

# Upgrading Skills to Windows Server 2008 Bootcamp

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Course number: WS08UB  
5 Days

## Course Description

### About this course:

This five-day instructor-led bootcamp combines information from [MS6416](#), [MS6417](#), and [MS6424](#) to provide students with the knowledge and skills to work with Network Infrastructure, Active Directory, and Application Infrastructure Technologies in Windows Server 2008. This course is intended for individuals who already have experience in these areas with Windows Server 2003 to upgrade their skills to Windows Server 2008.

### At Course Completion:

- Install and Configure Windows Server 2008
- Add and Configure Windows Server Core roles.
- Identify new and improved networking features with Windows Server 2008
- Configure Hyper-V virtual machines
- Understand the functions of Active Directory Federation Services, Active Directory Lightweight Directory Services, and Active Directory Rights Management Services
- Use Read-Only Domain Controllers
- Implement Network Access Protection
- Configure SharePoint Services 3.0 Platform
- Configure Terminal Services
- Understand IIS 7.0 Application Server
- Implement Window Server 2008 Active Directory Roles

### Prerequisites

This course is intended for IT Professionals experienced in the technologies included in Windows Server 2003 and who hold an MCSE or MCSA certification and/or equivalent knowledge.

## Before attending this course, students must have:

- Experience planning, implementing, managing, and maintaining, and securing Microsoft Windows Server 2000 or 2003, including Active Directory, Network Infrastructure, and Application server roles

### Course Outline:

**Module 1: Installing and Configuring Windows Server 2008:** This module describes how to prepare for and perform an installation of Windows Server 2008. This module also provides details on how to manage the various server roles and Server Core in Windows Server 2008.

#### Lessons

- Installing Windows Server 2008
- Managing Server Roles and Features
- Configuring Windows 2008 Server Core

#### Lab : Installing and Configuring Windows Server 2008

- Installing and Configuring Server Roles and Features
- Configuring Server Core and Performing Basic Management Tasks

After completing this module, students will be able to:

- Install Windows Server 2008.
- Manage Server roles and features.
- Configure Windows 2008 Server Core.

**Module 2: Configuring Windows Deployment Services:** This module provides an overview of the Windows installation technologies. This module also describes how to create images for WDS. Finally, the module explains the procedures for deploying images by using WDS.

#### Lessons

- Overview of Windows Installation Technologies
- Preparing Images for WDS
- Deploying Images using WDS

#### Lab : Configuring Windows Deployment Services

- Installing and Configuring WDS
- Adding Images to WDS
- Creating an Answer File for the WDS client
- Deploying an Image with WDS

After completing this module, students will be able to:

- Describe Windows Deployment Services in Windows Server 2008.
- Manage operating system images in the WIM image format.
- Deploy images with Windows Deployment Services.

**Module 3: Configuring Networking and Network Services:** This module describes how to configure IPv6 addressing and how to migrate from IPv4 to IPv6. Additionally, the module examines the new features in DHCP and DNS, the configuration and management of Windows Firewall. Finally, the module covers the basic concepts for wireless connectivity and the authentication options for wireless networks, and then describes how to configure wireless network settings in Group Policy.

#### Lessons

- Configuring IP v6 Addressing
- Migrating from IPv4 to IPv6
- Configuring DHCP and DNS
- Configuring Windows Firewall
- Configuring Wireless Networks

#### Lab : Configuring Networking and Network Services



- Configuring an ISATAP Router
- Configuring DHCP and DNS
- Configuring Windows Firewall

After completing this module, students will be able to:

- Configure IPv6 addressing.
- Describe coexistence and migration from IPv4 to IPv6 addressing.
- Configure DHCP and DNS services.
- Configure Windows Firewall.
- Configure Wireless Networks.

**Module 4: Configuring Network Policy Server and Remote Access Services:** This module provides an overview of NPS as a RADIUS compliant server and client. The module then describes how to configure NPS and remote access.

#### Lessons

- Overview of Network Policy Server
- Configuring Network Policy Server
- Configuring Remote Access

#### Lab : Configuring Network Policy Server and Remote Access Services

- Deploying Network Policy Server
- Configuring SSTP VPN

After completing this module, students will be able to:

- Understand the purpose of the Network Policy and Access Services server role
- Configure Network Policy Server (NPS)
- Configure Routing and Remote Access Service (RRAS)
- Configure remote access.

**Module 5: Configuring Network Access Protection:** This module provides an overview of Network Access Protection (NAP) and the various NAP enforcement methods such as IPsec, 802.1x, VPN, and DHCP enforcements. The module also describes how to implement NAP using System Health Validators (SHVs), health policies, remediation server groups, and NAP tracing. The module also provides details on implementing IPsec enforcement for NAP.

#### Lessons

- Overview of Network Access Protection
- Implementing NAP
- Implementing IPsec Enforcement for NAP

#### Lab : Configuring Network Access Protection

- Configuring NAP for VPN Clients
- Configuring NAP for IPsec Enforcement

After completing this module, students will be able to:

- Describe the role of NAP.
- Install, configure, and monitor NAP.
- Implement IPsec enforcement for NAP.

**Module 6: Configuring Storage Technologies in Windows Server 2008:** This module describes how to configure the Distributed File System (DFS) in Windows Server 2008. The module then explains how to manage storage by using File System Resource Manager (FSRM). Finally, the module covers how to configure storage area network (SAN) connectivity.

#### Lessons

- Configuring Distributed File System
- Managing Storage with File System Resource Management
- Configuring Storage Area Network Connectivity

#### Lab : Configuring Storage Technologies in Windows Server 2008

- Installing and Configuring the DFS Role Service
- Installing and Configuring the File Server Resource Manager Role Service



After completing this module, students will be able to:

- Configure DFS.
- Manage storage by using File System Resource Management.
- Describe storage area network connectivity.

**Module 7: Configuring Virtualization in Windows Server 2008:** This module provides an overview of virtualization in Windows Server 2008 and the features and architecture of Microsoft Hyper-V. The module also describes the requirements and considerations for installing Hyper-V. Finally, the module covers how to configure and manage virtual machines in Windows Server 2008 Hyper-V.

**Lessons**

- Overview of Hyper-V
- Installing Hyper-V
- Configuring Hyper-V
- High Availability in a Hyper-V Environment

**Lab : Configuring a Hyper-V Environment**

- Configuring Hyper-V Settings
- Creating and Configuring Virtual Networks
- Creating Virtual Hard Disks
- Creating and Managing Virtual Machines

After completing this module, students will be able to:

- Describe Hyper-V and identify its key features.
- Install Hyper-V.
- Configure Hyper-V settings.
- Configure highly available virtual machines.

**Module 8: Introduction to the Windows SharePoint Services 3.0 Platform**

This module describes and demonstrates Windows SharePoint Service 3.0, including planning for implementation and performing a new installation.

**Lessons**

- Overview of Windows SharePoint Services 3.0
- Collaboration Technologies Offered by Windows SharePoint Services 3.0
- Determining Organizational and User Needs
- Review Planning Site Creation, Maintenance, and Security
- Review Planning Server Requirements and Topologies
- Performing a Clean Installation of Windows SharePoint Services 3.0
- Installing and Configuring the Central Administration Site

**Lab 1: Introduction to the Windows SharePoint Services 3.0 Platform**

- Installing and Configuring the Central Administration Site
- Installing the Central Administration Site
- Configuring the Services on the Windows SharePoint Services 3.0 Server

After completing this module, students will be able to:

- Plan for SharePoint Services 3.0 implementation.
- Install and configure Windows SharePoint Services 3.0.

**Module 9: Configuring and Managing Windows SharePoint Services 3.0**

This module describes and demonstrates how to configure and manage Windows SharePoint Services 3.0, including creating and configuring sites and managing sites and servers.

**Lessons**

- Creating and Configuring Sites
- Managing Windows SharePoint Services 3.0 Sites
- Managing the Windows SharePoint Services 3.0 Server

**Lab 1: Configuring and Managing Windows SharePoint Services 3.0**

- Creating a Web Application and Site Collection
- Creating a Web Application



- Creating a Site Collection
- Starting the Windows SharePoint Services Search Service
- Configuring the Alternate Access Mappings
- Managing Site Settings
- Troubleshooting Windows SharePoint Services 3.0 Server Performance Issues

After completing this module, students will be able to:

- Create Web applications and Site collection with Windows SharePoint Services 3.0.
- Manage site settings
- Troubleshoot SharePoint performance issues.

### **Module 10: Configuring Terminal Services**

Terminal Services has been updated with Windows Server 2008, including changes to Terminal Services core. This module covers the new Terminal Services core functionality as well as Terminal Services Web Access and Terminal Services Licensing.

#### **Lessons**

- Terminal Services Overview
- Terminal Services Core Functionality
- Terminal Services Web Access
- Terminal Services Licensing

#### **Lab 1: Exploring Terminal Services**

- Installing Terminal Services
- Remote Desktop Connection
- Configure TS Web Access

After completing this module, students will be able to:

- Describe how Terminal Services works.
- Identify new Terminal Services core features.
- Use Terminal Services Web Access.
- Describe how Terminal Services Licensing functions.

### **Module 11: Overview of IIS 7.0 Application Server**

This module introduces IIS 7.0 modular architecture, in which more than 40 features can be independently installed. It also demonstrates new scripting interface features and distributed configuration files.

#### **Lessons**

- Review of IIS 6.0
- Key Improvements in IIS 7.0
- IIS 7.0 Configuration System

### **Module 12: Exploring Windows Server 2008 Active Directory Roles**

This module provides an overview of the Active Directory (AD) server roles.

#### **Lessons**

- Overview of Active Directory Domain Services (AD DS)
- Overview of Active Directory Lightweight Directory Services (AD LDS)
- Overview of Active Directory Digital Certificates (AD CS)
- Overview of Active Directory Rights Management Solution (AD RMS)
- Overview of Active Directory Federation Solution (AD FS)

#### **Lab: Exploring Windows Server 2008 Active Directory Server Roles**

- Exercise 1: Planning AD Server Role Implementations
- Exercise 2: Understanding AD Server Role Integration with AD DS

After completing this module, students will be able to:

- Describe the AD server roles required for a variety of AD deployment scenarios.
- Describe the integration of AD DS with other AD server roles

### **Module 13: Introduction to Active Directory Domain Services**

This module explains the reasons for deploying AD DS and describes the AD DS components.

#### **Lessons**

- Overview of Active Directory Domain Services



- Overview of AD DS Logical Components
- Overview of AD DS Physical Components

**Lab: Exploring AD Domain Services Components and Tools**

- Exercise 1: Installing the AD DS Management Tools
- Exercise 2: Examining the AD DS Logical Components
- Exercise 3: Examining the AD DS Physical Components

After completing this module, students will be able to:

- Install the AD DS management tools on a Windows Vista computer.
- Describe the AD DS logical components
- Describe the AD DS physical components

**Module 14: Introduction to Active Directory Lightweight Directory Services**

This module explains how AD LDS works and how to configure AD LDS components.

**Lessons**

- AD LDS Overview
- Implementing and Administering AD LDS
- Implementing AD LDS Replication
- Comparing AD DS and AD LDS

After completing this module, students will be able to:

- Configure AD LDS instances and application partitions.
- Configure AD LDS access control.
- Configure AD LDS replication.

**Module 15: Introduction to Active Directory Certificate Services**

This module explains how AD CS works and how to implement AD CS certificate enrollment.

**Lessons**

- AD CS Overview
- Understanding AD CS Certificates
- Implementing Certificate Enrollment and Revocation

After completing this module, students will be able to:

- Request certificates using Web enrollment.
- Manage certificate requests.

**Module 16: Introduction to Active Directory Rights Management Services**

This module explains how AD RMS works and how to configure AD RMS settings.

**Lessons**

- AD RMS Overview
- Understanding AD RMS
- Managing AD RMS

After completing this module, students will be able to:

- Verify AD RMS functionality.
- Customize the AD RMS configuration.

**Module 17: Introduction to Active Directory Federation Services**

This module explains how AD FS works and how to configure AD FS components.

**Lessons**

- AD FS Overview
- AD FS Deployment Scenarios
- Configuring AD FS Components

After completing this module, students will be able to:

- Describe how to implement the AD FS Components.
- Configure the AD FS Account Partner Organization.