



Red Hat OpenStack Platform 11 Introduction to the OpenStack Dashboard

An overview of the OpenStack dashboard graphical user interface

OpenStack Team

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Abstract

This guide provides an outline of the options available in the OpenStack dashboard user interface.

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PREFACE

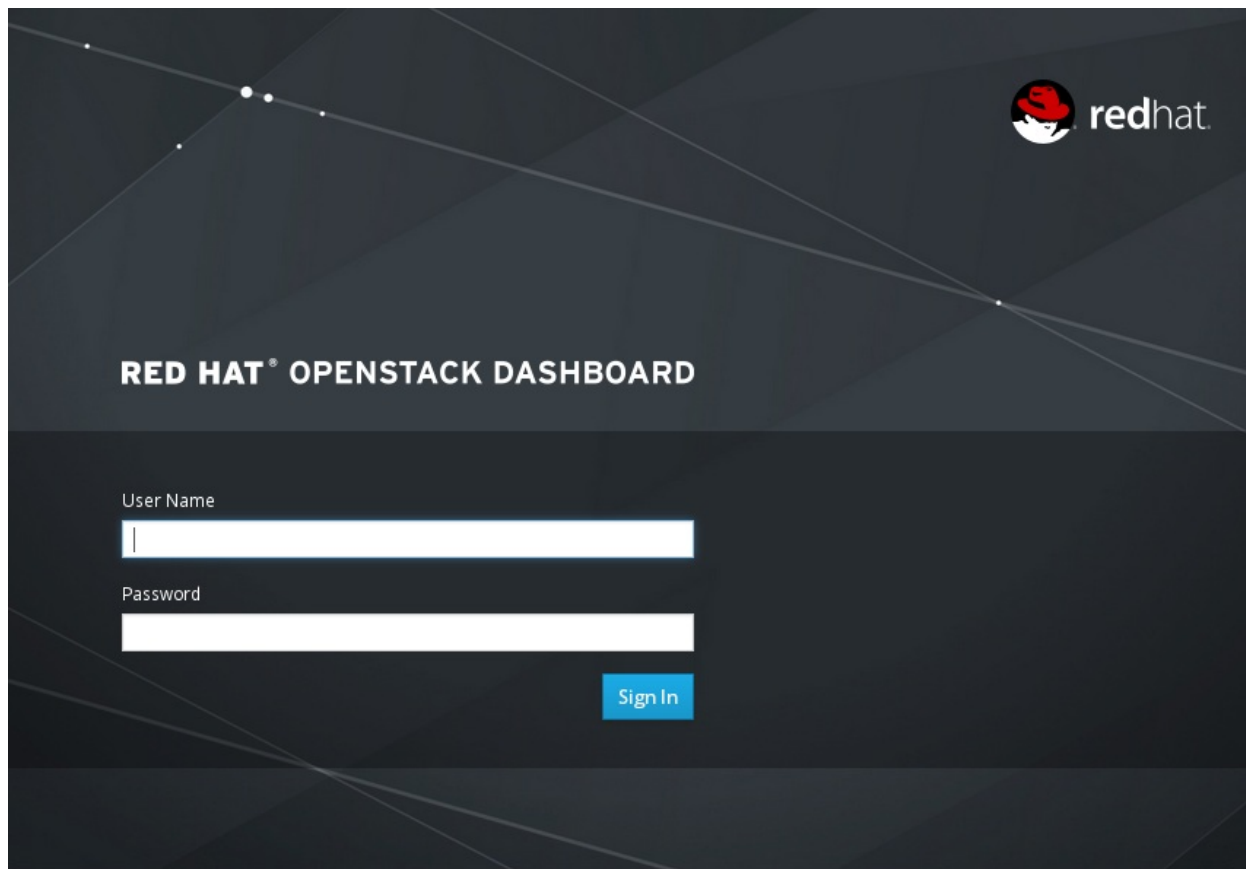
This document provides an outline of the options available in the OpenStack dashboard graphical user interface.

CHAPTER 1. THE OPENSTACK DASHBOARD

The OpenStack dashboard is a web-based graphical user interface for managing OpenStack services.

To access the browser dashboard, the dashboard service must be installed, and you must know the dashboard host name (or IP) and login password. The dashboard URL is:

```
http://HOSTNAME/dashboard/
```



CHAPTER 2. THE ADMIN TAB

The **Admin** tab provides an interface where administrative users can view usage and manage instances, volumes, flavors, images, projects, users, services, and quotas.



Note

The **Admin** tab displays in the main window only if you have logged in as a user with administrative privileges.

RED HAT ENTERPRISE LINUX OPENSTACK PLATFORM Project Admin Identity Red Hat Access Help admin

System

Overview Resource Usage Hypervisors Host Aggregates Instances Volumes Flavors Images Networks Routers Defaults Metadata Definitions System Information

Usage Summary

Select a period of time to query its usage:

From: 2015-07-01 To: 2015-07-09 Submit The date should be in YYYY-mm-dd format.

Active Instances: 0 Active RAM: 0 Bytes This Period's VCPU-Hours: 0 This Period's GB-Hours: 0 This Period's RAM-Hours: 0

Usage [Download CSV Summary](#)

| Project Name | VCPUs | Disk | RAM | VCPU Hours | Disk GB Hours | Memory MB Hours |
|----------------------|-------|------|-----|------------|---------------|-----------------|
| No items to display. | | | | | | |
| Displaying 0 items | | | | | | |

The following options are available in the **Admin** tab:

Table 2.1. System Panel

| Parameter Name | Description |
|------------------------|---|
| Overview | View basic reports. |
| Resource Usage | Use the following tabs to view the following usages: <ul style="list-style-type: none"> ➤ Usage Report - View the usage report. ➤ Stats - View the statistics of all resources. |
| Hypervisors | View the hypervisor summary. |
| Host Aggregates | View, create, and edit host aggregates. View the list of availability zones. |

| Parameter Name | Description |
|-----------------------------|---|
| Instances | View, pause, resume, suspend, migrate, soft or hard reboot, and delete running instances that belong to users of some, but not all, projects. Also, view the log for an instance or access an instance using the console. |
| Volumes | View, create, edit, and delete volumes, and volume types. |
| Flavors | View, create, edit, view extra specifications for, and delete flavors. Flavors are the virtual hardware templates in OpenStack. |
| Images | View, create, edit properties for, and delete custom images. |
| Networks | View, create, edit properties for, and delete networks. |
| Routers | View, create, edit properties for, and delete routers. |
| Floating IPs | View allocated floating IP addresses for all projects. |
| Defaults | View and edit the default quotas (maximum limits) for resources in the environment. |
| Metadata Definitions | Import, view, and edit metadata definition namespaces, and associate the metadata definitions with specific resource types. |
| System Information | Contains the following tabs: <ul style="list-style-type: none">✦ Services - View a list of the services.✦ Compute Services - View a list of all Compute services.✦ Network Agents - View the network agents.✦ Block Storage Services - View a list of all Block Storage services.✦ Orchestration Services - View a list of all Orchestration services. |

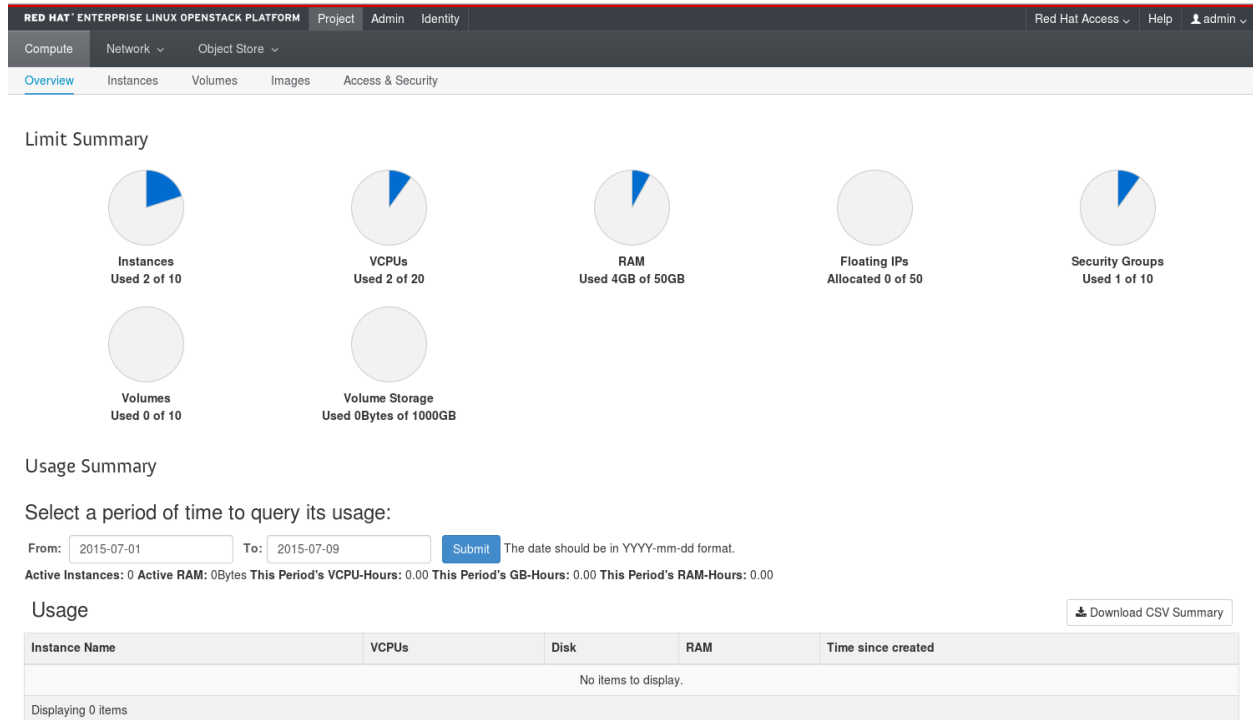
2.1. VIEW ALLOCATED FLOATING IP ADDRESSES

You can use the **Floating IPs** panel to view a list of allocated floating IP addresses. This information can also be accessed using the command line:

```
$ nova list --all-tenants
```

CHAPTER 3. THE PROJECT TAB

The **Project** tab provides an interface for viewing and managing the resources of a project. Set a project as active in **Identity > Projects** to view and manage resources in that project.



The screenshot shows the OpenStack Dashboard interface for the Project tab. At the top, there is a navigation bar with 'Project' selected. Below the navigation bar, there are several resource usage gauges:

- Instances:** Used 2 of 10
- VCPUs:** Used 2 of 20
- RAM:** Used 4GB of 50GB
- Floating IPs:** Allocated 0 of 50
- Security Groups:** Used 1 of 10
- Volumes:** Used 0 of 10
- Volume Storage:** Used 0Bytes of 1000GB

Below the gauges is a 'Usage Summary' section with a date range selector (From: 2015-07-01, To: 2015-07-09) and a 'Submit' button. The summary shows: Active Instances: 0, Active RAM: 0Bytes, This Period's VCPU-Hours: 0.00, This Period's GB-Hours: 0.00, This Period's RAM-Hours: 0.00. There is a 'Download CSV Summary' button.

Below the summary is a table with the following columns: Instance Name, VCPUs, Disk, RAM, Time since created. The table is currently empty, displaying 'No items to display.' and 'Displaying 0 items'.

The following options are available in the **Project** tab:

Table 3.1. The Compute Tab

| Parameter Name | Description |
|------------------|--|
| Overview | View reports for the project. |
| Instances | View, launch, create a snapshot from, stop, pause, or reboot instances, or connect to them through the console. |
| Volumes | Use the following tabs to complete these tasks: <ul style="list-style-type: none"> ✦ Volumes - View, create, edit, and delete volumes. ✦ Volume Snapshots - View, create, edit, and delete volume snapshots. |
| Images | View images, instance snapshots, and volume snapshots created by project users, and any images that are publicly available. Create, edit, and delete images, and launch instances from images and snapshots. |

| Parameter Name | Description |
|------------------------------|---|
| Access & Security | <p>Use the following tabs to complete these tasks:</p> <ul style="list-style-type: none"> ✦ Security Groups - View, create, edit, and delete security groups and security group rules. ✦ Key Pairs - View, create, edit, import, and delete key pairs. ✦ Floating IPs - Allocate an IP address to or release it from a project. ✦ API Access - View API endpoints, download the OpenStack RC file, download EC2 credentials, and view credentials for the logged-in project user. |

Table 3.2. The Network Tab

| Parameter Name | Description |
|-------------------------|--|
| Network Topology | View the interactive topology of the network. |
| Networks | Create and manage public and private networks and subnets. |
| Routers | Create and manage routers. |

Table 3.3. The Object Store Tab

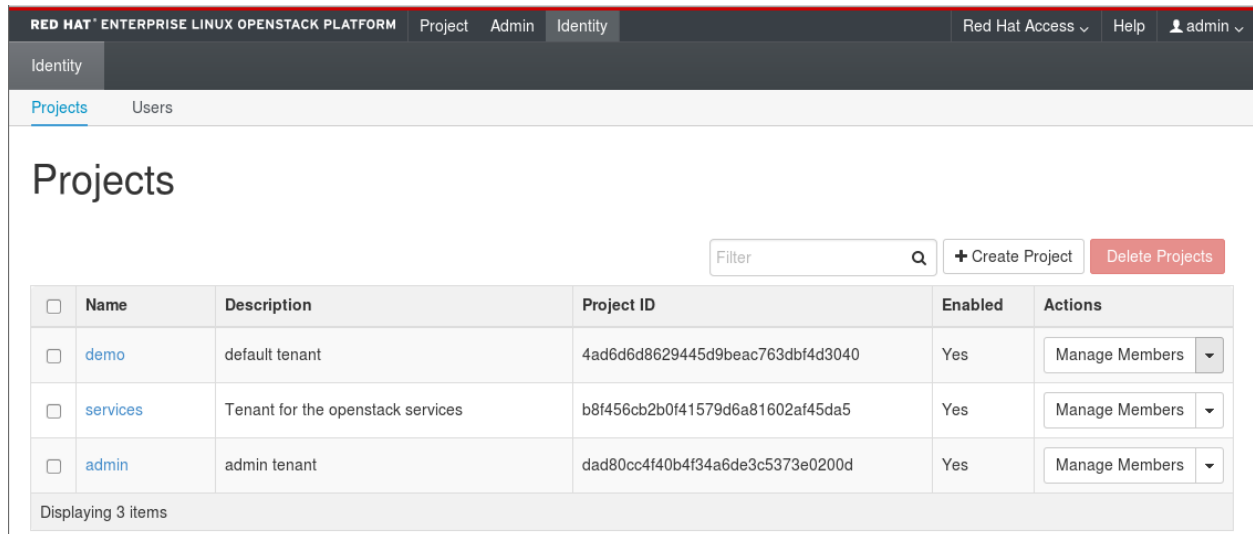
| Parameter Name | Description |
|-------------------|---|
| Containers | Create and manage storage containers. A container is a storage compartment for data, and provides a way for you to organize your data. It is similar to the concept of a Linux file directory, but it cannot be nested. |

Table 3.4. The Orchestration Tab

| Parameter Name | Description |
|----------------|---|
| Stacks | Orchestrate multiple composite cloud applications using templates, through both an OpenStack-native REST API and a CloudFormation-compatible Query API. |

CHAPTER 4. THE IDENTITY TAB

The **Identity** tab provides an interface for viewing and managing projects and users.



The screenshot shows the OpenStack Identity tab interface. At the top, there is a navigation bar with 'RED HAT ENTERPRISE LINUX OPENSTACK PLATFORM' on the left and 'Project Admin Identity' on the right. Below the navigation bar, there are tabs for 'Projects' and 'Users'. The main content area is titled 'Projects' and contains a table with the following data:

| <input type="checkbox"/> | Name | Description | Project ID | Enabled | Actions |
|--------------------------|----------|-----------------------------------|----------------------------------|---------|----------------|
| <input type="checkbox"/> | demo | default tenant | 4ad6d6d8629445d9beac763dbf4d3040 | Yes | Manage Members |
| <input type="checkbox"/> | services | Tenant for the openstack services | b8f456cb2b0f41579d6a81602af45da5 | Yes | Manage Members |
| <input type="checkbox"/> | admin | admin tenant | dad80cc4f40b4f34a6de3c5373e0200d | Yes | Manage Members |

Below the table, it says 'Displaying 3 items'. Above the table, there is a search filter box and two buttons: '+ Create Project' and 'Delete Projects'.

The following options are available in the **Identity** tab:

- ✎ **Projects** - View, create, edit, and delete projects/tenants, view project usage, add or remove users as project members, modify quotas, and set an active project.
- ✎ **Users** - View, create, edit, disable, and delete users, and change user passwords. The **Users** tab displays only if you are logged in as a user with administrative privileges.

For more information on procedures to manage your cloud using the OpenStack Dashboard, see the following guides:

- ✎ [Instances and Images guide](#) (also has procedures for volumes and containers)
- ✎ [Networking guide](#)
- ✎ [Users and Identity Management guide](#)

CHAPTER 5. CUSTOMIZING THE DASHBOARD

The look and feel of the OpenStack dashboard can be customized using the settings defined in `/openstack-dashboard/openstack_dashboard/local/local_settings.py`. You can customize the following elements of the dashboard:

- ✦ HTML title
- ✦ Site branding link
- ✦ Help URL

In addition, you can create a custom theme and further customize the look and feel of the dashboard, including the following components:

- ✦ Logo
- ✦ Site colors
- ✦ Stylesheets



Note

The OpenStack dashboard installs a default theme. If you do not want to use this theme, remove it using the following commands:

```
# cd /usr/share/openstack-dashboard/openstack_dashboard/enabled
# cp _99_customization.py _999_remove_theme.py
# echo "DISABLED = True" >> _999_remove_theme.py
# systemctl restart httpd
```

For a director deployment, you will need to log in to each controller node as **heat-admin** to make the changes.

5.1. LOGO, SITE COLORS, AND STYLESHEETS

1. Copy the entire RCUE theme directory `/usr/share/openstack-dashboard/openstack_dashboard/themes/rcue` to a new location, for example `/usr/share/openstack-dashboard/openstack_dashboard/themes/mytheme`.
2. Create a new file `/etc/openstack-dashboard/local_settings.d/_12_mytheme_theme.py` and add the following line:

```
AVAILABLE_THEMES = [('mytheme', 'My Custom Theme',
                     'themes/mytheme')]
```

3. Change all paths inside `/usr/share/openstack-dashboard/openstack_dashboard/themes/mytheme/static/` replacing **rcue** with the new **mytheme** name.

```
To change a theme's colors, graphics, fonts, among others, edit the files in ~/usr/share/openstack-dashboard/openstack_dashboard/themes/mytheme`.
```

4. If you deployed OpenStack with High Availability, restart the `httpd` service using pacemaker:

```
# pcs resource restart httpd-clone
```

Otherwise, run:

```
# systemctl restart httpd
```

To view your changes, reload your dashboard.

5.2. HTML TITLE

1. To set the HTML title that appears at the top of the browser window, add the following line to `local_settings.py`.

```
SITE_BRANDING = "Example, Inc. Cloud"
```

2. Restart the `httpd` server.

5.3. SITE BRANDING LINK

1. The logo also acts as a hyperlink, redirecting to `horizon:user_home` by default. To change this, add the following attribute with the desired URL target to `local_settings.py`.

```
SITE_BRANDING_LINK = "http://example.com"
```

2. Restart the `httpd` server.

5.4. HELP URL

1. By default the help URL points to <https://access.redhat.com/documentation/en/red-hat-openstack-platform>. You can change the help URL by editing the following attribute to the URL of your choice in `local_settings.py`:

```
'help_url': "http://openstack.example.com",
```

2. Restart the `httpd` server.