

## **MOC 6331A - Deploying and Managing Microsoft System Center Virtual Machine Manager**

**Number of Days:** Three (3)

This three-day instructor-led course teaches students how to implement a Microsoft System Center Virtual Machine Manager V2 solution in an organization. The course also discusses how to install, configure, and deploy VMM.

### **Instructors:**

The instructors that deliver this course are experienced, enterprise consultants who have experience in the deployment of Operations Manager. All of our instructors have real-world expertise and are both accomplished consultants and excellent presenters that make the delivery interesting and provide insight into real world issues that they have had to provide solutions to.

### **Description:**

This class consists of the following sessions:

- Session 1:** Installing System Center Virtual Machine Manager
- Session 2:** Configuring VM Hardware, Hosts, and User Roles
- Session 3:** Configuring the VMM Self-Service Portal and Library
- Session 4:** Deploying and Managing VMs
- Session 5:** Converting from Physical or Virtual Platforms
- Session 6:** Deploying Highly Available VMs
- Session 7:** Managing Virtual Machine Checkpoints and Updates
- Session 8:** Implementing Monitoring and Reporting
- Session 9:** Monitoring and Troubleshooting Jobs
- Session 10:** Complex Environments
- Session 11:** Migrating from MOM 2005 to Operations Manager 2007

### **Session 1: Installing System Center Virtual Machine Manager**

Session 1 describes the installation prerequisites for VMM and describes the procedure for installing VMM. In addition, Session 1 describes the procedure to install the VMM Administrator Console and the VMM Self-Service Portal.

### **Lessons**

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- Installing System Center Virtual Machine Manager Server Components
- Installing the VMM Administrator Console
- Installing the VMM Self-Service Portal

**Lab : Installing System Center Virtual Machine Manager**

- Installing VMM Server
- Installing the VMM Administrator Console
- Installing the VMM Self-Service Portal and Configuring a DNS Record

**Session 2: Configuring VM Hardware, Hosts, and User Roles**

Session 2 describes host server hardware configuration considerations. In addition, Session 2 describes general host server configuration procedures including security configuration procedures.

**Lessons**

- Adding Hosts to VMM
- Configuring Hardware
- Configuring VMM Settings
- Managing VMM Security

**Lab : Configuring VM Hardware, Hosts, and User Roles**

- Configuring Hosts
- Configuring VM Hardware
- Configuring User Roles

**Session 3: Configuring the VMM Self-Service Portal and Library**

Session 3 describes considerations and procedures for configuring the VMM Self-Service Portal and Library. This includes enabling user- or group-level access to the Self-Service Portal, configuring quotas, and using the Self-Service Portal to self-provision VMs. In addition, Session 3 describes procedures for maintaining VMM library servers and shares and the contents of library shares.

**Lessons**

- Configuring the VMM Self-Service Portal
- Maintaining a VMM Library
- Managing Library Files

**Lab : Configuring the VMM Self-Service Portal and Library**

- Configuring the VMM Self-Service Portal
- Maintaining a VMM Library

**Session 4: Deploying and Managing VMs**

Session 4 describes VM deployment and management tasks. This includes using VMM Intelligent Placement, VM Templates, and other automated VM deployment tools. In addition, Session 4 describes using VMM to move VMs between available hosts.

**Lessons**

- Deploying VMs
- Moving VMs Between Hosts

**Lab : Deploying and Managing VMs**

- Deploying VMs
- Using Intelligent Placement

**Session 5: Converting from Physical or Virtual Platforms**

Session 5 describes important considerations for converting physical and virtual computers to Microsoft VMs. This includes procedures for using deployment agents to execute conversions to Microsoft VMs as well as converting from third-party formats.

**Lessons**

- Converting Physical Computers to Virtual Machines
- Migrating Virtual Machines to Hyper-V

**Lab : Converting Virtual Machines Using VMM**

- Converting a Microsoft Virtual Server VM
- Converting a VMWare Virtual Machine

**Session 6: Deploying Highly Available VMs**

Session 6 describes considerations and procedures for deploying clustered VMs.

**Lessons**

- Introducing Virtual Machine High Availability
- Deploying Host Clustering
- Deploying Guest Clustering

**Lab : Planning for Highly Available Virtual Machines**

- Designing Host Clustering Hardware
- Selecting Guest Clustering Type

**Session 7: Managing Virtual Machine Checkpoints and Updates**

Session 7 describes procedures for managing VMs using checkpoints and updates. This includes identifying scenarios for using VMM VM Checkpoints and procedures for creating VM Checkpoints. In addition, Session 7 describes update deployment using WSUS and SCCM tools.

**Lessons**

- Managing Virtual Machine Checkpoints
- Managing Virtual Machine Updates

**Lab : Managing Virtual Machine Checkpoints and Updates**

- Managing Virtual Machine Checkpoints
- Managing Virtual Machine Updates

**Session 8: Implementing Monitoring and Reporting**

Session 8 describes procedures for integrating System Center Operations Manager with VMM to extend the capabilities of VMM. This includes using SCOM reporting with VMM. In addition,

Session 8 describes using SCOM to select potential virtualization targets and to monitor and plan host server utilization.

**Lessons**

- Integrating System Center Operations Manager
- Performance and Resource Optimization
- Planning and Managing Hyper-V

**Lab : Configuring VMM and Operations Manager for Reporting**

- Setting Up VMM for Reporting and PRO
- Enabling PRO
- Viewing Reports

**Session 9: Monitoring and Troubleshooting Jobs**

Session 9 describes procedures for monitoring and troubleshooting VMM jobs. This includes monitoring and verifying multiple job types as well as recovering from failed jobs.

**Lessons**

- Monitoring Jobs
- Troubleshooting and Repairing Jobs

**Lab : Troubleshooting Jobs**

- Using PowerShell to View Jobs
- Running PowerShell Script to Generate Jobs
- Managing Jobs
- Troubleshooting Failed Jobs