

Updating your Network Infrastructure Technology Skills to Windows Server 2008 (Beta 3)

Course Outline

Module 1: Configuring Windows Server 2008

This module explains how to install and configure Windows Server 2008. It also explores using Server Manager to work with roles, features, and other aspects of server configuration like Automatic Updates.

Lessons

- Server Manager Roles
- Windows Server 2008 Features

Lab 1: Configuring Windows Server 2008

- Initial Configuration Tasks
- Server Manager Console
- Server Manager Wizards

After completing this module, students will be able to:

- Describe Windows Server 2008 roles.
- Describe Windows Server 2008 features.

Module 2: Next Generation Networking

This module explains how to use new and improved networking features in Windows Server 2008, including server and domain isolation, IPv6, and DNS.

Lessons

- Networking with Windows Server 2008
- DNS Overview and Improvements
- Lab 1: Reviewing Networking Defaults and Settings
- Review the Network Center
- Creating Domain Isolation Policies
- Create a Centralized QoS Policy
- Communicate with Link-Local Addresses

Lab 2: DNS: Explore Management Settings

- Explore the Active Directory Snap-Ins
- Create a Forward Lookup Zone
- Create a Reverse Lookup Zone

- Create Resource Records
- Configure Zone Transfers

After completing this module, students will be able to:

- Identify new and improved networking features with Windows Server 2008.
- Explain how Server and Domain Isolation protects your network.
- Know the difference between IPv4 and IPv6 addresses.
- Know how DNS is used.
- Explain how DNS and Active Directory work together.
- List new improvements to DNS with Windows Server 2008.

Module 3: Server Core

This module explains how to use key functionality and benefits of a Server Core installation, including adding and configuring roles.

Lessons

- Server Core Introduction
- Configuring and Managing Server Core

Lab 1: Server Core

- Installing Windows Server Core
- Configure Server Core
- Add and Configure Server Roles
- Add Backup Feature
- Managing Server Core

After completing this module, students will be able to:

- Describe Server Core.
- List Server Core benefits.
- Add Server Core roles.
- Configure Server Core roles.

Module 4: Windows Backup

This module provides an overview of the new backup infrastructure in Windows Server 2008, including Volume Shadow Copy service, scheduled vs. manual backups, media, the Universal Disk Format (UDF), and restoring data.

Lessons

- Backup Infrastructure

- Optical Media
- Restore Utilities

Lab 1: Backup and Restore System Data

- Perform Installation Tasks
- Schedule a Backup
- Create a Manual Backup
- Schedule Daily AD DS Backup via Command Line
- Perform Windows RE Tasks
- Restore Files and Folders
- Backup and Recovery with Vista Client

After completing this module, students will be able to:

- List new features with Windows Server 2008.
- Explain the new backup infrastructure, including Volume Shadow Copy Service.
- Explain the difference between scheduled and manual backups.
- Identify which media you can use for backups in Windows Server 2008.
- Describe the Universal Disk Format.
- Identify ways to restore data in Windows Server 2008.

Module 5: Network Policies and Access Protection

This module explains how to use Network Access Protection (NAP) and related technologies to enforce security and client health policies.

Lessons

- Network Policies Access Protection
- Enforcement Options
- Network Access Protection Scenarios

Lab 1: Using Network Access Protection

- Configuring Network Access Protection for DHCP

After completing this module, students will be able to:

- Describe how Network Policies Access Protection works.
- Identify the enforcement options.
- List Network Access Protection scenarios.

Module 6: Windows Deployment Services

This module explains how to use benefits and components of Windows Deployment Services, including image capture and management.

Lessons

- Introducing Windows Deployment Services
- WDS Components

Lab 1: Working with Windows Deployment Services

- Install and Configure Windows Deployment Services
- Working with Images
- Creating Images
- Using Unattend Files

After completing this module, students will be able to:

- Describe Windows Deployment Services benefits.
- List Windows Deployment Services components.
- Explain the Windows Deployment Services image capture process.
- Use Windows Deployment Services management components.

Module 7: Windows Server Virtualization

This module explains how to use new capabilities and architecture in Windows Server Virtualization, including integrated management functions for physical and virtual environments.

Lessons

- Introducing Windows Server Virtualization
- Configuring Windows Server Virtualization

Lab 1: Windows Server Virtualization

- Configure Server Virtualization
- Configure Virtual Networks
- Add Virtual Machines
- Monitoring and Optimization

After completing this module, students will be able to:

- List the new features of Windows Server virtualization.
- Configure Windows Server virtualization virtual machines.
- Create virtual machine snapshots.
- Migrate Virtual Server 2005 virtual machines to Windows Server virtualization.

Module 8: High Availability Features

This module explains how to use failover clustering and network load balancing.

Lessons

- Failover Clustering
- Network Load Balancing

Lab 1: High Availability Features

- Installing a Two-Node File Server Cluster
- Configuring Network Load Balancing with Terminal Services

After completing this module, students will be able to:

- List suitable scenarios for Failover Cluster use
- List suitable scenarios for Network Load Balancing use
- Describe how Failover Clustering is used to support availability and scalability
- List new features in Windows Server 2008 Failover Clustering
- Describe Failover Clustering requirements

Module 9: Performance Monitoring and Optimization

This module explains how to use Windows Server 2008's performance monitoring tools, including using Windows System Resource Manager to implement server resource controls.

Lessons

- Windows Reliability and Performance Monitor
- Microsoft Windows System Resource Manager

Lab 1: Performance Monitoring and Optimization

- Reviewing Performance and Reliability Monitoring
- Key Scenarios for Monitoring Performance and Reliability
- Add Windows System Resource Manager Feature
- Windows System Resource Manager Scenarios
- Configure Windows System Resource Manager for Terminal Services

After completing this module, students will be able to:

- Describe the features of Windows Reliability and Performance Monitor
- Implement server resource controls using Windows System Resource Manager