Red Hat OpenShift Development I: Introduction to Containers with Podman

Kód kurzu: DO188

A developer introduction to building and managing containers with Podman for deploying applications on Red Hat OpenShift Container Platform.Red Hat OpenShift Development I: Introduction to Containers with Podman (DO188) introduces students to building, running, and managing containers with Podman and Red Hat OpenShift. This course helps students build the core skills for developing containerized applications through hands-on experience. These skills can be applied using all versions of OpenShift, including Red Hat OpenShift on AWS (ROSA), Azure Red Hat OpenShift (ARO), and OpenShift Container Platform.This course is based on Red Hat® Enterprise Linux® 8, Podman 4.2 and Red Hat OpenShift® 4.12.

Pro koho je kurz určen

- Developers and Site Reliability Engineers that are new to container technology.

Co Vás naučíme

- Introduction to containers
- Run containers with Podman
- Build custom container images
- Manage container images
- Remote debugging with containers
- Basic container networking
- Persist data with containers
- Run multi-container applications
- Troubleshoot Container Deployments
- Orchestrate containers with OpenShift and Kubernetes

Požadované vstupní znalosti

- Some experience with web application architectures and their corresponding technologies.
- Experience in the use of a Linux terminal session, issuing operating system commands, and familiarity with shell scripting is recommended.

Studijní materiály

Studijní materiál Red Hat.

Osnova kurzu

Introduction and overview of containers

Describe how containers facilitate application development.

Podman basics

Manage and run containers with Podman.

Container images

Navigate container registries to find and manage container images.

Custom container images

Build custom container images to containerize applications.

Persisting data

Build persistent databases.

Container networking

Describe basic container networking and how to access containerized services.

Troubleshooting containers

Analyze container logs and configure a remote debugger.

Multi-container applications with compose

Run multi-container applications using Compose.

Container orchestration with Kubernetes and OpenShift

Orchestrate containerized applications with Kubernetes and OpenShift.

Co musíte vědět

Impact on the organization

A container-based architecture improves application reliability, scalability, and facilitates continuous integration and continuous deployment. This course provides the foundation needed for OpenShift development and is the entrypoint to digital transformation through application containerization

Red Hat has created this course in a way intended to benefit our customers, but each company and infrastructure is unique, and actual results or benefits may vary.

Impact of this training

As a result of attending this course, you will understand the foundations of container-based application development. You will be able to run, manage, and troubleshoot containerized applications. This course is the starting point for the OpenShift developer curriculum and provides the foundation you will need to advance to cloud-native developer courses.