

## Course duration

- 2 days

## Course Benefits

- Learn to plan for and perform an IIS installation.
- Understand IIS architecture and configuration.
- Perform common IIS administration tasks.
- Learn the techniques and best practices for IIS security and monitoring.
- Gain an understanding of how to host and configure ASP.NET-based web applications.

### Available Delivery Methods

#### Public Class

Public expert-led online training from the convenience of your home, office or anywhere with an internet connection. Guaranteed to run .

#### Private Class

Private classes are delivered for groups at your offices or a location of your choice.

## Course Outline

1. Introduction
  1. Role of a Web Server
  2. Dynamic Content
  3. Security
  4. Authorization and Authentication
  5. Evolution of IIS
2. Deployment Planning
  1. Windows Server Editions
  2. Windows Installation Options
  3. Active Directory vs. Standalone
  4. IIS Modules
3. Installation
  1. Server Manager
  2. PowerShell
  3. Upgrading from a Previous Version of IIS
  4. Automated Installation

5. Lab 1: Installation
4. Server Footprint
  1. Folders and Files
  2. System Services
  3. Windows Users and Groups
5. Tools for IIS Administration
  1. IIS Manager
  2. AppCmd.exe
  3. PowerShell
  4. Microsoft.Web.Administration API
6. Configuration System
  1. Architecture
  2. Configuration Editor
  3. Configuration Backups
7. Core Architecture
  1. HTTP.sys
  2. Worker Processes
  3. World Wide Web Publishing Service (W3SVC)
  4. Windows Activation Service (WAS)
8. Request Pipeline
  1. Modules
  2. Classic vs. Integrated Pipeline Mode
  3. Lab 2: Configuration Backup and Baseline Configuration
9. Basic Administration Objects
  1. Virtual Directories
  2. Applications
  3. Sites and Bindings
  4. Application Pools
  5. Lab 3: Creating a New Site
10. Request Processing
  1. Request Filtering
  2. Website Limits
  3. Output Caching
  4. Handler Mappings
  5. Static File Handler
  6. Compression
  7. HTTP Response Headers
  8. Error Pages
  9. IIS HTTP Sub-Status Codes
  10. Lab 4: Modules for Request Processing
11. Application Pool Administration
  1. Basic Settings
  2. Advanced Settings
  3. Application Pool Identity
  4. Recycling
  5. Real-Time Monitoring
  6. Lab 5: Recycling and Real-Time Monitoring

- 12. IP Address and Domain Restrictions
  - 1. Configuration
  - 2. Dynamic IP Restrictions
- 13. Logging
  - 1. HTTP Logging
  - 2. Centralized Logging
  - 3. Failed Request Tracing
  - 4. Lab 6: Logging and Failed Request Tracing
- 14. Server Certificates and SSL
  - 1. Introduction
  - 2. TLS Handshake
  - 3. Server Name Indication (SNI)
  - 4. Requiring SSL
  - 5. Certificate Rebind (IIS 8.5 only)
  - 6. Lab 7: Server Certificates and Requiring SSL
- 15. Authentication
  - 1. Application Pool Identity vs. Authenticated User
  - 2. Anonymous Authentication
  - 3. HTTP Basic Authentication
  - 4. HTTP Digest Authentication
  - 5. Windows Authentication
  - 6. Client Certificate Authentication
  - 7. ASP.NET Forms Authentication
  - 8. Delegation
  - 9. Lab 8: Authentication
- 16. Authorization
  - 1. NTFS Authorization
  - 2. URL-Based Authorization
  - 3. ASP.NET Application-Level Authorization
- 17. Session State
  - 1. Session IDs
  - 2. In-Process Session State
  - 3. Using a State Server
  - 4. Using SQL Server
  - 5. Lab 9: Session State
- 18. Remote Administration
  - 1. IIS Management Service
  - 2. Permissions
  - 3. Feature Delegation
- 19. Web Deploy
  - 1. Exporting and Importing Applications
  - 2. Visual Studio Support
- 20. URL Rewrite
  - 1. Introduction
  - 2. Rules
  - 3. Actions
  - 4. Lab 10: URL Rewrite

### 21. Web Farms

1. Introduction
2. Shared Configuration
3. Shared Website Content
4. Centralized SSL Certificates
5. Session State
6. .NET Machine Key

### 22. Application Request Routing (ARR)

1. Features
2. Architecture
3. Configuration
4. Server Farm Site Bindings

## Class Materials

Each student will receive a comprehensive set of materials, including course notes and all the class examples.

### Class Prerequisites

Experience in the following *is required* for this IIS class:

- No prior experience is presumed.