## **Preface**

This book is about a very new area of computer technology: providing secure access between members of an organization who are cast far around the world. Both the technology providers and the users are feeling their way.

We approached the idea of the virtual private network (VPN) with some skepticism, since we own an Internet service provider. Security compromises are fairly common, as end users fail to understand the importance of password integrity and other basic protections. Though known cracks are not common, attempted cracks are; unfortunately, the successful cracks are those you never hear about.

Customers began approaching us with requests for solutions. How can we use the global reach of the Internet to access our various networks around the country and the world? Can we do it securely? Can we do it now? Charlie probably looked them square in the eye and said, "Oh, yeah, we can do that," then gave a cackle, to Mike's and Paul's dismay. In the course of trying to find solutions for these needy customers, and for our own nationally expanding networks, we turned to the virtual private network, and eventually wrote this book.

Although it doesn't fully represent the drama and tribulations of learning about and erecting a VPN, this book covers everything you need to know to get one up and running. The technology of the virtual private network is widely available; however, specific solutions are fairly slim. We cover the four that are currently available—Layer 2 tunneling through PPTP or L2TP, the Cisco PIX firewall, the AltaVista Tunnel, and the Secure Shell (SSH)—and other basics on how VPNs work, how much they cost, and why you should use one. (And when you shouldn't.)

## **Audience**

We assume that you are a network administrator who has already set up local area networks and knows something about the Internet and remote access (dial-in use). VPN solutions are usually employed along with firewalls, which are discussed only briefly in this book. For help with firewall concepts and technologies, you can find a variety of useful books, including *Building Internet Firewalls*, by D. Brent Chapman and Elizabeth D. Zwicky, published by O'Reilly & Associates, Inc.