Administering the Web Server (IIS) Role of Windows Server (10972)

Duration: 5 Days

MOC On-Demand Price: £650

Delivery Option: Attend via MOC On-Demand.

Students Will Learn

- Installing IIS

- Configuring the default web site

- Configuring and managing application pools

- Creating additional web sites

- Configuring Web sites and application support

- Securing Web sites and applications

- Securing Web site data transmission

- Managing certificates in the Centralized Certificate Store

- Configuring remote administration

- Implement FTP

- Monitoring IIS

- Backing up and restoring IIS

- Building load-balanced web farms

Course Description

This is a Microsoft Official Course (MOC) and includes Microsoft courseware and hands-on labs. This course provides students with the fundamental knowledge and skills to configure and manage Internet Information Services. This course is intended to help provide prerequisite skills supporting a broad range of Internet Web applications, security, and knowledge to help support other products that use IIS such as Exchange and SharePoint. In keeping with that goal, this course will not focus on any particular web application or development practice.

This course is intended for IT Professionals already experienced in general Windows Server and Windows Client administration. No prior experience with any version of Internet Information Services is assumed.

Course Prerequisites

Before attending this course, students must have:

- Experience with Windows networking technologies and implementation
- Experience with Windows Server administration, maintenance and troubleshooting

- Experience with Windows Client administration, maintenance and troubleshooting

About MOC On-Demand

MIcrosoft Official Courses On-Demand uses a combination of streaming video, text, lab exercises and assessment checks throughout the course. MOC On-Demand courses are available for 90 days and recommend the following system requirements:

- Browser: Current version of Internet Explorer, Microsoft Edge, Google Chrome or Firefox
- Internet: Broadband Internet connection of over 4Mbps
- Screen Resolution: 1280 x 1024 or higher

Course Overview

Module 1: Understanding and Installing Internet Information Services

In this module, you will learn about the infrastructure prerequisites for using Microsoft Internet Information Services (IIS) 8.5. Students will also learn about the high-level architecture of IIS, and will learn to perform a basic installation and configuration of IIS.

Lessons

- Understanding a Web Server infrastructure
- Installing Internet Information Services

Lab

- Installing Internet Information Services

After completing this module, students will be able to:

- Describe the prerequisites for using IIS
- Describe the architecture of IIS
- Install IIS and configure basic security settings

Module 2: Configuring The Default Website

In this module students will learn to plan and implement network requirements for a public website. Students will configure Domain Name Service (DNS) records to support access to both internal and public websites, and create virtual directories and application folders for additional website content.

Lessons

- Examining the Default Website Using IIS Manager
- Examining the Default IIS File Structure
- Configuring DNS Records for a Website
- Creating Folders, Virtual Directories, and Applications

Labs

- Configuring the Default Website for Public Access

Creating Virtual Directories and Applications

After completing this module, students will be able to:

- Plan and configure the DNS records and networking requirements that support website access
- Describe the default Microsoft Internet Information Services (IIS) folder structure for a website
- Create a webpage that verifies website functionality
- Install additional role services that support a web application
- Create folders, virtual directories, and applications that can contain additional website content

Module 3: Configuring and Managing Application Pools

In this module students will learn the benefits to the application pool architecture. Students will create and configure application pools to support additional applications and configure application pool recycle settings. Students will perform recycle events and examine the event logs for recycle events.

Lessons

- Defining the Application Pool Architecture
- Creating and Managing Application Pools
- Configuring Application Pool Recycling

Lab

- Configuring Application Pool Recycling

After completing this module, students will be able to:

- Describe the benefits of the application pool architecture
- Configure application pools to support web applications
- Configure application pool recycling
- Recycle application pools
- Monitor application pool recycling by using event logs

Module 4: Creating Additional Websites

In this module students will learn how to examine and create new websites using unique bindings to avoid naming conflicts. Students will examine existing sites to determine and resolve binding conflicts then create new websites by using unique bindings.

Lessons

- Understanding Configurations for Multiple Websites
- Configuring Website Bindings
- Creating and Starting Websites

Labs

- Examining Existing Websites for Binding Conflicts
- Creating New Websites

After completing this module, students will be able to:

- Describe the basic configuration of a server that hosts multiple websites
- Configure website bindings
- Create and configure new websites

Module 5: Configuring Website and Web Application Support

In this module students will learn to support additional application requirements including common configuration settings, platform support from the built-in web server, and include additional application support by using the Web Platform Installer.

Lessons

- Configuring Common Features
- Configuring Support for Web Applications

Labs

- Configuring Common Features
- Configuring Support for Web Applications

After completing this module, students will be able to:

- Describe and configure common IIS features
- Add support for web applications

Module 6: Securing Websites and Applications

In this module students will learn to secure internal and public websites for users and groups by using the built-in Windows and Basic authentication. Students will configure file system permissions for specific users and groups and secure a website using URL Authorization Rules.

Lessons

- Understanding IIS Authentication and Authorization
- Configuring Authentication and Authorization
- Configuring URL Authorization Rules

Labs

- Configuring Authentication and Access
- Configuring URL Authorization Rules

After completing this module, students will be able to:

- Describe access control methods that are used in IIS
- Configure authentication and authorization
- Configure URL authorization rules

Module 7: Securing Website Data Transmission

In this module students will protect customer data using websites configured for SSL. Students will install and configure PKI certificates on a web server, create secured bindings, and verify that a website data transmissions are secured.

Lessons

- Understanding Certificates and SSL
- Creating and Managing Web Server Certificates
- Configuring HTTPS Bindings

Labs

- Creating and Managing Web Server Certificates
- Adding a Certificate to a Website

After completing this module, students will be able to:

- Describe the benefits and function of digital certificates and Secure Sockets Layer (SSL)
- Create SSL certificates for a web server
- Configure HTTPS bindings that use certificates

Module 8: Managing Certificates in the Centralized Certificate Store

In this module students will install and configure the IIS 8.5 Central Certificate Store to enable centralized and improved certificate management, Students will configure a website to use a secured binding with the Central Certificate Store.

Lessons

- Understanding the Centralized Certificate Store
- Installing and Configuring the Centralized Certificate Store

Lab

- Installing and Configuring the Centralized Certificate Store

After completing this module, students will be able to:

- Explain the purpose of the Centralized Certificate Store
- Install and configure the Centralized Certificate Store

Module 9: Configuring Remote Administration

In this module students will configure secured remote management of web servers and websites. Create and configure permissions for site level administrators and developers, and verify web server and website management.

Lessons

- Installing and Configuring the Management Service
- Connecting to Remote Web Servers and Websites
- Delegating Management Permissions

Labs

- Installing and Configuring the Management Service
- Connecting to Remote Web Servers and Websites
- Delegating Management Permissions

After completing this module, students will be able to:

- Install and configure the IIS management service
- Connect to remote web servers and websites
- Delegate management permissions

Module 10: Implementing FTP

In this module students will learn configure a secured FTP site for users to store and retrieve files. Student will configure authentication, authorization and the FTP storage location. Students will retrieve and files using the native Windows FTP command.

Lessons

- Planning for FTP
- Implementing an FTP site
- Uploading and Downloading by Using FTP

Lab

- Installing and Configuring an FTP Site

After completing this module, students will be able to:

- Describe the architecture and requirements of FTP
- Implement anonymous and authenticated FTP sites
- Upload and download files by using FTP

Module 11: Monitoring IIS

In this module students will learn to monitor IIS log files and performance counters using Log Parser and PerfMon. Students will identify common issues related to performance and attacks recorded in the log files.

Lessons

- Monitoring IIS Logs
- Analyzing Performance Counters

Labs

- Monitoring IIS Logs
- Analyzing Performance Counters

After completing this module, students will be able to:

- Monitor IIS log files
- Analyze IIS performance counters

Module 12: Backing Up and Restoring IIS

In this module students will learn to backup and recover form a website or web server failure. Students will learn the importance of using high available techniques to avoid the recovery process.

Lessons

- Understanding IIS Backup and Recovery Components
- Backing Up and Recovering a Website

Lab

- Backing Up and Recovering Configuration History

After completing this module, students will be able to:

- Explain the components of IIS backup and recovery
- Back up and recover a website

Module 13: Building Load-Balanced Web Farms

In this module students will learn to increase reliability and performance of website by creating a web farm. Students will improve the management and update capabilities of the websites by using shared content in both a network share and DFS-R. Student will improve web server and website management by using Shared Configurations.

Lessons

- Understanding Load-Balancing Mechanisms
- Building a Load-Balanced Web Farm by Using ARR
- Sharing Content in a Web FarmÂ by Using Shared Folders
- Sharing Content in a Web Farm by Using DFS-R
- Sharing IIS Configurations in a Web Farm

Labs

- Building a Load-Balanced Web Farm by Using ARR
- Sharing Content in a Web Farm by Using Shared Folders
- Sharing Web Farm Content by Using DFS-R
- Sharing IIS Configurations in a Web Farm

After completing this module, students will be able to:

- List load-balancing mechanisms that can be used in a web farm
- Plan and deploy a load-balanced web farm that uses ARR
- Centralize the content for a web farm by using shared folders
- Centralize the content for a web farm by using Distributed File System-Replication (DFS-R)
- Centralize the configuration of a web farm