

Cisco Asa All In One Next Generation Firewall Ips And Vpn Services 3rd Edition

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.

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

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

Master network security skills with more than five hours of personal video instruction on ASA and FWSM firewall configuration tasks.

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.

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

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.

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 Cisco® Nexus switches and the new NX-OS operating system are rapidly becoming the new de facto standards for data center distribution/aggregation layer networking. NX-OS builds on Cisco IOS to provide advanced features that will be increasingly crucial to efficient data center operations. NX-OS and Cisco Nexus Switching is the definitive guide to utilizing these powerful new capabilities in enterprise environments. In this book, three Cisco consultants cover every facet of deploying, configuring, operating, and troubleshooting NX-OS in the data center. They review the key NX-OS enhancements for high availability, virtualization, In-Service Software Upgrades (ISSU), and security. In this book, you will discover support and configuration best practices for working with Layer 2 and Layer 3 protocols and networks, implementing multicasting, maximizing serviceability, providing consistent network and storage services, and much more. The authors present multiple command-line interface (CLI) commands, screen captures, realistic configurations, and troubleshooting tips—all based on their extensive experience working with customers who have successfully deployed Nexus switches in their data centers. Learn how Cisco NX-OS builds on and differs from IOS Work with NX-OS user modes, management interfaces, and system files Configure Layer 2 networking: VLANs/private VLANs, STP, virtual port channels, and unidirectional link detection Configure Layer 3 EIGRP, OSPF, BGP, and First Hop Redundancy Protocols (FHRPs) Set up IP multicasting with PIM, IGMP, and MSDP Secure NX-OS with SSH, Cisco TrustSec, ACLs, port security, DHCP snooping, Dynamic ARP inspection, IP Source Guard, keychains, Traffic Storm Control, and more Build high availability networks using process modularity and restart, stateful switchover, nonstop forwarding, and in-service software upgrades Utilize NX-OS embedded serviceability, including Switched Port Analyzer (SPAN), Smart Call Home, Configuration Checkpoint/Rollback, and NetFlow Use the NX-OS Unified Fabric to simplify infrastructure and provide ubiquitous network and storage services Run NX-OS on Nexus 1000V server-based software switches This book is part of the Networking Technology Series from Cisco Press®, which offers networking professionals valuable information for constructing efficient networks, understanding new technologies, and building successful careers.

Cisco ASA for Accidental Administrators is a major update to the previous Accidental Administrator ASA book. This new edition is packed with 48 easy-to-follow hands-on exercises to help you build a working firewall configuration from scratch. Based on software version 9.x, it continues as the most straight-forward approach to learning how to configure the Cisco ASA Security Appliance, filled with practical tips and secrets learned from years of teaching and consulting on the ASA. There is no time wasted on boring theory. The essentials are covered in chapters on installing, backups and restores, remote administration, VPNs, DMZs, usernames, transparent mode, static NAT, port address translation, access lists, DHCP, password recovery, logon banners, AAA (authentication, authorization and accounting), filtering content and more. Inside this concise, step-by-step guide, you'll find: **How to backup and restore software images and configurations **How to configure different types of VPNs, including AAA authentication **The secrets to successfully building and implementing access-lists All this information is presented in a straight-forward style that you can understand and use right away. The idea is for you to be able to sit down with your ASA 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 it done" in a minimal amount of time!

Create and manage highly-secure Ipsec VPNs with IKEv2 and Cisco FlexVPN The IKEv2 protocol significantly improves VPN security, and Cisco's FlexVPN offers a unified paradigm and command line interface for taking full advantage of it. Simple and modular, FlexVPN relies extensively on tunnel interfaces while maximizing compatibility with legacy VPNs. Now, two Cisco network security experts offer a complete, easy-to-understand, and practical introduction to IKEv2, modern IPsec VPNs, and FlexVPN. The authors explain each key concept, and then guide you through all facets of

FlexVPN planning, deployment, migration, configuration, administration, troubleshooting, and optimization. You'll discover how IKEv2 improves on IKEv1, master key IKEv2 features, and learn how to apply them with Cisco FlexVPN. IKEv2 IPsec Virtual Private Networks offers practical design examples for many common scenarios, addressing IPv4 and IPv6, servers, clients, NAT, pre-shared keys, resiliency, overhead, and more. If you're a network engineer, architect, security specialist, or VPN administrator, you'll find all the knowledge you need to protect your organization with IKEv2 and FlexVPN. Understand IKEv2 improvements: anti-DDoS cookies, configuration payloads, acknowledged responses, and more Implement modern secure VPNs with Cisco IOS and IOS-XE Plan and deploy IKEv2 in diverse real-world environments Configure IKEv2 proposals, policies, profiles, keyrings, and authorization Use advanced IKEv2 features, including SGT transportation and IKEv2 fragmentation Understand FlexVPN, its tunnel interface types, and IOS AAA infrastructure Implement FlexVPN Server with EAP authentication, pre-shared keys, and digital signatures Deploy, configure, and customize FlexVPN clients Configure, manage, and troubleshoot the FlexVPN Load Balancer Improve FlexVPN resiliency with dynamic tunnel source, backup peers, and backup tunnels Monitor IPsec VPNs with AAA, SNMP, and Syslog Troubleshoot connectivity, tunnel creation, authentication, authorization, data encapsulation, data encryption, and overlay routing Calculate IPsec overhead and fragmentation Plan your IKEv2 migration: hardware, VPN technologies, routing, restrictions, capacity, PKI, authentication, availability, and more

Become an expert in Cisco VPN technologies with this practical and comprehensive configuration guide. Learn how to configure IPSEC VPNs (site-to-site, hub-and-spoke, remote access), SSL VPN, DMVPN, GRE, VTI etc. This book is packed with step-by-step configuration tutorials and real world scenarios to implement VPNs on Cisco ASA Firewalls (v8.4 and above and v9.x) and on Cisco Routers. It is filled with raw practical concepts, around 40 network diagrams to explain the scenarios, troubleshooting instructions, 20 complete configurations on actual devices and much more. Both beginners and experts will find some golden nuggets inside this practical guide. Every Cisco Networking Professional in this planet will have to configure some kind of VPN sooner or later in his/her professional career. This VPN Guide, therefore, will be a great reference for years to come. Some of the topics covered include the following: Policy-Based (IPSEC) and Route-Based VPNs (Comparison and Applications). Practical Applications of each VPN Technology. Configuration of Site-to-Site, Hub-and-Spoke and Remote Access IPSEC VPNs on Cisco Routers. Configuration of Route-Based VPNs using GRE, Static VTI, Dynamic VTI. Configuration of Dynamic Multipoint VPN (DMVPN) on Cisco Routers. Configuration of PPTP VPNs on Cisco Routers. Configuration of Site-to-Site and Hub-and-Spoke IPSEC VPNs (including IKEv2 IPSEC) on Cisco ASA Firewalls. Configuration of Remote Access IPSEC VPN and Anyconnect SSL VPN on Cisco ASA Firewalls. VPN Authentication using Active Directory, RSA Server and external AAA Server. PLUS MUCH MORE In addition to the most popular VPN topologies and scenarios, the book contains also some special cases for which you will not find information easily anywhere else. Some special cases and scenarios included in the book: VPNs with sites having dynamic public IP address. Implementations of hub-and-spoke together with remote access VPNs on the same device. Using Dynamic Routing Protocols (EIGRP) to make VPNs on Routers more scalable. Spoke to Spoke communication via the Hub Site (using VPN Hairpinning on ASA). Remote Access users to communicate with Spoke sites via the Hub (using VPN Hairpinning on ASA). Site-to-Site IPSEC VPN with duplicate subnets on the two sites. IPSEC VPN Failover with backup ISP.

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

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

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.

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 Fully updated: The complete guide to Cisco Identity Services Engine solutions Using Cisco Secure Access Architecture and Cisco Identity Services Engine, you can secure and gain control of access to your networks in a Bring Your Own Device (BYOD) world. This second edition of Cisco ISE for BYOD and Secure Unified Access contains more than eight brand-new chapters as well as extensively updated coverage of all the previous topics in the first edition book to reflect the latest technologies, features, and best practices of the ISE solution. It begins by reviewing today's business case for identity solutions. Next, you walk through ISE foundational topics and ISE design. Then you explore how to build an access security policy using the building blocks of ISE. Next are the in-depth and advanced ISE configuration sections, followed by the troubleshooting and monitoring chapters. Finally, we go in depth on the new TACACS+ device administration solution that is new to ISE and to this second edition. With this book, you will gain an understanding of ISE configuration, such as identifying users, devices, and security posture; learn about Cisco Secure Access solutions; and master advanced techniques for securing access to networks, from dynamic segmentation to guest access and everything in between. Drawing on their cutting-edge experience supporting Cisco enterprise customers, the authors offer in-depth coverage of the complete lifecycle for all relevant ISE solutions, making this book a cornerstone resource whether you're an architect, engineer, operator, or IT manager.

- Review evolving security challenges associated with borderless networks, ubiquitous mobility, and consumerized IT
- Understand Cisco Secure Access, the Identity Services Engine (ISE), and the building blocks of complete solutions
- Design an ISE-enabled network, plan/distribute ISE functions, and prepare for rollout
- Build context-aware security policies for network access, devices, accounting, and audit
- Configure device profiles, visibility, endpoint posture assessments, and guest services
- Implement secure guest lifecycle management, from WebAuth to sponsored guest access
- Configure ISE, network access devices, and supplicants, step by step
- Apply best practices to avoid the pitfalls of BYOD secure access
- Set up efficient distributed ISE deployments
- Provide remote access VPNs with ASA and Cisco ISE
- Simplify administration with self-service onboarding and registration
- Deploy security group access with Cisco TrustSec
- Prepare for high availability and disaster scenarios
- Implement passive identities via ISE-PIC and EZ Connect
- Implement TACACS+ using ISE
- Monitor, maintain, and troubleshoot ISE and your entire Secure Access system
- Administer device AAA with Cisco IOS, WLC, and Nexus

As a network administrator, auditor or architect, you know the importance of securing your network and finding security solutions

you can implement quickly. This succinct book departs from other security literature by focusing exclusively on ways to secure Cisco routers, rather than the entire network. The rationale is simple: If the router protecting a network is exposed to hackers, then so is the network behind it. *Hardening Cisco Routers* is a reference for protecting the protectors. Included are the following topics: The importance of router security and where routers fit into an overall security plan Different router configurations for various versions of Cisco's IOS Standard ways to access a Cisco router and the security implications of each Password and privilege levels in Cisco routers Authentication, Authorization, and Accounting (AAA) control Router warning banner use (as recommended by the FBI) Unnecessary protocols and services commonly run on Cisco routers SNMP security Anti-spoofing Protocol security for RIP, OSPF, EIGRP, NTP, and BGP Logging violations Incident response Physical security

Written by Thomas Akin, an experienced Certified Information Systems Security Professional (CISSP) and Certified Cisco Academic Instructor (CCAI), the book is well organized, emphasizing practicality and a hands-on approach. At the end of each chapter, Akin includes a Checklist that summarizes the hardening techniques discussed in the chapter. The Checklists help you double-check the configurations you have been instructed to make, and serve as quick references for future security procedures. Concise and to the point, *Hardening Cisco Routers* supplies you with all the tools necessary to turn a potential vulnerability into a strength. In an area that is otherwise poorly documented, this is the one book that will help you make your Cisco routers rock solid.

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

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

Cisco ASA All-in-One Firewall, IPS, Anti-X, and VPN Adaptive Security Appliance Pearson Education

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

This book is focused on Firepower essentials. In it, you will find practical, best practice recommendations for configuring and using Firepower. Each best practice is listed in the table of contents so you can quickly find it along with an explanation of why it is important. Essential Firepower will help you learn how to effectively configure and use this system, what is important, and what is not. The best way to use this book is to read each of the recommendations with their associated explanation and decide if they are right for you. Not every recommendation will be applicable to your Firepower deployment. However, you will find that most will provide valuable real-world information and insight into the type of tuning that will bring out the true value and potential of your Firepower system. The goal of this book is not to be just another tome on the switches, knobs and dials available to configure and tune the Firepower NGFW. The primary focus is to provide pragmatic, real-life information and advice to network and security administrators who use this system day-to-day. You will get the benefit of the author's 14 years of experience as a user, instructor and consultant with the Sourcefire 3D and FireSIGHT/Firepower system. If you are ready to learn the practical application of Firepower technology, and to gain understanding you won't get from the official documentation, then this book is for you.

Annotation Cisco®ASAAll-in-One Next-Generation Firewall, IPS, and VPN Services, Third EditionIdentify, 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 devicesEfficiently implement Authentication, Authorization, and Accounting (AAA) servicesControl and provision network access with packet filtering, context-aware Cisco ASA next-generation firewall services, and new NAT/PAT conceptsConfigure IP routing, application inspection, and QoSCreate firewall contexts with unique configurations, interfaces, policies, routing tables, and administration

Identify, mitigate, and respond to network attacks Understand the evolution of security technologies that make up the unified ASA device and how to install the ASA hardware Examine firewall solutions including network access control, IP routing, AAA, application inspection, virtual firewalls, transparent (Layer 2) firewalls, failover and redundancy, and QoS Evaluate Intrusion Prevention System (IPS) solutions including IPS integration and Adaptive Inspection and Prevention Security Services Module (AIP-SSM) configuration Deploy VPN solutions including site-to-site IPsec VPNs, remote- access VPNs, and Public Key Infrastructure (PKI) Learn to manage firewall, IPS, and VPN solutions with Adaptive Security Device Manager (ASDM) Achieving maximum network security is a challenge for most organizations. Cisco® ASA, a new unified security device that combines firewall, network antivirus, intrusion prevention, and virtual private network (VPN) capabilities, provides proactive threat defense that stops attacks before they spread through the network. This new family of adaptive security appliances also controls network activity and application traffic and delivers flexible VPN connectivity. The result is a powerful Multifunction network security device

that provides the security breadth and depth for protecting your entire network, while reducing the high deployment and operations costs and complexities associated with managing multiple point products. Cisco ASA: All-in-One Firewall, IPS, and VPN Adaptive Security Appliance is a practitioner's guide to planning, deploying, and troubleshooting a comprehensive security plan with Cisco ASA. The book provides valuable insight and deployment examples and demonstrates how adaptive identification and mitigation services on Cisco ASA provide a sophisticated security solution for both large and small network environments. The book contains many useful sample configurations, proven design scenarios, and discussions of debugs that help you understand how to get the most out of Cisco ASA in your own network. "I have found this book really highlights the practical aspects needed for building real-world security. It offers the insider's guidance needed to plan, implement, configure, and troubleshoot the Cisco ASA in customer environments and demonstrates the potential and power of Self-Defending Networks."--Jayshree Ullal, Sr. Vice President, Security Technologies Group, Cisco Systems® This security book is part of th ...

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

Plan and deploy identity-based secure access for BYOD and borderless networks Using Cisco Secure Unified Access Architecture and Cisco Identity Services Engine, you can secure and regain control of borderless networks in a Bring Your Own Device (BYOD) world. This book covers the complete lifecycle of protecting a modern borderless network using these advanced solutions, from planning an architecture through deployment, management, and troubleshooting. Cisco ISE for BYOD and Secure Unified Access begins by reviewing the business case for an identity solution. Next, you'll walk through identifying users, devices, and security posture; gain a deep understanding of Cisco's Secure Unified Access solution; and master powerful techniques for securing borderless networks, from device isolation to protocol-independent network segmentation. You'll find in-depth coverage of all relevant technologies and techniques, including 802.1X, profiling, device onboarding, guest lifecycle management, network admission control, RADIUS, and Security Group Access. Drawing on their cutting-edge experience supporting Cisco enterprise customers, the authors present detailed sample configurations to help you plan your own integrated identity solution. Whether you're a technical professional or an IT manager, this guide will help you provide reliable secure access for BYOD, CYOD (Choose Your Own Device), or any IT model you choose. Review the new security challenges associated with borderless networks, ubiquitous mobility, and consumerized IT Understand the building blocks of an Identity Services Engine (ISE) solution Design an ISE-Enabled network, plan/distribute ISE functions, and prepare for rollout Build context-aware security policies Configure device profiling, endpoint posture assessments, and guest services Implement secure guest lifecycle management, from WebAuth to sponsored guest access Configure ISE, network access devices, and supplicants, step-by-step Walk through a phased deployment that ensures zero downtime Apply best practices to avoid the pitfalls of BYOD secure access Simplify administration with self-service onboarding and registration Deploy Security Group Access, Cisco's tagging enforcement solution Add Layer 2 encryption to secure traffic flows Use Network Edge Access Topology to extend secure access beyond the wiring closet Monitor, maintain, and troubleshoot ISE and your entire Secure Unified Access system

"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

There is a newer version of this book, updated for software version 9.x and later. Look for ISBN 978-0983660750. This version is appropriate for software versions 8.3 and 8.4. The Accidental Administrator: Cisco ASA Step-by-Step Configuration Guide is packed with 56 easy-to-follow hands-on exercises to help you build a working firewall configuration from scratch. It's the most straight-forward approach to learning how to configure the Cisco ASA Security Appliance, filled with practical tips and secrets learned from years of teaching and consulting on the ASA. There is no time wasted on boring theory. The essentials are covered in chapters on installing, backups and restores, remote administration, VPNs, DMZs, usernames, transparent mode, static NAT, port address translation, access lists, DHCP, password recovery, logon banners, AAA (authentication, authorization, and accounting), filtering content, and more. This book is based on software version 8.3(1). All this information is presented in a straightforward style that you can understand and use right away. The idea is for you to be able to sit down with your ASA 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 it done" in a minimal amount of time!

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.

Identify, analyze, and resolve current and potential network security problems Learn diagnostic commands, common problems and resolutions, best practices, and case studies covering a wide array of Cisco network security troubleshooting scenarios and products Refer to common problems and resolutions in each chapter to identify and solve chronic issues or expedite escalation of problems to the Cisco TAC/HTTS Flip directly to the techniques you need by following the modular chapter organization Isolate the components of a complex network problem in sequence Master the troubleshooting techniques used by TAC/HTTS security support engineers to isolate problems and resolve them on all four security domains: IDS/IPS, AAA, VPNs, and firewalls With the myriad Cisco® security products available today, you need access to a comprehensive source of defensive troubleshooting strategies to protect your enterprise network. Cisco Network Security Troubleshooting Handbook can single-handedly help you analyze current and potential network security problems and identify viable solutions, detailing each step until you reach the best resolution. Through its modular design, the book allows you to move between chapters and sections to find just the information you need. Chapters open with an in-depth architectural look at numerous popular Cisco security products and their packet flows, while also discussing potential third-party compatibility issues. By following the presentation of troubleshooting techniques and tips, you can observe and analyze problems through the eyes of an experienced Cisco TAC or High-Touch Technical Support (HTTS) engineer or determine how to escalate your case to a TAC/HTTS engineer. Part I starts with a solid overview of troubleshooting tools and methodologies. In Part II, the author explains the features of Cisco ASA and Cisco PIX® version 7.0 security platforms, Firewall Services Module (FWSM), and Cisco IOS® firewalls. Part III covers troubleshooting IPsec Virtual Private Networks (IPsec VPN) on Cisco IOS routers, Cisco PIX firewalls with embedded VPN functionalities, and the Cisco 3000 Concentrator. Troubleshooting tools and techniques on the Authentication, Authorization, and Accounting (AAA) framework are discussed thoroughly on routers, Cisco PIX firewalls, and Cisco VPN 3000 concentrators in Part IV. Part IV also covers troubleshooting Cisco Secure ACS on Windows, the server-side component of the AAA framework. IDS/IPS troubleshooting ... A comprehensive guide for deploying, configuring, and troubleshooting NetFlow and learning big data analytics technologies for cyber security Today's world of network security is full of cyber security vulnerabilities, incidents, breaches, and many headaches. Visibility into the network is an indispensable tool for network and security professionals and Cisco NetFlow creates an environment where network administrators and security professionals have the tools to understand who, what, when, where, and how network traffic is flowing. Network Security with NetFlow and IPFIX is a key resource for introducing yourself to and understanding the power behind the Cisco NetFlow solution. Omar Santos, a Cisco Product Security Incident Response Team (PSIRT) technical leader and author of numerous books including the CCNA Security 210-260 Official Cert Guide, details the importance of NetFlow and demonstrates how it can be used by large enterprises and small-to-medium-sized businesses to meet critical network challenges. This book also examines NetFlow's potential as a powerful network security tool. Network Security

with NetFlow and IPFIX explores everything you need to know to fully understand and implement the Cisco Cyber Threat Defense Solution. It also provides detailed configuration and troubleshooting guidance, sample configurations with depth analysis of design scenarios in every chapter, and detailed case studies with real-life scenarios. You can follow Omar on Twitter: @santosomar

NetFlow and IPFIX basics Cisco NetFlow versions and features Cisco Flexible NetFlow NetFlow Commercial and Open Source Software Packages Big Data Analytics tools and technologies such as Hadoop, Flume, Kafka, Storm, Hive, HBase, Elasticsearch, Logstash, Kibana (ELK) Additional Telemetry Sources for Big Data Analytics for Cyber Security Understanding big data scalability Big data analytics in the Internet of everything Cisco Cyber Threat Defense and NetFlow Troubleshooting NetFlow Real-world case studies

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

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.

With increased use of Internet connectivity and less reliance on private WAN networks, virtual private networks (VPNs) provide a much-needed secure method of transferring critical information. As Cisco Systems integrates security and access features into routers, firewalls, clients, and concentrators, its solutions become ever more accessible to companies with networks of all sizes. The Complete Cisco VPN Configuration Guide contains detailed explanations of all Cisco VPN products, describing how to set up IPsec and Secure Sockets Layer (SSL) connections on any type of Cisco device, including concentrators, clients, routers, or Cisco PIX and Cisco ASA security appliances. With copious configuration examples and troubleshooting scenarios, it offers clear information on VPN implementation designs. - A complete resource for understanding VPN components and VPN design issues - Learn how to employ state-of-the-art VPN connection types and implement complex VPN configurations on Cisco devices, including routers, Cisco PIX and Cisco ASA security appliances, concentrators, and remote access clients - Discover troubleshooting tips and techniques from real-world scenarios based on the author's vast field experience - Filled with relevant configurations you can use immediately in your own network

[Copyright: 5000b1fbd7bafce6cbb9f3b2dcd3dde0](https://www.pdfdrive.com/cisco-asa-all-in-one-next-generation-firewall-ps-and-vpn-services-3rd-edition.html)