

Training | Consulting | Developement | Outsourcing



Administrator Master Program









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Course Overview:

This program intended for non programmers who do not wants to get into complexity of learning programming languages. Suitable for both IT and Non IT candidates. We cover Windows server administration, Linux, Virtualization & Citrix Job oriented scenarios supported with placement calls until you get placed.

While attending this combo course - students will take seven exams (70-740, 70-741, 70-742, VCP, VCA & CCA-V / CC-VAD-CC (CWS-215) to achieve the MCSA, Linux, VMware vSphere & Citrix certifications. This hands on, instructor led live course teaches the knowledge to administer an Administrator environment along with the knowledge needed for the certification exams which are administered while attending.

Course Outline:

MCSA 2016

70-740: Installation, Storage, and Compute with Windows Server 2016

- ➤ Install Windows Servers in Host and Compute Environments
- Implement Storage Solutions
- > Implement Hyper-V
- > Implement Windows Containers
- > Implement High Availability
- Maintain and Monitor Server Environments

70-741: Networking with Windows Server 2016

- Implement Domain Name System (DNS)
- Implement DHCP and IPAM
- ➤ Implement Network Connectivity and Remote Access Solutions
- ➤ Implement Core and Distributed Network Solutions
- Implement an Advanced Network Infrastructure

70-742: Identity with Windows Server 2016

- ➤ Install and Configure Active Directory Domain Services (AD DS)
- Manage and Maintain AD DS
- Create and Manage Group Policy
- Implement Active Directory Certificate Services (AD CS)
- Implement Identity Federation and Access Solutions

Red Hat System Administration I (RH124)

1. Get started with Red Hat Enterprise Linux

- > Describe and define open source
- Linux distributions
- Red Hat Enterprise Linux.

2. Access the command line

➤ Log into a Linux system and run simple commands using the shell.

3. Manage files from the command line

Copy, move, create, delete, and organize files while working from the bash shell.

4. Get help in Red Hat Enterprise Linux

Resolve problems by using local help systems.

5. Create, view, and edit text files

Manage text files from command output or in a text editor.

6. Manage local users and groups

Create, manage, and delete local users and groups, as well as administer local password policies.

7. Control access to files

➤ Set Linux file system permissions on files and interpret the security effects of different permission settings.

8. Monitor and manage Linux processes

> Evaluate and control processes running on a Red Hat Enterprise Linux system.

9. Control services and daemons

- Control and monitor network services
- > System daemons using systemd.

10. Configure and secure SSH

Configure secure command line service on remote systems, using OpenSSH.

11. Analyze and store logs

Locate and accurately interpret logs of system events for troubleshooting purposes.

12. Manage networking

➤ Configure network interfaces and settings on Red Hat Enterprise Linux servers.

13. Archive and transfer files

Archive and copy files from one system to another.

14. Install and update software

Download, install, update, and manage software packages from Red Hat and yum package repositories.

15. Access Linux files systems

Access, inspect, and use existing file systems on storage attached to a Linux server.

16. Analyze servers and get support

Investigate and resolve issues in the web-based management interface, getting support from Red Hat to help solve problems.

Red Hat System Administration II (RH 134)

1. Improve command line productivity

Run commands more efficiently by using advanced features of the Bash shell, shell scripts, and various utilities provided by Red Hat Enterprise Linux.

2. Schedule future tasks

Schedule commands to run in the future, either one time or on a repeating schedule.

3. Tune system performance

Improve system performance by setting tuning parameters and adjusting scheduling priority of processes.

4. Control access to files with ACLs

Interpret and set access control lists (ACLs) on files to handle situations requiring complex user and group access permissions.

5. Manage SELinux security

Protect and manage the security of a server by using SELinux.

6. Manage basic storage

Create and manage storage devices, partitions, file systems, and swap spaces from the command line.

7. Manage logical volumes

Create and manage logical volumes containing file systems and swap spaces from the command line.

8. Implement advanced storage features

Manage storage using the Stratis local storage management system and use VDO volumes to optimize storage space in use.

9. Access network-attached storage

Use the NFS protocol to administer network-attached storage.

10. Control the boot process

Manage the boot process to control services offered and to troubleshoot and repair problems.

11. Manage network security

Control network connections to services using the system firewall and SELinux rules.

12. Install Red Hat Enterprise Linux

Install Red Hat Enterprise Linux on servers and virtual machines.

13. Run Containers

Obtain, run, and manage simple, lightweight services as containers on a single Red Hat Enterprise Linux server.

Red Hat System Administration III (RH 254)

1. Control services and daemons

Review how to manage services and the boot-up process using systemctl.

2. Manage IPv6 networking

Configure and troubleshoot basic IPv6 networking on Red Hat Enterprise Linux systems.

3. Configure link aggregation and bridging

Configure and troubleshoot advanced network interface functionality including bonding, teaming, and local software bridges.

4. Control network port security

Permit and reject access to network services using advanced SELinux and firewalld filtering techniques.

5. Manage DNS for servers

> Set and verify correct DNS records for systems and configure secure DNS caching.

6. Configure email delivery

Relay all email sent by the system to an SMTP gateway for central delivery.

7. Provide block-based storage

Provide and use networked iSCSI block devices as remote disks.

8. Provide file-based storage

Provide NFS exports and SMB file shares to specific systems and users.

9. Configure Maria DB databases

Provide a MariaDB SQL database for use by programs and database administrators.

10. Provide Apache HTTPD web service

Configure Apache HTTPD to provide Transport Layer Security (TLS)-enabled websites and virtual hosts.

11. Write bash scripts

Write simple shell scripts using bash.

12. Bash conditionals and control structures

Use bash conditionals and other control structures to write more sophisticated shell commands and scripts.

13. Configure the shell environment

Customize bash startup and use environment variables, bash aliases, and bash functions.

14. Comprehensive review

Practice and demonstrate knowledge and skills learned in this course.

VMware vSphere: Install, Configure, Manage [V6.7]

Course Outline:

1. Course Introduction

- > Introductions and course logistics
- Course objectives
- > Describe the content of this course
- > Gain a complete picture of the VMware certification system
- Familiarize yourself with the benefits of the VMware Education Learning Zone
- Identify additional resources

2. Introduction to vSphere and the Software-Defined Data Centre

- Describe the topology of a physical data centre
- > Explain the vSphere virtual infrastructure
- > Define the files and components of virtual machines
- > Describe the benefits of using virtual machines
- > Explain the similarities and differences between physical architectures and virtual architectures
- > Define the purpose of ESXi
- Define the purpose of vCentre Server
- > Explain the software-defined data centre
- Describe private, public, and hybrid clouds

3. Creating Virtual Machines

- Introduce virtual machines, virtual machine hardware, and virtual machine files
- > Identify the files that make up a virtual machine
- > Discuss the latest virtual machine hardware and its features
- > Describe virtual machine CPU, memory, disk, and network resource usage
- Explain the importance of VMware Tools™
- Discuss PCI pass-through, Direct I/O, remote direct memory access, and NVMe
- > Deploy and configure virtual machines and templates
- > Identify the virtual machine disk format

4. vCentre Server

- Introduce the vCentre Server architecture
- > Deploy and configure vCentre Server Appliance
- Use vSphere Web Client
- Backup and restore vCentre Server
- Examine vCentre Server permissions and roles
- > Explain the vSphere HA architectures and features
- > Examine the new vSphere authentication proxy
- Manage vCentre Server inventory objects and licenses
- > Access and navigate the new vSphere clients

5. Configuring and Managing Virtual Networks

- > Describe, create, and manage standard switches
- Configure virtual switch security and load-balancing policies
- Contrast and compare vSphere distributed switches and standard switches
- Describe the virtual switch connection types
- > Describe the new TCP/IP stack architecture
- Use VLANs with standard switches

6. Configuring and Managing Virtual Storage

- > Introduce storage protocols and storage device types
- Discuss ESXi hosts using iSCSI, NFS, and Fibre Channel storage

- > Create and manage VMFS and NFS data stores
- > Describe the new features of VMFS 6.5
- Introduce vSAN
- Describe guest file encryption

7. Virtual Machine Management

- Use templates and cloning to deploy new virtual machines
- Modify and manage virtual machines
- Clone a virtual machine
- Upgrade virtual machine hardware to version 12
- > Remove virtual machines from the vCentre Server inventory and datastore
- Customize a new virtual machine using customization specification files
- Perform vSphere vMotion and vSphere Storage vMotion migrations
- > Create and manage virtual machine snapshots
- Create, clone, and export vApps
- > Introduce the types of content libraries and how to deploy and use them

8. Resource Management and Monitoring

- Introduce virtual CPU and memory concepts
- Explain virtual memory reclamation techniques
- > Describe virtual machine over commitment and resource competition
- Configure and manage resource pools
- Describe methods for optimizing CPU and memory usage
- Use various tools to monitor resource usage
- > Create and use alarms to report certain conditions or events
- Describe and deploy resource pools
- > Set reservations, limits, and shares
- > Describe expandable reservations
- Schedule changes to resource settings
- Create, clone, and export vApps
- Use vCentre Server performance charts and esxtop to analyze vSphere performance

9. vSphere HA, vSphere Fault Tolerance, and Protecting Data

- > Explain the vSphere HA architecture
- Configure and manage a vSphere HA cluster
- Use vSphere HA advanced parameters
- > Define clusterwide restart ordering capabilities
- Enforce infrastructural or intra-app dependencies during failover
- Describe vSphere HA heartbeat networks and datastore heartbeats
- > Introduce vSphere Fault Tolerance
- > Enable vSphere Fault Tolerance on virtual machines
- Support vSphere Fault Tolerance interoperability with vSAN
- Examine enhanced consolidation of vSphere Fault Tolerance virtual machines
- > Introduce vSphere Replication
- > Use vSphere Data Protection to back up and restore data

10. vSphere DRS

- Describe the functions and benefits of a vSphere DRS cluster
- Configure and manage a vSphere DRS cluster
- > Work with affinity and anti-affinity rules
- Describe the new capabilities for what-if analysis and proactive vSphere DRS
- > Highlight the evolution of vSphere DRS using predictive data from VMware vRealize Operations Manager
- Perform preemptive actions to prepare for CPU or memory changes
- Describe the vCentre Server embedded vSphere Update Manager, VMware vSphere ESXi Image Builder CLI, and VMware vSphere Auto Deploy capabilities
- > Use vSphere HA and vSphere DRS together for business continuity

11. vSphere Update Manager

- Describe the new vSphere Update Manager architecture, components, and capabilities
- Use vSphere Update Manager to manage ESXi, virtual machine, and vApp patching
- Install vSphere Update Manager and the vSphere Update Manager plug-in
- Create patch baselines

- > Use host profiles to manage host configuration compliance
- Scan and remediate hosts

Citrix Virtual Apps and Desktops 7 Administration

Course Outline:

1. Architecture Overview

- Introduction to Citrix Virtual Apps and Desktops
- > Architecture Overview
- > Features
- ➤ Hosting Platform Considerations
- Citrix Virtual Apps and Desktops Service
- Connection Flow Process Introduction

2: Deploy the Site

- Pre-Deployment Considerations
- Citrix Licensing Setup
- Delivery Controller Setup
- Site Setup And Management
- Redundancy Considerations

3: The Apps and Desktops Images

- Consider Master Image Creation Methods
- ➤ Master Image Requirements

4: Provision and Deliver App and Desktop Resources

- Machine Catalogs and Delivery Groups
- Provisioning Methods and Considerations
- Machine Creation Services (MCS) Deep Dive
- MCS Environment Considerations
- ➤ Resource Locations

5: Provide Access to App and Desktop Resources

- Consider Workspace Experience versus StoreFront
- Workspace Experience User Authentication
- Workspace App
- Communication Flow

6: Manage the User Experience

- Methods to Manage the User Experience
- Common User Experience Settings

7: Published App and Desktop Presentation and Management

- Published App Properties
- Server OS Published App Optimizations
- Published App Presentation
- Application Groups
- Apps and Desktops Presentation
- > 8: Manage Printing for User Sessions
- ➤ Map Printers to the User Session
- Printer Drivers
- Print Environment Considerations

9: Citrix Profile Management

- > Introduction and Considerations
- Configure Citrix Profile Management

10: Manage the Site

- Delegated Administration
- Use PowerShell with Citrix Virtual Apps and Desktops
- Power Management Considerations

11: Citrix Virtual Apps and Desktops Basic Security Considerations

- Citrix Admin Security Considerations
- > XML Service Security Considerations
- Secure HDX External Traffic

12: Monitor the Site

- Citrix Director Introduction
- Monitor and Interact with User Sessions
- Published Apps Analysis
- Monitor the Machines Running the VDA
- Site Specific Common Monitoring
- Alerts and Notifications
- Optimize Citrix Director Monitoring with Citrix ADM

13: Introduction to Supporting and Troubleshooting Citrix Virtual Apps and Desktops

- ➤ Introduction to Supporting a Citrix Virtual Apps and Desktops Site
- > Tools
- Proactive Administration Common Tasks

14: Migrate To Citrix Cloud

- Migration Considerations
- Citrix Cloud Connector Deployment
- > Citrix Virtual Apps and Desktops with an On-Premises Resource Location
- > The Migration Process

15: Citrix Analytics

- Citrix Analytics Introduction
- Prepare to Use Citrix Analytics
- > Types of Analytics

Prerequisites:

- System administration experience on Microsoft Windows or Linux operating systems
- Basic Knowledge on Networking and Storage

Who Can Attend:

- All students who start their Microsoft servers study.
- Help Desk who wants to improve to next level as a system admin.
- System Administrators

Number of Hours: 100hrs

Certification: 70-740, 70-741, 70-742, VCP, VCA & CCA-V / CC-VAD-CC (CWS-215)

Key Features:

- One to One Training
- Online Training

- > Fastrack & Normal Track
- > Resume Modification
- Mock Interviews
- Video Tutorials
- Materials
- Real Time Projects
- Virtual Live Experience
- Preparing for Certification

