Allied Telesis Switch Configuration Guide

The Information Age: An Anthology on Its Impacts and Consequences was originally prepared by The Center for Advanced Concepts, Technologies, and Information Strategies of the Institute for National Strategic Studies, National Defense University. The original four volumes have been combined into one volume for this printing. They are: Part One: The Information and Communication Revolution Part Two: Business, Commerce, and Services Part Three: Government and the Military Part Four: International Affairs

The revised and extended papers collected in this volume represent the cutting-edge of research at the nexus of electrical engineering and intelligent systems. They were selected from well over 1000 papers submitted to the high-profile international World Congress on Engineering held in London in July 2011. The chapters cover material across the full spectrum of work in the field, including computational intelligence, control engineering, network management, and wireless networks. Readers will also find substantive papers on signal processing, Internet computing, high performance computing, and industrial applications. The Electrical Engineering and Intelligent Systems conference, as part of the 2011 World Congress on Engineering was organized under the auspices of the non-profit International Association of Engineers (IAENG). With more than 30 nations represented on the conference committees alone, the Congress features the best and brightest scientific minds from a multitude of disciplines related to engineering. These peer-reviewed papers demonstrate the huge strides currently being taken in this rapidly developing field and reflect the excitement of those at the frontiers of this research.

PCMag.com is a leading authority on technology, delivering Labs-based, independent reviews of the latest products and services. Our expert industry analysis and practical solutions help you make better buying decisions and get more from technology.

Ethernet Networks, Fourth Edition, provides everything you need to know to plan, implement, manage and upgrade Ethernet networks. * Improve your skills in employing Ethernet hubs, switches, and routers. * Learn how to set up and operate a wireless Local Area Network (LAN). * Discover how to extend a wired Ethernet via wireless LANs. * Understand cabling standards and the role of NEXT (Near End Crosstalk), FEXT (Far End Crosstalk) and other transmission parameters. * Profit from Gilbert Held's tips and tricks on enhancing security ... and much more. This indispensable resource features up-to-date coverage of: * Wireless Ethernet (IEEE802.11 standards) * 10Gbps Ethernet * Firewalls in both a wired and wireless environment * The operation of new versions of Windows(r) on Ethernet LANs * The use of LAN switches at and above layer 2 in the ISO reference model * Copper and fiber optic cable to transport high

speed Ethernet Network planners, administrators, and system engineers working with Ethernet networks will find Ethernet Networks, Fourth Edition, an invaluable tool for implementing, updating, and managing their networks.

The complete reference for the RPM software package that is the heart of the Red Hat Linux distribution. Designed for both the novice and advanced users, Maximum RPM enables anyone to take full advantage of the benefits of building software packages with the Red Hat Package management tools to ensure that they install simply and accurately each and every time.

The rapid increase of cloud computing, high performance computing (HPC) and the vast growth in Internet and Social Media use have aroused the interest in energy consumption and the carbon footprint of Data Centres. Data Centres primarily contain electronic equipment used for data processing (servers), data storage (storage equipment), and communications (network equipment). Collectively, this equipment processes, stores, and transmits digital information and is known as information technology (IT) equipment. Advanced Concepts for Renewable Energy Supply of Data Centres introduces a number of technical solutions for the supply of power and cooling energy into Data Centres with enhanced utilisation of renewable energy sources in order to achieve low energy Data Centres. Because of the high energy density nature of these unique infrastructures, it is essential to implement energy efficiency measures and reduce consumption before introducing any renewable energy source. A holistic approach is used with the objective of integrating many technical solutions such as management of the IT (Information Technology) load, efficient electrical supply to the IT systems, Low-Ex air-conditioning systems, interaction with district heating and cooling networks, re-use of heat, free cooling (air, seawater, groundwater), optimal use of heat and cold storage, electrical storage and integration in smart grids. This book is therefore a catalogue of advanced technical concepts that could be integrated into Data Centres portfolio in order to increase the overall efficiency and the share of renewable energies in power and cooling supply. Based on dynamic energy models implemented in TRNSYS some concepts are deeply evaluated through yearly simulations. The results of the simulation are illustrated with Sankey charts, where the energy flows per year within the subsystems of each concept for a selected scenario are shown, and graphs showing the results of parametric analysis. A set of environmental metrics (as the non-renewable primary energy) and financial metrics (CAPEX and OPEX) as well of energy efficiency metrics like the well-known PUE, are described and used to evaluate the different technical concepts.

This expanded and completely updated edition, of the popular text reflects the major changes to communications technology since 1990. New coverage includes discussions of ATM and Frame Relay, Ethernet and Token-Ring Networks, and expanded treatment of satellite communications. There is also new material on the ATM LAN versus WAN evolution as well as new sections on LAN networking and Internetworking. Emphasis is given throughout to reflect the

emergence of the Internet with timely information on TCP/IP, NetWare, and LAN applications.

Cisco IOS XR Fundamentals is a systematic, authoritative guide to configuring routers with Cisco IOS® XR, the next-generation flagship Cisco® Internet operating system. In this book, a team of Cisco experts brings together quick, authoritative, and example-rich reference information for all the commands most frequently used to configure and troubleshoot Cisco IOS XR-based routers in both service provider and enterprise environments. The authors walk you through the details of the Cisco IOS XR architecture and explain commands in the new Cisco IOS XR CLI wherever required. They present concise explanations of service provider requirements and internetwork theory, backed by proven sample configurations for IOS XR services, MPLS, multicast, system management, system security, routing, and interfaces. Cisco IOS XR Fundamentals is an indispensable resource for designing, implementing, troubleshooting, administering, or selling networks containing Cisco IOS XR–supported routers. This is the only Cisco IOS XR book that: Clearly explains how Cisco IOS XR meets the emerging requirements of both current and future networks Gives network professionals extensive information for simplifying migration and taking full advantage of Cisco IOS XR's new power Presents detailed, tested configuration examples that network professionals can apply in their own networks Walks through using new Cisco IOS XR features and the In-Service Software Upgrade (ISSU) process to minimize downtime and cost Use Cisco IOS XR to deliver superior scalability, availability, security, and service flexibility Understand the Cisco IOS XR distributed, modular architecture Design, implement, and troubleshoot networks containing Cisco IOS XR–supported routers Configure Cisco IOS XR routing, including RIP, IS-IS, OSPF, and EIGRP Learn BGP implementation details specific to Cisco IOS XR and using RPL to influence policies Manage IP addresses and Cisco IOS XR services Secure Cisco IOS XR using standard and extended ACLs, prefix lists, and uRPF Master all facets of MPLS configuration, including LDP, L3VPN, and TE Configure PIM, IGMP, and static RP multicast Optimize networks using advanced Cisco IOS XR features, including secure domain routers Learn building blocks of Multishelf, and understand configurations and migration techniques This book is part of the Cisco Press® Fundamentals Series. Books in this series introduce networking professionals to new networking technologies, covering network topologies, sample deployment concepts, protocols, and management techniques.

This volume contains a selection of revised and extended research articles written by prominent researchers participating in The 26th World Congress on Engineering (WCE 2018) which was held in London, U.K., July 4-6, 2018. Topics covered include engineering mathematics, electrical engineering, communications systems, computer science, chemical engineering, systems engineering, manufacturing engineering, and industrial applications. With contributions carefully chosen to represent the most cutting-edge research presented during the conference, the book contains some of the state-of-the-art in engineering technologies and the physical sciences and their applications, and serves as a useful reference for researchers and graduate students working in these fields.

It has long been assumed that product innovations are usually developed by product manufacturers, but this book shows that innovation occurs in different places in different industries.

Conference proceedings - International Academic Conference on Engineering, Internet and Technology in Prague 2014 (IAC-EIaT 2014 in Prague), Friday - Saturday, December 12 - 13, 2014

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 isn't 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. You'll 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

Slackware Creator Patrick Volkerding Shows You How to Build Your Own System Harness the power of Linux with step-by-step explanations straight from the creator of one of its most popular distributions. Complete with Slackware 3.5 and new coverage of specific installation and configuration topics, Linux® Configuration and Installation, 4th Edition brings you everything you need, short of a PC, to get you up and running in no time. Inside, You'll Learn How to: Prepare your PC for Linux Install and configure Linux for your system Set up XFree86 Master the basic Linux tools and applications Manage your system for maximum performance Leverage resources with a Linux network Expand your system with telecommunications capabilities Connect to the Internet with Linux Develop Linux applications using C, Make, Java, Tcl, Perl, and Gawk Get Slackware 3.5 Free, including: Kernels for most major PC hardware configurations — including support for IDE/EIDE, SCSI, PCMCIA cards, tape drives, sound boards, network cards, Jaz and Zip drives, and CD-ROMs Full set of installation tools — including easy-to-use menus and tools for upgrading Three installation methods — traditional Linux installation via bootdisks and rootdisks, direct installation onto a Zip drive or other DOS partition, and direct installation from the bootable installation CD-ROM Complete installation of XFree86 3.3.2 system — including installation and configuration utilities, window managers (fvwm, fvwm-95, twm, olvwm), and X servers for most graphics cards Full TCP/IP connectivity for the Internet, corporate networks, and intranets Netscape Communicator, with Web-browsing, electronic-mail, collaborative, and newsgroup capabilities Complete ANSI C and C++ programming suites Various Unix shells — including the Bourne Again Shell (bash), tcsh, and more Tools for connecting your PC to the Internet and to online services with PPP, SLIP, CSLIP, UUCP, dip, mailx, and dialup serial programs Other Internet applications — including electronic mail (pine and elm), Web browsers (Arena and Lynx), Usenet newsreaders (cnews, nn, tin, trn, and inn) and FTP All major GNU commands and applications — including GNU Emacs 20.2 Multimedia tools for working with images files and MIME Internet servers — including the Apache HTTP Web server, sendmail, and an FTP server Terminal applications — including Midnight Commander and the sc spreadsheet A full set of programming tools — egcs-1.0.3 (gcc-2.8 based C/C++/f77/Objective-C compiler from egcs.cygnus.com), make (GNU and BSD), byacc and GNU bison, flex, 5.4.44 C libraries, gdb, SVGAlib, ncurses, gcl (LISP), p2c, m4, perl, python, rcs Text-editing and text-formatting tools — including elvis, vm, jed, joe, jove, pico, gross TeX, info) as well as hundreds of fonts Full suite of X Window applications — including Ghostscript, xlock, libgr, seyon, workman, xfilemanager, xv 3.10a, GNU chess and xboard, xfm 1.3.2, ghostview, gnuplot, xpaint, xfractint, and various X games. Support for iBCS, which allow binaries created on other x86 UNIX variants to run under Linux X Window programming and usage tools — X11 server linkkit, static libraries, PEX support, xview3.2p1-X11R6 (XView libraries), the Open Look virtual and nonvirtual window managers for XFree86 Various applications and add-ons — the manual pages, groff, ispell, joe, jed, jove, ghostscript, sc, bc, and the quota patches A collection of FAQs and other documentation Tcl, Tk, and TclX, built with ELF shared libraries and dynamic loading support, as well as the TkDesk file

manager The BSD games collection — Koules, Lizards, and Sasteroids Shareware programs are fully functional, free trial versions of copyrighted programs. If you like particular programs, register with their authors for a nominal fee and receive licenses, enhanced versions, and technical support. Freeware programs are free, copyrighted games, applications, and utilities. You can copy them to as many PCs as you like—free—but they have no technical support.

With in-depth complete coverage on the installation process, editing and typesetting, graphical user interfaces, programming, system administration, and managing Internet sites, this is the only book users new to Linux will need. The book guides users to a high-level of proficiency with all the flavors of Linux, and helps them with crucial system administration chores.

Identify vulnerabilities across applications, network and systems using simplified cybersecurity scripting KEY FEATURES ? Exciting coverage on red teaming methodologies and penetration testing techniques. ? Explore the exploitation development environment and process of creating exploit scripts. ? Includes powerful Python libraries to analyze the web and helps identifying critical vulnerabilities. ? Conduct wireless attacks and identify potential threats using Python. DESCRIPTION This book starts with an understanding of penetration testing and red teaming methodologies and teaches Python 3.x from scratch for those who are not familiar with programming. The book gives the skills of how to create scripts for cracking, and brute force attacks. The second part of this book focuses on the network and wireless level. The book teaches you the skills of how to create an offensive tool using Python 3.x to identify different services and ports using different Python network modules and conducting network attacks. In the network monitoring section, you will be able to monitor layers 3 and 4. And finally, you will be able to conduct different attacks on wireless. The last part of this book focuses on web applications and exploitation developments. It focuses on how to create scripts to extract web information such as links, images, documents, etc. It also focuses on how to create scripts to identify and exploit web vulnerabilities and how to bypass WAF. The last chapter of this book focuses on exploitation development starting with how to play with the stack and then moving on to how to use Python in fuzzing and creating exploitation scripts. WHAT YOU WILL LEARN ? Learn to code Python scripts from scratch to identify web vulnerabilities. ? Conduct network attacks, create offensive tools, and identify vulnerable services and ports. ? Perform deep monitoring of network up to layers 3 and 4. ? Execute web scraping scripts to extract images, documents, and links. WHO THIS BOOK IS FOR This book is for Penetration Testers, Security Researchers, Red Teams, Security Auditors and IT Administrators who want to start with an action plan in protecting their IT systems. All you need is some basic understanding of programming concepts and working of IT systems. Hands-on experience with python will be more beneficial but not required. TABLE OF CONTENTS 1. Start with Penetration Testing and Basic Python 2. Cracking with Python 3. Service and Applications Brute Forcing with Python 4. Python Services Identifications - Ports and Banner 5. Python Network Modules and Nmap 6. Network Monitoring with Python 7. Attacking Wireless with Python 8. Analyze Web Applications with Python 9. Attack Web Application with Python 10. Exploitation Development with Python

Internet is based on TCP/IP. There are many terms like IP, DNS, VPN, etc., and the books explaining them are so detailed. This book introduces you to the World of TCP/IP. You will have a basic understanding of TCP/IP after reading this book. IP addres

types, DHCP, DNS, NAT, Proxy, VPN and IPv6 subjects are explained. And it is funny somewhat:)

For more than 20 years, Network World has been the premier provider of information, intelligence and insight for network and IT executives responsible for the digital nervous systems of large organizations. Readers are responsible for designing, implementing and managing the voice, data and video systems their companies use to support everything from business critical applications to employee collaboration and electronic commerce.

Note - this version is for instructor led classroom use only. If you are looking for the self study version the ISBN for that is 978-0-7897-5088-0. Cisco CCNA Routing and Switching 200-120 Network Simulatorhelps students in the classroom develop and improve hands-on configuration and troubleshooting skills without the investment in expensive lab hardware. This state-of-the-art, interactive simulation software enables you to practice your networking skills with almost 400 structured labs designed to help you learn by doing, the most effective method of learning. Topics covered include router and switch navigation and administration, Ethernet LAN switches, VLANs and trunking, Spanning Tree Protocol (STP), IPv4 and IPv6 addressing and subnetting, subnet design, VLSM, route summarization, IPv4 Access Control Lists (ACL), Network Address Translation (NAT), DHCP, HSRP, GLBP, router on a stick (ROAS), operating Cisco routers, IPv4 and IPv6 routing, OSPF configuration and troubleshooting, EIGRP configuration and troubleshooting, Frame Relay, network management, SNMP, IOS licensing, and network troubleshooting. Experience realistic network device responses as you perform each lab, which include detailed instructions, topology diagrams, critical-thinking questions, hints, and answers. Working through the labs, you will quickly become proficient with all the common Cisco IOS version 15 router and switch commands on the CCNA Routing and Switching exam. Choose from almost 400 labs organized by lab type or by topic. Track your progress with the lab status indicator, and use the new search feature to search for commands and keywords. Review lab objectives and step-by-step instructions within each lab, opening hints and tips sections that help you when you get stuck. Record your observations on device performance in interactive tables. Enter answers to critical thinking questions and get instant feedback to verify your work. Access performance reports in this easy-to-navigate grade history screen, which store all your attempts on each lab. View device configuration details, lab question performance, time to complete each lab, and CLI activity for each device in every lab. Export lab results to PDF files for easy sharing. Unlike other simulators on the market, the lab scenarios included in the Cisco CCNA Routing and Switching 200-120 Network Simulatorare far more complex, challenging you to learn how to perform real-world network configuration and troubleshooting tasks. Note - this version is for classroom use. The ISBN for the version for personal study is 978-0-7897-5088-0.

Passionately democratic in its advocacy of networking for the masses, this is the first book on Linux networking written especially for the novice user. Because the free, open-source Linux operating system is winning so many converts today, the number of Linux-based networks will grow exponentially over the next few years. Taking up where Linux Clearly Explained left off, Linux Networking Clearly Explained walks the reader through the creation of a TCP/IP-based, Linux-driven local area network, beginning with a "sandbox" installation involving just two or three computers. Readers master the fundamentals of system and network

administration-including handling user accounts and setting up security-in this less complex environment. The author then helps them along to the more sophisticated techniques associated with connecting this network to the Internet. * Focuses on the 20% of Linux networking knowledge that satisfies 80% of network needs-including the needs of small businesses, workgroups within enterprises and high-tech homes. * Teaches novices to implement DNS servers, network information services (NIS), network file systems (NFS), and all of the most important TCP/IP services, including email, Web and newsgroup access. * Explains how to set up AppleTalk and Windows NT domain servers for networks that include MacIntosh or Windows systems. * Comes with a CD containing the latest version of Red Hat Linux, as well as additional freeware/shareware Linux tools and network management applications.

The title says it all. Concise, straight to the point guidance on developing a winning computer trading system.

A practical, fast-paced guide that gives you all the information you need to successfully create networks and simulate them using Packet Tracer. Packet Tracer Network Simulator is aimed at students, instructors, and network administrators who wish to use this simulator to learn how to perform networking instead of investing in expensive, specialized hardware. This book assumes that you have a good amount of Cisco networking knowledge, and it will focus more on Packet Tracer rather than networking.

You may be contemplating your first Linux installation. Or you may have been using Linux for years and need to know more about adding a network printer or setting up an FTP server. Running Linux, now in its fifth edition, is the book you'll want on hand in either case. Widely recognized in the Linux community as the ultimate getting-started and problem-solving book, it answers the questions and tackles the configuration issues that frequently plague users, but are seldom addressed in other books. This fifth edition of Running Linux is greatly expanded, reflecting the maturity of the operating system and the teeming wealth of software available for it. Hot consumer topics suchas audio and video playback applications, groupware functionality, and spam filtering are covered, along with the basics in configuration and management that always have made the book popular. Running Linux covers basic communications such as mail, web surfing, and instant messaging, but also delves into the subtleties of network configuration--including dial-up, ADSL, and cable modems--in case you need to set up your network manually. The book canmake you proficient on office suites and personal productivity applications--and also tells you what programming tools are available if you're interested in contributing to these applications. Other new topics in the fifth edition include encrypted email and filesystems, advanced shell techniques, and remote login applications. Classic discussions on booting, package management, kernel recompilation, and X configuration have also been updated. The authors of Running Linux have anticipated problem areas, selected stable and popular solutions, and provided clear instructions to ensure that you'll have a satisfying experience using Linux. The discussion is direct and complete enough to guide novice users, while still providing the

additional information experienced users will need to progress in their mastery of Linux. Whether you're using Linux on a home workstation or maintaining a network server, Running Linux will provide expert advice just when you need it.
Position yourself at the forefront of audio and broadcast studio technology by learning audio over IP. You will gain knowledge of IP network engineering as it applies to audio applications, and then progress to a full understanding of how equipment built on Ethernet and Internet Protocol are used in today's audio production and broadcast facilities for the transporting, mixing and processing of pro-quality audio. A chapter on integrating Voice-over IP telephony (VoIP) to pro-audio and broadcast facilities is also included. Using the popular Livewire technology, you will learn how to design, construct, configure and troubleshoot an AoIP system, including how to interface with PCs, VoIP telephone PBXs, IP codecs, and the Internet. See how AoIP systems work in practice, and discover their distinct advantages over older audio infrastructures. With its complete introduction to AoIP technology in a fun, highly readable style, this book is essential for audio professionals who want to broaden their knowledge of IP-based studio systems--or for IT experts who need to understand AoIP applications.
This MBA and advanced undergraduate text focuses on managing information technology within organizational settings. Following an introduction to IT, hardware, software, and networking, examples are presented of three major types of IT applications: organizational systems, managerial support systems,
Crossbar switch fabrics offer many benefits when designing switch/routers. This book discusses switch/router architectures using design examples and case studies of well-known systems that employ crossbar switch fabric as their internal interconnects. This book looks to explain the design of switch/routers from a practicing engineer’s perspective. It uses a broad range of design examples to illustrate switch/router designs and provides case studies to enhance readers comprehension of switch/router architectures. The book goes on to discuss industry best practices in switch/router design and explains the key features and differences between unicast and multicast packet forwarding architectures. This book will be of benefit to telecoms/networking industry professionals and engineers as well as researchers and academics looking for more practical and efficient approaches for designing non-blocking crossbar switch fabrics.
Your company needs a call center to be competitive in the 21st century. This book is your guide to the technology, techniques, and trends in today's call centers. The Call Center Dictionary contains all the information you need to: Understand: Your boss,
Linux Kernel Networking takes you on a guided in-depth tour of the current Linux networking implementation and the theory behind it. Linux kernel networking is a complex topic, so the book won't burden you with topics not directly related to networking. This book will also not overload you with cumbersome line-by-line code walkthroughs not directly related

to what you're searching for; you'll find just what you need, with in-depth explanations in each chapter and a quick reference at the end of each chapter. Linux Kernel Networking is the only up-to-date reference guide to understanding how networking is implemented, and it will be indispensable in years to come since so many devices now use Linux or operating systems based on Linux, like Android, and since Linux is so prevalent in the data center arena, including Linux-based virtualization technologies like Xen and KVM.

Explains how to prepare and install the Linux system, work with shells and command lines, use the X Windows graphical interface, access the Web, and configure mail and news services

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.

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

Switch/Router ArchitecturesSystems with Crossbar Switch FabricsCRC Press

This book is a study guide for Huawei (HCNA) certification. It has been written to help readers understand the principles of network technologies. It covers topics including network fundamentals, Ethernet, various protocols such as those used in routing, and Huawei’s own VRP operating system—all essential aspects of HCNA certification. Presenting routing and switching basics in depth, it is a valuable resource for information and communications technology (ICT) practitioners, university students and network technology fans.

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 design enterprise 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 book will provide 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 assumptions that can be 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. Changes for the 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 time, from any device, 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 more important 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 in network designs ¿ 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

THE HARD DRIVE BIBLE, EIGHTH EDITION is the definitive reference book for anyone who deals with personal computer data storage devices of any kind. This comprehensive work covers installations, drive parameters, & set up information for thousands of Hard Disk, Optical, DAT Tape, & CD-ROM Drives. A concise history of data storage devices is followed by the most expansive compilation of technical data offered to the public today. Specifications, drawings, charts & photos cover jumper settings, cabling, partitioning & formatting of disk drives. SCSI commands & protocols are addressed, in addition to chapters revealing the intricacies of different interface standards & common troubleshooting procedures. THE HARD DRIVE BIBLE contains the answers to anyone's questions concerning the purchase, installation & use of modern digital data storage devices. The difficulties caused by compatibility mismatches are addressed & solutions are offered. Also featured are controller card information & performance ratings, as well as valuable tips on increasing drive performance & reliability through software. THE HARD DRIVE BIBLE is published by Corporate Systems Center, one of the leaders in the digital storage device field. A CD-ROM included with the book carries CSC's drive performance test software & formatting tools, as well as thousands of drive parameters,

specifications, & technical drawings. To order contact: Corporate Systems Center, 1294 Hammerwood Avenue, Sunnyvale, CA 94089; 408-743-8787.