

## System Center Operations Manager 2012

**Length:** 5 Days

**Summary:** This five-day course provides instructor-led students with the knowledge to successfully design and deploy Microsoft's System Center 2012- Operations Manager (SCOM). In this course, students are introduced to the basic theory of service monitoring. Students also learn about configuration, deployment, monitoring, and operation. Upon course completion, students will have the skills necessary to manage Operations Manager for maximum business benefit. This course incorporates case-studies and hands-on learning opportunities so students can practice applying business solutions to real-world scenarios.

**Objectives:** After completing this course, students will be able to:

- Design and Build a Production Service Monitoring Program
- Configure and administer Operations Manager 2012
- Design monitoring deployment for Microsoft and non-Microsoft scenarios
- Deploy monitoring for servers, applications and services
- Deploy monitoring for UNIX/Linux and Network Devices
- Tune monitors and rules for maximum benefit
- Automate Operations Manager with PowerShell
- Meet and exceed SLA's in order to bring value to business partners
- Integrate Operations Manager with other tools

**Audience:** This course is intended for IT Professionals who already have some pre-requisite technical knowledge and want to learn the skills necessary to implement a comprehensive service monitoring system for their production environment. This course is also for IT Professionals who want to learn how to communicate relevant business information about the operational status of the IT environment.

**Prerequisites:** Before taking this course, students should have pre-requisite technical knowledge in the following areas:

- Windows Server® 2008 R2 operating system
- Active Directory® Domain Services (AD DS)
- Familiarity with data center management processes
- Previous work with IT Infrastructure Library (ITIL)
- Previous work with Microsoft Operations Framework (MOF)
- Experience with PowerShell and SQL Server and SQL Server Reporting Services
- Knowledge of previous versions of Operations Manager helpful
- Knowledge of the product(s) that you plan to monitor

## COURSE CONTENT

### INTRODUCTION TO SYSTEM CENTER 2012 OPERATIONS MANAGER

- History and Evolution of System Center
- System Center 2012 Product Suite
- System Center 2012 Licensing
- System Center 2012 Operations Manager
- Lab: Introduction to System Center 2012 Operations Manager
  - Setting up the initial lab environment
  - Introduction system center 2012
- After completing this module, students will be able to:
  - Explain in history and evolution of system center
  - Differentiate between each of the system center 2012 products
  - Describe system center 2012 licensing
  - Identify the purpose and function of operations manager 2012

### PLAN FOR SERVICE MONITORING

- Introducing ITIL and MOF
- Designing the service monitoring process
- Documenting the service monitoring process
- Lab: Plan for service monitoring
  - Introducing service management
- After completing this module, students will be able to
  - Provide an overview of ITIL and MOF
  - Design and document a service monitoring plan

### PLAN AN OPERATIONS MANAGER 2012 DEPLOYMENT

- Defining the operations manager 2012 core components
- Designing for high availability
- Defining core hardware and software requirements
- Designing network device monitoring requirements
- Designing UNIX/LINUX monitoring requirements
- Designing windows-based monitoring requirements
- Lab: Plan an operations manager 2012 deployment
  - Planning for operations manager 2012 deployments
  - Exploring operations manager 2012 SQL database objects
- After completing this module, students will be able to:
  - Define what a management group and its components are
  - Design a highly available system center 2012 operations manager environment
  - Plan and design the necessary hardware and software components
  - Describe the necessary components for network device monitoring
  - Describe the necessary components of UNIX/LINUX based server monitoring
  - Implement Windows-based server monitoring

### DEPLOY OPERATIONS MANAGER 2012

- Reviewing Environmental Prerequisites
- Installing Operations Manager 2012
- Verifying Operations Manager 2012 Installation and Additional Configuration
- Creating and Using Run As Accounts

- Implementing Active Directory Integration
- Designing and Implementing Role-Based Administration
- Lab: Deploy operations manager 2012
  - Installing Operations Manager 2012
  - Configuring Active Directory Integration
  - Configuring Role-Based Security
- After completing this module, students will be able to
  - List the environmental prerequisites needed to install Operations Manager 2012 and Active Directory accounts
  - Describe how to install and configure a management group and its components
  - Verify the successful implementation of basic management group components
  - Create and use Run As accounts
  - Design a role-based administrative model
  - Explain what Active Directory Integration is

#### **DEPLOY THE OPERATIONS MANAGER 2012 AGENT**

- Reviewing the Operations Manager 2012 Agent
- Deploying the Operations Manager 2012 Agent
- Introducing Agent Failover
- Lab: Deploy the operations manager 2012 agent
  - Deploying the operations manager 2012 agent
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- After completing this module, students will be able to
  - Explain the agent architecture
  - Explain agent deployment methods
  - Describe what Active Directory auto assignment is
  - Describe how the agent will handle a primary management server failure

#### **DEPLOYMENT AND ADMINISTRATION OF MONITORING (MANAGEMENT) PACKS**

- Introducing Monitoring (Management) Packs
- Understanding Most Commonly Used Monitoring (Management) Packs
- Modifying and Expanding Monitoring (Management) Packs: Overrides
- Monitoring (Management) Pack Administration Best Practices
- Lab: Deployment and administration of monitoring (management) packs
  - Creating Management Packs and Groups
  - Installing Line of Business .NET Application
  - Installing and Importing Management Packs
- After completing this module, students will be able to
  - Explain what a monitoring (management) pack is
  - Describe the components of a monitoring (management) pack
  - Explain how to obtain a monitoring (management) pack
  - Deploy monitoring (management) pack
  - Explain the difference between sealed and unsealed

monitoring (management) packs

- Override a monitoring (management) pack
- Describe best practices for monitoring (management) pack administration

### **TUNE MONITORING (MANAGEMENT) PACKS**

- Introducing Alerts
- Tuning a Monitoring (Management) Pack
- Using Operations Manager Baseline Monitors and Rules
- Documenting Changes to Monitoring (Management) Packs
- Lab: Tune Monitoring (management) Packs
  - Tuning monitoring (management) packs
- After completing this module, students will be able to
  - Describe alerts
  - Describe the monitoring (management) pack tuning process
  - Describe baseline monitors and rules
  - Document overrides

### **MONITOR ADMINISTRATION**

- Exploring the Operations Console – Monitoring Pane
- Administering Alerts
- Exploring Agent-Based Monitoring
- Customizing the Monitoring Pane
- Lab: Monitor Administration
  - Working with monitors and alerts
- After completing this module, students will be able to
  - Navigate the monitoring pane in the Operations console
  - Investigate an alert
  - Use Health Explorer
  - Explain maintenance mode
  - Describe and create Views

### **ADVANCED MONITORING**

- Monitoring Network Devices
- Monitoring UNIX/LINUX-Based Computers
- Monitoring .NET-Based Applications
- Expanding Operations Manager 2012 Monitoring
- Lab: Advanced Monitoring
  - Monitoring a network device
  - Monitoring a .NET application
- After completing this module, students will be able to
  - Monitor network devices
  - Monitor UNIX/LINUX-based computers
  - Monitor .NET-based applications
  - Monitor distributed applications
  - Expand monitoring by using monitoring (management) pack templates

### **REPORTS**

- Using Operations Manager 2012 Reporting
- Administering Reports
- Customizing Reports
- Lab: Reports
  - Reporting
- After completing this module, students will be able to
  - Understand how Operations Manager 2012 Reporting and SQL Server Reporting Services work together
  - Manage default Operations Manager 2012 reports
  - Create customized reports

### **NOTIFICATIONS AND OPERATIONS MANAGER 2012 MAINTENANCE**

- Introducing Alert Notifications
- Designing Maintenance and Disaster Recovery
- Lab: Notifications and operations manager 2012 maintenance

- Creating subscriptions and notifications
- After completing this module, students will be able to
  - Describe and configure Operations Manager 2012 notifications
  - Plan and perform routine maintenance
  - Create a disaster recovery plan

#### **SYSTEM CENTER 2012 INTEGRATION**

- Lab: System Center 2012 Integration
  - Setting up the Initial Lab Environment
  - Creating an Orchestrator 2012 Runbook
  - Working with Orchestrator System Center Runbooks
- After completing this module, students will be able to
  - Describe System Center 2012 Integration