

Module Title : DO290-Developing and Deploying Applications on OpenShift

Duration : 3 days

Overview

Through hands-on labs, the student will implement user stories for an existing Java™ EE application and deploy the application to an OpenShift instance. The student will learn how to create, update, and maintain applications using Red Hat OpenShift Container Platform.

Course content summary

- Managing an application with Red Hat JBoss® Developer Studio
- Introduction to continuous integration (CI)
- Integrating CI into OpenShift Container Platform
- Implementing CI for the application
- Clustering the Bookstore application
- Remote debugging the Bookstore application
- Deploying custom containers
- Creating a custom template

Audience

This course is designed for application developers (not necessarily Java EE developers) interested in creating OpenShift applications with automated unit/acceptance tests and deploying those applications using continuous integration (CI) to an OpenShift instance.

Prerequisites

Red Hat recommends these prerequisites:

- Java EE programming skills are helpful—we try to keep the programming tasks simple, like changing the color of an item on an HTML page—so general HTML skills common to many programming environments will suffice
- Experience as a successful developer in one of the environments supported by Red Hat OpenShift Container Platform—either Python, Ruby, Java EE, Node.js
- Have taken [Introduction to Containers, Kubernetes, and Red Hat OpenShift \(DO180\)](#) or have equivalent experience

Outline

Course introduction

Introduce and review the course.

Development environment review

Describe the developer's tools, agile practices, and deployment environment that will be used in this course.

Bookstore application review

Become familiar with the course application architecture, features, and project layout.

Introduction to OpenShift Container Platform

Describe the features and architecture of OpenShift Container Platform.

Manage OpenShift Container Platform applications

Control and maintain applications using the OpenShift Container Platform command line interface.

Deploy applications on OpenShift Container Platform

Define, build, and deploy an application on OpenShift Container Platform.

Create complex deployments

Create deployments that use clustering, load balancing, and customized node scheduling.

Implement continuous integration

Establish continuous integration with Jenkins.

Troubleshoot applications

Use debugging and logs to troubleshoot problems with application performance or deployment issues.

Customize OpenShift Container Platform

Create custom source image containers, templates, and builders.

Course review

Practice the skills learned in this course.