

# VS70-DESIGN (VMWARE VSPHERE: DESIGN [V7]) 7

## Objetivo

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

- Identify the business objectives for the vSphere environment
- Identify business requirements, constraints, assumptions, and risks for all layers in the vSphere environment
- Apply a framework to a design
- Analyze design choices and best-practice recommendations
- Create a design that ensures availability, manageability, performance, recoverability, and security
- Design the core management infrastructure for an Enterprise
- Design the virtual data center for an Enterprise
- Design the compute infrastructure for an Enterprise
- Design the storage and networking infrastructures for an Enterprise
- Design virtual machines to run applications in a vSphere infrastructure
- Design security, manageability, and recoverability features for an enterprise

## Público Alvo

Intended audience Experienced system integrators and consultants responsible for designing and deploying vSphere environments

## Pré-requisitos

Prerequisites This course requires completion of the following prerequisites:

- VMware vSphere: Install, Configure, Manage [V7]
- VMware vSphere: Optimize and Scale [V7]

## Carga Horária

24 horas (3 dias).

## Conteúdo Programático

### COURSE OUTLINE

#### 1 Course Introduction

- Introductions and course logistics
- Course objectives

#### 2 Infrastructure Assessment

- Follow a proven process to design a virtualization solution
- Define customer business objectives
- Gather and analyze business and application requirements
- Document design requirements, constraints, assumptions, and risks
- Use a systematic method to evaluate and document design decisions
- Create a conceptual design

### 3 Core Management Infrastructure

- Determine the number of VMware vCenter® Server Appliance™ instances to include in a design
- Choose the appropriate single sign-on identity source
- Choose the time synchronization method
- Choose methods to collect log files and ESXi core dumps
- Design a vCenter Server deployment topology that is appropriate for the size and requirements of the data center

### 4 Virtual Data Center Infrastructure

- Calculate total compute capacity requirements for a virtual data center
- Create a virtual data center cluster design that meets business and workload requirements
- Evaluate in the virtual data center the use of several management services, such as VMware vSphere® High Availability and VMware vSphere® Distributed Resource Scheduler™
- Evaluate the use of resource pools in the virtual data center design

### 5 Compute Infrastructure

- Create a compute infrastructure design that includes the appropriate ESXi boot, installation, and configuration options
- Choose the ESXi host hardware for the compute infrastructure

### 6 Storage Infrastructure

- Calculate storage capacity and performance requirements for a design
- Evaluate the use of different storage platforms and storage management solutions
- Design a storage platform infrastructure and storage management architecture that meets the needs of the vSphere environment

### 7 Network Infrastructure

- Evaluate the use of different network component and network management solutions
- Design a network component architecture that includes information about network segmentation and virtual switch types
- Design a network management architecture that meets the needs of the vSphere environment

### 8 Virtual Machine Design

- Make virtual machine design decisions, including decisions about resources
- Design virtual machines that meet the needs of the applications in the vSphere environment and follow VMware best practices

### 9 Infrastructure Security

- Make security design decisions for various layers in the vSphere environment
- Design a security strategy that meets the needs of the vSphere environment and follows VMware best practices

### 10 Infrastructure Manageability

- Make lifecycle management, scalability, and capacity planning design decisions that adhere to business requirements
- Design lifecycle management, scalability, and capacity planning strategies that meet the needs of the vSphere environment and follow VMware best practices

### 11 Infrastructure Recoverability

- Make infrastructure recoverability design decisions that adhere to business requirements
- Design an infrastructure recoverability strategy that meets the needs of the vSphere environment and follows VMware best practices