

VMWare Infrastructure: VI3 Design

SSV016 — 4 Days —Instructor-led

Introduction

This hands-on training course explores the foundations of designing VMware Infrastructure architectures. This course is not required for the VMware Certified Design Expert (VCDX) certification. The content of the course is a subset of the knowledge tested in the VCDX examinations. Therefore, the course is most appropriate for persons who are new to designing virtual infrastructures and who intend to gain further hands-on design experience before beginning the VCDX process.

Audience

System architects, system administrators, IT managers, and individuals responsible for designing VMware Infrastructure architectures.

At Course Completion

At the end of the course, students will be able to:

- Implement best practices and evaluate design considerations to meet business needs
- Distribute resources across ESX clusters automatically and ensure high availability
- Architecting remote and branch offices
- Designing to support certain enterprise applications

Prerequisites

Required

- Comfort with fundamental Linux commands (such as ls and cp) & Linux text editor

Recommended

- Completion of VMware Infrastructure 3: Install and Configure or equivalent experience with VMware Infrastructure 3

Basic Skills Self-Assessment: VMware Infrastructure Fundamentals

You must already possess the following prerequisite skills to gain the greatest possible value from attending this course:

- Install VMware ESX on a local volume.
- Install VMware vCenter and add an ESX server to its inventory.
- Build a Windows virtual machine using the VMware Infrastructure Client.
- Create a template in vCenter and deploy a virtual machine from it.
- Configure access to iSCSI storage on your ESX server.
- Create a VMFS datastore on shared storage.
- Migrate a virtual machine using VMware vMotion.
- Apply migration recommendations in a VMware Distributed Resource Scheduler cluster
- Send an SNMP notification when a virtual machine-based alarm is triggered.
- Configure VMware High Availability to successfully fail over virtual machines during a host failure.

Course Outline

Module 1: Introduction

- Fundamental design principles

Module 2: Designing for Manageability

- Designing for lower cost of administration

Module 3: Designing for Availability

- Fault-tolerant, resilient, and highly available architectures

Module 4: Designing for Scalability

- Trade-offs between scaling up versus scaling out resources

Module 5: Designing Based on Analytical Tools

- Designing templates based on inventory analysis
- Sizing a virtual infrastructure based on capacity analysis

Module 6: Designing for Remote and Branch Offices

- Centralized and distributed remote office architectures
- Making remote office information more available

Module 7: Designing for Microsoft SQL Server

- Design considerations for online transaction processing (OLTP) versus decision support systems (DSS)
- Deciding between VMFS, RDM, and a hybrid combination

Module 8: Designing for Microsoft Active Directory

- Designing virtual domain controllers to minimize management while maximizing performance

Module 9: Designing for Microsoft Exchange Server

- Including Exchange 2003 and Exchange 2007 server roles