

CVE-400-1W Engineering a Citrix Virtualization Solution

The CVE-400-1W Engineering a Citrix[®] Virtualization Solution course teaches Citrix engineers how to plan for and perform the tasks necessary to successfully integrate the component technologies that make up a Citrix virtualization solution in a Windows Server 2008 environment. Upon course completion, students will be able to interpret environmental assessment documentation, plan for a virtualization solution project and integrate key Citrix virtualization technologies, including XenApp[™], XenServer[™], and XenDesktop[™], to create a holistic, end-to-end virtualization solution that will address the most pressing business issues of the day. The extensive, highly hands-on curriculum includes exercises that allow students to demonstrate the advanced technical knowledge gained from instruction.

Audience

This course is intended for IT professionals, such as Server, Network and Systems Engineers. Systems Integrators, Systems Administrators and Application Engineers are also appropriate candidates for this course.

Included Products

The exercises for this course include hands-on integration of the following Citrix core and component products:

- Citrix XenApp 5.0 on Windows Server 2008
- Citrix Essentials[™] for XenServer 5.5
- Citrix XenDesktop 3.1
- Citrix Provisioning Services[™] 5.1
- Citrix EdgeSight[™] for Load Testing 3.0
- Citrix EdgeSight for Endpoints 5.0
- Citrix EdgeSight for XenApp[™] 5.0
- Citrix Workflow Studio[™] 2.0
- Citrix Profile management 2.0
- Citrix Receiver 1.0
- Citrix Dazzle[™] 1.0
- Citrix NetScaler[®] VPX 9.1

Preparatory Recommendations

The following preparatory recommendations describe the experience and knowledge students should possess to ensure successful completion of this course.

- Experience using the following Citrix products:
 - Citrix XenApp 4.5 or higher
 - Citrix XenServer 5.0 or higher
 - Citrix XenDesktop 2.0 or higher
 - Citrix Provisioning Services 5.0 or higher
 - Citrix EdgeSight for Load Testing 3.0
 - Citrix EdgeSight for Endpoints 5.0
 - Citrix EdgeSight for XenApp 5.0
- Experience using Windows Server 2008, including:
 - Active Directory
 - Terminal Services
 - DHCP
 - DNS
 - Performance Monitoring
 - Troubleshooting
 - Base OS, including server roles
 - Group Policy Objects
- Experience using Microsoft SQL Server

- Completion of the following courses or demonstrate equivalent knowledge:
 - CXA-201-1 - Implementing Citrix XenApp 5.0 for Windows Server 2008
 - CXS-200-1 - Implementing Citrix XenServer Enterprise Edition 5.0
 - CXD-200-1 - Implementing Citrix XenDesktop 3
 - CXA-300-1 - Advanced Administration for Citrix XenApp 5.0 for Windows Server 2008

Key Skills

Upon completion of this course, learners are able to:

- Explain the benefits and considerations for VM storage, including local host disk, iSCSI SAN, Fibre Channel SAN and NFS SAN.
- Explain how network considerations, including network topology, utilization requirements and the number of interfaces, affect a virtualization host server.
- Configure network connectivity and storage for the XenServer host.
- Configure a resource pool for optimal performance.
- Identify information in the project documentation that is required for project decision-making purposes.
- Create an order of execution plan that reflects the tasks required to implement the virtual solution and organizational goals.
- Identify the available Provisioning Services server optimizations.
- Install, configure and test a Provisioning Services configuration.
- Configure XenApp for optimal performance in a virtualized environment.
- Prepare, install and configure a provisioned XenApp server within a Citrix virtualization solution.
- Identify the components that comprise a XenDesktop virtual solution.
- Provision a XenDesktop pool in a virtual solution.
- Identify the uses and differences of EdgeSight for Load Testing, EdgeSight for Endpoints and EdgeSight for XenApp.
- Configure an EdgeSight alert to trigger a Workflow Studio workflow.
- Identify common workflows that can be automated using Workflow Studio.
- Perform a XenApp server upgrade using the vDisk update process.

Instructional Method

This is a self-paced online course with practical application of concepts through live labs.

Course Length

30 hours

Certification Preparation

CVE-400-1W prepares learners for exam 1Y0-A15 Engineering a Citrix Virtualization Solution, one of the requirements for the CCEE for Virtualization.

Registration

For more information and to register for this course, please go to www.citrixeducation.com.

Topic Outline

Provided is the outline for CVE-400-1W:

- Host Server Concepts
 - Key Virtualization Terms
 - Hardware Configuration
 - Memory Considerations
 - CPU Considerations
 - Network Considerations
 - Virtual Machine Management
 - Virtual Machine Migration
 - Identifying Media Storage Considerations
 - Differentiating Between Local Storage and SAN
 - Determining RAM Scalability
 - Determining CPU Scalability
 - Determining Network Interface Strategies
 - Determining HA Priority Levels
 - Identifying Storage Overcommitment Risks
- XenServer Integration
 - ISO Storage
 - Pre-Installation Considerations
 - Troubleshooting
 - Configuring XenServer Networking
 - Configuring XenServer Storage
 - Creating a Resource Pool
 - Testing High Availability
- Project Planning and Implementation Strategies
 - Project Roles
 - Project Documentation
 - Implementation Planning
 - Implementation Case Studies
 - Identifying Gaps in Documentation
 - Interpreting Project Documentation and Identifying Goals
- Provisioning Services Integration
 - Network Support of Streaming
 - Provisioning Services Optimizations
 - Streaming Other Workloads
 - Troubleshooting
 - Installing and Configuring Provisioning Services Server
 - Creating and Configuring the vDisk
 - Testing the Configuration
 - Adding Additional Server to Farm
 - Configuring Load Balancing and HA for Provisioning Services
- XenApp Integration
 - Application Delivery
 - XenApp Configurations
 - Provisioning Services with XenApp
 - XenApp Migration
 - Troubleshooting
 - Installing XenApp
 - Provisioning XenApp Servers
 - Configuring XenApp Servers
- XenDesktop Integration
 - Virtual Desktop Components
 - Desktop Groups
 - XenDesktop Management
 - NetScaler VPX
 - Troubleshooting
 - Installing the Desktop Delivery Controller
 - Installing the Additional Desktop Delivery Controllers

- Configuring the XenDesktop Farm
- Creating a Virtual Desktop VM
- Provisioning the XenDesktop Pool
- Configuring the Desktop Group
- Testing the Desktop Pool
- Configuring NetScaler VPX
- Virtualized Environment Monitoring
 - EdgeSight
 - EdgeSight for Load Testing
 - Installing EdgeSight for Load Testing
 - Installing EdgeSight Server
 - Configuring the EdgeSight Server
 - Installing EdgeSight Agent Database Server
 - Installing EdgeSight Agent on XenDesktop Desktops
 - Configuring EdgeSight
 - Testing the Monitoring Environment
- Virtualized Environment Maintenance
 - Workflow Studio Overview
 - Workflow Automation
 - Sample Maintenance Workflows
 - XenApp and XenDesktop Server Backup
 - Configuring a XenServer Metadata Backup Schedule
 - Performing a XenServer Hotfix Update
 - Performing a XenApp Application Update
 - Upgrading a Provisioned XenApp Server
 - Configuring Lab Manager
 - Configuring Citrix Receiver for Citrix Dazzle