



Cloud & Datacenter Monitoring with System Center Operations Manager:

COURSE OVERVIEW

This course equips students with the skills they require to deploy and configure System Center 2012 R2 Operations Manager.

TARGET AUDIENCE

The primary audience for this course is 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.

COURSE OBJECTIVES

- 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 utilizing Microsoft SQL Server AlwaysOn.
- Planning for migration and upgrade scenarios to System Center 2012 R2 Operations Manager.
- Customize 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.
- 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.

COURSE CONTENT

- **Module 1: Overview and Architecture**
- Overview of Operations Manager
- Overview of Key Features in Operations Manager
- Overview of Core Components and Topology
- Addressing Cloud and Datacenter Issues by Using 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**
- Overview of Security Considerations
- Designing the Management Group
- Installing System Center 2012 R2 Operations Manager
- Configuring Operations Manager Default Settings
- Deploying the Operations Manager Agent
- Configuring Agentless Exception Monitoring (AEM)
- 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**
- Overview of 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**
- Introduction to Management Packs
- 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
- Installing and configuring the System Center Management Pack for SQL Server
- Installing the System Center 2012 Management Pack for Microsoft Windows Server 2012 Internet Information Service 8
- Installing and configuring the System Center Management Pack for SharePoint Server 2013
- Configuring Network Monitoring
- Configuring integration between Operations Manager and Virtual Machine Manager
- Using the System Center Management Pack for VMM Fabric Dashboard 2012 R2
- **Module 5: Application Performance Monitoring**
- Application Performance Monitoring
- Using IntelliTraceTeam Foundation Server Integration
- Lab : Monitoring .NET Framework Applications
- Monitoring .NET Applications
- Using IntelliTrace
- Configuring TFS Integration

- **Module 6: End to End Service Monitoring**

- Management Pack Templates
- Distributed Application Models
- Global Service Monitor
- Real-time Visio Dashboards
- Lab : Configuring End to End Service Monitoring
- Configure Agent Locations for the Summary Dashboard
- Configuring Synthetic Transactions
- Create a Distributed Application Diagram for DinnerNow
- Creating a Visio Diagram of the Distributed Application

- **Module 7: Scorecards, Dashboards and Reporting**

- 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 Customizing the Console**

- Security, Scoping and User Roles
- Creating Custom Views and Alert Resolution States
- Configuring Notification Subscriptions
- Creating Diagnostic and Recovery Tasks
- Lab : Customizing the Operations Console
- Creating User Roles and Importing the Active Directory Management Pack
- Creating Custom Resolution States
- Creating Custom Views
- Configuring Notifications

- Configuring Diagnostic and Recovery Tasks
- **Module 9: Management Pack Authoring**
- Management Packs Authoring Concepts
- Authoring Management Packs by using the Operations Console
- Authoring Management Packs by using the Visual Studio Authoring Extensions
- Lab : Authoring Management Packs
- Creating a Management Pack in the Operations Console
- Authoring a Management Pack using the Visual Studio Authoring Extensions
- **Module 10: Integrating Operations Manager with Other System Center Components**
- Service Manager Integration
- Data Protection Manager Integration
- Orchestrator Integration
- 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**
- Troubleshooting Operations Manager Core Components
- Tuning Management Packs
- Configuring SQL AlwaysOn for Operations Manager
- Configuring Data Retention in Operations Manager
- Disaster Recovery in Operations Manager
- Lab : Troubleshooting Operations Manager
- Troubleshooting an Agent installation failure in Operations Manager
- Recovering from a Management Server failure
- Recovering from an Operational database failure

COURSE PREREQUISITES

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.

