10964 - Cloud & Datacenter Monitoring with System Center Operations Manager

Duration: **5 days**

Overview:

This 5-day Microsoft 10964 training courseequips students with the skills they require to deploy and configure System Center 2012 R2 Operations Manager. Read on…

Target Audience:

The primary audience for this course is for cloud and datacenter administrators who are new to System Center 2012 R2 Operations Manager and are responsible for deploying, configuring and operating it in their cloud or datacenter. The secondary audience for this course is cloud and datacenter administrators who are already familiar with Operations Manager and want to upgrade their skills to include the new features found in System Center 2012 Operations Manager, System Center 2012 SP1 Operations Manager and System Center 2012 R2 Operations Manager.

Pre-requisites:

In addition to their professional experience, students who attend this training should already have the following technical knowledge:

- One or more years' experience in the design and implementation of System Center Operations 2007 R2 or System Center 2012 Operations Manager is desired.
- Working knowledge of Windows Server 2008 R2 and Windows Server 2012 R2.
- Working knowledge of SQL Server 2008 R2 and SQL Server 2012.

Module 1: Overview and Architecture

Lessons
- Operations Manager in the Cloud and Data Center
- Operations Manager Overview
- Core Components and Topology
- Key features of System Center 2012 R2 Operations Manager
- Planning and Sizing System Center 2012 R2 Operations Manager

Lab : Using the System Center 2012 Operations Manager Sizing Helper Tool
- Calculate the hardware requirements for Contoso's Management Group
- Create a Visio diagram of the proposed Management Group design

Module 2: Deploying a new System Center 2012 R2 Operations Manager Management Group

Lessons
- Security Considerations
- Management Group Design Considerations
- Installing System Center 2012 R2 Operations Manager
- Configuring Operations Manager Default Settings
- Configuring Agentless Exception Monitoring (AEM)
- Agent Deployment Methods
- Configuring Audit Collection Services

Lab : Installing System Center 2012 R2 Operations Manager and Deploying Agents
- Installing a new System Center 2012 R2 Operations Manager Management Group
- Installing and Configuring the Gateway Server
- Installing the Operations Manager Agent
- Configuring Active Directory Integration
- Installing and Configuring Audit Collection Services (ACS)
- Configuring Agentless Exception Monitoring (AEM)

Module 3: Upgrading Operations Manager

Lessons
- Migration and Upgrade Planning
- Upgrading to System Center 2012 R2 Operations Manager
- Migrating to System Center 2012 R2 Operations Manager

Lab : Upgrading to System Center 2012 R2 Operations Manager
- Preparing the Operations Manager 2007 R2 Environment for Upgrade
- Upgrading the Operations Manager 2007 R2 Management Group to System Center 2012 Operations Manager
- Upgrading the System Center 2012 Operations Manager Management Group to System Center 2012 SP1 Operations Manager
- Upgrading the System Center 2012 SP1 Operations Manager Management Group to System Center 2012 R2 Operations Manager

Module 4: Configuring Fabric and Application Monitoring

Lessons
- Management Packs Fundamentals
- Configuring Network Device Monitoring
- Configuring Fabric Monitoring
- Configuring Application Monitoring

Lab : Configuring Application and Fabric Monitoring
- Installing the System Center Management Pack for Windows Server Operating System
- Install and configure the System Center Management Pack for SQL Server
- Install the System Center 2012 Management Pack for Microsoft Windows Server 2012 Internet Information Service 8.
- Install and configure the System Center Management Pack for SharePoint Server 2013
- Configure Network Monitoring
- Configure integration between Operations Manager and Virtual Machine Manager
- Install the System Center Management Pack for VMM Fabric Dashboard 2012 R2

At Course Completion:

After completing this course, students will be able to:

- Plan for the deployment of System Center 2012 R2 Operations Manager including:
- Defining hardware and software requirements.
- Describing security considerations.
- Architect a highly available System Center and Microsoft SQL Server platform utilising Microsoft SQL Server AlwaysOn.
- Planning for migration and upgrade scenarios to System Center 2012 R2 Operations Manager.
- Customise the Operations Console with User Roles.
- Perform different methods of Agent deployment with System Center 2012 R2 Operations Manager.
- Implement key Management Pack concepts and elements including Management Packs Templates.
- Configure Notifications, Reporting, and Service Level Tracking in System Center 2012 R2 Operations Manager.
- Configure the following: Audit Collection Services, Agentless Exception Monitoring, and Operations Manager SharePoint Web Part in System Center 2012 R2 Operations Manager.
- Configure Application Performance Monitoring and Network Device monitoring in System Center 2012 R2 Operations Manager.
- Configure dashboards and widgets in System Center 2012 R2 Operations Manager.
- Describe how to use new cloud-based features including System Center Global Service Monitor and System Center Advisor.
- Configure integration between System Center 2012 R2 Operations Manager and other System Center 2012 R2 components.
- Troubleshoot an Operations Manager Management Group.
- Perform disaster recovery in System Center 2012 R2 Operations Manager.

Module 5: Application Performance Monitoring

Lessons
- Application Performance Monitoring
- Using IntelliTrace
- Team Foundation Server Integration

Lab : Configuring Application Performance Monitoring
- Monitoring .NET and Java applications with Application Performance Monitoring
- Using IntelliTrace
- Using the APM Consoles
- Configuring integration with Team Foundation Server

Module 6: End to End Service Monitoring

Lessons
- Management Pack Templates
- Distributed Application Models
- Global Service Monitor
- Real-time Visio Dashboards

Lab : Configuring End to End Service Monitoring
- Configuring Synthetic Transactions
- Configuring the Summary Dashboard with agent locations
- Building a Distributed Application Model for Dinner Now
- Creating a Visio Dashboard

Module 7: Scorecards, Dashboards and Reporting

Lessons
- Configuring and Managing Reporting in Operations Manager
- Configuring Service Level Tracking
- Configuring the Operations Manager SharePoint WebPart
- Configuring Dashboards and Widgets
- Creating Custom Dashboards

Lab : Configuring Reporting, Dashboards and Service Level Tracking
- Design a custom report
- Scheduling Reports
- Configure Service Level Tracking for DinnerNow
- Configure an Alert Dashboard
- Configure a Performance Dashboard
- Configure a Summary Dashboard
- Configure an SLA Dashboard and add Publish the Dashboard to SharePoint
- Use the GTM Tool to Publish a Custom Dashboard

Module 8: Configuring and Customising the Console

Lessons
- Security, Scoping and User Roles
- Creating Custom Views
- Configuring Notification Subscriptions
- Creating Diagnostic and Recovery Tasks

Lab : Customising the Operations Console
- Create User Roles
- Create a Custom Resolution Status
- Create Custom Views
- Configuring Notification Subscriptions
- Configure Diagnostic & Recovery Tasks

Module 9: Management Pack Authoring

Lessons
- Management Packs Authoring Concepts
- Authoring a Management Pack

Lab : Authoring Management Packs
- Creating a Management Pack in the Operations Console
- Authoring a custom Management Pack using the Visual Studio Authoring Extensions

Module 10: System Center Integration

Lessons
- Integrating Operations Manager with Service Manager
- Integrating Operations Manager with Data Protection Manager
- Integrating Operations Manager with Orchestrator

Lab : Configuring System Center Integration
- Configure Service Manager Integration with Operations Manager
- Configure Operations Manager Integration with Data Protection Manager
- Configure Orchestrator Integration
- Implement Automatic Web Site Restart and Create an Incident if it Fails

Module 11: Troubleshooting, Tuning and Disaster Recovery

Lessons
- Troubleshooting Operations Manager Core Components
- Configuring SQL AlwaysOn for Operations Manager
- Configuring Data Retention in Operations Manager
- Using Reports to troubleshoot Operations Manager
- Disaster Recovery

Lab : Troubleshooting Operations Manager
- Troubleshoot a performance problem in Operations Manager
- Recovering from a Management Server Failure
- Recovering from an Operational database failure.