

## OpenShift Enterprise Administration

### Course Summary

#### Description

OpenShift Enterprise Administration prepares the system administrator to install, configure, and manage OpenShift Enterprise by Red Hat instances. OpenShift Enterprise, Red Hat's platform-as-a-service (PaaS) offering, provides pre-defined deployment environments for applications of all types through its use of container technology. This creates an environment that supports DevOps principles such as reduced time to market and continuous delivery. OpenShift Enterprise is a key technology in Red Hat's DevOps story. Using PaaS has proven to accelerate time to market for many organizations. This course provides the knowledge to take advantage of the platform in a popular DevOps environment. In this course, students will learn how to install and configure an instance of OpenShift Enterprise, test the instance by deploying a real world application, and manage projects/applications through hands-on labs.

#### Skills Gained:

- Container concepts
- Configuring resources with the command line interface
- Building a pod
- Enabling services for a pod
- Creating routes
- Downloading and configuring images
- Rolling back and activating deployments
- Creating custom S2I images

#### Topics

- Introduction to Red Hat OpenShift Enterprise
- Install OpenShift Enterprise
- Execute commands
- Build applications
- Persistent storage
- Build applications with source-to-image (S2I)
- Manage the system
- Customize OpenShift Enterprise
- Comprehensive review

#### Audience

This course is designed for system administrators responsible for creating OpenShift Enterprise instances, deploying applications, creating process customizations, managing instances and projects.

#### Prerequisites

Before taking this course students should:

- Have taken Managing Containers with Red Hat Enterprise Linux Atomic Host (RH270) for a deeper understanding of the architecture used by OpenShift, or equivalent experience
- Have taken Red Hat Enterprise Linux Administration I and II (RH124 and RH134), or equivalent Red Hat Enterprise Linux® system administration experience
- Be certified as a Red Hat Certified System Administrator (RHCSA), or equivalent Red Hat Enterprise Linux system administration experience
- Be certified as a Red Hat Certified Engineer (RHCE®)

#### Duration

Four days

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### Course Outline

- I. Introduction to Red Hat OpenShift Enterprise**
  - A. Review features and architecture of OpenShift Enterprise.
- II. Install OpenShift Enterprise**
  - A. Install OpenShift Enterprise and configure a master and node.
- III. Execute commands**
  - A. Execute commands using the command line interface.
- IV. Build applications**
  - A. Create, build, and deploy applications to an OpenShift Enterprise instance.
- V. Persistent storage**
  - A. Provision persistent storage and use it for the internal registry.
- VI. Build applications with source-to-image (S2I)**
  - A. Create and build applications with S2I and templates.
- VII. Manage the system**
  - A. Use OpenShift Enterprise components to manage deployed applications.
- VIII. Customize OpenShift Enterprise**
  - A. Customize resources and processes used by OpenShift Enterprise.
- IX. Comprehensive review**
  - A. Practice and demonstrate knowledge and skills learned in the course.