



Figure 2-3:
Routing a
call across
a VoIP
network.

The circuit-switched network gets organized

As circuit-switched networks continued to evolve, other technologies were developed that helped the carriers manage their telephony operations. Carriers began offering more types of POTS access and POTS carrier services.

The early forms of local and long-distance carrier services had to be redefined according to where the carrier company had facilities to terminate the circuits and transport lines, as well as where they might install their facilities. In addition, government regulation of telecommunications picked up. The concept of a *local access and transport area*, or *LATA*, as a geographical designation was defined. Eventually, the entire map of the United States would be developed into thousands of LATAs. You can usually identify a particular LATA by the area code associated with a telephone number.

The big advance with LATA was that it helped carriers get organized in a manner that would let them offer other types of carrier services, including those outside the circuit-switched services of the PSTN. For example, a numbering plan was developed that identified any circuit or access transport by its area code and the prefix of the main telephone number. The area code became known as the NPA, for numbering plan area, and the prefix became known as the NXX, for number exchange. For example, the NPA-NXX 412-882 is the area code and prefix for the Pittsburgh 412 LATA and switch 882, located in the South Hills of the Pittsburgh 412 LATA.