



'setup' course – difficulty ★★☆☆

2 days (14h)

Recommended for:
Developers
System administrators
Devops Engineers

TEACHING GOALS

At the end of the course:

- ✓ You know how to deploy a production-ready Kubernetes platform
- ✓ You understand how the Kubernetes components work
- ✓ You are able to create and generate your own containers platform

Prerequisites

Having had the “usage” course or
Very good knowledge of
Kubernetes basic concepts

DETAILED CONTENT

Day 1

Kubernetes presentation

- ✓ Project history
- ✓ Architecture

Access management

- ✓ Authentication management
- ✓ Access control configuration (RBAC)

Kubernetes deployment

- ✓ Certificates management
- ✓ Masters and nodes deployment
- ✓ Additional services deployment (Dashboard, DNS, network plugin)

High Availability

- ✓ Kubernetes components HA setup

Network

- ✓ How to use NetworkPolicy objects to filter network traffic
- ✓ HTTP load-balancer (Ingress) deployment

Day 2

Storage

- ✓ Presentation of existing storage drivers
- ✓ Storage volume management

Logs management

- ✓ How to query and store containers logs
- ✓ How to query and store Kubernetes logs

Monitoring

- ✓ Kubernetes monitoring tools presentation
- ✓ Heapster, cadvisor and dashboard
- ✓ Prometheus

Next steps...

- ✓ Presentation of some useful resources for Kubernetes
- ✓ Presentation of Kubernetes installation tools