Red Hat CloudForms 4.5

Support Matrix

Supported platforms and features in Red Hat CloudForms 4.5

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Abstract

A summary of the supported platforms and features in Red Hat CloudForms 4.5. 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.

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1. INTRODUCTION

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

- Red Hat Enterprise Linux (RHEL) 7.3
- Rails 5.0.1
- Ruby 2.3.1
- PostgreSQL 9.5.4
- Red Hat CloudForms Management Engine (CFME) 5.8
- Apache 2.4.6

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	11 and over
Mozilla Firefox	Firefox Extended Support Release
Google Chrome	Chrome for Business. 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
Red Hat Enterprise Virtualization (RHEV) 3.3 and above [a]	Yes
Red Hat Virtualization (RHV) 4.1 [a]	Yes

Platform	Support Status
Red Hat OpenStack Platform (OSP) 9.0 and above (except OSP 11) [b]	Yes
Microsoft System Center Virtual Machine Manager (SCVMM) 2012 R2 or above	Yes
Microsoft Azure	Yes
Google Cloud Platform	Yes
Amazon EC2	Yes
OpenShift Container Platform (OCP) 3.5	Technology Preview [c]

[a] See Red Hat Enterprise Virtualization Life Cycle for product life cycle information.

[b] See Red Hat OpenStack Platform Life Cycle for product life cycle information.

[c] For more information, see Technology Preview Features Support Scope.

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 (SCVMM)	Red Hat Virtualization (RHV) Manager	VMware vCenter
Provision Host	No [a]	No [a]	No [a]
Provision VM/Instance using PXE	No [a]	Yes	No
Provision VM/Instance using ISO	No	Yes	No
Clone from VM/Instance to VM/Instance	No	No	Yes
Provision from Template/Image to VM/Instance	Yes	Yes	Yes

Feature	Microsoft System Center VMM (SCVMM)	Red Hat Virtualization (RHV) Manager	VMware vCenter
Provision from VM/Instance to Template/Image	No	No	Yes

[a] Available when using Red Hat Satellite with CloudForms.

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 (OSP)	Amazon EC2	Microsoft Azure	Google Compute Engine
Provision VM/Instance using PXE	No	No	No	No
Provision VM/Instance using ISO	No	No	No	No
Clone from VM/Instance to VM/Instance	No	No	No	No
Provision from Template/Image to VM/Instance	Yes	Yes	Yes	Yes
Provision from VM/Instance to Template/Image	No	No	No	No
Orchestration Template Provisioning	Yes	Yes	Yes	No

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.

NOTE

You can run a rake command to retrieve a list of provider features supported across all platforms. Run the following command in your CloudForms appliance to retrieve the supported features in a comma-separated values (.csv) file format, which are displayed on the command-line interface (CLI) by default, however, you can use a pipe to redirect the output to a file.

```
ruby /var/www/miq/vmdb/tools/feature_support_matrix.rb
```

5.1. Infrastructure Providers

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

5.1.1. Red Hat Virtualization

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

Table 5. Red Hat Virtualization Provider Feature Support

Feature	RHV 4.0	RHV 4.1
Relationship Discovery	Yes	Yes
VM Drift Comparison	Yes	Yes
Track VM Genealogy	Yes	Yes
Capacity & Utilization	Yes	Yes
Capture Cloud Layer Timelines	N/A	Yes
Capture VM/Instance Event Timelines	N/A	Yes
Discovery - Provider	Yes	Yes
Disk Addition to VM/Instance	Yes	Yes
Key Pairs Inventory		
Key Pairs Management		
Optimization - Bottleneck Identification	Yes	Yes
Reporting	Yes	Yes
Right Sizing	Yes	Yes

Feature	RHV 4.0	RHV 4.1
Chargeback	Yes	Yes
Remote Console VM Access	Yes [a]	Yes
Snapshot Creation and Removal	Yes	Yes
VM / Instance Compliance Enforcement		
VM / Instance Policy Enforcement		
VM / Instance Power Operations		Yes
VM / Instance Retirement		
Alerts - Real Time		
Alerts - VM Value Changed		
Alerts - Reconfigured		
Integrate with Service Catalogs	Yes	Yes
Virtual Machine Reconfiguration	Yes	Yes
Volume Inventory		
Volume Creation/Deletion		
VM Migration		
Automation Workflows		
Customize Windows Templates with Sysprep during provision	No	No

[a] On some operating system and browser combinations

5.1.2. VMware vSphere

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

Table 6. VMware vSphere Provider Feature Support

Feature	vSphere 5.5	vSphere 6.0	vSphere 6.5
Relationship Discovery	Yes	Yes	Yes
VM Drift Comparison	Yes	Yes	Yes
Track VM Genealogy	Yes	Yes	Yes
Capacity & Utilization	Yes	Yes	Yes
Capture Cloud Layer Timelines	Yes	Yes	Yes
Capture VM/Instance Event Timelines	Yes	Yes	Yes
Discovery - Provider	Yes	Yes	Yes
Disk Addition to VM/Instance	Yes	Yes	Yes
Key Pairs Inventory			
Key Pairs Management			
Optimization - Bottleneck Identification	Yes	Yes	Yes
Reporting	Yes	Yes	Yes
Right Sizing	Yes	Yes	Yes
Chargeback	Yes	Yes	Yes
Remote Console VM Access	Yes	Yes	Yes
Snapshot Creation and Removal	Yes	Yes	Yes
VM / Instance Compliance Enforcement	Yes	Yes	Yes
VM / Instance Policy Enforcement	Yes	Yes	Yes
VM / Instance Power Operations	Yes	Yes	Yes
VM / Instance Retirement	Yes	Yes	Yes
Alerts - Real Time	Yes	Yes	Yes
Alerts - VM Value Changed	Yes	Yes	Yes
Alerts - Reconfigured			

Feature	vSphere 5.5	vSphere 6.0	vSphere 6.5
Integrate with Service Catalogs	Yes	Yes	Yes
Virtual Machine Reconfiguration	Yes	Yes	Yes
Volume Inventory			
Volume Creation/Deletion			
VM Migration	Yes	Yes	Yes
Automation Workflows			
Customize Windows Templates with Sysprep during provision	No	No	No

5.1.3. Microsoft SCVMM

The following table outlines the status of support for Microsoft SCVMM infrastructure providers.

Table 7. Microsoft SCVMM Provider Feature Support

Feature	SCVMM 2012 R2	SVMM 2016
Relationship Discovery	Yes	Yes
VM Drift Comparison	Yes	Yes
Track VM Genealogy	Yes	Yes
Capacity & Utilization	No	No
Capture Cloud Layer Timelines	No	No
Capture VM/Instance Event Timelines	No	No
Discovery - Provider	Yes	Yes
Disk Addition to VM/Instance	No	No
Key Pairs Inventory	No	No
Key Pairs Management	No	No
Optimization - Bottleneck Identification	Yes	Yes

Feature	SCVMM 2012 R2	SVMM 2016
Reporting	Yes	Yes
Right Sizing	No	No
Chargeback	Yes	Yes
Remote Console VM Access	Yes	Yes
Snapshot Creation and Removal	No	No
VM / Instance Compliance Enforcement	Yes	Yes
VM / Instance Policy Enforcement	No	No
VM / Instance Power Operations	Yes	Yes
VM / Instance Retirement	Yes	Yes
Alerts - Real Time	No	No
Alerts - VM Value Changed	No	No
Alerts - Reconfigured	Yes [a]	Yes
Integrate with Service Catalogs	Yes	Yes
Virtual Machine Reconfiguration	No	No
Volume Inventory	No	No
Volume Creation/Deletion	No	No
VM Migration	No	No
Automation Workflows	Yes	Yes

[a] CPU and RAM reconfigure alerts only

5.2. OpenStack Platform Director Infrastructure Providers

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

Table 8. OpenStack Platform Director Infrastructure Provider Feature Support

Feature	OpenStack Platform (OSP) Director
Relationship Discovery	Yes
Nodes Inventory	Yes
OpenStack Services Inventory	Yes
Nodes Drift Comparison	Yes
Nodes Smart State	Yes
Capacity & Utilization	Yes
Capture Infrastructure Event Timelines	Yes
Node Power Operation	Yes
Capacity Planning	Yes
Reporting	Yes
Add/Remove Node	Yes
Scale Down Node	Yes (Compute nodes only)
Scale Up Nodes	Yes (Compute nodes only)
Nodes Policy Enforcement	Yes
Nodes Evacuate	Yes
OpenStack Upgrade	No

5.3. Cloud Providers

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

5.3.1. Red Hat OpenStack Platform

The following table outlines the status of support for Red Hat CloudForms features on Red Hat OpenStack Platform (RHOSP) cloud providers.

Table 9. Red Hat OpenStack Platform Feature Support

Feature	OSP 9	OSP 10	OSP 11
Relationship Discovery		Yes	
Instance Drift Comparison	Yes	Yes	No
Track Instance Genealogy	Yes	Yes	No
Capacity & Utilization	Yes	Yes	No
Capture Cloud Layer Timelines			
Capture Instance Event Timelines			
Discovery - Provider	No	No	No
Disk Addition to Instance			
Key Pairs Inventory			
Key Pairs Management			
Reporting	Yes	Yes	No
Right Sizing			
Chargeback	Yes	Yes	No
Remote Console Instance Access	Yes	Yes	No
Snapshot Creation and Removal			
Instance Compliance Enforcement			
Instance Policy Enforcement			
Instance Power Operations			No
Instance Retirement			No
Alerts - Real Time			
Alerts - VM Value Changed			
Alerts - Reconfigured			
Integrate with Service Catalogs	Yes	Yes	No

Feature	OSP 9	OSP 10	OSP 11
Virtual Machine Reconfiguration	Yes	Yes	No
Volume Inventory			
Volume Creation/Deletion			
Instance Migration			
Automation Workflows			

5.3.2. Amazon EC2

The following table outlines the status of support for Red Hat CloudForms features on Amazon EC2 cloud providers.

Table 10. Amazon EC2 Feature Support

Feature	Amazon EC2
Relationship Discovery	Yes
VM Drift Comparison	No
Track VM Genealogy	Yes
Capacity & Utilization	Yes
Capture Cloud Layer Timelines	Yes
Capture VM/Instance Event Timelines	Yes
Discovery - Provider	Yes
Disk Addition to VM/Instance	Yes
Key Pairs Inventory	Yes
Key Pairs Management	No
Optimization - Bottleneck Identification	Yes
Reporting	Yes
Right Sizing	

Feature	Amazon EC2
Chargeback	Yes
Remote Console VM Access	No
Snapshot Creation and Removal	Yes
VM / Instance Compliance Enforcement	
VM / Instance Policy Enforcement	
VM / Instance Power Operations	Yes
VM / Instance Retirement	Yes
Alerts - Real Time	
Alerts - VM Value Changed	
Alerts - Reconfigured	
Integrate with Service Catalogs	Yes
Virtual Machine Reconfiguration	No
Volume Inventory	Yes
Volume Creation/Deletion	Yes
VM Migration	
Automation Workflows	

5.3.3. Microsoft Azure

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

Table 11. Microsoft Azure Feature Support

Feature	Microsoft Azure
Relationship Discovery	Yes
VM Drift Comparison	Yes

Feature	Microsoft Azure
Track VM Genealogy	Yes
Capacity & Utilization	Yes
Capture Cloud Layer Timelines	Yes
Capture VM/Instance Event Timelines	Yes
Discovery - Provider	Yes
Disk Addition to VM/Instance	Yes
Key Pairs Inventory	No
Key Pairs Management	No
Optimization - Bottleneck Identification	Yes
Reporting	Yes
Right Sizing	
Chargeback	Yes
Remote Console VM Access	No
Snapshot Creation and Removal	No
VM / Instance Compliance Enforcement	Yes
VM / Instance Policy Enforcement	Yes
VM / Instance Power Operations	Yes
VM / Instance Retirement	Yes
Alerts - Real Time	No
Alerts - VM Value Changed	No
Alerts - Reconfigured	No
Integrate with Service Catalogs	Yes
Virtual Machine Reconfiguration	No

Feature	Microsoft Azure
Volume Inventory	No
Volume Creation/Deletion	No
VM Migration	No
Automation Workflows	No

5.3.4. Google Compute Engine

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

Table 12. Google Compute Engine Feature Support

Feature	Google Compute Engine
Relationship Discovery	Yes
VM Drift Comparison	No
Track VM Genealogy	Yes
Capacity & Utilization	Yes
Capture Cloud Layer Timelines	No
Capture VM/Instance Event Timelines	No
Discovery - Provider	No
Disk Addition to VM/Instance	Yes
Key Pairs Inventory	
Key Pairs Management	
Optimization - Bottleneck Identification	Yes
Reporting	Yes
Right Sizing	
Chargeback	Yes

Feature	Google Compute Engine
Remote Console VM Access	No
Snapshot Creation and Removal	
VM / Instance Compliance Enforcement	
VM / Instance Policy Enforcement	
VM / Instance Power Operations	Yes
VM / Instance Retirement	
Alerts - Real Time	
Alerts - VM Value Changed	
Alerts - Reconfigured	
Integrate with Service Catalogs	Yes
Virtual Machine Reconfiguration	No
Volume Inventory	
Volume Creation/Deletion	
VM Migration	
Automation Workflows	

5.4. Container Providers

The following section outlines the status of support for Red Hat CloudForms features on OpenShift Container Platform container providers.

Table 13. OpenShift Container Platform Provider Feature Support

Feature	OCP 3.5	OCP 3.6	OCP 3.7
Relationship Discovery	N/A	N/A	N/A
VM Drift Comparison	N/A	N/A	N/A
Track VM Genealogy	N/A	N/A	N/A

Feature	OCP 3.5	OCP 3.6	OCP 3.7
Capacity & Utilization	Yes	Yes	Yes
Capture Cloud Layer Timelines			
Capture VM/Instance Event Timelines			
Discovery - Provider	No	No	No
Disk Addition to VM/Instance	N/A	N/A	N/A
Key Pairs Inventory	N/A	N/A	N/A
Key Pairs Management	N/A	N/A	N/A
Optimization - Bottleneck Identification	No	No	No
Reporting	Yes	Yes	Yes
Right Sizing	No	No	No
Chargeback	Yes	Yes	Yes
Remote Console VM Access	N/A	N/A	N/A
Snapshot Creation and Removal	N/A	N/A	N/A
VM / Instance Compliance Enforcement	N/A	N/A	N/A
VM / Instance Policy Enforcement	N/A	N/A	N/A
VM / Instance Power Operations	N/A	N/A	N/A
VM / Instance Retirement	N/A	N/A	N/A
Alerts - Real Time	N/A	N/A	N/A
Alerts - VM Value Changed	N/A	N/A	N/A
Alerts - Reconfigured	N/A	N/A	N/A
Integrate with Service Catalogs	N/A	N/A	N/A
Virtual Machine Reconfiguration	No	No	No
Volume Inventory	N/A	N/A	N/A

Feature	OCP 3.5	OCP 3.6	OCP 3.7
Volume Creation/Deletion	N/A	N/A	N/A
VM Migration	N/A	N/A	N/A
Automation Work Flows	No	No	No

5.5. Network Providers

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

Table 14. Network Provider Feature Support

Feature	Red Hat OpenStack Platform (OSP)	Amazon EC2	Microsoft Azure	Google Compute Engine
Network Manager Relationships	Yes	Yes	Yes	Yes
Relationship Discovery	Yes	Yes	Yes	Yes
Cloud Network Inventory	Yes	Yes	Yes	Yes
Cloud Subnet Inventory	Yes	Yes	Yes	Yes
Network Router Inventory	Yes	No	No	Yes
Security Groups	Yes	Yes	Yes	Yes
Floating IP Addresses	Yes	Yes	Yes	Yes
Network Ports	Yes	Yes	Yes	Yes
Load Balancer Inventory	No	Yes	Yes	Yes
Create/Update/Delete Network	Yes	No	No	No
Create/Update/Delete Subnet	Yes	No	No	No

Feature	Red Hat OpenStack Platform (OSP)	Amazon EC2	Microsoft Azure	Google Compute Engine
Create/Update/Delete Routers	Yes	No	No	No

5.6. Configuration Management Providers

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

Table 15. Configuration Management Provider Feature Support

Feature	Ansible Tower
Groups Inventory	Yes
Configured Systems Inventory	Yes
Job Template Inventory	Yes
Integrate with Service Catalog	Yes
Automate Workflows	Yes

NOTE

- Red Hat CloudForms 4.5 supports Ansible Tower 2.4 as a configuration management provider.
- Red Hat CloudForms versions 4.2.1 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 managers 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.karlrunge.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 16. Provider Remote Console Support

Provider	Status
VMware vSphere 5.1	Yes
VMware vSphere 5.5	Yes
VMware vSphere 6.x	Yes
Red Hat Enterprise Virtualization (RHEV) 3.3	No
Red Hat Enterprise Virtualization 3.4	No
Red Hat Enterprise Virtualization 3.5	No
Red Hat Enterprise Virtualization 3.6	Yes
Red Hat Virtualization (RHV) 4.1	Yes [a]
Red Hat OpenStack 4	No
Red Hat Enterprise Linux OpenStack Platform (OSP) 5	No

Provider	Status
Red Hat Enterprise Linux OpenStack Platform 6	No
Red Hat Enterprise Linux OpenStack Platform 7	No
Red Hat OpenStack Platform 8	No
Red Hat OpenStack Platform 9	Yes
Red Hat OpenStack Platform 10	Yes
Red Hat OpenStack Platform 11	No
Google Compute Engine	No
Amazon EC2	No
Microsoft SCVMM	No

[a] Supported in Red Hat CloudForms 4.2 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 17. Browser Remote Console Support

Operating System	Chrome	Firefox	Internet Explorer 11	Internet Explorer 10
Red Hat Enterprise Linux (RHEL) 6	Yes	Yes	N/A	N/A
Red Hat Enterprise Linux (RHEL) 7	Yes	Yes	N/A	N/A
Fedora 21	Yes	Yes	N/A	N/A
Fedora 22	Yes	Yes	N/A	N/A
Fedora 23	Yes	Yes	N/A	N/A
Windows 7	Yes	Yes	Yes	Yes

6.3. VMware Provider Console Support

This section outlines the status of support for accessing remote consoles for virtual machines on VMware providers.

Table 18. VMware Provider Console Support

Console	Supported	Comments
VMRC	Yes	VMware is moving from a browser-based plug-in to a standalone application. For more information, see https://www.vmware.com/go/download-vmrc.
VNC	Yes	VNC is incompatible with VMware ESXi 6.5 and later.
WebMKS	Yes	WebMKS is incompatible with VMware ESXi 6.0 and earlier.
Cockpit	Yes	Cockpit consoles are supported in Linux-based virtual machines where Cockpit server is installed and the **Cockpit** role has been enabled in CloudForms.

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 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 SmartState analysis of virtual machines by guest operating system.

Table 19. Guest Operating System SmartState Analysis Support

Guest Operating System	Status
Windows 2000	Yes
Windows XP	Yes
Windows Server 2003	Yes
Windows Vista	Yes
Windows 2008	Yes
Windows 7	Yes
Red Hat Enterprise Linux (RHEL) 7 and above	Yes

Guest Operating System	Status
Fedora	Yes
Debian and Debian-Derived	Yes
Ubuntu and Ubuntu Derived	Yes
Suse and Open Suse Derived	Yes

7.2. File Systems

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

Table 20. File System SmartState Analysis Support

File System	Status
Ext3	Yes
Ext4	Yes
FAT32	Yes
ISO9660 (CDFS)	Yes
NTFS	Yes
XFS	Yes

7.3. Infrastructure Providers

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

Table 21. Infrastructure Provider SmartState Analysis Support

Infrastructure Provider	Status
Red Hat Enterprise Virtualization (RHEV) 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	Yes
Red Hat Enterprise Virtualization 3.5	Yes

Infrastructure Provider	Status
Red Hat Enterprise Virtualization 3.6	Yes
Red Hat Virtualization (RHV) 4.1	Yes [b]
VMware vCenter 4.x	Technical Guidance [a]
VMware vCenter 5.0	Yes
VMware vCenter 5.1	Yes
VMware vCenter 5.5	Yes
VMware vCenter 6.0 [c]	Yes
Microsoft System Center Virtual Machine Manager (SCVMM) 2012 R2 and above	Yes

[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.

[b] Supported in Red Hat CloudForms 4.2 and above only.

[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.

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 22. Cloud Provider SmartState Analysis Support

Cloud Provider	Status
Red Hat OpenStack Platform (OSP)	Yes
Amazon EC2	No
Google Compute Engine	No
Microsoft Azure	Yes

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.