

5 Days

20409 Server Virtualization with Windows Server Hyper-V and System Center

The Server Virtualization training is a five-day course that imparts essential knowledge and skills required to design and implement Microsoft Server Virtualization solutions using Hyper-V and System Center.

Completion of this training course will enable candidates to:

- Install and configure the Hyper-V server role.
- Evaluate an organization's virtualization requirements and plan.
- Implement virtual machine movement and Hyper-V Replica.
- Create & configure virtual machine networks in a Hyper-V environment.
- Create virtual machines, and managing virtual hard disks and work with snapshots.
- Provide high availability for Hyper-V environment.
- Configuring and managing Virtual Machine Manager library and library objects.
- Create and manage virtual machines by Virtual Machine Manager.
- Manage virtual environment by using System Center 2012 R2 Virtual Machine Manager.

Course Details

Course Outline

Module 1: Evaluate the Environment for Virtualization

- Microsoft Virtualization
- System Center 2012 R2 Components
- Evaluate Current Environment for Virtualization
- Extend Virtualization to the Cloud Environment

Module 2: Install and Configure the Hyper-V Role

- Install the Hyper-V Role
- Manage Hyper-V

- Hyper-V Host Storage and Networking
- Configure Hyper-V Settings

Module 3: Create and Manage Virtual Hard Disks, Machines, and Checkpoints

- Create and Configure Virtual Hard Disks
- Create and Configure Virtual Machines
- Install and Import Virtual Machines
- Manage Virtual Machine Checkpoints
- Design Virtual Machines for Server Roles and Services
- Monitor Hyper-V

Module 4: Create and Configure Virtual Machine Networks

- Create and Use Hyper-V Virtual Switches
- Configure and Use Hyper-V Network Virtualization
- Advanced Hyper-V Networking Features

Module 5: Virtual Machine Movement and Hyper-V Replica

- Provide High Availability and Redundancy for Virtualization
- Implement and Manage Hyper-V Replica
- Implement Virtual Machine Movement

Module 6: Implement Failover Clustering with Hyper-V

- Overview of Failover Clustering
- Implement and Manage Failover Clustering with Hyper-V
- Configure and Use Shared Storage

Module 7: Install and Configure System Center 2012 R2 Virtual Machine Manager

- Integrate System Center and Server Virtualization
- Overview of VMM
- Install VMM
- Add Hosts and Managing Host Groups

Module 8: Manage the Networking and Storage Infrastructure in System Center 2012 R2 Virtual Machine Manager

- Manage Networking Infrastructure
- Manage Storage Infrastructure
- Manage Infrastructure Updates

Module 9: Create and Manage Virtual Machines by Using Microsoft System Center 2012 R2 Virtual Machine Manager

- Virtual Machine Management Tasks in VMM
- Create, Clone, and Convert Virtual Machines
- Virtual Machine Updating

Module 10: Configure and Manage the Microsoft System Center 2012 R2 Virtual Machine Manager Library and Library Objects

- Overview of the Virtual Machine Manager Library
- Work with Profiles and Templates

Module 11: Manage Clouds in Microsoft System Center 2012 R2 Virtual Machine Manager

- Introduction to Clouds
- Create and Manage a Cloud
- Work with User Roles in Virtual Machine Manager

Module 12: Manage Services in Microsoft System Center 2012 R2 Virtual Machine Manager and App Controller

- Understand Services in VMM
- Create and Manage Services in VMM
- Use App Controller

Module 13: Protect and Monitor Virtualization Infrastructure

- Backup and Restore Options for Virtual Machines Overview
- Protect Virtualization Infrastructure by Using DPM
- Use Operations Manager for Monitoring and Reporting
- Integrate VMM with Operations Manager

Additional Reading

To prepare yourself for this class, review the following resources:

- Course 20410B - Installing and Configuring Windows Server® 2012
- Course 20411B - Administering Windows Server® 2012

Who Should Attend

- This course is intended for IT professionals who are involved in designing, implementing, managing, and maintaining a virtualization infrastructure.
- The remaining majority for this course may include IT decision makers who will determine which virtualization product to implement in their data centers.

Pre Requisite

Before attending this course, candidates must have:

- Basic understanding of TCP/IP and networking concepts
- Basic understanding of different storage technologies and concepts
- Basic knowledge of Windows PowerShell
- The ability to work in a team/virtual team

Exams

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