Part IV

IP Services

Part IV shifts to a variety of topics that can be found in most every network. None are required for a network to work, but many happen to be useful services. Most happen to use IP or support the IP network in some way, so Part IV groups the topics together as IP services.

Part IV begins and ends with chapters that examine a series of smaller topics. First, Chapter 13 examines several IP services for which the CCNA 200-301 version 1.1 exam blueprint requires you to develop configuration and verification skills. Those services include logging and syslog, the Network Time Protocol (NTP), as well as two related services: CDP and LLDP.

The next two chapters in Part IV also focus on IP-based services, beginning with Chapter 14's examination of Network Address Translation (NAT). Almost every network uses NAT with IPv4, although in many cases, the firewall implements NAT. This chapter shows how to configure and verify NAT in a Cisco router.

Chapter 15 at first may give the appearance of a large chapter about one topic—Quality of Service—and it does focus on QoS. However, QoS by nature includes a wide variety of individual QoS tools. This chapter walks you through the basic concepts of the primary QoS features.

Chapters 16 and 17, at the end of Part IV, close with another series of smaller topics that require only conceptual knowledge rather than configuration skills. Chapter 16 covers First Hop Redundancy Protocols (FHRPs), while Chapter 17 covers Simple Network Management Protocol (SNMP), and two related protocols: TFTP and FTP.