Introduction

What You'll Find in This Book

As in the first edition, I've tried to make this Encyclopedia a comprehensive source of information about matters relating to networking. I've also tried to present the information in a clear and useful manner.

This book contains comprehensive, straightforward summaries of the major concepts, issues, and approaches related to networking. Networking is defined broadly to encompass configurations ranging from a couple of connected computers just a few feet apart to a network of several thousand machines (of all types and sizes) scattered around the world. You'll find discussions of networking as it's done by servers and clients, managers and agents, peers, and even over the telephone.

You probably won't find anything here that you can't find in other places. However, I don't know of any other book or source that collects so much network-related information in one place. To find all the information summarized here, you would need to check hundreds of books, disks, articles, Web pages, or other documents.

Despite its hefty size, this encyclopedia just scratches the surface of what there is to know about networking. After all, how complete can any book be if just the World Wide Web on the Internet has over 10 million hypertext documents. I do think, however, that this book scratches deeper than most other references you'll find.

This revised edition updates entries for concepts and technologies that change rapidly or where there have been major developments. I've also added considerable material about the Internet (and especially about the World Wide Web), since interest in this networking phenomenon is growing at an astounding pace.

Concepts, Not Instructions

As in the first edition, I've tried to cover concepts rather than making this a how-to book. Thus, you won't learn how to install networks or run specific programs. However, you will learn about different types of programs and what they do. For example, you can read about browsers and how they make exploring the World Wide Web possible; you'll also learn about programs such as network operating systems and how they differ from ordinary operating systems.

An Anchor in an Ocean of Words

This book was obsolete from the moment it was written. That's because nothing changes faster than vocabulary in a field where there is money to be made. Since major breakthroughs and advances are still happening in the area of networking, there are new network-related words and concepts to be found in almost every issue of every computer magazine. If you include acronyms and abbreviations, the speed with which the vernacular expands is even faster. For example, the first edition of this book was published under a year ago and it was no trouble finding almost 2,000 new entries for Appendix A.

Given the futility of even trying to stay completely up-to-date, I've chosen to focus on the more enduring concepts and facts—those that provide the foundations and background that underlie the constantly changing terminology. This makes the Encyclopedia more generally useful and enduring.

Helping the Book Grow

While core networking concepts change very little, the core does grow. For example, ten years ago there was much less need to know about wireless communications because there were fewer wireless products, as well as less public interest in the technology. Because of such progress, the body of essential fundamentals grows with each year.

I expect to update and add to the material in the book, and hope to make the Encyclopedia always effective, comprehensive, and useful. Fortunately, an electronic medium makes it easier to grow in this way.

If you need to find out something about networking, look for it in this book. If you find an entry for the topic, we hope you'll be more informed after you've read it. On the other hand, if you can't find the information you need, didn't understand it, or don't think you learned what you should have, please drop us a line and tell us.

Also, if there are concepts or terms you would like to see included, please let us know. If you can provide references, that would be helpful. Even under the best of circumstances, there's little chance that you'll get a reply to individual queries. However, we will read your comments and suggestions and will try to use them to improve future versions of the book.