

Course : Red Hat OpenShift I administration: running a production cluster (classroom-based)

Official RED HAT DO180 course

Practical course - 4d - 28h00 - Ref. R18

With this training course, you'll learn how to deploy, manage and troubleshoot containerized applications on Kubernetes clusters via OpenShift. You'll discover best practices for configuring and orchestrating workloads, while mastering the tools needed to ensure the stability and performance of your applications. You'll also acquire the skills to identify and resolve common issues encountered in OpenShift-based production environments.

Teaching objectives

At the end of the training, the participant will be able to:

- ✓ Manage OpenShift clusters using the command line interface and web console
- ✓ Resolve network connectivity issues between applications, inside and outside an OpenShift cluster
- ✓ Connecting Kubernetes workloads to the application data storage system
- ✓ Configure Kubernetes workloads to implement high availability and reliability
- ✓ Manage updates to an application's container images, settings and Kubernetes manifests

Intended audience

Platform administrators and operators, reliability engineers, system and software architects.

Prerequisites

Avoir suivi le cours Administration système Red Hat I (RH124) ou posséder des compétences équivalentes en gestion de systèmes et de serveurs Linux à partir du shell bash.

PARTICIPANTS

Platform administrators and operators, reliability engineers, system and software architects.

PREREQUISITES

Avoir suivi le cours Administration système Red Hat I (RH124) ou posséder des compétences équivalentes en gestion de systèmes et de serveurs Linux à partir du shell bash.

TRAINER QUALIFICATIONS

The experts who lead the training courses are specialists in the subjects covered. They are approved by the publisher and certified for the course. They have also been validated by our teaching teams in terms of both professional knowledge and teaching skills for each course they teach. They have at least three to ten years of experience in their field and hold or have held positions of responsibility in companies.

Certification

This course prepares you for Red Hat Certified Specialist in OpenShift Administration (RHCOSA) certification by taking exam EX280.

[Comment passer votre examen ?](#)

Practical details

Teaching methods

Training in French. Official course material in digital format and in English. Good understanding of written English.

Course schedule

1 Module 1 - Introduction to Kubernetes and OpenShift

- Identify the main Kubernetes and OpenShift services, and monitor them from the web console.

2 Module 2 - Kubernetes and OpenShift APIs and command-line interfaces

- Access an OpenShift cluster and assess its integrity by querying linked Kubernetes API resources.

3 Module 3 - Running applications as containers and pods

- Run containerized applications as unmanaged Kubernetes pods and resolve associated problems.

4 Module 4 - Deploying managed and networked applications on Kubernetes

- Deploy applications and expose them to network access inside and outside a Kubernetes cluster.

5 Module 5 - Storing configuration and application data

- Externalize application configurations to Kubernetes resources.
- Provision storage volumes for persistent data.

6 Module 6 - Configuring applications for greater reliability

- Configure applications to implement high availability and resilience on Kubernetes.

7 Module 7 - Application update management

- Manage reproducible application updates and restore code and configurations.

ASSESSMENT TERMS

Assessment of targeted skills prior to training.

Assessment by the participant, at the end of the training course, of the skills acquired during the training course.

Validation by the trainer of the participant's learning outcomes, specifying the tools used: multiple-choice questions, role-playing exercises, etc.

At the end of each training course, ITTCERT provides participants with a course evaluation questionnaire, which is then analysed by our teaching teams. Participants also complete an official evaluation of the publisher.

An attendance sheet for each half-day of attendance is provided at the end of the training course, along with a certificate of completion if the participant has attended the entire session.

TEACHING AIDS AND TECHNICAL RESOURCES

The teaching resources used are the publisher's official materials and practical exercises.

TERMS AND DEADLINES

Registration must be completed 24 hours before the start of the training course.

ACCESSIBILITY FOR PEOPLE WITH DISABILITIES

Do you have specific accessibility requirements? Contact Ms FOSSE, disability advisor, at the following address: psh-accueil@orsys.fr so that we can assess your request and its feasibility.