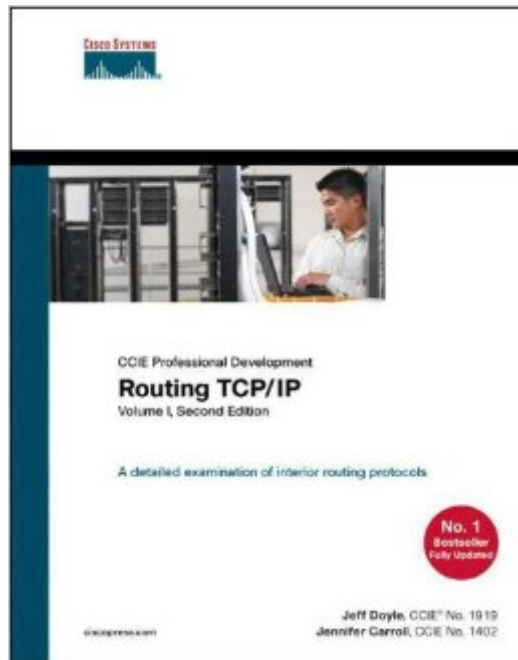# Routing TCP/IP, Volume 1 (2nd Edition)

Synopsis

A detailed examination of interior routing protocols -- completely updated in a new edition Â A complete revision of the best-selling first edition--widely considered a premier text on TCP/IP routing protocols A core textbook for CCIE preparation and a practical reference for network designers, administrators, and engineers Includes configuration and troubleshooting lessons that would cost thousands to learn in a classroom and numerous real-world examples and case studies Â Praised in its first edition for its approachable style and wealth of information, this new edition provides readers a deep understanding of IP routing protocols, teaches how to implement these protocols using Cisco routers, and brings readers up to date protocol and implementation enhancements. Routing TCP/IP, Volume 1, Second Edition, includes protocol changes and Cisco features that enhance routing integrity, secure routers from attacks initiated through routing protocols, and provide greater control over the propagation of routing information for all the IP interior routing protocols. Routing TCP/IP, Volume 1, Second Edition, provides a detailed analysis of each of the IP interior gateway protocols (IGPs). Its structure remains the same as the best-selling first edition, though information within each section is enhanced and modified to include the new developments in routing protocols and Cisco implementations. What's New In This Edition? The first edition covers routing protocols as they existed in 1998. The new book updates all covered routing protocols and discusses new features integrated in the latest version of Cisco IOS Software. IPv6, its use with interior routing protocols, and its interoperability and integration with IPv4 are also integrated into this book. Approximately 200 pages of new information are added to the main text, with some old text removed. Additional exercise and solutions are also included.

Book Information

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Customer Reviews

Jeff Doyle's 2nd edition of his best-selling book - "Routing TCI/IP Volume 1" is a welcome revision to the cannon required for any CCIE Routing & Switching candidate. Jeff Doyle, along with Jennifer Carroll, has done an excellent job at updating what is considered by many to be THE book on routing. In particular, the new edition does a terrific job at describing the white-elephant in the room - IPv6, IPv6's packet format and how to configure some routing protocols to advertise IPv6 prefixes.The primary focus of this book discusses the most popular routing protocols - RIPv1 & RIPv2, EIGRP, OSPFv2 and, particular to IPv6, RIPng and OSPFv3. Dedicating over 450 pages to these topics alone makes the book worth itself. A further 130 pages are used to discuss route control (redistribution, filtering and route-maps).In particular, I was impressed by:* The book is fully-updated, and is not just a copy-and-paste of subject matter from the first book. For instance, on page 439 is discussed the use of a much misunderstood newer command `area nssa translate type7 suppress-fa'. This is just an example of complex and new commands that are documented.* Of all the books I have looked at, this book does the best job at introducing oneself to RIPng.* The book wastes little time discussing site-local addresses for IPv6. As the difficulties of using of IPv6's site-local addresses has rendered ths address as too complex to implement (and was, in fact, deprecated in RFC 3879), this books notes this and moves on. This goes against other recent books that that wastes pages and time discussing IPv6 site-local addresses. As any CCIE candidate will attest, studying time comes at a premium.

The second edition of the book was a long felt need as there have been a lot of changes in the CCIE certification blueprint as well the Cisco IOS.This is the most highly recommended book for anyone attempting to study for any of the CCIE certifications as Routing and Switching are covered in varying degrees in all the CCIE written Exams.The detailed coverage of IPV6 is a highpoint of this book as it is very well explained with the help of various examples and also by comparing and contrasting it with IPV4 so as to bring out the true subtleness of and the glaring differences between the two. By showing how each task is done differently with IPV6 makes the difficult and confusing address scheme which is in hex much more understandable. Through out the book where ever applicable the authors use IPV6 addresses during various configuration examples to clarify the

concepts.The principles of route redistribution are explained with the help of case studies and sample output which make this usually difficult to understand and confusing topic much more bearable. Redistribution remains the cause of most problems in the lab and once routes are redistributed a variety of problems crop up. Jeff explains the right way to do this and most importantly what not to do.The troubleshooting case study at the end of the chapter explains the method to troubleshoot that particular protocol and provides tips on what to basically look for.Then the troubleshooting exercises provide the opportunity to test the troubleshooting knowledge.This knowledge comes in handy for the CCIE LAB as time is always short and if something breaks down troubleshooting skills can make the difference between getting your magical Number or a visit to the LAB again.

Full disclosure, I haven't finished the book yet. I have read the Sybex CCNA books, Cisco CCNP related books and other books from Cisco Press on other topics, Security, VOIP etc. For an introduction to Cisco, the Sybex CCNA Study Guide by Todd Lammle I think is great, but I really needed something that would dig in and explain routing protocols in depth. Most of Cisco Press puts me to sleep after a few pages, but on the shelf or desk of just about every network engineer I work with is a copy of Routing TCP/IP, Volume 1 (1st Edition). That title seemed to be the defacto standard for all network engineers, and even some engineers that weren't network engineers, so I decided to pick up a copy only to be surprised that it had been updated with a second edition. I figured I'd start at the beginning, when a situation at work dictated that I jump into some specific routing protocols. I found that this book was what I was hoping it'd be. The authors explain things in such a way that the light bulb went off on the inner workings of the protocol. I found I was getting the in-depth knowledge I needed, not just a gloss over and how to configure the protocol at a basic level. The authors somehow manage to provide a wealth of information, without it just looking like they dumped the Cisco Whitepages on a page. It's definitely a technical book, but the information is provided in such a manner that you feel engaged and want to keep reading more. I'm currently going over OSPF, and there are approximately 80+ pages just going over the details of OSPF before the authors even get into how to configure OSPF. And that's just OSPFv2. There is a separate chapter for OSPfv3. It's a hefty book at approximately 800 pages, but the authors are really presenting a lot of material in a human readable format.

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