training code: LX-CKA / ENG DL 2d / EN

Certified Kubernetes Administrator (CKA) workshop

The CKA (Certified Kubernetes Administrator) training is just for you.
We will teach you practical skills in Kubernetes cluster administration that you can immediately apply in your work – the training is workshop-based. We will prepare you for the certification exam, opening the path to obtaining a highly valued certificate on the job market that confirms your specialized skills.

Training recipients

Become a Kubernetes Administrator! CKA (Certified Kubernetes Administrator) Training

Are you working with containerization, and are Docker-related topics familiar to you?

Is Kubernetes your daily work environment?

Have you completed Docker and/or Kubernetes training and want to continue developing in these areas?

Benefits

With us, you will learn how to:

- Check the status of a Kubernetes cluster
- Deploy applications on the cluster and manage their configuration
- Troubleshoot and repair the cluster state
- Update the Kubernetes cluster
- Scale applications on the cluster as needed, deploy and roll back previous versions, and manage update history
- Manage data storage generated by applications
- Use Helm charts and Ingress

Invest in knowledge! Check the available training dates today and choose the right one for you.

Training program

1. Basic information about the exam:
- Scope of the CKA exam
- Preparing your browser for the remote exam
- Methods for working with official documentation (search, copy, adapt)

2. Information about basic objects:
- Pods, ReplicaSets, Deployments, etc.
- Searching for deployed objects on the cluster
- Namespaces and ways to navigate between them
- Methods for deploying objects using declarative vs. imperative approaches (dry-run option for the exam)
- Role of labels, annotations, etc.

3. Cluster and application configuration:
- Passing configuration to objects – ConfigMap and Secret
- Distributing Pods across nodes in the cluster
- Marking nodes with NoSchedule
- Updating the cluster to a new version
- Managing Deployments and application change deployment policies

4. Cluster status monitoring:
- Managing and reviewing logs
- Managing and repairing services on cluster nodes (kubelet service)
- Checking the status of a single Pod
- Troubleshooting elements

5. Networking issues in Kubernetes:
- Network policies
- Exposing applications using service objects

6. Storage space:
- Managing volumes (PVC, PV), storage classes (Storage Class)

7. Deploying applications using Helm
8. API calls
9. Ingress Controller
10. Practical test mimicking the certification exam

Expected preparation of the participant

Participation in the training or equivalent knowledge at the following level:

- ELA010 – Enterprise Linux Administration I v.9
- LX-D – Docker in practice
- LX-K – Kubernetes in practice

Training Includes

- 2 days of hands-on training with the instructor
- Instructor supervision
- Community support
- Electronic version of the handbook
- Laboratory environment

Training method

- Lecture
- Workshops

Duration

2 days / 14 hours

Language

Training: English
Materials: English