



Microsoft  
**Internet Security &  
Acceleration Server 2004**

## Course 2824B: Implementing Microsoft Internet Security and Acceleration Server 2004

|                 |   |
|-----------------|---|
| Length          | 5 days  |
| Audience(s)     | IT Professionals                                    |
| Technology      | Microsoft Internet Security and Acceleration Server |
| Type            | Course  |
| Delivery Method | Instructor-led (classroom)                          |

### About this Course

This five-day 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.

### Audience Profile

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.

### At Course Completion

After completing this course, students will be able 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 intranet clients using ISA Server 2004.
- Configure ISA Server 2004 as a firewall between the Internet and the internal network.
- Configure secure access to Intranet resources for Internet clients who are using Web and server publishing rules.
- Configure ISA Server to provide secure access to ES for servers and clients on the Internet.
- Implement application and Web filters on ISA Server 2004.
- Implement a VPN for remote clients/remote networks using ISA Server 2004.
- Implement Web proxy caching on ISA Server 2004.
- Plan 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.

### Certification Path

MCP (Microsoft Certified Professional)

MCP: Microsoft Internet Security and Acceleration (ISA) Server 2004

- Exam 70-350: Implementing Microsoft Internet Security and Acceleration Server 2004

MCSE (Microsoft Certified System Engineer)

MCSA (Microsoft Certified System Administrator)

## Course Outline

| Module 1: Overview of Microsoft ISA Server 2004   |   |   |
|---|---|---|
| Lessons   | Labs: Introducing ISA Server 2004   | After completing this module, students will be able to  |
| <ul style="list-style-type: none"> <li>Introducing ISA Server 2004</li> <li>Deployment Scenarios for ISA Server 2004</li> </ul>   | <ul style="list-style-type: none"> <li>Designing an ISA Server Deployment.</li> </ul>   | <ul style="list-style-type: none"> <li>Describe the features and functionality in ISA Server 2004 Standard Edition and Enterprise Edition.</li> <li>List common deployment scenarios for ISA Server.</li> </ul>   |
| Module 2: Installing and Maintaining ISA Server 2004  |   |   |
| Lessons   | Labs: Installing and Maintaining ISA Server 2004  | After completing this module, students will be able to  |
| <ul style="list-style-type: none"> <li>Performing an Unattended Installation of ISA Server 2004</li> <li>Migrating an ISA Server Configuration</li> <li>Securing ISA Server 2004</li> </ul>   | <ul style="list-style-type: none"> <li>Performing an Unattended Installation of ISA Server 2004</li> <li>Migrating an ISA Server Configuration</li> <li>Securing ISA Server 2004</li> </ul> | <ul style="list-style-type: none"> <li>Install ISA Server 2004.</li> <li>Install and configure ISA Server 2004 clients.</li> <li>Improve the security of ISA Server.</li> <li>Maintain ISA Server.</li> </ul>   |
| Module 3: Enabling Access to Internet Resources   |   |   |
| Lessons   | Labs: Enabling Access to Internet Resources   | After completing this module, students will be able to  |
| <ul style="list-style-type: none"> <li>ISA Server 2004 as a Proxy Server</li> <li>Configuring Multi-Networking on ISA Server</li> <li>Configuring Access Rule Elements</li> <li>Configuring Access Rules for Internet Access</li> </ul> | <ul style="list-style-type: none"> <li>Configuring ISA Server Access Rule Elements</li> <li>Configuring ISA Server Access Rules</li> <li>Testing ISA Server Access Rules</li> </ul>         | <ul style="list-style-type: none"> <li>Describe access to Internet resources and how ISA Server 2004 enables access.</li> <li>Describe how ISA Server 2004 works as a proxy server.</li> <li>Configure multiple networks on ISA Server.</li> <li>Configure access rule elements.</li> <li>Configure ISA Server to provide access to Internet res.</li> </ul>  |
| Module 4: Configuring ISA Server 2004 as a Firewall   |   |   |
| Lessons   | Labs: Configuring ISA Server as a Firewall  | After completing this module, students will be able to  |
| <ul style="list-style-type: none"> <li>Using ISA Server as a Firewall</li> <li>Examining Perimeter Networks and Templates</li> <li>Configuring System Policies</li> <li>Configuring Intrusion Detection and IP Preferences</li> </ul>   | <ul style="list-style-type: none"> <li>Restoring Firewall Access Rules</li> <li>Modifying the ISA Server System Policy</li> <li>Testing the Policy Modifications</li> </ul>                 | <ul style="list-style-type: none"> <li>Describe the core functionality provided by firewalls and how this functionality is implemented in ISA Server 2004.</li> <li>Describe the different types of perimeter network types and use ISA Server network templates to deploy perimeter networks.</li> <li>Configure system policies.</li> <li>Configure intrusion detection and IP preferences on ISA Server 2004.</li> </ul> |

| Module 5: Configuring Access to Internal Resources   |  |   |
|--|--|---|
| Lessons  | Labs: Configuring Access to Internal Resources   | After completing this module, students will be able to  |
| <ul style="list-style-type: none"> <li>• Introduction to Publishing</li> <li>• Configuring Web Publishing</li> <li>• Configuring Secure Web Publishing</li> <li>• Configuring Server Publishing</li> <li>• Configuring ISA Server Authentication</li> </ul>              | <ul style="list-style-type: none"> <li>• Configuring ISA Server Authentication and Secure Publishing</li> <li>• Testing the ISA Server Configuration</li> </ul>                    | <ul style="list-style-type: none"> <li>• Describe how ISA Server 2004 can be used to configure access to internal resources.</li> <li>• Configure Web publishing.</li> <li>• Configure secure Web publishing.</li> <li>• Configure server publishing.</li> <li>• Configure ISA Server authentication.</li> <li>• Configure publishing for additional services.</li> </ul> |
| Module 6: Integrating ISA Server 2004 and Microsoft Exchange Server  |  |   |
| Lessons  | Labs: Integrating ISA Server 2004 / Exchange Server  | After completing this module, students will be able to  |
| <ul style="list-style-type: none"> <li>• Issues in E-Mail Security</li> <li>• Configuring ISA Server to Secure SMTP Traffic</li> <li>• Configuring ISA Server to Secure Web Client Connections</li> <li>• Configuring ISA Server to Secure Client Connections</li> </ul> | <ul style="list-style-type: none"> <li>• Enabling RPC over HTTP Client Connections</li> <li>• Configuring a Forms-Based Authentication for Microsoft Outlook Web Access</li> </ul> | <ul style="list-style-type: none"> <li>• Describe the issues in e-mail security.</li> <li>• Configure ISA Server to secure SMTP traffic.</li> <li>• Configure ISA Server to secure client connections.</li> <li>• Configure ISA Server to secure Web client connections.</li> </ul>   |
| Module 7: Advanced Application and Web Filtering   |  |   |
| Lessons  | Labs: Advanced Application and Web Filtering   | After completing this module, students will be able to  |
| <ul style="list-style-type: none"> <li>• Advanced Application/ Web Filtering Overview</li> <li>• Configuring HTTP Web Filters</li> <li>• Configuring Additional Application and Web Filters</li> </ul>   | <ul style="list-style-type: none"> <li>• Identifying an Application Method and Signature</li> <li>• Modifying the HTTP Web Filter</li> </ul>                                       | <ul style="list-style-type: none"> <li>• Describe how application filtering and Web filtering work.</li> <li>• Configure HTTP Web filters.</li> <li>• Configure other application and Web filters.</li> </ul>   |
| Module 8: Configuring Virtual Private Network Access for Remote Clients and Networks   |  |   |
| Lessons  | Labs: None   | After completing this module, students will be able to  |
| <ul style="list-style-type: none"> <li>• Virtual Private Networking (VPN) Overview</li> <li>• Configuring VPN for Remote Clients</li> <li>• Configuring VPN for Remote Sites</li> <li>• Configuring VPN Quarantine Control Using ISA Server 2004</li> </ul>              |  | <ul style="list-style-type: none"> <li>• Describe how VPNs work /components required to configure a VPN.</li> <li>• Configure ISA Server to enable VPNs for remote clients.</li> <li>• Configure ISA Server to enable VPNs for remote sites.</li> <li>• Configure ISA Server to enable VPN quarantine service.</li> </ul>   |

| Module 9: Implementing Caching to Improve Browsing Performance   |  |  |
|--|--|--|
| Lessons  | Labs: Configuring Caching on ISA Server 2004   | After completing this module, students will be able to   |
| <ul style="list-style-type: none"> <li>• Caching Overview</li> <li>• Configuring General Cache Properties</li> <li>• Configuring Cache Rules</li> <li>• Configuring Content Download Jobs</li> </ul>                           | <ul style="list-style-type: none"> <li>• Testing and Monitoring ISA Server Caching</li> </ul>  | <ul style="list-style-type: none"> <li>• Describe how caching is implemented on ISA Server 2004.</li> <li>• Configure caching properties on ISA Server 2004.</li> <li>• Configure cache rules on ISA Server 2004.</li> <li>• Configure content download jobs on ISA Server 2004</li> </ul>   |
| Module 10: Monitoring ISA Server 2004  |  |  |
| Lessons  | Labs: Configuring Caching on ISA Server 2004   | After completing this module, students will be able to   |
| <ul style="list-style-type: none"> <li>• Monitoring Overview</li> <li>• Configuring Alerts, Session Monitoring, Logging, Reports,</li> <li>• Monitoring Connectivity</li> <li>• Monitoring Services and Performance</li> </ul> | <ul style="list-style-type: none"> <li>• Testing the Alerts Feature</li> <li>• Testing the Reporting Feature</li> <li>• Testing the Connectivity Monitoring Feature</li> </ul>   | <ul style="list-style-type: none"> <li>• Describe how to use monitoring features on ISA Server 04.</li> <li>• Configure alerts on ISA Server 2004.</li> <li>• Configure session monitoring, logging, &amp; reports.</li> <li>• Configure monitoring of connectivity on ISA Server 2004.</li> <li>• Monitor services and performance on ISA Server 2004.</li> </ul> |
| Module 11: Implementing ISA Server 2004 Enterprise Edition   |  |  |
| Lessons  | Labs: None   | After completing this module, students will be able to   |
| <ul style="list-style-type: none"> <li>• Overview of ISA Server 2004 Enterprise Edition</li> <li>• Planning an ISA Server 2004</li> <li>• Implementing ISA Server 2004</li> </ul>  |  | <ul style="list-style-type: none"> <li>• Describe the differences between ISA EE &amp; ISA SE</li> <li>• Plan an ISA Server 2004 Enterprise Edition deployment.</li> <li>• Install, configure &amp; manage ISA Server 2004 EE.</li> </ul>  |
| Module 12: Implementing ISA Server 2004 Enterprise Edition: Back-to-Back Firewall Scenario   |  |  |
| Lessons  | Labs: Implementing the Back-to-Back Firewall Scenario  | After completing this module, students will be able to   |
| <ul style="list-style-type: none"> <li>• Implementing a Back-to-Back Firewall Scenario</li> </ul>  | <ul style="list-style-type: none"> <li>• Enabling Network Load Balancing for the Main\Front-End Array</li> <li>• Configuring the Front-End Array Server</li> <li>• Configuring Firewall Rules for Resource Access</li> </ul>   | <ul style="list-style-type: none"> <li>• Describe the issues involved with deploying ISA Server EE in a back-to-back firewall scenario and their Solution.</li> <li>• Implement ISA Server 2004 in a back-to-back firewall scenario.</li> </ul>  |
| Module 13: Implementing ISA Server 2004 Enterprise Edition: Site-to-Site VPN Scenario  |  |  |
| Lessons  | Labs: Implementing ISA Server Enterprise Edition   | After completing this module, students will be able to   |
| <ul style="list-style-type: none"> <li>• Implementing the Site-to-Site VPN Scenario</li> </ul>   | <ul style="list-style-type: none"> <li>• Enabling NLB/CARP for Main/Front-End Array</li> <li>• Configuring Main-Office Array for a Site-to-Site VPN</li> <li>• Deploying ISA Server Services in a Remote Site</li> <li>• Configure the Remote Site for a Site-to-Site VPN</li> </ul> | <ul style="list-style-type: none"> <li>• Describe the issues involved with deploying ISA Server Enterprise Edition in a site-to-site VPN scenario, their solutions.</li> <li>• Implement ISA Server 2004 in a site-to-site VPN scenario.</li> </ul>  |