



MCSE: Cloud Platform and Infrastructure

This course is developed for IT professionals to monitor and operate a cloud with Microsoft® System Center 2012 R2. This course focuses on how to manage and administer a cloud environment, and it describes how you can monitor key infrastructure elements and applications that run within a cloud.

ZOOM
TECHNOLOGIES

Monitoring and Operating a Private Cloud

(Exam : 70-246)

Course Outline

1. Introduction to the Cloud Model

- Overview of the Cloud Computing Model
- Requirements for a Private Cloud
- Requirements for a Public or Hybrid Cloud
- Operating a Hybrid Cloud Infrastructure with System Center
- Maintaining the Health of a Cloud
- Integrating System Center Components

2. Configuring a Private Cloud Environment

- Overview of System Center 2012 R2 Virtual Machine Manager
- Managing the Virtual Environment with Virtual Machine Manager
- Creating Clouds

3. Deploying Cloud Services

- Overview of Service Templates
- VMM Profiles
- Web Deploy Packages
- Overview of Server App-V
- Data-Tier Application Packages
- Deploying Services through App Controller

4. Monitoring Cloud Based Applications

- Overview of System Center 2012 R2 Operations Manager
- Agent Deployment in Operations Manager
- Configuring Custom Monitoring
- Monitoring the Network Infrastructure
- Monitoring Distributed Applications

5. Configuring Application Performance Monitoring

- Application Performance Monitoring
- Advanced Monitoring in APM
- Viewing Application Performance Data in Operations Manager

6. Operating and Extending Service Management in the Private Cloud

- Overview of Service Manager
- Configuring Security and User Roles
- Configuring Work Items
- Configuring Incident Queues
- Configuring Service Offerings for a Cloud

7. Automating Incident Creation, Remediation, and Change Requests

- Overview of System Center 2012 R2 Orchestrator
- Integrating Orchestrator with Operations Manager and Service Manager

8. Problem Management in the Private Cloud

- Overview of Problem Management
- Creating Custom Rules

9. Operating a Self Service, Multi-Tenant Cloud with Windows Azure Pack

- Windows Azure Pack Key Concepts
- Administer Windows Azure Pack
- Windows Azure Pack Providers

10. High Availability, Protection, and Recovery for the Cloud

- High Availability for a Cloud
- Protecting Data in the Private Cloud
- Recovering Data in the Private Cloud

11. Optimizing Your Cloud Infrastructure

- Using Virtual Machine Manager to Keep the Cloud Infrastructure Up-to-Date
- Using Configuration Manager to keep Virtual Machines up-to-date
- Using System Center Advisor to Optimize Cloud infrastructure
- Using Pro-Tips to Optimize Cloud infrastructure

12. Configuring SLAs, Dashboards, and Widgets

- Service Level Tracking
- Configuring and Deploying Widgets and Dashboards
- Publishing Real-Time State with Microsoft Visio Snap-in
- System Center Analytics
- Using Excel and SSRS to View Data
- Configuring Service Reporting

Configuring and Deploying a Private Cloud (Exam : 70-247)

Course Outline

1. Planning for the Cloud

- Understanding Cloud Models
- Benefits for Deploying a Private Cloud
- Designing a Private Cloud Infrastructure
- Overview of Windows Server 2012 R2 Hyper-V
- Overview of System Center 2012 R2 Components
- Deploying Hyper-V Clustering with VMM

2. Configuring and Deploying the Private Cloud with Microsoft System Center 2012 R2 Virtual Machine Manager

- Overview of VMM Architecture and Components
- Configuring Advanced Networking in VMM
- Installing and Upgrading VMM
- Configuring VMM Security and Roles
- Understanding Host Groups

3. Extending and Maintaining Cloud Infrastructure

- Overview of the PXE and Update Server Roles
- Deploying Bare-Metal Hyper-V Host Servers
- Configuring the Update Server Role
- Creating and Using an Update Baseline

4. Configuring Application Delivery

- Dynamic Application Deployment Overview
- Web Deployment Packages
- Server Application Virtualization Overview
- Configuring Server App-V Components
- Sequencing and Deploying Virtual Applications

5. Creating the Private Cloud Building Blocks

- Configuring Guest Operating System Profiles
- Configuring Hardware Profiles
- Configuring SQL Server Using SQL Server Profiles
- Configuring Application Profiles
- Configuring Virtual Machine Templates
- Configuring Service Provider Foundation
- Configuring User Roles

6. Deploying and Configuring Access to a Private Cloud

- Understanding Private Cloud Computing
- Installing and Configuring App Controller
- Creating and Managing Service Templates

7. Monitoring Cloud Infrastructure

- Operations Manager Architecture and Security
- Operations Manager Installation Considerations
- Configuring User Roles and Notifications
- Configuring Management Packs
- Configuring Integration with System Center 2012 R2

8. Extending and Customizing Monitoring of the Cloud Infrastructure

- Configuring System Center Advisor
- Configuring the SharePoint Server Portal
- Monitoring Templates
- Distributed Application Monitoring

9. Implementing Service Management for the Cloud

- Service Manager Architecture Overview
- Upgrading to System Center 2012 R2 Service Manager
- Understanding Service Manager Work Items
- Configuring Service Manager Connectors
- Configuring Service Manager Notifications

10. Configuring High Availability, Disaster Recovery and Protection for a Cloud

- Planning for Azure Site Recovery
- Planning DPM Deployment
- DPM Architecture and Components
- Upgrading DPM
- Configuring DPM for the Private Cloud
- Configuring Application Protection for a Cloud
- Restoring Applications to the Cloud

11. Automating and Standardizing a Cloud

- Orchestrator Architecture and Components Overview
- Deploying and Configuring Core Components
- Managing Runbooks
- Configuring Integration Packs

12. Configuring a Self-Service Multi-Tenant Cloud with the Windows Azure Pack

- Configuring the Windows Azure Pack