



Updated on 15/11/2024

Sign up

# Portainer Training: Docker and Kubernetes Management Platform

3 days (21 hours)

### Presentation

Our Portainer training course will teach you how to manage containers, making it easier to create, monitor and deploy your applications efficiently, thanks to an intuitive interface.

During our course, you'll explore how to manage Docker images, from downloading to creating and deleting them.

With this course, you'll unlock the skills you need to harness the power of containerized applications, whatever large-scale platform you use.

You'll learn about best practices in container security, so you can easily deploy container-based applications. You'll also learn how to manage permissions and users.

The course will be presented with the <u>latest version</u> of Portainer, version 2.19, released in October 2023.

### **Objectives**

- Protecting your applications and data
- Be able to create and manage service stacks
- Install and configure Portainer on your own environment
- Monitor the status of your containers and optimize their performance

### Target audience

- Developments
- Systems Administrator
- DevOps engineers

### Prerequisites

Experience in container management and deployment.

### Portainer Training Program

#### Introduction to Portainer

- Tool presentation
- Importance of container management
- Portainer installation
- Configuration
- Interface navigation

#### Container management

- Container creation
- Container condition monitoring
- Data volume management
- Network management
- Container update
- Managing a Docker Standalone or Docker Swarm environment
- Managing a Kubernetes environment
- Registers
  - Add a new register
  - Add a custom register
  - Browse a register
  - Register management

### Stack management

- What is a Stack?
- Creating stacks
- Service deployment
- Stack scaling
- Secret management

### Security and authentication

- Securing access to Portainer
- Using SSL certificates

- User management integration
- Team management

#### Portainer administration

- Add a new user
- Turn a user into an administrator
- Reset user password
- Teams
- The roles

### Optimization and troubleshooting

- Performance monitoring
- Logging and debugging
- Portainer updates
- Best practices

### Companies concerned

This course is aimed at both individuals and companies, large or small, wishing to train their teams in a new advanced computer technology, or to acquire specific business knowledge or modern methods.

### Positioning on entry to training

Positioning at the start of training complies with Qualiopi quality criteria. As soon as registration is finalized, the learner receives a self-assessment questionnaire which enables us to assess his or her estimated level of proficiency in different types of technology, as well as his or her expectations and personal objectives for the training to come, within the limits imposed by the selected format. This questionnaire also enables us to anticipate any connection or security difficulties within the company (intra-company or virtual classroom) which could be problematic for the follow-up and smooth running of the training session.

### Teaching methods

Practical course: 60% Practical, 40% Theory. Training material distributed in digital format to all participants.

## Organization

The course alternates theoretical input from the trainer, supported by examples, with brainstorming sessions and group work.

### Validation

At the end of the session, a multiple-choice questionnaire is used to check correct acquisition.

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## Sanction

A certificate will be issued to each trainee who completes the course.

Training Program Web page - Appendix 1 - Training sheet
Training organization registered under number 11 75 54743 75. This registration does not imply government approval.

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