

Kubernetes Fundamentals and Cluster Operations

Kód kurzu: VMW_KFCO

Školení je vedené virtuálně v angličtině. Cena kurzu je 1 510 EUR a bude přepočtena aktuálním kurzem poslední den školení. This four-day course is the first step in learning about Containers and Kubernetes Fundamentals and Cluster Operations. Through a series of lectures and lab exercises, the fundamental concepts of containers and Kubernetes are presented and put to practice by containerizing and deploying a two-tier application into Kubernetes.

Pobočka	Dnů	Cena kurzu	ITB
Praha	4	1 510 €	0
Brno	4	1 510 €	0
Bratislava	4	1 510 €	0

Uvedené ceny jsou bez DPH.

Termíny kurzu

Datum	Dnů	Cena kurzu	Typ výuky	Jazyk výuky	Lokalita
06.07.2026	4	1 510 €	Online	EN	TD SYNEX Czech - Online
07.09.2026	4	1 510 €	Online	EN	TD SYNEX Czech - Online
02.11.2026	4	1 510 €	Online	EN	TD SYNEX Czech - Online

Uvedené ceny jsou bez DPH.

Pro koho je kurz určen

Anyone who is preparing to build and run Kubernetes clusters.

Co Vás naučíme

By the end of the course, you should be able to meet the following objectives:

- Build, test, and publish Docker container images
- Become familiar with YAML files that define Kubernetes objects
- Understand Kubernetes core user-facing concepts, including pods, services, and deployments
- Use kubectl, the Kubernetes CLI, and become familiar with its commands and options
- Understand the architecture of Kubernetes (Control plane and its components, worker nodes, and kubelet)
- Learn how to troubleshoot issues with deployments on Kubernetes
- Apply resource requests, limits, and probes to deployments
- Manage dynamic application configuration using ConfigMaps and Secrets
- Deploy other workloads, including DaemonSets, Jobs, and CronJobs
- Learn about user-facing security using SecurityContext, RBAC, and NetworkPolicies

Požadované vstupní znalosti

- Linux concepts and command line proficiency.
- General networking proficiency.

Osnova kurzu

1 Course Introduction

- Introductions and objectives

2 Containers

- What and Why containers
- Building images
- Running containers

GOPAS Praha

Na Strži 2097/63
140 00 Praha 4 - Krč
Tel.: +420 226 201 390
info@gopas.cz

GOPAS Brno

Nové sady 996/25
602 00 Brno
Tel.: +420 530 513 590
info@gopas.cz

GOPAS Bratislava

Dr. Vladimíra Clementisa 10
Bratislava, 821 02
Tel.: +421 902 903 132
info@gopas.sk



Copyright © 2026 GOPAS, a.s.,
All rights reserved

Kubernetes Fundamentals and Cluster Operations

- Registry and image management
- ### 3 Kubernetes Overview
- Kubernetes project
 - Plugin interfaces
 - Building Kubernetes
 - Kubectl CLI
- ### 4 Beyond Kubernetes Basics
- Kubernetes objects
 - YAML
 - Pods, replicas, and deployments
 - Services
 - Deployment management
 - Rolling updates
 - Controlling deployments
 - Pod and container configurations
- ### 5 Kubernetes Networking
- Networking within a pod
 - Pod-to-Pod Networking
 - Services to Pods
 - ClusterIP, NodePort, and LoadBalancer
 - Ingress controllers
 - Service Discovery via DNS
- ### 6 Stateful Applications in Kubernetes
- Stateless versus Stateful
 - Volumes
 - Persistent volumes claims
 - StorageClasses
 - StatefulSets
- ### 7 Additional Kubernetes Considerations
- Dynamic configuration
 - ConfigMaps
 - Secrets
 - Jobs, CronJobs
- ### 8 Security
- Network policy
 - Applying a NetworkPolicy
 - SecurityContext
 - runAsUser/Group
 - Service accounts
 - Role-based access control
- ### 9 Logging and Monitoring
- Logging for various objects
 - Sidecar logging
 - Node logging
 - Audit logging

GOPAS Praha

Na Strži 2097/63
140 00 Praha 4 - Krč
Tel.: +420 226 201 390
info@gopas.cz

GOPAS Brno

Nové sady 996/25
602 00 Brno
Tel.: +420 530 513 590
info@gopas.cz

GOPAS Bratislava

Dr. Vladimíra Clementisa 10
Bratislava, 821 02
Tel.: +421 902 903 132
info@gopas.sk



Copyright © 2026 GOPAS, a.s.,
All rights reserved

Kubernetes Fundamentals and Cluster Operations

- Monitoring architecture
 - Monitoring solutions
 - Octant
 - VMware vRealize® Operations Manager™
- 10 Cluster Operations
- Onboarding new applications
 - Backups
 - Upgrading
 - Drain and cordon commands
 - Impact of an upgrade to running applications
 - Troubleshooting commands
 - VMware Tanzu™ portfolio overview

GOPAS Praha
Na Strži 2097/63
140 00 Praha 4 - Krč
Tel.: +420 226 201 390
info@gopas.cz

GOPAS Brno
Nové sady 996/25
602 00 Brno
Tel.: +420 530 513 590
info@gopas.cz

GOPAS Bratislava
Dr. Vladimíra Clementisa 10
Bratislava, 821 02
Tel.: +421 902 903 132
info@gopas.sk



Copyright © 2026 GOPAS, a.s.,
All rights reserved