

6420 Fundamentals of Windows Server 2008

5 Days

Overview:

The purpose of this 5-day course is to teach students the basic fundamentals of networking, security, and server administration with Windows Server 2008. It is intended to provide the foundational knowledge needed to prepare for the Microsoft Technology Associate (MTA) exams and begin building a career in Microsoft technologies.

Course Outline:

Module 1: Understanding Networks Infrastructure

In this module, students will learn how to describe fundamental network component and terminology thus enabling the student to select an appropriate network component in a particular scenario. Students will also learn to determine the appropriate network infrastructure component for a given scenario.

Lessons

- Lesson 1: Network Architecture Standards
- Lesson 2: Local Area Networking
- Lesson 3: Wide Area Networking
- Lesson 4: Wireless Networking
- Lesson 5: Connecting to the Internet
- Lesson 6: Remote Access

Module 2: Connecting Network Components

In this module, students will learn to build a network using network hardware components and technologies. The student will also learn to determine the appropriate network hardware and wiring components for a given situation.

Lessons

- Lesson 1: Understanding the OSI Model
- Lesson 2: Understanding Adapters, Hubs, and Switches
- Lesson 3: Understanding Routing
- Lesson 4: Understanding Media Types

Module 3: Implementing TCP/IP

In this module, students will describe the protocols and services within the TCP/IP suite of protocols. Students will learn to implement IPv4 within a Windows environment. Students will also learn basic understanding of IPv6 and name resolution.

Lessons

- Lesson 1: Overview of TCP/IP
- Lesson 2: Understanding IPv4 Addressing
- Lesson 3: Configuring IPv4
- Lesson 4: Understanding IPv6
- Lesson 5: Name Resolution

Module 4: Implementing Storage in Windows Server

This module will introduce students to different storage technologies, discuss how to implement the storage solutions in Windows Server 2008 R2 and will finish with helping you detail a resilient strategy for your storage that will be tolerant in various ways, helping to avoid unplanned downtime and loss of data.

Lessons

- Lesson 1: Identifying Storage Technologies
- Lesson 2: Managing Disks and Volumes
- Lesson 3: Implementing RAID

Module 5: Installing and Configuring Windows Server

In this module, students will learn to understand the various options available for installing Windows Server and to complete an installation. Students will also launch a local media setup and then perform the post-installation configuration of a server.

Lessons

- Lesson 1: Installing Windows Server
- Lesson 2: Managing Services
- Lesson 3: Managing Peripherals and Devices

Module 6: Windows Server Roles

In this module, students will learn to deploy server roles to support a business scenario. Students will also learn to implement appropriate server roles to support a given scenario.

Lessons

- Lesson 1: Role-Based Deployment
- Lesson 2: Deploying Role-Specific Servers

Module 7: Implementing Active Directory Domain Services

In this module, students will learn to implement an AD DS forest. Students will also create and configure an AD DS forest.

Lessons

- Lesson 1: Introducing AD DS
- Lesson 2: Implementing AD DS
- Lesson 3: Managing Users, Groups, and Computers
- Lesson 4: Implementing Organizational Units
- Lesson 5: Implementing Group Policy

Module 8: Implementing IT Security Layers

In this module, students will learn the concept of defense-in-depth and how to implement this approach with Windows Server. Students will also

learn to implement security best practices to help to secure the network.

Lessons

- Lesson 1: Overview of Defense-in-Depth
- Lesson 2: Physical Security
- Lesson 3: Internet Security

Module 9: Implementing Windows Server Security

In this module, students will understand security features in Windows Server to help to provide defense-in-depth. Students will also implement some of the Windows Server security features.

Lessons

- Lesson 1: Overview of Windows Security
- Lesson 2: Securing Files and Folders
- Lesson 3: Implementing Encryption

Module 10: Implementing Network Security

In this module, students will describe the security-related threats to an organization's network and the technologies available in Windows Server to mitigate these risks.

Students will also implement network-related security features in Windows Server.

Lessons

- Lesson 1: Overview of Network Security
- Lesson 2: Implementing Firewall
- Lesson 3: Network Access Protection

Module 11: Implementing Security Software

In this module, students will identify and implement additional software components to enhance an organizations security. Students will also analyze and secure a Windows Server.

Lessons

- Lesson 1: Client Protection Features
- Lesson 2: E-Mail Protection
- Lesson 3: Server Protection

Module 12: Monitoring Server Performance

In this module, students will identify a poorly performing server. Students will also monitor a server to determine the performance level.

Lessons

- Lesson 1: Overview of Server Components
- Lesson 2: Performance Monitoring

Module 13: Maintaining Windows Server

In this module, students will understand the tools available and the methods to employ to maintain and troubleshoot Windows Server. Students will also learn how to maintain and troubleshoot Windows Server systems.

Lessons

- Lesson 1: Troubleshooting Windows Server Startup
- Lesson 2: Server Availability and Data Recovery
- Lesson 3: Applying Updates to Windows Server
- Lesson 4: Troubleshooting Windows Server

Module 14: Implementing Virtualization

In this module, students will understand the virtualization technologies provided by Microsoft. Students will also create and configure a virtual machine with Hyper-V.

Lessons

- Lesson 1: Overview of Virtualization Technologies
- Lesson 2: Implementing Hyper-V Role