# **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.