Computer Networking A Topdown Approach International Edition

Computer Networks: A Systems Approach, Fifth Edition, explores the key principles of computer networking, with examples drawn from the real world of network and protocol design. Using the Internet as the primary example, this best-selling and classic textbook explains various protocols and networking technologies. The systems-oriented approach encourages students to think about how individual network components fit into a larger, complex system of interactions. This book has a completely updated content with expanded coverage of the topics of utmost importance to networking professionals and students, including P2P, wireless, network security, and network applications such as e-mail and the Web, IP telephony and video streaming, and peer-to-peer file sharing. There is now increased focus on application layer issues where innovative and exciting research and design is currently the center of attention. Other topics include network design and architecture; the ways users can connect to a network; the concepts of switching, routing, and internetworking; end-to-end protocols; congestion control and resource allocation; and end-to-end data. Each chapter includes a problem statement, which introduces issues to be examined; shaded sidebars that elaborate on a topic or introduce a related advanced topic; What's Next? discussions that deal with emerging issues in research, the commercial world, or society; and exercises. This book is written for graduate or upper-division undergraduate classes in computer networking. It will also be useful for industry professionals retraining for network-related assignments, as well as for network practitioners seeking to understand the workings of network protocols and the big picture of networking. Completely updated content with expanded coverage of the topics of utmost importance to networking professionals and students, including P2P, wireless, security, and applications Increased focus on application layer issues where innovative and exciting research and design is currently the center of attention Free downloadable network simulation software and lab experiments manual available

Computer Networking: A Top-Down Approach, eBook, Global EditionPearson Higher Ed

It's been watching ... it's coming to town and sliding down your chimney. Kringle or Krampus? Of this world or not? Aliens, elves and reindeer, zombies and hard-boiled detectives. Which ghost of Christmas is coming for you? If you love Halloween but are so-so about Christmas - these stories are for you. scary, funny, sweet or sad - they're all TWISTED.

A Top-Down Approach

A Top-down Approach Featuring the Internet, 3rd Ed

Introduction to Computer Networks

Network Warrior

Why Helping Others Drives Our Success

Computer Networking: A Top-Down Approach, eBook, Global Edition

"This remarkable book combines practical advice, ready-to-use techniques, anda deep understanding of why this is the right way to develop software. I haveseen software teams transformed by the ideas in this book." --Mike Cohn, author of Agile Estimating and Planning "As a lean practitioner myself, I have loved and used their first book for years.When this second book came out, I was delighted that it was even better. If youare interested in how lean principles can be useful for software developmentorganizations, this is the book you are looking for. The Poppendiecks offer abeautiful blend of history, theory, and practice." --Alan Shalloway, coauthor of Design Patterns Explained "I've enjoyed reading the book very much. I feel it might even be better than thefirst lean book by Tom and Mary, while that one was already exceptionallygood! Mary especially has a lot of knowledge related to lean techniques inproduct development and manufacturing. It's rare that these techniques areactually translated to software. This is something no other book does well(except their first book)." --Bas Vodde "The new book by Mary and Tom Poppendieck provides a well-written andcomprehensive introduction to lean principles and selected practices for softwaremanagers and engineers. It illustrates the application of the values andpractices with well-suited success stories. I enjoyed reading it." --Roman Pichler "In Implementing Lean Software Development, the Poppendiecks explore moredeeply the themes they introduced in Lean Software Development. They beginwith a compelling history of lean thinking, then move to key areas such asvalue, waste, and people. Each chapter includes exercises to help you apply keypoints. If you want a better understanding of how lean ideas can work withsoftware, this book is for you." --Bill Wake, independent consultant In 2003, Mary and Tom Poppendieck's Lean Software Development introduced breakthrough development techniques that leverage Lean principles to deliver unprecedented agility and value. Now their widely anticipated sequel and companion guide shows exactly how to implement Lean software development, hands-on. This new book draws on the Poppendiecks' unparalleled experience helping development organizations optimize the entire software value stream. You'll discover the right questions to ask, the key issues to focus on, and techniques proven to work. The authors present case studies from leading-edge software organizations, and offer practical exercises for jumpstarting your own Lean initiatives. Managing to extend, nourish, and leverage agile practices Building true development teams, not just groups Driving quality through rapid feedback and detailed discipline Making decisions Just-in-Time, but no later Delivering fast: How PatientKeeper delivers 45 rock-solid releases per year Making tradeoffs that really satisfy customers Implementing Lean Software Development is indispensable to anyone who wants more effective development processes--managers, project leaders, senior developers, and architects in enterprise IT and software companies alike.

Data is at the center of many challenges in system design today. Difficult issues need to be figured out, such as scalability, consistency, reliability, efficiency, and maintainability. In addition, we have an overwhelming variety of tools, including relational databases, NoSQL datastores, stream or batch processors, and message brokers. What are the right choices for your application? How do you make sense of all these buzzwords? In this practical and comprehensive guide, author Martin Kleppmann helps you navigate this diverse landscape by examining the pros and cons of various technologies for processing and storing data. Software keeps changing, but the fundamental principles remain the same. With this book, software engineers and architects will learn how to apply those ideas in practice, and how to make full use of data in modern applications. Peer under the hood of the systems you already use, and learn how to use and operate them more effectively Make informed decisions by identifying the strengths and weaknesses of different tools Navigate the trade-offs around consistency, scalability, fault tolerance, and complexity Understand the distributed systems research upon which modern databases are built Peek behind the scenes of major online services, and learn from their architectures

At the highest level of description, this book is Introduction to Computer Networks. It focuses on Basic level of networks and its background of networks. This book is not intended as an introduction to Computer Networks, although we do provide the background necessary in several areas in order to facilitate the reader's comprehension of their respective roles in Networking. This book reviews state-of-the-art. This is the first book that explains how computer networks work inside, from the hardware technology up to and including the most popular Internet application protocols.

A Top-down Approach, (book+plp+ebk) Ge_o7

A Top-down Approach, Seventh Edition

Computer Networking, eBook, Global Edition

Wisdom at Work

The Puppy's Soul

Structure and Interpretation of Computer Programs - 2nd Edition

Building on the successful top-down approach of previous editions, this fourth edition continues with an early emphasis on application-layer paradigms and application programming interfaces, encouraging a hands-on experience with protocols and networking concepts.

A top-down,layered approach to computer networking. Unique among computernetworking texts, the 8th Edition, Global Edition, of thepopular Computer Networking: A Top Down Approach buildson the authors' long tradition of teaching this complex subject through alayered approach in a "top-down manner." The text works its way from theapplication layer down toward the physical layer, motivating students byexposing them to important concepts early in their study of networking.Focusing on the Internet and the fundamentally important issues of networking,this text provides an excellent foundation for students in computer science andelectrical engineering, without requiring extensive knowledge of programming ormathematics. The 8th Edition, Global Edition, has been updatedto reflect the most important and exciting recent advances in networking,including the importance of software-defined networking (SDN) and the rapidadoption of 4G/5G networks and the mobile applications they enable.

A girl learns about different religions when she asks what will happen to her puppy's soul.

The Rise of the New American Security State

How to Navigate Clueless Colleagues, Lunch-Stealing Bosses, and the Rest of Your Life at Work

A Top-down Approach (book+plp) Ge_07

PLP COMPUTER NETWORKING

Computer Networking

Top-Down Network Design

"This book is organized around three concepts fundamental to OS construction: virtualization (of CPU and memory), concurrency (locks and condition variables), and persistence (disks, RAIDS, and file systems"--Back cover.

For courses in Networking/Communications. Motivate your students with a top-down, layered approach to computer networking Unique among computer networking texts, the 7th Edition of the popular Computer Networking: A Top Down Approach builds on the author's long tradition of teaching this complex subject through a layered approach in a "top-down manner." The text works its way from the application layer down toward the physical layer, motivating students by exposing them to important concepts early in their study of networking. Focusing on the Internet and the fundamentally important issues of networking, this text provides an excellent foundation for students in computer science and electrical engineering, without requiring extensive knowledge of programming or mathematics. The full text downloaded to your computer With eBooks you can: search for key concepts, words and phrases make highlights and notes as you study share your notes with friends eBooks are downloaded to your computer and accessible either offline through the Bookshelf (available as a free download), available online and also via the iPad and Android apps. Upon purchase, you'll gain instant access to this eBook. Time limit The eBooks products do not have an expiry date. You will continue to access your digital ebook products whilst you have your Bookshelf installed.

Have you ever wondered what is behind social media, email, all different websites and so on? Would you like to know how it was created and the technology that stand behind it? Can you imagine your life without all these technologies, and how different it would be? If at least one of these questions makes you think, then keep reading... We are more than happy to represtent our most recent product: "COMPUTER NETWORKING FOR BEGINNERS" - a complete guide for every newcomer who is interested in computer networking and technology in general. It's almost impossible to imagine our everyday life without a smartphone or computer. But how it all started? What is the science behind it? How these so-called simple and obvious websites were created? How do computers connect to each other? Where does the information go? - All of these questions and mreo are going to be explained it this book. Now let's take a look at only a few things you will get out of this book: A complete step-by-step computer networking guide for beginners All the information you need to know about the internet and how it works Basic characteristics and technologies behind computer networking 1 SIMPLE TIP you have to know about technology Networking issues you need to know about Many many more... You feel that you know a lot about computers networking and how it works? Let's check it out, this book will guide you through every single step, and you will be surprised how different the reality is compared to what you think. Take action now, scroll up, click on "Buy Now" and start reading!

Study Companion

Computer Networks: A Top Down Approach

Exploitation and Countermeasures for Modern Web Applications

Operating Systems

The Essential Guide To Networking To Introduce Yourself To The Computer Network Through a Top-down Approach And Various Infrastructures

The Making of a Modern Elder

From the creator of the popular website Ask a Manager and New York's work-advice columnist comes a witty, practical guide to 200 difficult professional conversations—featuring all-new advice! There's a reason Alison Green has been called "the Dear Abby of the work world." Ten years as a workplace-advice columnist have taught her that people avoid awkward conversations in the office because they simply don't know what to say. Thankfully, Green does—and in this incredibly helpful book, she tackles the tough discussions you may need to have during your career. You'll learn what to say when • coworkers push their work on you—then take credit for it • you accidentally trash-talk someone in an email then hit "reply all" • you're being micromanaged—or not being managed at all • you catch a colleague in a lie • your boss seems unhappy with your work • your cubemate's loud speakerphone is making you homicidal • you got drunk at the holiday party Praise for Ask a Manager "A must-read for anyone who works . . . [Alison Green's] advice boils down to the idea that you should be professional (even when others are not) and that communicating in a straightforward manner with candor and kindness will get you far, no matter where you work."—Booklist (starred review) "The author's friendly, warm, no-nonsense writing is a pleasure to read, and her advice can be widely applied to relationships in all areas of readers' lives. Ideal for anyone new to the job market or new to management, or anyone hoping to improve their work experience."—Library Journal (starred review) "I am a huge fan of Alison Green's Ask a Manager column. This book is even better. It teaches us how to deal with many of the most vexing big and little problems in our workplaces—and to do so with grace, confidence, and a sense of humor."—Robert Sutton, Stanford professor and author of The No Asshole Rule and The Asshole Survival Guide "Ask a Manager is the ultimate playbook for navigating the traditional workforce in a diplomatic but firm way."—Erin Lowry, author of Broke Millennial: Stop Scraping By and Get Your Financial Life Together

Structure and Interpretation of Computer Programs by Harold Abelson and Gerald Jay Sussman is licensed under a Creative Commons Attribution-NonCommercial 3.0 License.

A shocking examination of the extreme national secruity apparatus built in response to the terrorist attacks of September 11th After 9/11, the United States government embarked on an unprecedented effort to protect America. The result has been calamitous: Eleven years of unparalleled spending and growth have produced a system to keep America safe that may in fact be putting us in even greater danger--but we don't know because it's all top secret. In this acclaimed bestseller, award-winning journalists Dana Priest and William M. Arkin lift the curtain on this clandestine universe. From the agencies and private companies keeping track of American citizens, to the military commanders building America's first "top secret city," to a hidden army within the U.S. military more secret than the CIA, this new national security octopus has become a self-sustaining "fourth branch" of government. Top Secret America is a tour de force of investigative journalism that reveals government run amok and a war on terrorism gone wrong.

Web Application Security

Computer Networking First Step

Give and Take

A Top-Down Approach: International Edition

Designing Data-Intensive Applications

A Systems Approach

By starting at the application-layer and working down to the protocol stack, this text provides a motivational treatment of important concepts for networking students.

Your ultimate one-stop networking reference Designed to replace that groaning shelf-load of dull networking books you'd otherwise have to buy and house, Networking All-in-One For Dummies covers all the basic and not-so-basic information you need to get a network up and running. It also helps you keep it running as it grows more complicated, develops bugs, and encounters all the fun sorts of trouble you expect from a complex system. Ideal both as a starter for newbie administrators and as a handy quick reference for pros, this book is built for speed, allowing you to get past all the basics—like installing and configuring hardware and software, planning your network design, and managing cloud services—so you can get on with what your network is actually intended to do. In a friendly, jargon-free style, Doug Lowe—an experienced IT Director and prolific tech author—covers the essential, up-to-date information for networking in systems such as Linux and Windows 10 and clues you in on best practices for security, mobile, and more. Each of the nine minibooks demystifies the basics of one key area of network management. Plan and administrate your network Implement virtualization Get your head around networking in the Cloud Lock down your security protocols The best thing about this book? You don't have to read it all at once to get things done; once you've solved the specific issue at hand, you can put it down again and get on with your life. And the next time you need it, it'll have you covered.

Revised to reflect the rapid changes in the field of networking, Computer Networking provides a top-down approach to this study by beginning with application-level protocols and then working down the protocol stack. An early emphasis is placed on application-layer paradigms and application programming interfaces to allow readers to get their "hands dirty" with protocols and networking concepts in the context of applications they will use in the industry. Networking today is much more (and far more interesting) than standards specifying message formats and protocol behaviors. Professors Kurose and Ross focus on describing emerging principles in a lively and engaging manner and then illustrate these principles with examples drawn from Internet architecture."

Computer Networking:A Top-Down Approach Featuring the Internet with Multimedia Communications:Applications, Networks, Protocols and Standards

Fundamentals of Data Communication Networks

Ask a Manager

Computer Networking: A Top-Down Approach

Computer Networking: A Top-Down Approach Featuring the Internet, 3/e

From Concept to Cash

Appropriate for a first course on computer networking, this textbook describes the architecture and function of the application, transport, network, and link layers of the internet protocol stack, then examines audio and video networking applications, the underpinnings of encryption and network security, and the key issues of network management. Th

This new networking text follows a top-down approach. The presentation begins with an explanation of the application layer, which makes it easier for students to understand how network devices work, and then, with the students fully engaged, the authors move on to discuss the other layers, ending with the physical layer. With this top-down approach, its thorough treatment of the topic, and a host of pedagogical features, this new networking book offers the market something it hasn't had for many years- a well-crafted, modern text that places the student at the center of the learning experience. Forouzan's Computer Networks presents a complex topic in an accessible, student-friendly way that makes learning the material not only manageable but fun as well. The appealing visual layout combines with numerous figures and examples to provide multiple routes to understanding. Students are presented with the most up-to-date material currently available and are encouraged to view what they are learning in a real-world context. This approach is both motivating and practical in that students begin to see themselves as the professionals they will soon become.

Computer Networkingprovides a top-down approach to this study by beginning with applications-level protocols and then working down the protocol stack. Focuses on a specific motivating example of a network-the Internet-as well as introducing students to protocols in a more theoretical context. New short "interlude" on "putting it all together" that follows the coverage of application, transport, network, and datalink layers ties together the various components of the Internet architecture and identifying aspects of the architecture that have made the Internet so successful. A new chapter covers wireless and mobile networking, including in-depth coverage of Wi-Fi, Mobile IP and GSM. Also included is expanded coverage on BGP, wireless security and DNS. This book is designed for readers who need to learn the fundamentals of computer networking. It also has extensive material, on the very latest technology, making it of great interest to networking professionals.

Short and Twisted Christmas Tales

Implementing Lean Software Development

Top Secret America

Study Companion [to] Computer Networking

Three Easy Pieces

Everything You Need to Know That Wasn't on the CCNA Exam

While many resources for network and IT security are available, detailed knowledge regarding modern web application security has been lacking—until now. This practical guide provides both offensive and defensive security concepts that software engineers can easily learn and apply. Andrew Hoffman, a senior security engineer at Salesforce, introduces three pillars of web application security: recon, offense, and defense. You'll learn methods for effectively researching and analyzing modern web applications—including those you don't have direct access to. You'll also learn how to break into web applications using the latest hacking techniques. Finally, you'll learn how to develop mitigations for use in your own web applications to protect against hackers. Explore common vulnerabilities plaguing today's web applications Learn essential hacking techniques attackers use to exploit applications Map and document web applications for which you don't have direct access Develop and deploy customized exploits that can bypass common defenses Develop and deploy mitigations to protect your applications against hackers Integrate secure coding best practices into your development lifecycle Get practical tips to help you improve the overall security of your web applications

Experience is making a comeback. Learn how to repurpose your wisdom. At age 52, after selling the company he founded and ran as CEO for 24 years, rebel boutique hotelier Chip Conley was looking at an open horizon in midlife. Then he received a call from the young founders of Airbnb, asking him to help grow their disruptive start-up into a global hospitality giant. He had the industry experience, but Conley was lacking in the digital fluency of his 20-something colleagues. He didn't write code, or have an Uber or Lyft app on his phone, was twice the age of the average Airbnb employee, and would be reporting to a CEO young enough to be his son. Conley quickly discovered that while he'd been hired as a teacher and mentor, he was also in many ways a student and intern. What emerged is the secret to thriving as a mid-life worker: learning to marry wisdom and experience with curiosity, a beginner's mind, and a willingness to evolve, all hallmarks of the "Modern Elder." In a world that venerates the new, bright, and shiny, many of us are left feeling invisible, undervalued, and threatened by the "digital natives" nipping at our heels. But Conley argues that experience is on the brink of a comeback. Because at a time when power is shifting younger, companies are finally waking up to the value of the humility, emotional intelligence, and wisdom that come with age. And while digital skills might have only the shelf life of the latest fad or gadget, the human skills that mid-career workers possess--like good judgment, specialized knowledge, and the ability to collaborate and coach - never expire. Part manifesto and part playbook, Wisdom@Work ignites an urgent conversation about ageism in the workplace, calling on us to treat age as we would other type of diversity. In the process, Conley liberates the term "elder" from the stigma of "elderly," and inspires us to embrace wisdom as a path to growing whole, not old. Whether you've been forced to make a mid-career change, are choosing to work past retirement age, or are struggling to keep up with the millennials rising up the ranks, Wisdom@Work will help you write your next chapter.

Original textbook (c) October 31, 2011 by Olivier Bonaventure, is licensed under a Creative Commons Attribution (CC BY) license made possible by funding from The Saylor Foundation's Open Textbook Challenge in order to be incorporated into Saylor's collection of open courses available at: http: //www.saylor.org. Free PDF 282 pages at https: //www.textbookequity.org/bonaventure-computer-networking-principles-protocols-and-practice/ This open textbook aims to fill the gap between the open-source implementations and the open-source network specifications by providing a detailed but pedagogical description of the key principles that guide the operation of the Internet. 1 Preface 2 Introduction 3 The application Layer 4 The transport layer 5 The network layer 6 The datalink layer and the Local Area Networks 7 Glossary 8 Bibliography

The Big Ideas Behind Reliable, Scalable, and Maintainable Systems

A Top-down Approach Featuring the Internet

Computer Networks

Networking All-in-One For Dummies

Computer Networking [Global Edition]

What every electrical engineering student and technical professional needs to know about data exchange across networks While most electrical engineering students learn how the individual components that make up data communication technologies work, they rarely learn how the parts work together in complete data communication networks. In part, this is due to the fact that until now there have been no texts on data communication networking written for undergraduate electrical engineering students. Based on the author's years of classroom experience, Fundamentals of Data Communication Networks fills that gap in the pedagogical literature, providing readers with a much-needed overview of all relevant aspects of data communication networking, addressed from the perspective of the various technologies involved. The demand for information exchange in networks continues to grow at a staggering rate, and that demand will continue to mount exponentially as the number of interconnected IoT-enabled devices grows to an expected twenty-six billion by the year 2020. Never has it been more urgent for engineering students to understand the fundamental science and technology behind data communication, and this book, the first of its kind, gives them that understanding. To achieve this goal, the book: Combines signal theory, data protocols, and wireless networking concepts into one text Explores the full range of issues that affect common processes such as media downloads and online games Addresses services for the network layer, the transport layer, and the application layer Investigates multiple access schemes and local area networks with coverage of services for the physical layer and the data link layer Describes mobile communication networks and critical issues in network security Includes problem sets in each chapter to test and fine-tune readers' understanding Fundamentals of Data Communication Networks is a must-read for advanced undergraduates and graduate students in electrical and computer engineering. It is also a valuable working resource for researchers, electrical engineers, and technical professionals.

Pick up where certification exams leave off. With this practical, in-depth guide to the entire network infrastructure, you'll learn how to deal with real Cisco networks, rather than the hypothetical situations presented on exams like the CCNA. Network Warrior takes you step by step through the world of routers, switches, firewalls, and other technologies based on the author's extensive field experience. You'll find new content for MPLS, IPv6, VoIP, and wireless in this completely revised second edition, along with examples of Cisco Nexus 5000 and 7000 switches throughout. Topics include: An in-depth view of routers and routing Switching, using Cisco Catalyst and Nexus switches as examples SOHO VoIP and SOHO wireless access point design and configuration Introduction to IPv6 with configuration examples Telecom technologies in the data-networking world, including T1, DS3, frame relay, and MPLS Security, firewall theory, and configuration, as well as ACL and authentication Quality of Service (QoS), with an emphasis on low-latency queuing (LLQ) IP address allocation, Network Time Protocol (NTP), and device failures

A groundbreaking look at why our interactions with others hold the key to success, from the bestselling author of Think Again and Originals For generations, we have focused on the individual drivers of success: passion, hard work, talent, and luck. But in today's dramatically reconfigured world, success is increasingly dependent on how we interact with others. In Give and Take, Adam Grant, an award-winning researcher and Wharton's highest-rated professor, examines the surprising forces that shape why some people rise to the top of the success ladder while others sink to the bottom. Praised by social scientists, business theorists, and corporate leaders, Give and Take opens up an approach to work, interactions, and productivity that is nothing short of revolutionary.

A Top-down Approach

Principles, Protocols and Practice

TOP-DOWN NET DES _c3

Appropriate for Computer Networking or Introduction to Networking courses at both the undergraduate and graduate level in Computer Science, Electrical Engineering, CIS, MIS, and Business Departments. Tanenbaum takes a structured approach to explaining how networks work from the inside out. He starts with an explanation of the physical layer of networking, computer hardware and transmission systems; then works his way up to ne applications. Tanenbaum's in-depth application coverage includes email; the domain name system; the World Wide Web (both client- and server-side); and multimedia (including voice over IP, Internet radio video on demand, video conferencing, and streaming media.

Objectives The purpose of Top-Down Network Design, Third Edition, is to help you design networks that meet a customer's business and technical goals. Whether your customer is another department within your own company or an external client, this book provides you with tested processes and tools to help you understand traffic flow, protocol behavior, and internetworking technologies. After completing this book, you will be equipped to networks that meet a customer's requirements for functionality, capacity, performance, availability, scalability, affordability, security, and manageability. Audience This book is for you if you are an internetworking professional responsible for designing and maintaining medium- to large-sized enterprise networks. If you are a network engineer, architect, or technician who has a working knowledge of network protocols and technologies, this bo you with practical advice on applying your knowledge to internetwork design. This book also includes useful information for consultants, systems engineers, and sales engineers who design corporate networks for clients. In the fast-paced presales environment of many systems engineers, it often is difficult to slow down and insist on a top-down, structured systems analysis approach. Wherever possible, this book includes shortcuts and assu made to speed up the network design process. Finally, this book is useful for undergraduate and graduate students in computer science and information technology disciplines. Students who have taken one or two courses in networking theory will find Top-Down Network Design, Third Edition, an approachable introduction to the engineering and business issues related to developing real-world networks that solve typical business problems. Third Edition Networks have changed in many ways since the second edition was published. Many legacy technologies have disappeared and are no longer covered in the book. In addition, modern networks have become multifaceted, providing support for numerous bandwidth-hungry applications and a variety of devices, ranging from smart phones to tablet PCs to high-end servers. Modern users expect the network to be available all the and to let them securely collaborate with coworkers, friends, and family. Networks today support voice, video, high-definition TV, desktop sharing, virtual meetings, online training, virtual reality, and applications that we can't even imagine that brilliant college students are busily creating in their dorm rooms. As applications rapidly change and put more demand on networks, the need to teach a systematic approach to network design is even than ever. With that need in mind, the third edition has been retooled to make it an ideal textbook for college students. The third edition features review questions and design scenarios at the end of each chapter to help students learn top-down network design. To address new demands on modern networks, the third edition of Top-Down Network Design also has updated material on the following topics: ¿ Network redundancy ¿ Modularity i The Cisco SAFE security reference architecture ¿ The Rapid Spanning Tree Protocol (RSTP) ¿ Internet Protocol version 6 (IPv6) ¿ Ethernet scalability options, including 10-Gbps Ethernet and Metro Ethernet ¿ Network design and management tools