vmware EDUCATION SERVICES

VMware Tanzu Kubernetes Grid Integrated Edition: Fundamentals

Course Overview

This 4-day course provides administrators and operators with the theoretical understanding and hands-on experience needed to manually install and manage VMware Tanzu Kubernetes Grid Integrated Edition (TKGI) - formerly known as Pivotal Container Service (PKS). The course begins with an introduction to BOSH and how to use it. This builds the foundation for installing Ops Manager and the VMware Tanzu Kubernetes Grid Integrated Edition (TKGI).

Students experience how Operations Manager and BOSH are used to operate TKGI through hands-on lab exercises. Furthermore, students will create and manage individual Kubernetes clusters via TKGI and then deploy an application to a container. Lab work is completed using Google Cloud Platform, and concepts can be generalized to using TKGI in any IaaS. You will also work productively with Pivots in a Platform Dojo, or to join an experienced platform team that has already completed a Platform Dojo with Pivotal.

Course Objectives

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

- Understand a BOSH release and how a BOSH deployment is used
- Understand the BOSH architecture and how it enables VMware Tanzu Kubernetes Grid Integrated Edition (TKGI)
- Understand the VMware Tanzu Kubernetes Grid Integrated Edition architecture and how it impacts developers
- Install VMware Tanzu Kubernetes Grid Integrated Edition
- Harbor
- Helm
- Use BOSH to explore, troubleshoot and deploy releases
- Kubernetes
- Operations Manager
- Deploying a sample application to Kubernetes

Target Audience

Platform Engineers responsible for the creation, configuration, and updates of TKGI and associated products

Prerequisites

- Google account (can be Gmail)
- Network access to Google Cloud Platform
- Chrome or Firefox
- Experience using the Linux command line interface
- Knowledge of YAML, basic IaaS, and container concepts is preferred, but not required

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Course Delivery Options

- Classroom
- Live Online
- Onsite

Course Modules

1 Course Introduction
- Kubernetes Overview

2 BOSH
- Introduction
- Deploy, Patch & Upgrade
- Deploy a simple release
- Inside the VM
- Persistent Disks
- Patch the OS
- Upgrade Nginx

3 Entry Point
- Set up a jumpbox

4 Platform Infrastructure
- Pave the IaaS
- Deploy ops manager
- Deploy BOSH director

5 Containerized Workloads
- Deploy VMware Tanzu Kubernetes Grid Integrated Edition
- Provision a Kubernetes Cluster
- Harbor Container Registry
- Application Deployment
- Helm

6 Advanced BOSH
- Deploy a distributed system
- Deploy Concourse
- CredHub
- Troubleshooting Concourse Deployment
- Concourse Day 2 Operations

Contact

If you have questions or need help registering for this course, click here.