

DO244

Developing Applications with Red Hat OpenShift Serverless and Knative

Course Description

Develop and deploy event-driven auto-scaling serverless applications and functions

Learn how to develop, deploy, and auto-scale event driven serverless applications on the [Red Hat OpenShift Container Platform](#). [Red Hat OpenShift Serverless](#) enables developers and [Site Reliability Engineers \(SREs\)](#) to focus on the core business logic of their applications and functions by delegating operational concerns and infrastructure services to the Red Hat® OpenShift Serverless platform.

This course is based on Red Hat OpenShift Serverless 1.23 and OpenShift Container Platform 4.10.

Course content summary

- Understand OpenShift Serverless architecture and primary features of [Knative](#) for serverless applications.
- Implement cloud-native serverless applications using Knative serving.
- Implement event-driven serverless applications using Knative eventing.
- Implement serverless applications using OpenShift Serverless functions.

Audience for this course

- Cloud-native application developers interested in developing serverless applications
- Site Reliability Engineers and OpenShift Administrators interested in using serverless technologies to automate operations and developing utility tools to manage and monitor their applications.

Recommended training

- Complete [Red Hat OpenShift Administration I: Operating a Production Cluster \(DO180\)](#) or demonstrate equivalent knowledge.
- Complete [Red Hat OpenShift Development II: Containerizing Applications \(DO288\)](#) or demonstrate equivalent knowledge.
- Experience programming REST APIs in Java or JavaScript (Node.js) is required.

Outline for this course

- **Introduction to Red Hat OpenShift Serverless and Knative**
Describe the architecture of Red Hat OpenShift Serverless

- **Develop Serverless Applications by using Knative Serving**
Deploy and scale serverless applications with Knative Serving
- **Develop Event-driven Serverless Applications by using Knative Eventing**
Implement event driven serverless applications using Knative Eventing
- **Develop Applications by Using OpenShift Serverless Functions**
Implement serverless applications using OpenShift Serverless Functions

As a result of attending this course, you will be able to accelerate the time to market for cloud-native applications by minimizing time spent on operational and scaling aspects. You will be able to achieve this through learning and demonstrating the following skills:

- Develop serverless applications locally, learn how to unit test them, build container images with using Containerfiles, and deploy the container image to a registry
- Deploy serverless applications to an OpenShift cluster from a container registry
- Auto-scale, version control and perform traffic splitting of serverless applications using Knative Serving
- Develop event-driven applications using Knative Eventing
- Develop serverless functions in multiple programming languages using Red Hat OpenShift Serverless Functions