

# DO180

## Containers, Kubernetes, and Red Hat OpenShift



# Welcome

Thank you for joining us today

We've worked together with the Red Hat Partner Network and Red Hat Learning Academies to bring you a world-class learning experience. At the end of class, please complete an evaluation of today's experience. We value your feedback!



Red Hat Certified  
Instructor

Your instructor is a premier technical and instructional expert who meets ongoing certification requirements



Customer Satisfaction  
Guarantee

Our partners offer a satisfaction guarantee and we hold them accountable for it



Certification Exam  
Benefits

After training, you will be ready to take on exam the Red Hat Certified Specialist in Containers and Kubernetes (EX180) tests. This exam also counts towards earning RHCA

We wish you a great learning experience and ongoing career success!

# Hello! Instructor Introduction



Instructor: Jason Trainocate (M)

Red Hat Certified Instructor

RHCA & RHCE

Microsoft Certified Trainer

Cisco Certified System Instructor

NetApp Certified Trainer

Google Cloud Authorized Instructor



# Hello! Student Introductions

Your name

Company affiliation

Title/function

Container & Red Hat OpenShift  
experience

Your expectations for the course





# Course Introduction: Containers, Kubernetes, and Red Hat OpenShift Administration II

This course helps you build core knowledge in building and managing Linux containers and Red Hat® OpenShift® Container Platform. This hands-on, lab-based course shows you how to deploy sample applications to either a local container runtime or an OpenShift cluster and then how to configure and manage OpenShift clusters to further understand how developers will use the platform. These skills are needed for multiple roles, including developers, administrators, and site reliability engineers.



## Course Objectives

After completing this course, you should be able to demonstrate the skills to create and manage local containers using Podman, establish a new OpenShift cluster, perform initial configuration of the cluster, and manage the cluster on a day-to-day basis. One major focus of the course is troubleshooting common problems that will be encountered beyond day one.

Audience



## Audience

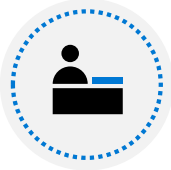
System and Software Architects , System Administrators , Cluster Operators, Site Reliability Engineers



## Prerequisites

Either attain the Red Hat Certified System Administrator certification (RHCSA), or have equivalent knowledge.

# Facilities



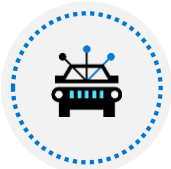
Class hours

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Building hours

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Parking

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Restrooms

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Meals

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Phones



Messages

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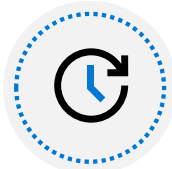
Smoking

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Internet access

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Recycling

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Emergency procedures

Module	Content: minutes
1 Introducing Container Technology	<ul style="list-style-type: none"><li>● Lecture: 55</li><li>● Quiz: 15</li></ul>
2 Creating Containerized Services	<ul style="list-style-type: none"><li>● Lecture: 20</li><li>● Guided Exercise: 20</li><li>● Review Lab: 20</li></ul>
3 Managing Containers	<ul style="list-style-type: none"><li>● Lecture: 55</li><li>● Guided Exercise: 60</li><li>● Review Lab: 30</li></ul>

## Module

## Content: minutes

### 4 Managing Container Images

- Lecture: 45
- Quiz: 5
- Guided Exercise: 20
- Review Lab: 20

### 5 Creating Custom Container Images

- Lecture: 50
- Quiz: 5
- Guided Exercise: 25
- Review Lab: 25

### 6 Deploying Containerized Applications on OpenShift

- Lecture: 125
- Guided Exercise: 70
- Review Lab: 30



## Module

## Content: minutes

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|---|--|--|
| 7 | Deploying Multi-container Applications     | <ul style="list-style-type: none"><li>● Lecture: 25</li><li>● Guided Exercise: 20</li><li>● Review Lab: 60</li></ul> |
| 8 | Troubleshooting Containerized Applications | <ul style="list-style-type: none"><li>● Lecture: 45</li><li>● Guided Exercise: 40</li><li>● Lab: 30</li></ul>        |
| 9 | Comprehensive Review                       | <ul style="list-style-type: none"><li>● Lecture: 5</li><li>● Review Lab: 60</li></ul>                                |