



# Red Hat OpenStack Services on OpenShift 18.0

## Managing cloud resources with the Dashboard

Viewing and configuring the Dashboard service (horizon) GUI



# Red Hat OpenStack Services on OpenShift 18.0 Managing cloud resources with the Dashboard

---

Viewing and configuring the Dashboard service (horizon) GUI

OpenStack Team  
rhos-docs@redhat.com

## Legal Notice

Copyright © 2024 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, the Red Hat logo, JBoss, OpenShift, Fedora, the Infinity logo, and RHCE are trademarks of Red Hat, Inc., registered in the United States and other countries.

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

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

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

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

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

The OpenStack<sup>®</sup> 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

Use the options available in the graphical user interface of the Dashboard service (horizon) to manage cloud resources in Red Hat OpenStack Services on OpenShift.

---

## Table of Contents

<b>PROVIDING FEEDBACK ON RED HAT DOCUMENTATION</b> .....	<b>3</b>
<b>CHAPTER 1. THE RED HAT OPENSTACK PLATFORM DASHBOARD SERVICE (HORIZON)</b> .....	<b>4</b>
1.1. THE ADMIN TAB	4
1.1.1. Viewing allocated floating IP addresses	5
1.1.2. Viewing the PCPU usage	5
1.2. THE PROJECT TAB	5
1.3. THE IDENTITY TAB	7
<b>CHAPTER 2. CUSTOMIZING THE DASHBOARD</b> .....	<b>8</b>
2.1. OBTAINING THE HORIZON CONTAINER IMAGE	8
2.2. OBTAINING THE RCUE THEME	8
2.3. CREATING YOUR OWN THEME BASED ON RCUE	9
2.4. CREATING A FILE TO ENABLE YOUR THEME AND CUSTOMIZE THE DASHBOARD	9



# PROVIDING FEEDBACK ON RED HAT DOCUMENTATION

We appreciate your input on our documentation. Tell us how we can make it better.

## Providing documentation feedback in Jira

Use the [Create Issue](#) form to provide feedback on the documentation for Red Hat OpenStack Services on OpenShift (RHOSO) or earlier releases of Red Hat OpenStack Platform (RHOSP). When you create an issue for RHOSO or RHOSP documents, the issue is recorded in the RHOSO Jira project, where you can track the progress of your feedback.

To complete the [Create Issue](#) form, ensure that you are logged in to Jira. If you do not have a Red Hat Jira account, you can create an account at <https://issues.redhat.com>.

1. Click the following link to open a **Create Issue** page: [Create Issue](#)
2. Complete the **Summary** and **Description** fields. In the **Description** field, include the documentation URL, chapter or section number, and a detailed description of the issue. Do not modify any other fields in the form.
3. Click **Create**.

# CHAPTER 1. THE RED HAT OPENSTACK PLATFORM DASHBOARD SERVICE (HORIZON)

The Red Hat OpenStack Platform (RHOSP) Dashboard (horizon) is a web-based graphical user interface that you can use to manage RHOSP services.

To access the browser dashboard, you must install the Dashboard service, and you must know the dashboard host name, or IP, and login password. The dashboard URL is:

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

## 1.1. THE ADMIN TAB

In the **Admin** tab you can view usage and manage instances, volumes, flavors, images, projects, users, services, and quotas.



### NOTE

The **Admin** tab displays in the main window when you log in as an admin user.

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

Table 1.1. 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"> <li>● <b>Usage Report</b> - View the usage report.</li> <li>● <b>Stats</b> - View the statistics of all resources.</li> </ul>
Hypervisors	View the hypervisor summary.
Host Aggregates	View, create, and edit host aggregates. View the list of availability zones.
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 with 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 Red Hat OpenStack Platform (RHOSP).



Parameter name	Description
<b>Images</b>	View, create, edit properties for, and delete custom images.
<b>Networks</b>	View, create, edit properties for, and delete networks.
<b>Routers</b>	View, create, edit properties for, and delete routers.
<b>Floating IPs</b>	View allocated floating IP addresses for all projects.
<b>Defaults</b>	View and edit the default quotas (maximum limits) for resources in the environment.
<b>Metadata Definitions</b>	Import, view, and edit metadata definition namespaces, and associate the metadata definitions with specific resource types.
<b>System Information</b>	<p>Contains the following tabs:</p> <ul style="list-style-type: none"> <li>● <b>Services</b> - View a list of the services.</li> <li>● <b>Compute Services</b> - View a list of all Compute services.</li> <li>● <b>Network Agents</b> - View the network agents.</li> <li>● <b>Block Storage Services</b> - View a list of all Block Storage services.</li> <li>● <b>Orchestration Services</b> - View a list of all Orchestration services.</li> </ul>

### 1.1.1. Viewing allocated floating IP addresses

You can use the **Floating IPs** panel to view a list of allocated floating IP addresses. You can access the same information from the command line with the **nova list --all-projects** command.

### 1.1.2. Viewing the PCPU usage

The **PCPU Usage** shows how many pinned CPUs (pCPUs) that you have used in your environment and how many pCPUs are available for you to use in your environment. You can view the PCPU usage in the **Resource Providers Summary** section of the **All Hypervisors** page.

To find the **All Hypervisors** page, complete the following steps:

1. Click **Admin**.
2. Click **Compute**.
3. In the **Compute** submenu, click **Hypervisors**.

## 1.2. THE PROJECT TAB

In the **Project** tab you can view and manage project resources. Set a project as active in **Identity > Projects** to view and manage resources in that project.

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

**Table 1.2. The Compute tab**

Parameter name	Description
<b>Overview</b>	View reports for the project.
<b>Instances</b>	View, launch, create a snapshot from, stop, pause, or reboot instances, or connect to them through the console.
<b>Volumes</b>	Use the following tabs to complete these tasks: <ul style="list-style-type: none"> <li>● <b>Volumes</b> - View, create, edit, and delete volumes.</li> <li>● <b>Volume Snapshots</b> - View, create, edit, and delete volume snapshots.</li> </ul>
<b>Images</b>	View images, instance snapshots, and volume snapshots that project users create, and any images that are publicly available. Create, edit, and delete images, and launch instances from images and snapshots.
<b>Access &amp; Security</b>	Use the following tabs to complete these tasks: <ul style="list-style-type: none"> <li>● <b>Security Groups</b> - View, create, edit, and delete security groups and security group rules.</li> <li>● <b>Key Pairs</b> - View, create, edit, import, and delete key pairs.</li> <li>● <b>Floating IPs</b> - Allocate an IP address to or release it from a project.</li> <li>● <b>API Access</b> - View API endpoints, download the OpenStack RC file, download EC2 credentials, and view credentials for the current project user.</li> </ul>

**Table 1.3. The Network tab**

Parameter name	Description
<b>Network Topology</b>	View the interactive topology of the network.
<b>Networks</b>	Create and manage public and private networks and subnets.
<b>Routers</b>	Create and manage routers.

Parameter name	Description
Trunks	Create and manage trunks. Requires the <b>trunk</b> extension enabled in OpenStack Networking (neutron).

Table 1.4. 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 1.5. The Orchestration tab

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

## 1.3. THE IDENTITY TAB

In the **Identity** tab you can view and manage projects and users.

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

- **Projects** - View, create, edit, and delete projects, 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 is available when you log in as an admin user.

For more information about managing your cloud with the Red Hat OpenStack Platform dashboard, see the following guides:

- [Creating and managing instances](#)
- [Creating and managing images](#)
- [Networking guide](#)
- [Users and Identity Management guide](#)

## CHAPTER 2. CUSTOMIZING THE DASHBOARD

The Red Hat OpenStack Platform (RHOSP) dashboard (horizon) uses a default theme (RCUE), which is stored inside the horizon container. You can add your own theme to the container image and customize certain parameters to change the look and feel of the following dashboard elements:

- Logo
- Site colors
- Stylesheets
- HTML title
- Site branding link
- Help URL



### NOTE

To ensure continued support for modified RHOSP container images, the resulting images must comply with the [Red Hat Container Support Policy](#).

### 2.1. OBTAINING THE HORIZON CONTAINER IMAGE

To obtain a copy of the horizon container image, pull the image either into the undercloud or a separate client system that is running podman.

#### Procedure

- Pull the horizon container image:

```
$ sudo podman pull registry.redhat.io/rhosp-rhel8/openstack-horizon:18.0
```

You can use this image as a basis for a modified image.

### 2.2. OBTAINING THE RCUE THEME

The horizon container image uses the Red Hat branded RCUE theme by default. You can use this theme as a basis for your own theme and extract a copy from the container image.

#### Procedure

1. Create a directory for your theme:

```
$ mkdir ~/horizon-themes  
$ cd ~/horizon-themes
```

2. Start a container that executes a null loop. For example, run the following command:

```
$ sudo podman run --rm -d --name horizon-temp registry.redhat.io/rhosp-rhel8/openstack-horizon /usr/bin/sleep infinity
```

3. Copy the RCUE theme from the container to your local directory:

```
$ sudo podman cp horizon-temp:/usr/share/openstack-  
dashboard/openstack_dashboard/themes/rcue .
```

4. Terminate the container:

```
$ sudo podman kill horizon-temp
```

**Result:** You now have a local copy of the RCUE theme.

## 2.3. CREATING YOUR OWN THEME BASED ON RCUE

To use RCUE as a basis, copy the entire RCUE theme directory `rcue` to a new location. This procedure uses **mytheme** as an example name.

### Procedure

- Copy the theme:

```
$ cp -r rcue mytheme
```

To change the colors, graphics, fonts, and other elements of a theme, edit the files in `mytheme`. When you edit this theme, check for all instances of `rcue` including paths, files, and directories to ensure that you change them to the new `mytheme` name.

## 2.4. CREATING A FILE TO ENABLE YOUR THEME AND CUSTOMIZE THE DASHBOARD

To enable your theme in the dashboard container, you must create a file to override the **AVAILABLE\_THEMES** parameter.

### Procedure

1. Create a new file called `_12_mytheme_theme.py` in the **horizon-themes** directory and add the following content:

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

The **12** in the file name ensures this file is loaded after the RCUE file, which uses **11**, and overrides the **AVAILABLE\_THEMES** parameter.

2. Optional: You can also set custom parameters in the `_12_mytheme_theme.py` file. Use the following examples as a guide:

#### SITE\_BRANDING

Set the HTML title that appears at the top of the browser window.

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

#### SITE\_BRANDING\_LINK

Changes the hyperlink of the theme logo, which normally redirects to **horizon:user\_home** by default.

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