



Red Hat CloudForms 4.1 Support Matrix

Supported platforms and features in Red Hat CloudForms 4.1

Red Hat CloudForms Documentation Team

Red Hat CloudForms 4.1 Support Matrix

Supported platforms and features in Red Hat CloudForms 4.1

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

Legal Notice

Copyright © 2017 Red Hat, Inc.

The text of and illustrations in this document are licensed by Red Hat under a Creative Commons Attribution-Share Alike 3.0 Unported license ("CC-BY-SA"). An explanation of CC-BY-SA is available at

<http://creativecommons.org/licenses/by-sa/3.0/>

. In accordance with CC-BY-SA, if you distribute this document or an adaptation of it, you must provide the URL for the original version.

Red Hat, as the licensor of this document, waives the right to enforce, and agrees not to assert, Section 4d of CC-BY-SA to the fullest extent permitted by applicable law.

Red Hat, Red Hat Enterprise Linux, the Shadowman logo, JBoss, OpenShift, Fedora, the Infinity logo, and RHCE are trademarks of Red Hat, Inc., registered in the United States and other countries.

Linux ® is the registered trademark of Linus Torvalds in the United States and other countries.

Java ® is a registered trademark of Oracle and/or its affiliates.

XFS ® is a trademark of Silicon Graphics International Corp. or its subsidiaries in the United States and/or other countries.

MySQL ® is a registered trademark of MySQL AB in the United States, the European Union and other countries.

Node.js ® is an official trademark of Joyent. Red Hat Software Collections is not formally related to or endorsed by the official Joyent Node.js open source or commercial project.

The OpenStack ® Word Mark and OpenStack logo are either registered trademarks/service marks or trademarks/service marks of the OpenStack Foundation, in the United States and other countries and are used with the OpenStack Foundation's permission. We are not affiliated with, endorsed or sponsored by the OpenStack Foundation, or the OpenStack community.

All other trademarks are the property of their respective owners.

Abstract

A summary of the supported platforms and features in Red Hat CloudForms 4.1. 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 | 2 |
| 2. SUPPORTED BROWSERS | 2 |
| 3. PLATFORMS THAT CAN HOST RED HAT CLOUDFORMS | 2 |
| 4. PROVISIONING SUPPORT | 3 |
| 4.1. Infrastructure Providers | 4 |
| 4.2. Cloud Providers | 4 |
| 5. FEATURE SUPPORT | 5 |
| 5.1. Infrastructure Providers | 5 |
| 5.2. OpenStack Platform Director Infrastructure Providers | 8 |
| 5.3. Cloud Providers | 9 |
| 5.4. Container Providers | 12 |
| 5.5. Network Providers | 15 |
| 5.6. Configuration Management Providers | 16 |
| 6. REMOTE CONSOLE SUPPORT | 16 |
| 6.1. Providers | 17 |
| 6.2. Browsers | 18 |
| 7. SMART STATE ANALYSIS SUPPORT | 19 |
| 7.1. Guest Operating System | 19 |
| 7.2. File Systems | 20 |
| 7.3. Infrastructure Providers | 21 |
| 7.4. Cloud Providers | 22 |

1. INTRODUCTION

This release of Red Hat CloudForms is delivered as a virtual appliance that includes the following key components:

- » Red Hat Enterprise Linux 7.2
- » PostgreSQL 9.4
- » Red Hat CloudForms Management Engine 5.6

2. SUPPORTED BROWSERS

The following table outlines the browsers that are supported for viewing the Red Hat CloudForms web user interface.

Table 1. Supported Browsers

| Browser | Version |
|-----------------------------|--|
| Microsoft Internet Explorer | 10 and over |
| Mozilla Firefox | Firefox Extended Support Release FAQ |
| Google Chrome | Chrome for Business FAQ - Chrome for Business Help. See Section 6, "Remote Console Support" for information on VMRC plug-in support. |

3. PLATFORMS THAT CAN HOST RED HAT CLOUDFORMS

The following table outlines the platforms that can host the Red Hat CloudForms appliance.

Table 2. Platforms that can Host Red Hat CloudForms

| Platform | Support Status |
|-------------------------------------|----------------|
| VMware vCenter Server 5.0 and above | Yes |

| Platform | Support Status |
|--|------------------------|
| Red Hat Enterprise Virtualization 3.3 and above [a] | Yes |
| Red Hat Virtualization 4.0 [a] | Yes |
| Red Hat OpenStack Platform 6.0 and above [b] | Yes |
| Microsoft System Center Virtual Machine Manager 2012 R2 | Yes |
| Microsoft Azure | Yes |
| Google Cloud Platform | Yes |
| Amazon EC2 [c] | CCP Program Only |
| Linux Containers | Technology Preview [d] |
| <p>[a] See Red Hat Enterprise Virtualization Life Cycle for product life cycle information.</p> <p>[b] See Red Hat OpenStack Platform Life Cycle for product life cycle information.</p> <p>[c] For more information on the Certified Cloud Providers (CCP) Program, see Red Hat Cloud Access.</p> <p>[d] For more information, see Technology Preview Features Support Scope.</p> | |



Note

See [CloudForms Support for non-Red Hat Virtual and Cloud Infrastructures](#) for information on support on other providers.

4. PROVISIONING SUPPORT

Red Hat CloudForms allows you to provision virtual machines, instances, and other resources in the providers that it manages. This section outlines the status of support for provisioning features on providers.

4.1. Infrastructure Providers

The following table outlines the status of support for provisioning on infrastructure providers.

Table 3. Infrastructure Provider Provisioning Support

| Feature | Microsoft System Center VMM | Red Hat Enterprise Virtualization Manager | VMware vCenter |
|--|-----------------------------|---|----------------|
| Provision Host | Unsupported | Unsupported | Supported |
| Provision VM/Instance using PXE | Unsupported | Supported | Unsupported |
| Provision VM/Instance using ISO | Unsupported | Supported | Unsupported |
| Clone from VM/Instance to VM/Instance | Unsupported | Supported | Supported |
| Provision from Template/Image to VM/Instance | Supported | Supported | Supported |
| Provision from VM/Instance to Template/Image | Unsupported | Unsupported | Supported |

4.2. Cloud Providers

The following table outlines the status of support for provisioning on cloud providers.

Table 4. Cloud Provider Provisioning Support

| Feature | Red Hat OpenStack Platform | Amazon EC2 | Microsoft Azure | Google Compute Engine |
|---------------------------------|----------------------------|-------------|-----------------|-----------------------|
| Provision VM/Instance using PXE | Unsupported | Unsupported | Unsupported | Unsupported |

| Feature | Red Hat OpenStack Platform | Amazon EC2 | Microsoft Azure | Google Compute Engine |
|--|----------------------------|-------------|-----------------|-----------------------|
| Provision VM/Instance using ISO | Unsupported | Unsupported | Unsupported | Unsupported |
| Clone from VM/Instance to VM/Instance | Unsupported | Unsupported | Unsupported | Unsupported |
| Provision from Template/Image to VM/Instance | Supported | Supported | Supported | Supported |
| Provision from VM/Instance to Template/Image | Unsupported | Unsupported | Unsupported | Unsupported |
| Orchestration Template Provisioning | Supported | Supported | Supported | Unsupported |

5. FEATURE SUPPORT

Red Hat CloudForms allows you to perform actions on the providers that it manages, and provides features for interacting with and providing information about those providers. This section outlines the status of support for actions that you can perform on providers, and the CloudForms features that allow you to interact with those providers.

5.1. Infrastructure Providers

The following table outlines the status of support for Red Hat CloudForms features on infrastructure providers.

Table 5. Infrastructure Provider Feature Support

| Feature | Microsoft System Center VMM | Red Hat Enterprise Virtualization Manager | VMware vCenter |
|--|------------------------------------|--|-----------------------|
| Relationship Discovery | Yes | Yes | Yes |
| VM Drift Comparison | Yes | Yes | Yes |
| Track VM Genealogy | No | Yes | Yes |
| Capacity Planning | No | Yes | Yes |
| Capacity & Utilization | No | Yes | Yes |
| Capture Infrastructure Event Timelines | No | Yes | Yes |
| Capture VM/Instance Event Timelines | No | Yes | Yes |
| Discovery - Provider | No | Yes | Yes |
| Disk Addition to VM/Instance | No | No | Yes |
| Host Drift Comparison | No | Yes | Yes |
| Optimization - Bottleneck Identification | No | Yes | Yes |
| Reporting | Yes | Yes | Yes |
| Right Sizing | No | Yes | Yes |
| Chargeback | No | Yes | Yes |

| Feature | Microsoft System Center VMM | Red Hat Enterprise Virtualization Manager | VMware vCenter |
|--------------------------------------|------------------------------------|--|-----------------------|
| Insight REST API | No | Yes | Yes |
| Host Compliance Enforcement | No | Yes | Yes |
| Host Policy Enforcement | No | Yes | Yes |
| Host Power Operations | No | No | Yes |
| Remote Console VM Access | No | Yes | Yes |
| Snapshot Creation and Removal | No | No | Yes |
| VM / Instance Compliance Enforcement | Yes | Yes | Yes |
| VM / Instance Policy Enforcement | No | Yes | Yes |
| VM / Instance Power Operations | Yes | Yes | Yes |
| VM / Instance Retirement | Yes | Yes | Yes |
| Alerts - Real Time | No | No | Yes |
| Alerts - VMware Alarms | N/A | N/A | Yes |
| Alerts - VM Value Changed | No | No | Yes |
| Alerts - Reconfigured | No | No | Yes |

| Feature | Microsoft System Center VMM | Red Hat Enterprise Virtualization Manager | VMware vCenter |
|---------------------------------|-----------------------------|---|----------------|
| Control REST API | No | Yes | Yes |
| Integrate with Service Catalogs | Yes | Yes | Yes |
| Virtual Machine Reconfiguration | No | Yes | Yes |
| VM Migration | No | No | Yes |
| Automation Work Flows | Yes | Yes | Yes |
| Automate REST API (Provision) | Yes | Yes | Yes |

5.2. OpenStack Platform Director Infrastructure Providers

The following table outlines the status of support for Red Hat CloudForms features on OpenStack Platform director infrastructure providers.

Table 6. OpenStack Platform Director Infrastructure Provider Feature Support

| Feature | OpenStack Platform Director |
|------------------------------|-----------------------------|
| Relationship Discovery | Yes |
| Nodes Inventory | Yes |
| OpenStack Services Inventory | Yes |
| Nodes Drift Comparison | Yes |

| Feature | OpenStack Platform Director |
|--|-----------------------------|
| Nodes Smart State | Yes |
| Capacity & Utilization | Yes |
| Capture Infrastructure Event Timelines | Yes |
| Node Power Operation | No |
| Capacity Planning | Yes |
| Reporting | Yes |
| Add/Remove Node | No |
| Scale Down Node | Yes (Compute only) |
| Scale Up Nodes | Yes |
| Nodes Policy Enforcement | Yes |
| Nodes Evacuate | Yes |
| OpenStack Upgrade | No |

5.3. Cloud Providers

The following table outlines the status of support for Red Hat CloudForms features on cloud providers.

Table 7. Cloud Provider Feature Support

| Feature | Red Hat OpenStack Platform | Amazon EC2 | Microsoft Azure | Google Compute Engine |
|--|----------------------------|------------|-----------------|-----------------------|
| Relationship Discovery | Yes | Yes | Yes | Yes |
| VM Drift Comparison | Yes | Yes | Yes | No |
| Track VM Genealogy | Yes | Yes | Yes | No |
| Capacity & Utilization | Yes | Yes | Yes | No |
| Capture Cloud Layer Timelines | Yes | N/A | Yes | No |
| Capture VM/Instance Event Timelines | Yes | Yes | Yes | No |
| Discovery - Provider | No | Yes | Yes | No |
| Disk Addition to VM/Instance | Yes | No | No | No |
| Key Pairs Inventory | Yes | Yes | No | No |
| Key Pairs Management | Yes | No | No | No |
| Optimization - Bottleneck Identification | N/A | N/A | No | No |

| Feature | Red Hat OpenStack Platform | Amazon EC2 | Microsoft Azure | Google Compute Engine |
|--------------------------------------|----------------------------|------------|-----------------|-----------------------|
| Reporting | Yes | Yes | Yes | Yes |
| Right Sizing | Yes | No | No | No |
| Chargeback | Yes | Yes | No | No |
| Insight REST API | Yes | Yes | ? | No |
| Remote Console VM Access | Yes | No | No | No |
| Snapshot Creation and Removal | No | No | No | No |
| VM / Instance Compliance Enforcement | Yes | Yes | Yes | No |
| VM / Instance Policy Enforcement | Yes | Yes | Yes | No |
| VM / Instance Power Operations | Yes | Yes | Yes | Yes |
| VM / Instance Retirement | Yes | Yes | Yes | Yes |
| Alerts - Real Time | Yes | No | No | No |
| Alerts - VM Value Changed | No | No | No | No |

| Feature | Red Hat OpenStack Platform | Amazon EC2 | Microsoft Azure | Google Compute Engine |
|---------------------------------|----------------------------|------------|-----------------|-----------------------|
| Alerts - Reconfigured | No | No | No | No |
| Control REST API | Yes | Yes | Yes | No |
| Integrate with Service Catalogs | Yes | Yes | Yes | Yes |
| Virtual Machine Reconfiguration | Yes | No | No | No |
| Volume Inventory | Yes | No | No | Yes |
| Volume Creation/Deletion | Yes | No | No | No |
| VM Migration | Yes | No | No | No |
| Automation Work Flows | Yes | Yes | No | Yes |
| Automate REST API (Provision) | Yes | Yes | Yes | Yes |
| Remote Execution | | Yes | No | No |

5.4. Container Providers

The following table outlines the status of support for Red Hat CloudForms features on containers providers.

Table 8. Container Provider Feature Support

| Feature | Red Hat OpenShift |
|--|-------------------|
| Relationship Discovery | Yes |
| VM Drift Comparison | n/a |
| Smart State | Yes |
| Cross linking | Yes |
| Capacity & Utilization | Yes |
| Capture Container Event Timelines | Yes |
| Container Node Compliance Enforcement | Yes |
| Container Node Policy Enforcement | Yes |
| Replicator Compliance Enforcement | Yes |
| Replicator Policy Enforcement | Yes |
| Pod Compliance Enforcement | Yes |
| Pod Policy Enforcement | Yes |
| Track Container Image Relationship | Yes |
| Discovery - Provider | No |
| Optimization - Bottleneck Identification | No |

| Feature | Red Hat OpenShift |
|---------------------------------|-------------------|
| OpenSCAP Execution and Report | Yes |
| Reporting | Yes |
| Right Sizing | No |
| Chargeback | Yes (by project) |
| Insight REST API | Yes |
| Remote Console VM Access | n/a |
| Container Power Operations | No |
| Container Retirement | No |
| Alerts - Real Time | No |
| Alerts - VM Value Changed | Partial |
| Alerts - Reconfigured | No |
| Control REST API | No |
| Integrate with Service Catalogs | No |
| Container Reconfiguration | No |
| Container Migration | No |

| Feature | Red Hat OpenShift |
|-------------------------------|-------------------|
| Automation Work Flows | Partial |
| Automate REST API (Provision) | No |

5.5. Network Providers

This section outlines the status of support for Red Hat CloudForms features on network providers.

Table 9. Network Provider Feature Support

| Feature | Red Hat OpenStack Platform | Amazon EC2 | Microsoft Azure | Google Compute Engine |
|-------------------------------|----------------------------|-------------|-----------------|-----------------------|
| Network Manager Relationships | Supported | Supported | Supported | Unsupported |
| Relationship Discovery | Supported | Supported | Supported | Unsupported |
| Cloud Network Inventory | Supported | Supported | Supported | Unsupported |
| Cloud Subnet Inventory | Supported | Supported | Supported | Unsupported |
| Network Router Inventory | Supported | Unsupported | Unsupported | Unsupported |
| Security Groups | Supported | Supported | Supported | Unsupported |
| Floating IP Addresses | Supported | Supported | Supported | Unsupported |

| Feature | Red Hat OpenStack Platform | Amazon EC2 | Microsoft Azure | Google Compute Engine |
|---------------|----------------------------|------------|-----------------|-----------------------|
| Network Ports | Supported | Supported | Supported | Unsupported |

5.6. Configuration Management Providers

The following table outlines the status of support for Red Hat CloudForms features on configuration management providers.

Table 10. Configuration Management Provider Feature Support

| Feature | Ansible Tower |
|--------------------------------|---------------|
| Groups Inventory | Supported |
| Configured Systems Inventory | Supported |
| Job Template Inventory | Supported |
| Integrate with Service Catalog | Supported |
| Automate Workflows | Supported |



Note

- Red Hat CloudForms 4.1 supports Ansible Tower 2.4 as a configuration management provider.
- Red Hat CloudForms versions 4.1.1 and above also support Ansible Tower 3.0.

6. REMOTE CONSOLE SUPPORT

Red Hat CloudForms allows you to access the console of virtual machines and instances on the providers it manages using HTML5-based VNC consoles. This section outlines the status of support for remote consoles in Red Hat CloudForms.

**Note**

For VMware vSphere providers, Red Hat CloudForms supports the versions of VMRC that VMware supports. However, VMware does not support VMRC for Mac operating systems. See [VMware VMRC documentation](#) for more information.

For all other providers, Red Hat CloudForms supports HTML5-based VNC consoles. The following have been tested with CloudForms Management Engine:

- ✦ Windows: UltraVNC 1.1.8.8 - <http://www.uvnc.com/>
- ✦ Linux/Mac: SSVNC 1.0.29 - <http://www.karlrunde.com/x11vnc/ssvnc.html>. At the time of this writing, this is the only client that supports the VNC repeater configuration.

See [Red Hat CloudForms Management Engine VNC Support](#)

**Note**

As of 1 September 2015, new versions of Chrome no longer support VMRC consoles. VMRC requires NPAPI plug-in support. Chrome removed support for NPAPI plug-ins in version 45.0.2454, which was released on this date.

6.1. Providers

The following table outlines the status of support for remote consoles on providers.

Table 11. Provider Remote Console Support

| Provider | Status |
|---------------------------------------|-------------|
| vSphere 51 | Supported |
| vSphere 55 | Supported |
| vSphere 6 | Supported |
| Red Hat Enterprise Virtualization 3.3 | Unsupported |
| Red Hat Enterprise Virtualization 3.4 | Supported |
| Red Hat Enterprise Virtualization 3.5 | Supported |

| Provider | Status |
|--|---------------|
| Red Hat Enterprise Virtualization 3.6 | Supported |
| Red Hat Virtualization 4.0 | Supported [a] |
| Red Hat OpenStack 4 | Unsupported |
| Red Hat Enterprise Linux OpenStack Platform 5 | Supported |
| Red Hat Enterprise Linux OpenStack Platform 6 | Supported |
| Red Hat Enterprise Linux OpenStack Platform 7 (overcloud) | Supported |
| Red Hat Enterprise Linux OpenStack Platform 7 (undercloud) | Unsupported |
| Google Compute Engine | Unsupported |
| Amazon EC2 | Unsupported |
| Microsoft SCVMM | Unsupported |
| [a] Supported in Red Hat CloudForms 4.1 and above only. | |

6.2. Browsers

This section outlines the status of support for accessing remote consoles for virtual machines and instances on major operating system and web browser combinations.

Table 12. Browser Remote Console Support

| Operating System | Chrome | Firefox | Internet Explorer 11 | Internet Explorer 10 |
|----------------------------|-----------|-----------|----------------------|----------------------|
| Red Hat Enterprise Linux 6 | Supported | Supported | N/A | N/A |
| Red Hat Enterprise Linux 7 | Supported | Supported | N/A | N/A |
| Fedora 21 | Supported | Supported | N/A | N/A |
| Fedora 22 | Supported | Supported | N/A | N/A |
| Fedora 23 | Supported | Supported | N/A | N/A |
| Windows 7 | Supported | Supported | Supported | Supported |

7. SMART STATE ANALYSIS SUPPORT

Red Hat CloudForms allows you to analyze virtual machines and instances on the providers it manages to collect information about the base operating system on those virtual machines or instances, their virtual hardware, installed applications, and other details. This operation is known as SmartState analysis. This section outlines the status of support for this SmartState analysis of virtual machines and instances by guest operating system, file system, and by provider.

7.1. Guest Operating System

The following table outlines support for smart state analysis of virtual machines by guest operating system.

Table 13. Guest Operating System SmartState Analysis Support

| Guest Operating System | Status |
|------------------------|-----------|
| Windows 2000 | Supported |

| Guest Operating System | Status |
|--------------------------------------|-----------|
| Windows XP | Supported |
| Windows Server 2003 | Supported |
| Windows Vista | Supported |
| Windows 2008 | Supported |
| Windows 7 | Supported |
| Red Hat Enterprise Linux 7 and above | Supported |
| Fedora | Supported |
| Debian and Debian-Derived | Supported |
| Ubuntu and Ubuntu Derived | Supported |
| Suse and Open Suse Derived | Supported |

7.2. File Systems

The following table outlines support for smart state analysis of virtual machines by guest operating file system.

Table 14. File System SmartState Analysis Support

| File System | Status |
|-------------|-----------|
| Ext3 | Supported |
| Ext4 | Supported |

| File System | Status |
|----------------|-----------|
| FAT32 | Supported |
| ISO9660 (CDFS) | Supported |
| NTFS | Supported |
| XFS | Supported |

7.3. Infrastructure Providers

The following table outlines support for SmartState analysis of virtual machines by infrastructure provider.

Table 15. Infrastructure Provider SmartState Analysis Support

| Infrastructure Provider | Status |
|--|-----------------------------------|
| Red Hat Enterprise Virtualization 3.2 and below (prior to 3.3) | Technical Guidance ^[a] |
| Red Hat Enterprise Virtualization 3.3 | Technical Guidance ^[a] |
| Red Hat Enterprise Virtualization 3.4 | Supported |
| Red Hat Enterprise Virtualization 3.5 | Supported |
| Red Hat Enterprise Virtualization 3.6 | Supported |
| Red Hat Virtualization 4.0 | Supported ^[b] |
| VMware vCenter 4.x | Technical Guidance ^[a] |

| Infrastructure Provider | Status |
|--|-----------|
| VMware vCenter 5.0 | Supported |
| VMware vCenter 5.1 | Supported |
| VMware vCenter 5.5 | Supported |
| VMware vCenter 6.0 [c] | Supported |
| Microsoft System Center Virtual Machine Manager 2012 R2 | Supported |
| <p>[a] Technical Guidance, if available, is provided from the end of the General Support phase and lasts for a fixed duration. This phase is intended for usage by customers operating in stable environments with systems that are operating under reasonably stable loads.</p> <p>[b] Supported in Red Hat CloudForms 4.1 and above only.</p> <p>[c] To install the VMware VDDK 6.0 so that SmartState Analysis is successful, see Installing the VMware 6.0 VDDK on a CFME Appliance. Alternatively, you can use VMware VDDK 5.5.</p> | |



Note

For Microsoft SCVMM integration, Microsoft PowerShell version 4 is required.

7.4. Cloud Providers

The following table outlines support for SmartState analysis of virtual machines by cloud provider.

Table 16. Cloud Provider SmartState Analysis Support

| Cloud Provider | Status |
|----------------------------|-------------|
| Red Hat OpenStack Platform | Supported |
| Amazon EC2 | Unsupported |

| Cloud Provider | Status |
|-----------------------|-------------|
| Google Compute Engine | Unsupported |
| Microsoft Azure | Supported |

**Note**

For virtual machine instances running on Red Hat OpenStack Platform, CloudForms currently does not support SmartState analysis if an instance is booted from OpenStack Block Storage (Cinder volumes); it can only be performed when an instance is booted from an image.