

Course 6427A: Configuring and Troubleshooting Internet Information Services in Windows Server 2008



Length:	3 Days
Audience(s):	IT Professionals
Level:	200
Technology:	Windows Server 2008
Type:	Course
Delivery Method:	Instructor-led (classroom)

About this Course

In this 3-day instructor-led course, the students will learn to install, configure, maintain, and troubleshoot an Internet Information Services (IIS) 7.0 Web Server in Windows Server 2008.

Audience Profile

The primary audience for this course is individuals who want to become a Web Server Administrator in an enterprise environment. Also, individuals who are assuming a new role requiring skills to manage content served by an IIS 7.0 Web Server over an intranet, extranet, and internet would be interested in this course.

The secondary audience for this course is individuals who are Web-based application developers who also possess networking skills.

At Course Completion

After completing this course, students will be able to:

- Describe the IIS 7.0 modular architecture and workloads.
- Configure an IIS 7.0 Web Server.
- Secure Web sites and Web application pools.
- Troubleshoot Web servers, sites and applications.
- Use command line tools and scripting tools.
- Tune IIS to improve performance.
- Maintain Web sites.
- Enable integrated technologies to extend IIS 7.0 functionality.



Pre-Requisites

Before attending this course, students must have:

Course 6420 Foundational Series: Fundamentals of a Windows Server 2008 Network Infrastructure and Application Platform.

Or

- A minimum of 1 year of experience administering and supporting a Web Server role using Windows Server 2003.
- Network + certification.

Course Outline

Module 1: Configuring an IIS 7.0 Web Server

The students will be introduced to the process of installing a Web Server and configuring IIS features such as application development; health and diagnostics; HTTP features and more.

Lessons

- Introducing Internet Information Services 7.0
- Installing the Web Server Role in Windows Server 2008
- Configuring Application Development, Health, and HTTP Features
- Configuring Performance, Security, and Server Component Features

Lab : Configuring an IIS 7.0 Web Server

- Installing IIS using Role Manager
- Installing IIS using Unattend Setup
- Installing IIS on Server Core from Command Line
- Configuring IIS and Validate Functionality

After completing this module, students will be able to:

- Describe the IIS 7.0 modular architecture.
- Describe the IIS 7.0 workloads.
- Describe the three methods for installing IIS 7.0.
- Install IIS 7.0 using each of the three identified methods.
- Configure common features for IIS 7.0.
- Validate functionality of configured features.



Module 2: Configuring IIS 7.0 Web Sites and Application Pools

The students will be introduced to creating and managing Web sites and application pools.

Lessons

- Introducing Web Sites and Application Pools
- Creating a Web Site
- Creating an Application Pool
- Maintaining an Application Pool

Lab : Configuring IIS 7.0 Web Sites and Application Pools

- Configuring Authentication Types
- Creating a Web Site and Web Application
- Creating an Application Pool
- Configuring an Existing Application Pool

After completing this module, students will be able to:

- Describe how the application pool is used.
- Describe authentication types used in IIS 7.0.
- Configure the authentication types for Web sites and application pools.
- Create a Web site and a corresponding virtual directory.
- Create a new application pool.
- Configure an existing application pool.

Module 3: Configuring IIS 7.0 Application Settings

The students will be introduced to configuring application settings using ASP.NET.

Lessons

- Configuring Application Settings
- Configuring ASP.NET Security

Lab : Configuring IIS 7.0 Application Settings

- Configuring ASP.NET
- Configuring ASP.NET Application Development Settings
- Configuring a Web Server to Host Multiple Web Applications with Separate Application Pools
- Configuring ASP.NET Security

After completing this module, students will be able to:

- Describe ASP.NET application development settings.
- Configure ASP.NET.
- Configure ASP.NET Web application development settings.
- Configure a Web Server to host multiple Web applications with separate application pools using ASP.NET.
- Configure ASP.NET security.



Module 4: Configuring IIS 7.0 Modules

The students will be introduced to configuring IIS modules.

Lessons

- Configuring Native Modules
- Configuring Managed Modules

Lab : Configuring IIS 7.0 Modules

- Configuring and Editing Native Modules
- Configuring and Edit Managed Modules

After completing this module, students will be able to:

- Configure native modules.
- Configure managed modules.
- Edit managed and native modules.

Module 5: Securing the IIS 7.0 Web Server and Web Sites

The students will be introduced to configuring a secure Web Server and Web sites and to using logging as a tool for monitoring security.

Lessons

- Configuring Secure Web Sites and Servers
- Configure Other Aspects of Web Server Security
- Configuring Logging for IIS 7.0

Lab : Securing IIS 7.0 Web Server and Web Sites

- Configuring a Secure Web Server
- Configuring Authorization, Authentication, and Access
- Configuring Logging
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After completing this module, students will be able to:

- Configure a secure Web Server.
- Configure authorization for IIS Web Server.
- Configure authentication for IIS Web Server.
- Configure access for IIS Web Server.
- Configure a secure Web site.
- Configure logging for IIS 7.0.



Module 6: Configuring Delegation and Remote Administration

The students will be introduced to assigning rights to Web site users and configuring users to serve as remote administrators of a server and its corresponding Web sites.

Lessons

- Configuring Remote Administration
- Configuring Delegated Administration
- Configuring Feature Delegation

Lab : Configuring Delegation and Remote Administration

- Configuring Remote Administration
- Configuring Delegated Administration
- Configuring Feature Delegation

After completing this module, students will be able to:

- Describe remote administration service.
- Configure remote administration.
- Describe the new distributed, configuration system, applicationHost.config.
- Describe how configuration files are distributed down to the application level Web.config for IIS settings.
- Configure delegated administrative rights to a Web site.
- Configure feature delegation for a specific Web site.

Module 7: Using Command-line and Scripting for IIS 7.0 Administration

The students will learn basic scripting methods for completing IIS 7.0 administrative tasks needed to maintain Web sites and Web Servers.

Lessons

- Tools for Running Administrative Tasks in IIS
- Executing Scripts for Administrative Tasks
- Managing IIS Tasks

Lab : Using Command-line and Scripting for IIS 7.0 Administration

- Managing IIS Web Sites with PowerShell
- Executing a Script using WAP
- Automating IIS Administration using Scripts
- Navigating IIS tasks using WMI and Appcmd



After completing this module, students will be able to:

- Maintain Web Servers with command-line tools
- Identify when and how to run scripts using PowerShell.
- Identify when and how to run scripts using the Microsoft Web Administration Provider.
- Identify when and how to run scripts using command-line.
- Execute an IIS script using PowerShell.
- Execute an IIS script using Microsoft Web Administration Provider.
- Execute an IIS script using command-line.
- Automate IIS administration tasks using scripts.
- Navigate IIS tasks using WMI Provider and appcmd.exe.

Module 8: Tuning IIS 7.0 for Improved Performance

The students will be introduced to techniques for improving Web Server performance.

Lessons

- Implementing Best Practices for Improving IIS Performance
- Configuring Options to Improve IIS Performance
- Managing Application Pools to Improve IIS Performance

Lab : Tuning IIS 7.0 for Performance

- Configuring IIS Performance Options
- Managing Application Pools to Improve Performance
- Deploying Applications

After completing this module, students will be able to:

- Describe best practices for improving performance.
- Configure options to improve IIS performance.
- Manage application pools to improve IIS performance.



Module 9: Ensuring Web Site Availability with Web Farms

The students will learn to ensure Web site availability in a Web farm topology.

Lessons

- Backing Up and Restoring Web Sites
- Working with Shared Configurations
- Configuring Network Load Balancing for IIS

Lab : Ensuring Web Site Availability with Web Farms

- Backing Up an IIS Web Site
- Restoring an IIS Web site
- Enabling Shared Configurations
- Configuring Network Load Balancing

After completing this module, students will be able to:

- Back up an IIS 7.0 Web site.
- Restore an IIS 7.0 Web site.
- Enable shared configurations.
- Ensure Web site availability using Network Load Balancing.

Module 10: Troubleshooting IIS 7.0 Web Servers

The students will learn to use audit logs to troubleshoot common Web Server related authentication, authorization, communication, and configuration error messages.

Lessons

- Using IIS 7.0 Logging for Troubleshooting
- Troubleshooting Authentication
- Troubleshooting Authorization
- Troubleshooting Communication
- Troubleshooting Configuration

Lab : Troubleshooting IIS 7.0 Web Servers

- Troubleshooting Authentication
- Troubleshooting Authorization Types
- Troubleshooting Communication
- Troubleshooting Configuration

After completing this module, students will be able to:

- Audit logs to troubleshoot IIS.
- Troubleshoot authentication based on common error messages.
- Troubleshoot authorization types for IIS 7.0.
- Troubleshoot configuration based on common error messages.
- Troubleshoot communication when managing a Web Server.