Hands-On Fundamentals of Windows Server 2008



Course Description

This Hands-On 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 (if desired) and begin building a career in Microsoft technologies.

This course is geared to gain fundamental knowledge and skills around security, networking, and administration in Windows Server 2008 R2. It can apply to home computer users, academic, information workers, developers, or help desk technicians wishing to begin a new skills path or up-skill to Windows Server technologies.

Students Will Learn

- Describe fundamental network components and terminology thus enabling you to select an appropriate network component in a particular scenario.
- 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.
- Select appropriate storage technologies and configure storage on Windows Server.
- Perform a local media-based installation of Windows Server 2008 R2.
- Describe server roles.
- Implement and configure an Active Domain Directory 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 you network.
- Identify and implement additional software components to enhance your organizations security.
- Monitor a server to determine the performance level.
- Identify the Windows Server tools available to maintain and troubleshoot Windows Server.
- Create and configure a virtual machine with Hyper-V.

Prerequisites

A good fundamental knowledge of general computing equivalent with the CompTIA A+ Certification An ability to understand basic security, networking and administration concepts Some previous knowledge and experience with desktop operating systems, although this is not mandatory.

Course Outline

Fundamentals of Network Infrastructure Network Communication Standards Physical Network Infrastructure Logical Network Organization Overview of Active Directory Server Roles

Connecting Network Components Understanding the OSI Model Understanding Adapters, Hubs, and Switches Understanding Routing Understanding Media Types

Configuring Basic TCP/IPv4 Overview of the TCP/IP Protocol Suite Overview of TCP/IP Addressing Name Resolution Dynamic IP Addressing TCP/IPv4 Tools

Implementing Storage in Windows Server Identifying Storage Technologies Managing Disks and Volumes Implementing RAID

Installing and Configuring Windows Server Installing Windows Server Managing Services Managing Peripherals and Devices

Windows Server Roles Role-Based Deployment Deploying Role-Specific Servers

Implementing Active Directory Domain Services Introducing AD DS Implementing AD DS Managing Users, Groups, and Computers Implementing Organizational Units Implementing Group Policy Implementing IT Security Layers Overview of Defense-in-Depth Physical Security Internet Security

Implementing Windows Server Security Overview of Windows Security Securing Files and Folders Implementing Encryption

Implementing Network Security Overview of Network Security Implementing Firewall Network Access Protection

Implementing Security Software Client Protection Features E-Mail Protection Server Protection

Monitoring Server Performance Overview of Server Components Performance Monitoring

Maintaining Windows Server Troubleshooting Windows Server Startup Server Availability and Data Recovery Applying Updates to Windows Server Troubleshooting Windows Server

Configuring Print Resources and Printing Pools Printing Overview Configuring Network Printers Using Print Management Managing Printers Troubleshooting Network Printing

Implementing Virtualization Overview of Virtualization Technologies Implementing Hyper-V Role

Delivery Method

Instructor-Led with numerous Hands-On exercises.

Equipment Requirements

(This apply's to our hands-on courses only)

BTS always provides equipment to have a very successful Hands-On course. BTS also encourages all attendees to bring their own equipment to the course. This will provide attendees the opportunity to incorporate their own gear into the labs and gain valuable training using their specific equipment.

Course Length

5 Days