Ipsec Virtual Private Network Fundamentals James Henry Carmouche

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Ipsec Virtual Private Network Fundamentals James Henry Carmouche ***2021-07-04***

KAEL PEREZ

Data Center Fundamentals Cisco Press
"Demystifying VPN" is intended to help those individuals with little or no knowledge of internetworking understand VPNs and how they fit into the overall networking environment that includes TCP/IP. The material is presented in a logical fashion, beginning with the basic business reasons for selecting VPNs as a communications solution to the fundamentals of networking and the complexities of VPNs. The material also focuses on the Transmission Control Protocol and Internet Protocol that form the software platform on which VPNs are based, and the Point-to-Point Tunneling Protocol, which is the network protocol supporting VPNs. Michael Busby is an electrical engineer and technical writer in Plano, Texas. He is a consultant; the president of Global Network Services, an international telecommunications company; and the author of "Demystifying ATM/ADSL" and "Demystifying TCP/IP (3e)".

IKEv2 IPsec Virtual Private Networks Cisco Press
Beginners network professionals can learn how to set up a Virtual Private Network in the most secure and cost-effective way. Includes VPN blueprints for one of the fastest growing and secure methods for connecting branch offices.

Network Security Principles and Practices Cisco Press
Expert solutions for securing network infrastructures and VPNs bull; 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 a CCIE engineer who participated in the development of the CCIE Security exams, Network Security Principles and Practices is the first book that provides a comprehensive review of topics important to achieving CCIE Security certification. 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 IOSreg; 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.

Mobile VPN Cisco Press

Based on the official instructor-led training course of the same name in a self-study product, Cisco® Secure Virtual Private Networks is a comprehensive, results-oriented book designed to give readers the knowledge to plan, administer, and maintain a Virtual Private Network (VPN). Readers are taught to accomplish several specific tasks, including identifying the features, functions, and benefits of Cisco® Secure VPN products; identifying the component technologies implemented in Cisco® Secure VPN products; utilizing commands required to configure and test IPSec in Cisco IOS® software and PIX Firewalls; installing and configuring the Cisco® VPN Client to create a secure tunnel to a Cisco® VPN Concentrator and PIX Firewall; configuring and verifying IPSec in the Cisco® VPN Concentrator, Cisco router, and PIX Firewall; and configuring the Cisco® VPN Concentrator, Cisco® router, and PIX

Firewall for interoperability.

CCNA Security 210-260 Official Cert Guide Network Professional's Library

The authors meet the growing demands of de-centralized companies that need a secure and functional network using Linux. The only book available that extensively covers the combination of VPN technology and Linux, this volume teaches first hand how to build various VPN solutions with individual setup guides.

Cisco Secure Virtual Private Networks IOS Press

What is IPSec? What's a VPN? Why do the need each other? Virtual Private Network (VPN) has become one of the most recognized terms in our industry, yet there continuously seems to be different impressions of what VPNs really are and can become. A Technical Guide to IPSec Virtual Private Networks provides a single point of information that represents hundreds or resources and years of experience with IPSec VPN solutions. It cuts through the complexity surrounding IPSec and the idiosyncrasies of design, implementation, operations, and security. Starting with a primer on the IP protocol suite, the book travels layer by layer through the protocols and the technologies that make VPNs possible. It includes security theory, cryptography, RAS, authentication, IKE, IPSec, encapsulation, keys, and policies. After explaining the technologies and their interrelationships, the book provides sections on implementation and product evaluation. A Technical Guide to IPSec Virtual Private Networks arms

information security, network, and system engineers and administrators with the knowledge and the methodologies to design and deploy VPNs in the real world for real companies.

Intelligent Interactive Multimedia Systems and Services John Wiley & Sons

Let's face it: the information age makes dummies of us all at some point. One thing we can say for sure, though, about things related to the Internet is that their best strengths are often also their worst weaknesses. This goes for virtual private networks (VPNs). They may reach a wide base of customers – but can also be vulnerable to viruses, hackers, spoofers, and other shady online characters and entities. VPNs may allow for super-efficient communication between customer and company – but they rely on information which, if compromised, can cause huge losses. The Internet is still a frontier – sometimes so wide open it leaves us bewildered – and, like any frontier, the risks go hand in hand with potentially huge rewards. Virtual Private Networks for Dummies offers you a no-nonsense, practical guide to evaluating your company's need for a VPN, understanding what it takes to implement one, and undertaking the challenging quest to set it up, make it work, and keep it safe. Whether you're the resident expert leading the project team, or you just want to learn what makes e-commerce tick, this detailed, from-the-ground-up guide will soon have you comfortably conceptualizing: Security goals and strategies The

evolution of VPNs Privacy in VPNs Extranets Remote-Access VPNs Funding Custom network solutions design Testing VPNs And more With new products and technologies offering supposedly revolutionary solutions to IT departments every day, this book focuses on the real world – you know, the one full of obstacles, mishaps, threats, delays, and errors – and gives you the background knowledge to make decisions for yourself about your VPN needs. Written with a dash of humor, Virtual Private Networks for Dummies contains both technical detail (standards, protocols, etc.) and more general concepts (such as conducting cost-benefit analyses). This clear, authoritative guide will have you securely and cost-effectively networking over the Internet in no time.

Implementing Cisco IOS Network Security (IINS) Jones & Bartlett Publishers

The definitive design and deployment guide for secure virtual private networks Learn about IPSec protocols and Cisco IOS IPSec packet processing Understand the differences between IPSec tunnel mode and transport mode Evaluate the IPSec features that improve VPN scalability and fault tolerance, such as dead peer detection and control plane keepalives Overcome the challenges of working with NAT and PMTUD Explore IPSec remote-access features, including extended authentication, mode-configuration, and digital certificates Examine the pros and cons of various IPSec connection models such as native

IPSec, GRE, and remote access Apply fault tolerance methods to IPSec VPN designs Employ mechanisms to alleviate the configuration complexity of a large-scale IPSec VPN, including Tunnel End-Point Discovery (TED) and Dynamic Multipoint VPNs (DMVPN) Add services to IPSec VPNs, including voice and multicast Understand how network-based VPNs operate and how to integrate IPSec VPNs with MPLS VPNs Among the many functions that networking technologies permit is the ability for organizations to easily and securely communicate with branch offices, mobile users, telecommuters, and business partners. Such connectivity is now vital to maintaining a competitive level of business productivity. Although several technologies exist that can enable interconnectivity among business sites, Internet-based virtual private networks (VPNs) have evolved as the most effective means to link corporate network resources to remote employees, offices, and mobile workers. VPNs provide productivity enhancements, efficient and convenient remote access to network resources, site-to-site connectivity, a high level of security, and tremendous cost savings. IPSec VPN Design is the first book to present a detailed examination of the design aspects of IPSec protocols that enable secure VPN communication. Divided into three parts, the book provides a solid understanding of design and architectural issues of large-scale, secure VPN solutions. Part I includes a comprehensive introduction to the

general architecture of IPSec, including its protocols and Cisco IOS® IPSec implementation details. Part II examines IPSec VPN design principles covering hub-and-spoke, full-mesh, and fault-tolerant designs. This part of the book also covers dynamic configuration models used to simplify IPSec VPN designs. Part III addresses design issues in adding services to an IPSec VPN such as voice and multicast. This part of the book also shows you how to effectively integrate IPSec VPNs with MPLS VPNs. IPSec VPN Design provides you with the field-tested design and configuration advice to help you deploy an effective and secure VPN solution in any environment. 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.

IPSec Virtual Private Network Fundamentals Cisco Press

& Learn the troubleshooting techniques that every IT professional running a Virtual Private Network (VPN) must master & & Experience real-world solutions through practice scenarios in each chapter & & An essential workplace reference guide for every VPN management site

Fusion of Smart, Multimedia and Computer Gaming Technologies Adobe Press

Document from the year 2018 in the subject Computer Science - IT-Security,

grade: A, language: English, abstract: This book encompasses virtual private network technologies theoretical as well as practical. In this project, it demonstrates how to VPNs actually work and their practical implementation with different lab scenarios step by step. The objective of this book is to teach the students and professionals in an easy way. The reader does not learn the theoretical knowledge of VPNs, but he also learns the practical implementation of several types of VPN in his home and office. There are several types of VPN with different scenarios. After the study of this book, the reader will be familiar with almost all types of VPN and can perform with different scenarios in his office and home.

Comparing, Designing, and Deploying VPNs Cisco Press

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

through the use of proven series elements and techniques. “Do I Know This Already?” quizzes open each chapter and enable you to decide how much time you need to spend on each section. Exam topic lists make referencing easy. Chapter-ending Exam Preparation Tasks help you drill on key concepts you must know thoroughly. CCNA Security 210-260 Official Cert Guide focuses specifically on the objectives for the Cisco CCNA Security exam. Networking Security experts Omar Santos and John Stuppi share preparation hints and test-taking tips, helping you identify areas of weakness and improve both your conceptual knowledge and hands-on skills. Material is presented in a concise manner, focusing on increasing your understanding and retention of exam topics. Well regarded for its level of detail, assessment features, comprehensive design scenarios, and challenging review questions and exercises, this official study guide helps you master the concepts and techniques that will enable you to succeed on the exam the first time. The official study guide helps you master all the topics on the CCNA Security exam, including --Networking security concepts --Common security threats --Implementing AAA using IOS and ISE --Bring Your Own Device (BYOD) --Fundamentals of VPN technology and cryptography --Fundamentals of IP security --Implementing IPsec site-to-site VPNs --Implementing SSL remote-access VPNs using Cisco ASA --Securing Layer 2

technologies --Network Foundation Protection (NFP) --Securing the management plane on Cisco IOS devices --Securing the data plane --Securing routing protocols and the control plane --Understanding firewall fundamentals --Implementing Cisco IOS zone-based firewalls --Configuring basic firewall policies on Cisco ASA --Cisco IPS fundamentals --Mitigation technologies for e-mail- and web-based threats --Mitigation technologies for endpoint threats CCNA Security 210-260 Official Cert Guide is part of a recommended learning path from Cisco that includes simulation and hands-on training from authorized Cisco Learning Partners and self-study products from Cisco Press. To find out more about instructor-led training, e-learning, and hands-on instruction offered by authorized Cisco Learning Partners worldwide, please visit http://www.cisco.com/web/learning/index.html.

A Technical Guide to IPSec Virtual Private Networks Packt Publishing Ltd

The classic and authoritative reference in the field of computer security, now completely updated and revised With the continued presence of large-scale computers; the proliferation of desktop, laptop, and handheld computers; and the vast international networks that interconnect them, the nature and extent of threats to computer security have grown enormously. Now in its fifth edition, Computer Security Handbook continues to provide authoritative guidance to identify and to eliminate these threats where possible, as well as

to lessen any losses attributable to them. With seventy-seven chapters contributed by a panel of renowned industry professionals, the new edition has increased coverage in both breadth and depth of all ten domains of the Common Body of Knowledge defined by the International Information Systems Security Certification Consortium (ISC). Of the seventy-seven chapters in the fifth edition, twenty-five chapters are completely new, including: 1. Hardware Elements of Security 2. Fundamentals of Cryptography and Steganography 3. Mathematical models of information security 4. Insider threats 5. Social engineering and low-tech attacks 6. Spam, phishing, and Trojans: attacks meant to fool 7. Biometric authentication 8. VPNs and secure remote access 9. Securing Peer2Peer, IM, SMS, and collaboration tools 10. U.S. legal and regulatory security issues, such as GLBA and SOX Whether you are in charge of many computers or just one important one, there are immediate steps you can take to safeguard your computer system and its contents. Computer Security Handbook, Fifth Edition equips you to protect the information and networks that are vital to your organization.

IPsec Virtual Private Network Fundamentals John Wiley & Sons

VPNs enable any enterprise to utilize the Internet as its own secure private network. In this book, two leading VPN implementers offer a start-to-finish, hands-on guide to constructing and operating secure VPNs. Going far beyond the theory found in most books, Ruixi

Yuan and Tim Strayer present best practices for every aspect of VPN deployment, including tunneling, IPsec, authentication, public key infrastructure, and network/service management. Strayer and Yuan begin with a detailed overview of the fundamental concepts and architectures associated with enterprise VPNs, including site-to-site VPNs, remote access VPNs, and extranets. They compare all options for establishing VPN tunnels across the Internet, including PPTP, L2F, and L2TP. Next, they present in-depth coverage of implementing IPsec; establishing two-party or trusted third-party authentication; building a robust public key infrastructure; and managing access control. The book includes expert coverage of VPN gateway configuration, provisioning, and management; Windows and other VPN clients; and network/service management, including SLAs and network operations centers. Finally, the authors preview the future of VPNs, showing how they may be enhanced to provide greater quality of service and network intelligence. For all networking and IT professionals, security specialists, consultants, vendors, and service providers responsible for building or operating VPNs.

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

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. An introduction to designing and configuring Cisco IPsec

VPNs Understand the basics of the IPsec protocol and learn implementation best practices Study up-to-date IPsec design, incorporating current Cisco innovations in the security and VPN marketplace Learn how to avoid common pitfalls related to IPsec deployment Reinforce theory with case studies, configuration examples showing how IPsec maps to real-world solutions IPsec Virtual Private N.

IPSec VPN Design Addison-Wesley Professional

At a time when computers are more widespread than ever, intelligent interactive systems have become a necessity. The term ‘multimedia systems’ refers to the coordinated storage, processing, transmission and retrieval of multiple forms of information, such as audio, image, video, animation, graphics and text. The growth of multimedia services has been exponential, as technological progress keeps up with the consumer’s need for content. The solution of 'one fits all' is no longer appropriate for the wide ranges of users with various backgrounds and needs, so one important goal of many intelligent interactive systems is dynamic personalization and adaptivity to users. This book presents 37 papers summarizing the work and new research results presented at the 6th International Conference on Intelligent Interactive Multimedia Systems and Services (KES-IIMSS2013), held in Sesimbra, Portugal, in June 2013. The conference series focuses on research in the fields of intelligent interactive multimedia

systems and services and provides an internationally respected forum for scientific research in related technologies and applications.

Network Security Fundamentals

Cisco Press

Implementing Cisco IOS Network Security (IINS) Foundation Learning Guide Second Edition Foundation learning for the CCNA Security IINS 640-554 exam Implementing Cisco IOS Network Security (IINS) Foundation Learning Guide, Second Edition, is a Cisco-authorized, self-paced learning tool for CCNA® Security 640-554 foundation learning. This book provides you with the knowledge needed to secure Cisco® networks. By reading this book, you will gain a thorough understanding of how to develop a security infrastructure, recognize threats and vulnerabilities to networks, and mitigate security threats. This book focuses on using Cisco IOS routers to protect the network by capitalizing on their advanced features as a perimeter router, firewall, intrusion prevention system, and site-to-site VPN device. The book also covers the use of Cisco Catalyst switches for basic network security, the Cisco Secure Access Control System (ACS), and the Cisco Adaptive Security Appliance (ASA). You learn how to perform basic tasks to secure a small branch office network using Cisco IOS security features available through web-based GUIs (Cisco Configuration Professional) and the CLI on Cisco routers, switches, and ASAs. Whether you are preparing for CCNA Security

certification or simply want to gain a better understanding of Cisco IOS security fundamentals, you will benefit from the information provided in this book. Implementing Cisco IOS Network Security (IINS) Foundation Learning Guide, Second Edition, is part of a recommended learning path from Cisco that includes simulation and hands-on training from authorized Cisco Learning Partners and self-study products from Cisco Press. To find out more about instructor-led training, e-learning, and hands-on instruction offered by authorized Cisco Learning Partners worldwide, please visit www.cisco.com/go/authorizedtraining. -- Develop a comprehensive network security policy to counter threats against information security -- Secure borderless networks -- Learn how to use Cisco IOS Network Foundation Protection (NFP) and Cisco Configuration Professional (CCP) -- Securely implement the management and reporting features of Cisco IOS devices -- Deploy Cisco Catalyst Switch security features -- Understand IPv6 security features -- Plan threat control strategies -- Filter traffic with access control lists -- Configure ASA and Cisco IOS zone-based firewalls -- Implement intrusion prevention systems (IPS) and network address translation (NAT) -- Secure connectivity with site-to-site IPsec VPNs and remote access VPNs This volume is in the Foundation Learning Guide Series offered by Cisco Press®. These guides are developed together with Cisco as the only authorized, self-paced learning tools that help

networking professionals build their understanding of networking concepts and prepare for Cisco certification exams. Category: Cisco Certification Covers: CCNA Security IINS exam 640-554

Virtual Private Networks For Dummies CRC Press

Master building and integrating secure private networks using OpenVPN About This Book Discover how to configure and set up a secure OpenVPN Enhance user experience by using multiple authentication methods Delve into better reporting, monitoring, logging, and control with OpenVPN Who This Book Is For If you are familiar with TCP/IP networking and general system administration, then this book is ideal for you. Some knowledge and understanding of core elements and applications related to Virtual Private Networking is assumed. What You Will Learn Identify different VPN protocols (IPSec, PPTP, OpenVPN) Build your own PKI and manage certificates Deploy your VPN on various devices like PCs, mobile phones, tablets, and more Differentiate between the routed and bridged network Enhance your VPN with monitoring and logging Authenticate against third-party databases like LDAP or the Unix password file Troubleshoot an OpenVPN setup that is not performing correctly In Detail Security on the internet is increasingly vital to both businesses and individuals. Encrypting network traffic using Virtual Private Networks is one method to enhance security. The internet, corporate, and “free internet”

networks grow more hostile every day. OpenVPN, the most widely used open source VPN package, allows you to create a secure network across these systems, keeping your private data secure. The main advantage of using OpenVPN is its portability, which allows it to be embedded into several systems. This book is an advanced guide that will help you build secure Virtual Private Networks using OpenVPN. You will begin your journey with an exploration of OpenVPN, while discussing its modes of operation, its clients, its secret keys, and their format types. You will explore PKI: its setting up and working, PAM authentication, and MTU troubleshooting. Next, client-server mode is discussed, the most commonly used deployment model, and you will learn about the two modes of operation using "tun" and "tap" devices. The book then progresses to more advanced concepts, such as deployment scenarios in tun devices which will include integration with back-end authentication, and securing your OpenVPN server using iptables, scripting, plugins, and using OpenVPN on mobile devices and networks. Finally, you will discover the strengths and weaknesses of the current OpenVPN implementation, understand the future directions of OpenVPN, and delve into the troubleshooting techniques for OpenVPN. By the end of the book, you will be able to build secure private networks across the internet and hostile networks with confidence. Style and approach An easy-to-follow yet

comprehensive guide to building secure Virtual Private Networks using OpenVPN. A progressively complex VPN design is developed with the help of examples. More advanced topics are covered in each chapter, with subjects grouped according to their complexity, as well as their utility.

Optimal Routing Design Jones & Bartlett Publishers

This monograph book is focused on the recent advances in smart, multimedia and computer gaming technologies. The Contributions include: ·Smart Gamification and Smart Serious Games. ·Fusion of secure IPsec-based Virtual Private Network, mobile computing and rich multimedia technology. ·Teaching and Promoting Smart Internet of Things Solutions Using the Serious-game Approach. ·Evaluation of Student Knowledge using an e-Learning Framework. ·The iTEC Eduteka. ·3D Virtual Worlds as a Fusion of Immersing, Visualizing, Recording, and Replaying Technologies. ·Fusion of multimedia and mobile technology in audio guides for Museums and Exhibitions: from Bluetooth Push to Web Pull. The book is directed to researchers, students and software developers working in the areas of education and information technologies.

IPsec Virtual Private Network Fundamentals Cisco Press

Master the basics of data centers to build server farms that enhance your Web site performance Learn design guidelines that show how to deploy server farms in highly available and

scalable environments Plan site performance capacity with discussions of server farm architectures and their real-life applications to determine your system needs Today's market demands that businesses have an Internet presence through which they can perform e-commerce and customer support, and establish a presence that can attract and increase their customer base. Underestimated hit ratios, compromised credit card records, perceived slow Web site access, or the infamous "Object Not Found" alerts make the difference between a successful online presence and one that is bound to fail. These challenges can be solved in part with the use of data center technology. Data centers switch traffic based on information at the Network, Transport, or Application layers. Content switches perform the "best server" selection process to direct users' requests for a specific service to a server in a server farm. The best server selection process takes into account both server load and availability, and the existence and consistency of the requested content. Data Center Fundamentals helps you understand the basic concepts behind the design and scaling of server farms using data center and content switching technologies. It addresses the principles and concepts needed to take on the most common challenges encountered during planning, implementing, and managing Internet and intranet IP-based server farms. An in-depth analysis of the data center technology with real-life scenarios make

Data Center Fundamentals an ideal reference for understanding, planning, and designing Web hosting and e-commerce environments.

Virtual Private Networks in Theory and Practice Pearson Education

An introduction to designing and configuring Cisco IPsec VPNs Understand the basics of the IPsec protocol and learn implementation best practices Study up-to-date IPsec design, incorporating current Cisco innovations in the security and VPN marketplace Learn how to avoid common pitfalls related to IPsec deployment Reinforce theory with case studies, configuration examples showing how IPsec maps to real-world solutions IPsec Virtual Private Network Fundamentals provides a basic working knowledge of IPsec on various Cisco routing and switching platforms. It provides the foundation necessary to understand the different components of Cisco IPsec implementation and how it can be successfully implemented in a variety of network topologies and markets (service provider, enterprise, financial, government). This book views IPsec as an emerging requirement in most major vertical markets, explaining the need for increased information authentication, confidentiality, and non-repudiation for secure transmission of confidential data. The book is written using a layered approach, starting with basic explanations of why IPsec was developed and the types of organizations relying on IPsec to secure data transmissions. It then outlines the basic IPsec/ISAKMP fundamentals that

were developed to meet demand for secure data transmission. The book covers the design and implementation of IPsec VPN architectures using an array of Cisco products, starting with basic concepts and proceeding to more advanced topics including high availability solutions and public key infrastructure (PKI). Sample topology diagrams and configuration examples are provided in each chapter to reinforce the fundamentals expressed in text and to assist readers in translating concepts into practical deployment scenarios. Additionally, comprehensive case studies are incorporated throughout to map topics to real-world solutions.