



'usage' 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 applications on a Kubernetes platform
- ✓ You are able to daily use Kubernetes to manage your production containers
- ✓ You know how to react in case of problem
- ✓ You know how to deploy a clustered application

Prerequisites
Bases of Linux systems administration
Docker knowledge

DETAILED CONTENT

Day 1

Kubernetes project presentation

- ✓ Architecture
- ✓ Overview
- ✓ Integration with underlying platforms

Kubernetes objects

- ✓ Base objects
 - ✓ Pods
 - ✓ Services
 - ✓ Volumes

Internal objects

- ✓ ReplicaSets
- ✓ Deployments
- ✓ StatefulSets
- ✓ DaemonSets
- ✓ Jobs

First steps

- ✓ Accessing the web interface
- ✓ Installing and using Kubectl
- ✓ Deploying a pod
- ✓ Creating a deployment from a YAML file

Day 2

Basic usage

- ✓ Creating a persistent volume
- ✓ Creating a deployment
- ✓ Exposing a deployment using internal services
- ✓ Exposing a deployment to the outside world
- ✓ Best practices

Advanced usages

- ✓ Deploying a Stateful application
- ✓ Programming a job

Troubleshooting

- ✓ Accessing containers logs
- ✓ Debugging techniques