



Price: \$1,995
Length: 35 Hours (5 days)

Introduction: Learn the fundamental knowledge and skills that you need to build a Windows Server infrastructure with Windows Server 2012. This five day course provides the networking, security, and system administration information that you need to implement a Windows Server infrastructure. It covers the basics of installation and configuration, storage, network infrastructure, network components, network protocols, server roles, Active Directory Domain Services (AD DS), Group Policy, IT security, server security, network security, security software, monitoring server performance, and maintaining a Windows Server.

Target Audience: Students for this course are just starting their Information Technology (IT) careers or want to change careers into Windows Server technologies. This fundamental knowledge and skills can be used by home computer users, small business owners, academic students, information workers, technical managers, help desk technicians, or students who want to cross train from another technology.

Prerequisites:

- A basic knowledge of general computing concepts
 - Some experience working with Windows Client operating systems such as Windows 7 or Windows 8
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Course Objectives: After completing this course, students will be able to:

- Perform a local media-based installation of Windows Server 2012.
- Select appropriate storage technologies and configure storage on a Windows Server.
- Describe fundamental network components and terminology so you can select an appropriate network component.
- Implement a network by selecting network hardware components and technologies and determine the appropriate network hardware and wiring components for a given situation.
- Describe the protocols and services within the Transmission Control Protocol/Internet Protocol (TCP/IP) suite of protocols and implement IPv4 within a Windows Server environment.
- Describe and implement server roles.
- Implement and configure an Active Directory Domain Service (AD DS) forest.
- Describe the concept of defense-in-depth and determine how to implement this approach with Windows Server.
- Identify the security features in Windows Server that help to provide defense-in-depth.
- Identify the network-related security features in Windows Server to mitigate security threats to your network.
- Identify and implement additional software components to enhance your organization's security.
- Monitor a server to determine the performance level.
- Identify the Windows Server tools available to maintain and troubleshoot Windows Server.



Course Outline

I. Installing and Configuring Windows Server 2012

- A. Windows Server Architecture
- B. Installing Windows Server
- C. Configuring Services
- D. Configuring Devices and Device Drivers

II. Implementing Storage in Windows Server

- A. Identifying Storage Technologies
- B. Managing Disks and Volumes
- C. Fault Tolerance

III. Understanding Network Infrastructure

- A. Network Architecture Standards
- B. Local Area Networking
- C. Wide Area Networking
- D. Wireless Networking
- E. Connecting to the Internet
- F. Remote Access

IV. Connecting Network Components

- A. Understanding the OSI Model
- B. Understanding Media Types
- C. Understanding Adapters, Hubs, and Switches
- D. Understanding Routing

V. Implementing TCP/IP

- A. Overview of TCP/IP
- B. IPv4 Addressing
- C. IPv6 Addressing
- D. Name Resolution

VI. Implementing Windows Server Roles

- A. Role-Based Deployment
- B. Deploying Role-Specific Services
- C. Considerations for Provisioning Roles

VII. Implementing Active Directory

- A. Introducing Active Directory Domain Services (AD DS)
- B. Implementing AD DS
- C. Managing Users, Groups, and Computers
- D. Implementing Group Policy

VIII. Implementing IT Security Layers

- A. Overview of Defense-in-Depth
- B. Physical Security
- C. Internet Security

IX. Implementing Security in Windows Server

- A. Overview of Windows Security
- B. Securing Files and Folders
- C. Implementing Encryption

X. Implementing Network Security

- A. Overview of Network Security
- B. Implementing Firewalls
- C. Internet Protocol Security (IPsec)

XI. Implementing Security Software

- A. Client Software Protection Features
- B. E-Mail Protection
- C. Server Protection

XII. Monitoring Server Performance

- A. Event Logging
- B. Performance Monitoring

XIII. Maintaining Windows Server

- A. Troubleshooting Windows Server Startup
- B. Server Availability and Data Recovery
- C. Applying Updates to Windows Server
- D. Troubleshooting Windows Server