



# Course 6451B: Planning, Deploying, and Managing Microsoft System Center Configuration Manager 2007 R2

## ❖ The Course

This five-day course provides students with the knowledge and skills to plan, deploy, and manage Microsoft System Center Configuration Manager 2007 R2. The course focuses on planning and deploying a single-site System Center Configuration Manager infrastructure including client deployment, hardware and software inventory, software distribution, deploying operating systems, and managing software updates. The course also includes instruction on how to configure a multiple site hierarchy, and how to use Configuration Manager 2007 in native mode.

## ❖ Who Should Attend

This course is intended for systems engineers who have one to three years experience supporting multiple desktop and server computers running Windows Server operating systems in medium to large enterprise organisations, and those who plan on deploying Configuration Manager 2007.

Additionally, this course is intended for Configuration Manager 2007 administrators who are responsible for configuring and managing one or more Configuration Manager 2007 sites and their supporting systems.

## ❖ Pre-requisites

Before attending this course, students must have:

- A base-level understanding of Microsoft Systems Management Server (SMS) 2003 or Configuration Manager 2007.
- System Administrator - level working knowledge of:
  - Deployment, configuration, and troubleshooting for personal computers running Windows operating systems.
  - TCP/IP networking
  - Microsoft SQL Servers
  - Active Directory Domain Services (AD DS)
  - Basic Public Key Infrastructure (PKI) concepts



## ❖ Outline

### **Module 1: Overview of Microsoft System Center Configuration Manager 2007**

This module describes key features and primary infrastructure components of Configuration Manager 2007. This module also describes deployment scenarios for organisations of different sizes.

#### **Lessons**

- Introduction to Configuration Manager 2007
- Configuration Manager Features
- Configuration Manager Deployment Scenarios
- Overview of the Configuration Manager Client

#### **After completing this module, students will be able to:**

- Describe Configuration Manager 2007
- Describe the Configuration Manager Features
- Describe the Configuration Manager Deployment Scenarios
- Describe the Configuration Manager Client

### **Module 2: Planning and Deploying a Single-Site Architecture**

This module explains how you can plan, prepare to deploy, and implement a Configuration Manager 2007 site. This module also describes the process of discovery, and how Configuration Manager 2007 discovers resources to manage. The module concludes by describing the tools you can use to monitor and troubleshoot Configuration Manager 2007.

#### **Lessons**

- Planning a Configuration Manager 2007 Site Deployment
- Preparing to Deploy a Configuration Manager 2007 Site
- Installing a Configuration Manager 2007 Site Server
- Performing Post-Setup Configuration Tasks
- Discovering Resources
- Monitoring and Troubleshooting Tools in Configuration Manager 2007
  
- Lab: Deploying a Configuration Manager Site Server
- Lab: Deploying a Configuration Manager Site Server, Continued
- Lab: Managing Users and Configuring Boundaries and Discovery Methods
- Lab: Monitoring and Troubleshooting Configuration Manager 2007

#### **After completing this module, students will be able to:**

- Plan a Configuration Manager 2007 Site Deployment
- Prepare to deploy a Configuration Manager 2007 Site
- Install a Configuration Manager 2007 Site Server



### Module 3: Manage Users

This module explains the site system roles needed for client deployment. This module also describes different Configuration Manager client deployment methods, and describes how you can verify a successful deployment.

#### Lessons

- Client Deployment Methods
- Deploying Clients
- Managing Configuration Manager 2007 Clients
- Using Configuration Manager Reporting with Client Installation
  
- Lab: Deploying Configuration Manager 2007 Clients
- Lab: Verifying Client Deployment

#### After completing this module, students will be able to:

- Determine the most appropriate client deployment method.
- Deploy Configuration Manager 2007 clients.
- Manage and verify Configuration Manager 2007 client deployment.
- Use Configuration Manager reporting to monitor client deployment.

### Module 4: Inventory Collection, Software Metering, and Asset Intelligence

This module describes how you can use hardware and software inventory features to collect information related to client computers and files within a Configuration Manager 2007 hierarchy. This module also explains how you can implement software metering to help monitor and collect software usage data for Configuration Manager 2007 clients.

#### Lessons

- Overview of Inventory Collection
- Collecting Hardware Inventory
- Collecting Software Inventory
- Managing and Troubleshooting Inventory
- Asset Intelligence
- Metering Software Usage
  
- Lab: Collecting Inventory
- Lab: Using Asset Intelligence
- Lab: Configuring Software Metering

#### After completing this module, students will be able to:

- Describe Inventory Collection
- Explain how to collect hardware inventory
- Explain how to collect software inventory



## Module 5: Querying and Reporting Data

This module explains how you can use queries to find information related to resource discovery, inventory data, and status messages. This module also describes how you can use reports to easily organize and display information about the computers that Configuration Manager 2007 manages.

### Lessons

- Introduction to Data and Status Message Queries
- Managing Queries
- Configuring and Deploying a Reporting Point
- Managing Reports
- Creating and Using Dashboards
- SQL Reporting Services in Configuration Manager 2007 R2
- Client Status Reporting in Configuration Manager 2007 R2
  
- Lab: Creating Queries
- Lab: Creating a Reporting Point
- Lab: Managing Reports
- Lab: Working with Dashboards
- Lab: Using SQL Reporting Services
- Lab: Installing and Using Client Status Reporting

### After completing this module, students will be able to:

- Describe data and status message queries
- Manage queries
- Configure and deploy a reporting point

## Module 6: Distributing Software Using Microsoft System Center Configuration Manager 2007

This module describes how you can successfully set up the infrastructure that you need to deploy and launch applications, scripts, or executables, using software distribution.

### Lessons

- Overview of the Software Distribution Process
- Preparing for Software Distribution
- Overview of Distribution Points
- Creating and Populating Collections
- Configuring Collections
- Creating and Configuring Packages and Programs
- Distributing Packages
- Advertising Programs
- Monitoring and Troubleshooting Software Distribution
  
- Lab: Preparing for Software Distribution
- Lab: Creating and Configuring a Collection
- Lab: Creating a Package and Configuring Programs
- Lab: Deploying Applications by Using Software Distribution



**After completing this module, students will be able to:**

- Describe the software distribution process
- Explain how to prepare a site for software distribution
- Describe how distribution points work
- Explain how to create and populate collections for targeting software distribution

## **Module 7: Deploying Virtual Applications Using Microsoft® System Center Configuration Manager 2007**

This module describes how you can use Configuration Manager 2007 R2 to deploy and manage virtual application packages throughout your environment.

### **Lessons**

- Configuring the Infrastructure to Support Application Virtualisation
- Deploying and Managing Application Virtualisation Packages
- Using Virtual Application Programs
  
- Lab: Deploying Virtual Applications to Configuration Manager Clients

**After completing this module, students will be able to:**

- Describe infrastructure requirements to support App-V
- Deploy and manage virtual application packages
- Launch virtual applications on Configuration Manager clients

## **Module 8: Deploying and Managing Software Updates**

This module explains how the software updates feature integrates with Configuration Manager 2007. This module also describes how you prepare the software updates infrastructure, and how you manage software updates. This module concludes by describing how you can monitor and troubleshoot software updates.

### **Lessons**

- Overviews of Software Updates
- Preparing the Configuration Manager Site for Software Updates
- Managing Software Updates
- Monitoring and Troubleshooting Software Updates
  
- Lab: Deploying and Managing Software Updates

**After completing this module, students will be able to:**

- Describe how the software updates feature integrates with Configuration Manager 2007
- Prepare a Configuration Manager Site for software updates
- Manage software updates
- Monitor and troubleshoot software updates



## Module 9: Deploying Operating Systems Using Microsoft® System Center Configuration Manager 2007

This module explains Operating System Deployment, and how you can use it to deploy operating systems. This module also describes how you can work with task sequences, and how you can configure reference computers. Finally, this module explains how you can capture operating systems, and how you can capture and restore user state information.

### Lessons

- Overview of Operating System Deployment
- Task Sequences in Operating System Deployment
- Preparing for Operating System Deployment
- Capturing Operating System Images
- Managing User Data
- Deploying an Operating System
  
- Lab: Capturing a Reference Computer
- Lab: Performing an In- Place Upgrade Using Hard Links

### After completing this module, students will be able to:

- Describe Operating System Deployment
- Work with task sequences
- Configure reference computers
- Capture operating system
- Capture and restore user state information
- Deploy operating systems

## Module 10: Working with Desired Configuration Management

This module describes the Configuration Manager 2007 desired configuration management tools, and how you can use them to help manage your systems

### Lessons

- Overview of Desired Configuration Management
- Configuring Desired Configuration Management
- Integrating Microsoft Forefront Client Security Compliance
- Viewing and Troubleshooting Compliance Results
  
- Lab: Configuring Desired Configuration Management

### After completing this module, students will be able to:

- Describe desired configuration management
- Configure desired configuration management
- Integrate Microsoft Forefront Client Security with software patches.
- View and troubleshoot compliance results



## Module 11: Configuring Wake On LAN, Out of Band Management and Remote Tools

This module explains the Wake On LAN and out of band management features, and describes how you can configure them. This module also describes the Remote Tools feature, and how you can configure the Remote Tools Client Agent.

### Lessons

- Overview of Wake On LAN
- Overview of Out of Band Management
- Configuring Out of Band Management
- Overview of Configuration Manager 2007 Remote Tools
- Configuring the Remote Tools Client Agent
  
- Lab: Configuring and Using Remote Tools

### After completing this module, students will be able to:

- Describe the Wake On LAN feature
- Describe the Out of Band Management feature
- Configure Out of Band Management
- Describe the Remote Tools feature
- Configure the Remote Tools Client Agent

## Module 12: Planning and Configuring a Multiple Site Hierarchy

This module describes the options available for building a large-scale Configuration Manager 2007 system for your enterprise. This module also describes how you configure site communications, connect primary sites, install secondary sites, roam between sites, and decommission sites and hierarchies.

### Lessons

- Introduction to the Configuration Manager 2007 Site Hierarchy
- Configuring Configuration Manager 2007 Site Communications
- Installing a Secondary Site Server
- Roaming in Multiple Site Hierarchies
- Decommissioning Sites and Hierarchies
  
- Lab: Planning a Configuration Manager 2007 Hierarchy and Installing a Primary Child Site
- Lab: Installing Secondary Sites and Proxy Management Points
- Lab: Roaming Between Configuration Manager 2007 Sites

### After completing this module, students will be able to:

- Describe Configuration Manager 2007 Site hierarchies
- Describe site-to-site communication, and how to connect primary sites to parent sites
- Explain how to install a secondary child site
- Describe client roaming
- Explain how to remove sites from the hierarchy

## Module 13: Maintaining and Monitoring Microsoft® System Center Configuration Manager 2007

This module explains how you can configure and schedule site maintenance tasks, and backup and recovery tasks for Configuration Manager 2007. This module also explains how you can use Microsoft System Center Operations Manager 2007 to monitor Configuration Manager 2007. This module concludes by describing how you can use Windows Performance Monitor to monitor Configuration Manager 2007.

### Lessons

- Configuration Manager 2007 Maintenance Tasks
- Backup and Recovery of Configuration Manager 2007
- Using Microsoft System Center Operations Manager 2007
- Using Windows Performance Monitor to Monitor Configuration Manager
  
- Lab: Backing Up and Repairing a Primary Site System to Monitor Configuration Manager 2007
- Lab: Using Windows Performance Monitor to Monitor Configuration Manager 2007

### After completing this module, students will be able to:

- Describe and schedule site maintenance tasks for Configuration Manager
- Describe and schedule backup and recovery tasks for Configuration Manager
- Describe how to use Microsoft System Center Operations Manager 2007 to monitor Configuration Manager 2007
- Use Windows Performance Monitor to monitor Configuration Manager 2007

## Module 14: Microsoft System Center Configuration Manager 2007 Native Mode and Internet-Based Client Management

This module describes Configuration Manager native mode, and the Public Key Infrastructure (PKI) requirements for native mode. This module also explains how you configure sites for native mode, and how you configure Internet-based client management.

### Lessons

- Introduction to Configuration Manager 2007 Native Mode
- The Public Key Infrastructure Required for Native Mode
- Configuring Sites for Native Mode
- Internet-Based Client Management
  
- Lab: Configuring Native Mode Lesson 4: Internet-Based Client Management
- Lab: Configuring a Site for Internet-Based Client Management

### After completing this module, students will be able to:

- Describe Configuration Manager 2007 native mode
- Describe Public Key Infrastructure requirements for native mode
- Configure sites for native mode
- Configure Internet-Based Client Management