



VMware vSphere Foundation: Build, Manage, & Operate v9.0 (VSFBMO)

COURSE OVERVIEW

This five-day course provides you with the knowledge, skills, and abilities to achieve competence in deploying, configuring and managing VMware vSphere Foundation. You will learn about the architecture of vSphere Foundation, compute, storage, networks and licensing. This course prepares you to administer a vSphere Foundation, which includes VCF Operations 9.0, vCenter9.0, and ESX 9.0.

WHO WILL BENEFIT FROM THIS COURSE?

- System Administrators
- Solution Engineers
- Consultants
- Architects
- Support Personnel

COURSE OBJECTIVES

- IT Architectures, Technologies, Standards – Understanding industry standards, frameworks, and IT architectural principles.
- VMware Products and Solutions – Knowledge of VMware vSphere Foundation components and related VMware ecosystem solutions.
- Plan and Design – Designing VMware solutions that align with organizational requirements.
- Install, Configure, Administrate the VMware Solution – Hands-on skills in deploying, configuring, and managing VVF environments.
- Troubleshoot and Optimize the VMware Solution – Problem-solving and performance tuning to ensure maximum efficiency and uptime.

COURSE OUTLINE

Course Introduction

- Introduction and course logistics.
- Course objectives.

VMware vSphere Foundation Overview and Architecture

- Define the vSphere Foundation key features.
- Explain vSphere Foundation use cases.
- Explain the architecture of vSphere Foundation.
- Explore the components of vSphere Foundation.
- Introduction to VCF Operations.
- List the steps to navigate the VCF Operations UI and vSphere UI.



License Management

- Describe the process for managing and assigning licenses.
- Enable VCF Operations integration for vCenter.
- Explain license usage by product.

vSphere Foundation Compute

- Explain basic virtualization concepts.
- Describe how vSphere fits in the software-defined data center.
- Describe vSphere architecture and use cases.
- Recognize the user interfaces for accessing vSphere.
- Install and configure ESXi host.
- Create and organize vCenter inventory objects

vSphere Foundation Networking

- Create and configure standard switch.
- Create and configure distributed switch.
- Differentiate between standard and distributed switches.
- Explain how to set networking policies.

vSphere Foundation Storage

- Recognize vSphere storage technologies.
- Identify the types of vSphere datastores.
- Describe Fibre Channel components and addressing.
- Describe iSCSI components and addressing.
- Configure iSCSI storage on ESXi.
- Create and manage VMFS datastores.
- Configure and manage NFS datastores.

Deploying Virtual Machines

- Create and provision VMs.
- Explain the importance of VMware Tools.
- Manage a virtual machine from the vSphere client.
- Manage virtual machine resources.
- List the steps to deploy virtual machines.
- Clone VMs and create customization specifications for guest operating systems.
- Create local, published, and subscribed content libraries.

Virtual Machine Management

- Migrate VMs using vSphere vMotion and Storage vMotion.
- Perform snapshots operations.
- Specify CPU and memory shares, reservations, and limits.

Deploying and Configuring vSphere Clusters

- Create a vSphere cluster enabled for vSphere DRS and vSphere HA.
- Explain how vSphere DRS determines VM placement on hosts in the cluster.
- Recognize use cases for vSphere DRS settings.
- Describe how vSphere HA responds to various types of failures.
- Identify options for configuring network redundancy in a vSphere HA cluster.



- Recognize vSphere HA design considerations.
- Recognize the use cases for various vSphere HA settings.
- Configure a vSphere HA cluster.

vSAN Management

- Identify the features of vSAN.
- Understand the key differences between vSAN OSA and vSAN ESA.
- Explain the role of the performance leg and the capacity leg in vSAN ESA.
- Examine vSAN ESA Object health states.
- Compare how RAID-0/1/5/6 space consumption.
- Identify vSAN component states.

vSphere Kubernetes Service Overview

- Describe vSphere Supervisor Architecture and use cases.
- Explain vSphere Supervisor Deployment Options.
- Install vSphere Supervisor.
- Explain Supervisor Storage vSphere Zones, Networking, and Storage.
- Configuring and managing a supervisor.
- Configuring vSphere Namespaces for Hosting VKS Clusters.
- Managing vSphere Kubernetes Service Clusters.

VCF Operations Metrics

- Outline the role of metrics in VCF Operations.
- Create and configure views in VCF Operations.
- Create and configure reports in VCF Operations.
- Create and configure dashboards in VCF Operations.
- Configure widget interactions.
- Describe the purpose of using alerts.
- Identify the components of an alert definition.
- Create static symptom definitions.

vSphere Foundation Deployment

- Prepare the infrastructure for VMware vSphere Foundation.
- Identify the information required for the Planning and Preparation Workbook.
- Explain the high-level steps to deploy vSphere Foundation.
- Describe the procedure for downloading the software using online and offline modes.
- Describe the vSphere Foundation workflow using the VCF Installer UI and JSON spec file.
- Deploy and enable VCF Operations collector, VCF Operations for Logs, and VCF Operations Orchestrator
- Deploy vCenter Server Appliance.

Managing the vSphere Foundation Lifecycle

- Describe features of the vCenter Update Planner.
- Run vCenter upgrade prechecks and interoperability reports.
- Recognize features of VMware vSphere Lifecycle Manager
- Validate and update ESXi hosts using vSphere Lifecycle Manager
- Use vSphere Lifecycle Manager to upgrade VMware Tools and VM hardware

WHY TRAIN WITH SUNSET LEARNING INSTITUTE?

Sunset Learning Institute (SLI) has been an innovative leader in developing and delivering authorized technical training since 1996. Our goal is to help our customers optimize their technology Investments by providing convenient, high quality technical training that our customers can rely on. We empower students to master their desired technologies for their unique environments.

What sets SLI apart is not only our immense selection of trainings options, but our convenient and consistent delivery system. No matter how complex your environment is or where you are located, SLI is sure to have a training solution that you can count on!

Premiere World Class Instruction Team

- All SLI instructors have a four-year technical degree, instructor level certifications and field consulting work experience
- Sunset Learning has won numerous Instructor Excellence and Instructor Quality Distinction awards since 2012

Enhanced Learning Experience

- The goal of our instructors during class is ensure students understand the material, guide them through our labs and encourage questions and interactive discussions.

Convenient and Reliable Training Experience

- You have the option to attend classes live with the instructor, at any of our established training facilities, or from the convenience of your home or office
- All Sunset Learning Institute classes are guaranteed to run – you can count on us to deliver the training you need when you need it!

Outstanding Customer Service

- You will work with a dedicated account manager to suggest the optimal learning path for you and/or your team
- An enthusiastic student services team is available to answer any questions and ensure a quality training experience

Interested in Private Group Training?

[Contact Us](#)