

# Part V

## Network Architecture

**Chapter 18:** LAN Architecture

**Chapter 19:** WAN Architecture

**Chapter 20:** Cloud Architecture

**Part V Review**

**Part V** delivers content related to concept-only exam topics. As a result, it moves away from the concept-configure-verify approach of the earlier chapters of this book. Instead, this part collects exam topics better understood from an architecture and design perspective. In fact, the CCNA 200-301 V1.1 exam blueprint organizes six exam topics with this same approach, all listed under exam topic 1.2 “Describe characteristics of network topology architectures.” The chapters in this part examine most of those topics.

First, **Chapter 18** revisits LAN switching, discussing campus LAN design concepts and terminology, such as the *two-tier* and *three-tier* terms listed in the exam topics. This chapter also discusses how to supply power over that LAN infrastructure using Power over Ethernet (PoE), what the term *small office/home office* (SOHO) means, and the particulars of cabling choices in a campus LAN.

[Chapter 19](#) takes the brief mentions of WAN technologies in the CCNA 200-301 V1.1 blueprint and expands that into a story of three major WAN architectures to explain the topics of MPLS VPN WANs, Ethernet WANs, and Internet VPNs.

[Chapter 20](#) completes the architecture-focused chapters with a discussion of cloud computing and networking. This chapter begins by defining basic concepts and terms related to data centers and cloud, and closes with design discussions that show packet flows in a public cloud environment.