Cisco Press - Troubleshooting Remote Access Networks

A guide to understanding the troubleshooting tools, commands, and methodologies that enable reliable performance for remote access services

- Gain a solid grasp of enterprise telecommunications technology fundamentals, including service options and clocking, line coding, and framing in carrier systems
- Understand how network traffic is handled by carriers and service providers
- Examine a layer-by-layer, systematic approach to troubleshooting issues
- Design, configure, and troubleshoot T1 and PRI circuits, text and PPP dial-in and dial-out services, and Cisco AS5000 Access Servers
- Design, configure, and troubleshoot ISDN BRI at the physical, data link, and network levels, as well as PPP, MMP, and telephone interfaces

- Design, configure, and troubleshoot Frame Relay UNI and NNI interfaces, with a focus on new installs, wrong DLCI, LMI settings, performance and multicast issues, and re-hosting of Frame Relay service
- Design, configure, and troubleshoot PTPP, L2TP, and IPSec VPNs, examining specific VPN clients, Internet technology, and LAN issues
- Resolve common availability issues for all major remote access technologies through real-world scenarios for dial, ISDN, Frame Relay, and VPNs

The ranks of telecommuters, remote employees, and mobile users are growing every day and their communications needs are expanding just as rapidly. Advancements in remote access technologies allow users to become less dependent on the office and to increase productivity without sacrificing the convenience of direct access to the corporate network. Convenient, secure, and reliable connections are crucial to corporate reliance on remote access. Customers, employees, and partners should connect seamlessly, as if they were in company headquarters. They also must count on the ability to log in and to remain connected at an expected level of performance. Understanding how to deploy remote access services is the first step to realizing the benefits that these services offer but inconsistent performance or denial of service threaten productivity gains. It is critical that these services not only be available but also perform as promised.

Troubleshooting Remote Access Networks helps you understand underlying technologies and gain insight into the challenges, issues, and best practices for supporting remote access networks. This book focuses on the enterprise portion of a remote access network and includes service provider troubleshooting and design information that helps both enterprise and service provider network engineers understand the larger picture of remote access networks. This book opens with a section covering fundamental concepts. Design issues, provisioning, DSL and cable connectivity options, central office operations, authentication techniques, and troubleshooting tools are all addressed in this part of the book, forming the foundation upon which later sections are built. Each of the subsequent four parts examines a key remote access technology, including dial, ISDN, Frame Relay, and VPNs. Each part is a self-contained tutorial, providing foundation review, design and configuration overviews, and troubleshooting techniques. Each part concludes with a series of real-world support scenarios that represent proven best practices for remote access network management, drawn from tens of thousands of cases handled by the Cisco Remote Access team.

Download | **Size:** 9.99 MB |

[This hidden content is only available for our VIP member. Become VIP Member NOW