

# 6427 – Configuring and Troubleshooting Internet Information Services in Windows Server 2008

**Vendor Course Code:** MS6427

**Course Length:** 3 days

**Overview:** In this three day instructor-led course the students will learn to install, configure, maintain, and troubleshoot an Internet Information Services 7.0 Web Server in Windows Server 2008.

**Skills Gained:** After completing this course, students will be able to:

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

**Key Topics:** 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.

## 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 1: 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 1: 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 configuring application settings using ASP.NET.

Lessons

Configuring Application Settings  
Configuring ASP.NET Security

Lab 1: 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 1: 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 1: Securing IIS 7.0 Web Server and Web Sites

Configuring a Secure Web server

Configuring Authorisation, Authentication and Access

## Configuring Logging

After completing this module, students will be able to:

- Configure a secure Web Server.
- Configure authorisation 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 1: 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 1: 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 1: 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 1: 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, authorisation, communication, and configuration error messages.

Lessons  
Using IIS 7.0 Logging for Troubleshooting  
Troubleshooting Authentication  
Troubleshooting Authorisation  
Troubleshooting Communication  
Troubleshooting Configuration

Lab 1: Troubleshooting IIS 7.0 Web Servers  
Troubleshooting Authentication  
Troubleshooting Authorisation 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 authorisation types for IIS 7.0.
- Troubleshoot communication when managing a Web Server.
- Troubleshoot configuration based on common error messages.

### **Target Audience:**

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.

## Prerequisites:

Before attending this course, students must have one or more of the following:

- Course 6420 Foundational Series: Fundamentals of a Windows Server 2008 Network Infrastructure and Application Platform
- Or
- A minimum of one year of experience administering and supporting a Web Server role using Windows Server 2003
- Network + certification