What This Book Covers

Working with TCP/IP has been an interesting, exciting, and rewarding experience. As I continue to learn about computers and TCP/IP, the more I see the need to continue learning. No matter what sector of the computer industry you're employed in, TCP/IP is an important foundational topic that you must understand; TCP/IP is the current and future standard protocol.

TCP/IP JumpStart contains many drawings and charts that help create a comfortable learning environment. It provides many real-world analogies that you will be able to relate to and through which the TCP/IP protocol will become tangible. These analogies provide a simple way to understand the technical process that is occurring through TCP/IP.

This book continues to build your understanding about TCP/IP progressively, like climbing a ladder. Here is how the information is presented:

Chapter 1 This chapter provides an overview of where TCP/IP and the Internet came from and how they are related. A lot of good Internet trivia appears in this chapter.

Chapters 2-5 These chapters describe what a protocol is and what the OSI and DoD models are. These chapters include a discussion of what happens at each layer in the DoD model and why the model is important.

Chapters 6-10 These chapters describe TCP/IP addressing-what IP addresses look like and how they are implemented. You'll learn how to assign IP addresses both manually and through Dynamic Host Configuration Protocol (DHCP). You'll learn all about DHCP. You'll also learn about subnet masks: what they are, what they do, and how to create them.

Chapters 11-14 These chapters focus on name resolution methods and implementations. You'll learn why name resolution is needed and the steps taken to resolve names. You'll learn about Domain Name System (DNS), Dynamic DNS, and Windows Internet Naming Service (WINS).

Chapter 15 You'll learn about the future of TCP/IP: the transition to a new version of IP in the next few years. This chapter gives you a heads-up on what to expect, and tells you how to find out more.

Making the Most of This Book

At the beginning of each chapter of *TCP/IP JumpStart*, you'll find a list of topics that you can expect to learn about within that chapter.

To help you soak up new material easily, I've highlighted **new terms** in bold and defined them in the page margins. And to give you some hands-on experience, there are Test It Out sections that let you practice what you've just learned. In addition, several special elements highlight important information:

Note Notes provide extra information and references to related information.
Tip Tips are insights that help you perform tasks more easily and effectively.
Warning Warnings let you know about things you should do-or shouldn't do-as you learn