

MOC 6451 (B) Planning, Deploying and Managing Microsoft System Center Configuration Manager 2007

Course Summary

Description

This course will provide you with the knowledge and skills to plan, deploy, and manage Microsoft System Center 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.

Objectives

At the end of this course, students will be able to:

- Plan, deploy, and manage Microsoft System Center 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 Center Configuration Manager 2007.
- Deploy virtual applications using Microsoft System Center Configuration Manager 2007.
- Deploy and manage software updates.
- Deploy operating systems using Microsoft System Center 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 Center Configuration Manager 2007.
- Use Microsoft System Center Configuration Manager 2007 native mode and Internet-Based Client Management.

Topics

- Overview of Microsoft System Center Configuration Manager 2007
- Planning and Deploying a Single-Site Architecture
- Planning for and Completing Client Deployment
- Inventory Collection, Software Metering, and Asset Intelligence
- Querying and Reporting Data
- Distributing Software Using Microsoft System Center Configuration Manager 2007
- Deploying Virtual Applications Using Microsoft System Center Configuration Manager 2007
- Deploying and Managing Software Updates
- Deploying Operating Systems Using Microsoft System Center Configuration Manager 2007

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Course Summary (cont'd)

- Working with Desired Configuration Management
- Configuring Wake On LAN, Power Management, and Remote Tools
- Planning and Configuring a Multiple Site Hierarchy
- Maintaining and Monitoring Microsoft System Center Configuration Manager 2007
- Microsoft System Center Configuration Manager 2007 Native Mode and Internet-Based Client Management

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 organizations, and who have a need to plan a System Center 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 organizations.

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

Duration

Five days

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Course Outline

I. Overview of Microsoft System Center Configuration Manager 2007

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

- A. Introduction to System Center Configuration Manager 2007
- B. Configuration Manager Features
- C. Configuration Manager Deployment Scenarios
- D. 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.

II. Planning and Deploying a Single-Site Architecture

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

- A. Planning a Configuration Manager 2007 Site Deployment
- B. Preparing to Deploy a Configuration Manager 2007 Site
- C. Installing a Configuration Manager 2007 Site Server
- D. Performing Post-Setup Configuration Tasks
- E. Discovering Resources
- F. 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.

III. Planning for and Completing Client Deployment

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

- A. Client Deployment Methods
- B. Deploying Clients
- C.

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Course Outline (cont'd)

- D. Managing Configuration Manager 2007 Clients
- E. 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.

IV. 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.

- A. Overview of Inventory Collection
- B. Collecting Hardware Inventory
- C. Collecting Software Inventory
- D. Managing and Troubleshooting Inventory
- E. Asset Intelligence
- F. 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
- Customizing 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.

V. 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.

- A. Introduction to Data and Status Message Queries
- B. Managing Queries
- C. Configuring and Deploying a Reporting Point
- D. SQL Reporting Services in Configuration Manager 2007 R2
- E. 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

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Course Outline (cont'd)

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.

VI. Distributing Software Using Microsoft System Center Configuration Manager 2007

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

- A. Overview of the Software Distribution Process
- B. Preparing for Software Distribution
- C. Overview of Distribution Points
- D. Creating and Populating Collections
- E. Configuring Collection Settings
- F. Creating and Configuring Packages and Programs
- G. Distributing Packages
- H. Advertising Programs
- I. 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.

VII. Deploying Virtual Applications Using Microsoft System Center Configuration Manager 2007

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

- A. Configuring the Infrastructure to Support Application Virtualization
- B. Deploying and Managing Application Virtualization Packages
- C. Using Virtual Application Programs

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Course Outline (cont'd)

Lab: Deploying Virtual Applications to Configuration Manager Clients

- Preparing the Infrastructure for Application Virtualization
- 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.

VIII. Deploying and Managing Software Updates

This module explains how to deploy and manage software updates to client computers throughout the enterprise.

- 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 Center Configuration Manager 2007.
- Prepare a Configuration Manager site for software updates.
- Manage software updates.
- Monitor and troubleshoot software updates.

IX. Deploying Operating Systems Using Microsoft System Center Configuration Manager 2007

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

- 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.

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Course Outline (cont'd)

- Describe task sequences in operating system deployment.
- Capture operating system images.
- Manage user data.
- Deploy operating systems.

X. Working with Desired Configuration Management

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

- 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.

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.

- 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.

XI. Planning and Configuring a Multiple Site Hierarchy

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

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Course Outline (cont'd)

- 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.

XII. Maintaining and Monitoring Microsoft System Center Configuration Manager 2007

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

- A. Configuration Manager 2007 Maintenance Tasks
- B. Backup and Recovery of Configuration Manager 2007
- C. 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 Center Operations Manager 2007 to monitor Configuration Manager 2007.
- Use Windows Performance Monitor to monitor Configuration Manager 2007.

XIII. Microsoft System Center Configuration Manager 2007 Native Mode and Internet-Based Client Management

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

- A. Introduction to the Configuration Manager 2007 Native Mode
- B. The Public Key Infrastructure Required for Native Mode
- C. Configuring Sites for Native Mode
- D. 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 Center Configuration Manager native mode.
- Describe Public Key Infrastructure requirements for native mode.
- Configure sites for native mode.
- Configure Internet-Based Client Management.