Cisco Ios Switch Security Configuration Guide

Improve operations and agility in any data center, campus, LAN, or WAN Today, the best way to stay in control of your network is to address devices programmatically and automate network interactions. In this book, Cisco experts Ryan Tischer and Jason Gooley show you how to do just that. You'll learn how to use programmability and automation to solve business problems, reduce costs, promote agility and innovation, handle accelerating complexity, and add value in any data center, campus, LAN, or WAN. The authors show you how to create production solutions that run on or interact with Nexus NX-OS-based switches, Cisco ACI, Campus, and WAN technologies. You'll learn how to use advanced Cisco tools together with industry-standard languages and platforms, including Python, JSON, and Linux. The authors demonstrate how to support dynamic application environments, tighten links between apps and infrastructure, and make DevOps work better. This book will be an indispensable resource for network and cloud designers, architects, DevOps engineers, security specialists, and every professional who wants to build or operate high-efficiency networks. Drive more value through programmability and automation, freeing resources for high-value innovation Move beyond error-prone, box-by-box network management Bridge management gaps arising from current operational models Write NX-OS software to run on, access, or extend your Nexus switch Master Cisco's powerful on-box automation and operation tools Manage complex WANs with NetConf/Yang, ConfD, and Cisco SDN Controller Interact with and enhance Cisco Application Centric Infrastructure (ACI) Build self-service catalogs to accelerate application delivery Find resources for deepening your expertise in network automation Learn how to secure your network with the official MCNS Coursebook

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

Learn about network security, including the threats and the ways a network is protected from them. The book also covers firewalls, viruses and virtual private networks.

Implementing Cisco IOS Network Security (IINS)

Cisco IOS Cookbook

Next-Generation Data Center Architectures

CCIE Routing and Switching v5.0 Official Cert Guide, Volume 2

Step-by-Step Practical Configuration Guide Using the Cli for Asa V8.x and V9.x

Engineers' Handbook of Routing, Switching, and Security with IOS, NX-OS, and ASA

While several publishers (including O'Reilly) supply excellent documentation of router features, the trick is knowing when, why, and how to use these features There are often many different ways to solve any given networking problem using Cisco devices, and some solutions are clearly more effective than others. The pressing question for a network engineer is which of the many potential solutions is the most appropriate for a particular situation. Once you have decided to use a particular feature, how should you implement it? Unfortunately, the documentation describing a particular command or feature frequently does very little to answer either of these questions. Everybody who has worked with Cisco routers for any length of time has had to ask their friends and coworkers for example router configuration files that show how to solve a common problem. A good working configuration example can often save huge amounts of time and frustration when implementing a feature that you've never used before. The Cisco Cookbook gathers hundreds of example router configurations all in one place. As the name suggests, Cisco Cookbook is organized as a series of recipes. Each recipe begins with a problem statement that describes a common situation that you might face. After each problem statement is a brief solution that shows a sample router configuration or script that you can use to resolve this particular problem. A discussion section then describes the solution, how it works, and when you should or should not use it. The chapters are organized by the feature or protocol discussed. If you are looking for information on a particular feature such as NAT, NTP or SNMP, you can turn to that chapter and find a variety of related recipes. Most chapters list basic problems first, and any unusual or complicated situations last. The Cisco Cookbook will quickly become your "go to" resource for researching and solving complex router configuration issues, saving you time and making your network more efficient. It covers: Router Configuration and File Management Router Management User Access and Privilege Levels TACACS+ IP Routing RIP EIGRP OSPF BGP Frame Relay Queueing and Congestion Tunnels and VPNs Dial Backup NTP and Time DLSw Router Interfaces and Media Simple Network Management Protocol Logging Access Lists DHCP NAT Hot Standby Router Protocol IP Multicast A guide to Cisco routers and switches provides informaton on switch and router maintenance and integration into an existing network.

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 CCIE R&S v5.0 exam topics, including BGP, QoS, WANs, IP multicast, security, and MPLS --Assess your knowledge with chapter-opening quizzes --Review key concepts with exam preparation tasks This is the eBook edition of the CCIE Routing and Switching v5.0 Official Cert Guide, Volume 2, Fifth Edition. This eBook does not include the companion CD-ROM with practice exam that comes with the print edition. CCIE Routing and Switching v5.0 Official Cert Guide, Volume 2, Fifth Edition from Cisco Press enables you to succeed on the exam the first time and is the only self-study resource approved by Cisco. Expert instructors Narbik Kocharians and Terry Vinson share preparation hints and test-taking tips, helping you identify areas of weakness and improve both your conceptual knowledge and hands-on skills. This second of two volumes covers IP BGP routing, quality of service (QoS), wide area networks, IP multicast, network security, and Multiprotocol Label Switching (MPLS) topics. This complete study package includes -- A test-preparation routine proven to help you pass the exams -- "Do I Know This Already?" quizzes, which enable you to decide how much time you need to spend on each section -- Chapter-ending exercises, which help you drill on key concepts you must know thoroughly -- The powerful Pearson IT Certification Practice Test software, complete with hundreds of well-reviewed, exam-realistic questions, customization options, and detailed performance reports -- A final preparation chapter, which guides you through tools and resources to help you craft your review and test-taking strategies --Study plan suggestions and templates to help you organize and optimize your study time Well regarded for its level of detail, study plans, assessment features, challenging review questions and exercises, this official study guide helps you master the concepts and techniques that ensure your exam success. CCIE Routing and Switching v5.0 Official Cert Guide, Volume 2, Fifth 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. The official study guide helps you master topics on the CCIE Routing and Switching v5.0 exams, including: --BGP operations and routing policies --QoS --WANs --IP Multicast --Device and network security and tunneling technologies --MPLS

Implementing Cisco IOS Network Security (IINS) is a Cisco-authorized, self-paced learning tool for CCNA® Security foundation learning. This book provides you with the knowledge needed to secure Cisco® routers and switches and their associated networks. By reading this book, you will gain a thorough understanding of how to troubleshoot and monitor network devices to maintain integrity, confidentiality, and availability of data and devices, as well as the technologies that Cisco uses in its security infrastructure. This book focuses on the

necessity of a comprehensive security policy and how it affects the posture of the network. You will learn how to perform basic tasks to secure a small branch type office network using Cisco IOS® security features available through the Cisco Router and Security Device Manager (SDM) web-based graphical user interface (GUI) and through the command-line interface (CLI) on Cisco routers and switches. The author also provides, when appropriate, parallels with Cisco ASA appliances. 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) 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 Configure routers on the network perimeter with Cisco IOS Software security features Configure firewall features including ACLs and Cisco IOS zone-based policy firewalls to perform basic security operations on a network Configure site-to-site VPNs using Cisco IOS features Configure IPS on Cisco network routers Configure LAN devices to control access, resist attacks, shield other network devices and systems, and protect the integrity and confidentiality of network traffic This volume is in the Certification Self-Study Series offered by Cisco Press®. Books in this series provide officially developed self-study solutions to help networking professionals understand technology implementations and prepare for the Cisco Career Certifications examinations.

CCNP Routing and Switching Portable Command Guide Network Administrators Survival Guide Essential SNMP

Foundation learning for SWITCH 642-813

Programming and Automating Cisco Networks

Network Security Principles and Practices

The essential reference for security pros and CCIE Security candidates: policies, standards, infrastructure/perimeter and content security, and threat protection Integrated Security Technologies and Solutions - Volume I offers one-stop expert-level instruction in security design, deployment, integration, and support methodologies to help security professionals manage complex solutions and prepare for their CCIE exams. It will help security pros succeed in their day-to-day jobs and also get ready for their CCIE Security written and lab exams. Part of the Cisco CCIE Professional Development Series from Cisco Press, it is

authored by a team of CCIEs who are world-class experts in their Cisco security disciplines, including cocreators of the CCIE Security v5 blueprint. Each chapter starts with relevant theory, presents configuration examples and applications, and concludes with practical troubleshooting. Volume 1 focuses on security policies and standards; infrastructure security; perimeter security (Next-Generation Firewall, Next-Generation Intrusion Prevention Systems, and Adaptive Security Appliance [ASA]), and the advanced threat protection and content security sections of the CCIE Security v5 blueprint. With a strong focus on interproduct integration, it also shows how to combine formerly disparate systems into a seamless, coherent nextgeneration security solution. Review security standards, create security policies, and organize security with Cisco SAFE architecture Understand and mitigate threats to network infrastructure, and protect the three planes of a network device Safeguard wireless networks, and mitigate risk on Cisco WLC and access points Secure the network perimeter with Cisco Adaptive Security Appliance (ASA) Configure Cisco Next-Generation Firewall Firepower Threat Defense (FTD) and operate security via Firepower Management Center (FMC) Detect and prevent intrusions with Cisco Next-Gen IPS, FTD, and FMC Configure and verify Cisco IOS firewall features such as ZBFW and address translation Deploy and configure the Cisco web and email security appliances to protect content and defend against advanced threats Implement Cisco Umbrella Secure Internet Gateway in the cloud as your first line of defense against internet threats Protect against new malware with Cisco Advanced Malware Protection and Cisco ThreatGrid

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 $\frac{Page}{5/23}$

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.

Port-based authentication is a "network access control" concept in which a particular device is evaluated before being permitted to communicate with other devices located on the network. 802.1X Port-Based Authentication examines how this concept can be applied and the effects of its application to the majority of computer networks in existence today. 802.1X is a standard that extends the Extensible Authentication Protocol (EAP) over a Local Area Network (LAN) through a process called Extensible Authentication Protocol Over LANs (EAPOL). The text presents an introductory overview of port-based authentication including a description of 802.1X port-based authentication, a history of the standard and the technical documents published, and details of the connections among the three network components. It focuses on the technical aspect of 802.1X and the related protocols and components involved in implementing it in a network. The book provides an in-depth discussion of technology, design, and implementation with a specific focus on Cisco devices. Including examples derived from the 802.1X implementation, it also addresses troubleshooting issues in a Cisco environment. Each chapter contains a subject overview. Incorporating theoretical and practical approaches, 802.1X Port-Based Authentication seeks to define this complex concept in accessible terms. It explores various applications to today's computer networks using this particular network protocol. Simple Network Management Protocol (SNMP) provides a "simple" set of operations that allows you to more easily monitor and manage network devices like routers, switches, servers, printers, and more. The information you can monitor with SNMP is wide-ranging--from standard items, like the amount of traffic flowing into an interface, to far more esoteric items, like the air temperature inside a router. In spite of its name, though, SNMP is not especially simple to learn. O'Reilly has answered the call for help with a practical introduction that shows how to install, configure, and manage SNMP. Written for network and system administrators, the book introduces the basics of SNMP and then offers a technical background on how to use it effectively. Essential SNMP explores both commercial and open source packages, and elements like OIDs, MIBs, community strings, and traps are covered in depth. The book contains five new chapters and various updates throughout. Other new topics include: Expanded coverage of SNMPv1, SNMPv2, and SNMPv3 Expanded coverage of SNMPc The concepts behind network management and change management RRDTool and Cricket The use of scripts for a variety of tasks How Java can be used to create SNMP applications Net-SNMP's Perl module The bulk of the book is devoted to discussing, with real examples, how to use SNMP for $\frac{Page\ 6/23}{Page\ 6/23}$

system and network administration tasks. Administrators will come away with ideas for writing scripts to help them manage their networks, create managed objects, and extend the operation of SNMP agents. Once demystified, SNMP is much more accessible. If you're looking for a way to more easily manage your network, look no further than Essential SNMP, 2nd Edition.

CCIE Routing and Switching V5.0 Official Cert Guide

AAA Identity Management Security

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Scaling Networks v6 Companion Guide

Cisco ISP Essentials

CCIE Routing and Switching v5.0 Official Cert Guide Library

Here are all the CCNA-level Routing and Switching commands you need in one condensed, portable resource. The CCNA Routing and Switching Portable Command Guide, Third Edition, is filled with valuable, easy-to-access information and is portable enough for use whe you're in the server room or the equipment closet. The guide summarizes all CCNA certification-level Cisco IOS® Software commands, keywords, command arguments, and associated prompts, providing you with tips and examples of how to apply the commands to real-vscenarios. Configuration examples throughout the book provide you with a better understanding of how these commands are used in s network designs. This book has been completely updated to cover topics in the ICND1 100-101, ICND2 200-101, and CCNA 200-120 ex Use this quick reference resource to help you memorize commands and concepts as you work to pass the CCNA Routing and Switching certification exam. The book is organized into these parts: • Part I TCP/IP v4 • Part II Introduction to Cisco Devices • Part III Configuring Router • Part IV Routing • Part V Switching • Part VI Layer 3 Redundancy • Part VII IPv6 • Part VIII Network Administration and Troubleshooting • Part IX Managing IP Services • Part X WANs • Part XI Network Security Quick, offline access to all CCNA Routing and Switching commands for research and solutions Logical how-to topic groupings for a one-stop resource Great for review before CCNA Routing and Switching certification exams Compact size makes it easy to carry with you, wherever you go "Create Your Own Journal" section with blank, lined pages allows you to personalize the book for your needs "What Do You Want to Do?" chart inside back cover hyou to quickly reference specific tasks

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

Cisco routers are everywhere that networks are. They come in all sizes, from inexpensive units for homes and small offices to equipme costing well over \$100,000 and capable of routing at gigabit speeds. A fixture in today's networks, Cisco claims roughly 70% of the romarket, producing high-end switches, hubs, and other network hardware. One unifying thread runs through the product line: virtually all Cisco's products run the Internetwork Operating System, or IOS. If you work with Cisco routers, it's likely that you deal with Cisco's IOS software--an extremely powerful and complex operating system, with an equally complex configuration language. With a cryptic comma line interface and thousands of commands--some of which mean different things in different situations--it doesn't have a reputation for user-friendly. Fortunately, there's help. This second edition of Cisco IOS in a Nutshell consolidates the most important commands and features of IOS into a single, well-organized volume that you'll find refreshingly user-friendly. This handy, two-part reference covers IOS Page 7/23

configuration for the TCP/IP protocol family. The first section includes chapters on the user interface, configuring lines and interfaces, lists, routing protocols, and dial-on-demand routing and security. A brief, example-filled tutorial shows you how to accomplish common The second part is a classic O'Reilly quick reference to all the commands for working with TCP/IP and the lower-level protocols on whice relies. Brief descriptions and lists of options help you zero in on the commands you for the task at hand. Updated to cover Cisco IOS Software Major Release 12.3, this second edition includes lots of examples of the most common configuration steps for the routers themselves. It's a timely guide that any network administrator will come to rely on.

CCIE Routing and Switching v5.0 Official Cert Guide Library, Fifth Edition Assessment, review, and practice package for the CCIE R&S v5 exams Includes CCIE Routing and Switching v5.0 Official Cert Guide, Volume 1, Fifth Edition, and CCIE Routing and Switching v5.0 Official Cert Guide, Volume 2, Fifth Edition. This is the eBook version of the print title. The eBook edition does not provide access to the test en software or the practice tests that accompany the print book These official study guides help you master all the topics on the CCIE R8 exams, including Virtual LANs and VLAN Trunking Spanning Tree Protocol (STP) IP services (ARP, NTP, DHCP, NAT, SNMP, NetFlow, and more) RIPv2 and RIPng EIGRP OSPFv2 and v3 IS-IS Route redistribution, route summarization, default routing, and performance routing BGP operations and routing policies QoS WANs IP Multicast Device and network security and tunneling technologies MPLS CCIE Routing and Switching v5.0 Official Cert Guide Library, Fifth Edition from Cisco Press enables you to succeed on the exam the first time and is only self-study resource approved by Cisco. In the two books included in this package, expert instructors Narbik Kocharians, Peter Palú and Terry Vinson share preparation hints and test-taking tips, helping you identify areas of weakness and improve both your conceptual knowledge and hands-on skills. The first volume covers LAN switching, IP networking, and IP IGP routing topics. The second volume cover IP BGP routing, quality of service (QoS), wide area networks, IP multicast, network security, and Multiprotocol Label Switching (MPLS): Together, these two books cover all the topics on the new v5.0 blueprint. This complete study package includes A test-preparation rou proven to help you pass the exams "Do I Know This Already?" guizzes, which enable you to decide how much time you need to spend or each section Chapter-ending exercises, which help you drill on key concepts you must know thoroughly A final preparation chapter, wh quides you through tools and resources to help you craft your review and test-taking strategies Study plan suggestions and templates you organize and optimize your study time Well regarded for its level of detail, study plans, assessment features, challenging review questions and exercises, this official study guide helps you master the concepts and techniques that ensure your exam success. CCIE Routing and Switching v5.0 Official Cert Guide Library, Fifth 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 a instructor-led training, e-learning, and hands-on instruction offered by authorized Cisco Learning Partners worldwide, please visit www.cisco.com. This volume is part of the Official Cert Guide series from Cisco Press. Books in this series provide officially developed of the Official Cert Guide series from Cisco Press. 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.

Cisco IOS XR Fundamentals NX-OS and Cisco Nexus Switching Exam 54 Porta Comma ePub _2 CCNA Rout Swit Com Gd ePub_3 Managing Cisco Network Security Cisco IOS in a Nutshell

Trust the best selling Official Cert Guide series from Cisco Press to help you learn, prepare, and practice for exam success. The built with the objective of providing assessment, review, and practice to help ensure you are fully prepared for your certificat CCIE Routing and Switching v5.0 Official Cert Guide, Volume 2, Fifth Edition from Cisco Press enables you to succeed on the the first time and is the only self-study resource approved by Cisco. Expert instructors Narbik Kocharians and Terry Vinson sh preparation hints and test-taking tips, helping you identify areas of weakness and improve both your conceptual knowledge as on skills. This second of two volumes covers IP BGP routing, quality of service (QoS), wide area networks, IP multicast, netwo security, and Multiprotocol Label Switching (MPLS) topics. This complete study package includes -- A test-preparation routine to help you pass the exams -- Do I Know This Already? guizzes, which enable you to decide how much time you need to spend section -- Chapter-ending exercises, which help you drill on key concepts you must know thoroughly -- The powerful Pearson Certification Practice Test software, complete with hundreds of well-reviewed, exam-realistic questions, customization option detailed performance reports -- A final preparation chapter, which guides you through tools and resources to help you craft y review and test-taking strategies -- Study plan suggestions and templates to help you organize and optimize your study time regarded for its level of detail, study plans, assessment features, challenging review questions and exercises, this official study helps you master the concepts and techniques that ensure your exam success. The official study guide helps you master topi CCIE Routing and Switching v5.0 exams, including: -- BGP operations and routing policies -- QoS -- WANs -- IP Multicast -- De and network security and tunneling technologies -- MPLS CCIE Routing and Switching v5.0 Official Cert Guide, Volume 2, Fifth 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 ha instruction offered by authorized Cisco Learning Partners worldwide, please visit www.cisco.com/go/authorizedtraining. The p edition of the CCIE Routing and Switching v5.0 Official Cert Guide, Volume 2, Fifth Edition contains more than 200 practice ex questions. Also available from Cisco Press for Cisco CCIE R&S v5.0 study is the CCIE Routing and Switching v5.0 Official Cert Guide, Volume 2 Premium Edition eBook and Practice Test, Fifth Edition. This digital-only certification preparation product com an eBook with enhanced Pearson IT Certification Practice Test. This integrated learning package: -- Allows you to focus on inc topic areas or take complete, timed exams -- Includes direct links from each question to detailed tutorials to help you unders concepts behind the questions -- Provides additional unique sets of exam-realistic practice questions -- Tracks your performa provides feedback on a module-by-module basis, laying out a complete assessment of your knowledge to help you focus your where it is needed most This print book includes a 70% discount offer off the list price of the CCIE Routing and Switching v5 Cert Guide, Volume 2 Premium Edition eBook and Practice Test, Fifth Edition to help enhance your exam preparation experience IPv6 Security Protection measures for the next Internet Protocol As the world's networks migrate to the IPv6 protocol, networks

professionals need a clearer understanding of the security risks, threats, and challenges this transition presents. In IPv6 Secu of the world's leading Internet security practitioners review each potential security issue introduced by IPv6 networking and today's best solutions. IPv6 Security offers guidance for avoiding security problems prior to widespread IPv6 deployment. The covers every component of today's networks, identifying specific security deficiencies that occur within IPv6 environments ar demonstrating how to combat them. The authors describe best practices for identifying and resolving weaknesses as you may dual stack network. Then they describe the security mechanisms you need to implement as you migrate to an IPv6-only netw authors survey the techniques hackers might use to try to breach your network, such as IPv6 network reconnaissance, address spoofing, traffic interception, denial of service, and tunnel injection. The authors also turn to Cisco® products and protection mechanisms. You learn how to use Cisco IOS® and ASA firewalls and ACLs to selectively filter IPv6 traffic. You also learn about securing hosts with Cisco Security Agent 6.0 and about securing a network with IOS routers and switches. Multiple examples explained for Windows, Linux, FreeBSD, and Solaris hosts. The authors offer detailed examples that are consistent with today's practices and easy to adapt to virtually any IPv6 environment. Scott Hogg, CCIE® No. 5133, is Director of Advanced Technology Services at Global Technology Resources, Inc. (GTRI). He is responsible for setting the company's technical direction and helpin create service offerings for emerging technologies such as IPv6. He is the Chair of the Rocky Mountain IPv6 Task Force. Eric ' Cisco Distinguished System Engineer, consults on security issues throughout Europe. He has 20 years' experience in security teaches security seminars as a guest professor at universities throughout Belgium. He also participates in the Internet Engine Force (IETF) and has helped several organizations deploy IPv6 securely. Understand why IPv6 is already a latent threat in your IPv4-only network Plan ahead to avoid IPv6 security problems before widespread deployment Identify known areas of weakne IPv6 security and the current state of attack tools and hacker skills Understand each high-level approach to securing IPv6 an when to use each Protect service provider networks, perimeters, LANs, and host/server connections Harden IPv6 network de against attack Utilize IPsec in IPv6 environments Secure mobile IPv6 networks Secure transition mechanisms in use during the migration from IPv4 to IPv6 Monitor IPv6 security Understand the security implications of the IPv6 protocol, including issues to ICMPv6 and the IPv6 header structure Protect your network against large-scale threats by using perimeter filtering techn service provider—focused security practices Understand the vulnerabilities that exist on IPv6 access networks and learn solutions of the control of the cont mitigating each This security book is part of the Cisco Press® Networking Technology Series. Security titles from Cisco Press networking professionals secure critical data and resources, prevent and mitigate network attacks, and build end-to-end selfnetworks. Category: Networking: Security Covers: IPv6 Security

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

Scaling Networks v6 Companion Guide is the official supplemental textbook for the Scaling Networks v6 course in the Cisco Networking Academy CCNA Routing and Switching curriculum. The Companion Guide is designed as a portable desk reference

anytime, anywhere to reinforce the material from the course and organize your time. The book's features help you focus on in concepts to succeed in this course: Chapter objectives–Review core concepts by answering the focus questions listed at the 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 more than 250 terms. Summary of Activities and Labs–Maximize your sturn 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 answexplains 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 boundary that the videos embedded within the online course. Packet Tracer Activities–Explore and visualize networking concepts using Packet Tracer exercises interspersed throughout the chapters and provided in the accompanying Labs & Study book. Hands-on Labs–Work through all the course labs and additional Class Activities that are included in the course and publications.

Cisco Security Solutions for Advanced Threat Protection with Next Generation Firewall, Intrusion Prevention, AMP, and Conter Security

CCNA Security (210-260) Portable Command Guide

A Desktop Quick Reference for IOS on IP Networks

Help for Network Administrators

Exploring the Network Layer

EXAM STUDY GUIDE FOR CCNP ENTERPRISE DESIGN (ENSLD 300-420) LATEST VERISON Implementing Cisco IP Switched Networks (SWITCH) Foundation Learning Guide: Foundation learning for SWITCH 642-813 Richard Froom, CCIE No. 5102 Balaji Sivasubramanian Erum Frahim, CCIE No. 7549 Implementing Cisco IP Switched Networks (SWITCH) Foundation Learning Guide is a Cisco® authorized learning tool for CCNP® and CCDP® preparation. As part of the Cisco Press foundation learning series, this book covers how to plan, configure, and verify the implementation of complex enterprise switching solutions using the Cisco Campus Enterprise Architecture. The Foundation Learning Guide also covers secure integration of VLANs, WLANs, voice, and video into campus networks. Each chapter opens with the list of topics covered to clearly identify the focus of that chapter. At the end of each chapter, a summary and review questions provide you with an opportunity to assess and reinforce your understanding of the material. Throughout the book detailed

explanations with commands, configurations, and diagrams serve to illuminate theoretical concepts. Implementing Cisco IP Switched Networks (SWITCH) Foundation Learning Guide is ideal for certification candidates who are seeking a tool to learn all the topics covered in the SWITCH 642-813 exam. - Serves as the official book for the Cisco Networking Academy CCNP SWITCH course - Provides a thorough presentation of the fundamentals of multilayer switched network design - Explains the implementation of the design features such as VLAN, Spanning Tree, and inter-VLAN routing in the multilayer switched environment - Explains how to implement high-availability technologies and techniques -Covers security features in a switched network - Presents self-assessment review questions, chapter topics, summaries, command syntax explanations, network diagrams, and configuration examples to facilitate effective studying This book is in the Foundation Learning Guide Series. 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. Switched Networks Companion Guide is the official supplemental textbook for the Switched Networks course in the Cisco® Networking Academy® CCNA® Routing and Switching curriculum. This course describes the architecture, components, and operations of a converged switched network. You will learn about the hierarchical network design model and how to configure a switch for basic and advanced functionality. By the end of this course, you will be able to troubleshoot and resolve common issues with Virtual LANs and inter-VLAN routing in a converged network. You will also develop the knowledge and skills needed to implement a WLAN in a small-to-medium network. 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 more than 300 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. Related Title: Switched Networks Lab Manual ISBN-10: 1-58713-327-X ISBN-13: 978-1-58713-327-5 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 all the different exercises from the online course identified throughout the book with this icon. Videos–Watch the videos embedded within the online course. Packet Tracer Activities–Explore and visualize networking concepts using Packet Tracer exercises interspersed throughout the chapters. Hands-on Labs–Work through all the course labs and Class Activities that are included in the course and published in the separate Lab Manual.

-- Written as a comprehensive guide for intermediate and advanced network professionals, who want to install or maintain a Cisco switching environment or learn about Cisco switching technologies. -- No other book thoroughly covers the advanced topics required to achieve this level of comprehensive Cisco knowledge or certification in the new CCNP curriculum. -- Includes valuable information for those studying for the CCNP certification including tips and hints, sample review questions and lab exercises. -- Explores complex topics in-depth, in the popular Black Book format, using a complete systematic approach to Cisco switching along with comprehensive examples and diagrams. -- Covers basic to advanced ISL, spanning tree, switch configuration, and switch technologies featuring Cisco's line of Catalyst switches. -- Provides information on ASICs and bridging modes; virtual LANs; line interfaces and modules; multicast; ATM; fault tolerance and policy switching; catalyst show, set and clear commands; redundant links and network traffic. -- Presents the following topics: basic switch configuration, IOS v 12.x, switches and features in the access layer, distribution layer, and core layer.

Cisco's complete, authoritative guide to Authentication, Authorization, and Accounting (AAA) solutions with CiscoSecure ACS AAA solutions are very frequently used by customers to provide secure access to devices and networks AAA solutions are difficult and

confusing to implement even though they are almost mandatory Helps IT Pros choose the best identity management protocols and designs for their environments Covers AAA on Cisco routers, switches, access points, and firewalls This is the first complete, authoritative, single-source guide to implementing, configuring, and managing Authentication, Authorization and Accounting (AAA) identity management with CiscoSecure Access Control Server (ACS) 4 and 5. Written by three of Cisco's most experienced CiscoSecure product support experts, it covers all AAA solutions (except NAC) on Cisco routers, switches, access points, firewalls, and concentrators. It also thoroughly addresses both ACS configuration and troubleshooting, including the use of external databases supported by ACS. Each of this book's six sections focuses on specific Cisco devices and their AAA configuration with ACS. Each chapter covers configuration syntax and examples, debug outputs with explanations, and ACS screenshots. Drawing on the authors' experience with several thousand support cases in organizations of all kinds, AAA Identity Management Security presents pitfalls, warnings, and tips throughout. Each major topic concludes with a practical, hands-on lab scenario corresponding to a reallife solution that has been widely implemented by Cisco customers. This book brings together crucial information that was previously scattered across multiple sources. It will be indispensable to every professional running CiscoSecure ACS 4 or 5, as well as all candidates for CCSP and CCIE (Security or R and S) certification.

Cisco Router Firewall Security

Integrated Security Technologies and Solutions - Volume I

Cisco Router Configuration Handbook

(CCNA Security exam 640-553) (Authorized Self-Study Guide)

LAN Switch Security

CCNA Routing and Switching Portable Command Guide

Contrary to popular belief, Ethernet switches are not inherently secure. Security vulnerabilities in Ethernet switches are multiple: from the switch implementation, to control plane protocols (Spanning Tree Protocol [STP], Cisco® Discovery Protocol [CDP], and so on) and data plane protocols, such as Address Routing Protocol (ARP) or Dynamic Host Configuration Protocol (DHCP). LAN Switch Security explains all the vulnerabilities in a network infrastructure related to

Ethernet switches. Further, this book shows you how to configure a switch to prevent or to mitigate attacks based on those vulnerabilities. This book also includes a section on how to use an Ethernet switch to increase the security of a network and prevent future attacks. Divided into four parts, LAN Switch Security provides you with steps you can take to ensure the integrity of both voice and data traffic traveling over Layer 2 devices. Part I covers vulnerabilities in Layer 2 protocols and how to configure switches to prevent attacks against those vulnerabilities. Part II addresses denial-ofservice (DoS) attacks on an Ethernet switch and shows how those attacks can be mitigated. Part III shows how a switch can actually augment the security of a network through the utilization of wirespeed access control list (ACL) processing and IEEE 802.1x for user authentication and authorization. Part IV examines future developments from the LinkSec working group at the IEEE. For all parts, most of the content is vendor independent and is useful for all network architects deploying Ethernet switches. After reading this book, you will have an in-depth understanding of LAN security and be prepared to plug the security holes that exist in a great number of campus networks. Use port security to protect against CAM attacks Prevent spanning-tree attacks Isolate VLANs with proper configuration techniques Protect against rogue DHCP servers Block ARP snooping Prevent IPv6 neighbor discovery and router solicitation exploitation Identify Power over Ethernet vulnerabilities Mitigate risks from HSRP and VRPP Stop information leaks with CDP, PaGP, VTP, CGMP and other Cisco ancillary protocols Understand and prevent DoS attacks against switches Enforce simple wirespeed security policies with ACLs Implement user authentication on a port base with IEEE 802.1x Use new IEEE protocols to encrypt all Ethernet frames at wirespeed. 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.

Routing and Switching Essentials Companion Guide is the official supplemental textbook for the Routing and Switching Essentials course in the Cisco® Networking Academy® CCNA® Routing and Switching curriculum. This course describes the architecture, components, and operations of routers and switches in a small network. You learn how to configure a router and a switch for basic functionality. By the end of this course, you will be able to configure and troubleshoot routers and switches and resolve common issues with RIPv1, RIPv2, single-area and multi-area OSPF, virtual LANs, and inter-VLAN routing in both IPv4 and IPv6 networks. 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

more than 200 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. Related Title: Routing and Switching Essentials Lab Manual 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 by doing all the exercises from the online course identified throughout the book with this icon. Videos – Watch the videos embedded within the online course. Packet Tracer Activities – Explore and visualize networking concepts using Packet Tracer exercises interspersed throughout the chapters. Hands-on Labs – Work through all the course labs and additional Class Activities that are included in the course and published in the separate Lab Manual.

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Cisco IOS Cookbook"O'Reilly Media, Inc."

Cisco Asa Firewall Fundamentals
IPv6 Security
Investigating and Analyzing Malicious Network Activity
802.1X Port-Based Authentication
Cisco Routers for the Desperate, 2nd Edition

Harden perimeter routers with Cisco firewall functionality and features to ensure network security Detect and prevent denial of service (DoS) attacks with TCP Intercept, Context-Based Access Control (CBAC), and ratelimiting techniques Use Network-Based Application Recognition (NBAR) to detect and filter unwanted and malicious traffic Use router authentication to prevent spoofing and routing attacks Activate basic Cisco IOS filtering features like standard, extended, timed, lock-and-key, and reflexive ACLs to block various types of security threats and attacks, such as spoofing, DoS, Trojan horses, and worms Use black hole routing, policy routing, and Reverse Path Forwarding (RPF) to protect against spoofing attacks Apply stateful filtering of traffic with CBAC, including dynamic port mapping Use Authentication Proxy (AP) for user authentication Perform address translation with NAT, PAT, load distribution, and other methods Implement stateful NAT (SNAT) for redundancy Use Intrusion Detection System (IDS) to protect against basic types of attacks Obtain how-to instructions on basic logging and learn to easily interpret results Apply IPSec to provide secure connectivity for site-to-site and remote access connections Read about many, many more features of the IOS firewall for mastery of router security The Cisco IOS firewall offers you the feature-rich functionality that you've come to expect from best-of-breed firewalls: address translation, authentication, encryption, stateful filtering, failover, URL content filtering, ACLs, NBAR, and many others. Cisco Router Firewall Security teaches you how to use the Cisco IOS firewall to enhance the security of your perimeter routers and, along the way, take advantage of the flexibility and scalability that is part of the Cisco IOS Software package. Each chapter in Cisco Router Firewall Security addresses an important component of perimeter router security. Author Richard Deal explains the advantages and disadvantages of all key security features to help you understand when they should be used and includes examples from his personal consulting experience to illustrate critical issues and security pitfalls. A detailed case study is included at the end of the book, which illustrates best practices and specific information on how to implement Cisco router security features. Whether you are looking to learn about firewall security or seeking how-to techniques to enhance security in your Cisco routers, Cisco Router Firewall Security is your complete reference for securing the perimeter of your network. 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.

Preparing for the latest CCNA Security exam? Here are all the CCNA Security (210-260) commands you need in one condensed, portable resource. Filled with valuable, easy-to-access information, the CCNA Security Portable Command Guide, is portable enough for you to use whether you're in the server room or the equipment closet. Completely updated to reflect the new CCNA Security 210-260 exam, this quick reference summarizes relevant Cisco IOS® Software commands, keywords, command arguments, and associated prompts, and offers tips and examples for applying these commands to real-world security challenges. Configuration examples, throughout, provide an even deeper understanding of how to use IOS to protect networks. Topics covered include **Networking security fundamentals: concepts, policies, strategy Protecting network infrastructure: network** foundations, security management planes/access; data planes (Catalyst switches and IPv6) Threat control/containment: protecting endpoints and content; configuring ACLs, zone-based firewalls, and Cisco IOS IPS Secure connectivity: VPNs, cryptology, asymmetric encryption, PKI, IPsec VPNs, and site-to-site VPN configuration ASA network security: ASA/ASDM concepts; configuring ASA basic settings, advanced settings, and VPNs Access all CCNA Security commands: use as a quick, offline resource for research and solutions Logical how-to topic groupings provide one-stop research Great for review before CCNA Security certification exams Compact size makes it easy to carry with you, wherever you go "Create Your Own Journal" section with blank, lined pages allows you to personalize the book for your needs "What Do You Want to Do?" chart inside the front cover helps you to quickly reference specific tasks

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 rational 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. Fast answers and reliable solutions for all widely-used Cisco router features - all in one time-saving guide Organized for maximum efficiency: describes actual commands and options in the sequence they should be used Helps network pros eliminate time-consuming documentation searches Extensive updates: IPv6, MPLS, AutoQoS, SIP, MGCP, voice troubleshooting, VPNs, security, and more "At-a-glance" illustrations offer fast answers and easy double-checking Locating reliable Cisco router configuration command information can require extensive, time-consuming research. Cisco Router Configuration Handbook, 2/e, is the solution: a day-to-day reference to the most widely used Cisco router features and configurations. Straight from Cisco experts, it covers every facet of router configuration, including fundamentals, network protocols, packet processing, voice/telephony, security, and more. This book is organized for maximum efficiency. Related features are covered together, and features and options are covered in the sequence in which they are typically used. Shaded tabs mark each section for quick reference. Information on each feature, technology, or protocol is presented in a concise oneor two-page format, with sections presenting quick facts, configuration information, and step-by-step examples, including both required and optional commands. Simply put, this book brings together all the Cisco routing configuration information most network professionals will ever need - and organizes it more efficiently than any other resource.

What Hackers Know About Your Switches
Cisco Switching Black Book
Cisco Cookbook
Hardening Cisco Routers
Routing and Switching Essentials Companion Guide
Implementing Cisco IP Switched Networks (SWITCH) Foundation Learning Guide

Go beyond layer 2 broadcast domains with this in-depth tour of advanced link and internetwork layer protocols, and learn how they enable you to expand to larger topologies. An ideal follow-up to Packet Guide to Core Network Protocols, this concise guide dissects several of these protocols to explain their structure and operation. This isnlt a book on packet theory. Author Bruce Hartpence built topologies in a lab as he wrote this guide, and each chapter includes several packet captures. Youlll learn about protocol classification, static vs. dynamic topologies, and reasons for installing a particular route. This guide covers: Host routing Process a routing table and learn how traffic starts out across a

network Static routing Build router routing tables and understand how forwarding decisions are made and processed Spanning Tree Protocol Learn how this protocol is an integral part of every network containing switches Virtual Local Area Networks Use VLANs to address the limitations of layer 2 networks Trunking Get an indepth look at VLAN tagging and the 802.1Q protocol Routing Information Protocol Understand how this distance vector protocol works in small, modern communication networks Open Shortest Path First Discover why convergence times of OSPF and other link state protocols are improved over distance vectors These courses cover the expertise needed to design Cisco Enterprise networks. They cover the fundamentals for advanced routing and addressing solutions, advanced enterprise campus networks, Cisco WAN, security services, network services, and SDA. By the end of this path, youll be confident in your abilities to design network architecture for Cisco Enterprise networks. In addition, these courses line up with the objectives in the Designing Cisco Enterprise Networks ENSLD (300-420) exam and will help you prepare for the certification. Preparing for the Designing Cisco Enterprise Networks ENSLD (300-420) exam to become a CISCO ENSLD Certified? Here we have brought Best Exam Questions for you so that you can prepare well CISCO ENSLD (300-420) exam. Unlike other online simulation practice tests, you get an eBook version that is easy to read & remember these questions. You can simply rely on these questions for successfully certifying this exam. 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, selfpaced 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 webbased 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

Cisco IOS (the software that runs the vast majority of Cisco routers and all Cisco network switches) is the dominant routing platform on the Internet and corporate networks. This widespread distribution, as well as its architectural deficiencies, makes it a valuable target for hackers looking to attack a corporate or private network infrastructure. Compromised devices can disrupt stability, introduce malicious modification, and endanger all communication on the network. For security of the network and investigation of attacks, in-depth analysis and diagnostics are critical, but no book currently covers forensic analysis of Cisco network devices in any detail. Cisco Router and Switch Forensics is the first book devoted to criminal attacks, incident response, data collection, and legal testimony on the market leader in network devices, including routers, switches, and wireless access points. Why is this focus on network devices necessary? Because criminals are targeting networks, and network devices require a fundamentally different approach than the process taken with traditional forensics. By hacking a router, an attacker can bypass a network's firewalls, issue a denial of service (DoS) attack to disable the network, monitor and record all outgoing and incoming traffic, or redirect that communication anywhere they like. But capturing this criminal activity cannot be accomplished with the tools and techniques of traditional forensics. While forensic analysis of computers or other traditional media typically involves immediate shut-down of the target machine, creation of a duplicate, and analysis of static data, this process rarely recovers live system data. So, when an investigation focuses on live network activity, this traditional approach obviously fails. Investigators must recover data as it is transferred via the router or switch, because it is destroyed when the network device is powered down. In this case, following the traditional approach outlined in books on general computer forensics techniques is not only insufficient, but also essentially harmful to an investigation. Jargon buster: A network switch is a small hardware device that joins multiple computers together within one local area network (LAN). A router is a more sophisticated network device that joins multiple wired or wireless networks together. The only book devoted to forensic analysis of routers and switches, focusing on the operating system that runs the vast majority of network devices in the enterprise and on the Internet Outlines the fundamental differences between router forensics and traditional forensics, a critical distinction for responders in an investigation targeting network activity Details where network forensics fits within the entire process of an investigation, end to end, from incident response and data collection to preparing a report and legal testimony

Network Security First-step

Cisco Networks

Implementing Cisco IOS Network Security (IINS 640-554) Foundation Learning Guide

Cisco Router and Switch Forensics

DESIGNING CISCO ENTERPRISE NETWORKS (ENSLD 300-420) Exam Practice Questions & Dumps

Packet Guide to Routing and Switching

Expert solutions for securing network infrastructures and VPNs Build security into the network by defining zones, implementing secure routing protocol designs,

and building safe LAN switching environments Understand the inner workings of the Cisco PIX Firewall and analyze in-depth Cisco PIX Firewall and Cisco IOS Firewall features and concepts Understand what VPNs are and how they are implemented with protocols such as GRE, L2TP, and IPSec Gain a packet-level understanding of the IPSec suite of protocols, its associated encryption and hashing functions, and authentication techniques Learn how network attacks can be categorized and how the Cisco IDS is designed and can be set upto protect against them Control network access by learning how AAA fits into the Cisco security model and by implementing RADIUS and TACACS+ protocols Provision service provider security using ACLs, NBAR, and CAR to identify and control attacks Identify and resolve common implementation failures by evaluating real-world troubleshooting scenarios As organizations increase their dependence on networks for core business processes and increase access to remote sites and mobile workers via virtual private networks (VPNs), network security becomes more and more critical. In today's networked era, information is an organization's most valuable resource. Lack of customer, partner, and employee access to e-commerce and data servers can impact both revenue and productivity. Even so, most networks do not have the proper degree of security. Network Security Principles and Practices provides an in-depth understanding of the policies, products, and expertise that brings organization to this extremely complex topic and boosts your confidence in the performance and integrity of your network systems and services. Written by the CCIE engineer who wrote the CCIE Security lab exam and who helped develop the CCIE Security written exam, Network Security Principles and Practices is the first book to help prepare candidates for the CCIE Security exams. Network Security Principles and Practices is a comprehensive guide to network security threats and the policies and tools developed specifically to combat those threats. Taking a practical, applied approach to building security into networks, the book shows you how to build secure network architectures from the ground up. Security aspects of routing protocols, Layer 2 threats, and switch security features are all analyzed. A comprehensive treatment of VPNs and IPSec is presented in extensive packet-by-packet detail. The book takes a behind-the-scenes look at how the Cisco PIX(r) Firewall actually works, presenting many difficult-to-understand and new Cisco PIX Firewall and Cisco IOS(r) Firewall concepts. The book launches into a discussion of intrusion detection systems (IDS) by analyzing and breaking down modern-day network attacks, describing how an IDS deals with those threats in general, and elaborating on the Cisco implementation of IDS. The book also discusses AAA, RADIUS, and TACACS+ and their usage with some of the newer security implementations such as VPNs and proxy authentication. A complete section devoted to service provider techniques for enhancing customer security and providing support in the event of an attack is also included. Finally, the book concludes with a section dedicated to discussing tried-and-tested troubleshooting tools and techniques that are not only invaluable to candidates working toward their CCIE Security lab exam but also to the security network administrator running the operations of a network on a daily basis.

The all-in-one practical guide to supporting Cisco networks using freeware tools.

A comprehensive guide to the best common practices for Internet service providers Learn the best common practices for configuring routers on the Internet from experts who helped build the Internet Gain specific advice through comprehensive coverage of all Cisco routers and current versions of Cisco IOS Software Understand the Cisco IOS tools essential to building and maintaining reliable networks Increase your knowledge of network security Learn how to prevent problems and improve performance through detailed configuration examples and diagrams Cisco IOS Software documentation is extensive and detailed and is often too hard for many Internet service providers (ISPs) who simply want to switch on and get going. Cisco ISP Essentials highlights many of the key Cisco IOS features in everyday use in the major ISP backbones of the world to help new network engineers gain understanding of the power of Cisco IOS Software and the richness of features available specifically for them. Cisco ISP Essentials also provides a detailed technical reference for the expert ISP engineer, with descriptions of the various knobs and special features that have been specifically designed for ISPs. The configuration examples and diagrams describe many scenarios, ranging from good operational practices to network security. Finally a whole appendix is dedicated to using the best principles to cover the configuration detail of each router in a small ISP Point of Presence.

CCNP Routing and Switching Portable Command Guide All ROUTE (300-101) and SWITCH (300-115) Commands in One Compact, Portable Resource Preparing for the CCNP® ROUTE or CCNP SWITCH exam? Working as a network professional? Here are all the CCNP-level commands you'll need, in one handy resource. The CCNP Routing and Switching Portable Command Guide is filled with valuable, easy-to-access information, and it's portable enough to use whether you're in the server room or the equipment closet. This guide helps you memorize commands and concepts as you prepare to pass the CCNP ROUTE (300-101) or CCNP SWITCH (300-115) exams. It summarizes all CCNP certification-level Cisco IOS® Software commands, keywords, command arguments, and associated prompts, offering tips and examples for applying them in real-world environments. Throughout, configuration examples deepen your understanding of how these commands are used in actual network designs. Whenever you're researching routing or switching solutions, you won't find a quicker, more useful offline resource. --Logical "how-to" topic groupings inside the front and back covers provide one-stop research --Compact size makes it easy to carry with you, wherever you go --Helps you review important commands before taking the CCNP ROUTE or CCNP SWITCH certification exam -- "Create Your Own Journal" appendix with blank, lined pages enables you to personalize the book for your own needs -- "What Do You Want to Do?" chart inside front and back covers helps you to quickly reference specific tasks

A guide to network programmability and automation in the data center, campus, and WAN Switched Networks Companion Guide Router and Switch Management, the Easy Way