



**IPv6 Fundamentals**-Rick Graziani 2017-06-06 Organizations are increasingly transitioning to IPv6, the next generation protocol for defining how devices of all kinds communicate over networks. Now fully updated, IPv6 Fundamentals offers a thorough, friendly, and easy-to-understand introduction to the knowledge and skills you need to deploy and operate IPv6 networks. Leading networking instructor Rick Graziani explains all the basics simply and clearly, step-by-step, providing all the details you'll need to succeed. You'll learn why IPv6 is necessary, how it was created, how it works, and how it has become the protocol of choice in environments ranging from cloud to mobile and IoT. Graziani thoroughly introduces IPv6 addressing, configuration options, and routing protocols, including EIGRP for IPv6, and OSPFv3 (traditional configuration and with address families). Building on this coverage, he then includes more in-depth information involving these protocols and processes. This edition contains a completely revamped discussion of deploying IPv6 in your network, including IPv6/IPv4 integration, dynamic address allocation, and understanding IPv6 from the perspective of the network and host. You'll also find improved coverage of key topics such as Stateless Address Autoconfiguration (SLAAC), DHCPv6, and the advantages of the solicited node multicast address. Throughout, Graziani presents command syntax for Cisco IOS, Windows, Linux, and Mac OS, as well as many examples, diagrams, configuration tips, and updated links to white papers and official RFCs for even deeper understanding. Learn how IPv6 supports modern networks encompassing the cloud, mobile, IoT, and gaming devices Compare IPv6 with IPv4 to see what has changed and what hasn't Understand and represent IPv6 addresses for unicast, multicast, and anycast environments Master all facets of dynamic IPv6 address allocation with SLAAC, stateless DHCPv6, and stateful DHCPv6 Understand all the features of deploying IPv6 addresses in the network including temporary addresses and the privacy extension Improve operations by leveraging major enhancements built into ICMPv6 and ICMPv6 Neighbor Discovery Protocol Configure IPv6 addressing and Access Control Lists using a common topology Implement routing of IPv6 packets via static routing, EIGRP for IPv6, and OSPFv3 Walk step-by-step through deploying IPv6 in existing networks, and coexisting with or transitioning from IPv4

**Routing and Switching Essentials v6 Companion Guide**-Cisco Networking Academy 2016-12-01 This is the eBook of the printed book and may not include any media, website access codes, or print supplements that may come packaged with the bound book. Routing and Switching Essentials v6 Companion Guide Routing and Switching Essentials v6 Companion Guide is the official supplemental textbook for the Routing and Switching Essentials course in the Cisco Networking Academy CCNA Routing and Switching curriculum. This course describes the architecture, components, and operations of routers and switches in a small network. The Companion Guide is designed as a portable desk reference to use anytime, anywhere to reinforce the material from the course and organize your time. The book's features help you focus on important concepts to succeed in this course: · Chapter Objectives—Review core concepts by answering the focus questions listed at the beginning of each chapter. · Key Terms—Refer to the lists of networking vocabulary introduced and highlighted in context in each chapter. · Glossary—Consult the comprehensive Glossary with more than 250 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. · How To—Look for this icon to study the steps you need to learn to perform certain tasks. · Interactive Activities—Reinforce your understanding of topics with dozens of exercises from the online course identified throughout the book with this icon. · Packet Tracer Activities—Explore and visualize networking concepts using Packet Tracer exercises interspersed throughout the chapters and provided in the accompanying Labs & Study Guide book. · Videos—Watch the videos embedded within the online course. · Hands-on Labs—Work through all the course labs and additional Class Activities that are included in the course and published in the separate Labs & Study Guide. This book is part of the Cisco Networking Academy Series from Cisco Press. Books in this series support and complement the Cisco Networking Academy curriculum.

**CCNA Routing and Switching 200-125 Official Cert Guide Library**-Wendell Odom 2016-08-26 This is the eBook of the printed book and may not include any media, website access codes, or print supplements that may come packaged with the bound book. Cisco Press has the only self-study guides approved by Cisco for the new CCENT and CCNA Routing and Switching certifications. The new edition of the best-selling two-book value priced CCNA Official Cert Guide Library includes updated content, new online practice exercises, more than 600 practice exam questions, and more than 2 hours of video training, plus the CCENT and CCNA Network Simulator Lite Editions with 43 free Network Simulator labs. CCNA Routing and Switching 200-125 Official Cert Guide Library is a comprehensive review and practice package for the latest CCNA exams and is the only self-study resource approved by Cisco. The two books contained in this package, CCENT/CCNA ICND1 100-105 Official Cert Guide and CCNA Routing and Switching ICND2 200-105 Official Cert Guide, present complete reviews and more challenging and realistic preparation experiences. The books have been fully updated to refresh the content for the latest CCNA exam topics and to enhance certain key topics that are critical for exam success. Best-selling author and expert instructor Wendell Odom shares preparation hints and test-taking tips, helping you identify areas of weakness and improve both your conceptual knowledge and hands-on skills. This complete study package includes · A test-preparation routine proven to help you pass the exams · "Do I Know This Already?" quizzes, which enable you to decide how much time you need to spend on each section · Chapter-ending and part-ending exercises, which help you drill on key concepts you must know thoroughly · Troubleshooting sections, which help you master the complex scenarios you will face on the exam · The powerful Pearson IT Certification Practice Test software, complete with hundreds of well-reviewed, exam-realistic questions, customization options, and detailed performance reports · A free copy of the CCNA ICND1 and ICND2 Network Simulator Lite software, complete with meaningful lab exercises that help you hone your hands-on skills with the command-line interface for routers and switches · Links to a series of hands-on config labs developed by the author · Online interactive practice exercises that help you hone your knowledge · More than 2 hours of video mentoring from the author · A final preparation chapter, which guides you through tools and resources to help you craft your review and test-taking strategies · Study plan suggestions and templates to help you organize and optimize your study time Well regarded for its level of detail, study plans, assessment features, challenging review questions and exercises, video instruction, and hands-on labs, these official study guides help you master the concepts and techniques that ensure your exam success. These official study guides help you master all the topics on the CCNA exams, including · Networking fundamentals · Implementing basic Ethernet LANs · Ethernet LANs: design, VLANs, and troubleshooting · IPv4 addressing and subnetting · Implementing IPv4 · IPv4 design and troubleshooting · IPv4 services: ACLs, NAT, and QoS · IPv4 routing protocols and routing · Wide area networks · IPv6 · Network management, SDN, and cloud computing

**IoT Fundamentals**-David Hanes 2017-05-30 Today, billions of devices are Internet-connected, IoT standards and protocols are stabilizing, and technical professionals must increasingly solve real problems with IoT technologies. Now, five leading Cisco IoT experts present the first comprehensive, practical reference for making IoT work. IoT Fundamentals brings together knowledge previously available only in white papers, standards documents, and other hard-to-find sources—or nowhere at all. The authors begin with a high-level overview of IoT and introduce key concepts needed to successfully design IoT solutions. Next, they walk through each key technology, protocol, and technical building block that combine into complete IoT solutions. Building on these essentials, they present several detailed use cases, including manufacturing, energy, utilities, smart+connected cities, transportation, mining, and public safety. Whatever your role or existing infrastructure, you'll gain deep insight what IoT applications can do, and what it takes to deliver them. Fully covers the principles and components of next-generation wireless networks built with Cisco IOT solutions such as IEEE 802.11 (Wi-Fi), IEEE 802.15.4-2015 (Mesh), and LoRaWAN Brings together real-world tips, insights, and best practices for designing and implementing next-generation wireless networks Presents start-to-finish configuration examples for common deployment scenarios Reflects the extensive first-hand experience of Cisco experts

**Troubleshooting Cisco Nexus Switches and NX-OS**-Vinit Jain 2018-05-22 The definitive deep-dive guide to hardware and software troubleshooting on Cisco Nexus switches The Cisco Nexus platform and NX-OS switch operating system combine to deliver unprecedented speed, capacity, resilience, and flexibility in today's data center networks. Troubleshooting Cisco Nexus Switches and NX-OS is your single reference for quickly identifying and solving problems with these business-critical technologies. Three expert authors draw on deep experience with large Cisco customers, emphasizing the most common issues in real-world deployments, including problems that have caused major data center outages. Their authoritative, hands-on guidance addresses both features and architecture, helping you troubleshoot both control plane forwarding and data plane/data path problems and use NX-OS APIs to automate and simplify troubleshooting. Throughout, you'll find real-world configurations, intuitive illustrations, and practical insights into key platform-specific behaviors. This is an indispensable technical resource for all Cisco network consultants, system/support engineers, network operations professionals, and CCNP/CCIE certification candidates working in the data center domain. · Understand the NX-OS operating system and its powerful troubleshooting tools · Solve problems with cards, hardware drops, fabrics, and CoPP policies · Troubleshoot network packet switching and forwarding · Properly design, implement, and troubleshoot issues related to Virtual Port Channels (VPC and VPC+) · Optimize routing through filtering or path manipulation · Optimize IP/IPv6 services and FHRP protocols (including HSRP, VRRP, and Anycast HSRP) · Troubleshoot EIGRP, OSPF, and IS-IS neighbor relationships and routing paths · Identify and resolve issues with Nexus route maps · Locate problems with BGP neighbor adjacencies and enhance path selection · Troubleshoot high availability components (BFD, SSO, ISSU, and GIR) · Understand multicast protocols and troubleshooting techniques · Identify and solve problems with OTV · Use NX-OS APIs to automate troubleshooting and administrative tasks

**CCNA Routing and Switching Portable Command Guide**-Scott Empson 2013-06-12 Here are all the CCNA-level Routing and Switching commands you need in one condensed, portable resource. The CCNA Routing and Switching Portable Command Guide, Third Edition, is filled with valuable, easy-to-access information and is portable enough for use whether you're in the server room or the equipment closet. The guide summarizes all CCNA certification-level Cisco IOS® Software commands, keywords, command arguments, and associated prompts, providing you with tips and examples of how to apply the commands to real-world scenarios. Configuration examples throughout the book provide you with a better understanding of how these commands are used in simple network designs. This book has been completely updated to cover topics in the ICND1 100-101, ICND2 200-101, and CCNA 200-120 exams. Use this quick reference resource to help you memorize commands and concepts as you work to pass the CCNA Routing and Switching certification exam. The book is organized into these parts: · Part I TCP/IP v4 · Part II Introduction to Cisco Devices · Part III Configuring a Router · Part IV Routing · Part V Switching · Part VI Layer 3 Redundancy · Part VII IPv6 · Part VIII Network Administration and Troubleshooting · Part IX Managing IP Services · Part X WANs · Part XI Network Security Quick, offline access to all CCNA Routing and Switching commands for research and solutions Logical how-to topic groupings for a one-stop resource Great for review before CCNA Routing and Switching certification exams Compact size makes it easy to carry with you, wherever you go "Create Your Own Journal" section with blank, lined pages allows you to personalize the book for your needs "What Do You Want to Do?" chart inside back cover helps you to quickly reference specific tasks

**Troubleshooting BGP**-Vinit Jain 2016-12-23 The definitive guide to troubleshooting today's complex BGP networks This is today's best single source for the techniques you need to troubleshoot BGP issues in modern Cisco IOS, IOS XR, and NxOS environments. BGP has expanded from being an Internet routing protocol and provides a scalable control plane for a variety of technologies, including MPLS VPNs and VXLAN. Bringing together content previously spread across multiple sources, Troubleshooting BGP describes BGP functions in today's blended service provider and enterprise environments. Two expert authors emphasize the BGP-related issues you're most likely to encounter in real-world deployments, including problems that have caused massive network outages. They fully address convergence and scalability, as well as common concerns such as BGP slow peer, RT constraint filtering, and missing BGP routes. For each issue, key concepts are presented, along with basic configuration, detailed troubleshooting methods, and clear illustrations. Wherever appropriate, OS-specific behaviors are described and analyzed. Troubleshooting BGP is an indispensable technical resource for all consultants, system/support engineers, and operations professionals working with BGP in even the largest, most complex environments. · Quickly review the BGP protocol, configuration, and commonly used features · Master generic troubleshooting methodologies that are relevant to BGP networks · Troubleshoot BGP peering issues, flapping peers, and dynamic BGP peering · Resolve issues related to BGP route installation, path selection, or route policies · Avoid and fix convergence problems · Address platform issues such as high CPU or memory usage · Scale BGP using route reflectors, diverse paths, and other advanced features · Solve problems with BGP edge architectures, multihoming, and load balancing · Secure BGP inter-domain routing with RPKI · Mitigate DDoS attacks with RTBH and BGP Flowsec · Understand common BGP problems with MPLS Layer 3 or Layer 2 VPN services · Troubleshoot IPv6 BGP for service providers, including 6PE and 6VPE · Overcome problems with VXLAN BGP EVPN data center deployments · Fully leverage BGP High Availability features, including GR, NSR, and BFD · Use new BGP enhancements for link-state distribution or tunnel setup This book is part of the Networking Technology Series from Cisco Press, which offers networking professionals valuable information for constructing efficient networks, understanding new technologies, and building successful careers.

**CCNA Cyber Ops SECFND #210-250 Official Cert Guide**-Omar Santos 2017-04-04 This is the eBook version of the print title. Note that the eBook does not provide access to the practice test software that accompanies the print book. Learn, prepare, and practice for CCNA Cyber Ops SECFND 210-250 exam success with this Cert Guide from Pearson IT Certification, a leader in IT Certification learning. Master CCNA Cyber Ops SECFND 210-250 exam topics Assess your knowledge with chapter-ending quizzes Review key concepts with exam preparation tasks CCNA Cyber Ops SECFND 210-250 Official Cert Guide is a best-of-breed exam study guide. Cisco enterprise security experts Omar Santos, Joseph Muniz, and Stefano De Crescenzo share preparation hints and test-taking tips, helping you identify areas of weakness and improve both your conceptual knowledge and hands-on skills. Material is presented in a concise manner, focusing on increasing your understanding and retention of exam topics. The book presents you with an organized test preparation routine through the use of proven series elements and techniques. Exam topic lists make referencing easy. Chapter-ending Exam Preparation Tasks help you drill on key concepts you must know thoroughly. Review questions help you assess your knowledge, and a final preparation chapter guides you through tools and resources to help you craft your final study plan. Well-regarded for its level of detail, assessment features, and challenging review questions and exercises, this study guide helps you master the concepts and techniques that will allow you to succeed on the exam the first time. The study guide helps you master all the topics on the CCNA Cyber Ops SECFND exam, including: Fundamentals of networking protocols and networking device types Network security devices and cloud services Security principles Access control models Security management concepts and techniques Fundamentals of cryptography and PKI Essentials of Virtual Private Networks (VPNs) Windows-based Analysis Linux /MAC OS X-based Analysis Endpoint security technologies Network and host telemetry Security monitoring operations and challenges Types of attacks and vulnerabilities Security evasion techniques

**MCSA 70-741 Cert Guide**-Michael S. Schulz 2017-05-26 This is the eBook version of the print title. Note that the eBook does not provide access to the practice test software that accompanies the print book. Learn, prepare, and practice for MCSA 70-741 exam success with this Cert Guide from Pearson IT Certification, a leader in IT certification. Master MCSA 70-741 exam topics Assess your knowledge with chapter-ending quizzes Review key concepts with exam preparation tasks MCSA 70-741 Cert Guide is a best-of-breed exam study guide. Leading technology trainer and consultant Michael S. Schulz shares preparation hints and test-taking tips, helping you identify areas of weakness and improve both your conceptual knowledge and hands-on skills. Material is presented in a concise manner, focusing on increasing your understanding and retention of exam topics. The book presents you with an organized test-preparation routine through the use of proven series elements and techniques. Exam topic lists make referencing easy. Chapter-ending Exam Preparation Tasks help you drill on key concepts you must know thoroughly. Review questions help you assess your knowledge, and a final preparation chapter guides you through tools and resources to help you craft your final study plan. Well regarded for its level of detail, assessment features, and challenging review questions and exercises, this study guide helps you master the concepts and techniques that will enable you to succeed on the exam the first time. The study guide helps you master all the topics on the MCSA 70-741 exam for Windows Server 2016, including DNS implementation, including server configuration, zones, records, policies, DNSSEC, and DANE DHCP, including server installation, configuration, and scopes IPAM, including installation/configuration, DNS/DHCP management, and auditing Network connectivity and remote access solutions, including VPN, DirectAccess, NPS Radius, and wired clients Core and distributed network solutions, including IPv4 and IPv6 addressing, DFS, and branch office solutions Advanced network infrastructure

**CCNP TSHOOT 642-832 Official Certification Guide**-Kevin Wallace 2010 CCNP TSHOOT 642-832 Official Certification Guide Kevin Wallace, CCIE No. 7945 CCNP TSHOOT Exam Preparation Master CCNP TSHOOT 642-832 exam topics Assess your knowledge with chapter-opening quizzes Review key concepts with Exam Preparation Tasks Practice with realistic exam questions on the CD-ROM The official study guide helps you master all the topics on the CCNP TSHOOT exam, including Common network maintenance tasks and tools Troubleshooting models Cisco IOS troubleshooting commands and features Troubleshooting Cisco Catalyst Switches and STP Troubleshooting BGP, OSPF, and EIGRP routing protocols Route redistribution, security, and router performance troubleshooting IP services and IP communications troubleshooting IPv6 troubleshooting Large enterprise network troubleshooting CCNP TSHOOT 642-832 Official Certification Guide is a best-of-breed Cisco exam study guide that focuses specifically on the objectives for the CCNP TSHOOT exam. Senior instructor and best-selling author Kevin Wallace shares 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. CCNP TSHOOT 642-832 Official Certification 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 sections help drill you on key concepts you must know thoroughly. The companion CD-ROM contains a powerful testing engine that enables you to focus on individual topic areas or take complete, timed exams. The assessment engine also tracks your performance and provides feedback on a module-by-module basis, laying out a complete study plan for review. Well regarded for its level of detail, assessment features, 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. CCNP TSHOOT 642-832 Official Certification Guide is part of a recommended learning path from Cisco that includes simulation and hands-on training from authorized Cisco Learning Partners and self-study products from Cisco Press. To find out more about instructor-led training, e-learning, and hands-on instruction offered by authorized Cisco Learning Partners worldwide, please visit [www.cisco.com/go/authorizedtraining](http://www.cisco.com/go/authorizedtraining). Kevin Wallace, CCIE No. 7945, is a certified Cisco instructor who holds multiple Cisco certifications including CCSP, CCVP, CCNP, and CCDF, in addition to

multiple security and voice specializations. With Cisco experience dating back to 1989 (beginning with a Cisco AGS+ running Cisco IOS 7.x), Kevin has been a network design specialist for the Walt Disney World Resort, a senior technical instructor for SkillSoft/Thomson NETg/KnowledgeNet, and a network manager for Eastern Kentucky University. This volume is part of the Official Certification Guide Series from Cisco Press. Books in this series provide officially developed exam preparation materials that offer assessment, review, and practice to help Cisco Career Certification candidates identify weaknesses, concentrate their study efforts, and enhance their confidence as exam day nears. Companion CD-ROM The CD-ROM contains 100 practice questions for the exam developed by Cisco Press and delivered by the Boson Exam Environment (BEE). Boson's ExSim-Max premium practice exams available at [www.boson.com](http://www.boson.com) Category: Cisco Press Cisco Certification Covers: CCNP TSHOOT exam 642-832

**CCNA Wireless 200-355 Official Cert Guide**-David Hucaby 2015-12-22 Trust the best selling Official Cert Guide series from Cisco Press to help you learn, prepare, and practice for exam success. This series is built with the objective of providing assessment, review, and practice to help ensure you are fully prepared for your certification exam. Master Cisco CCNA Wireless 200-355 exam topics Assess your knowledge with chapter-opening quizzes Review key concepts with exam preparation tasks This is the eBook edition of the CCNA Wireless 200-355 Official Cert Guide. This eBook does not include the companion DVD with practice exam that comes with the print edition. CCNA Wireless 200-355 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 Wireless 200-355 Official Cert Guide focuses specifically on the objectives for the Cisco CCNA WIFUND exam. Leading network engineer and best-selling Cisco certification author David Hucaby shares 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 WIFUND 200-355 exam, including RF signals, modulations, standards, and performance Antenna theory Wireless LAN topologies and 802.11 frame types Wireless AP coverage planning Cisco wireless architectures Autonomous, cloud, and controller-based deployments Controller discovery, roaming, and RRM Wireless security WLAN configuration Wireless guest network implementation Client connectivity Cisco wireless network management Troubleshooting interference and connectivity CCNA Wireless 200-355 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>.

**Introduction to Networks v6 Companion Guide**-Cisco Networking Academy 2016-12-10 This is the eBook of the printed book and may not include any media, website access codes, or print supplements that may come packaged with the bound book. Introduction to Networks Companion Guide v6 is the official supplemental textbook for the Introduction to Networks course in the Cisco® Networking Academy® CCNA® Routing and Switching curriculum. The course introduces the architecture, structure, functions, components, and models of the Internet and computer networks. The principles of IP addressing and fundamentals of Ethernet concepts, media, and operations are introduced to provide a foundation for the curriculum. By the end of the course, you will be able to build simple LANs, perform basic configurations for routers and switches, and implement IP addressing schemes. The Companion Guide is designed as a portable desk reference to use anytime, anywhere to reinforce the material from the course and organize your time. The book's features help you focus on important concepts to succeed in this course: Chapter Objectives—Review core concepts by answering the focus questions listed at the beginning of each chapter Key Terms—Refer to the lists of networking vocabulary introduced and highlighted in context in each chapter. Glossary—Consult the comprehensive Glossary with more than 250 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.

**CCNP Security VPN 642-647 Official Cert Guide**-Jim Thomas 2011-01-14 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. CCNP Security VPN 642-647 Official Cert Guide presents you with an organized test preparation routine through the use of proven series elements and techniques. "Do I Know This Already?" quizzes open each chapter and enable you to decide how much time you need to spend on each section. Exam topic lists make referencing easy. Chapter-ending Exam Preparation Tasks help you drill on key concepts you must know thoroughly. Master Cisco CCNP Security VPN 642-647 EAM topics Assess your knowledge with chapter-opening quizzes Review key concepts with exam preparation tasks Practice with realistic exam questions on the CD-ROM CCNP Security VPN 642-647 Official Cert Guide, focuses specifically on the objectives for the CCNP Security VPN exam. Cisco Certified Internetwork Expert (CCIE) Howard Hooper share preparation hints and test-taking tips, helping you identify areas of weakness and improve both your conceptual knowledge and hands-on skills. Material is presented in a concise manner, focusing on increasing your understanding and retention of exam topics. The companion CD-ROM contains a powerful Pearson IT Certification Practice Test engine that enables you to focus on individual topic areas or take a complete, timed exam. The assessment engine also tracks your performance and provides feedback on a module-by-module basis, laying out a complete assessment of your knowledge to help you focus your study where it is needed most. 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 CCNP Security VPN exam, including: Configuring policies, inheritance, and attributes AnyConnect Remote Access VPN solution AAA and Dynamic Access Policies (DAP) High availability and performance Clientless VPN solutions SSL VPN with Cisco Secure Desktop Easy VPN solutions IPsec VPN clients and site-to-site VPNs CCNP Security VPN 642-647 Official Cert Guide is part of a recommended learning path from Cisco that includes simulation and hands-on training from authorized Cisco Learning Partners and self-study products from Cisco Press. To find out more about instructor-led training, e-learning, and hands-on instruction offered by authorized Cisco Learning Partners worldwide, please visit [www.cisco.com/go/authorizedtraining](http://www.cisco.com/go/authorizedtraining). The print edition of the CCNP Security VPN 642-647 Official Cert Guide contains a free, complete practice exam. Also available from Cisco Press for Cisco CCNP Security study is the CCNP Security VPN 642-647 Official Cert Guide Premium Edition eBook and Practice Test. This digital-only certification preparation product combines an eBook with enhanced Pearson IT Certification Practice Test. This integrated learning package: Allows you to focus on individual topic areas or take complete, timed exams Includes direct links from each question to detailed tutorials to help you understand the concepts behind the questions Provides unique sets of exam-realistic practice questions Tracks your performance and provides feedback on a module-by-module basis, laying out a complete assessment of your knowledge to help you focus your study where it is needed most

**Scaling Networks v6 Companion Guide**-Cisco Networking Academy 2017-08-17 Scaling Networks v6 Companion Guide is the official supplemental textbook for the Scaling Networks v6 course in the Cisco Networking Academy CCNA Routing and Switching curriculum. The Companion Guide is designed as a portable desk reference to use anytime, anywhere to reinforce the material from the course and organize your time. The book's features help you focus on important concepts to succeed in this course: · Chapter objectives—Review core concepts by answering the focus questions listed at the beginning of each chapter. · Key terms—Refer to the lists of networking vocabulary introduced and highlighted in context in each chapter. · Glossary—Consult the comprehensive Glossary with more than 250 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. How To—Look for this icon to study the steps you need to learn to perform certain tasks. Interactive Activities—Reinforce your understanding of topics with dozens of exercises from the online course identified throughout the 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 and provided in the accompanying Labs & Study Guide book. Hands-on Labs—Work through all the course labs and additional Class Activities that are included in the course and published in the separate Labs & Study Guide.

**Top-Down Network Design**-Priscilla Oppenheimer 2010-08-24 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

**How to Master Ccnp Switch**-René Molenaar 2013-08-28 ow to master CCNP SWITCH shows you, step-by-step, everything you need to know to master the CCNP SWITCH exam. You will discover new topics like layer 3 switching and virtual gateway protocols but also learn more about familiar switching protocols like spanning-tree and VLANs / trunking. Plus you will receive an overview of switching labs that you should practice from GNS3vault.com.

**Cisco Unified Customer Voice Portal**-Rue Green 2011-12-16 Cisco Unified Customer Voice Portal Building Unified Contact Centers Rue Green, CCIE® No. 9269 The definitive guide to deploying Cisco Unified Customer Voice Portal IVRs in any contact center environment Thousands of companies are replacing legacy ACD/TDM-based contact centers with pure IP-based unified contact center solutions. One of these solutions is quickly earning market leadership: Cisco Unified Customer Voice Portal (CVP). Now, one of the leading Cisco CVP experts brings together everything network and telephony professionals need to successfully implement production Interactive Voice Response (IVR) solutions with CVP: architectural guidelines, deployment best practices, detailed insights for design and sizing, and more. CCIE Rue Green guides you through designing unified contact centers with CVP, and deploying proven infrastructures to support your designs. The author first explains CVP's architecture, outlining its key advantages and opportunities for integration and illuminating the design challenges it presents. Next, he guides you through addressing each of these challenges, covering all CVP components and tools and offering detailed insights available in no other book. Using this book's detailed working configurations and examples, you can minimize configuration errors, reduce downtime, strengthen monitoring, and drive maximum value from any CVP-based unified call center solution. Rue Green, CCIE No. 9269 (Routing & Switching and Voice), CISSP, MCSE, MCITP is a Technical Leader for the Customer Collaboration Service Line within Cisco Advanced Services, where he focuses on unified contact center architectures and deployment methodologies. He currently acts in a delivery architect role for Unified CVP, Unified ICM, and Cisco Unified Communications Manager for Unified Contact Center Solutions. He has spent the last 21 years working within different roles related to the architecture, design, and implementation of large voice and data networks, including several years working with complex contact center solutions. · Discover CVP's powerful capabilities and advantages · Understand how CVP's components fit together into a unified architecture · Utilize CVP native components: Call Server, VXML Server, Reporting Server, Operations Console Server, and Cisco Unified Call Studio · Integrate non-native components such as IOS devices, Unified ICM, UCM, content load balancers, and third-party servers · Choose the right deployment model for your organization · Implement detailed call flows for Standalone, Call Director, Comprehensive, and VRU-only deployment models · Design Unified CVP for high availability · Efficiently deliver media via streaming, caching, and other techniques · Address crucial sizing, QoS, network latency, and security considerations · Successfully upgrade from older versions or H.323 platforms · Isolate and troubleshoot faults in native and non-native CVP components · Design virtualized Unified CVP deployments using UCS This IP communications book is part of the Cisco Press® Networking Technology Series. IP communications titles from Cisco Press help networking professionals understand voice and IP telephony technologies, plan and design converged networks, and implement network solutions for increased productivity.

**70-411 Administering Windows Server 2012 R2**-Patrick Regan 2014-06-03 This 70-411 Administering Windows Server 2012 R2 textbook covers the second of three exams required for Microsoft Certified Solutions Associate (MCSA): Windows Server 2012 certification. This course validates the skills and knowledge necessary to administer a Windows Server 2012 Infrastructure in an enterprise environment. The three MCSA exams collectively validate the skills and knowledge necessary for implementing, managing, maintaining, and provisioning services and infrastructure in a Windows Server 2012 environment. This Microsoft Official Academic Course is mapped to the 70-411 Administering Windows Server 2012 exam skills, including the recent R2 objectives. This textbook focuses on real skills for real jobs and prepares students to prove mastery of core services such as user and group management, network access, and data security. In addition, this book also covers such valuable skills as: Implementing a Group Policy Infrastructure Managing User and Service Accounts Maintaining Active Directory Domain Services Configuring and Troubleshooting DNS Configuring and Troubleshooting Remote Access Installing, Configuring, and Troubleshooting the Network Policy Server Role Optimizing File Services Increasing File System Security Implementing Update Management The MOAC IT Professional series is the Official from Microsoft, turn-key workforce training program that leads to professional certification and was authored for college instructors and college students. MOAC gets instructors ready to teach and students ready for work by delivering essential resources in 5 key areas: Instructor readiness, student software, student assessment, instruction resources, and learning validation. With the Microsoft Official Academic course program, you are getting instructional support from Microsoft; materials that are accurate and make course delivery easy.

**CCIE Routing and Switching v5.1 Foundations**-Narbik Kocharians 2017-05-30 CCIE-level Cisco routing and switching guide for every CCNP Preparing for the CCIE Routing and Switching lab exam typically involves deep and lengthy study. But if you already possess the Cisco CCNP Routing and Switching certification, you already know much of what you'll need to succeed on CCIE's labs. This book will help you quickly bridge your remaining knowledge gaps and make the most of everything you already know. CCIE Routing and Switching v5.1 Foundations addresses every segment of the CCIE R&S Version 5 blueprint, helping you focus your study where it will do the most good: intense hands-on practice to deepen your current knowledge and thorough explanations of theoretical topics you haven't yet encountered. Based on the author's industry-recognized CCIE prep classes, it includes 40+ detailed labs for real gear and platform emulators; structured illustrations of protocol and feature operation; and topic-specific labs to drive the theory home. It includes a full lab walkthrough of a complex configuration reflective of the actual CCIE—ensuring that you thoroughly understand the technologies and interactions you're reading about. Discover the physical topology for any network deployment Master Spanning Tree Protocol (STP) foundations and advanced features Deploy and optimize PPP and use its full set of capabilities Implement Dynamic Multipoint VPNs (DMVPNs) from start to finish Use IP Prefix lists in prefix filtration, packet filtering, and other applications Handle any RIPv2 deployment scenario n Implement EIGRP, including classical and named operation modes and interoperation Use advanced OSPF techniques, including route filtration, LSA operation, stub configurations, and update filtering Understand what happens when you perform redistribution, and manage problematic scenarios Manage complex BGP capabilities, including Adjacency State Machine Operate IPv6 in complex network environments, including DMVPN Focus on QoS mechanisms that CCIE still covers, including traffic marking, classification, policing, and shaping Deploy IPsec VPN solutions including GRE/IPsec tunnel mode, multi-site VPN technologies, and their encryption Implement multicasting in environments requiring end-to-end IPv4 and IPv6 transport Address operational and deployment issues involving MPLS VPNv4 tunnels

**SCION: A Secure Internet Architecture**-Adrian Perrig 2017-10-13 This book describes the essential components of the SCION secure Internet architecture, the first architecture designed foremost for strong security and high availability. Among its core features, SCION also provides route control, explicit trust information, multipath communication, scalable quality-of-service guarantees, and efficient forwarding. The book includes functional specifications of the network elements, communication protocols among these elements, data structures, and configuration files. In particular, the book offers a specification of a working prototype. The

authors provide a comprehensive description of the main design features for achieving a secure Internet architecture. They facilitate the reader throughout, structuring the book so that the technical detail gradually increases, and supporting the text with a glossary, an index, a list of abbreviations, answers to frequently asked questions, and special highlighting for examples and for sections that explain important research, engineering, and deployment features. The book is suitable for researchers, practitioners, and graduate students who are interested in network security.

**CCNA Routing and Switching Study Guide**-Todd Lammle 2013-09-20 Prepare for the new CCNA exams with this Todd Lammle study guide Cisco author, speaker, and trainer Todd Lammle is considered the authority on all things networking, and his books have sold almost a million copies worldwide. This all-purpose CCNA study guide methodically covers all the objectives of the ICND1 (100-101) and ICND2 (200-101) exams as well as providing additional insight for those taking CCNA Composite (200-120) exam. It thoroughly examines operation of IP data networks, LAN switching technologies, IP addressing (IPv4/IPv6), IP routing technologies, IP services, network device security, troubleshooting, and WAN technologies. Valuable study tools such as a companion test engine that includes hundreds of sample questions, a pre-assessment test, and multiple practice exams. Plus, you'll also get access to hundreds of electronic flashcards, author files, and a network simulator. CCNA candidates may choose to take either the ICND1(100-101) and ICND2 (200-101) exams or the CCNA Composite exam (200-120); this study guide covers the full objectives of all three Written by bestselling Sybex study guide author Todd Lammle, an acknowledged authority on all things Cisco Covers essential Cisco networking topics such as operating an IP data network, IP addressing, switching and routing technologies, troubleshooting, network device security, and much more Includes a comprehensive set of study tools including practice exams, electronic flashcards, comprehensive glossary of key terms, videos, and a network simulator that can be used with the book's hands-on labs Bonus Content: Access to over 40 MicroNugget videos from CBT Nuggets CCNA Routing and Switching Study Guide prepares you for CCNA certification success.

**CCNP Routing and Switching V2.0 Official Cert Guide Library**-Kevin Wallace 2014-12-05 The new edition of bestselling CCNP Routing and Switching Official Cert Library is a comprehensive review and practice package for the latest CCNP Routing and Switching exams. The three books contained in this package, CCNP Routing and Switching ROUTE 300-101 Official Cert Guide, CCNP Routing and Switching SWITCH 300-115 Official Cert Guide, and CCNP Routing and Switching TSHOOT 300-135 Official Cert Guide, present complete reviews and a more challenging and realistic preparation experience. The books will be fully updated to cover the latest CCNP exam topics. The companion DVDs contains the powerful Pearson IT Certification Practice Test engine, complete with hundreds of well-reviewed, exam-realistic questions. The assessment engine offers you a wealth of customization options and reporting features, laying out a complete assessment of your knowledge to help you focus your study where it is needed most. The DVDs also each contain more than 60 minutes of personal video mentoring from the author. Well-regarded for their level of detail, assessment features, and challenging review questions and exercises, these official study guides help you master the concepts and techniques that will enable you to succeed on the exam the first time.

**CCNA Routing and Switching 200-125 Exam Cram**-Anthony Sequeira 2017-02-15 This is the eBook of the printed book and may not include any media, website access codes, or print supplements that may come packaged with the bound book. CCNA Routing and Switching 200-125 Exam Cram, 5/e is the perfect study guide to help you pass the Cisco 200-125 CCNA exam, providing coverage and practice questions for every exam topic. The book contains an extensive set of preparation tools, including topic overviews, ExamAlerts, CramSavers, CramQuizzes, chapter-ending review questions, author notes and tips, and an extensive glossary. The book also contains the extremely useful CramSheet tear-out: a collection of essential facts in an easy-to-review format. Complementing all these great study tools is the powerful Pearson Test Prep practice test software, complete with hundreds of exam-realistic practice questions. This assessment software offers you a wealth of customization options and reporting features, allowing you to test your knowledge in study mode should be. Covers the critical information you'll need to know to score higher on your CCNA exam! Compare and contrast networking models including OSI and TCP/IP Master subnetting in IPv4 u Understand important details of IPv6 Configure Layer 2 switches, including VLANs, trunks, STP, and Port Security Deploy EtherChannel and switch stacking Configure and verify Inter-VLAN routing Configure, verify, and troubleshoot static and dynamic routing using OSPF, EIGRP, and RIPv2 Describe basic QoS concepts Learn WAN topology and connectivity options and configure PPP, MLPPP, PPPoE, and GRE tunnel connectivity Configure and verify single-homed branch connectivity using eBGP IPv4 Configure and verify key infrastructure services including DNS, DHCP, NTP, HSRP, and NAT Configure Cisco device hardening and deploy access layer security, AAA, and ACLs Learn how to manage Cisco infrastructure Troubleshoot networks using key IOS tools Understand network programmability concepts

**Building Data Centers with VXLAN BGP EVPN**-David Jansen 2017-04-04 The complete guide to building and managing next-generation data center network fabrics with VXLAN and BGP EVPN This is the only comprehensive guide and deployment reference for building flexible data center network fabrics with VXLAN and BGP EVPN technologies. Writing for experienced network professionals, three leading Cisco experts address everything from standards and protocols to functions, configurations, and operations. The authors first explain why and how data center fabrics are evolving, and introduce Cisco's fabric journey. Next, they review key switch roles, essential data center network fabric terminology, and core concepts such as network attributes, control plane details, and the associated data plane encapsulation. Building on this foundation, they provide a deep dive into fabric semantics, efficient creation and addressing of the underlay, multi-tenancy, control and data plane interaction, forwarding flows, external interconnectivity, and service appliance deployments. You'll find detailed tutorials, descriptions, and packet flows that can easily be adapted to accommodate customized deployments. This guide concludes with a full section on fabric management, introducing multiple opportunities to simplify, automate, and orchestrate data center network fabrics. Learn how changing data center requirements have driven the evolution to overlays, evolved control planes, and VXLAN BGP EVPN spine-leaf fabrics Discover why VXLAN BGP EVPN fabrics are so scalable, resilient, and elastic Implement enhanced unicast and multicast forwarding of tenant traffic over the VXLAN BGP EVPN fabric Build fabric underlays to efficiently transport uni- and multi-destination traffic Connect the fabric externally via Layer 3 (VRF-Lite, LISP, MPLS L3VPN) and Layer 2 (VPC) Choose your most appropriate Multi-POD, multifabric, and Data Center Interconnect (DCI) options Integrate Layer 4-7 services into the fabric, including load balancers and firewalls Manage fabrics with POAP-based day-0 provisioning, incremental day 0.5 configuration, overlay day-1 configuration, or day-2 operations

**Introduction to Networks Companion Guide**-Cisco Networking Academy 2013-11-15 Introduction to Networks Companion Guide is the official supplemental textbook for the Introduction to Networks course in the Cisco® Networking Academy® CCNA® Routing and Switching curriculum. The course introduces the architecture, structure, functions, components, and models of the Internet and computer networks. The principles of IP addressing and fundamentals of Ethernet concepts, media, and operations are introduced to provide a foundation

for the curriculum. By the end of the course, you will be able to build simple LANs, perform basic configurations for routers and switches, and implement IP addressing schemes. The Companion Guide is designed as a portable desk reference to use anytime, anywhere to reinforce the material from the course and organize your time. The book's features help you focus on important concepts to succeed in this course: Chapter Objectives-Review core concepts by answering the focus questions listed at the beginning of each chapter. Key Terms-Refer to the lists of networking vocabulary introduced and highlighted in context in each chapter. Glossary-Consult the comprehensive Glossary with more than 195 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: Introduction to Networks Lab Manual ISBN-10: 1-58713-312-1 ISBN-13: 978-1-58713-312-1 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 more than 50 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 66 course labs and Class Activities that are included in the course and published in the separate Lab Manual. This book is part of the Cisco Networking Academy Series from Cisco Press®. Books in this series support and complement the Cisco Networking Academy curriculum.

**CCNA: Cisco Certified Network Associate**-Todd Lammle 2008-02-11 Organized by exam objectives, this is a focused, concise review guide that works hand-in-hand with any learning tool, including the Sybex CCNA: Cisco Certified Network Associate Study Guide, 6th and Deluxe editions. The book will consist of four high-level chapters, each mapping to the four main Domains of the exam skill-set. The book will drill down into the specifics of the exam, covering the following: Designing Cisco internetworks Developing an access list Evaluating TCP/IP communication Configuring routers and switches Configuring IP addresses, subnet masks, and gateway addresses Performing LAN, VLAN, and WAN troubleshooting Understanding rules for packet control The interactive CD contains two bonus exams, handy flashcard questions, and a searchable PDF of a Glossary of Terms.

**CCNP Enterprise Advanced Routing ENARSI 300-410 Official Cert Guide**-Raymond Lacoste 2020-02-24 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 CCNP ENARSI exam topics Assess your knowledge with chapter-opening quizzes Review key concepts with exam preparation tasks This is the eBook edition of the CCNP Enterprise Advanced Routing ENARSI 300-410 Official Cert Guide. This eBook does not include access to the Pearson Test Prep practice exams that comes with the print edition. CCNP Enterprise Advanced Routing ENARSI 300-410 Official Cert Guide from Cisco Press allows you to succeed on the exam the first time and is the only self-study resource approved by Cisco. Expert authors Raymond Lacoste and Brad Edgeworth share preparation hints and test-taking tips, helping you identify areas of weakness and improve both your conceptual knowledge and hands-on skills. This complete study package includes A test-preparation routine proven to help you pass the exams Do I Know This Already? quizzes, which allow you to decide how much time you need to spend on each section Chapter-ending exercises, which help you drill on key concepts you must know thoroughly Practice exercises that help you enhance your knowledge More than 60 minutes of video mentoring from the author A final preparation chapter, which guides you through tools and resources to help you craft your review and test-taking strategies Study plan suggestions and templates to help you organize and optimize your study time Well regarded for its level of detail, study plans, assessment features, and challenging review questions and exercises, this official study guide helps you master the concepts and techniques that ensure your exam success. This official study guide helps you master all the topics on the CCNP Enterprise Advanced Routing ENARSI exam, including Layer 3 technologies, including IPv4/IPv6 routing, EIGRP, OSPF, and BGP VPN services, including MPLS Layer 3 VPNs and DMVPN Infrastructure security, including ACLs, AAA, uRPF, CoPP, and IPv6 first hop security features Infrastructure services, including syslog, SNMP, IP SLA, Object Tracking, NetFlow, Flexible NetFlow, and more

**CCNP ROUTE 642-902 Official Certification Guide**-Wendell Odom 2010-02-09 This is the eBook version of the print title. Note that the eBook does not provide access to the practice test software that accompanies the print book. 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. Assess your knowledge with chapter-opening quizzes Review key concepts with Exam Preparation Tasks CCNP ROUTE 642-902 Official Certification Guide is a best of breed Cisco® exam study guide that focuses specifically on the objectives for the CCNP® ROUTE exam. Senior instructor and best-selling author Wendell Odom shares 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. CCNP ROUTE 642-902 Official Certification 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 allow you to decide how much time you need to spend on each section. Exam topic lists make referencing easy. Chapter-ending Exam Preparation Tasks sections help drill you on key concepts you must know thoroughly. Well-regarded for its level of detail, assessment features, 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. CCNP ROUTE 642-902 Official Certification Guide is part of a recommended learning path from Cisco that includes simulation and hands-on training from authorized Cisco Learning Partners and self-study products from Cisco Press. To find out more about instructor-led training, e-learning, and hands-on instruction offered by authorized Cisco Learning Partners worldwide, please visit [www.cisco.com/go/authorizedtraining](http://www.cisco.com/go/authorizedtraining) Wendell Odom, CCIE® No. 1624, is a 28-year veteran of the networking industry. He currently works as an independent author of Cisco certification resources and occasional instructor of Cisco authorized training for Skyline ATS. He has worked as a network engineer, consultant, systems engineer, instructor, and course developer. He is the author of several best-selling Cisco certification titles. He maintains lists of current titles, links to Wendell's blogs, and other certification resources at [www.TheCertZone.com](http://www.TheCertZone.com). This official study guide helps you master all the topics on the CCNP ROUTE exam, including: Network design, implementation, and verification plans EIGRP OSPF IGP Redistribution Policy-based routing and IP service-level agreement (IP SLA) BGP IPv6 IPv4 and IPv6 coexistence Routing over branch Internet connections This volume is part of the Official Certification Guide Series from Cisco Press. Books in this series provide officially developed exam preparation materials that offer assessment, review, and practice to help Cisco Career Certification candidates identify weaknesses, concentrate their study efforts, and enhance their confidence as exam day nears.