

Implementing Microsoft Internet Security and Acceleration (ISA) Server 2004 including ISA 2006 updates

Duration: 5 Days Course Code: M2824

Overview:

This instructor-led course provides students with the knowledge and skills to deploy and manage Microsoft Internet Security and Acceleration (ISA) Server 2004 as part of a larger security infrastructure. The course introduces security concepts unique to ISA Server 2004 and provides best practices for their implementation. This course includes information on both the Standard Edition and Enterprise Edition of ISA Server 2004 and will also cover the Incremental changes between ISA 2004 and ISA 2006

Target Audience:

The audience will be IT Professionals who are responsible for implementing network and perimeter security measures, including Internet firewalls, application layer filters, and screened networks. They will also implement caching servers and additional mechanisms to protect public-facing Web servers. These individuals will have a need to simplify ongoing management, reduce support costs and prevent security breaches.

This course will also help to prepare individuals pursuing the MCSA: Security or MCSE: Security certification specializations.

Objectives:

- After completing this course, students will gain the skills to:
- Describe the functionality provided by ISA Server 2004, and explain valid deployment scenarios for ISA Server 2004.
- Install and maintain ISA Server 2004, and install and configure ISA Server clients. Configure secure access to Internet resources for internal network clients using ISA Server 2004.
- Configure ISA Server 2004 as a firewall between the Internet and the internal network.
- Configure secure access to internal network resources for Internet clients who are using Web and server publishing rules.
- Configure ISA Server to provide secure access to Exchange Server for servers and clients located on the Internet.
- Implement application and Web filters on ISA Server 2004.
- Implement a virtual private network for remote clients and remote networks using ISA Server 2004.
- Implement Web proxy caching on ISA Server 2004.
- Monitor server performance, security, and usage on ISA Server 2004.
- Plan an ISA Server 2004 Enterprise Edition deployment and install ISA Server 2004 Enterprise Edition.
- Implement ISA Server 2004 Enterprise Edition in a back-to-back firewall scenario.
- Implement ISA Server 2004 Enterprise Edition in a site-to-site VPN scenario.

Prerequisites:

The skills and knowledge required from a delegate before they attend this course are as follows:

- Successful completion of Course 2810: Fundamentals of Network Security, or equivalent knowledge of networking security.
- Successful completion of Course 2273: Managing and Maintaining a Microsoft Windows Server 2003 Environment, or equivalent knowledge of the Windows Server 2003 operating system and network concepts, or equivalent knowledge of Microsoft Windows 2000 Server operating system and network concepts.
- Experience implementing network resources such as Web, FTP, and Microsoft Exchange servers. Detailed knowledge about

Testing and Certification:

This course will help the student prepare for the following Microsoft Certified Professional exam:

- [Exam 70-350](#): Implementing Microsoft Internet Security and Acceleration Server 2004

deploying these resources is not required.

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Content:

Overview of Microsoft ISA Server 2004

This module provides an introduction to ISA Server 2004. It introduces the core functionality provided by ISA Server 2004 and presents an overview of how ISA Server 2004 integrates with other security practices to form a defense-in-depth approach to network security. The module also describes the most common deployment scenarios for ISA Server 2004.

- Introducing ISA Server 2004

Installing and Maintaining ISA Server 2004

This module describes how to install ISA Server 2004, how to install and configure the ISA Server client software, and how to maintain ISA Server 2004 after installation.

- Installing ISA Server 2004
- Choosing ISA Server Clients
- Installing and Configuring Firewall Clients
- Advanced Firewall Client Configuration
- Securing ISA Server 2004
- Maintaining ISA Server 2004
- Lab A: Installing and Maintaining ISA Server 2004
- Performing an Unattended Installation of ISA Server 2004
- Migrating an ISA Server Configuration
- Securing ISA Server 2004

Enabling Access to Internet Resources

This module explains how to provide access to Internet resources for internal corporate clients while maintaining network security. The module discusses different ways to implement this and also how to configure rules for access.

- ISA Server 2004 as a Proxy Server
- Configuring Multi-Networking on ISA Server
- Configuring Access Rule Elements
- Configuring Access Rules for Internet Access
- Lab A: Enabling Access to Internet Resources
- Configuring ISA Server Access Rule Elements
- Configuring ISA Server Access Rules
- Testing ISA Server Access Rules

Configuring ISA Server 2004 as a Firewall

This module explains how to configure ISA Server 2004 to provide firewall capabilities and restrict traffic into and out of the network. The module describes how to configure firewall policies and rules to provide specific functionality.

- Using ISA Server as a Firewall
- Examining Perimeter Networks and Templates
- Configuring System Policies
- Configuring Intrusion Detection and IP

Integrating ISA Server 2004 and Microsoft Exchange Server

This module explains how Microsoft Exchange Server is a critical network service that is virtually always accessible from the Internet and how ISA Server 2004 can be used to provide security for Exchange Server and for securing client connections to Exchange.

- Issues in E-Mail Security
- Configuring ISA Server to Secure SMTP Traffic
- Configuring ISA Server to Secure Web Client Connections
- Configuring ISA Server to Secure Client Connections
- Lab A: Integrating ISA Server 2004 and Microsoft Exchange Server
- Enabling RPC over HTTP Client Connections
- Configuring a Forms-Based Authentication for Microsoft Outlook Web Access

Advanced Application and Web Filtering

This module explains how application and Web filtering can be used for very specific filtering of traffic that flows through the ISA Server. The module shows how to configure application and Web filtering to provide advanced protection for the internal network.

- Advanced Application and Web Filtering Overview
- Configuring HTTP Web Filters
- Configuring Additional Application and Web Filters
- Lab A: Advanced Application and Web Filtering
- Identifying an Application Method and Signature
- Modifying the HTTP Web Filter

Configuring Virtual Private Network Access for Remote Clients and Networks

This module explains how to provide access to the internal network for remote users while maintaining network security by implementing a virtual private network (VPN). The module shows how to configure ISA Server 2004 to provide a VPN solution.

- Virtual Private Networking Overview
- Configuring Virtual Private Networking for Remote Clients
- Configuring Virtual Private Networking for Remote Sites
- Configuring VPN Quarantine Control Using ISA Server 2004

Implementing Caching to Improve Browsing Performance

This module explains how ISA Server can

Implementing ISA Server 2004 Enterprise Edition

This module will focus on the concepts related to planning and implementing an ISA Server 2004 infrastructure. This module will highlight the differences between ISA Server 2004 Standard Edition and Enterprise Edition and explain how to implement the Enterprise Edition features.

- Overview of ISA Server 2004 Enterprise Edition
- Planning an ISA Server 2004 Enterprise Edition Deployment
- Implementing ISA Server 2004 Enterprise Edition

Implementing ISA Server 2004 Enterprise Edition: Back-to-Back Firewall Scenario

The primary focus of this module is the lab where the students will implement ISA Server Enterprise Edition in a back-to-back firewall configuration that includes network load balancing and shared caching. The module information will introduce the complexities of implementing a back-to-back firewall configuration and then provide guidelines for deploying this configuration. In the lab, the students will implement and test a back-to-back firewall scenario. This module should prepare students to implement a scalable back-to-back firewall solution using ISA Server Enterprise Edition based on a minimal but realistic set of business requirements.

- Implementing a Back-to-Back Firewall Scenario
- Lab A: Implementing the Back-to-Back Firewall Scenario
- Exercise 1: Enabling Network Load Balancing for the Main\Front-End Array
- Exercise 2: Configuring the Front-End Array Server
- Exercise 3: Configuring Firewall Rules for Resource Access

Implementing ISA Server 2004 Enterprise Edition: Site-to-Site VPN Scenario

The primary focus of this module is the lab where the students will implement ISA Server Enterprise Edition in a branch office site-to-site VPN scenario that include VPN network load balancing. The module information will introduce the complexities of implementing a branch office site-to-site VPN scenario and then provide guidelines for deploying this configuration. In the lab, the students will implement and test the deployment scenario. This module should prepare students to implement a scalable site-to-site VPN solution using ISA Server Enterprise Edition. The scenario will demonstrate how to implement a site-to-site

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- Lab A: Configuring ISA Server as a Firewall
- Restoring Firewall Access Rules
- Modifying the ISA Server System Policy
- Testing the Policy Modifications

Configuring Access to Internal Resources

This module explains how to configure Web and server publishing rules to publish internal network resources to the Internet without compromising internal network security.

- Introduction to Publishing
- Configuring Web Publishing
- Configuring Secure Web Publishing
- Configuring Server Publishing
- Configuring ISA Server Authentication
- Lab A: Configuring Access to Internal Resources
- Configuring ISA Server Authentication and Secure Publishing
- Testing the ISA Server Configuration

cache content that clients request from the Internet to provide a quicker response to the client. This module discusses how to configure caching for maximum efficiency.

- Caching Overview
- Configuring General Cache Properties
- Configuring Cache Rules
- Configuring Content Download Jobs
- Lab A: Configuring Caching on ISA Server 2004
- Testing and Monitoring ISA Server Caching

Monitoring ISA Server 2004

This module explains how administrators can use monitoring features of ISA Server to track network activity and monitor ISA Server performance.

- Monitoring Overview
- Configuring Alerts
- Configuring Session Monitoring
- Configuring Logging
- Configuring Reports
- Monitoring Connectivity
- Monitoring Services and Performance
- Lab A: Configuring Caching on ISA Server 2004
- Exercise 1: Testing the Alerts Feature
- Exercise 2: Testing the Reporting Feature
- Exercise 3: Testing the Connectivity Monitoring Feature

VPN scenario that reflects a minimal but realistic set of business requirements.

- Implementing the Site-to-Site VPN Scenario
- Lab A: Implementing ISA Server Enterprise Edition
- Exercise 1: Enabling NLB and CARP for the Main/Front-End Array
- Exercise 2: Configuring the Main-Office Array for a Site-to-Site VPN
- Exercise 3: Deploying ISA Server Services in a Remote Site
- Exercise 4: Configure the Remote Site for a Site-to-Site VPN

Incremental functionality within ISA 2006

- Secure Application Publishing with ISA Server 2006
- Publishing Exchange Web Access
- Certificate Management Using Cross-Site Link Translation to publish SharePoint Server
- Publishing a Web Farm for Load Balancing
- ISA Server 2006 as Branch Office Gateway
- Configuring HTTP Compression to Reduce Bandwidth Usage
- Configuring ISA Server to Cache BITS Content
- Configuring DiffServ Settings to Prioritize Network Traffic
- Web Access Protection with ISA Server 2006
- Configuring ISA Server 2006 for Flood Resiliency

Additional Information:

Exclusive Modules - Incremental changes between ISA 2004 and 2006

These modules will cover the Incremental changes between ISA 2004 and ISA 2006.

A Hands on Lab and theory elements will cover:- Security, management and performance changes, Focusing on New Server Publishing features and Branch office Gateway and Web Access Protection.

Module A Secure Application Publishing with ISA Server 2006

Publishing Exchange Web Access - Certificate Management Using Cross-Site Link Translation to Publish SharePoint Server Publishing a Web Farm for Load Balancing

Module B ISA Server 2006 as Branch Office Gateway

Configuring HTTP Compression to Reduce Bandwidth Usage Configuring ISA Server to Cache BITS Content Configuring DiffServ Settings to Prioritize Network Traffic

Module C: Web Access Protection with ISA Server 2006

Configuring ISA Server 2006 for Flood Resiliency

Further Information:

For More information, or to book your course, please call us on Head Office 01189 123456 / Northern Office 01924 377489

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