Course 6416D:

Updating Your Windows Server 2003 Technology Skills to Windows Server 2008

Course Details

Course Outline

Module 1: Installing and Configuring Windows Server 2008

This module explains how to plan and prepare the environment and servers for installation, upgrade, and migration to Windows Server 2008 and Windows Server 2008 R2 operating systems from Windows Server 2003.

Lessons

- Overview of Windows Server

- Installing Windows Server 2008

- Managing Server Roles and Features

- Configuring and Managing Windows Server 2008 Server Core

- Choosing a Deployment Strategy

- Deploying Windows Server 2008

Lab : Installing Windows Server and Configuring Post-Installation Settings

- Install Windows Server 2008 R2

- Configuring Server Core

- Enabling Remote Management

- Adding the Domain Name System and Dynamic Host Configuration Protocol Server Roles

Lab : Deploying Windows Server 2008

- Installing and Configuring Windows Deployment Services

- Creating Operating System Images with Windows Deployment Services

- Using an Unattended File with Windows Deployment Services

- Completing Windows Deployment Services Configuration

After completing this module, students will be able to:

•Describe the steps necessary to prepare to install Windows Server 2008.
•Install Windows Server 2008.
•Add and remove server roles and features.
•Configure and manage Server Core.
•Select a deployment technology.
•Deploy Windows Server 2008.

Module 2: Server Management in Windows Server 2008

This module explains new technologies and options available to manage the operating system environment. The module discusses and allows students practice storage configuration, boot configuration, scheduled tasks and services, event logs, and performance monitoring.

Lessons

- Managing Windows Server with Server Manager

- Managing Server Updates by using WSUS

- Managing Backup and Restore by Using Windows Server Backup

- Managing Event Logs and Auditing

- Performance and Resource Management

Lab : Managing Windows Server 2008

- Configuring a Replica WSUS Server

- Managing Windows Server Backup

- Configuring Event Logging

After completing this module, students will be able to:
•Describe and use Server Manager.
•Manage server updates by using Windows Server Update Services 3.0 SP2.
•Manage backup and restore by using Windows Server Backup.
•Describe and perform event logging and auditing.
•Perform reliability and performance monitoring.

Module 3: Configuring Networking and Network Services

This module describes how to configure and troubleshoot the new networking technologies and settings on Windows Server 2008.

Lessons

- Configuring IPv6 Addressing

- Migrating from IPv4 to IPv6

- DHCP and DNS Enhancements in Windows Server 2008

- Configuring and Managing Windows Firewall with Advanced Security

- Configuring Routing and Networking with Windows Server 2008

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 and implementIPv6 migration technologies.
•Describe the enhancements to DHCP and DNS in Windows Server 2008
•Configure Windows Firewall with Advanced Security.
•Configure routing with Windows Server 2008.

Module 4: Configuring Network Policy Server and Remote Access services

This module explains how to configure Network Policy Server and Remote Access Services in Windows Server 2008. It outlines how to secure your remote access clients by using network policies and, where appropriate, Network Access Protection (NAP) as well as covering technologies such as VPN and also explaining DirectAccess, a feature available with Windows Server 2008 R2

Lessons

- Overview of Network Policy Server

- Configuring a Network Policy Server

- Configuring Remote Access

- Managing DirectAccess in Windows Server 2008 R2

- Implementing Network Access Protection

- Configuring VPN Enforcement by Using NAP

Lab : Configuring Network Policy Server and Remote Access Services

- Configuring Routing and Remote Access as a VPN Remote Access Solution

- Configuring a Custom Network Policy

- Create and Distribute a CMAK Profile

Lab : Configuring NAP with VPN Enforcement

- Configuring NAP Components

- Configuring Client Settings to Support NAP

After completing this module, students will be able to:
- Understand the purpose of the Network Policy and Access Services server role.

- Configure NPS.

- Configure remote access.

- Describe and deploy DirectAccess.

- Describe NAP. Configure VPN enforcement by using NAP.

Module 5: Configuring and Managing Active Directory Domain Services

This module explains the new and improved features of Windows 2008 and Windows 2008 R2 Active Directory Domain Services, such as RODC, fine-grained password policies and advanced auditing and others.

Lessons

- Active Directory Enhancements in Windows Server 2008 and 2008 R2

- Installing and Configuring Domain Controllers

- Configuring Read-Only Domain Controllers

- Configuring Fine-Grained Password Policies

- Managing Active Directory Objects with Windows PowerShell

- Active Directory Database Management

Lab : Configuring Active Directory Domain Services

- Installing and Configuring an RODC

- Implementing Fine-Grained Password Policies

Lab : Managing AD DS Objects and Database

- Using PowerShell Commands to Administer Active Directory

- Working with Active Directory Snapshots

- Restoring Deleted Objects with Active Directory Recycle Bin

After completing this module, students will be able to:
•Describe Active Directory Enhancements in Windows Server 2008 and 2008 R2.
•Install and configure domain controllers.
•Configure read-only domain controllers.
•Configure fine-grained password policies.
•Manage Active Directory objects with Windows PowerShell.
•Perform Active Directory database management.

Module 6: Managing Group Policy in Active Directory Domain Services

This module explains what is new in the management of an Active Directory Domain Services infrastructure, what improvements were made to Group Policy, what are Group Policy Preferences, and how the ability to restart the Active Directory database service (NTDS) supports and simplifies

advanced administrative tasks.

Lessons

- Group Policy Enhancements in Windows server 2008

- Managing Security with Group Policy

- Managing Clients With Group Policy Preferences

Lab : Managing Group Policies

- Creating a Central Store

- Configuring Administrative Templates

Lab : Managing Client Security with Group Policy

- Configuring Application Control Policies

Lab : Managing Clients with Group Policy Preferences

- Deploying Group Policy Preferences

After completing this module, students will be able to:
•Describe the new features in Group Policy.
•Implement security settings with Group Policy.
•Configure Group Policy preferences.

Module 7: Configuring Active Directory Certificate Services

This module explains how to manage enterprise PKI smoothly in Windows Server 2008 and Windows Server 2008 R2 while ensuring a manageable, secure infrastructure, maintaining application and legacy system compatibility.

Lessons

- Active Directory Certificate Services Overview

- Deploying Active Directory Certificate Services

- Managing Certificate Templates

- Managing Certificate Enrollment

- Managing Certificate Revocation

- Managing Certificate Recovery

Lab : Configuring and Managing Active Directory Certificate Services

- Installing the AD CS Server Role and Configuring CAs

- Managing Certificate Revocation

- Managing Certificate Recovery

After completing this module, students will be able to:

•Describe Active Directory Certificate Services and enhancements in Windows Server 2008.

•Deploy AD CS infrastructure.

•Manage certificate templates.

•Manage certificate enrollment.

•Manage certificate revocation.

•Manage certificate recovery.

Module 8: Configuring Active Directory Identity and Access Solutions

This module explains the Active Directory(AD) roles of AD LDS, AD FS and AD RMS, how they fit into the overall Windows Server 2008 management concept, and how to configure a Windows Server 2008 and Windows Server 2008 R2 infrastructure to incorporate these roles.

Lessons

- Installing and Configuring AD LDS

- Installing and Configuring AD FS

- Overview of AD RMS

- Installing and Configuring AD RMS

Lab : Configuring AD LDS

- Configuring AD LDS Instances and Partitions

- Configuring AD LDS Replication

Lab : Configuring AD RMS

- Installing the AD RMS Server Role

- Configuring AD RMS Templates

- Configuring AD RMS Trust Policies

- Testing AD RMS Functionality

After completing this module, students will be able to:

•Install and configure Active Directory Lightweight Directory Services.

•Describe Active Directory Federation Services.

•Describe Active Directory Rights Management Services.

•Install and configure Active Directory Rights Management Services.

Module 9: Installing and Configuring Remote Desktop Services

This module provides an overview of RDS and related role services, and the procedures for connecting to an RD Session host. The module describes RemoteApp programs and the methods for accessing them. The module also explains how to use RD Gateway to access RDS infrastructure securely from an external network.

Lessons

- Overview of Remote Desktop Services

- Implementing RemoteApp Infrastructure

- Implementing Remote Desktop Gateway

Lab : Implementing Remote Desktop Services

- Preparing the RDS Environment

- Publishing RemoteApp programs

- Accessing Published RemoteApp Programs

After completing this module, students will be able to:
•Describe Remote Desktop Services.
•Implement Remote Applications.
•Implement Remote Desktop Gateway.

Module 10: Managing Remote Desktop Services

It is very important to manage client connections for Remote Desktop to provide a stable and secure environment. In this module, you will learn about Remote Desktop Session Host and Connection Broker, Remote Desktop Licensing, and Remote Desktop client connections management.

Lessons

- Managing RD Session Host and Connection Broker

- Configuring and Managing Remote Desktop Licensing

- Managing Remote Desktop Client Connections

Lab : Managing Remote Desktop Services

- Installing the RDS Role Services and Reviewing the RDL Manager Tool

- Using WSRM to apply an equal per user resource management policy

- Installing and Configuring Remote Desktop Services Connection Broker

After completing this module, students will be able to:
•Manage Remote Desktop Session Host and Connection Broker.
•Manage Remote Desktop Licensing.
•Manage Remote Desktop client connections.

Module 11: Installing and Configuring Web Servers and Applications with Internet Information Services

This module explains the new Web Server (IIS) 7.0 and 7.5 roles available on Windows Server 2008 and Windows Server 2008 R2, respectively. This module also describes the application servers that help configure a simple website, an FTP server, and an SMTP server within the IIS role.

Lessons

- Managing the Web Server Role

- Configuring web Applications and Sites

- Configuring a File Transfer Protocol Server and Simple Mail Transfer Protocol Server

- Configuring Secure Websites and Servers

Lab : Installing and Configuring IIS and Creating a Website in IIS

- Deploying the Web Server (IIS) Server Role

- Configuring the Contoso Website to enable logging and back up the site configuration

Lab : Implementing FTP and SMTP Services in IIS

- Installing FTP and SMTP

- Configuring and Testing FTP

- Configuring and Testing SMTP

Lab : Implementing Security on Websites

- Enabling Integrated Windows Authentication

- Configuring SSL

After completing this module, students will be able to:
•Manage the Web Server role.
•Configure websites, applications, and virtual folders.
•Configure both the File Transfer Protocol and the Simple Mail Transfer Protocol.
•Configure IIS to enable a more secure website platform.

Module 12: Configuring Storage Technologies in Windows Server 2008

This module defines basic storage terminology, types of available configurations, and information about storage area networks (SANs).

Lessons

- Configuring Distributed File System

- Managing Storage with File System Resource Management

- Implementing Classification Management and File Management Tasks

- Configuring Storage in Windows Server 2008

Lab : Configuring Storage Technologies in Windows Server 2008

- Installing the Distributed File System Role Service

- Creating a DFS Namespace

- Configuring Folder Targets

- Configuring DFS Folder Replication

- Installing the FSRM Role Service and Configuring Quotas

- Configuring File Screening and Storage Reports

After completing this module, students will be able to:
•Configure DFS.
•Manage storage by using File System Resource Management.
•Describe how Classification Management and File Management enable you to organize your server-based files.
•Describe storage area network connectivity.

Module 13: Configuring High Availability in Windows Server 2008

This module explains the functionality of Network Load Balancing and how it has changed from previous versions of Windows Server to Windows Server 2008 to understand and implement a Windows Server 2008 failover cluster. This module covers the management and configuration aspects of both Network Load Balancing and failover clustering.

Lessons

- Configuring Network Load Balancing

- Overview of Windows Server 2008 Failover Clusters

- Preparing for Failover Clustering

- Creating and Configuring Failover Clusters

Lab : Configuring High Availability in Windows server 2008

- Creating and Validating a Cluster

- Clustering the Print Services Role by Using Failover Cluster Management

- Configuring Cluster Resources

After completing this module, students will be able to:
•Configure Network Load Balancing.
•Describe Windows Server 2008 failover clusters.
•Prepare for failover clustering implementation.
•Create and configure failover clusters.

Module 14: Configuring Virtualization in Windows Server 2008

This module explains the features, requirements, and usage of the Hyper-V role of Windows Server 2008, as well as implementation of Virtual Desktop Infrastructure.

Lessons

- Hyper-V Overview

- Installing and Configuring Hyper-V and Virtual Machines

- Overview of Virtualization Management

- High Availability in a Hyper-V Environment

- Implementing Virtual Desktop Infrastructure

Lab : Configuring Hyper-V and Virtual Machines

- 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 virtualization platform .
•Install and configure Hyper-V.
•Describe management technologies for a virtual environment.
•Describe high availability options in a Hyper-V environment.
•Describe Virtual Desktop Infrastructure.