VMware Cloud Foundation: Troubleshooting [V9.0]

Course code: VMW_VCFT

This comprehensive five-day hands-on training is designed to provide you with the knowledge, skills, and abilities to achieve competence in troubleshooting the VMware Cloud Foundation® (VCF) 9.0 environments. This course blends lecture and hands-on lab exercises to deliver advanced skills to diagnose and resolve problems in VMware Cloud Foundation 9.0 environments. This course also focuses on investigating and resolving problems and analyzing log files to help you recognize log file entries that identify root causes.

Who is the course for

System Administrators, Solution Engineers, Consultants, and Support Personnel

What we teach you

Describe the VCF solution

Describe the VCF architecture and components

Describe the deployment model based on the existing infrastructure

Explain the troubleshooting methodology to resolve common validation precheck errors

Identify and use the correct logs to troubleshoot VMware Cloud Foundation (VCF) Installer

Describe the license assignment process for connected and disconnected deployments

Identify the log file and log locations for VCF licensing components

Explain the workload domain creation workflow

Troubleshoot network pool creation

Troubleshoot VMware® ESX® host commissioning

Monitor VMware vSAN™ health using the VMware Cloud Foundation® Operations console

Monitor vSAN Health using vSphere Client

Monitor network operations

Analyze flows and network performance

Describe central password management in VCF Operations

Monitor password expiration

Describe the architecture and components of the VMSP cluster

Identify key log files to troubleshoot the VMSP cluster provisioning

Identify key kubectl commands and logs to check the health status of the VMSP cluster

Generate, download, and review the structure of the VMware Cloud Foundation® Automation support log bundle

Required skills
- Before taking this course, students should have completed the VMware Cloud Foundation Fundamentals for Technical Support training from Support Learning Path Stage-1.
- Familiarity with command-line interfaces is strongly recommended.

Course outline
1. Course Introduction
   - Introduction and course logistics
   - Course objectives

2. Troubleshooting VCF Deployment

- Describe the VCF solution
- Describe the VCF architecture and components
- Describe the sequence of steps that occur during the VCF installation process
- Identify key log files to troubleshoot the VCF installation
- Describe the VMware vSphere® Foundation solution
- Describe the vSphere Foundation architecture and components

3. Troubleshooting Upgrades
- Understand the deployment model based on the existing infrastructure
- Explain the troubleshooting methodology to resolve common validation precheck errors
- Identify and use the correct logs to troubleshoot VMware Cloud Foundation (VCF) Installer
- Explain the key components and features of VMware vSphere Foundation 9.0 Private Cloud
- Understand the architecture of VMware vSphere Foundation 9.0 Private Cloud
- Identify and analyze the supported upgrade paths to vSphere Foundation 9.0 private cloud
- Identify the prerequisites to deploy vSphere Foundation

4. Troubleshooting License
- Describe the license assignment process for connected and disconnected deployments
- Identify the log file and log locations for VCF licensing components
- Run commands on the ESX host to verify licensing status

5. Workload Domain Troubleshooting
- Describe the workload domain architecture and components
- Explain the workload domain creation workflow
- Troubleshoot network pool creation
- Troubleshoot ESX host commissioning
- Troubleshoot the different steps in workload domain creation

6. Troubleshooting VMware Cloud Foundation Compute
- Monitor compute environments using VMware Cloud Foundation
- Troubleshoot ESX hosts and vCenter issues effectively
- Diagnose and resolve virtual machine problems efficiently
- Describe vSphere cluster features and related issues
- Describe diagnostic findings to identify and remediate issues

7. Troubleshooting VCF vSAN Storage
- Monitor vSAN health using the VCF Operations console
- Monitor vSAN Health using VCF Operations diagnostics Health in the vSphere Client
- Monitor object health in the vSphere Client

8. Troubleshooting VMware Cloud Foundation Networking
- Monitor network operations
- Deploy the Operations Network appliance
- Analyze flows and network performance

9. Troubleshooting VCF Operations Fleet Management

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- Describe central password management in VCF Operations
- Implement password management
- Monitor password expiration
- Update VCF component passwords

10.Troubleshooting VMware Cloud Foundation Automation
- Describe the architecture and components of the VMSP cluster
- Identify key log files to troubleshoot the VMSP cluster provisioning
- Identify key kubectl commands and logs to check the health status of the VMSP cluster
- Generate, download, and review the structure of the VCF Automation support log bundle