



![](_page_1_Figure_1.jpeg)

![](_page_1_Figure_2.jpeg)

![](_page_2_Figure_1.jpeg)

![](_page_2_Figure_2.jpeg)

![](_page_3_Figure_1.jpeg)

![](_page_3_Figure_2.jpeg)

![](_page_4_Figure_1.jpeg)

![](_page_4_Figure_2.jpeg)

![](_page_5_Figure_1.jpeg)

![](_page_5_Figure_2.jpeg)

![](_page_6_Picture_1.jpeg)

![](_page_6_Picture_2.jpeg)

![](_page_7_Figure_1.jpeg)

![](_page_7_Figure_2.jpeg)

![](_page_8_Figure_1.jpeg)

![](_page_8_Figure_2.jpeg)

![](_page_9_Figure_1.jpeg)

![](_page_9_Figure_2.jpeg)

![](_page_10_Figure_1.jpeg)

![](_page_10_Figure_2.jpeg)

Internet Terminology	Central Office (CO)   The place where telephone companies terminate customer lines and locate switching equipment to interconnect those lines with other networks.   Customer Premises Equipment (CPE)   Telecommunications equipment that is located on the customer's premises (physical location) rather than on the provider's premises or in between. Telephone handsets, modems, cable TV set-top boxes, and digital subscriber line routers are examples. Historically, this term referred to equipment placed at the customer's end of the telephone line and usually owned by the telephone company. Today, almost any end-user equipment can be called customer premises equipment and it can be owned by the customer or by the provider.	
•	Internet Service Provider (ISP) A company that provides other companies or individuals with access to, or presence on, the Internet. An ISP has the equipment and the telecommunication line access required to have a POP on the Internet for the geographic area served. The larger ISPs have their own high-speed leased lines so that they are less dependent on the telecommunication providers and can provide better service to their customers.	
	Network Access Point (NAP)     In the United States, a network access point (NAP) is one of several major Internet interconnection points that serve to tie all the ISPs together. Originally, four NAPs - in New York, Washington, D.C., Chicago, and San Francisco - were created and supported by the National Science Foundation as part of the transition from the original U.S. government-financed Internet to a commercially operated Internet. Since that time, several new NAPs have arrived, including WorldCom's "MAE West" site in San Jose, California and ICS Network Systems' "Big East."     The NAPs provide major switching facilities that serve the public in general. Companies apply to use the NAP facilities. Much Internet traffic is handled without involving NAPs, using peering arrangements and interconnections within geographic regions.	
	Network Service Provider (NSP) A company that provides backbone services to an Internet service provider (ISP). Typically, an ISP connects at a point called an Internet exchange (IX) to a regional ISP that in turn connects to an NSP backbone.	
▶ 23	Point of Presence (POP) A site that has a collection of telecommunications equipment, usually refers to ISP or telephone company sites. An ISP POP is the edge of the ISP's network; connections from users are accepted and authenticated here. An Internet access provider may operate several POPs distributed throughout its area of operation to increase the chance that their subscribers will be able to reach one with a local telephone call. The largest national ISPs have POPs all over the country.	

![](_page_11_Figure_2.jpeg)

![](_page_12_Figure_1.jpeg)

![](_page_12_Figure_2.jpeg)

![](_page_13_Figure_1.jpeg)