

# Red Hat OpenShift Development I: Introduction to Containers with Podman

## DO188

### CHAPTER 1

#### **Course Introduction**

- Welcome to Hands-on with Podman Containers on Linux

### CHAPTER 2

#### **Introduction to Containers and Podman**

- Understanding Containers and Pods
- Introducing Podman, Skopeo, and Buildah

### CHAPTER 3

#### **Managing Container Images Using Podman**

- Understanding Container Images
- Installing and Configuring Podman on RHEL
- Working with Container Images Using Podman and Skopeo - Part 1
- Working with Container Images Using Podman and Skopeo - Part 2
- HANDS-ON LAB Managing Container Images Using Podman and Skopeo on RHEL

### CHAPTER 4

#### **Managing Containers Using Podman**

- Running Your First Podman Container
- Managing Containers Using Podman
- Managing Container Storage Using Podman
- Managing Container Networking Using Podman

- Monitoring Containers Using Podman
- HANDS-ON LAB Running Your First Podman Container on RHEL
- HANDS-ON LAB Advanced Container Management Using Podman on RHEL

## CHAPTER 5

### **Managing Pods Using Podman**

- Understanding Pods
- Creating Your First Podman Pod
- Managing Pods Using Podman
- HANDS-ON LAB Managing Pods Using Podman on RHEL

## CHAPTER 6

### **Creating Container Images Using Buildah**

- Introducing Buildah and Dockerfiles
- Creating a Container Image Using Buildah and a Dockerfile
- Creating a Container Image Using Buildah Native Commands
- Using Buildah to Manage Container Images - Part 1
- Using Buildah to Manage Container Images - Part 2
- HANDS-ON LAB Customizing Container Images Using Podman and Buildah on RHEL

## CHAPTER 7

### **Exploring Podman and Kubernetes Interoperability**

- Introduction to Kubernetes YAML Files
- Using Podman to Create a Kubernetes YAML File
- Running a Pod from a Podman-Generated Kubernetes YAML File Using Podman
- Running a Pod from a Podman-Generated Kubernetes YAML File Using Kubernetes
- HANDS-ON LAB Exploring Podman and Kubernetes Interoperability on RHEL

## CHAPTER 8

### **Using Podman to Create systemd Containers and Pods**

- Introduction to systemd Containers

- Configuring Persistent systemd Containers and Pods
- HANDS-ON LAB Use Podman to Create Persistent systemd Containers and Pods on RHEL

## CHAPTER 9

### **Managing Podman Containers Using Cockpit**

- Introduction to Cockpit
- Managing Podman Containers Using Cockpit
- HANDS-ON LAB Manage Podman Containers Using Cockpit on RHEL

## CHAPTER 10

### Conclusion

- Hands-on with Podman Containers on Linux - A Review
- Conclusion and What's Next