Red Hat CloudForms 4.2

Release Notes

Summary of new features, corrections, and known bugs for Red Hat CloudForms Management Engine 5.7
Red Hat CloudForms 4.2 Release Notes

Summary of new features, corrections, and known bugs for Red Hat CloudForms Management Engine 5.7

Red Hat CloudForms Documentation Team
cloudforms-docs@redhat.com
Abstract

A summary of enhancements, known bugs, and support information for Red Hat CloudForms 4.2. If you have a suggestion for improving this guide or have found an error, please submit a Bugzilla report at http://bugzilla.redhat.com against Red Hat CloudForms Management Engine for the Documentation component. Please provide specific details, such as the section number, guide name, and CloudForms version so we can easily locate the content.
# Table of Contents

1. **INTRODUCTION**  
   1.1. Getting Support  
   1.2. Red Hat CloudForms Life Cycle  

2. **TECHNOLOGY PREVIEW**  

3. **ENHANCEMENTS**  
  3.1. Core  
  3.2. Providers  
  3.3. Self Service User Interface  
  3.4. User Experience  

4. **KNOWN ISSUES**  

5. **DEPRECATED FUNCTIONALITY**  

6. **CHANGING THE USER INTERFACE LOCALE**  

7. **CHANGES IN THE CORE SET OF RUBY GEMS**  
   7.1. Red Hat CloudForms 4.2.0  
   7.1.1. New Ruby Gems in Red Hat CloudForms 4.2.0  
   7.1.2. Updated Ruby Gems in Red Hat CloudForms 4.2.0  
   7.1.3. Removed Ruby Gems in Red Hat CloudForms 4.2.0  
   7.2. Red Hat CloudForms 4.2.1  
   7.2.1. New Ruby Gems in Red Hat CloudForms 4.2.1  
   7.2.2. Updated Ruby Gems in Red Hat CloudForms 4.2.1  
   7.2.3. Removed Ruby Gems in Red Hat CloudForms 4.2.1  
   7.3. Red Hat CloudForms 4.2.2  
   7.3.1. New Ruby Gems in Red Hat CloudForms 4.2.2  
   7.3.2. Updated Ruby Gems in Red Hat CloudForms 4.2.2  
   7.3.3. Removed Ruby Gems in Red Hat CloudForms 4.2.2  
   7.4. Red Hat CloudForms 4.2.3  
   7.4.1. New Ruby Gems in Red Hat CloudForms 4.2.3  
   7.4.2. Updated Ruby Gems in Red Hat CloudForms 4.2.3  
   7.4.3. Removed Ruby Gems in Red Hat CloudForms 4.2.3  
   7.5. Red Hat CloudForms 4.2.4  
   7.5.1. New Ruby Gems in Red Hat CloudForms 4.2.4  
   7.5.2. Updated Ruby Gems in Red Hat CloudForms 4.2.4  
   7.5.3. Removed Ruby Gems in Red Hat CloudForms 4.2.4  

8. **TECHNICAL NOTES**  
   8.1. Red Hat CloudForms 4.2.0  
   8.1.1. RHBA-2017-0012: CFME 5.7.0 Bug Fixes and Enhancement Update  
   8.1.2. RHBA-2017-0015: CFME 5.7.0 images for Openshift  
   8.1.3. RHBA-2017-0016: CFME 5.7.0 Container Image  
   8.2. Red Hat CloudForms 4.2.1  
   8.2.1. RHSA-2017-0320: CFME 5.7.1 Bug Fixes and Enhancement Update  
   8.2.2. RHBA-2017-0321: CFME 5.7.1 Container Image  
   8.2.3. RHBA-2017-0322: CFME 5.7.1 images for OpenShift  
   8.3. Red Hat CloudForms 4.2.2  
   8.3.1. RHSA-2017-0898: CFME 5.7.2 Bug Fixes and Enhancement Update  
   8.3.1.1. Automate  
   8.3.1.2. Providers  

---

# 1. INTRODUCTION

## 1.1. Getting Support

## 1.2. Red Hat CloudForms Life Cycle

---

# 2. TECHNOLOGY PREVIEW

---

# 3. ENHANCEMENTS

## 3.1. Core

## 3.2. Providers

## 3.3. Self Service User Interface

## 3.4. User Experience

---

# 4. KNOWN ISSUES

---

# 5. DEPRECATED FUNCTIONALITY

---

# 6. CHANGING THE USER INTERFACE LOCALE

---

# 7. CHANGES IN THE CORE SET OF RUBY GEMS

## 7.1. Red Hat CloudForms 4.2.0

### 7.1.1. New Ruby Gems in Red Hat CloudForms 4.2.0

### 7.1.2. Updated Ruby Gems in Red Hat CloudForms 4.2.0

### 7.1.3. Removed Ruby Gems in Red Hat CloudForms 4.2.0

## 7.2. Red Hat CloudForms 4.2.1

### 7.2.1. New Ruby Gems in Red Hat CloudForms 4.2.1

### 7.2.2. Updated Ruby Gems in Red Hat CloudForms 4.2.1

### 7.2.3. Removed Ruby Gems in Red Hat CloudForms 4.2.1

## 7.3. Red Hat CloudForms 4.2.2

### 7.3.1. New Ruby Gems in Red Hat CloudForms 4.2.2

### 7.3.2. Updated Ruby Gems in Red Hat CloudForms 4.2.2

### 7.3.3. Removed Ruby Gems in Red Hat CloudForms 4.2.2

## 7.4. Red Hat CloudForms 4.2.3

### 7.4.1. New Ruby Gems in Red Hat CloudForms 4.2.3

### 7.4.2. Updated Ruby Gems in Red Hat CloudForms 4.2.3

### 7.4.3. Removed Ruby Gems in Red Hat CloudForms 4.2.3

## 7.5. Red Hat CloudForms 4.2.4

### 7.5.1. New Ruby Gems in Red Hat CloudForms 4.2.4

### 7.5.2. Updated Ruby Gems in Red Hat CloudForms 4.2.4

### 7.5.3. Removed Ruby Gems in Red Hat CloudForms 4.2.4

---

# 8. TECHNICAL NOTES

## 8.1. Red Hat CloudForms 4.2.0

### 8.1.1. RHBA-2017-0012: CFME 5.7.0 Bug Fixes and Enhancement Update

### 8.1.2. RHBA-2017-0015: CFME 5.7.0 images for Openshift

### 8.1.3. RHBA-2017-0016: CFME 5.7.0 Container Image

## 8.2. Red Hat CloudForms 4.2.1

### 8.2.1. RHSA-2017-0320: CFME 5.7.1 Bug Fixes and Enhancement Update

### 8.2.2. RHBA-2017-0321: CFME 5.7.1 Container Image

### 8.2.3. RHBA-2017-0322: CFME 5.7.1 images for OpenShift

## 8.3. Red Hat CloudForms 4.2.2

### 8.3.1. RHSA-2017-0898: CFME 5.7.2 Bug Fixes and Enhancement Update

### 8.3.1.1. Automate

### 8.3.1.2. Providers
8.3.2. RHBA-2017-0899: CFME 5.7.2 Container Image
8.3.3. RHBA-2017-0900: CFME 5.7.2 Images for OpenShift
8.4. Red Hat CloudForms 4.2.3
  8.4.1. RHBA-2017-1579: CFME 5.7.3 Container Image
  8.4.2. RHBA-2017-1580: CFME 5.7.3 Images for OpenShift
  8.4.3. RHSA-2017-1601: CFME 5.7.3 Security, Bug Fixes and Enhancement Update
  8.4.4. Vulnerability
  8.4.5. RHBA-2017-2673: Updated CFME 5.7.3 Container Images
8.5. Red Hat CloudForms 4.2.4
  8.5.1. RHSA-2017-3484: Security Advisory
1. INTRODUCTION

Red Hat CloudForms Management Engine (CFME) delivers the insight, control, and automation enterprises need to address the challenges of managing virtual environments, which are far more complex than physical ones. This technology enables enterprises with existing virtual infrastructures to improve visibility and control, and those just starting virtualization deployments to build and operate a well-managed virtual infrastructure.

Red Hat CloudForms 4.2 is comprised of a single component, the CloudForms Management Engine. It has the following feature sets:

- Insight: Discovery, Monitoring, Utilization, Performance, Reporting, Analytics, Chargeback, and Trending.

1.1. Getting Support

If you experience difficulty with a procedure described in this documentation, visit the Red Hat Customer Portal at http://access.redhat.com. Through the customer portal, you can:

- Search or browse through a knowledgebase of technical support articles about Red Hat products
- Submit a support case to Red Hat Global Support Services (GSS)
- Access other product documentation

Red Hat also hosts a large number of electronic mailing lists for discussion of Red Hat software and technology. You can find a list of publicly available mailing lists at https://www.redhat.com/mailman/listinfo. Click on the name of any mailing list to subscribe to that list or to access the list archives.

1.2. Red Hat CloudForms Life Cycle

For an overview of the life cycle phases for Red Hat CloudForms and the status of support for this product, see Red Hat Cloudforms Life Cycle.

2. TECHNOLOGY PREVIEW

The following enhancements are available with this release of Red Hat CloudForms as technology preview only.

NOTE

For more information on the support scope for features marked as technology previews, see Technology Preview Features Support Scope
Integration with ServiceNow CMDB

You can integrate Red Hat CloudForms into ServiceNow to enable authentication with an existing ServiceNow database and add/amend items in the ServiceNow database during state machine processing, such as the virtual machine provisioning state machine.

Red Hat Insights Plug-In

You can access Red Hat Insights directly from the Red Hat CloudForms appliance web user interface. Red Hat Insights is an automated service that provides information that helps you to rapidly identify key issues in your Red Hat CloudForms deployment.

CloudForms Container Image

Red Hat CloudForms 4.2 is no longer available as a container image from https://registry.access.redhat.com, however, the CloudForms container image is fully supported in Red Hat CloudForms 4.6. See Installing Red Hat CloudForms 4.6 on OpenShift Container Platform for more information.

Middleware Providers

With this release, Red Hat CloudForms now supports Hawkular middleware providers. The following capabilities are available for middleware providers:

- Inventory
- Metrics
- Events
- Cross-linked relationships
- Topology view of middleware inventory
- Power operations on EAP servers
- Deployment operations on middleware servers
- Datasource operations on middleware servers

3. ENHANCEMENTS

The following enhancements are available with Red Hat CloudForms 4.2 (CFME 5.7).

3.1. Core

The following section outlines enhancements to the Red Hat CloudForms appliance.

Automated Database Maintenance

This release adds scripts for scheduling automatic PostgreSQL database maintenance tasks to maintain a responsive CloudForms environment. Tasks that can be scheduled hourly or periodically include database reorganization (backup and restore), reindexing of highly active tables (such as metrics, workers, servers), and truncation of empty metrics tables.

PostgreSQL High Availability

This release of CloudForms adds the ability to configure clustered PostgreSQL databases for high availability on CloudForms appliances.

Pluggable Providers
A framework has been added to this CloudForms release to create providers with separate ownership, management and life cycles. Cloud providers can now use a non-default proxy for connecting to the internet, configured with http_proxy.

Tenancy
This release of Red Hat CloudForms contains the following enhancements to tenancy:

- OpenStack cloud tenant mapping: CloudForms can discover existing OpenStack cloud tenant trees, and map and synchronize parallel cloud tenants to the OpenStack tenants.

- Resource sharing: Resources can be viewed and shared between tenants.

3.2. Providers
The following section outlines enhancements to providers.

Amazon AWS
This release of CloudForms contains the following new features and enhancements for use by Amazon AWS cloud providers:

- Integration of AWS elastic load balancers for more consistent application performance. This integration includes inventory and lifecycle management capabilities.

- AWS version of the CloudForms appliance.

Google Compute Engine
This Red Hat CloudForms release adds metrics collection for Google Compute Engine providers, so that users can monitor usage rates for CPU, memory, disk and network resources on instances.

Microsoft Azure
This release of CloudForms contains the following new features and enhancements for use by Microsoft Azure cloud providers:

- Metrics collection
- Chargeback reports
- Load balancer inventory collection

OpenShift Container Platform
This release of Red Hat CloudForms expands on the existing feature set for containers providers, adding several new features for use with Red Hat OpenShift Container Platform providers:

- Ability to run Red Hat CloudForms in pods.
- Automatic tagging by OpenShift labels.
- Ability to add extra provider metadata using the REST API.
- New chargeback report features:
  - Additional columns in the chargeback report for use with external billing systems.
  - Chargeback based on project tags.
  - Built-in reports for images per project, pods per images, and pods per node.
- Default Container Image Rate added to chargeback rates.

**OpenStack Cloud**

This release of CloudForms contains the following new features and enhancements for use by OpenStack cloud providers:

- Improved mapping between existing OpenStack cloud tenants and CloudForms tenants.
- Support for Keystone version 3 architecture features, including regions and multiple domains.
- Ability to assign and unassign floating IPs to existing instances.
- Cinder backup and restore for instances and volumes.
- Volume snapshot management functions including snapshot creation, listing, and deletion.
- Topology view for OpenStack cloud providers and components.
- Improved tenant management.

**OpenStack Infrastructure**

This release of CloudForms expands on the existing feature set for OpenStack infrastructure providers, adding the following new features and enhancements:

- Expanded life cycle functionalities for hosts.
- Expanded network inventory capabilities so that nodes show multiple networks.
- Topology view for OpenStack infrastructure providers and components.

**OpenStack Networking**

This release of CloudForms expands on the existing feature set for OpenStack networking providers, adding the following new features and enhancements:

- Ability to assign and unassign floating IPs to existing instances.
- Life cycle operations for cloud subnets, security groups, and cloud routers.

**Red Hat Enterprise Virtualization**

The following enhancements to Red Hat Enterprise Virtualization providers have been added to this release of CloudForms:

- Support for adding and removing disks from virtual machines.
- Ability to create and remove virtual machine snapshots.
- Improved targeted refresh functionality, including the ability to refresh a virtual machine’s storage domain, and the ability to refresh only virtual machine creation and removal events, thus avoiding unnecessary calls.
- Support for oVirt 4.0 engine events.

**Storage**
This CloudForms release adds an OpenStack Cinder manager as a storage provider. When adding an OpenStack provider, a Cinder manager is automatically added, which provides inventory, events, metrics, and life cycle for both block (OpenStack Cinder) and object (OpenStack Swift) storage.

**VMware**

The following enhancements to VMware providers have been added to this release of CloudForms:

- Support for storage profiles.
- A new provider dashboard detailing resources, trends and utilization.
- Summary pages for vSphere Distributed Switch (vDS), listing relationships to hosts and virtual machines for each vDS.
- The ability to tag vSphere Distributed Switches to support best-fit placement on switch and LAN models.

### 3.3. Self Service User Interface

The Self Service User Interface (SSUI) includes the following enhancements with this release:

- **myService Chargeback** - Adds the ability for users to view chargeback details per service in the SSUI.
- **myService PowerOperations** - Adds the ability for users to perform power operations on virtual machines from the SSUI, including a new set of buttons for that purpose.
- **Notification Banner** - The Notification Banner is a self contained content delivery system that adds the ability to view events, tasks, and alerts without having to navigate to another area of the application. Upon login, it offers initial notifications for what has changed in the form of dismissible toast notifications and a permanent interactive icon in the header bar, which can be hidden or revealed at the user’s request.
- **Cockpit Integration** - Adds the ability for users to access a button in the SSUI that opens a cockpit user interface for a given virtual machine.

### 3.4. User Experience

The following section outlines enhancements to the user experience.

**Centralized Administration**

This release of CloudForms adds a new centralized administration feature from the global region, including support for:

- Ad-hoc provisioning of virtual machines.
- Provisioning a service.
- Virtual machine power operations.
- Virtual machine retirement.

**Git Integration**

This release of CloudForms adds the ability to:
- Import domains from Git from the explorer screen
- Validate the imported domains from Git.

**User Interface Performance**

This release of CloudForms has introduced improvements in speed in navigating the following user interface elements:

- **Compute** → **Infrastructure** → **Virtual Machines**
- **Services** → **My Services**
- **Services** → **Catalogs** and clicking **Order** to order a service.
- **Services** → **Requests** to view details.
- **Services** → **Requests** to approve requests.
- **Compute** → **Infrastructure** → **Virtual Machines** to access Service via the Relationships table.
- **Cloud Intelligence** → **Reports** to access reports.

### 4. KNOWN ISSUES

These known issues exist in Red Hat CloudForms at this time:

**BZ#1402995**

Currently, power operations performed through the Service User Interface work for services created from catalog bundles, but will not work for services created from a single catalog item.

**BZ#1404354**

At current, connecting to virtual machines using HTML5 console access inconsistently fails. This is due to an issue in the underlying Apache web server related to web socket connections, which are used for remote console access to virtual machines. As a workaround, retry the connection. In the event that the connection fails again, wait a minute and retry again. This issue is currently being investigated by engineering, who seek to have a solution in the first update to Red Hat CloudForms 4.2.

**BZ#1405937**

When OpenShift Container Platform contains at least one image in any namespace with either the "dockerImageReference" or "dockerImageManifest" field missing, Red Hat CloudForms fails to refresh the entire inventory, and the last refresh shows "Error - Less Than A Minute Ago no implicit conversion of nil into". Please contact support for a solution.

### 5. DEPRECATED FUNCTIONALITY

The following are deprecated with Red Hat CloudForms 4.2 (CFME 5.7).

**Replication**

This release of Red Hat CloudForms contains the following deprecation to replication:
6. CHANGING THE USER INTERFACE LOCALE

You can use this procedure to change the user interface locale to specify either English, Japanese, or Simplified Chinese.

1. Navigate to Settings → My Settings from the navigation bar.

2. From the Locale list in the Display Settings area, select the user interface locale to specify either English, 日本語, or 简体中文.

3. You can also change the time zone from the Time Zone list as required. The default is (GMT+00:00) UTC.

4. Click Save.

7. CHANGES IN THE CORE SET OF RUBY GEMS

Users of Red Hat CloudForms can construct custom automation methods in Ruby to extend the product. Red Hat CloudForms ships with a core set of Ruby gems used by the CloudForms Management Engine (CFME) Rails Application. The Ruby gems in this set are subject to change, and have changed since CloudForms 3.2 (CloudForms Management Engine 5.4). If you are calling gems using Automate that are no longer in the CloudForms Management Engine Appliance, you can install them by using the gem install command.

While gems can be imported into automation methods using require, it is recommended that the authors of the automation methods clearly document the use of gems either in the core set or a custom set. It is the responsibility of the author of such custom automation to own the life cycle of any gem being referenced in those methods.

You can find a list of all gems included in the appliance in /var/www/miq/vmdb/log/gem_list.txt

To get lists of all gems for different CloudForms Management Engine releases, see the following resource:

- https://access.redhat.com/articles/1534753
7.1. Red Hat CloudForms 4.2.0

This section outlines the changes to the core set of Ruby gems included in this release in comparison to the Ruby gems included in Red Hat CloudForms 4.1.3. This is the latest version of Red Hat CloudForms 4.1 as of the release of Red Hat CloudForms 4.2.0.

7.1.1. New Ruby Gems in Red Hat CloudForms 4.2.0

The following Ruby gems have been added:

Table 1. New Ruby Gems in Red Hat CloudForms 4.2.0

<table>
<thead>
<tr>
<th>Ruby Gem</th>
<th>Version in Red Hat CloudForms 4.2.0</th>
</tr>
</thead>
<tbody>
<tr>
<td>coffee-rails</td>
<td>4.2.1</td>
</tr>
<tr>
<td>coffee-script</td>
<td>2.4.1</td>
</tr>
<tr>
<td>coffee-script-source</td>
<td>1.11.1</td>
</tr>
<tr>
<td>foreman_api_client</td>
<td>0.1.0</td>
</tr>
<tr>
<td>htauth</td>
<td>2.0.0</td>
</tr>
<tr>
<td>manageiq-api-client</td>
<td>0.1.1</td>
</tr>
<tr>
<td>pg-dsn_parser</td>
<td>0.1.0</td>
</tr>
<tr>
<td>query_relation</td>
<td>0.1.1</td>
</tr>
<tr>
<td>rbvmomi</td>
<td>1.8.2</td>
</tr>
</tbody>
</table>

7.1.2. Updated Ruby Gems in Red Hat CloudForms 4.2.0

The following Ruby gems have been updated:

Table 2. Updated Ruby Gems in Red Hat CloudForms 4.2.0

<table>
<thead>
<tr>
<th>Ruby Gem</th>
<th>Version in Red Hat CloudForms 4.2.0</th>
</tr>
</thead>
<tbody>
<tr>
<td>addressable</td>
<td>2.4.0</td>
</tr>
<tr>
<td>ancestry</td>
<td>2.2.2</td>
</tr>
<tr>
<td>ansible_tower_client</td>
<td>0.4.1</td>
</tr>
<tr>
<td>autoprefixer-rails</td>
<td>6.5.4</td>
</tr>
<tr>
<td>azure-armrest</td>
<td>0.3.9</td>
</tr>
<tr>
<td>Ruby Gem</td>
<td>Version in Red Hat CloudForms 4.2.0</td>
</tr>
<tr>
<td>----------------------</td>
<td>-------------------------------------</td>
</tr>
<tr>
<td>default_value_for</td>
<td>3.0.2</td>
</tr>
<tr>
<td>domain_name</td>
<td>0.5.20161129</td>
</tr>
<tr>
<td>fast_gettext</td>
<td>1.2.0</td>
</tr>
<tr>
<td>fog-openstack</td>
<td>0.1.17</td>
</tr>
<tr>
<td>font-awesome-sass</td>
<td>4.6.2</td>
</tr>
<tr>
<td>gettext_i18n_rails</td>
<td>1.7.2</td>
</tr>
<tr>
<td>gettext_i18n_rails_js</td>
<td>1.1.0</td>
</tr>
<tr>
<td>hawkular-client</td>
<td>2.7.0</td>
</tr>
<tr>
<td>jquery-rails</td>
<td>4.2.1</td>
</tr>
<tr>
<td>kubectl</td>
<td>2.3.0</td>
</tr>
<tr>
<td>minitest</td>
<td>5.10.1</td>
</tr>
<tr>
<td>more_core_extensions</td>
<td>3.1.0</td>
</tr>
<tr>
<td>multi_xml</td>
<td>0.6.0</td>
</tr>
<tr>
<td>ovirt</td>
<td>0.13.0</td>
</tr>
<tr>
<td>ovirt_metrics</td>
<td>1.4.0</td>
</tr>
<tr>
<td>parallel</td>
<td>1.9.0</td>
</tr>
<tr>
<td>patternfly-sass</td>
<td>3.12.0</td>
</tr>
<tr>
<td>uglifier</td>
<td>3.0.4</td>
</tr>
<tr>
<td>winrm-elevated</td>
<td>0.4.0</td>
</tr>
<tr>
<td>winrm-fs</td>
<td>0.4.3</td>
</tr>
</tbody>
</table>

### 7.1.3. Removed Ruby Gems in Red Hat CloudForms 4.2.0

The following Ruby gems have been removed:

**Table 3. Removed Ruby Gems in Red Hat CloudForms 4.2.0**
7.2. Red Hat CloudForms 4.2.1

This section outlines the changes to the core set of Ruby gems included in this release.

7.2.1. New Ruby Gems in Red Hat CloudForms 4.2.1

No Ruby gems were added to the appliance in Red Hat CloudForms 4.2.1.

7.2.2. Updated Ruby Gems in Red Hat CloudForms 4.2.1

The following Ruby gems have been updated:

<table>
<thead>
<tr>
<th>Ruby Gem</th>
<th>Version in Red Hat CloudForms 4.2.1</th>
</tr>
</thead>
<tbody>
<tr>
<td>amq-protocol</td>
<td>2.1.0</td>
</tr>
<tr>
<td>autoprefixer-rails</td>
<td>6.7.2</td>
</tr>
<tr>
<td>builder</td>
<td>3.2.3</td>
</tr>
<tr>
<td>bundler</td>
<td>1.14.3</td>
</tr>
<tr>
<td>climate_control</td>
<td>0.1.0</td>
</tr>
<tr>
<td>Ruby Gem</td>
<td>Version in Red Hat CloudForms 4.2.1</td>
</tr>
<tr>
<td>------------------</td>
<td>-------------------------------------</td>
</tr>
<tr>
<td>concurrent-ruby</td>
<td>1.0.4</td>
</tr>
<tr>
<td>domain_name</td>
<td>0.5.20161129</td>
</tr>
<tr>
<td>faraday</td>
<td>0.10.1</td>
</tr>
<tr>
<td>faraday_middleware</td>
<td>0.11.0.1</td>
</tr>
<tr>
<td>fog-openstack</td>
<td>0.1.19</td>
</tr>
<tr>
<td>i18n</td>
<td>0.8.0</td>
</tr>
<tr>
<td>minitest</td>
<td>5.10.1</td>
</tr>
<tr>
<td>multi_xml</td>
<td>0.6.0</td>
</tr>
<tr>
<td>oauth2</td>
<td>1.3.0</td>
</tr>
<tr>
<td>omniauth</td>
<td>1.3.2</td>
</tr>
<tr>
<td>public_suffix</td>
<td>2.0.5</td>
</tr>
<tr>
<td>rails-dom-testing</td>
<td>2.0.2</td>
</tr>
<tr>
<td>rails-i18n</td>
<td>5.0.2</td>
</tr>
<tr>
<td>request_store</td>
<td>1.3.2</td>
</tr>
<tr>
<td>ruby_parser</td>
<td>3.8.4</td>
</tr>
<tr>
<td>sass</td>
<td>3.4.23</td>
</tr>
<tr>
<td>sprockets</td>
<td>3.7.1</td>
</tr>
<tr>
<td>tilt</td>
<td>2.0.6</td>
</tr>
<tr>
<td>websocket</td>
<td>1.2.4</td>
</tr>
</tbody>
</table>

7.2.3. Removed Ruby Gems in Red Hat CloudForms 4.2.1

No Ruby gems were removed from the appliance in Red Hat CloudForms 4.2.1.

7.3. Red Hat CloudForms 4.2.2

This section outlines the changes to the core set of Ruby gems included in this release.
7.3.1. New Ruby Gems in Red Hat CloudForms 4.2.2

No Ruby gems were added to the appliance in Red Hat CloudForms 4.2.2.

7.3.2. Updated Ruby Gems in Red Hat CloudForms 4.2.2

The following Ruby gems have been updated:

**Table 5. Updated Ruby Gems in Red Hat CloudForms 4.2.2**

<table>
<thead>
<tr>
<th>Ruby Gem</th>
<th>Version in Red Hat CloudForms 4.2.2</th>
</tr>
</thead>
<tbody>
<tr>
<td>actioncable</td>
<td>5.0.2</td>
</tr>
<tr>
<td>actionmailer</td>
<td>5.0.2</td>
</tr>
<tr>
<td>actionpack</td>
<td>5.0.2</td>
</tr>
<tr>
<td>actionview</td>
<td>5.0.2</td>
</tr>
<tr>
<td>activejob</td>
<td>5.0.2</td>
</tr>
<tr>
<td>activemodel</td>
<td>5.0.2</td>
</tr>
<tr>
<td>activerecord</td>
<td>5.0.2</td>
</tr>
<tr>
<td>activesupport</td>
<td>5.0.2</td>
</tr>
<tr>
<td>autoprefixer-rails</td>
<td>6.7.7.1</td>
</tr>
<tr>
<td>bundler</td>
<td>1.14.6</td>
</tr>
<tr>
<td>concurrent-ruby</td>
<td>1.0.5</td>
</tr>
<tr>
<td>domain_name</td>
<td>0.5.20170404</td>
</tr>
<tr>
<td>ffi-vix_disk_lib</td>
<td>1.0.3</td>
</tr>
<tr>
<td>fog-openstack</td>
<td>0.1.20</td>
</tr>
<tr>
<td>fog-xml</td>
<td>0.1.3</td>
</tr>
<tr>
<td>i18n</td>
<td>0.8.1</td>
</tr>
<tr>
<td>jquery-rails</td>
<td>4.3.1</td>
</tr>
<tr>
<td>logging</td>
<td>2.2.0</td>
</tr>
<tr>
<td>more_core_extensions</td>
<td>3.2.0</td>
</tr>
</tbody>
</table>
7.3.3. Removed Ruby Gems in Red Hat CloudForms 4.2.2

No Ruby gems were removed from the appliance in Red Hat CloudForms 4.2.2.

7.4. Red Hat CloudForms 4.2.3

This section outlines the changes to the core set of Ruby gems included in this release.

7.4.1. New Ruby Gems in Red Hat CloudForms 4.2.3

No Ruby gems were added to the appliance in Red Hat CloudForms 4.2.3.

7.4.2. Updated Ruby Gems in Red Hat CloudForms 4.2.3

The following Ruby gems have been updated:

Table 6. Updated Ruby Gems in Red Hat CloudForms 4.2.3

<table>
<thead>
<tr>
<th>Ruby Gem</th>
<th>Version in Red Hat CloudForms 4.2.3</th>
</tr>
</thead>
<tbody>
<tr>
<td>oauth2</td>
<td>1.3.1</td>
</tr>
<tr>
<td>rails</td>
<td>5.0.2</td>
</tr>
<tr>
<td>railties</td>
<td>5.0.2</td>
</tr>
<tr>
<td>sys-proctable</td>
<td>1.1.4</td>
</tr>
<tr>
<td>thread_safe</td>
<td>0.3.6</td>
</tr>
<tr>
<td>tilt</td>
<td>2.0.7</td>
</tr>
<tr>
<td>tzinfo</td>
<td>1.2.3</td>
</tr>
<tr>
<td>Ruby Gem</td>
<td>Version in Red Hat CloudForms 4.2.3</td>
</tr>
<tr>
<td>---------------------------</td>
<td>-------------------------------------</td>
</tr>
<tr>
<td>activemodel</td>
<td>5.0.3</td>
</tr>
<tr>
<td>activerecord</td>
<td>5.0.3</td>
</tr>
<tr>
<td>activesupport</td>
<td>5.0.3</td>
</tr>
<tr>
<td>amq-protocol</td>
<td>2.2.0</td>
</tr>
<tr>
<td>ansible_tower_client</td>
<td>0.6.0</td>
</tr>
<tr>
<td>autoprefixer-rails</td>
<td>7.1.1</td>
</tr>
<tr>
<td>azure-armrest</td>
<td>0.7.3</td>
</tr>
<tr>
<td>bundler</td>
<td>1.15.1</td>
</tr>
<tr>
<td>climate_control</td>
<td>0.2.0</td>
</tr>
<tr>
<td>coffee-rails</td>
<td>4.2.2</td>
</tr>
<tr>
<td>excon</td>
<td>0.56.0</td>
</tr>
<tr>
<td>fog-core</td>
<td>1.44.3</td>
</tr>
<tr>
<td>globalid</td>
<td>0.4.0</td>
</tr>
<tr>
<td>http-form_data</td>
<td>1.0.3</td>
</tr>
<tr>
<td>i18n</td>
<td>0.8.4</td>
</tr>
<tr>
<td>iniparse</td>
<td>1.4.3</td>
</tr>
<tr>
<td>kubeclient</td>
<td>2.4.0</td>
</tr>
<tr>
<td>logging</td>
<td>2.2.2</td>
</tr>
<tr>
<td>mail</td>
<td>2.6.5</td>
</tr>
<tr>
<td>memoist</td>
<td>0.15.0</td>
</tr>
<tr>
<td>minitest</td>
<td>5.10.2</td>
</tr>
<tr>
<td>oauth</td>
<td>0.5.3</td>
</tr>
<tr>
<td>rack</td>
<td>2.0.3</td>
</tr>
</tbody>
</table>
### 7.4.3. Removed Ruby Gems in Red Hat CloudForms 4.2.3

The following Ruby gems have been removed:

**Table 7. Removed Ruby Gems in Red Hat CloudForms 4.2.3**

<table>
<thead>
<tr>
<th>Ruby Gem</th>
<th>Version in Red Hat CloudForms 4.2.3</th>
</tr>
</thead>
<tbody>
<tr>
<td>cache</td>
<td></td>
</tr>
<tr>
<td>cache_method</td>
<td></td>
</tr>
<tr>
<td>pkg-config</td>
<td></td>
</tr>
</tbody>
</table>

### 7.5. Red Hat CloudForms 4.2.4

This section outlines the changes to the core set of Ruby gems included in this release.

#### 7.5.1. New Ruby Gems in Red Hat CloudForms 4.2.4

No Ruby gems were added to the appliance in Red Hat CloudForms 4.2.4.

#### 7.5.2. Updated Ruby Gems in Red Hat CloudForms 4.2.4
The following Ruby gems have been updated:

Table 8. Updated Ruby Gems in Red Hat CloudForms 4.2.4

<table>
<thead>
<tr>
<th>Ruby Gem</th>
<th>Version in Red Hat CloudForms 4.2.4</th>
</tr>
</thead>
<tbody>
<tr>
<td>azure-armrest</td>
<td>0.9.3</td>
</tr>
<tr>
<td>bundler</td>
<td>1.15.4</td>
</tr>
<tr>
<td>linux_admin</td>
<td>1.0.0</td>
</tr>
<tr>
<td>mini_portile2</td>
<td>2.3.0</td>
</tr>
<tr>
<td>parallel</td>
<td>1.12.0</td>
</tr>
</tbody>
</table>

7.5.3. Removed Ruby Gems in Red Hat CloudForms 4.2.4

No Ruby gems were removed from the appliance in Red Hat CloudForms 4.2.4.

8. TECHNICAL NOTES

This chapter contains the summary text for bug fixes and enhancements in Red Hat CloudForms errata advisories. The information and procedures in this chapter are relevant to Red Hat CloudForms administrators.

8.1. Red Hat CloudForms 4.2.0

8.1.1. RHBA-2017-0012: CFME 5.7.0 Bug Fixes and Enhancement Update

Information about this advisory is available at https://access.redhat.com/errata/RHBA-2017:0012.html.

8.1.2. RHBA-2017-0015: CFME 5.7.0 images for Openshift

Information about this advisory is available at https://access.redhat.com/errata/RHBA-2017:0015.html.

8.1.3. RHBA-2017-0016: CFME 5.7.0 Container Image

Information about this advisory is available at https://access.redhat.com/errata/RHBA-2017:0016.html.

8.2. Red Hat CloudForms 4.2.1

8.2.1. RHSA-2017-0320: CFME 5.7.1 Bug Fixes and Enhancement Update

Information about this advisory is available at https://access.redhat.com/errata/RHSA-2017:0320.html.

8.2.2. RHBA-2017-0321: CFME 5.7.1 Container Image

Information about this advisory is available at https://access.redhat.com/errata/RHBA-2017:0321.html.
8.2.3. RHBA-2017-0322: CFME 5.7.1 images for OpenShift
Information about this advisory is available at https://access.redhat.com/errata/RHBA-2017:0322.html.

8.3. Red Hat CloudForms 4.2.2

8.3.1. RHSA-2017-0898: CFME 5.7.2 Bug Fixes and Enhancement Update
The bugs contained in this section are addressed by advisory RHSA-2017:0898. Further information about this advisory is available at https://access.redhat.com/errata/RHSA-2017:0898.html.

8.3.1.1. Automate
BZ#1402995

Currently, power operations performed through the Service User Interface work for services created from catalog bundles, but will not work for services created from a single catalog item.

8.3.1.2. Providers
BZ#1417757

This release corrects an issue with RHV server refusing to authenticate requests that use the IP address instead of the fully qualified host name.

The RHV provider has been modified so that when it receives an IP address instead of a fully qualified host name, it will try to find the corresponding fully qualified host name, doing a reverse DNS lookup if required.

If a user does not want to use DNS, the RHV server can be explicitly configured to accept IP addresses.

8.3.2. RHBA-2017-0899: CFME 5.7.2 Container Image
Information about this advisory is available at https://access.redhat.com/errata/RHBA-2017:0899.html.

8.3.3. RHBA-2017-0900: CFME 5.7.2 Images for OpenShift
Information about this advisory is available at https://access.redhat.com/errata/RHBA-2017:0900.html.

8.4. Red Hat CloudForms 4.2.3

8.4.1. RHBA-2017-1579: CFME 5.7.3 Container Image
Information about this advisory is available at https://access.redhat.com/errata/RHBA-2017:1579.html.

8.4.2. RHBA-2017-1580: CFME 5.7.3 Images for OpenShift
Information about this advisory is available at https://access.redhat.com/errata/RHBA-2017:1580.html.

8.4.3. RHSA-2017-1601: CFME 5.7.3 Security, Bug Fixes and Enhancement Update
The bugs contained in this section are addressed by advisory RHSA-2017:1601. Further information about this advisory is available at https://access.redhat.com/errata/RHSA-2017:1601.html.

8.4.4. Vulnerability

BZ#1341308

CloudForms includes a default SSL/TLS certificate for the web server. This certificate is replaced at install time. However if an attacker were able to man-in-the-middle an administrator while installing the new certificate, the attacker could get a copy of the uploaded private key allowing for future attacks.

BZ#1450150

The dialog for creating cloud volumes (cinder provider) in CloudForms does not filter cloud tenants by user. An attacker with the ability to create storage volumes could use this to create storage volumes for any other tenant.

BZ#1374215

A flaw was found in the CloudForms API. A user with permissions to use the MiqReportResults capability within the API could potentially view data from other tenants or groups to which they should not have access.

8.4.5. RHBA-2017-2673: Updated CFME 5.7.3 Container Images

Information about this advisory is available at https://access.redhat.com/errata/RHBA-2017:2673.html.

8.5. Red Hat CloudForms 4.2.4

8.5.1. RHSA-2017-3484: Security Advisory

Information about this advisory is available at https://access.redhat.com/errata/RHSA-2017:3484.html.