

Cisco Asa 5500 X Series Next Generation Firewalls

CCNP Security SISAS 300-208 Official Cert Guide is a comprehensive self-study tool for preparing for the latest CCNP Security SISAS exam. Complete coverage of all exam topics as posted on the exam topic blueprint ensures readers will arrive at a thorough understanding of what they need to master to succeed on the exam. The book follows a logical organization of the CCNP Security exam objectives. Material is presented in a concise manner, focusing on increasing readers' retention and recall of exam topics. Readers will organize their exam preparation through the use of the consistent features in these chapters, including: Pre-chapter quiz - These quizzes allow readers to assess their knowledge of the chapter content and decide how much time to spend on any given section. Foundation Topics - These sections make up the majority of the page count, explaining concepts, configurations, with emphasis on the theory and concepts, and with linking the theory to the meaning of the configuration commands. Key Topics - Inside the Foundation Topics sections, every figure, table, or list that should absolutely be understood and remembered for the exam is noted with the words Key Topic in the margin. This tool allows the reader to quickly review the most important details in each chapter. Exam Preparation - This ending section of each chapter includes three additional features for review and study, all designed to help the reader remember the details as well as to get more depth. Readers will be instructed to review key topics from the chapter, complete tables and lists from memory, and define key terms. Final Preparation Chapter - This final chapter details a set of tools and a study plan to help readers complete their preparation for the exams. CD-ROM Practice Test - The companion CD-ROM contains a set of customizable practice tests.

Network threats are emerging and changing faster than ever before. Cisco Next-Generation Network Security technologies give you all the visibility and control you need to anticipate and meet tomorrow's threats, wherever they appear. Now, three Cisco network security experts introduce these products and solutions, and offer expert guidance for planning, deploying, and operating them. The authors present authoritative coverage of Cisco ASA with FirePOWER Services; Cisco Firepower Threat Defense (FTD); Cisco Next-Generation IPS appliances; the Cisco Web Security Appliance (WSA) with integrated Advanced Malware Protection (AMP); Cisco Email Security Appliance (ESA) with integrated Advanced Malware Protection (AMP); Cisco AMP ThreatGrid Malware Analysis and Threat Intelligence, and the Cisco Firepower Management Center (FMC). You'll find everything you need to succeed: easy-to-follow configurations, application case studies, practical triage and troubleshooting methodologies, and much more. Effectively respond to changing threat landscapes and attack continuums Design Cisco ASA with FirePOWER Services and Cisco Firepower Threat Defense (FTD) solutions Set up, configure, and troubleshoot the Cisco ASA FirePOWER Services module and Cisco Firepower Threat Defense Walk

through installing AMP Private Clouds Deploy Cisco AMP for Networks, and configure malware and file policies Implement AMP for Content Security, and configure File Reputation and File Analysis Services Master Cisco AMP for Endpoints, including custom detection, application control, and policy management Make the most of the AMP ThreatGrid dynamic malware analysis engine Manage Next-Generation Security Devices with the Firepower Management Center (FMC) Plan, implement, and configure Cisco Next-Generation IPS—including performance and redundancy Create Cisco Next-Generation IPS custom reports and analyses Quickly identify the root causes of security problems

End-to-End Network Security Defense-in-Depth Best practices for assessing and improving network defenses and responding to security incidents Omar Santos Information security practices have evolved from Internet perimeter protection to an in-depth defense model in which multiple countermeasures are layered throughout the infrastructure to address vulnerabilities and attacks. This is necessary due to increased attack frequency, diverse attack sophistication, and the rapid nature of attack velocity—all blurring the boundaries between the network and perimeter. End-to-End Network Security is designed to counter the new generation of complex threats. Adopting this robust security strategy defends against highly sophisticated attacks that can occur at multiple locations in your network. The ultimate goal is to deploy a set of security capabilities that together create an intelligent, self-defending network that identifies attacks as they occur, generates alerts as appropriate, and then automatically responds. End-to-End Network Security provides you with a comprehensive look at the mechanisms to counter threats to each part of your network. The book starts with a review of network security technologies then covers the six-step methodology for incident response and best practices from proactive security frameworks. Later chapters cover wireless network security, IP telephony security, data center security, and IPv6 security. Finally, several case studies representing small, medium, and large enterprises provide detailed example configurations and implementation strategies of best practices learned in earlier chapters. Adopting the techniques and strategies outlined in this book enables you to prevent day-zero attacks, improve your overall security posture, build strong policies, and deploy intelligent, self-defending networks. “Within these pages, you will find many practical tools, both process related and technology related, that you can draw on to improve your risk mitigation strategies.” —Bruce Murphy, Vice President, World Wide Security Practices, Cisco Omar Santos is a senior network security engineer at Cisco®. Omar has designed, implemented, and supported numerous secure networks for Fortune 500 companies and the U.S. government. Prior to his current role, he was a technical leader within the World Wide Security Practice and the Cisco Technical Assistance Center (TAC), where he taught, led, and mentored many engineers within both organizations. Guard your network with firewalls, VPNs, and intrusion prevention systems Control

network access with AAA Enforce security policies with Cisco Network Admission Control (NAC) Learn how to perform risk and threat analysis Harden your network infrastructure, security policies, and procedures against security threats Identify and classify security threats Trace back attacks to their source Learn how to best react to security incidents Maintain visibility and control over your network with the SAVE framework Apply Defense-in-Depth principles to wireless networks, IP telephony networks, data centers, and IPv6 networks This security book is part of the Cisco Press® Networking Technology Series. Security titles from Cisco Press help networking professionals secure critical data and resources, prevent and mitigate network attacks, and build end-to-end self-defending networks. Category: Networking: Security Covers: Network security and incident response

Cover crops slow erosion, improve soil, smother weeds, enhance nutrient and moisture availability, help control many pests and bring a host of other benefits to your farm. At the same time, they can reduce costs, increase profits and even create new sources of income. You'll reap dividends on your cover crop investments for years, since their benefits accumulate over the long term. This book will help you find which ones are right for you. Captures farmer and other research results from the past ten years. The authors verified the info. from the 2nd ed., added new results and updated farmer profiles and research data, and added 2 chap. Includes maps and charts, detailed narratives about individual cover crop species, and chap. about aspects of cover cropping.

This proceedings volume provides a snapshot of the latest issues encountered in technical convergence and convergences of security technology. It explores how information science is core to most current research, industrial and commercial activities and consists of contributions covering topics including Ubiquitous Computing, Networks and Information Systems, Multimedia and Visualization, Middleware and Operating Systems, Security and Privacy, Data Mining and Artificial Intelligence, Software Engineering, and Web Technology. The proceedings introduce the most recent information technology and ideas, applications and problems related to technology convergence, illustrated through case studies, and reviews converging existing security techniques. Through this volume, readers will gain an understanding of the current state-of-the-art in information strategies and technologies of convergence security. The intended readership are researchers in academia, industry, and other research institutes focusing on information science and technology.

Data Center Virtualization Fundamentals For many IT organizations, today's greatest challenge is to drive more value, efficiency, and utilization from data centers. Virtualization is the best way to meet this challenge. Data Center Virtualization Fundamentals brings together the comprehensive knowledge Cisco professionals need to apply virtualization throughout their data center environments. Leading data center expert Gustavo A. A. Santana thoroughly explores all components of an end-to-end data center virtualization solution,

including networking, storage, servers, operating systems, application optimization, and security. Rather than focusing on a single product or technology, he explores product capabilities as interoperable design tools that can be combined and integrated with other solutions, including VMware vSphere. With the author's guidance, you'll learn how to define and implement highly-efficient architectures for new, expanded, or retrofit data center projects. By doing so, you can deliver agile application provisioning without purchasing unnecessary infrastructure, and establish a strong foundation for new cloud computing and IT-as-a-service initiatives. Throughout, Santana illuminates key theoretical concepts through realistic use cases, real-world designs, illustrative configuration examples, and verification outputs. Appendixes provide valuable reference information, including relevant Cisco data center products and CLI principles for IOS and NX-OS. With this approach, Data Center Virtualization Fundamentals will be an indispensable resource for anyone preparing for the CCNA Data Center, CCNP Data Center, or CCIE Data Center certification exams. Gustavo A. A. Santana, CCIE No. 8806, is a Cisco Technical Solutions Architect working in enterprise and service provider data center projects that require deep integration across technology areas such as networking, application optimization, storage, and servers. He has more than 15 years of data center experience, and has led and coordinated a team of specialized Cisco engineers in Brazil. He holds two CCIE certifications (Routing & Switching and Storage Networking), and is a VMware Certified Professional (VCP) and SNIA Certified Storage Networking Expert (SCSN-E). A frequent speaker at Cisco and data center industry events, he blogs on data center virtualization at gustavoasantana.net. Learn how virtualization can transform and improve traditional data center network topologies Understand the key characteristics and value of each data center virtualization technology Walk through key decisions, and transform choices into architecture Smoothly migrate existing data centers toward greater virtualization Burst silos that have traditionally made data centers inefficient Master foundational technologies such as VLANs, VRF, and virtual contexts Use virtual PortChannel and FabricPath to overcome the limits of STP Optimize cabling and network management with fabric extender (FEX) virtualized chassis Extend Layer 2 domains to distant data center sites using MPLS and Overlay Transport Virtualization (OTV) Use VSANs to overcome Fibre Channel fabric challenges Improve SAN data protection, environment isolation, and scalability Consolidate I/O through Data Center Bridging and FCoE Use virtualization to radically simplify server environments Create server profiles that streamline "bare metal" server provisioning "Transcend the rack" through virtualized networking based on Nexus 1000V and VM-FEX Leverage opportunities to deploy virtual network services more efficiently Evolve data center virtualization toward full-fledged private clouds -Reviews - "The variety of material that Gustavo covers in this work would appeal to anyone responsible for Data Centers today. His grasp of virtualization technologies and ability to relate it in both technical and non-technical terms

makes for compelling reading. This is not your ordinary tech manual. Through use of relatable visual cues, Gustavo provides information that is easily recalled on the subject of virtualization, reaching across Subject Matter Expertise domains. Whether you consider yourself well-versed or a novice on the topic, working in large or small environments, this work will provide a clear understanding of the diverse subject of virtualization." -- Bill Dufresne, CCIE 4375, Distinguished Systems Engineer, Cisco (Americas) "..this book is an essential reference and will be valuable asset for potential candidates pursuing their Cisco Data Center certifications. I am confident that in reading this book, individuals will inevitably gain extensive knowledge and hands-on experience during their certification preparations. If you're looking for a truly comprehensive guide to virtualization, this is the one!" -- Yusuf Bhajji, Senior Manager, Expert Certifications (CCIE, CCDE, CCAr), Learning@Cisco "When one first looks at those classic Cisco Data Center blueprints, it is very common to become distracted with the overwhelming number of pieces and linkages. By creating a solid theoretical foundation and providing rich sets of companion examples to illustrate each concept, Gustavo's book brings hope back to IT Professionals from different areas of expertise. Apparently complex topics are demystified and the insertion of products, mechanisms, protocols and technologies in the overall Data Center Architecture is clearly explained, thus enabling you to achieve robust designs and successful deployments. A must read... Definitely!" -- Alexandre M. S. P. Moraes, Consulting Systems Engineer -- Author of "Cisco Firewalls" "Richard Deal's gift of making difficult technology concepts understandable has remained constant. Whether it is presenting to a room of information technology professionals or writing books, Richard's communication skills are unsurpassed. As information technology professionals we are faced with overcoming challenges every day...Cisco ASA Configuration is a great reference and tool for answering our challenges." --From the Foreword by Steve Marcinek (CCIE 7225), Systems Engineer, Cisco Systems A hands-on guide to implementing Cisco ASA Configure and maintain a Cisco ASA platform to meet the requirements of your security policy. Cisco ASA Configuration shows you how to control traffic in the corporate network and protect it from internal and external threats. This comprehensive resource covers the latest features available in Cisco ASA version 8.0, and includes detailed examples of complex configurations and troubleshooting. Implement and manage Cisco's powerful, multifunction network adaptive security appliance with help from this definitive guide. Configure Cisco ASA using the command-line interface (CLI) and Adaptive Security Device Manager (ASDM) Control traffic through the appliance with access control lists (ACLs) and object groups Filter Java, ActiveX, and web content Authenticate and authorize connections using Cut-through Proxy (CTP) Use Modular Policy Framework (MPF) to configure security appliance features Perform protocol and application inspection Enable IPSec site-to-site and remote access connections Configure WebVPN components for SSL VPN access Implement advanced

features, including the transparent firewall, security contexts, and failover Detect and prevent network attacks Prepare and manage the AIP-SSM and CSC-SSM cards

ArchiMate®, an Open Group Standard, is an open and independent modelling language for Enterprise Architecture that is supported by different tool vendors and consulting firms. ArchiMate provides instruments to enable enterprise architects to describe, analyze, and visualize the relationships among business domains in an unambiguous way. This book provides the official specification of ArchiMate 2.1 from The Open Group. ArchiMate 2.1 is a maintenance update to ArchiMate 2.0, addressing comments raised since the introduction of ArchiMate 2.0 in 2012. The ArchiMate 2.1 Standard supports modelling throughout the TOGAF® Architecture Development Method (ADM). The intended audience is threefold: Enterprise Architecture practitioners, such as architects (e.g. application, information, process, infrastructure, and, obviously, enterprise architects), senior and operational management, project leaders, and anyone committed to work within the reference framework defined by the Enterprise Architecture. Those who intend to implement ArchiMate in a software tool; they will find a complete and detailed description of the language in this book. The academic community, on which we rely for amending and improving the language, based on state-of-the-art research results in the enterprise architecture field.

Product Description Firewalls have ample recognition as key elements on the field of protecting networks. Even though this is not a new subject, many important concepts and resources, which could be helpful to designing a secure network, are often overlooked or even ignored. This book unveils the potential of Cisco firewall products and functionalities, and demonstrates how they can be grouped, in a structured manner, in order to build security solutions. The text is written in such a way that instructive linkages between theory and practice are naturally created, thus contributing to a better understanding of the most relevant concepts, and preparing the reader for the production of solid designs. The motivation for writing this book is associated with a simple axiom assumed: The better you understand how individual features operate, the better you can use them for design purposes. After all, producing better security designs is the aim of anyone truly committed to security. The book is organized in 17 chapters, as follows: Chapter 1. Firewalls and Network Security Chapter 2. Cisco Firewall Families Overview Chapter 3. Configuration Fundamentals Chapter 4. Learn the Tools. Know the Firewall Chapter 5. Firewalls in the Network Topology Chapter 6. Virtualization in the Firewall World Chapter 7. Through ASA without NAT Chapter 8. Through ASA using NAT Chapter 9. Classic IOS Firewall Overview Chapter 10. IOS Zone Policy Firewall Overview Chapter 11. Additional Protection Mechanisms Chapter 12. Application Inspection Chapter 13. Inspection of Voice Protocols Chapter 14. Identity on Cisco Firewalls Chapter 15. Firewalls and IP Multicast Chapter 16. Cisco Firewalls and IPv6 Chapter 17. Firewall Interactions Appendix A - NAT and ACL changes in ASA 8.3 Foreword (by Yusuf Bhajji) Networks today have outgrown exponentially both in size and complexity, becoming more multifaceted and increasingly

challenging to secure. The blueprint of a core network requires a strong foundation, which can be simply provided with an integrated firewall architecture cemented at the core of the system. Today, the firewall has become a core entity within a network and an integral part of every network infrastructure. Cisco Firewalls by Alexandre M. S. P. Moraes, has taken a stab at unleashing some of the fundamentally missed concepts, providing readers with a complete library of the entire family of Cisco Firewall products in a single binder. Alexandre has used a unique approach in explaining the concepts and architecture of the firewall technology. His distinct style has proven his skill at writing on a difficult subject using easy to understand illustrations that walk the reader through a step-by-step approach that shows the theory in action. He has combined some of the commonly used tools with the outputs from several commands to demonstrate the understanding of the technology and exemplifying how it works. Cisco Firewalls is unlike any other book on this subject and cannot be categorized as a configuration guide or command syntax manual. It provides the readers with the key tools and essential techniques to understand the wide-ranging Cisco firewall portfolio. Whether you are just a beginner trying to learn Cisco firewalls or an experienced engineer looking for a reference, there is something for everyone in this book at varying levels. Cisco Firewalls is an essential reference in designing, implementing, and maintaining today's highly secured networks. It is a must read and a must have in your collection - Magnum Opus! Yusuf Bhaiji; Sr. Manager, Expert Certifications (CCIE, CCDE, CCAr) 'Alexandre has worked with Cisco Security technologies since the year 2000 and is a well recognized expert in the LATAM Security community. He is a frequent speaker at Cisco Networkers and other Security conferences and has helped on training partners and customers in Brazil. In this book, he proposes a totally different approach to the important subject of Firewalls: instead of just presenting configuration models, he uses a set of carefully crafted examples to illustrate the theory in action. From the configuration fundamentals to advanced topics such as Voice Inspection, Multicast, IPv6 and Identity-based firewalls, the book unveils important details about the operations of Cisco firewalls solutions, enabling the reader to better use this knowledge on Security Design. A must read !' Luc Billot, Security Consulting Engineer at Cisco (Emerging Markets and European Market) 'I think that Alexandre's book could have the alternative title 'Cisco Firewalls illustrated'. The way in which he links theory and practice is really insightful and greatly helps on understanding individual features and making better use of them for Security design. Definitely a reference work in the subject!' Louis Senecal, CCIE 2198, Consulting Systems Engineer, Cisco (Canada) 'In this fully illustrated tour to the world of Cisco Firewalls, Alexandre devotes a great deal of attention to Data Center related topics. Network Virtualization architecture and protection of environments that include Virtual Machines figure among the important subjects covered in the book. For those that want to benefit from Virtualization without compromising Security, this work is highly recommended.' David Gonzalez, CISSP #99462, Consulting Systems Engineer at Cisco (LATAM)

A helpful guide on all things Cisco Do you wish that the complex topics of routers, switches, and networking could be presented in a simple, understandable presentation? With Cisco Networking All-in-One For Dummies, they are! This expansive reference is packed with all the information you need to learn to use Cisco routers and switches to develop and manage secure Cisco networks. This straightforward-by-fun guide offers

expansive coverage of Cisco and breaks down intricate subjects such as networking, virtualization, and database technologies into easily digestible pieces. Drills down complex subjects concerning Cisco networking into easy-to-understand, straightforward coverage. Shares best practices for utilizing Cisco switches and routers to implement, secure, and optimize Cisco networks. Reviews Cisco networking solutions and products, securing Cisco networks, and optimizing Cisco networks. Details how to design and implement Cisco networks. Whether you're new to Cisco networking products and services or an experienced professional looking to refresh your knowledge about Cisco, this For Dummies guide provides you with the coverage, solutions, and best practices you need.

Connecting Networks v6 Companion Guide is the official supplemental textbook for the Connecting Networks version 6 course in the Cisco Networking Academy CCNA Routing and Switching curriculum. The Companion Guide is designed as a portable desk reference to use anytime, anywhere to reinforce the material from the course and organize your time. The book's features help you focus on important concepts to succeed in this course: Chapter Objectives—Review core concepts by answering the focus questions listed at the beginning of each chapter. Key Terms—Refer to the lists of networking vocabulary introduced and highlighted in context in each chapter.

Glossary—Consult the comprehensive Glossary with 347 terms. Summary of Activities and Labs—Maximize your study time with this complete list of all associated practice exercises at the end of each chapter. Check Your Understanding—Evaluate your readiness with the end-of-chapter questions that match the style of questions you see in the online course quizzes. The answer key explains each answer. How To—Look for this icon to study the steps you need to learn to perform certain tasks. Interactive Activities—Reinforce your understanding of topics with dozens of exercises from the online course identified throughout the book with this icon. Packet Tracer

Activities—Explore and visualize networking concepts using Packet Tracer exercises interspersed throughout the chapters and provided in the accompanying Labs & Study Guide book. Videos—Watch the videos embedded within the online course. Hands-on Labs—Work through all the course labs and additional Class Activities that are included in the course and published in the separate Labs & Study Guide.

This book is a concise one-stop desk reference and synopsis of basic knowledge and skills for Cisco certification prep. For beginning and experienced network engineers tasked with building LAN, WAN, and data center connections, this book lays out clear directions for installing, configuring, and troubleshooting networks with Cisco devices. The full range of certification topics is covered, including all aspects of IOS, NX-OS, and ASA software. The emphasis throughout is on solving the real-world challenges engineers face in configuring network devices, rather than on exhaustive descriptions of hardware features. This practical desk companion doubles as a comprehensive overview of the basic knowledge and skills needed by CCENT, CCNA, and CCNP exam takers. It distills a comprehensive library of cheat sheets, lab configurations, and advanced commands that the authors assembled as senior network engineers for the benefit of junior engineers they train, mentor on the job, and prepare for Cisco certification exams. Prior familiarity with Cisco routing and switching is desirable but not necessary, as Chris Carthern, Dr. Will Wilson, Noel Rivera, and Richard Bedwell start their book with a review of the basics of configuring routers and switches. All the more

advanced chapters have labs and exercises to reinforce the concepts learned. This book differentiates itself from other Cisco books on the market by approaching network security from a hacker's perspective. Not only does it provide network security recommendations but it teaches you how to use black-hat tools such as oclHashcat, Loki, Burp Suite, Scapy, Metasploit, and Kali to actually test the security concepts learned. Readers of Cisco Networks will learn How to configure Cisco switches, routers, and data center devices in typical corporate network architectures The skills and knowledge needed to pass Cisco CCENT, CCNA, and CCNP certification exams How to set up and configure at-home labs using virtual machines and lab exercises in the book to practice advanced Cisco commands How to implement networks of Cisco devices supporting WAN, LAN, and data center configurations How to implement secure network configurations and configure the Cisco ASA firewall How to use black-hat tools and network penetration techniques to test the security of your network A detailed guide for deploying PPTP, L2TPv2, L2TPv3, MPLS Layer-3, AToM, VPLS and IPSec virtual private networks.

The authoritative visual guide to Cisco Firepower Threat Defense (FTD) This is the definitive guide to best practices and advanced troubleshooting techniques for the Cisco flagship Firepower Threat Defense (FTD) system running on Cisco ASA platforms, Cisco Firepower security appliances, Firepower eXtensible Operating System (FXOS), and VMware virtual appliances. Senior Cisco engineer Nazmul Rajib draws on unsurpassed experience supporting and training Cisco Firepower engineers worldwide, and presenting detailed knowledge of Cisco Firepower deployment, tuning, and troubleshooting. Writing for cybersecurity consultants, service providers, channel partners, and enterprise or government security professionals, he shows how to deploy the Cisco Firepower next-generation security technologies to protect your network from potential cyber threats, and how to use Firepower's robust command-line tools to investigate a wide variety of technical issues. Each consistently organized chapter contains definitions of keywords, operational flowcharts, architectural diagrams, best practices, configuration steps (with detailed screenshots), verification tools, troubleshooting techniques, and FAQs drawn directly from issues raised by Cisco customers at the Global Technical Assistance Center (TAC). Covering key Firepower materials on the CCNA Security, CCNP Security, and CCIE Security exams, this guide also includes end-of-chapter quizzes to help candidates prepare.

- Understand the operational architecture of the Cisco Firepower NGFW, NGIPS, and AMP technologies
- Deploy FTD on ASA platform and Firepower appliance running FXOS
- Configure and troubleshoot Firepower Management Center (FMC)
- Plan and deploy FMC and FTD on VMware virtual appliance
- Design and implement the Firepower management network on FMC and FTD
- Understand and apply Firepower licenses, and register FTD with FMC
- Deploy FTD in Routed, Transparent, Inline, Inline Tap, and Passive Modes
- Manage traffic flow with detect-only, block, trust, and bypass operations
- Implement rate limiting and analyze quality of service (QoS)
- Blacklist suspicious IP addresses via Security Intelligence
- Block DNS queries to the malicious domains
- Filter URLs based on category, risk, and reputation
- Discover a network and implement application visibility and control (AVC)
- Control file transfers and block malicious files using advanced malware protection (AMP)
- Halt cyber attacks using Snort-based intrusion rule
- Masquerade an internal host's original IP address using Network Address

Translation (NAT) · Capture traffic and obtain troubleshooting files for advanced analysis · Use command-line tools to identify status, trace packet flows, analyze logs, and debug messages

"This live video introduces Cisco ASA solutions to overcoming obstacles by providing complete configuration and troubleshooting guidance. Cisco ASA 5500-X Series Next-Generation Firewalls LiveLessons (Workshop) is the definitive insider's guide to planning, installing, configuring, and maintaining the new Cisco ASA firewall features."--Resource description page.

Thoroughly revised and expanded, this second edition adds sections on MPLS, Security, IPv6, and IP Mobility and presents solutions to the most common configuration problems.

Covers the most important and common configuration scenarios and features which will put you on track to start implementing ASA firewalls right away.

This IBM® Redbooks® publication is an IBM and Cisco collaboration that articulates how IBM and Cisco can bring the benefits of their respective companies to the modern data center. It documents the architectures, solutions, and benefits that can be achieved by implementing a data center based on IBM server, storage, and integrated systems, with the broader Cisco network. We describe how to design a state-of-the-art data center and networking infrastructure combining Cisco and IBM solutions. The objective is to provide a reference guide for customers looking to build an infrastructure that is optimized for virtualization, is highly available, is interoperable, and is efficient in terms of power and space consumption. It will explain the technologies used to build the infrastructure, provide use cases, and give guidance on deployments.

Trust the best selling Official Cert Guide series from Cisco Press to help you learn, prepare, and practice for exam success. They are built with the objective of providing assessment, review, and practice to help ensure you are fully prepared for your certification exam. CCNA Security 640-554 Official Cert Guide presents you with an organized test preparation routine through the use of proven series elements and techniques. "Do I Know This Already?" quizzes open each chapter and enable you to decide how much time you need to spend on each section. Exam topic lists make referencing easy. Chapter-ending Exam Preparation Tasks help you drill on key concepts you must know thoroughly. · Master Cisco CCNA Security 640-554 exam topics · Assess your knowledge with chapter-opening quizzes · Review key concepts with exam preparation tasks · Practice with realistic exam questions on the CD-ROM CCNA Security 640-554 Official Cert Guide, focuses specifically on the objectives for the Cisco CCNA Security IINS exam. Expert networking professionals Keith Barker and Scott Morris share preparation hints and test-taking tips, helping you identify areas of weakness and improve both your conceptual knowledge and hands-on skills. Material is presented in a concise manner, focusing on increasing your understanding and retention of exam topics. The companion CD-ROM contains a powerful Pearson IT Certification Practice Test engine that enables you to focus on individual topic areas or take complete, timed exams. The assessment engine also tracks your performance and provides feedback on a module-by-module basis, laying out a complete assessment of your knowledge to help you focus your study where it is needed most. The CD also contains 90 minutes of video training on CCP, NAT, object groups, ACLs, port security on a Layer 2 switch, CP3L, and zone-based firewalls. Well-regarded for its level of

detail, assessment features, comprehensive design scenarios, and challenging review questions and exercises, this official study guide helps you master the concepts and techniques that will enable you to succeed on the exam the first time. The official study guide helps you master all the topics on the CCNA Security IINS exam, including:

- Network security concepts
- Security policies and strategies
- Network foundation protection (NFP)
- Cisco Configuration Professional (CCP) Management plane security
- AAA security
- Layer 2 security threats
- IPv6 security
- Threat mitigation and containment
- Access Control Lists (ACLs)
- Network Address Translation (NAT)
- Cisco IOS zone-based firewalls and ASA firewalls
- Intrusion prevention and detection systems
- Public Key Infrastructure (PKI) and cryptography
- Site-to-site IPsec VPNs and SSL VPNs

CCNA Security 640-554 Official Cert Guide is part of a recommended learning path from Cisco that includes simulation and hands-on training from authorized Cisco Learning Partners and self-study products from Cisco Press. To find out more about instructor-led training, e-learning, and hands-on instruction offered by authorized Cisco Learning Partners worldwide, please visit www.cisco.com/go/authorizedtraining. The print edition of the CCNA Security 640-554 Official Cert Guide contains 90 minutes of video instruction, two free, complete practice exams as well as an exclusive offer for 70% off Premium Edition eBook and Practice Test. Pearson IT Certification Practice Test minimum system requirements: Windows XP (SP3), Windows Vista (SP2), or Windows 7; Microsoft .NET Framework 4.0 Client; Pentium class 1GHz processor (or equivalent); 512 MB RAM; 650 MB disc space plus 50 MB for each downloaded practice exam

Also available from Cisco Press for Cisco CCNA Security study is the CCNA Security 640-554 Official Cert Guide Premium Edition eBook and Practice Test. This digital-only certification preparation product combines an eBook with enhanced Pearson IT Certification Practice Test. This integrated learning package:

- Allows you to focus on individual topic areas or take complete, timed exams
- Includes direct links from each question to detailed tutorials to help you understand the concepts behind the questions
- Provides unique sets of exam-realistic practice questions
- Tracks your performance and provides feedback on a module-by-module basis, laying out a complete assessment of your knowledge to help you focus your study where it is needed most

This is the eBook version of the print title. Note that the eBook does not provide access to the practice test software that accompanies the print book. Learn, prepare, and practice for CCNA Cyber Ops SECFND 210-250 exam success with this Cert Guide from Pearson IT Certification, a leader in IT Certification learning. Master CCNA Cyber Ops SECFND 210-250 exam topics

Assess your knowledge with chapter-ending quizzes

Review key concepts with exam preparation tasks

CCNA Cyber Ops SECFND 210-250 Official Cert Guide is a best-of-breed exam study guide. Cisco enterprise security experts Omar Santos, Joseph Muniz, and Stefano De Crescenzo share preparation hints and test-taking tips, helping you identify areas of weakness and improve both your conceptual knowledge and hands-on skills. Material is presented in a concise manner, focusing on increasing your understanding and retention of exam topics. The book presents you with an organized test preparation routine through the use of proven series elements and techniques. Exam topic lists make referencing easy. Chapter-ending Exam Preparation Tasks help you drill on key concepts you must know thoroughly. Review questions help you assess your knowledge, and a final preparation chapter guides you through tools and resources to help you craft your final study plan.

Well-regarded for its level of detail, assessment features, and challenging review questions and exercises, this study guide helps you master the concepts and techniques that will allow you to succeed on the exam the first time. The study guide helps you master all the topics on the CCNA Cyber Ops SECFND exam, including: Fundamentals of networking protocols and networking device types Network security devices and cloud services Security principles Access control models Security management concepts and techniques Fundamentals of cryptography and PKI Essentials of Virtual Private Networks (VPNs) Windows-based Analysis Linux /MAC OS X-based Analysis Endpoint security technologies Network and host telemetry Security monitoring operations and challenges Types of attacks and vulnerabilities Security evasion techniques

Implementing Cisco IOS Network Security (IINS) Foundation Learning Guide Second Edition Foundation learning for the CCNA Security IINS 640-554 exam Implementing Cisco IOS Network Security (IINS) Foundation Learning Guide, Second Edition, is a Cisco-authorized, self-paced learning tool for CCNA® Security 640-554 foundation learning. This book provides you with the knowledge needed to secure Cisco® networks. By reading this book, you will gain a thorough understanding of how to develop a security infrastructure, recognize threats and vulnerabilities to networks, and mitigate security threats. This book focuses on using Cisco IOS routers to protect the network by capitalizing on their advanced features as a perimeter router, firewall, intrusion prevention system, and site-to-site VPN device. The book also covers the use of Cisco Catalyst switches for basic network security, the Cisco Secure Access Control System (ACS), and the Cisco Adaptive Security Appliance (ASA). You learn how to perform basic tasks to secure a small branch office network using Cisco IOS security features available through web-based GUIs (Cisco Configuration Professional) and the CLI on Cisco routers, switches, and ASAs. Whether you are preparing for CCNA Security certification or simply want to gain a better understanding of Cisco IOS security fundamentals, you will benefit from the information provided in this book. Implementing Cisco IOS Network Security (IINS) Foundation Learning Guide, Second Edition, is part of a recommended learning path from Cisco that includes simulation and hands-on training from authorized Cisco Learning Partners and self-study products from Cisco Press. To find out more about instructor-led training, e-learning, and hands-on instruction offered by authorized Cisco Learning Partners worldwide, please visit www.cisco.com/go/authorizedtraining. -- Develop a comprehensive network security policy to counter threats against information security -- Secure borderless networks -- Learn how to use Cisco IOS Network Foundation Protection (NFP) and Cisco Configuration Professional (CCP) -- Securely implement the management and reporting features of Cisco IOS devices -- Deploy Cisco Catalyst Switch security features -- Understand IPv6 security features -- Plan threat control strategies -- Filter traffic with access control lists -- Configure ASA and Cisco IOS zone-based firewalls -- Implement intrusion prevention systems (IPS) and network address translation (NAT) -- Secure connectivity with site-to-site IPsec VPNs and remote access VPNs This volume is in the Foundation Learning Guide Series offered by Cisco Press®. These guides are developed together with Cisco as the only authorized, self-paced learning tools that help networking professionals build their understanding of networking concepts and prepare for Cisco certification exams. Category: Cisco Certification Covers: CCNA

Security IINS exam 640-554

The definitive insider's guide to planning, installing, configuring, and maintaining the new Cisco Adaptive Security Appliance.

Your easy-to-follow step-by-step guide to configuring a Cisco router from the ground up. The Accidental Administrator: Cisco Router Step-by-Step Configuration Guide is packed with more than 30 easy-to-follow interactive exercises, loads of screen captures, and lots of step-by-step examples to help you build a working router from scratch. Easily the most straightforward approach to learning how to configure a Cisco router, this book is filled with practical tips and secrets learned from years of Don's teaching and consulting on Cisco network devices. As a bonus, you won't waste your time on boring theory. All the essentials are covered in chapters on installing, backups and restores, and TCP/IP. You'll learn the nitty-gritty on subnetting, remote administration, routing protocols, static routing, access-control lists, site-to-site VPNs, network address translation (NAT), DHCP, password recovery, and security. There's even an entire chapter on the new Internet Protocol version 6 (IPv6). Here's just some of what you'll find: How to configure and manage access lists How to set up a site-to-site VPN How to implement IPv6 All the information is presented in a straightforward style that you can understand and use right away. With The Accidental Administrator: Cisco Router Step-by-Step Configuration Guide you'll be able to sit down with your routers and build a working configuration in a matter of minutes. Of course, some of the more advanced configs may take a little longer, but even so, you'll be able to "get 'er done" in a minimal amount of time. In addition, there are supporting videos and a supporting webpage to provide even more help and updated information.

Security Operations Center Building, Operating, and Maintaining Your SOC The complete, practical guide to planning, building, and operating an effective Security Operations Center (SOC) Security Operations Center is the complete guide to building, operating, and managing Security Operations Centers in any environment. Drawing on experience with hundreds of customers ranging from Fortune 500 enterprises to large military organizations, three leading experts thoroughly review each SOC model, including virtual SOCs. You'll learn how to select the right strategic option for your organization, and then plan and execute the strategy you've chosen. Security Operations Center walks you through every phase required to establish and run an effective SOC, including all significant people, process, and technology capabilities. The authors assess SOC technologies, strategy, infrastructure, governance, planning, implementation, and more. They take a holistic approach considering various commercial and open-source tools found in modern SOCs. This best-practice guide is written for anybody interested in learning how to develop, manage, or improve a SOC. A background in network security, management, and operations will be helpful but is not required. It is also an indispensable resource for anyone preparing for the Cisco SCYBER exam.

- Review high-level issues, such as vulnerability and risk management, threat intelligence, digital investigation, and data collection/analysis
- Understand the technical components of a modern SOC
- Assess the current state of your SOC and identify areas of improvement
- Plan SOC strategy, mission, functions, and services
- Design and build out SOC infrastructure, from facilities and networks to systems, storage, and physical security
- Collect and successfully analyze security data
- Establish an effective vulnerability management practice
- Organize incident response

teams and measure their performance · Define an optimal governance and staffing model · Develop a practical SOC handbook that people can actually use · Prepare SOC to go live, with comprehensive transition plans · React quickly and collaboratively to security incidents · Implement best practice security operations, including continuous enhancement and improvement

With a CCNA Security certification, you can demonstrate the skills required to develop a security infrastructure, recognize threats to networks, and mitigate security threats. Geared towards Cisco Security, the practical aspects of this book will help you clear the CCNA Security Exam (210-260) by increasing your knowledge of Network Security. Cisco ASA All-in-One Firewall, IPS, Anti-X, and VPN Adaptive Security Appliance Pearson Education

The first textbook on micron-scale mobile robotics, introducing the fundamentals of design, analysis, fabrication, and control, and drawing on case studies of existing approaches. Progress in micro- and nano-scale science and technology has created a demand for new microsystems for high-impact applications in healthcare, biotechnology, manufacturing, and mobile sensor networks. The new robotics field of microrobotics has emerged to extend our interactions and explorations to sub-millimeter scales. This is the first textbook on micron-scale mobile robotics, introducing the fundamentals of design, analysis, fabrication, and control, and drawing on case studies of existing approaches. The book covers the scaling laws that can be used to determine the dominant forces and effects at the micron scale; models forces acting on microrobots, including surface forces, friction, and viscous drag; and describes such possible microfabrication techniques as photo-lithography, bulk micromachining, and deep reactive ion etching. It presents on-board and remote sensing methods, noting that remote sensors are currently more feasible; studies possible on-board microactuators; discusses self-propulsion methods that use self-generated local gradients and fields or biological cells in liquid environments; and describes remote microrobot actuation methods for use in limited spaces such as inside the human body. It covers possible on-board powering methods, indispensable in future medical and other applications; locomotion methods for robots on surfaces, in liquids, in air, and on fluid-air interfaces; and the challenges of microrobot localization and control, in particular multi-robot control methods for magnetic microrobots. Finally, the book addresses current and future applications, including noninvasive medical diagnosis and treatment, environmental remediation, and scientific tools.

Cisco® ASA All-in-One Next-Generation Firewall, IPS, and VPN Services, Third Edition Identify, mitigate, and respond to today's highly-sophisticated network attacks. Today, network attackers are far more sophisticated, relentless, and dangerous. In response, Cisco ASA: All-in-One Next-Generation Firewall, IPS, and VPN Services has been fully updated to cover the newest techniques and Cisco technologies for maximizing end-to-end security in your environment. Three leading Cisco security experts guide you through every step of creating a complete security plan with Cisco ASA, and then deploying, configuring, operating, and troubleshooting your solution. Fully updated for today's newest ASA releases, this edition adds new coverage of ASA 5500-X, ASA 5585-X, ASA Services Module, ASA next-generation firewall services, EtherChannel, Global ACLs, clustering, IPv6 improvements, IKEv2, AnyConnect Secure Mobility VPN clients, and more. The authors explain significant recent licensing changes; introduce

enhancements to ASA IPS; and walk you through configuring IPsec, SSL VPN, and NAT/PAT. You'll learn how to apply Cisco ASA adaptive identification and mitigation services to systematically strengthen security in network environments of all sizes and types. The authors present up-to-date sample configurations, proven design scenarios, and actual debugs- all designed to help you make the most of Cisco ASA in your rapidly evolving network. Jazib Frahim, CCIE® No. 5459 (Routing and Switching; Security), Principal Engineer in the Global Security Solutions team, guides top-tier Cisco customers in security-focused network design and implementation. He architects, develops, and launches new security services concepts. His books include Cisco SSL VPN Solutions and Cisco Network Admission Control, Volume II: NAC Deployment and Troubleshooting. Omar Santos, CISSP No. 463598, Cisco Product Security Incident Response Team (PSIRT) technical leader, leads and mentors engineers and incident managers in investigating and resolving vulnerabilities in Cisco products and protecting Cisco customers. Through 18 years in IT and cybersecurity, he has designed, implemented, and supported numerous secure networks for Fortune® 500 companies and the U.S. government. He is also the author of several other books and numerous whitepapers and articles. Andrew Ossipov, CCIE® No. 18483 and CISSP No. 344324, is a Cisco Technical Marketing Engineer focused on firewalls, intrusion prevention, and data center security. Drawing on more than 16 years in networking, he works to solve complex customer technical problems, architect new features and products, and define future directions for Cisco's product portfolio. He holds several pending patents.

Understand, install, configure, license, maintain, and troubleshoot the newest ASA devices Efficiently implement Authentication, Authorization, and Accounting (AAA) services Control and provision network access with packet filtering, context-aware Cisco ASA next-generation firewall services, and new NAT/PAT concepts Configure IP routing, application inspection, and QoS Create firewall contexts with unique configurations, interfaces, policies, routing tables, and administration Enable integrated protection against many types of malware and advanced persistent threats (APTs) via Cisco Cloud Web Security and Cisco Security Intelligence Operations (SIO) Implement high availability with failover and elastic scalability with clustering Deploy, troubleshoot, monitor, tune, and manage Intrusion Prevention System (IPS) features Implement site-to-site IPsec VPNs and all forms of remote-access VPNs (IPsec, clientless SSL, and client-based SSL) Configure and troubleshoot Public Key Infrastructure (PKI) Use IKEv2 to more effectively resist attacks against VPNs Leverage IPv6 support for IPS, packet inspection, transparent firewalls, and site-to-site IPsec VPNs

CCIE Professional Development Network Security Technologies and Solutions A comprehensive, all-in-one reference for Cisco network security Yusuf Bhaiji, CCIE No. 9305 Network Security Technologies and Solutions is a comprehensive reference to the most cutting-edge security products and methodologies available to networking professionals today. This book helps you understand and implement current, state-of-the-art network security technologies to ensure secure communications throughout the network infrastructure. With an easy-to-follow approach, this book serves as a central repository of security knowledge to help you implement end-to-end security solutions and provides a single source of knowledge covering the entire range of the Cisco network security portfolio. The book is divided into five parts mapping to Cisco security technologies and solutions: perimeter security, identity security and access

management, data privacy, security monitoring, and security management. Together, all these elements enable dynamic links between customer security policy, user or host identity, and network infrastructures. With this definitive reference, you can gain a greater understanding of the solutions available and learn how to build integrated, secure networks in today's modern, heterogeneous networking environment. This book is an excellent resource for those seeking a comprehensive reference on mature and emerging security tactics and is also a great study guide for the CCIE Security exam. "Yusuf's extensive experience as a mentor and advisor in the security technology field has honed his ability to translate highly technical information into a straight-forward, easy-to-understand format. If you're looking for a truly comprehensive guide to network security, this is the one!" –Steve Gordon, Vice President, Technical Services, Cisco

Yusuf Bhajji, CCIE No. 9305 (R&S and Security), has been with Cisco for seven years and is currently the program manager for Cisco CCIE Security certification. He is also the CCIE Proctor in the Cisco Dubai Lab. Prior to this, he was technical lead for the Sydney TAC Security and VPN team at Cisco.

Filter traffic with access lists and implement security features on switches
Configure Cisco IOS router firewall features and deploy ASA and PIX Firewall appliances
Understand attack vectors and apply Layer 2 and Layer 3 mitigation techniques
Secure management access with AAA
Secure access control using multifactor authentication technology
Implement identity-based network access control
Apply the latest wireless LAN security solutions
Enforce security policy compliance with Cisco NAC
Learn the basics of cryptography and implement IPsec VPNs, DMVPN, GET VPN, SSL VPN, and MPLS VPN technologies
Monitor network activity and security incident response with network and host intrusion prevention, anomaly detection, and security monitoring and correlation
Deploy security management solutions such as Cisco Security Manager, SDM, ADSM, PDM, and IDM
Learn about regulatory compliance issues such as GLBA, HIPPA, and SOX

This book is part of the Cisco CCIE Professional Development Series from Cisco Press, which offers expert-level instruction on network design, deployment, and support methodologies to help networking professionals manage complex networks and prepare for CCIE exams.

Category: Network Security
Covers: CCIE Security Exam
Cisco ASA, PIX, and FWSM Firewall Handbook, Second Edition, is a guide for the most commonly implemented features of the popular Cisco® firewall security solutions. Fully updated to cover the latest firewall releases, this book helps you to quickly and easily configure, integrate, and manage the entire suite of Cisco firewall products, including ASA, PIX®, and the Catalyst® Firewall Services Module (FWSM). Organized by families of features, this book helps you get up to speed quickly and efficiently on topics such as file management, building connectivity, controlling access, firewall management, increasing availability with failover, load balancing, logging, and verifying operation. Sections are marked by shaded tabs for quick reference, and information on each feature is presented in a concise format, with background, configuration, and example components. Whether you are looking for an introduction to the latest ASA, PIX, and FWSM devices or a complete reference for making the most out of your Cisco firewall deployments, Cisco ASA, PIX, and FWSM Firewall Handbook, Second Edition, helps you achieve maximum protection of your network resources. "Many books on network security and firewalls settle for a discussion focused primarily on concepts and theory. This book, however, goes well beyond these topics. It covers in tremendous

detail the information every network and security administrator needs to know when configuring and managing market-leading firewall products from Cisco.” —Jason Nolet, Vice President of Engineering, Security Technology Group, Cisco David Hucaby, CCIE® No. 4594, is a lead network engineer for the University of Kentucky, where he works with health-care networks based on the Cisco Catalyst, ASA, FWSM, and VPN product lines. He was one of the beta reviewers of the ASA 8.0 operating system software. Learn about the various firewall models, user interfaces, feature sets, and configuration methods Understand how a Cisco firewall inspects traffic Configure firewall interfaces, routing, IP addressing services, and IP multicast support Maintain security contexts and flash and configuration files, manage users, and monitor firewalls with SNMP Authenticate, authorize, and maintain accounting records for firewall users Control access through the firewall by implementing transparent and routed firewall modes, address translation, and traffic shunning Define security policies that identify and act on various types of traffic with the Modular Policy Framework Increase firewall availability with firewall failover operation Understand how firewall load balancing works Generate firewall activity logs and learn how to analyze the contents of the log Verify firewall operation and connectivity and observe data passing through a firewall Configure Security Services Modules, such as the Content Security Control (CSC) module and the Advanced Inspection Processor (AIP) module This security book is part of the Cisco Press® Networking Technology Series. Security titles from Cisco Press help networking professionals secure critical data and resources, prevent and mitigate network attacks, and build end-to-end self-defending networks. Category: Networking: Security Covers: Cisco ASA 8.0, PIX 6.3, and FWSM 3.2 version firewalls Trust the best selling Official Cert Guide series from Cisco Press to help you learn, prepare, and practice for exam success. They are built with the objective of providing assessment, review, and practice to help ensure you are fully prepared for your certification exam. Master Cisco CCNP Security FIREWALL 642-618 exam topics Assess your knowledge with chapter-opening quizzes Review key concepts with exam preparation tasks This is the eBook edition of the CCNP Security FIREWALL 642-618 Official Cert Guide. This eBook does not include the companion CD-ROM with practice exam that comes with the print edition. CCNP Security FIREWALL 642-618 Official Cert Guide presents you with an organized test preparation routine through the use of proven series elements and techniques. “Do I Know This Already?” quizzes open each chapter and enable you to decide how much time you need to spend on each section. Exam topic lists make referencing easy. Chapter-ending Exam Preparation Tasks help you drill on key concepts you must know thoroughly. CCNP Security FIREWALL 642-618 Official Cert Guide, focuses specifically on the objectives for the Cisco CCNP Security FIREWALL exam. Expert networking consultants Dave Hucaby, Dave Garneau, and Anthony Sequeira share preparation hints and test-taking tips, helping you identify areas of weakness and improve both your conceptual knowledge and hands-on skills. Material is presented in a concise manner, focusing on increasing your understanding and retention of exam topics. Well-regarded for its level of detail, assessment features, comprehensive design scenarios, and challenging review questions and exercises, this official study guide helps you master the concepts and techniques that will enable you to succeed on the exam the first time. The official study guide helps you master all the topics on the CCNP Security FIREWALL exam,

including: ASA interfaces IP connectivity ASA management Recording ASA activity Address translation Access control Proxy services Traffic inspection and handling Transparent firewall mode Virtual firewalls High availability ASA service modules CCNP Security FIREWALL 642-618 Official Cert Guide is part of a recommended learning path from Cisco that includes simulation and hands-on training from authorized Cisco Learning Partners and self-study products from Cisco Press. To find out more about instructor-led training, e-learning, and hands-on instruction offered by authorized Cisco Learning Partners worldwide, please visit www.cisco.com/go/authorizedtraining. This is the eBook version of the print title. Note that the eBook does not provide access to the practice test software that accompanies the print book. Trust the best selling Official Cert Guide series from Cisco Press to help you learn, prepare, and practice for exam success. They are built with the objective of providing assessment, review, and practice to help ensure you are fully prepared for your certification exam. Master the CCNP® SWITCH 642-813 exam with this official study guide Assess your knowledge with chapter-opening quizzes Review key concepts with Exam Preparation Tasks CCNP SWITCH 642-813 Official Certification Guide is a best-of-breed Cisco® exam study guide that focuses specifically on the objectives for the CCNP® SWITCH exam. Network architect and best-selling author Dave Hucaby shares preparation hints and test-taking tips, helping you identify areas of weakness and improve both your conceptual knowledge and hands-on skills. Material is presented in a concise manner, focusing on increasing your understanding and retention of exam topics. CCNP SWITCH 642-813 Official Certification Guide presents you with an organized test preparation routine through the use of proven series elements and techniques. “Do I Know This Already?” quizzes open each chapter and allow you to decide how much time you need to spend on each section. The complete exam topic list makes referencing easy. Chapter-ending Exam Preparation Tasks sections help drill you on key concepts and commands you must know thoroughly. Well regarded for its level of detail, assessment features, and challenging review questions and exercises, this official study guide helps you master the concepts and techniques that will enable you to succeed on the exam the first time. CCNP SWITCH 642-813 Official Certification Guide is part of a recommended learning path from Cisco that includes simulation and hands-on training from authorized Cisco Learning Partners and self-study products from Cisco Press. To find out more about instructor-led training, e-learning, and hands-on instruction offered by authorized Cisco Learning Partners worldwide, please visit www.cisco.com/go/authorizedtraining. This official study guide helps you master all the topics on the CCNP SWITCH exam, including Network design, implementation, and verification plans Switch operation and port configuration VLANs, trunks, and VLAN Trunking Protocol (VTP) Aggregating switch links Spanning Tree Protocol (STP) Multilayer switching Enterprise campus network design Router and supervisor redundancy IP telephony Wireless LANs Switched network security This volume is part of the Official Certification Guide Series from Cisco Press. Books in this series provide officially developed exam preparation materials that offer assessment, review, and practice to help Cisco Career Certification candidates identify weaknesses, concentrate their study efforts, and enhance their confidence as exam day nears. The book begins with a summary of essential thermodynamic and kinetic facts, emphasizing aspects of these fields, where relevant, to reactions in solution. Chapter 2 introduces the

reader to the role of the solvent purely as a medium, touching on early theories based on electrostatic considerations (Born and Kirkwood-Onsager) and the solubility parameter (Hildebrand). Chapter 3 discusses the role of solvent as an active participant, chiefly through hydrogen bonding, Bronsted-Lowry and Lewis acid-base interactions, including hard and soft acids and bases. The ability of solvents to serve as media for oxidation and reduction is also touched upon. There then follows a chapter on chemometrics; the application of statistical methods to chemical phenomena and spectra, chiefly linear free energy correlations and principal component analysis. A novel method for the presentation of data is also described. The official, Guidance Software-approved book on the newest EnCE exam! The EnCE exam tests that computer forensic analysts and examiners have thoroughly mastered computer investigation methodologies, as well as the use of Guidance Software's EnCase Forensic 7. The only official Guidance-endorsed study guide on the topic, this book prepares you for the exam with extensive coverage of all exam topics, real-world scenarios, hands-on exercises, up-to-date legal information, and sample evidence files, flashcards, and more. Guides readers through preparation for the newest EnCase Certified Examiner (EnCE) exam Prepares candidates for both Phase 1 and Phase 2 of the exam, as well as for practical use of the certification Covers identifying and searching hardware and files systems, handling evidence on the scene, and acquiring digital evidence using EnCase Forensic 7 Includes hands-on exercises, practice questions, and up-to-date legal information Sample evidence files, Sybex Test Engine, electronic flashcards, and more If you're preparing for the new EnCE exam, this is the study guide you need.

For cloud users and providers alike, security is an everyday concern, yet there are very few books covering cloud security as a main subject. This book will help address this information gap from an Information Technology solution and usage-centric view of cloud infrastructure security. The book highlights the fundamental technology components necessary to build and enable trusted clouds. Here also is an explanation of the security and compliance challenges organizations face as they migrate mission-critical applications to the cloud, and how trusted clouds, that have their integrity rooted in hardware, can address these challenges. This book provides: Use cases and solution reference architectures to enable infrastructure integrity and the creation of trusted pools leveraging Intel Trusted Execution Technology (TXT). Trusted geo-location management in the cloud, enabling workload and data location compliance and boundary control usages in the cloud. OpenStack-based reference architecture of tenant-controlled virtual machine and workload protection in the cloud. A reference design to enable secure hybrid clouds for a cloud bursting use case, providing infrastructure visibility and control to organizations. "A valuable guide to the next generation of cloud security and hardware based root of trust. More than an explanation of the what and how, is the explanation of why. And why you can't afford to ignore it!" —Vince Lubsey, Vice President, Product Development, Virtustream Inc. "Raghu provides a valuable reference for the new 'inside out' approach, where trust in hardware, software, and privileged users is never assumed—but instead measured, attested, and limited according to least privilege principles." —John Skinner, Vice President, HyTrust Inc. "Traditional parameter based defenses are in sufficient in the cloud. Raghu's book addresses this problem head-on by highlighting unique usage models to enable trusted infrastructure in this open environment. A must read if you are exposed in cloud." —Nikhil Sharma, Sr. Director of Cloud Solutions, Office of CTO, EMC Corporation

Trust the best selling Official Cert Guide series from Cisco Press to help you learn, prepare, and practice for exam success. They are built with the objective of providing assessment, review, and practice to help ensure you are fully prepared for your certification exam. --Master Cisco CCNA Security 210-260 Official Cert Guide exam topics --Assess your knowledge with chapter-opening quizzes --Review key concepts with exam preparation tasks This is the eBook edition of the CCNA Security 210-260 Official Cert Guide. This eBook does not include the

companion CD-ROM with practice exam that comes with the print edition. CCNA Security 210-260 Official Cert Guide presents you with an organized test-preparation routine through the use of proven series elements and techniques. "Do I Know This Already?" quizzes open each chapter and enable you to decide how much time you need to spend on each section. Exam topic lists make referencing easy. Chapter-ending Exam Preparation Tasks help you drill on key concepts you must know thoroughly. CCNA Security 210-260 Official Cert Guide focuses specifically on the objectives for the Cisco CCNA Security exam. Networking Security experts Omar Santos and John Stuppi share preparation hints and test-taking tips, helping you identify areas of weakness and improve both your conceptual knowledge and hands-on skills. Material is presented in a concise manner, focusing on increasing your understanding and retention of exam topics. Well regarded for its level of detail, assessment features, comprehensive design scenarios, and challenging review questions and exercises, this official study guide helps you master the concepts and techniques that will enable you to succeed on the exam the first time. The official study guide helps you master all the topics on the CCNA Security exam, including --Networking security concepts --Common security threats --Implementing AAA using IOS and ISE --Bring Your Own Device (BYOD) --Fundamentals of VPN technology and cryptography --Fundamentals of IP security --Implementing IPsec site-to-site VPNs --Implementing SSL remote-access VPNs using Cisco ASA --Securing Layer 2 technologies --Network Foundation Protection (NFP) --Securing the management plane on Cisco IOS devices --Securing the data plane --Securing routing protocols and the control plane --Understanding firewall fundamentals --Implementing Cisco IOS zone-based firewalls --Configuring basic firewall policies on Cisco ASA --Cisco IPS fundamentals --Mitigation technologies for e-mail- and web-based threats --Mitigation technologies for endpoint threats CCNA Security 210-260 Official Cert Guide is part of a recommended learning path from Cisco that includes simulation and hands-on training from authorized Cisco Learning Partners and self-study products from Cisco Press. To find out more about instructor-led training, e-learning, and hands-on instruction offered by authorized Cisco Learning Partners worldwide, please visit <http://www.cisco.com/web/learning/index.html>.

This is the eBook version of the printed book. If the print book includes a CD-ROM, this content is not included within the eBook version. For organizations of all sizes, the Cisco ASA product family offers powerful new tools for maximizing network security. Cisco ASA: All-in-One Firewall, IPS, Anti-X and VPN Adaptive Security Appliance, Second Edition, is Cisco's authoritative practitioner's guide to planning, deploying, managing, and troubleshooting security with Cisco ASA. Written by two leading Cisco security experts, this book presents each Cisco ASA solution in depth, offering comprehensive sample configurations, proven troubleshooting methodologies, and debugging examples. Readers will learn about the Cisco ASA Firewall solution and capabilities; secure configuration and troubleshooting of site-to-site and remote access VPNs; Intrusion Prevention System features built into Cisco ASA's Advanced Inspection and Prevention Security Services Module (AIP-SSM); and Anti-X features in the ASA Content Security and Control Security Services Module (CSC-SSM). This new edition has been updated with detailed information on the latest ASA models and features. Everything network professionals need to know to identify, mitigate, and respond to network attacks with Cisco ASA Includes detailed configuration examples, with screenshots and command line references Covers the ASA 8.2 release Presents complete troubleshooting methodologies and architectural references

Cisco® ASA All-in-One Next-Generation Firewall, IPS, and VPN Services, Third Edition Identify, mitigate, and respond to today's highly-sophisticated network attacks. Today, network attackers are far more sophisticated, relentless, and dangerous. In response, Cisco ASA: All-in-One Next-Generation Firewall, IPS, and VPN Services has been fully updated to cover the newest techniques and Cisco technologies for maximizing end-to-end security in your

environment. Three leading Cisco security experts guide you through every step of creating a complete security plan with Cisco ASA, and then deploying, configuring, operating, and troubleshooting your solution. Fully updated for today's newest ASA releases, this edition adds new coverage of ASA 5500-X, ASA 5585-X, ASA Services Module, ASA next-generation firewall services, EtherChannel, Global ACLs, clustering, IPv6 improvements, IKEv2, AnyConnect Secure Mobility VPN clients, and more. The authors explain significant recent licensing changes; introduce enhancements to ASA IPS; and walk you through configuring IPsec, SSL VPN, and NAT/PAT. You'll learn how to apply Cisco ASA adaptive identification and mitigation services to systematically strengthen security in network environments of all sizes and types. The authors present up-to-date sample configurations, proven design scenarios, and actual debugs— all designed to help you make the most of Cisco ASA in your rapidly evolving network. Jazib Frahim, CCIE® No. 5459 (Routing and Switching; Security), Principal Engineer in the Global Security Solutions team, guides top-tier Cisco customers in security-focused network design and implementation. He architects, develops, and launches new security services concepts. His books include Cisco SSL VPN Solutions and Cisco Network Admission Control, Volume II: NAC Deployment and Troubleshooting. Omar Santos, CISSP No. 463598, Cisco Product Security Incident Response Team (PSIRT) technical leader, leads and mentors engineers and incident managers in investigating and resolving vulnerabilities in Cisco products and protecting Cisco customers. Through 18 years in IT and cybersecurity, he has designed, implemented, and supported numerous secure networks for Fortune® 500 companies and the U.S. government. He is also the author of several other books and numerous whitepapers and articles. Andrew Ossipov, CCIE® No. 18483 and CISSP No. 344324, is a Cisco Technical Marketing Engineer focused on firewalls, intrusion prevention, and data center security. Drawing on more than 16 years in networking, he works to solve complex customer technical problems, architect new features and products, and define future directions for Cisco's product portfolio. He holds several pending patents.

Understand, install, configure, license, maintain, and troubleshoot the newest ASA devices
Efficiently implement Authentication, Authorization, and Accounting (AAA) services
Control and provision network access with packet filtering, context-aware Cisco ASA next-generation firewall services, and new NAT/PAT concepts
Configure IP routing, application inspection, and QoS
Create firewall contexts with unique configurations, interfaces, policies, routing tables, and administration
Enable integrated protection against many types of malware and advanced persistent threats (APTs) via Cisco Cloud Web Security and Cisco Security Intelligence Operations (SIO)
Implement high availability with failover and elastic scalability with clustering
Deploy, troubleshoot, monitor, tune, and manage Intrusion Prevention System (IPS) features
Implement site-to-site IPsec VPNs and all forms of remote-access VPNs (IPsec, clientless SSL, and client-based SSL)
Configure and troubleshoot Public Key Infrastructure (PKI)
Use IKEv2 to more effectively resist attacks against VPNs
Leverage IPv6 support for IPS, packet inspection, transparent firewalls, and site-to-site IPsec VPNs

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