



# VMware Enterprise PKS: Install, Configure, Manage [V1.5] (PKSICM15)

#### ID PKSICM15 Price 3,440.— €excl. tax) Duration 5 days

This Advanced course is delivered directly by VMware.

#### **Course Overview**

This five-day course features intensive hands-on training that focuses on installing, configuring, and managing VMware® Enterprise PKS 1.5 (a purpose-built container solution to operationalize Kubernetes for multicloud enterprises and service providers). VMware Enterprise PKS significantly simplifies the deployment and management of Kubernetes clusters with Day 1 and Day 2 operations support. This course prepares you to install and administer a VMware Enterprise PKS environment for an organization of any size.

#### **Product Alignment**

- VMware Enterprise PKS 1.5
- VMware vSphere® 6.7 U2
- VMware NSX-TTM 2.4

#### Who should attend

- System administrators
- System engineers

#### Prerequisites

This class requires understanding the concepts and topics presented in the following courses:

- Completion of VMware vSphere: Install, Configure, Manage [V6.7]
- Completion of <u>VMware NSX-T: Install, Configure, Manage</u> (<u>NSXTICM) [V2.2]</u>

System administration experience with cloud computing concepts and generic Kubernetes knowledge is strongly recommended

#### **Course Objectives**

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

- Explain how the VMware Enterprise PKS platform enables enterprises to deploy and manage the Kubernetes platform as a service on premises
- Describe the VMware Enterprise PKS platform architecture
- Describe the preinstallation activities, such as how various topologies of VMware Enterprise PKS can be deployed, and how to meet prerequisites before installing VMware Enterprise PKS
- Describe how BOSH unifies release engineering, deployment, and lifecycle management of cloud software in a VMware Enterprise PKS platform
- Describe how the VMware Enterprise PKS Management Console appliance is used to configure and deploy the VMware Enterprise PKS platform components
- Describe how VMware NSX-T<sup>™</sup> Data Center integrates with VMware Enterprise PKS to provide networking and security services for all the components in a VMware Enterprise PKS environment
- Install, manage, monitor, and troubleshoot a VMware Enterprise PKS environment
- Use Day 2 operations to create, view, scale, and delete Kubernetes clusters and upgrade VMware Enterprise PKS

#### Course Content

- Course Introduction
- VMware Enterprise PKS Value Proposition
- VMware Enterprise PKS Architecture
- Networking VMware Enterprise PKS with NSX-T
- Managing VMware Enterprise PKS
- Monitoring VMware Enterprise PKS
- Installing VMware Enterprise PKS
- Troubleshooting VMware Enterprise PKS
- Provisioning a New Kubernetes Cluster for Developer Use

#### **Detailed Course Outline**

#### **Course Introduction**





- Introductions and course logistics
- · Course objectives

#### VMware Enterprise PKS Value Proposition

- Kubernetes and VMware Enterprise PKS Overview
- Changes in Software Development Practices
- Containers Overview
- Kubernetes Overview
- Managing Kubernetes with VMware Enterprise PKS

#### VMware Enterprise PKS Architecture

- Introduction to BOSH
- Introduction to Kubernetes in VMware Enterprise PKS
- Introduction to Operations Manager
- Introduction to the VMware Enterprise PKS Control Plane
- Introduction to Harbor
- Introduction to VMware Enterprise PKS Management Console

#### Networking VMware Enterprise PKS with NSX-T

- · Overview of NSX-T Data Center and it's uses
- Logical Switching, Routing, Load Balancing and NATs
- VMware NSX-T Data Center integration with Kubernetes
- Logical topologies
- Physical Topologies

#### Managing VMware Enterprise PKS

- · Physical topologies
- Tools to manage VMware Enterprise PKS
- Managing users
- · Network profiles
- Creating clusters
- Introduction to Kubernetes
- Persistent storage
- NSX-T Data Center Integration with VMware Enterprise
   PKS and Tools
- Managing clusters
- Managing Resources
- Upgrading VMware Enterprise PKS
- Backup and restore

#### Monitoring VMware Enterprise PKS

- Using vRealize Log Insight with VMware Enterprise PKS
- Using vRealize Operations with VMware Enterprise PKS
  Using Wavefront® by VMware® with VMware Enterprise
- Osing waverronte by vinwaree with vinware Enterpri PKS
- Using the Kubernetes dashboard
- VMware Enterprise PKS logging sinks

#### Installing VMware Enterprise PKS

- Overview of the Installation Process
- Install using Operations Manager
- Installing VMware Enterprise PKS
- Installing Harbor

### Troubleshooting VMware Enterprise PKS

- Troubleshooting with Bosh
- Retrieving Logs
- Troubleshooting Tips

#### Provisioning a New Kubernetes Cluster for Developer Use

- Installing PKS and Kubectl Command Line Interfaces (CLI)
- Establishing New User Credentials
- Creating a Network Profile
- Creating a new Cluster
- · Pushing Images into Harbor
- Deploying an application

# About Fast Lane

Fast Lane is a global, award-winning specialist in technology and business training as well as consulting services for digital transformation. As the only global partner of the three cloud hyperscalers- Microsoft, AWS and Google- and partner of 30 other leading IT vendors, Fast Lane offers gualification solutions and professional services that can be scaled as needed. More than 4,000 experienced Fast Lane professionals train and advise customers in organizations of all sizes in 90 countries worldwide in the areas of cloud, artificial intelligence, cyber security, software development, wireless and mobility, modern workplace, as well as management and leadership skills, IT and project management.



VMware

#### Germany

Fast Lane Institute for Knowledge **Transfer GmbH** Tel. +49 40 25334610

info@flane.de / www.flane.de

# Austria

**ITLS GmbH** (Partner of Fast Lane) Tel. +43 1 6000 8800

info@itls.at / www.itls.at

#### Switzerland

Fast Lane Institute for Knowledge Transfer (Switzerland) AG Tel. +41 44 8325080

info@flane.ch / www.flane.ch



## Fast Lane Services

- ✓ High End Technology Training
- ✓ Business & Soft Skill Training
- ✓ Consulting Services
- ✓ Managed Training Services
- ✓ Digital Learning Solutions
- ✓ Content Development
- Remote Labs
- ✓ Talent Programs
- Event Management Services