VMware Horizon 7: Design Workshop [V7]

Overview: This three-day course presents a methodology for designing a VMware Horizon® solution. The design methodology includes recommendations for the type of information and data that must be gathered and analyzed to make sound design decisions for the client systems, the desktop options, the VMware vSphere® infrastructure, and VMware Horizon components. VMware best practices are presented for each phase of the design process. In this course, you apply your new knowledge by working with other participants to design a VMware Horizon solution for a real-world project.

Objectives: By the end of the course, you should be able to meet the following objectives:
• Assess the business and application requirements of an environment
• Analyze design choices and design an EUC infrastructure architecture that addresses the needs of the environment
• Design a VMware Horizon infrastructure architecture that addresses the needs of the organization and follows VMware best practices
• Document a design that can be implemented
• Design a comprehensive VMware Horizon solution

Certifications
This course prepares you for the following certification:
• VMware Certified Advanced Professional – Desktop and Mobility Design (VCAP7-DTM Design)

Intended Audience: Experienced system administrators and system integrators responsible for designing and implementing VMware Horizon solutions

Prerequisites: This course recommends the following skills and knowledge:
• Virtualized desktop implementation experience
• Understanding of concepts presented in the VMware Horizon 7: Install, Configure, Manage [V7] course or equivalent experience
• Understanding of concepts presented in the VMware Data Center Virtualization Fundamentals course

Outline:

1. Course Introduction
   o Introductions and course logistics
   o Course objectives
2. Infrastructure Assessment
   o Define customer business objectives
   o Gather and analyze business and application requirements
   o Use a systematic methodology to evaluate and document design decisions
3. VMware Horizon Design
   o Identify the design process to build a VMware Horizon solution
   o Identify the VMware Horizon reference architecture
   o Outline the process to define a use case
   o Determine use cases for a given business case study
   o Outline the process to define service definition
4. VMware Horizon Block and Pod Design
   o Identify the components of a typical VMware Horizon block and pod
   o Outline the relationships between VMware Horizon management block components
   o Design a VMware Horizon desktop block and pod configuration for a given use case
   o Configure cloud pod architecture for multisite pool access
5. VMware Infrastructure Design
   o Identify factors and design decisions that determine the sizing for VMware ESXi™ hosts
   o Estimate and size CPU and memory requirements
   o Describe the design considerations for sizing network capacity
   o Outline the privileges that are required by an administrative user account
6. Pool and Desktop Design

- o Map use cases to VMware Horizon instances and VMware Horizon pools
- o Design desktop pools for a given use case
- o List the key considerations for sizing hardware for a desktop virtual machine
- o Identify key virtual desktop performance tuning and Windows optimizations and their effects on VMware Horizon performance

7. Storage Design
- o Identify factors that determine the sizing for shared storage
- o Identify benefits of using tiered storage for linked-clone pools
- o Identify use cases and benefits of using View Storage Accelerator
- o Identify use cases and benefits of using persistent disks and disposable-files disks in linked-clone desktops
- o Identify use cases and benefits of using VMware vSAN™

8. Network and Security Design
- o Identify the design decisions related to bandwidth use
- o Identify use cases and benefits of using load balancing and traffic management
- o Identify the best practices for avoiding network congestion
- o Recognize the PCoIP and Blast optimization strategies
- o Identify use cases and benefits of using firewalls for DMZ-based security servers

9. End-User Session and Device Design
- o Configure Horizon Persona Management for end-user personalization
- o Discuss the use of VMware User Environment Manager™ for personalizing desktops
- o Identify VMware best practices for Active Directory containers, groups, and Group Policy object policies in a VMware Horizon solution
- o Identify VMware best practices for True SSO
- o Identify client device characteristics and requirements

10. Delivering and Managing Applications
- o Describe the importance of the application delivery mechanism
- o Determine which VMware Horizon application tool should be used to accomplish which business objectives
- o Design and create Remote Desktop Services farms and application pools to support the deployment of applications