

6416C Updating Network Infrastructure/Active Directory Windows Server 2008 Instructor-Led (Classroom) - Five Days

Course Description

This course will provide you with the knowledge and skills to work with network infrastructure and Active Directory technologies in Windows Server 2008.

After completing this course, students will be able to:

- Install and configure Windows Server 2008.
- Configure Windows Deployment Services (WDS).
- Configure networking and network services.
- Configure Network Policy Server (NPS) and remote access.
- Configure Network Access Protection (NAP).
- Configure Active Directory Domain Services (AD DS).
- Manage Active Directory Domain Services (AD DS).
- Configure Active Directory Lightweight Services (AD LDS).
- Configure Active Directory Certificate Services (AD CS).
- Configure Active Directory Federation Services (AD FS).
- Configure Active Directory Rights Management Services (AD RMS).
- Implement Software Maintenance by using Windows Server Update Services (WSUS).
- Configure storage technologies in Windows Server 2008.
- Configure high availability in Windows Server 2008.
- Configure virtualization in Windows Server 2008.

Who Needs To Attend

This course is intended for individuals who already have experience with Network Infrastructure and Active Directory technologies in Windows Server 2000 or Windows Server 2003, and who wish to upgrade their skills to Windows Server 2008. Typical students include people who have at least one year of experience implementing and administering a network operating system and IT Professionals who work in medium and enterprise organizations with the knowledge and skills to design, implement, and manage a Windows Server 2000 or Windows Server 2003 infrastructure.

Prerequisites

- Experience planning, implementing, managing, maintaining, and securing Microsoft Windows Server 2000 or 2003, including Active Directory and Network Infrastructure server roles.
- Working knowledge of networking, for example, TCP/IP and Domain Name System (DNS).
- Experience installing, configuring, and administering Microsoft Windows 2000, Windows XP Professional, or Microsoft Vista.
- MCSA on Windows Server 2003 or MCSE on Windows Server 2003 recommended.

Course Content

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.

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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 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

Course Content - 6416C (Continued)

- 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 Active Directory Domain Services

This module describes the requirements and procedures for installing domain controllers and then explains how to deploy read-only domain controllers (RODCs). The module also describes how to implement fine-grained password policies. Additionally, the module covers the new features in Group Policy and provides an overview of Group Policy preferences.

Course Content - 6416C (Continued)

Lessons

- Installing Domain Controllers
- Configuring Read-Only Domain Controllers
- Configuring Fine-Grained Password Policies
- New Features in Group Policy
- Configuring Group Policy Preferences

Lab : Configuring Active Directory Domain Services

- Installing and Configuring an RODC
- Implementing Fine-Grained Password Policies

Lab : Exploring New Features in Group Policy

- Creating a Central Store
- Configuring Administrative Templates
- Configuring Preferences

After completing this module, students will be able to:

- Install domain controllers.
- Configure read-only domain controllers.
- Configure fine-grained password policies.
- Describe the new features in Group Policy.
- Configure Group Policy preferences.

Module 7: Managing Active Directory Domain Services

This module explains how to use the various tools included in Windows Server 2008 to monitor and manage events related to AD DS. The module then describes how to configure AD DS auditing and to maintain AD DS by using the Windows Server 2008 built-in tools.

Lessons

- Managing Events
- Configuring AD DS Auditing
- Monitoring AD DS
- Maintaining AD DS

Lab : Managing Active Directory Domain Services

- Monitoring AD DS by Using Event Viewer
- Creating a Subscription
- Configuring AD DS Auditing
- Reanimating Deleted Objects

After completing this module, students will be able to:

- Manage events.
- Configure Active Directory Domain Services (AD DS) auditing.
- Monitor AD DS.
- Maintain AD DS.

Module 8: Configuring Active Directory Lightweight Directory Services

This module describes how to install and configure AD LDS. The module explains the procedures for configuring AD LDS instances, AD LDS replication, and AD LDS integration with AD DS.

Course Content - 6416C (Continued)

Lessons

- Installing and Configuring AD LDS
- Configuring AD LDS Instances
- Configuring AD LDS Replication
- Configuring AD LDS Integration with AD DS

Lab : Configuring Active Directory Lightweight Directory Services

- Configuring an AD LDS Instance and an Application Partition
- Configuring the AD LDS Access Control
- Configuring AD LDS Replication
- Adding AD DS Users to AD LDS Groups

After completing this module, students will be able to:

- Install and configure AD LDS.
- Configure AD LDS instances.
- Configure AD LDS replication.
- Configure AD LDS integration with AD DS.

Module 9: Configuring Active Directory Certificate Services

This module describes how to deploy and configure the Active Directory Certificates Services in Windows Server 2008. The module covers the procedures for managing certificate templates, certificate enrollment, certificate revocation, and certificate recovery.

Lessons

- 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:

- Deploy AD CS infrastructure.
- Manage certificate templates.
- Manage certificate enrollment.
- Manage certificate revocation.
- Manage certificate recovery.

Module 10: Configuring Active Directory Federation Services

This module provides an overview of identity federation and federation trusts. The module covers the various features and components of AD FS and the options, requirements, and procedure for deploying it. Finally, the module describes the various types of AD FS claims and the procedure for configuring AD FS claim mapping.

Lessons

- Overview of AD FS
- Deploying AD FS
- Implementing AD FS Claims

For more information contact Karen Stewart at (702) 697-2242 or KStewart@DatanamicsInc.com.

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Lab : Configuring AD FS for the Federated Web SSO Scenario

- Installing the AD FS Server Role
- Configuring Certificate Requirements
- Configuring the AD FS Web Agent
- Configuring the Web Server Application on the NWTDC01 Virtual machine
- Configuring the Federation Trust Policies
- Configuring the Account Partner Federation Service
- Configuring the Resource Partner Federation Service
- Testing the AD FS Implementation

After completing this module, students will be able to:

- Describe the features and functionality of AD FS.
- Deploy AD FS.
- Implement AD FS claims.

Module 11: Configuring Active Directory Rights Management Services

This module provides an overview of AD RMS features and functionality. The module then describes the requirements and procedures for deploying AD RMS servers and clients. Additionally, the module explains how to administer AD RMS templates and policies.

Lessons

- Overview of Active Directory Rights Management Services
- Deploying AD RMS
- Administering AD RMS Templates
- Administering AD RMS Policies

Lab : Configuring Active Directory Rights Management Services

- Installing the AD RMS Server Role
- Managing AD RMS Rights Policy Templates
- Configuring Trust Policies
- Testing AD RMS Functionality

After completing this module, students will be able to:

- Describe Active Directory Rights Management Services (AD RMS).
- Deploy AD RMS.
- Administer AD RMS templates.
- Administer AD RMS policies.

Module 12: Software Maintenance Using Windows Server Update Services

This module provides an overview of WSUS and its features. The module also describes the requirements and procedures for installing, configuring, and managing WSUS.

Lessons

- Introduction to Windows Server Update Services 3.0 SPI
- Installing and Configuring WSUS
- Managing WSUS

Lab : Maintaining Software by Using Windows Server Update Services

- Installing WSUS Prerequisites
- Installing WSUS
- Restoring a WSUS Database
- Creating a Computer Group and Managing Updates

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After completing this module, students will be able to:

- Provide an overview of WSUS.
- Install and configure WSUS.
- Manage the WSUS infrastructure.

Module 13: 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 14: Configuring High Availability in Windows Server 2008

This module describes the various options available in Windows Server 2008 that you can use to provide highly available network services. The module covers options such as Network Load Balancing (NLB) and Failover Clustering.

Lessons

- Configuring Network Load Balancing
- Overview of Windows Server 2008 Failover Clusters
- Preparing for Failover Clusters
- 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 NLB.
- Describe how failover clusters work in Windows Server 2008.
- Prepare your environment for failover clustering.
- Create and configure failover clusters.

Module 15: 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.



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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.

Course Fee

\$ 2,425

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