## Introduction to OpenShift Applications

Course Code: DO101; Course Duration: 1 day; Instructor-led

### WHAT YOU WILL LEARN

A developer-focused introduction to OpenShift application building, deployment, scaling, and troubleshooting.

Red Hat® OpenShift® Container Platform is a containerized application platform that allows enterprises to accelerate and streamline application development, delivery, and deployment on-premise or in the cloud. As OpenShift and Kubernetes continue to become widely adopted, developers are increasingly required to understand how to develop, build, and deploy applications with a containerized application platform. While some developers are interested in managing the underlying infrastructure, most developers want to focus on developing applications and using OpenShift for its simple building, deployment, and scaling capabilities.

Course content summary
- Manage application source code with Git
- Develop applications with VSCode
- Deploy an application to OpenShift
- Update an application
- Configure application secrets
- Scale an application
- Troubleshoot and fixing an application

### AUDIENCE

This course is a low prerequisite on-ramp for OpenShift development. Many developers want to find ways to use OpenShift in their organization and have heard of its many benefits, but they lack the necessary skills or interest in approaching OpenShift from a low-level, bottom-up oriented approach. Most developers are instead focused on finding ways to write and deploy applications faster and easier. Students who are interested in learning more about the underlying OpenShift infrastructure and have strong RHCSA-level skills should instead start with Introduction to Containers, Kubernetes, and Red Hat OpenShift (DO180).

### PREREQUISITES

Students should have a strong background in application development and object-oriented programming. If not, it is recommended to first take Red Hat Application Development I: Programming in Java EE (JB183).

### METHODOLOGY

This program will be conducted with interactive lectures, PowerPoint presentation, discussion and practical exercise.

### COURSE OBJECTIVES

Organizations with developers that know how to leverage a container-based architecture, orchestrated with Kubernetes and OpenShift, are expected to see improvement in application reliability and scalability, while decreasing developer overhead.

As a result of attending this course, you should be able to deploy and update applications in an OpenShift 4 cluster. Using the OpenShift 4 web console, students will be able to build, deploy, troubleshoot, and scale applications.

### COURSE OUTLINES

**Module 1: Configure a Cloud Application Developer Environment**
Configure a developer environment with a modern integrated developer environment and version control.

**Module 2: Deploy Applications to Red Hat OpenShift Container Platform**
Deploy an application to OpenShift.

**Module 3: Configure Application builds in OpenShift**
Manage application builds in Red Hat OpenShift Container Platform.

**Module 4: Scale Applications in OpenShift**
Scale and test an application with Red Hat OpenShift Container Platform.

## Module 5: Troubleshoot Applications in OpenShift

Identify and resolve common problems in Red Hat OpenShift Container Platform