

Beta Exam Code: 3V0-652

Beta Exam Preparation Guide Version 1.1

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Disclaimer:

This preparation guide is intended to provide information about the objectives covered by this exam, as well as related resources. The material contained within this guide is not intended to guarantee that a passing score will be achieved on the exam. VMware recommends that a candidate thoroughly understands the objectives indicated in this guide and utilizes the resources recommended in this guide where needed to gain that understanding.

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Beta

1. The Exam

1.1 Purpose of Exam

The VMware Certified Advanced Professional 6 – Desktop and Mobility Beta Design Exam (3V0-652) tests candidates on their ability to develop a Horizon 6.x conceptual design given a set of customer requirements, determine the functional requirements needed to create a logical design, and architect a physical design using these elements. A given solution may include any of these products and technologies:

- VMware Horizon View
- VMware App Volumes
- VMware ThinApp
- VMware Mirage
- VMware Workspace
- vRealize Operations for Horizon
- VMware Virtual SAN

1.2 Intended Audience

Candidates should have approximately two years of experience working with VMware Desktop and Mobility solutions and have demonstrated technical leadership with Horizon View technologies, including the ability to design, plan and optimize a Horizon View 6.x solution. Successful candidates will have a strong understanding of Horizon View core components and their relation to the data center and can apply design methodologies and best practices to a Horizon View design. Candidates should also possess a working knowledge of application and infrastructure services.

2. Objectives covered in the VCAP6-DTM Beta Design Exam

2.1 Introduction

It is recommended that candidates have the knowledge and skills necessary to install, configure and administer a Horizon environment before taking the VCAP6-DTM Beta Design Exam. While there is no course requirement for this exam, VMware recommends taking the [Horizon: Design and Deploy \[V6\]](#) course. It is recommended that the candidate utilize this course and/or other materials where needed to provide background information on the objectives in the exam.

2.2 Objectives

Prior to taking this exam, candidates should understand each of the following objectives. Each objective is listed below; along with related tools the candidate should have experience with, and related documentation that contains information relevant to the objective. All objectives may also be referenced in other product documentation not specifically highlighted below. The candidate should be familiar with all relevant product documentation or have an equivalent skillset.

Section 1 – Create a Horizon Conceptual Design

Objective 1.1 – Gather and analyze business requirements

Skills and Abilities

- Associate a stakeholder with the information that needs to be collected.
- Utilize customer inventory and assessment data from a current environment to define a baseline state.
- Analyze customer interview data to explicitly define customer objectives for a conceptual design.
- Identify the need for and apply requirements tracking.
- Given results of a requirements gathering survey, identify requirements for a conceptual design.
- Categorize requirements by infrastructure qualities to prepare for logical design requirements.
- Evaluate desktop personas and user experience requirements.
- Evaluate mobility requirements.
- Evaluate TCO/ROI/Costs

Tools

- [Horizon 6 TCO/ROI Calculator](#)
- [Measuring the Business Value of VMware Horizon View](#)
- [Functional vs. Non-Functional Requirements](#)
- [Conceptual, Logical, Physical: It is Simple](#)
- [Conceptual Architecture Action Guide](#)
- [Systems Architecture Fundamentals – Conceptual, Logical, Physical Designs](#)

Objective 1.2 – Gather and analyze application requirements

Skills and Abilities

- Given a set of applications within a physical environment, determine the requirements for virtualization.
- Gather information needed in order to identify application dependencies.
- Given one or more application requirements, determine the impact of the requirements on the design.
- Analyze current technologies in use and technologies that should be added.
- Assess and categorize existing workloads.
- Analyze and differentiate between application architectures.
- Analyze current capacity requirements.
- Evaluate additional peripheral needs.
- Evaluate user groups.
- Evaluate access scenarios.

Tools

- [End-to-end Application and End-user Management with VMware](#)
- [Application-Delivery Options in VMware Horizon 6](#)
- [Systrack Desktop Assessment](#)
- [Application Delivery Decision Maker](#)

Objective 1.3 – Differentiate requirements, risks, constraints and assumptions

Skills and Abilities

- Differentiate between the concepts of risks, requirements, constraints, and assumptions.
- Analyze impact of VMware best practices to identified risks, constraints, and assumptions.
- Given a statement, determine whether it is a risk, requirement, constraint, or an assumption.

Tools

- [Developing Your Virtualization Strategy and Deployment Plan](#)
- [Constraints, Assumptions \(Risk, Requirements\) & Dependencies](#)

Objective 1.4 – Evaluate existing business practices against established use cases

Skills and Abilities

- Evaluate the customer's current capacity requirements.
- Recognize organizational structure and governance requirements.
- Match key requirements to known Horizon use cases
- Based on business requirements, determine what use cases fit the design

Tools

- [Validated Design Guide – Federal Secure Workplace](#)
- [Validated Design Guide – VMware AlwaysOn Desktop](#)
- [VMware App Volumes for Financial Services](#)
- [VMware Horizon Solution for Manufacturing](#)
- [The Forrester Total Economic Impact of VMware Automated Application Deployment](#)
- [Cloud Automation Savings Calculator](#)
- [A Guide to Hybrid Cloud](#)

Section 2 – Create a Horizon Logical Design

Objective 2.1 – Map Business Requirements to the Logical Design

Skills and Abilities

- Analyze requirements for functional and non-functional elements.
- Build non-functional requirements into a specific logical design.
- Translate stated business requirements into a logical design.
- Incorporate the current state of a customer environment into a logical design.

Tools

- [Conceptual, Logical, Physical: It is Simple](#)
- [Functional vs. Non-Functional Requirements](#)
- [ITIL v3 Introduction and Overview](#)
- [Conceptual Architecture Action Guide](#)
- [Systems Architecture Fundamentals – Conceptual, Logical, Physical Designs](#)

Objective 2.2 – Map Horizon Solution Dependencies

Skills and Abilities

- Document service relationships and dependencies
- Evaluate interfaces to existing business processes and define new business processes
- Given a scenario, determine logical components with dependencies on certain services.
- Include service dependencies in a Horizon logical design.
- Analyze services to identify upstream and downstream service dependencies.
- Having navigated logical components and their interdependencies, make decisions based upon all service relationships.

Tools

- [VMware Application Dependencies and Entity Relationship Diagrams MK2](#)
- [Datacenter Operational Excellence Through Automated Application Discovery and Dependency Mapping](#)
- [End-to-end Application and End-user Management with VMware](#)
- [Application-Delivery Options in VMware Horizon 6](#)

Objective 2.3 – Build Availability Requirements into the Logical Design

Skills and Abilities

- Evaluate which logical availability services can be used with a given Horizon solution.
- Analyze a Horizon design and determine possible single points of failure.
- Determine potential availability solutions for a logical design based on customer requirements.
- Create an availability plan, including maintenance processes.
- Balance availability requirements with other infrastructure qualities.

Tools

- [Validated Design Guide – VMware AlwaysOn Desktop](#)
- [Horizon Workspace Reference Architecture](#)
- [Horizon 6 Storage Considerations](#)
- [Horizon View Large Scale Reference Architecture](#)

Objective 2.4 – Build Manageability Requirements into the Logical Design

Skills and Abilities

- Determine requirements for vRealize Operations for Horizon in a given design
- Integrate vRealize Operations for Horizon into applicable designs
- Evaluate which management services can be used with a given Horizon Solution.
- Build interfaces into the logical design for existing operations practices.
- Address operational readiness deficiencies.
- Define Event, Incident and Problem Management practices.
- Design a log management solution.
- Determine request fulfillment and release management processes.
- Define change management processes based on business requirements.
- Based on customer requirements, determine required reporting assets and processes.

Tools

- [Maximizing the Use of VMware vRealize Operations for Horizon](#)
- [VMware Horizon 6 Reference Architecture](#)
- [Reviewer's Guide for View in Horizon 6](#)

Objective 2.5 – Build Performance Requirements into the Logical Design

Skills and Abilities

- Assess the impact of 3D hardware acceleration on performance.
- Assess possible performance tuning options for Horizon architecture components and virtual desktops
- Evaluate logical performance considerations for a given Horizon solution.
- Analyze the current performance of an environment and address gaps when building a logical design.
- Use a conceptual design to create a logical design that meets performance requirements.
- Determine performance-related functional requirements based on given non-functional requirements and service dependencies.
- Define capacity management practices and create a capacity plan.
- Incorporate scalability requirements into the logical design.

Tools

- [VMware Horizon 6 with View Performance and Best Practices](#)
- [VMware OS Optimization Tool](#)
- [Graphics Acceleration in View Virtual Desktops](#)
- [Optimization Guide for Desktops and Servers in View in VMware Horizon 6 and VMware Horizon Air Desktops and VMware Horizon Air Apps](#)

Objective 2.6 – Build Recoverability Requirements into the Logical Design

Skills and Abilities

- Evaluate which logical recoverability services are available for a given Horizon solution.
- Differentiate infrastructure qualities related to recoverability.
- Determine Business Continuity and Disaster Recovery solution options for a given Horizon Design.
- Given recoverability requirements, analyze services that will be impacted and provide a recovery plan for impacted services.
- Determine recoverability component of service level agreements and service level management processes.
- Plan a data retention policy based on customer requirements.

Tools

- [VMware Mirage Reviewer's Guide](#)
- [VMware Horizon Mirage Deployment Design Considerations](#)
- [VMware Horizon Mirage Reference Architecture - Branch Office](#)
- [VMware Horizon 6 Reference Architecture](#)
- [VMware Horizon with View and Virtual SAN Reference Architecture](#)

Objective 2.7 – Build Security Requirements into the Logical Design

Skills and Abilities

- Evaluate which security services can be used with a given Horizon solution.
- Build specific regulatory compliance requirements into the logical design.
- Analyze application and infrastructure security requirements.
- Build a role-based access model and map roles to services.

- Build a security policy based on existing security requirements and IT governance practices.
- Incorporate customer risk tolerance into the security policy.
- Assess the services that will be impacted and create an access management plan.
- Based on stated security requirements, analyze the current state for compliance/non-compliance.

Tools

- [VMware Horizon Workspace Security Features](#)
- [VMware Horizon with View Security Hardening Overview](#)
- [View Security](#)
- [VMware Mirage Administrator's Guide](#)
- [VMware Horizon 6 Reference Architecture](#)

Section 3 – Create a Physical Design for vSphere and Horizon Components

Objective 3.1 – Create a Horizon Pod and Block Architecture Design

Skills and Abilities

- Analyze the number and types of architecture components required
- Evaluate load balancing topology and requirements
- Determine target applications and application deployment method based on business requirements
- Determine user environment management infrastructure requirements
- Determine vSphere infrastructure and database requirements based on a given design
- Create a Horizon Pod and Block architecture design

Tools

- [VMware View Architecture Planning](#)
- [VMware Horizon 6 Reference Architecture](#)
- [Administering View Cloud Pod Architecture](#)

Objective 3.2 – Extend Horizon Architecture Design to Support Additional Horizon Suite Components

Skills and Abilities

- Determine infrastructure requirements for:
 - VMware Mirage, Workspace Portal
 - VMware Workspace Portal
 - Horizon application technologies (ThinApp, App Volumes, RDSH)
 - vRealize Operations for Horizon
 - Virtual SAN
- Extend a Horizon Pod and Block architecture design to support related Horizon technologies

Tools

- [VMware View Architecture Planning](#)
- [VMware Workspace Portal Reference Architecture](#)
- [VMware Horizon 6 with App Volumes and Virtual SAN Reference Architecture](#)
- [VMware Mirage Large-Scale Reference Architecture](#)
- [Administering View Cloud Pod Architecture](#)

Objective 3.3 – Design vSphere Infrastructure to Support a Horizon Implementation

Skills and Abilities

- Determine base vSphere design
- Determine Horizon design resource and capacity requirements
- Evaluate vSphere availability and networking requirements for a Horizon design
- Establish vSphere storage requirements for a Horizon design
- Create a vSphere infrastructure design to support a given Horizon implementation

Tools

- [View Installation](#)
- [View Architecture Planning](#)
- [VMware Horizon 6 Reference Architecture](#)
- [VMware Horizon 6 with App Volumes and Virtual SAN Reference Architecture](#)

Objective 3.4 – Add Required Services to Support a Given vSphere Design

Skills and Abilities

- Evaluate the following support services for a given Horizon design:
 - Active Directory configuration
 - Firewall rules
 - DNS / DHCP configuration
 - 3rd party SSO infrastructure
 - Database infrastructure
- Determine systems management and monitoring infrastructure requirement

Tools

- [View Installation](#)
- [View Administration](#)
- [View Architecture Planning](#)
- [VMware Horizon 6 Reference Architecture](#)
- [VMware Horizon 6 with App Volumes and Virtual SAN Reference Architecture](#)

Section 4 – Create a Physical Design for Horizon Storage

Objective 4.1 – Create and Optimize a Physical Design for Horizon Infrastructure Storage

Skills and Abilities

- Determine Horizon database sizing requirements
- Determine vCenter Server database requirements
- Determine Horizon component storage requirements

Tools

- [VMware vCenter Server 6.0 Deployment Guide](#)
- [View Architecture Planning](#)
- [VMware Horizon 6 Reference Architecture](#)
- [VMware Horizon 6 with App Volumes and Virtual SAN Reference Architecture](#)
- [VMware Horizon 6 Storage Considerations](#)

Objective 4.2 – Create and Optimize a Physical Design for View Pool Storage

Skills and Abilities

- Establish base image/template storage requirements
- Determine replica and linked clone requirements of a given Horizon design
- Plan for data growth in pool storage design
- Evaluate persistent, disposable and full clone disk requirements
- Analyze profile management requirements based on a Horizon design
- Based on requirements, determine appropriate storage type for a given virtual desktop
- Determine SE Sparse and View Storage Accelerator requirements and use cases

Tools

- [Setting Up Desktop and Application Pools in View](#)
- [View Administration](#)
- [VMware Horizon 6 Reference Architecture](#)
- [VMware Horizon 6 with App Volumes and Virtual SAN Reference Architecture](#)
- [VMware Horizon 6 Storage Considerations](#)

Objective 4.3 – Create and Optimize a Physical Storage Design for Applications

Skills and Abilities

- Determine application types in a given Horizon design
- Analyze deployment methodologies (e.g., ThinApp, App Volumes, Mirage application layers, natively installed, etc.)
- Evaluate application capacity requirements within a given Horizon solution
- Determine storage considerations for application deployment methodologies.

Tools

- [View Administration](#)
- [VMware Horizon 6 with App Volumes and Virtual SAN Reference Architecture](#)
- [VMware Horizon 6 Storage Considerations](#)
- [Application-Delivery Options in VMware Horizon 6](#)

Objective 4.4 – Create and Optimize a Tiered Physical Horizon Storage Design

Skills and Abilities

- Determine storage tier requirements for a given Horizon design
- Determine sizing for each storage tier based on business requirements
- Design Horizon pools to utilize storage tiers to meet performance requirements

Tools

- [VMware Horizon 6 Storage Considerations](#)
- [Setting Up Desktop and Application Pools in View](#)
- [VMware Horizon 6 with App Volumes and Virtual SAN Reference Architecture](#)

Objective 4.5 – Integrate Virtual SAN into a Horizon Design

Skills and Abilities

- Based on given design, evaluate Virtual SAN cluster architecture and hardware requirements
- Analyze optimization of Virtual SAN storage policies for Horizon workloads
- Determine Virtual SAN disk requirements to meet capacity, performance and availability needs based on a given Horizon design

Tools

- [VMware Horizon 6 with App Volumes and Virtual SAN Reference Architecture](#)
- [VMware Virtual SAN Design and Sizing Guide for Horizon View Virtual Desktop Infrastructures](#)
- [VMware Horizon with View and Virtual SAN Reference Architecture](#)
- [VMware Horizon View 6 and VMware Virtual SAN 6.0 Hybrid](#)

Objective 4.6 – Create and Optimize a Physical Storage Design for a Horizon Mirage Deployment

Skills and Abilities

- Analyze storage requirements and best practices for Mirage
- Determine best practices for reducing capacity requirements with Mirage
- Determine the Mirage architecture and its impact on storage requirements

- Analyze the number of devices, image size and deduplication rates to determine storage requirements for a Mirage deployment

Tools

- [Deployment and Design Considerations for VMware Mirage](#)
- [VMware Horizon 6 Storage Considerations](#)
- [VMware Mirage Reviewer's Guide](#)
- [VMware Mirage Large-Scale Reference Architecture](#)

Section 5 – Create a Physical Design for Horizon Networking

Objective 5.1: Plan and Design Network Requirements for Horizon solutions (including Mirage and Workspace)

Skills and Abilities

- Analyze use of Mirage Branch Reflector to reduce WAN traffic requirements.
- Determine appropriate switch configuration based on requirements.
- Determine appropriate remote display protocols based on their impact on network traffic.
- Determine network port requirements for a given design.
- Evaluate Workspace Portal access policy sets.
- Compute network throughput requirements.
- Analyze Network I/O Control and throughput requirements to support design components

Tools

- [VMware NSX for Horizon](#)
- [vSphere Networking](#)
- [Virtual SAN Network Design Guide](#)
- [VMware Horizon 6 Reference Architecture](#)
- [VMware Horizon 6 Network Ports](#)
- [VMware Horizon 6 with View Performance and Best Practices](#)
- [VMware Workspace Portal Administrator's Guide](#)

Objective 5.2: Design Network and Security Components Based on Capacity and Availability Requirements

Skills and Abilities

- Determine placement of design components (i.e. security gateways, firewalls, load balancers, Branch Reflectors, etc.)
- Determine Mirage bandwidth limiting to meet business requirements
- Evaluate security requirements for VMware Workspace
- Evaluate security requirements for Horizon View

Tools

- [Deployment and Design Considerations for VMware Mirage](#)
- [VMware Horizon 6 Reference Architecture](#)
- [View Security](#)
- [VMware Horizon 6 Firewall and Network Ports Visualized](#)
- [VMware Horizon Workspace Security Features](#)
- [VMware Horizon with View Security Hardening Overview](#)

Objective 5.3: Evaluate GPO and Display Protocol Tuning Options Based on Bandwidth and Connection Limits

Skills and Abilities

- Determine PCoIP tuning options to optimize experience and network utilization.
- Evaluate impact of Quality of Service/Class of Service settings on protocol performance.
- Design PCoIP GPOs to optimize display protocol for specific use cases.
- Determine QoS requirements in Horizon design.

Tools

- [VMware Horizon 6 with View Performance and Best Practices](#)
- [View Architecture Planning](#)
- [Setting up Desktop and Application Pools in View](#)
- [PCOIP Optimization for View in Horizon 6](#)
- [Optimization Guide for Desktops and Servers in View in VMware Horizon 6](#)
- [Graphics Acceleration in View Virtual Desktops](#)

Section 6 – Create a Physical Design for Horizon Desktops and Pools

Objective 6.1 – Design Virtual and Physical Image Masters

Skills and Abilities

- Determine virtual machine configuration
- Establish operating system image design requirements
- Determine the number of images to implement in a given Horizon solution
- Determine agent options for a Horizon design
- Analyze application delivery mechanism(s)
- Based on company policies, determine peripheral device requirements

Tools

- [Optimization Guide for Desktops and Servers in View in VMware Horizon 6](#)
- [Setting Up Desktop and Application Pools in View](#)
- [USB Device Redirection, Configuration, and Usage in Virtual Desktops](#)
- [Application-Delivery Options in VMware Horizon 6](#)
- [Consolidation of Desktop and Application Virtualization with Horizon 6](#)

Objective 6.2 – Optimize Desktop Images, OS Services and Applications for a Horizon Design

Skills and Abilities

- Determine OS services and applications to support a Horizon design
- Optimize desktop operating systems for best performance
- Evaluate Mirage reference CVD configuration best practices.
- Analyze application packaging best practices and capture procedures.

Tools

- [Optimization Guide for Desktops and Servers in View in VMware Horizon 6](#)
- [VMware Mirage 5.0 Reviewer's Guide](#)
- [Setting up Desktop and Application Pools in View](#)
- [View Administration](#)
- [Horizon 6 Decision Maker](#)

Objective 6.3 – Incorporate Desktop Pools into a Horizon Design

Skills and Abilities

- Build a pool design that leverages Pod and Block architecture
- Design a pool structure based on location and size requirements.
- Determine stateless pool requirements in a given Horizon design

Tools

- [Setting up Desktop and Application Pools in View](#)
- [Administering View Cloud Pod Architecture](#)
- [VMware Horizon 6 Reference Architecture](#)

Objective 6.4 – Incorporate RDS Pools into a Horizon Design

Skills and Abilities

- Given a set of requirements, design RDSH hosted desktop and application pools
- Analyze RDSH Design and Application Pool Infrastructure

Tools

- [VMware Horizon 6 Reference Architecture](#)
- [Setting Up Desktop and Application Pools in View](#)

Objective 6.5 – Design Mirage Image and Application Layers for a Horizon Design

Skills and Abilities

- Determine layering technologies with Mirage for a given Horizon design
- Determine Base Layer enforcement vs. Application Layer deployment
- Analyze creation of reference CVD in a given Horizon design
- Determine Capture Base and Application Layers based on business requirements
- Analyze deployment and monitoring of Application Layers
- Analyze Image recovery methods using Mirage

Tools

- [Deployment and Design Considerations for VMware Mirage](#)
- [VMware Mirage 5.0 Reviewer's Guide](#)
- [VMware Mirage Administrator's Guide](#)

Section 7 – Incorporate Application Services into a Horizon Physical Design

Objective 7.1: Design Application Integration and/or Delivery System(s) using Horizon Application Tools

Skills and Abilities

- Determine which Horizon Application component should be used to accomplish business requirements.
- Analyze end user design constraints and choose appropriate Application delivery methods
- Evaluate interoperability between Horizon delivery systems (App Volumes, View, Mirage)

Tools

- [Application-Delivery Options in VMware Horizon 6](#)
- [VMware App Volumes Deployment Guide](#)
- [Horizon 6 Decision Maker](#)

Objective 7.2: Design Active Directory to Facilitate Application Assignment

Skills and Abilities

- Analyze application assignment to AD group for a given Horizon design
- Determine Application Pool entitlements based on business requirements

Tools

- [View Architecture Planning](#)
- [Reviewer's Guide for View in Horizon 6](#)
- [VMware Horizon 6 Reference Architecture](#)

Objective 7.3: Design and Size RDS Application Pools and Farms

Skills and Abilities

- Based on business requirements, size RDS Farms appropriately to meet user workloads
- Analyze RDS Hosts to provide applications based off of use case.
- Determine App Volumes integration with RDSH for a given Horizon design

Tools

- [View Administration](#)
- [Setting Up Desktop and Application Pools in View](#)
- [VMware Horizon 6 with App Volumes and Virtual SAN Reference Architecture](#)
- [VMware App Volumes Deployment Guide](#)

Objective 7.4: Create Application Architecture Design

Skills and Abilities

- Determine which applications should to be packaged using ThinApp; provisioned from an App Layer or through another method
- Determine which applications should to be packaged using App Volumes, Mirage or RDSH

Tools

- [Using ThinApp Virtual Applications in VMware Mirage App Layers](#)
- [VMware App Volumes and VMware ThinApp Combined: The Perfect Mix](#)
- [Application-Delivery Options in VMware Horizon 6](#)

Objective 7.5: Design Application Integration and/or Delivery System(s) using Horizon Workspace

Skills and Abilities

- Analyze creation of ThinApp packages for delivery via Workspace
- Determine best practices for application delivery based on business requirements
- Analyze integration with Horizon to broker RDSH applications and Desktops
- Analyze methods and proper configuration of component integration in a Horizon design

Tools

- [Application-Delivery Options in VMware Horizon 6](#)
- [Application Delivery Strategy: A Key Piece in the VDI Design Puzzle](#)
- [View Administration](#)
- [Installing and configuring VMware Workspace Portal](#)
- [Setting up Desktop and Application Pools in View](#)

Section 8 – Incorporate Endpoints into a Horizon Design

Objective 8.1 – Incorporate Session Connectivity Requirements in a Horizon End Point Design

Skills and Abilities

- Determine appropriate endpoints for a given Horizon design (zero, thin and tablet)
- Integrate Horizon End Points with Mirage, Fusion Pro, Laptops
- Analyze peripheral and performance needs for a given End Point solution
- Determine whether desired End Point is usable for a given Horizon design

Tools

- [VMware Horizon Mirage Installation Guide](#)
- [VMware Mirage Reviewer's Guide](#)
- [Key Considerations in Choosing a Zero Client Environment for Virtual Desktops in Horizon](#)

Objective 8.2 – Incorporate Management Requirements in a Horizon End Point Client Design

Skills and Abilities

- Determine monitoring needs for End Point and Virtual Desktop connectivity (e.g., vRealize for Horizon)
- Establish patching requirements
- Establish software distribution requirements

Tools

- [VMware vRealize Operations for Horizon Administration](#)
- [View Upgrades](#)
- [How VMware Mirage Complements and Extends Microsoft SCCM](#)

Objective 8.3 – Incorporate Security Requirements in a Horizon End Point Design

Skills and Abilities

- Determine how endpoints connect via a remote session
- Analyze customer security requirements and approach those from an endpoint perspective
- Evaluate endpoint use cases based on connection protocols and endpoint devices
- Incorporate the following customer requirements in a Horizon design:
 - session behavior
 - remote access
 - session mobility

Tools

- [View Security](#)
- [Setting Up Desktop and Application Pools in View](#)
- [VMware Horizon with View Security Hardening Overview](#)

Additional Resources

3.1 Mock Exam

VMware provides an interactive simulation of the design-tool found in the exam. This simulation is located at: TBD

3.2 VCAP/VCIX Community

VMware provides an online community for VCAP/VCIX candidates. This community contains valuable information from other candidates and senior VCAPs/VCIXs, and is moderated by VMware certification staff. The community is located at:

<http://communities.vmware.com/community/vmtn/certedu/certification/VCIX>

3.3 Test Driving a VMware Desktop and Mobility environment

VMware provides Hands-on Labs for a VMware Horizon 6 environment. These labs provide an environment where you can work with the products covered in this exam. The labs can be accessed by going here:

<http://www.vmware.com/products/horizon-view/horizon6-hol>

Version	Change Notes	Date
1.0	Initial Prep Guide Creation	11/23/2015
1.1	Added beta designation and changed	12/08/2015