

# 6451 – Microsoft Planning, Deploying and Managing System Centre Configuration Manager

**Vendor Course Code:** 6451

**Course Length:** 5 days

**Overview:** This five-day, instructor-led course will provide you with the knowledge and skills to plan, deploy, and manage Microsoft System Centre Configuration Manager 2007. This course requires that students have a base-level understanding of Systems Management Server 2003 or Configuration Manager 2007. It also requires that students have a system administrator-level working knowledge of deployment, configuration, and troubleshooting for Windows-based personal computers, as well as a working knowledge of TCP/IP networking, Microsoft SQL Server, Active Directory Domain Services (AD DS) or Active Directory directory service, and basic Public Key Infrastructure concepts. This course focuses on planning and deploying sites and clients, configuring software distribution, deploying operating systems, and managing software updates. It also focuses on remote tools and managing mobile devices.

**Skills Gained:**

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

- Plan, deploy, and manage Microsoft System Centre Configuration Manager 2007 for the enterprise environment.
- Plan and deploy a single-site architecture.
- Plan for and complete client deployment.
- Use inventory collection, software metering, and Asset Intelligence.
- Query and report data.
- Distribute software using Microsoft System Centre Configuration Manager 2007.
- Deploy virtual applications using Microsoft System Centre Configuration Manager 2007.
- Deploy and manage software updates.
- Deploy operating systems using Microsoft System Centre Configuration Manager 2007.
- Work with desired configuration management.
- Configure Wake On LAN, power management, and remote tools.
- Plan and configure a multiple site hierarchy.
- Maintain and monitor Microsoft System Centre Configuration Manager 2007.
- Use Microsoft System Centre Configuration Manager 2007 native mode and Internet-Based Client Management.

**Key Topics:**

**Module 1: Overview of Microsoft System Centre Configuration Manager 2007**

This module explains Microsoft System Centre Configuration Manager 2007 features, and describes primary infrastructure components and deployment scenarios of Configuration Manager 2007.

**Lessons**

Introduction to System Centre 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 2007 features.
- Describe the Configuration Manager 2007 deployment scenarios.
- Describe the Configuration Manager client.

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

This module describes planning considerations and deployment tasks for implementing Microsoft System Centre Configuration Manager 2007 single-site architecture.

#### 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  
Tools for Monitoring and Troubleshooting Configuration Manager 2007

Lab : Deploying a Configuration Manager Site Server  
Installing Configuration Manager Prerequisites  
Extending the Active Directory Schema for Configuration Manager  
Installing Configuration Manager 2007 SP2  
Verifying a Successful Configuration Manager Site Server Installation  
Verifying the Creation of the System Management Container  
Installing Configuration Manager 2007 R3

Lab : Managing Users and Configuring Boundaries and Discovery Methods  
Managing Configuration Manager Users  
Configuring Boundaries  
Enabling and Configuring Discovery Methods

Lab : Monitoring and Troubleshooting Configuration Manager 2007  
Using the ConfigMgr Service Manager  
Reviewing Log Files with Trace32  
Reviewing Discovery Status Messages  
Configuring Status Messages

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.
- Perform post-setup configuration tasks.
- Configure and enable discovery methods.
- Monitor and troubleshoot Configuration Manager 2007.

### **Module 3: Planning for and Completing Client Deployment**

This module explains how to plan and deploy Configuration Manager 2007 clients.

#### Lessons

Client Deployment Methods  
Deploying Clients  
Managing Configuration Manager 2007 Clients  
Using Configuration Manager Reporting with Client Installation

Lab : Deploying Configuration Manager 2007 Clients  
Preparing the Site for Client Installation  
Deploying the Configuration Manager Client Using the Client Push Installation Method

Lab : Verifying Client Deployment  
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 explains how to collect and manage hardware and software inventory, implement software metering, and use Asset Intelligence.

#### Lessons

Overview of Inventory Collection  
Collecting Hardware Inventory

Collecting Software Inventory  
Managing and Troubleshooting Inventory  
Asset Intelligence  
Metering Software Usage

Lab : Collecting Inventory  
Configuring and Managing Hardware Inventory  
Modifying Hardware Inventory Collection  
Configuring and Managing Software Inventory

Lab : Using Asset Intelligence  
Configuring Asset Intelligence Prerequisites  
Configuring Asset Intelligence  
Customising Asset Intelligence  
Viewing Asset Intelligence Reports

Lab : Configuring Software Metering  
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.
- Manage and troubleshoot inventory.
- Explain how to configure and use Asset Intelligence.
- Describe how to implement software metering.

### **Module 5: Querying and Reporting Data**

This module describes the data structure for data queries and status message queries, and also describes the available reporting options and how to configure and deploy the available reporting options.

Lessons

Introduction to Data and Status Message Queries  
Managing Queries  
Configuring and Deploying a Reporting Point  
SQL Reporting Services in Configuration Manager 2007 R2  
Client Status Reporting in Configuration Manager 2007

Lab : Using Queries and Reports  
Creating and Running Queries  
Installing and Using a Reporting Point

Lab : Using SQL Reporting Services  
Installing the Reporting Services Point Role  
Managing the Reporting Services Point  
Viewing SQL Reporting Services Reports

Lab : Installing and Using Client Status Reporting  
Installing and Configuring Client Status Reporting  
Installing and Viewing Client Status Reporting Reports

After completing this module, students will be able to:

- Describe data and status message queries.
- Manage queries.
- Configure and deploy a reporting point.
- Manage reports.
- Create and use dashboards.
- Install and use SQL Reporting Services in Configuration Manager 2007 R3.
- Use client status reporting in Configuration Manager 2007.

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

This module describes the processes and components used to prepare for and manage software distribution using Configuration Manager 2007.

#### Lessons

Overview of the Software Distribution Process  
Preparing for Software Distribution  
Overview of Distribution Points  
Creating and Populating Collections  
Configuring Collection Settings  
Creating and Configuring Packages and Programs  
Distributing Packages  
Advertising Programs  
Monitoring and Troubleshooting Software Distribution

Lab : Preparing for Software Distribution  
Configuring the Software Distribution Component  
Configuring the Advertised Programs Client Agent  
Configuring a Distribution Point

Lab : Creating and Configuring a Collection  
Creating a Collection for Software Distribution

Lab : Creating a Package and Configuring Programs  
Creating a Package and Configuring Programs

Lab : Deploying Applications by Using Software Distribution  
Distributing a Package to a Distribution Point  
Advertising a Program to a Collection  
Running an Advertised Program  
Reviewing Results

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.
- Explain how to configure collections for targeting software distribution.
- Explain how to create and configure packages and programs.
- Explain how to distribute packages.
- Explain how to advertise programs.
- Explain how to monitor and troubleshoot the software distribution process.

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

This module explains how to deploy virtual applications using Configuration Manager 2007.

#### 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  
Preparing the Infrastructure for Application Virtualisation  
Deploying a Virtual Application Package  
Launching and Monitoring a Virtual Application Program

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 to deploy and manage software updates to client computers throughout the enterprise.

#### Lessons

Overview of Software Updates

Preparing the Configuration Manager 2007 Site for Software Updates  
Managing Software Updates  
Monitoring and Troubleshooting Software Updates

Lab : Deploying and Managing Software Updates  
Configuring the Software Updates Infrastructure  
Determining the Software Update Compliance  
Deploying Software Updates to Clients

After completing this module, students will be able to:

- Describe how the software updates feature integrates with System Centre 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 Centre Configuration Manager 2007**

This module explains how to deploy operating systems using Configuration Manager 2007.

Lessons

Overview of Operating System Deployment  
Preparing for Operating System Deployment  
Task Sequences in Operating System Deployment  
Capturing Operating System Images  
Managing User Data  
Deploying an Operating System

Lab : Preparing for Operating System Capture and Deployment  
Preparing the Reference Computer for Capture  
Creating Packages for Operating System Deployment  
Managing Drivers  
Preparing the Environment for Operating System Deployment

Lab : Capturing a Reference Computer  
Creating the Capture Operating System Task Sequence  
Modifying the Capture Operating System Task Sequence  
Advertising the Capture Operating System Task Sequence

Lab : Performing an In-Place Upgrade Using Hard Links  
Preparing the Operating System Image  
Creating a Task Sequence to Deploy a New Image  
Advertising and Running the Task Sequence

After completing this module, students will be able to:

- Describe operating system deployment.
- Explain how to prepare for operating system deployment.
- Describe task sequences in operating system deployment.
- Capture operating system images.
- Manage user data.
- Deploy operating systems.

### **Module 10: Working with Desired Configuration Management**

This module explains how to determine computer compliance using desired configuration management.

Lessons

Overview of Desired Configuration Management  
Configuring Desired Configuration Management  
Viewing and Troubleshooting Compliance Results

Lab : Configuring Desired Configuration Management  
Configuring Desired Configuration Management for Forefront Client Security

## Assigning a Baseline and Performing a Baseline Evaluation Viewing Desired Configuration Management Reports

After completing this module, students will be able to:

- Describe desired configuration management.
- Configure desired configuration management.
- View and troubleshoot compliance results.

## **Module 11: Configuring Wake On LAN, Power Management, and Remote Tools**

This module explains how to configure the Wake On LAN, power management, and remote tools features in Configuration Manager 2007.

### Lessons

Overview of Wake On LAN  
Overview of Power Management  
Overview of Configuration Manager 2007 Remote Tools  
Configuring the Remote Tools Client Agent

Lab : Configuring and Using Remote Tools  
Configuring the Remote Tools Client Agent  
Using Remote Tools  
Monitoring Remote Tools Usage

After completing this module, students will be able to:

- Describe the Wake On LAN feature.
- Describe power management.
- Describe the Configuration Manager 2007 Remote Tools feature.
- Configure the Remote Tools Client Agent.

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

This module describes how to configure a multiple site hierarchy in Configuration Manager 2007.

### 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  
Planning a Configuration Manager Hierarchy  
Preparing the Central Site  
Configuring Parent-Site Communications Settings  
Configuring Child-Site Communications Settings  
Establishing the Parent-Child Relationship  
Verifying Communication Between Parent and Child Sites  
Transferring Site Settings

Lab : Installing Secondary Sites and Proxy Management Points  
Installing a Secondary Site  
Configuring Site Boundaries  
Installing a Proxy Management Point

Lab : Roaming Between Configuration Manager 2007 Sites  
Preparing Packages for Roaming  
Roaming to a Primary Child Site  
Roaming to a Secondary Child Site

After completing this module, students will be able to

- Describe Configuration Manager 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 in multiple site hierarchies.
- Explain how to decommission sites and hierarchies.

### **Module 13: Maintaining and Monitoring Microsoft System Centre Configuration Manager 2007**

This module explains how to maintain and monitor Configuration Manager 2007.

#### Lessons

Configuration Manager 2007 Maintenance Tasks  
Backup and Recovery of Configuration Manager 2007  
Using Windows Performance Monitor to Monitor Configuration Manager 2007

#### Lab : Backing Up and Repairing a Primary Site System

Configuring the Backup Configuration Files  
Preparing the Configuration Manager Hierarchy  
Backing up a Primary Site System  
Performing a Site Repair

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.
- Explain how to use System Centre Operations Manager 2007 to monitor Configuration Manager 2007.
- Use Windows Performance Monitor to monitor Configuration Manager 2007.

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

This module explains Configuration Manager 2007 native mode, and how to install it.

#### Lessons

Introduction to the 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

Configuring the Certificate Templates  
Enrolling Certificates Required for Native Mode  
Changing From Mixed Mode to Native Mode

#### Lab : Configuring a Site for Internet-Based Client Management

Configuring Site Roles for Internet-Based Client Management  
Configuring Clients for Internet-Based Client Management

After completing this module, students will be able to:

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

### **Target Audience:**

This course is intended for systems engineers with one to three years of experience supporting multiple desktop and server computers running Microsoft Windows Server in medium to large enterprise organisations, and who have a need to plan a System Centre Configuration Manager 2007 deployment. This course may also be taken by Configuration Manager 2007 Administrators who are responsible for configuring and managing one or more Microsoft Systems Management Server (SMS) 2003 or Configuration Manager 2007 sites, and all supporting systems. Administrators have one to three years of experience supporting multiple desktop and server computers running Windows Server in medium to large enterprise organisations.

### **Prerequisites:**

Before attending this course, students must have:

- A base-level understanding of Systems Management Server 2003 or Configurations Manager 2007.
- A system administrator-level working knowledge of:
- Deployment, configuration, and troubleshooting for Windows-based personal computers

- TCP/IP networking
- SQL Server
- Active Directory
- Basic Public Key Infrastructure concepts.