



Course M6418-ILT

Deploying Windows Server 2008

Three days, Instructor-Led

INTRODUCTION

This course will provide you with the knowledge and skills to install and deploy Windows Server 2008 R2. This course also will teach you how to automate server deployment, as well as provide guidelines, best practices, and considerations that will help you to migrate existing services to Windows Server 2008 R2.

AUDIENCE PROFILE

This course is intended for information technology (IT) professionals who have experience with Windows Server 2003 or Windows Server 2008, and who hold an Microsoft Certified Technology Specialist (MCTS) credential or Microsoft Certified IT Professional (MCITP) credential (or Microsoft Certified Systems Engineer (MCSE) credential or Microsoft Certified Systems Administrator (MCSA) credential) certification and/or equivalent knowledge. They also should be responsible for deploying Windows Server 2008 R2, including the R2 features that enable enhanced functionality of Windows 7 clients, must understand how to use the latest deployment tools and solution accelerators that were updated for Windows Server 2008 R2 and Windows 7. This course is intended for IT professionals experienced on the technologies that Windows Server 2003 or Windows Server 2008 R2 includes, and who have a Windows Server 2003 or 2008 MCTS or MCITP (or MCSA/MCSE) certification or equivalent knowledge.

This course also is targeted at IT professionals who are responsible for planning and implementing the deployment of Windows Server 2008 R2 and Windows 7. This audience uses graphical administration tools, command-line tools, Windows PowerShell, imaging tools, Microsoft Deployment Toolkit, and Microsoft Solution Accelerators. These IT professionals conduct most server-deployment tasks in a deployment lab, and roll out monitored pilot deployments in a controlled fashion. They use a combination of low-touch and no-touch deployment processes and tools. This audience also deploys these servers from a centralized location, and validates remote server deployments and configurations using remote management tools and scripts.

PREREQUISITES

Before attending this course, students must have:

- Able to perform server and desktop installation, upgrades, and configuration
- A conceptual understanding of automated deployment
- A basic understanding of the processes in Microsoft Operations Connector Framework, Microsoft Solutions Framework, and ITIL 3.0
- Basic skills with Windows PowerShell 2.0
- Windows command line
- Understanding of, and experience with, monitoring and management tools
- Networking knowledge
- Knowledge of Active Directory Domain Services (AD DS)
- Knowledge of security
- Understanding of, and experience with, performance monitoring
- Troubleshooting skills
- Familiarity and experience with Windows PowerShell 2.0, Windows Command line, scripting of imaging and virtualization technologies, and general batch scripting.

COURSE OUTLINE

MODULE 1: INSTALLING AND CONFIGURING MICROSOFT WINDOWS SERVER 2008 R2

This module describes the installation options and requirements for Windows Server 2008 R2.

Lessons

- Lesson 1: Planning Windows Server 2008 R2 Installations
- Lesson 2: Performing a Windows Server 2008 R2 Installation
- Lesson 3: Configuring Windows Server 2008 R2 Following Installation
- Lesson 4: Automating Server Activation Using Microsoft Volume Activation

Lab A: Planning to Install Windows Server 2008 R2

- Exercise: Using the Microsoft Assessment and Planning (MAP) Toolkit

Lab B: Installing Windows Server and Configuring Post-Installation Settings

- Exercise 1: Installing Windows Server 2008 R2
- Exercise 2: Configuring Server Core
- Exercise 3: Enabling Remote Management

Lab C: Managing Roles and Features

- Exercise 1: Adding the DNS and DHCP Server Roles
- Exercise 2: Managing Server Core

Lab D: Configuring Windows Server 2008 R2 Licensing

- Exercise: Planning Volume Activation

MODULE 2: IMPLEMENTING DEPLOYMENT TECHNOLOGIES

This module describes the various deployment technologies available for use with Windows Server 2008 R2 and Windows 7.

Lessons

- Lesson 1: Selecting a Deployment Strategy
- Lesson 2: Using the Windows Automated Installation Kit
- Lesson 3: Working with Images
- Lesson 4: Working with Unattended Answer Files

Lab: Deploying Windows Server 2008 with an Answer File

- Exercise 1: Verifying the Configuration of WAIK
- Exercise 2: Creating an Answer File

MODULE 3: USING WINDOWS DEPLOYMENT SERVICES

This module explains how to create and deploy custom system images by using Windows Deployment Services and images.

Three days, Instructor-Led

Lessons

- Lesson 1: Overview of Windows Deployment Services (WDS)
- Lesson 2: Implementing Deployment with WD
- Lesson 3: Maintaining Images

Lab: Using WDS to Deploy Windows Server

- Exercise 1: Installing and configuring WDS
- Exercise 2: Creating Operating System Images with WDS
- Exercise 3: Using an Unattended File with WDS
- Exercise 4: Configuring Custom Computer Naming for Large-Scale Deployments
- Exercise 5: Deploying Images with WDS

MODULE 4: IMPLEMENTING THE MICROSOFT DEPLOYMENT TOOLKIT

This module explains how to deploy and create custom system images for common server configurations by using the Microsoft Deployment Toolkit.

Lessons

- Lesson 1: Introducing the Microsoft Deployment Toolkit
- Lesson 2: Using the Microsoft Deployment Toolkit
- Lesson 3: Maintaining Images with Microsoft Deployment Toolkit

Lab: Implementing the Microsoft Deployment Toolkit

- Exercise 1: Installing MDT 2010
- Exercise 2: Configuring MDT 2010
- Exercise 3: Creating an MDT 2010 Build
- Exercise 4: Creating Deployment Points
- Exercise 5: Performing a Lite-Touch Deployment

MODULE 5: MIGRATING ACTIVE DIRECTORY DIRECTORY SERVICE

This module explains how to upgrade and migrate Active Directory directory service from Windows 2000 Server or Windows Server 2003 to Windows Server 2008 R2.

Lessons

- Lesson 1: Overview of Upgrading Windows Server 2008 R2 Active Directory
- Lesson 2: Upgrading Domain Controllers to Windows Server 2008 R2

Lab: Migrating Active Directory

- Exercise 1: Preparing the Existing Forest
- Exercise 2: Deploying a Windows Server 2008 R2 DC
- Exercise 3: Removing Legacy Domain Controllers
- Exercise 4: Enabling New Active Directory Features

MODULE 6: MIGRATING FILE, PRINT, AND WEB SERVICES

This module provides guidance for upgrading and migrating file and print servers from Microsoft Windows 2000 Server or Windows Server 2003 to Windows Server 2008 R2. This module also includes guidance for upgrading and migrating application and Web servers from Windows Server 2003 to Windows Server 2008 R2.

Lessons

- Lesson 1: Introducing the Windows Server Migration Tools
- Lesson 2: Migrating File and Print Servers
- Lesson 3: Migrating Web and Application Servers

Lab A: Migrating Windows Server 2003 File and Print Services

- Exercise 1: Installing and Configuring the File and Print Server Roles
- Exercise 2: Enabling Windows Server Migration Tools
- Exercise 3: Migrating File and Print Services
- Exercise 4: Verifying the migration of file and print services

Lab B: Lesson 3: Migrating Web and Application Servers

- Exercise 1: Installing the Required Roles on Windows Server 2008 R2
- Exercise 2: Installing the Migration Tools
- Exercise 3: Migrating the Application
- Exercise 4: Verifying the Migration

MODULE 7: DEPLOYING BRANCH OFFICE AND REMOTE ACCESS SERVICES

This module provides guidance for upgrading and migrating branch offices and Remote Access Services to Windows Server 2008 R2.

Lessons

- Lesson 1: Implementing Read-Only Domain Controllers
- Lesson 2: Implementing Remote Infrastructure

Lab A: Deploying an RODC to a Branch Office

- Exercise 1: Enabling the Forest to Support RODC Deployment
- Exercise 2: Deploying the RODC Role on Server Core
- Exercise 3: Creating the Branch Office Site
- Exercise 4: Securing the RODC

Lab B: Implementing Branch Cache

- Exercise 1: Configuring BranchCache on a Server
- Exercise 2: Configuring Client-Side BranchCache Settings
- Exercise 3: Verify BranchCache Functionality



Course M6418-ILT

Deploying Windows Server 2008

Three days, Instructor-Led

MODULE 8: MIGRATING WORKLOADS TO MICROSOFT VIRTUAL MACHINES

This module provides guidance for migrating existing workloads to a virtual machine environment using the Hyper-V Server 2008 R2 Hyper-V role.

Lessons

- Lesson 1: Overview of Microsoft Virtualization
- Lesson 2: Installing Hyper-V
- Lesson 3: Migrating workloads to Hyper-V

Lab: Migrating Workloads to Microsoft Virtual Machines

- Exercise 1: Planning to Migrate Workloads
- Exercise 2: Deploying the Hyper-V Role
- Exercise 3: Creating Virtual Machines, Virtual Networks, and Virtual Hard Disks