

6418 – Deploying Windows Server 2008

Vendor Course Code: 6418

Course Length: 3 days

Overview: 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.

Skills Gained: After completing this course, students will be able to:

- Describe Microsoft Windows Server 2008 R2 installation and configuration options, and select an appropriate volume-licensing option for Windows Server 2008 R2.
- Deploy and configure a Windows Server 2008 R2 Server Core installation.
- Implement various Windows Server deployment technologies.
- Implement Windows 7 and Windows Server 2008 R2 deployments with Windows Deployment Services (WDS).
- Implement Windows 7 and Windows Server 2008 R2 deployments with Microsoft Deployment Toolkit 2010 (MDT 2010).
- Migrate earlier versions of Active Directory directory service to AD DS.
- Migrate file and print, and Web servers to Windows Server 2008 R2.
- Migrate remote infrastructure servers to support branch offices.
- Virtualise workloads by migrating physical servers to guests in Microsoft Hyper-V Server 2008 R2.

Key Topics:

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 : Lab A: Planning to Install Windows Server 2008 R2

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

Lab : 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 : Lab C: Managing Roles and Features

Exercise 1: Adding the DNS and DHCP Server Roles

Exercise 2: Managing Server Core

Lab : Lab D: Configuring Windows Server 2008 R2 Licensing

Exercise: Planning Volume Activation

After completing this module, students will be able to:

Plan Windows Server 2008 R2 installations.

Perform a Windows Server 2008 R2 installation.

Configure Windows Server 2008 R2 following installation.

Automate server activation using Microsoft 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
After completing this module, students will be able to:
Select a suitable deployment strategy.
Describe the Windows Automated Installation Kit (WAIK).
Describe the different types of images.
Perform an unattended Windows Server 2008 R2 installation.

Module 3: Using Windows Deployment Services

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

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
After completing this module, students will be able to:
Describe the important features and functionality of WDS.
Configure WDS in Windows Server 2008 R2.
Perform deployments 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
After completing this module, students will be able to:
Describe the MDT.
Use the MDT for low and zero-touch deployments.
Use MDT to maintain image files.

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
After completing this module, students will be able to:
Describe the considerations and changes resulting from the Active Directory upgrade.
Upgrade a legacy forest.

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 : 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 : 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

After completing this module, students will be able to:

Describe the Windows Server Migration Tools.

Upgrade file and print servers.

Upgrade Web and application servers.

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 : 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 : Lab B: Implementing Branch Cache

Exercise 1: Configuring BranchCache on a Server

Exercise 2: Configuring Client-Side BranchCache Settings

Exercise 3: Verify BranchCache Functionality

After completing this module, students will be able to:

Implement read-only domain controllers (RODC) to support branch offices.

Implement remote infrastructure features to support branch offices.

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 Virtualisation

Lesson 2: Installing Hyper-V

Lesson 3: Migrating workloads to Hyper-V

Lab : 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

After completing this module, students will be able to:

Describe Microsoft server virtualisation solutions.

Install and configure Hyper-V.

Plan the migration of workloads to Microsoft virtual machines.

Target Audience:

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 include, and who have a Windows Server 2003 or 2008 MCTS or MCITP (or MSCA/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 centralised 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 virtualisation technologies, and general batch scripting.