

20409BC	Server Virtualization with Windows Server Hyper-V and System Center	5 DAYS	SATV : YES
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Course Description

Get professional, experienced instruction and hands-on practice implementing Microsoft Server Virtualization technologies using Windows Server 2012 R2 Hyper-V and System Center 2012 R2 Virtual Machine Manager in this 5-day Microsoft Official Course. You will learn the skills you need to deploy and manage a Microsoft Server Virtualization infrastructure in an enterprise environment. You will learn how to install, configure, manage, and maintain Windows Server 2012 R2 Hyper-V and System Center 2012 R2 Virtual Machine Manager including networking and storage services. You will learn how to configure key Microsoft Server Virtualization features such as Generation 2 Virtual Machines, Replication Extension, Online Export, Cross-Version Live Migration, Online VHDX Resizing, Live Migration Performance tuning as well as Dynamic Virtual Switch Load Balancing and virtual Receive Side Scaling (vRSS). As part of the learning experience, you will also perform hands-on exercises in a virtual lab environment.

Course Outline

Module 1: Evaluating the Environment for Virtualization

- Overview of Microsoft Virtualization
- Overview of System Center 2012 R2 Components
- Evaluating Current Environment for Virtualization
- Extending Virtualization to the Cloud Environment

Module 2: Installing and Configuring the Hyper-V Role

- Installing the Hyper-V Role
- Managing Hyper-V
- Configuring Hyper-V Settings
- Hyper-V Host Storage and Networking

Module 3: Creating and Managing Virtual Hard Disks, Virtual Machines, and Checkpoints

- Creating and Configuring Virtual Hard Disks
- Creating and Configuring Virtual Machines
- Installing and Importing Virtual Machines
- Managing Virtual Machine Checkpoints
- Monitoring Hyper-V
- Designing Virtual Machines for Server Roles and Services

Module 4: Creating and Configuring Virtual Machine Networks

- Creating and Using Hyper-V Virtual Switches
- Advanced Hyper-V Networking Features
- Configuring and Using Hyper-V Network Virtualization

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Module 5: Virtual Machine Movement and Hyper-V Replica

- Providing High Availability and Redundancy for Virtualization
- Implementing Virtual Machine Movement
- Implementing and Managing Hyper-V Replica

Module 6: Implementing Failover Clustering with Hyper-V

- Overview of Failover Clustering
- Configuring and Using Shared Storage
- Implementing and Managing Failover Clustering with Hyper-V

Module 7: Installing and Configuring System Center 2012 R2 Virtual Machine Manager

- Integrating System Center and Server Virtualization
- Overview of VMM
- Installing VMM
- Adding Hosts and Managing Host Groups

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

- Managing Networking Infrastructure
- Managing Storage Infrastructure
- Managing Infrastructure Updates

Module 9: Creating and Managing Virtual Machines by Using Microsoft System Center 2012 R2 Virtual Machine Manager

- Virtual Machine Management Tasks in VMM
- Creating, Cloning, and Converting Virtual Machines
- Overview of Virtual Machine Updating

Module 10: Configuring and Managing the Microsoft System Center 2012 R2 Virtual Machine Manager Library and Library Objects

- Overview of the Virtual Machine Manager Library
- Working With Profiles and Templates

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

- Introduction to Clouds
- Creating and Managing a Cloud
- Working With User Roles in Virtual Machine Manager

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

- Understanding Services in VMM
- Creating and Managing Services in VMM
- Using App Controller

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Module 13: Protecting and Monitoring Virtualization Infrastructure

- Overview of Backup and Restore Options for Virtual Machines
- Protecting Virtualization Infrastructure by Using DPM
- Using Operations Manager for Monitoring and Reporting
- Integrating VMM with Operations Manager