

Lesson Guide - Installing and Configuring Podman on RHEL

Before we can get to work with containers and pods, we need a Podman environment to work with. In this lesson, we will take a look at how to get Podman installed and configured on RHEL. Upon completion of this lesson, you will be able to get a Podman environment up and running, customized the way you want it.

Resources

[Building, Running, and Managing Linux Containers on Red Hat Enterprise Linux 8 - Red Hat](#)

[Podman Installation Instructions - podman.io](#)

[RHEL 8 Enables Containers With the Tools of Software Craftsmanship - Red Hat](#)

Instructions

We need to set up a Podman environment!

Before we can work with Podman containers and pods, we're going to need to install and configure Podman. We're going to take a look at how to install Podman on RHEL.

Let's go!

Installing Podman Using yum

The easiest way to install Podman and its associated dependencies is using **yum** or **dnf** on Red Hat based distributions.

```
sudo yum -y install podman
```

This will give us the most current packages from the repositories.

Installing Podman Using Application Streams

With RHEL 8, we have the option to use **Application Streams** to select the version of Podman and associated dependencies.

We can take a look at the available streams by using:

```
sudo yum module list container-tools
```

By default, the **rhel8** stream is enabled. This will give us the most current packages, like issuing a **yum install podman** command.

Let's say that we want to try a different stream, say **2.0**. We would enable that stream with:

```
sudo yum module enable container-tools:2.0
```

Checking our configured stream:

```
sudo yum module list container-tools
```

We see that the **2.0** stream is now configured.

If we try an install:

```
sudo yum module install container-tools
```

We see the versions to be installed are based on the **1.6** version of Podman. Let's break out of the install.

Checking our configured stream:

```
sudo yum module list container-tools
```

We're going to switch back to the default stream:

```
sudo yum module reset container-tools
```

Checking our configured stream one more time:

```
sudo yum module list container-tools
```

If we try an install now:

```
sudo yum module install container-tools
```

Let's select **yes** to proceed. Once the installation is complete, we see the versions installed via the **rhel8** stream and the **yum install podman** command are the same.

Checking our installed version of Podman on both servers:

```
podman --version
```

Configuring Podman

The configuration files for the Podman environment are located in `/etc/containers`.

Important files include:

- `/etc/containers/registries.conf`
 - This file contains configuration information for container registries and registry mirrors.
- `/etc/containers/storage.conf`
 - This file contains configuration information for all tools that use the `containers/storage` library. You can specify storage locations, UID/GID mappings, thinpool storage options, and more.

Summary

Installation of Podman is relatively straightforward on RHEL-based distributions. You can either install directly with `yum` via `yum install podman` or you can use `yum` with Application Streams to choose from one or more streams that correspond with different versions of Podman and its associated packages.

Configuration files for Podman are located in the `/etc/containers` directory and are managed there. The two main configuration files we care about are the `registries.conf` and the `storage.conf` configuration files.

Notes

Recording - Environment used: Cloud Playground - Small 2 unit RHEL 8 Cloud Server - I used two

Environment Setup:

Create your Cloud Playground server and log in. That's it!