

VMware Enterprise PKS: Install, Configure, Manage [V1.5]

Course 10252 – 40 Hours

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.

On Completion, Delegates will be able to

- 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™ 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

Who Should Attend

- System administrators
- Systems engineers

Prerequisites

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

- [Kubernetes Foundations](#) (or equivalent)
- Completion of [VMware vSphere: Install, Configure, Manage \[V6.x\]](#)
- Completion of [VMware NSX-T: Install, Configure, Manage \[V2.x\]](#)

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



Course Contents

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 its 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 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