

Exploring the CLI and Web Console

Command Line Interface

OpenShift includes a feature-rich web console with both an Administrator perspective and a Developer perspective. In addition to the web console, OpenShift includes command line tools to provide users with a nice interface to work with applications deployed to the platform. The `oc` command line tool is an executable written in the Go programming language and is available for the following operating systems:

- Microsoft Windows
- macOS 10
- Linux

This lab environment has the `oc` command line tool installed, and your lab user is already logged in to the OpenShift cluster.

Issue the following command to see help information:

```
oc help
```

Using a Project

Projects are a top level concept to help you organize your deployments. An OpenShift project allows a community of users (or a user) to organize and manage their content in isolation from other communities. Each project has its own resources, policies (who can or cannot perform actions), and constraints (quotas and limits on resources, etc). Projects act as a "wrapper" around all the application services and endpoints you (or your teams) are using for your work.

During this lab, we are going to use a few different commands to make sure that things in the environment are working as expected. Don't worry if you don't understand all of the terminology as we will cover it in detail in later labs.

In this lab environment, you already have access to single project: **user4**.

If you had multiple projects, the first thing you would want to do is to switch to the **user4** project to make sure you're on the correct project from now on. You can do this with the following command:

```
oc project user4
```

The Web Console

OpenShift ships with a web-based console that will allow users to perform various tasks via a browser.

To get a feel for how the web console works, click on this [Web Console](#) link.

On the login screen, enter the following credentials:

Username: `user4`

Password: `openshift`

The first time you access the web console, you will most likely be in the Administrator perspective. You will be presented with the list of Projects that you can access, and you will see something that looks like the following image:

The screenshot shows the Red Hat OpenShift Container Platform dashboard. The left sidebar contains a navigation menu with the following items: Administrator, Home (selected), Overview, Projects, Search, Explore, Events, Operators, Workloads, Networking, Storage, Builds, Pipelines, Monitoring, User Management, Administration, and Resource Quotas. The main content area is titled 'Projects' and features a search bar with the placeholder text 'Filter by name or display name...'. Below the search bar is a table with the following columns: Name, Display Name, Status, Requester, Memory, CPU, and Created. The table contains one row for the project 'user1', which is marked as 'Active' and was created '21 hours ago'. The project name 'user1' is highlighted with a green 'PR' icon.

Name	Display Name	Status	Requester	Memory	CPU	Created
PR user1	No display name	Active	user1	-	-	21 hours ago

Click on the **user4** project link. When you click on the **user4** project, you will be taken to the project details page, which will list some metrics and details about your project. There's nothing there now, but that will change as you progress through the lab.

The screenshot displays the Red Hat OpenShift Container Platform dashboard. The top navigation bar includes the Red Hat logo, the text 'OpenShift Container Platform', and user information 'user1'. The left sidebar contains a navigation menu with options: Administrator, Home (selected), Projects, Search, Explore, Events, Operators, Workloads, Networking, Storage, Builds, Monitoring, User Management, and Administration. The main content area shows the 'Project Details' for 'user1', which is 'Active'. The 'Overview' tab is selected, showing a 'Details' section with 'Name: user1', 'Requester: user1', and 'Labels: No labels'. The 'Status' section shows 'Active' and 'No project messages'. The 'Activity' section shows 'Ongoing' and 'Recent Events' with a 'Pause' button. The 'Inventory' section lists '0 Deployments', '0 Pods', '0 PVCs', '0 Services', '0 Routes', '0 Config Maps', and '9 Secrets'. The 'Utilization' section shows a table with columns 'Resource', 'Usage', and 'No datapoints found.' for CPU, Memory, Filesystem, and Network Transfer.

Red Hat OpenShift Container Platform

Administrator

Home

Overview

Projects

Search

Explore

Events

Operators

Workloads

Networking

Storage

Builds

Monitoring

User Management

Administration

Projects > Project Details

PR user1 Active

Actions

Overview Details YAML Workloads Role Bindings

Details View all

Name user1

Requester user1

Labels No labels

Status

Active

No project messages

Activity View events

Ongoing

There are no ongoing activities.

Recent Events Pause

There are no recent events.

Inventory

0 Deployments

0 Pods

0 PVCs

0 Services

0 Routes

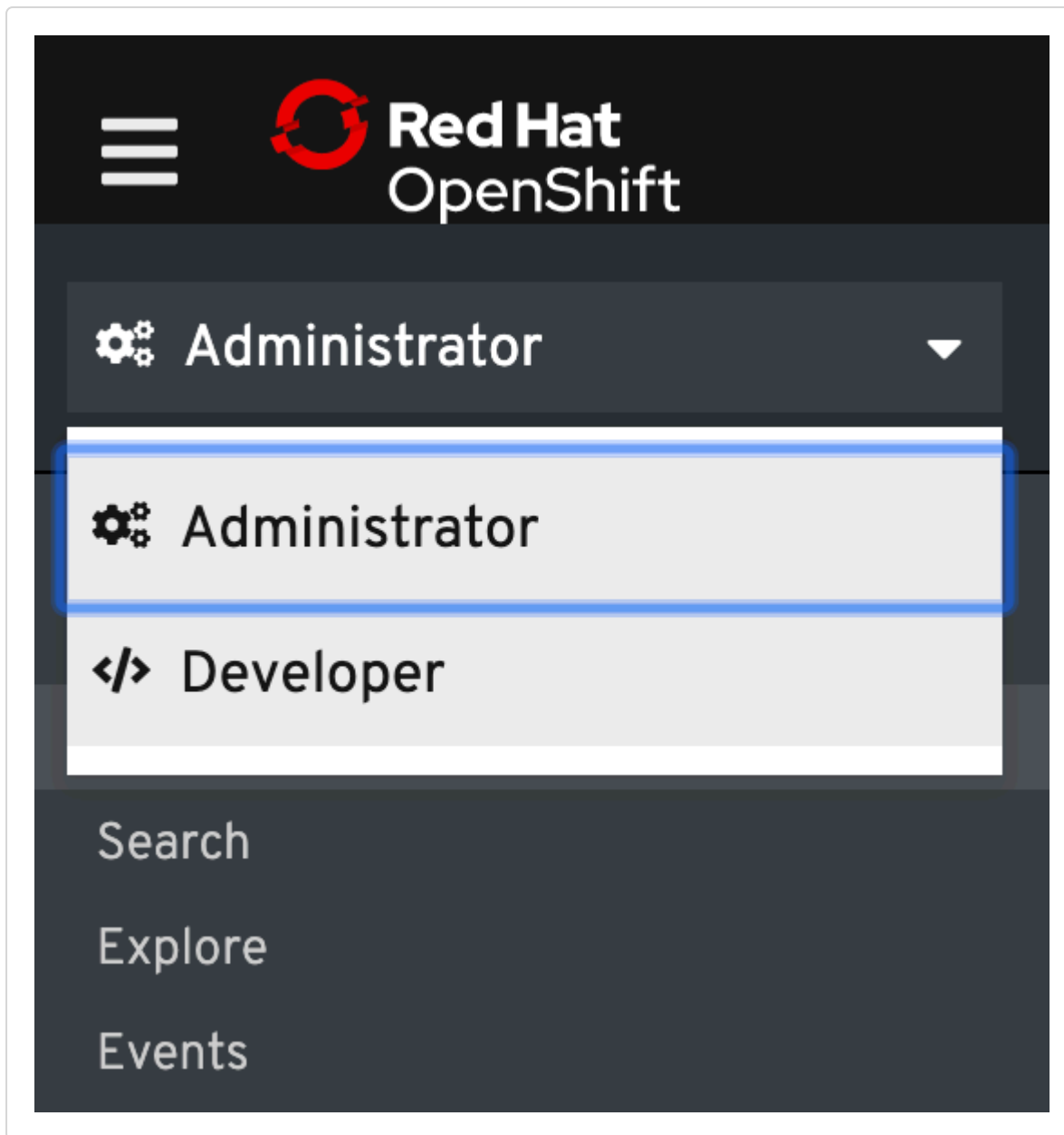
0 Config Maps

9 Secrets

Utilization 1 Hour

Resource	Usage	
CPU	Not available	No datapoints found.
Memory	Not available	No datapoints found.
Filesystem	Not available	No datapoints found.
Network Transfer	Not available	No datapoints found.

At the top of the left navigation menu, you can toggle between the Administrator perspective and the Developer perspective.



Select **Developer** to switch to the Developer perspective. Once the Developer perspective loads, you should be in the **Topology** view. Right now, there are no applications or components to view, but once you begin working on the lab, you'll be able to visualize and interact with

the components in your application here.

The screenshot shows the Red Hat OpenShift Container Platform Developer perspective dashboard. The top navigation bar includes the Red Hat logo, 'OpenShift Container Platform', and a user profile 'user1'. Below the navigation bar, there's a sidebar with a menu containing 'Developer', '+Add', 'Topology', 'Monitoring', 'Search', 'Builds', 'Pipelines', 'Helm', 'Project', 'ConfigMaps', and 'Secrets'. The main content area is titled 'Add' and includes a sub-header 'Project: user1' and 'Application: all applications'. It features a 'Getting started resources' section with three columns: 'Create applications using samples' (listing Basic Quarkus and Basic Spring Boot), 'Build with guided documentation' (listing Get started with Quarkus using s2i and Get started with Spring), and 'Explore new developer features' (listing Discover certified Helm Charts and Start building your application quickly in topology). Below this, there are four main sections: 'Developer Catalog' (All services, Database, Operator Backed), 'Git Repository' (From Git, From Devfile, From Dockerfile), 'Container images' (Deploy an existing Image from an Image registry or Image stream tag), and 'From Local Machine' (Import YAML, Upload JAR file). A 'Pipelines' section is also present, showing 'Create a Tekton Pipeline to automate delivery of your Application'. A 'Samples' section at the bottom right shows 'Create an Application from a code sample'.

We will be using a mix of command line tooling and the web console for the labs. Get ready!

