push containers to special compute nodes, run images, and manage running processes.

See the chapter on Working with Containers in the Satellite User Guide for more information.

1.3. PROVISIONING

This section describes new features associated with the Provisioning component of Satellite 6.1.

**BZ Capsule Isolation: Satellite now generates host-based images for template proxying**

**Feature**

The Satellite boot disk feature can now generate host-based images that work with template proxying (Capsule isolation feature of 6.1). The new "Subnet" type image is provided as a counterpart to the generic image which works with any host.

**Benefit**

With the introduction of template proxying, the Satellite boot disk had to be modified to generate valid boot disk images that work with Capsule proxies. This modification is no longer required.

1.4. SUPPORT FOR DISCONNECTED ENVIRONMENTS

You no longer have to generate ISOs locally and then import them into Satellite. All content ISOs can now be downloaded directly from the Customer Portal, making secure environments easier to manage.

See https://access.redhat.com/articles/1375133 for more information.

1.5. SCAP OPERATIONS

NIST defined SCAP to standardize security management. Satellite introduces OpenSCAP support (tech preview) to ensure that systems conform to a baseline set of rules and policies, such as automatically verifying the presence of patches, checking system security configuration settings, and examining systems for signs of compromise.

See https://access.redhat.com/articles/1438123 for more information.
1.6. ENHANCED BARE-METAL DISCOVERY

Discovery automatically finds bare-metal nodes on the provisioning network, helps those discovered nodes to self-register, scans for upload hardware facts, and even automatically provisions the physical machines based on their profiles.

1.7. ACTIVE DIRECTORY GROUPS FOR USER ROLES

Build on the secure authentication in your Microsoft Active Directory environment. Satellite authorization policies can be set that associate Active Directory user groups with Satellite user groups and user roles.

See https://access.redhat.com/articles/1380023#UsingAD for more information.

1.8. VIRTUALIZATION AGENT (VIRT-WHO)

The Satellite Virtualization Agent is no longer required to run on a subscription-manager-registered system. The only requirement is that it must be configured to communicate with the Satellite via the configuration file.

The performance of the Virtualization Agent has been improved when interacting with VMWare for polling and inventory operations.
CHAPTER 2. PRODUCT NOTES

2.1. API

Red Hat Satellite 6.1 only supports v2 of the API. The previous version, v1, is included as a holdover from previous versions of the upstream projects but should not be used. It is not officially supported.
CHAPTER 3. KNOWN ISSUES

This chapter describes known issues in Red Hat Satellite 6.1 and, where possible, suitable workarounds.

3.1. API ISSUES

This section describes known issues with the Satellite 6.1 API.

BZ 1198847: Docker Tags page shows all tags across all organizations

Issue
If you create a docker repository that has tags and then synchronize it in one organization, and then view the Docker Tags page for another organization, you can see all the tags for the first organization.

Workaround
None at this time.

BZ 1111574: Content Host API Calls Time Out

Red Hat Satellite 6 APIs that call the "GET /katello/api/systems (DEPRECATED) List content hosts" method may experience performance issues when there are over 300 hosts registered on the Satellite Server.

BZ 1239077: Cannot rename product to original name after importing a manifest

Issue
If you create a product in a new organization, import a manifest, and then rename the product, you cannot rename the product to its original name. For example, in the following scenario:

1. Create a product "MyProduct" in a new organization.
2. Import a manifest.
3. Rename the product to "YourProduct".
4. Attempt to rename the product to "MyProduct".

This results in the following error message:

Error:

Validation failed: Name Product with name 'MyProduct' already exists in this organization.

Workaround
You can run the following command to work around this issue:

```
# foreman-rake console
> Katello::MarketingProduct.find_by_name('MyProduct').destroy
```

This allows you to rename the product.
NOTE

This issue might return as soon as you import or refresh a manifest.

**BZ 1241077: API settings unquoted integer provided gives error**

**Issue**

If you provide a numeric value to an API element which requires a numeric value, you may see the following error message.

```
Value is invalid: must be integer
```

The cause of this issue is that the value is tested with a regular expression and the numeric value fails the test.

**Workaround**

Enclose the numeric value in quote characters (").

### 3.2. ACTIVATION KEYS

This section describes known issues with the Activation Keys component of Satellite 6.1.

**BZ 1250158: Duplicate subscriptions shown in Activation key**

**Issue**

When you create an activation key and immediately add a subscription to it, you may find that the selected subscription is then duplicated in the list of subscriptions.

**Workaround**

None at this time.

### 3.3. CAPSULE ISSUES

This section describes known issues with the Capsule component of Satellite 6.1.

**BZ 1199992: Error message for failed content view publishing is displayed in other language**

**Issue**

When you publish a Content View, you might see an error message displayed in a language different from your preferred setting. For example:

```
"ERF12-4115 [ProxyAPI::ProxyException]: Klassen für
KT_The_Demo_Org_Auto_Library_small_cv_22 konnten nicht von Puppet
geladen werden ([RestClient::Forbidden]: 403 Forbidden) für Proxy
https://satellite.example.com:9090/puppet"
```

This can occur if the services with the Satellite server cannot verify the host name being used for the API calls being used.

**Workaround**
Check `/etc/foreman-proxy/settings.yml` file and the `trusted_hosts:` field. Ensure that the host name in that field matches the host name from the error message above. If not, add an additional entry to that setting (can be multiple lines) and restart the `foreman-proxy` service.

Navigate to Monitor → Tasks and resume the Publish task.

**BZ 1205840: Capsule and Pulp might return many "Resetting dropped connection" messages during synchronization**

**Issue**

After you configure and register a capsule to a Satellite server and start the synchronization process, you might see a large number of "Resetting dropped connection" messages in the `/var/log/messages` file. For example:

```
Mar 25 19:09:32 ibm-x3550m3 pulp:
requests.packages.urllib3.connectionpool:INFO: Resetting dropped connection: rhsm.example.com
```

The synchronization process does eventually complete, although the overall process might take longer as a result of this issue. Refer to the bugzilla report for more information.

**Workaround**

To work around this issue, set the value of `MaxRequestsPerChild` to 0 in the `/etc/httpd/conf.d/prefork.conf` file on the Satellite server. This effectively allows an unlimited number of connections to the Satellite server during a Capsule synchronization.

**BZ 1117984: Installation program fails if --certs-tar value is incorrect**

**Issue**

If the file name entered for `--certs-tar` is not correct, the installation program will commence and eventually fail for confusing reasons. The error message may appear as:

```
Something went wrong! Check the log for ERROR-level output
The full log is at /var/log/katello-installer/capsule-installer.log
```

```
[ INFO 2014-10-23 18:10:41 verbose] All hooks in group post finished
[ERROR 2014-10-23 18:10:41 verbose] Repeating errors encountered during run:
[ERROR 2014-10-23 18:10:41 verbose] tar -xzf /capsule1.example.com.tar returned 2 instead of one of [0]
[ERROR 2014-10-23 18:10:41 verbose] /Stage[main]/Capsule/Certs::Tar_extract[/capsule1.example.com.tar]/Exec[ extract /capsule1.example.com.tar]/returns: change from notrun to 0 failed: tar -xzf /capsule1.example.com.tar returned 2 instead of one of [0]
```

**Workaround**

You need to ensure that the `--certs-tar` value in the capsule-installer command refers to the correct tar archive. If not, the error condition may be difficult to diagnose.
BZ 1214240: The subscription-manager always shows "Your identity certificate has expired" when system registered through Capsule

Issue
If the time difference between the Satellite and the Capsule is too great, you might see the following error when you try to attach subscriptions. This can occur if the time difference is more than one or two minutes.

```
# subscription-manager attach --auto
Your identity certificate has expired
```

Workaround
The time settings for both the Satellite and Capsule need to be the same to ensure proper registration of clients through the Capsule. Red Hat recommends that you install ntpd or a similar service on the Satellite and Capsule servers, and ensure the times are synchronized. Alternatively, you can manually ensure the time settings on each server are set correctly.

BZ 1207972: Deleting a Capsule can fail with foreign key constraint violation

Issue
If you attempt to delete a Capsule that still has Content Hosts associated with it, the following error appears:

```
Operation FAILED: ERROR: update or delete on table "smart_proxies" violates foreign key constraint "hosts_puppet_ca_proxy_id_fk" on table "hosts"
DETAIL: Key (id)=(2) is still referenced from table "hosts".
```

Workaround
The workaround for this issue involves several steps, and also requires that the user deleting the capsule have access to the Organization associated with the Capsule.

Procedure 3.1. To Remove a Capsule:
1. Remove all hosts provisioned by the Capsule that you want to remove.
2. Remove the association between the Capsule and subnet.
3. Remove the association between the Capsule and host group.
4. Unregister the Capsule.
5. Delete the Capsule.

BZ 1228165: Possible to delete Content Host for a Capsule, which breaks synchronization

Issue
Deleting or unregistering a Content Host that is associated with a Capsule, and then reregistering it, can cause synchronization to fail with a "Content Host not found" error. For example:

```
# hammer -u admin -p changeme capsule content synchronize --id=2
Could not synchronize capsule content:
```

CHAPTER 3. KNOWN ISSUES
Could not find Content Host with exact name 'sat6-capsule-rhel66.example.com', verify the Capsule is registered with that name.

**Workaround**

You can fix this issue in the foreman-rake console as follows:

```ruby
User.current = User.anonymous_admin
SmartProxy.all.each do |proxy|
  content_host = ::Katello::System.where(:name => proxy.name).order("created_at DESC").first
  if content_host
    proxy.content_host_id = content_host.id
    proxy.save!
    puts "Capsule #{proxy} has Content Host #{content_host}"
  else
    puts "No Content Host Found for #{proxy}"
  end
end
```

This issue has also been observed during an apparently successful upgrade from 6.0.8 to 6.1, but where the migration failed silently. The migration is performed by the `db/migrate/20150423134004_add_content_host_id_to_smart_proxy.rb` task, which is designed to add the Content Host to the Capsule. If that task fails, the error described here can occur.

### 3.4. CLI ISSUES

This section describes known issues with the CLI component of Satellite 6.1.

**BZ 1190902: hammer content upload can be very slow**

**Issue**

When you upload packages to a repository the process can be very slow, and the `hammer` process can take 100% of CPU resources. No progress is indicated, which means that you cannot determine the status of the task without checking log files.

**Workaround**

None at this time. See the Bugzilla report for more detailed information.

**BZ 1177570: "hammer host create" command using a MAC results in "mac value is blank"**

**Issue**

If you try to create a new host using the `hammer host create` command, it can fail with the error message "mac value is blank," even if a MAC value is provided. For example:

```
# hammer -d host create --architecture-id 1 --domain-id 1 --environment-id 3 --hostgroup-id 3 --medium-id 7 --mac 64:54:01:12:64:45 --name example-host [...]
ERROR 2014-12-23 11:50:02 Exception] mac value is blank!
```

Could not create the host:
mac value is blank!
Workaround

The error message for this issue is incorrect. You do not need to specify a MAC address because it gets updated after the VM is created. However, you do need to specify a value for either compute_attributes or compute_profile_id. See the Bugzilla report for more detailed information.

BZ 1230153: Cannot list available repositories in repository set using hammer

Issue

If you try to list available repositories using the hammer repository-set available-repositories command, and use the --product option to specify the product name, the command fails. For example:

```
# hammer -v -u admin -p changeme --output=csv repository-set available-repositories --product="Red Hat Enterprise Linux Server" --name="Red Hat Enterprise Virtualization Agents for RHEL 6 Server (RPMs)" --organization-id="302"
```

Workaround

Use the --product-id option and specify the product ID.

BZ 1221122: "hammer content-view remove version" output is misleading

Issue

If you run the hammer content-view remove-version command, it returns The component version has been removed, but the versions might still be visible in the web UI.

Workaround

None required. Content View version removal is an asynchronous task. The versions have actually been scheduled for removal, and will be removed in due course. A more accurate output message is planned for a later release.

BZ 1180282: CLI does not display product enablement

Issue

In the CLI, you can perform a content-override on a product in an activation key. However, there is currently no way to view the enablement of a product in the CLI.

BZ 1230884: Hammer role filter does work with ID but not with name

Issue

If you attempt to assign permissions to a role, using the roles’ names, you might see the following error message:

```
Could not create the permission filter:
Permissions Permissions must be of same resource type
```

Workaround
Specify the roles by their unique identifiers. For example:

```bash
$ hammer filter create --permission-ids 115,116,117,118,119 --role dhtest
Permission filter for [Puppetclass] created
```

To list available roles and their identifiers, use the following command:

```bash
hammer filter available-permissions
```

**BZ 1236193: hammer repository-set available-repositories shows disabled when the repository is enabled**

**Issue**

The Hammer command `hammer repository-set available-repositories` lists repositories as being disabled when in fact they are enabled.

The following example command lists all available repositories:

```bash
# hammer --csv repository-set available-repositories --product "$product" --name "$set" --organization-id $ORG_ID
Name,Arch,Release,Enabled
Red Hat Satellite Capsule 6 Beta for RHEL 6 Server RPMs i386,i386,,false
Red Hat Satellite Capsule 6 Beta for RHEL 6 Server RPMs x86_64,x86_64,,false
```

Each of them are listed as not enabled, however the following Hammer command attempts to enable the x86_64 repository, but fails because it is already enabled.

```bash
# hammer repository-set enable --product "$product" --organization-id $ORG_ID --name "$set" --releasever "" --basearch x86_64
Could not enable repository:  Error: 409 Conflict
```

**Workaround**

No workaround is available for the CLI. The only other option is to use the web user interface for this operation.

**BZ 1238458: Hammer ping output has no response for pulp_auth only on providing wrong credentials**

**Issue**

The `pulp_auth` service does not provide a response to the Hammer `ping` command if incorrect credentials are provided.

The following example illustrates the output provided when the `ping` command is run with invalid credentials.

```bash
# hammer ping
[Foreman] Username: admin
[Foreman] Password for admin: wrongPasswd
candlepin:
```
3.5. CLIENT AND AGENT ISSUES

This section describes known issues with the Client/Agent component of Satellite 6.1

BZ 1219157: katello-agent install fails on Red Hat Enterprise Linux 6.3 client

Issue

If you attempt to install the katello-agent package on a Red Hat Enterprise Linux 6.3 client, the installation fails. This occurs even if the Satellite 6 tools repository has been configured. For example:

```bash
yum install -y katello-agent
```

```
Error: Package: qpid-proton-c-0.9-1.20150223.el6.x86_64 (sat6-tools)
    Requires: libcrypto.so.10(libcrypto.so.10)(64bit)
Error: Package: qpid-proton-c-0.9-1.20150223.el6.x86_64 (sat6-tools)
    Requires: libssl.so.10(libssl.so.10)(64bit)
```

You could try using --skip-broken to work around the problem

You could try running: `rpm -Va --nofiles --nodigest`

Workaround

The `katello-agent` package will install on a Red Hat Enterprise Linux 6.3 client if the following repository is included in the life cycle environment and content view that the client registers to:

```
[rhel-6-server-optional-rpms]
name = Red Hat Enterprise Linux 6 Server - Optional (RPMs)
```

NOTE

This repository is in addition to the Satellite 6 tools and RHEL 6 server repositories.
3.6. CONTAINER MANAGEMENT ISSUES

This section describes known issues with the Container Management component of Satellite 6.1.

**BZ 1223547: When a command cannot be found in a Docker container the error displayed complains about HTTP error code**

**Issue**
If you pass an invalid command to a container, the system returns an **HTTP 404 Not Found** error, instead of informing the user that the command itself was invalid or not found. For example, the web UI displays the following error:

"Error - Expected([200, 201, 202, 203, 204, 304]) <=> Actual(404 Not Found)"

**Workaround**
None at this time.

**BZ 1230930: Cannot create external registries using the API or CLI**
Satellite 6 has the ability to inspect not only the official docker registry (registry.hub.docker.com) but also to inspect custom registries. This is described in the section "Working with Containers" in the Red Hat Satellite User Guide.

**Issue**
The ability to add a custom registry is currently only available through the web UI, not using hammer (CLI) or the API. You need to use the web UI to create an external registry and then reference that registry and not the official one. This registry is used to create containers using the **External Registry** tab in order to search for the desired image and select a tag. Satellite then pulls the image from the custom registry and creates the container.

**BZ 1246265: Cannot provision Docker container straight from an external Red Hat registry**

**Issue**
If you use the New Container wizard to try to provision a new Docker container directly from the Red Hat registry, the provisioning process fails with no indication in the UI as to what has happened.

This issue appears in the following scenario:

1. Create a new container Registry pointing at http://registry.access.redhat.com
2. Create a new Docker compute resource
3. Create a new Docker container, choosing the Registry option from the Wizard and selecting the Red Hat registry

A message similar to the following might appear in `/var/log/messages`:

```
Jul 23 16:11:52 ibm-06 docker: v1 ping attempt failed with error: Get https://registry.access.redhat.com:/v1/_ping: dial tcp 10.44.256.99:99: connection refused. If this private registry supports only HTTP or HTTPS with an unknown CA certificate, please add `--insecure-registry registry.access.redhat.com:` to the daemon's arguments. In the case of
```
HTTPS, if you have access to the registry's CA certificate, no need for the flag; simply place the CA certificate at /etc/docker/certs.d/registry.access.redhat.com:/ca.crt

**Workaround**

You can work around this issue by using **HTTPS** instead of **HTTP**.

### 3.7. CONTENT VIEW ISSUES

This section describes known issues with the Content Views component of Satellite 6.1

**BZ 1199667: Performance issues with large numbers of Puppet Modules**

**Issue**

Custom repositories with large numbers of Puppet Modules (for example, Puppet Forge, with 2,000 modules) can cause performance problems rendering the Puppet Module list in the Content View selection page. This can result in your web browser becoming completely unresponsive for a short period.

**Workaround**

As a temporary workaround, Red Hat recommends that you only upload the puppet modules that you plan to use to your repositories, and not the entire collection.

### 3.8. CONFIGURATION MANAGEMENT

This section describes known issues with the Configuration Management component of Satellite 6.1

**BZ 1187774: Smart proxy Puppet environment list errors under load**

**Issue**

The Capsule listing of Puppet environments or Puppet classes fails when multiple content views (3 or more parallel) are published. When this occurs, the content view publishing process fails and must be re-attempted in a singular fashion.

**Workaround**

Increase the REST client timeout as follows:

**Procedure 3.2. Increase the REST Client Timeout**

1. Set the desired timeout in the Katello configuration file

   Edit the file `/etc/foreman/plugins/katello.yaml` and change the value of `rest_client_timeout` to **240**

2. Restart the Katello service.

   `katello-service restart`
3.9. CONTENT MANAGEMENT ISSUES

This section describes known issues with the Content Management component of Satellite 6.1.

**BZ 1182481: Possible to delete ContentViewVersion used by Composite Content View Components**

**Issue**
The relationship between a Composite Content View and the used ContentViewVersion is not strict. If you re-publish a ContentView and delete the old ContentViewVersion, the list of Composite Content View components is empty.

**Workaround**
None at this time.

**BZ 1207642: Race condition on enabling repositories or promoting to the same environment**

**Issue**
A race condition could exist if you try to create, enable, publish, or promote different content views to the same environment. As a result, not all of the repositories that should be visible in the environment are actually visible.

**Workaround**
To work around this issue, re-enable the repository or promote the Content View again.

**BZ 1118271: The Remove repositories option does not delete associated packages from the file system**

**Issue**
If you remove the repositories from a specific product, Red Hat Satellite does not automatically remove the associated packages from the file system, even though the repositories themselves are successfully removed.

**Workaround**
No supported workaround for this issue currently exists. If you encounter this issue, contact Red Hat Support or visit [https://access.redhat.com/solutions/1295653 “How to deploy and use pulp-admin.”](https://access.redhat.com/solutions/1295653)

**BZ 1223568: Unregistering a Content Host shows an error in the Content Host’s log file**

**Issue**
If you unregister a Content Host from Satellite, the process completes successfully but displays an error in the `/var/log/messages` file. For example:

```
May 20 17:50:19 cloud-10 goferd: [ERROR][Thread-3] katelloplugin:148 - send enabled report failed: [Errno 2] No such file or directory: '/etc/pki/consumer/key.pem'
```

Other error messages may also appear but in this scenario they appear not to affect the successful completion of the operation.

**Workaround**
None required.
BZ 1227064: Unregistering a Content Host shows an error in the Content Host's log file

**Issue**

If you see messages similar to the following in `/var/log/foreman/production.log` log file, they can be ignored. The underlying error does not affect Satellite 6's operation and will be resolved in a future release.

```
[F] no manager for d587f86a-5287-4369-b71a-fe4e7dc10582:3
(Dynflow::Error)
```

**Workaround**

None required.

BZ 1184853: [RFE] Don't publish the same repositories over and over again

**Issue**

Publishing and promoting Content View performance is not optimal and will be improved in future releases. Currently the publish and promotion process operates on all the repositories in the Content View, not only those repositories whose content had been changed.

**Workaround**

None at this time.

BZ 1250716: Duplicate content view entries are shown in composite content view -> Add page

**Issue**

If you navigate to Content → Content View → Create New View, enter a name for the view and check the Composite View? checkbox, you may find the list of content views contains duplicates. This issue is cosmetic only and does not affect the operation of views.

**Workaround**

Navigate to another screen, then navigate again to Content → Content View and the duplicates will no longer be visible.

3.10. ERRATA MANAGEMENT

This section describes known issues with the Errata Management component of Satellite 6.1

BZ 1242943: Having no applicable Errata does not hint to uncheck applicable

**Issue**

If you have errata present in your organization but have no content hosts with applicable errata and navigate to the Errata page, you may find that you get the following error message:

```
There are no Errata in this organization. Create one or more Products with Errata to view Errata on this page.
```

This message is misleading, because Errata do potentially exist in the organization. The issue is likely to be that the **Applicable** checkbox is checked by default and none of the Errata are considered applicable.
Workaround
Uncheck the Applicable checkbox.

3.11. HOST GROUP
This section describes known issues with the Host Group component of Satellite 6.1

BZ 1233391: Cloning Host Groups via the web UI fails with a 400 error

Issue
If you try to clone a Host group which has either global parameters or activation keys, you may see
the following error message when you click Save.

Host Group not found

Workaround
None at this time.

3.12. INSTALLER ISSUES
This section describes known issues with the Installer component of Satellite 6.1.

BZ 1171841: ProxyAPI::ProxyException: ERF12-2749 [ProxyAPI::ProxyException]

Issue
If you install Satellite 6 with a signed CA certificate and then change to a self-signed certificate, it can
cause issues with SSL and Foreman. This is the result of the previous certificates still existing in the
/etc/pki/katello-certs directory.

Workaround
Refer to https://access.redhat.com/solutions/1311844 for information on how to work around this
issue.

BZ 1230393: katello-installer saves the password in clear text and echoes it on subsequent runs

Issue
When you run katello-installer, it saves the password in plain text. Further, every time you
run katello-installer successfully after that it is echoed to the console.

Workaround
To prevent this issue, change the password using the Satellite UI/API. The new password is not
displayed as the installer output; only the old, invalid password is shown.

BZ 1122623: Installation fails if host puppet certificates have already been generated

Issue
If Puppet has been run at any time on a host prior to the installation of Satellite 6 (such as in an
environment where the normal bootstrap process involves running Puppet), the host-specific certs
are generated, but the CA certificate is not generated. When you run the Satellite 6 installation
program, it attempts to generate the CA certificates but fails, because the host .PEM files already exist. The installation does not appear to error out in any way. The result is that the installation fails because HTTPD does not start. You might see the following error message:

```
Could not start Service[httpd]: Execution of '/usr/share/katello-installer/modules/service_wait/bin/service-wait httpd start' returned 1:
Starting httpd: [Tue Jul 22 12:49:31 2014] [warn] module passenger_module is already loaded, skipping /Stage[main]/Foreman::Database/Foreman::Rake[db:seed]/Exec[foreman-rake-db:seed]: Failed to call refresh: /usr/sbin/foreman-rake db:seed returned 1 instead of one of [0]
```

**Workaround**

To work around this issue, use the following procedure:

1. Delete or move all of the contents of `/var/lib/puppet/ssl`.
2. Generate a puppet certificate for the host system:

   ```bash
   # puppet cert generate $(hostname -f)
   ```
3. Clear all subsequent back-end data stores:

   ```bash
   # katello-installer --reset
   ```

**WARNING**

The `--reset` option drops the entire database; all existing data will be lost. Only use this option prior to initial installation when there is no previous data accumulated. To preserve any existing data, do not use the `--reset` option.

---

**BZ 1181283: error when changing fqdn and updating certificates**

**Issue**

Attempting to change the FQDN and update the certificates on a Satellite 6 system currently does not work as expected, and as described in https://access.redhat.com/documentation/en-US/Red_Hat_Satellite/6.0/html/User_Guide/sect-Troubleshooting.html#idp27144192. Following this procedure does not correctly update the server certificates and results in an error.

**Workaround**

Updating the Satellite server host name is currently not supported, and consequently there is no workaround for this issue. This is scheduled to be addressed in an upcoming release.

---

**BZ 1242264: Default configuration only supports up to 225 Content Hosts**

**Issue**

The default Satellite 6 installation settings allow a maximum of 225 connected Content Hosts.
Workaround
See https://access.redhat.com/solutions/1375253 for instructions on how to configure your Satellite 6 deployment to support more Content Hosts.

BZ 1125414: Rerunning katello-installer still shows the "seed" password even if it has been changed

Issue
The first time you run katello-installer it issues a randomly-generated "seed" password. You can change this password from the web UI. However, if you run the katello-installer command again, it issues another random password, which does not work. The password change made in the web UI is required.

Workaround
There is no actual workaround for this issue. If you forget the password change that you made in the web UI you can reset the password from the command line, as follows:

```
# foreman-rake permissions:reset
  Reset to user: admin, password: qwJxBpxb7Gfcjj5
```

BZ 11929256: The capsule-certs-generate command always suggests registering the capsule to ACME_Corporation

Issue
The capsule-certs-generate command always suggests using the "ACME_Corporation" organization with the subscription-manager command, whether that organization exists or not. For example:

```
# capsule-certs-generate --capsule-fqdn mycapsule.example.com --certs-tar ~/mycapsule.example.com-certs.tar

# rpm -Uvh http://myserver.example.com/pub/katello-ca-consumer-latest.noarch.rpm
  subscription-manager register --org "ACME_Corporation"
  capsule-installer --parent-fqdn "myserver.example.com"
```

Workaround
Ensure that you replace "ACME_Corporation" with a valid organization.

BZ 1126759: ISO installer "--help" output should not contain "--enhanced_reporting" option

Issue
The ISO installer --help output contains the --enhanced_reporting option, which attempts to install the splice, ruby193-rubygem-splice_reports, and spacewalk-splice-tool packages. These packages do not exist on the ISO.

Workaround
None at this time.

BZ 1127307: Installation program fails if host name does not contain a top-level domain
Issue
If the host name does not contain a top-level domain, the **katello-installer** command fails with an error similar to the following:

```
/Stage[main]/Foreman_proxy::Register/Foreman_smartproxy[sat6.test.example-domain]: Could not evaluate: 500 Internal Server Error
Installing             Done            [100%]
```

**Workaround**
Either update the host name to include a top-level domain, or pass a valid email address to the **katello-installer** command. For example:

```
# katello-installer --foreman-admin-email=root@localhost.example.com
```

**BZ 1221749: Puppet content promotion fails if there is no reverse DNS entry**

**Issue**
If you create a content view with at least one module and attempt to promote it on a system that does not have a reverse DNS record, the action will fail with an error similar to the following:

```
ERROR -- : Unable to resolve hostname for connecting client - 10.20.30.256. If it's to be a trusted host, ensure it has a reverse DNS entry.
```

**Workaround**
There is currently no workaround for this issue. Red Hat Satellite 6 requires that both forward and reverse DNS be configured and working correctly.

**BZ 1221217: Rerunning installer can overwrite manual changes**

**Issue**
The Satellite 6 installation program is based on Puppet, which means that any manual configuration changes might be overwritten if you run the installation program more than once.

**Workaround**
You can use the **--noop** argument when you run the installation program to determine what changes would be applied. This argument ensures that no actual changes are made. Potential changes are written to the `/var/log/katello-installer.log` file.

Files are always backed up and so you can revert any unwanted changes. For example, in the **katello-installer** logs you can see an entry similar to the following about Filebucket:

```
/Stage[main]/Dhcp/File[/etc/dhcp/dhcpd.conf]: Filebucketed /etc/dhcp/dhcpd.conf to puppet with sum 622d9820b8e764ab124367c68f5fa3a1
```

You can restore the previous file as follows:

```
puppet filebucket -l restore /etc/dhcp/dhcpd.conf
```

BZ 1226708: Running katello-remove does not remove puppet packages or directory

Issue

If you install katello and run the `katello-installer` installation program, and then use the `katello-remove` command, various packages and directories remain. This may cause issues with any future installations.

For example, the following files may remain:

```bash
$ ls -la /etc/puppet
drwxr-xr-x.   3 root          root    4096 Jun  1 06:10 .
drwxr-xr-x. 105 root          root   12288 Jun  1 06:12 ..
-rw-r--r--.   1 root          root    4179 May 26 02:23 auth.conf.rpmsave
-rw-rw-r--.   1 foreman-proxy puppet     0 May 26 02:23 autosign.conf
-rw-r--r--    1 root          root    5529 Jun  1 03:49 client_cert.pem
-r-xr-x---.   1 puppet        root 10641 May 26 02:23 node.rb
-rw-r--r--.   1 root          root    2456 May 26 02:23 puppet.conf.rpmsave
drwxr-xr-x.   4 puppet        root    4096 May 26 02:23 rack
-rw-r--r--.   1 root          root    5469 Jun  1 03:49 ssl_ca.pem
```

The following package may also remain:

```bash
$ rpm -qa | grep puppet
sat6home.example.com-puppet-client-1.0-1.noarch
```

BZ 1217821: System may not boot if Satellite services are configured incorrectly

Issue

If Satellite 6.1 services are configured to start at the wrong runlevel, it could result in the system failing to boot. Satellite 6.1 services require that networking be enabled, and so all Satellite 6.1 services should be off for runlevels 0, 1, 2, and 6, and on for runlevels 3, 4, and 5.

Workaround

Use the `chkconfig` command on Red Hat Enterprise Linux 6 or the `systemctl` command on Red Hat Enterprise Linux 7 to ensure that all Satellite services are enabled for the correct runlevels.

3.13. PROVISIONING ISSUES

This section describes known issues with the Provisioning component of Satellite 6.1.

BZ 1203670: Provisioning of virtual machine on RHEV-M through Satellite 6 fails with "User is not authorized to perform this action."

Issue

If you create a user on RHEV-M and assign the required roles and permissions for provisioning, when you try to deploy a new Content Host the operation fails with an error similar to the following:

```
Rolling back due to a problem: [Set up compute instance sat6-content-host.example.com 2 failed
```
Failed to save: Failed to create a compute lab-rhevm.example.com (RHEV) instance sat6-content-host.example.com: User is not authorized to perform this action.

In the /var/log/ovirt-engine/engine.log file on RHEV-M the following messages might appear:

**Workaround**
Log in to the "User Portal" with the same user and same permissions to create a new virtual machine.

**BZ 1170261: RHEL 7 missing from list of available OSes when using VMware ESXi as Compute Node, even when RHEL 7 profiles exist**

**Issue**
If you use VMware as a compute resource and have Red Hat Enterprise Linux 7 available as a profile, it does not appear as an available OS when creating a new host in Satellite 6.1.

This is caused by the version of the rbvmomi gem shipped with Satellite 6.1 (1.6). This issue disappears if version 1.8 or later of this gem is installed. You can determine the currently-installed version of this gem as follows:

```bash
# ll /opt/rh/ruby193/root/usr/share/gems/gems/rbvmomi-1.6.0/
```

**Workaround**
To address this issue, you need to manually update the vmodl.db file and restart the appropriate services, as follows:

**Procedure 3.3. To Update the vmodl.db File:**

1. Change to the appropriate directory and back up the existing file:

   ```bash
   # cd /opt/rh/ruby193/root/usr/share/gems/gems/rbvmomi-1.6.0/
   # ll
   total 1172
   drwxr-xr-x 2 root root 4096 Apr 2 15:06 bin
   drwxr-xr-x 3 root root 4096 Apr 2 15:06 lib
   -rw-r--r-- 1 root root 1078 Jan 30 2014 LICENSE
   -rw-r--r-- 1 root root 1187562 Jan 30 2014 vmodl.db
   # mv vmodl.db vmodl.db.1.60
   ```

2. Download the latest version of the vmodl.db file:
3. Restart the `foreman` and `httpd` services:

```bash
# service foreman restart
# service httpd restart
```

**NOTE**

After you restart the `httpd` service you might see the following warning:

```
[warn] module passenger_module is already loaded, skipping
```

This can be safely ignored.

**BZ 1197139:** Newly created hosts in VMware can receive an empty network label/VLAN

**Issue**

If you clone a host in a VMware ESX cluster from a template, the newly created host receives an empty network label/VLAN on the network interface. The attached network interface is not active and is assigned the "Standard port group" type, while previously deployed machines have been assigned the "Distributed port group" interface type. As a result the VM does not receive a DHCP IP address and cannot complete deployment.

This issue has so far only been observed in a VMware network infrastructure based on distributed switches, and can be reproduced as follows:

1. In the VMware UI, define a VMware network infrastructure based on distributed switches.
2. In VMware UI, create a template based on an image with attached distributed virtual switches and ports.
3. In Satellite 6, define a VMware compute resource and some compute profiles.
4. Create compute profiles using the previously defined VMware template.
5. In the Satellite 6 web UI, navigate to **Hosts → New Host**, and enter all required parameters.
6. Select **Deploy on VMware**.
7. Select **Compute Profile**.
8. On the **Virtual Machine** tab, in the **Network** field, select any of the defined VLANs/Network Labels (must be queried automatically).
9. Click Submit.

**Workaround**

The best workaround currently available is that for the described network infrastructure, use network-based, instead of image-based, provisioning.
BZ 1219577: Cannot create unmanaged hosts from the web UI

**Issue**

The web UI currently provides no direct process for creating an unmanaged host.

**Workaround**

To create an unmanaged host in the web UI, you first need to select a managed host and then edit it to make it unmanaged. You can also use the API to create an unmanaged host without first creating a managed host.

BZ 1194288: Accessing a provisioned host’s console using an encrypted connection

**Issue**

Unlike Satellite 6.0, Satellite 6.1 uses encrypted connections by default to connect to the console of provisioned hosts. Before you can use encrypted connections, you need to import the Satellite server’s CA certificate into your browser.

**Workaround**

Import the Satellite server's CA certificate into your browser.

**Procedure 3.4. To Import the CA certificate:**

1. Download the CA certificate from `https://satellite6-server/pub/katello-server-ca.crt`
2. In Firefox, navigate to **Edit → Preferences → Advanced**.
3. On the **Certificates** tab, click **View Certificates**.
4. On the **Servers** tab, click **Import**, select the certificate that you downloaded, and then click **Open**.

**NOTE**

Modify this procedure to suit whichever browser you are using.

BZ 1223962: VMware Compute Resource issue

**Issue**

Provisioning fails with VMware Compute Resource if the vCenter's data center uses nested folders.

**Workaround**

Until this issue is resolved, Red Hat recommends that you create VMware virtual machines outside of Satellite 6 and associate them using subscription-manager and puppet-agent explicitly.

**See also:**

- [https://bugzilla.redhat.com/show_bug.cgi?id=1170276](https://bugzilla.redhat.com/show_bug.cgi?id=1170276)
- [https://bugzilla.redhat.com/show_bug.cgi?id=1188435](https://bugzilla.redhat.com/show_bug.cgi?id=1188435)

3.14. PULP ISSUES
This section describes known issues with the Satellite 6.1 Pulp component.

**BZ 1242631: Cancellation of node sync tasks not propagated to the agent/capsule**

**Issue**

Cancellation of node sync tasks is not propagated to the agent. As a result, the task on the parent has a state of canceled but continues to run on the agent/node. This means that Katello considers the task canceled when it was not. This prevents new tasks from running by the agent until the previous task finishes normally. This can result in a backlog of agent requests and tasks on the node.

**Workaround**

None at this time.

**BZ 1105673: Dependency issues running pulp-puppet-module-builder on non-Satellite 6 machine**

**Issue**

Creating puppet git repositories on other than Satellite 6 machines fails because of dependency issues and import errors.

**Workaround**

To use the `pulp-puppet-module-builder` command on a separate system from the Satellite Server, subscribe the system to a Red Hat Satellite 6 server. This provides access to the extra packages required: `pulp-puppet-module-builder python-setuptools python-pulp-puppet-common`.

Enable the Red Hat Satellite 6 repositories and install the packages:

```bash
# yum install pulp-puppet-module-builder python-setuptools python-pulp-puppet-common
```

**BZ 1229322: database error: too much data for sort() with no index**

**Issue**

If you try to access a large number of Content Views or Product Views the page may not display correctly, and instead display only "Loading..." The following error can occur in the production log:

```
database error: too much data for sort() with no index. add an index or specify a smaller limit
```

**Workaround**

This issue is being worked on upstream and a fix will be available in a future release. To work around this issue, you need to uncomment and modify the `repo_sync_history` option in the `/etc/pulp/server.conf` file as follows:

```
[data_reaping]
repo_sync_history: 2
```

This changes the default repository synchronization history value of 60 days to two days, reducing the table size considerably. See the bugzilla comments for more detailed information.

**BZ 1227920: Install applicable errata task missed reporting kernel packages**
Issue
If you install an errata that includes kernel updates, the kernel and kernel-devel packages are not reported as being installed.

Workaround
To work around this issue, you can review the Content Host's package profile to confirm that the expected packages have been updated. This issue is being worked on upstream and will be addressed in a future release.

3.15. REGISTRATION ISSUES

This section describes known issues with the Satellite 6.1 Registration component.

BZ 1199408: Non-admin user cannot register content host

Issue
If you create a non-admin user account, even with the required permissions for registering Content Hosts, any attempt to register a host fails. For example:

```
# subscription-manager register --org="platops" --environment="Library"
Username: jdoe
Password: undefined local variable or method `anonymous_admin' for #
<User:0x00000009734318>
```

This issue appears to be the result of an incorrect method call (`allowed_organization` method is trying to call `anonymous_admin` as an instance method, but `anonymous_admin` is actually a class method).

Workaround
To work around this issue, ensure the user is assigned the `Admin` role, or use an Activation Key.

BZ 1135557: Registering a large number of clients in parallel results in some hosts showing up in Satellite 6 and subscription-manager reporting errors

Issue
Satellite 6 and the `subscription-manager` client show inconsistencies when registering many clients in parallel (for example, 50, 100, 150, 200), using an activation key.

It has been observed that while attempting to register 100 clients at the same time, Satellite 6 reports 100 new content hosts in the web UI and in the candlepin database (table `cp_consumers`), but the output from `rhsm` on the clients shows errors and timeouts.

Workaround
If you run `subscription-manager register` using an activation key and observe a failure, follow these steps:

1. Open the `/var/log/rhsm/rhsm.log` file on the client and search for the error that occurred during registration.
2. If the error is an SSLTimeoutError, request the Satellite 6 administrator to confirm if the client has been registered. Navigate to Hosts → Content Hosts and look for the client to make this confirmation.

3.16. SELINUX ISSUES

This section describes known issues with the SELinux component of Satellite 6.1.

BZ 1190823: SELinux limitation

Issue

Although Satellite 6.1 Server fully supports SELinux in enforcing mode, the smart-proxy process running on Capsule Server does not yet run in confined mode. Other processes on the Capsule are fully confined and full support is expected in the upcoming minor versions of Satellite 6.

3.17. UPGRADE ISSUES

This section describes known issues with the Upgrade component of Satellite 6.1

BZ 1222194: Upgrade from 6.0 to 6.1 fails if Satellite host name has been changed

Issue

If you installed Satellite 6.0 and changed the host name of that Satellite, the upgrade procedure to Satellite 6.1 fails. When you run the katello-installer command, you might see output similar to the following:

```
katello-installer --upgrade
Upgrading...  
Upgrade Step: migrate_pulp...  
Upgrade Step: migrate_candlepin...  
Upgrade Step: migrate_foreman...  
Upgrade Step: Running installer...  
/Stage[main]/Foreman_proxy::Register/Foreman_smartproxy[jnikolakrhel7sat6.usersys.redhat.com]: Could not evaluate: Could not load data from https://sat6.example.com
/Stage[main]/Foreman_proxy::Register/Foreman_smartproxy[jnikolakrhel7sat6.usersys.redhat.com]: Failed to call refresh: Could not load data from https://sat6.example.com
/Stage[main]/Foreman_proxy::Register/Foreman_smartproxy[jnikolakrhel7sat6.usersys.redhat.com]: Could not load data from https://sat6.example.com
Installing             Done
[100%] [........................]
Something went wrong! Check the log for ERROR-level output
The full log is at /var/log/katello-installer/katello-installer.log
```

Workaround

No specific workaround is available at this time. To ensure a smooth and error-free upgrade, do not change the Satellite host name prior to or during the upgrade. Changing the host name is currently not supported, but will be available in a future release.
**BZ 1219792**: On successful completion of upgrade, katello-installer.log ends with Error: `<NilClass> nil`

**Issue**
After a successful Satellite upgrade, you may see the following error message in the installer.log log file. This error message can be safely ignored and will be resolved in a future release.

```
ERROR 2015-05-08 04:45:27 main] Repeating errors encountered during run:
[ERROR 2015-05-08 04:45:27 main] <NilClass> nil
```

**Workaround**
None at this time.

### 3.18. USER AND ROLE ISSUES

This section describes known issues with the User and Role component of Satellite 6.1

**BZ 1238442**: AD integration fails

**Issue**
If you configure Active Directory integration and log in to Satellite, the account is created but may not be assigned any roles.

This appears to be an issue with how Satellite handles uppercase and lowercase user group names.

**Workaround**
When you specify the Active Directory group in Satellite, you need to use all lowercase characters. A fix for this is being worked on for an upcoming release.

### 3.19. WEB INTERFACE (WEB UI) ISSUES

This section describes known issues with the Satellite 6.1 web user interface (web UI).

**BZ 1180160**: Web UI displays "can't convert nil into String" when manifest subscriptions have expired

**Issue**
If you navigate to Content → Red Hat Repositories and open a tree for a repository, you might see the following error message:

```
Exception:
TypeError: can't convert nil into String
```

This can occur if you have expired subscriptions in your manifest.

**Workaround**
To work around this issue, update your manifest. This issue will be addressed in a future release.

**BZ 1115315**: Content Search of product filters do not handle spaces correctly
Issue
On the Satellite Server's Content Search user interface, search strings with spaces do not return any results.

Workaround
To search for product names that contain spaces, either enclose the product name in quotes or escape the spaces. For example:

"Red Hat Enterprise Server"

or

Red\ Hat\ Enterprise\ Linux\n
BZ 1232363: Puppet: "Import" dropdown runs off the side of the screen, is unreadable/discernible

Issue
If you navigate to Configure → Puppet Classes and click Import, the labels in the drop-down list may be cut off at the edge of the browser's window, making it impossible to confirm in advance what is being selected. Resizing the browser's window has no effect on the problem.

Workaround
None at this time.

BZ 1225348: Can't remove NIC from compute profile

Issue
If you attempt to remove a network interface card (NIC) from a compute profile, it will fail, with no error message output.

Workaround
None at this time.

BZ 1193812: Override puppet configuration on host level does not work if specified on host group

Issue
When you assign a host to a host group which has a Puppet Certificate Authority and PuppetMaster specified, and remove these value from the host, you will find that the values are reinstated when you click Submit.

Workaround
Assign the host to a host group without a Puppet Certificate Authority and PuppetMaster specified.

3.20. OTHER KNOWN ISSUES

This section describes other known issues with Satellite 6.1.

BZ 1243649: Error when trying to remove a Host Group from an Organization

.
**Issue**

If you try to delete a Host Group that is referenced by another Organization (that is not visible to your account), the operation does not complete correctly and produces a misleading error.

The error message has been corrected to clearly state the actual problem, and is scheduled for a future release.

**Workaround**

To delete a Host Group, you need to remove all hosts from that group.

**Procedure 3.5. To Remove Hosts from a Host Group:**

1. Navigate to **Hosts → All hosts**.

2. Enter `hostgroup =` in the search field and select the Host Group that you want to delete.

3. Select all of the hosts and move them to a different Host Group.
# APPENDIX A. REVISION HISTORY

<table>
<thead>
<tr>
<th>Revision</th>
<th>Date</th>
<th>Author</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Revision 2.0-0</td>
<td>Fri Aug 28 2015</td>
<td>David O'Brien</td>
<td>Add entries for further known issues and new features.</td>
</tr>
<tr>
<td>Revision 0.0-4</td>
<td>Wed Apr 8 2015</td>
<td>Megan Lewis</td>
<td>Updated brand.</td>
</tr>
<tr>
<td>Revision 0.0-3</td>
<td>Thu Apr 2 2015</td>
<td>Athene Chan</td>
<td>Revised sort order for the splash page.</td>
</tr>
<tr>
<td>Revision 0.0-2</td>
<td>Thu Apr 2 2015</td>
<td>Athene Chan</td>
<td>Revised sort order for the splash page.</td>
</tr>
<tr>
<td>Revision 0.0-1</td>
<td>Mon Feb 23 2015</td>
<td>Athene Chan</td>
<td>Initial creation of Release Notes.</td>
</tr>
</tbody>
</table>