Overview

About Public Cloud Support

You can add, manage, and monitor supported public cloud accounts in Cisco UCS Director.

After you have added and configured a public cloud, end users can provision virtual machines (VMs) in the End User Portal.

Supported Public Clouds

Cisco UCS Director supports the following public clouds:

- Amazon Elastic Compute Cloud (Amazon EC2)
- Rackspace Public Cloud

Public Cloud Management Tasks You Can Perform in Cisco UCS Director

You can use Cisco UCS Director to provision and the following for each supported public cloud account:

- Connect to the public cloud account

- View images available in that public cloud account

- Provision a VM in that public cloud

- Monitor the public cloud account, including the system inventory, lifecycle actions, VMs in the cloud, VM action requests, images, and events

- Generate tabular, graphical, and map reports for the public cloud account, including memory usage, disk usage, and other trending and statistical data

Public Cloud Orchestration Tasks

Cisco UCS Director includes orchestration features that allow you to automate some Amazon VM-related tasks in one or more workflows. For more information about orchestration in Cisco UCS Director, see the Cisco UCS Director Orchestration Guide.

Location of Orchestration Tasks

A complete list of the public cloud orchestration tasks is available in the Workflow Designer, in the Task Library and the **Amazon VM** folder. The Task Library includes a description of the orchestration tasks, and can be accessed from the following locations in Cisco UCS Director:

- **Policies** > **Orchestration** > **Workflows**

- `http://`*IP_address*`/app/cloudmgr/onlinedocs/cloupiaTaskLib.html` where *IP_address* is the IP address of Cisco UCS Director.

Types of Orchestration Tasks

The Amazon VM orchestration tasks include tasks for VM provisioning and limited support for VM lifecycle management, such as the following:

- Power action, including power on, power off, reboot, terminate, and enable or disable Cloudwatch monitoring

- Volume management, including create, delete, and attach and detach volume to instance

Public Cloud Accounts

You need to create a virtual account for each public cloud that you want to manage through Cisco UCS Director. For example, each Amazon cloud account represents a public cloud created through Amazon EC2.

Note You must register an account with a supported public cloud provider before you can add the account to Cisco UCS Director.

Public Cloud Accounts and Proxy Servers

Guidelines and Limitations for Public Cloud Accounts with Proxy Servers

If you need to access a public cloud account through a proxy server, consider the following guidelines and limitations:

- You must configure the proxy server in your Java Virtual Machine (JVM) before you add the account. If you do not, the connection test will fail.

- For the proxy settings to work, Cisco UCS Director must be synchronized with the system time (host) or NTP server for the DMZ. You can configure time synchronization through the Time Sync option in the Shelladmin. For more information, see the Shell Guide.

- After you apply a patch and upgrade Cisco UCS Director, you must reconfigure the proxy settings in the `inframgr.env` file.

Accessing a Public Cloud Account Through a Proxy Server

Before You Begin

You must know the following:

- Name of the proxy server

- Port used by the proxy server

Step 1   On the server or VM that hosts Cisco UCS Director, navigate to the `/opt/infra/bin` folder.

Step 2   Open the `inframgr.env` file.

Step 3   Add the following information for the proxy server to the `JVM_ARGS` section:
```
-Dhttp.useProxy=true -Dhttp.proxyHost=proxy_name
-Dhttp.proxyPort=proxy_port
```
The updated `JVM_ARGS` section should look like the following:

```
JVM_ARGS="-DSVC=$SVC -Xms$MEMORY_MIN -Xmx$MEMORY_MAX $REMOTE_DEBUG_OPTS -Djava.security.manager
-Djava.security.policy=security.policy
-DpreInitSchema=false -verbose:gc -Dfile.encoding=UTF-8 $JMX_OPTS -Dhttp.useProxy=true
-Dhttp.proxyHost=proxy_name
-Dhttp.proxyPort=proxy_port"
```

Public Cloud Deployment Policies

The public cloud deployment policies define the parameters that are required to provision VMs in the public cloud account. The configuration of these policies depends upon the type of public cloud account.