

## STUDENT ACTIVITY 1.1\_KEY: COMPARING NETWORKS

MTA Course: 98-366 Networking Fundamentals

Topic: Understand the concepts of the Internet, intranet, and extranet

File name: NetFund\_SA\_1.1\_1\_Key

**Lesson Objective**

**1.1:** Understand the concepts of the Internet, intranet, and extranet. *This objective may include but is not limited to:* VPN, security zones, firewalls.

**Resources, software, and additional files needed for this lesson**

- None

**Directions to the student**

Answer the following questions.

**Content**

1. The Internet has been called the “Information Superhighway.” Define the Internet and discuss why you would agree or disagree with this alternative label for the Internet.

***Sample answer:***

***Internet:*** *A worldwide computer network that allows people to communicate and exchange information. The Internet is not owned by any particular company or person.*

*Most students would probably agree with the label Information Superhighway, citing such things as the global/international reach of the Internet, the high-speed connections of the Internet’s backbone, and the incredible amounts of information on any subject that can be obtained, epitomized by a Google search.*

2. The term *extranet* was coined by Mark Andreessen, a key developer of the early Web browser Mosaic, in 1996. He was actually criticized by *Network World* in an editorial\* published the following year. The editorial stated that "... extranet is just a piece of marketing-speak gobbledygook that some people with too much time on their keyboards and a lack of inspiration are using" and ended with the statement, "an extranet by any other name is still an intranet." Define an intranet

and an extranet. Discuss your view of this editorial: do you think a single term should be used or are both terms necessary? Justify your point of view.

\* Mark Gibbs in *Network World*, January 27, 1997, p. 66.

**Sample answer:**

**Intranet:** *A private network based on Internet protocols such as TCP/IP that is strictly internal to the organization and is not connected to the Internet directly. It is designed for information management within a company or organization, and includes such services as specialized applications, document distribution, software distribution, access to databases, and training.*

**Extranet:** *An extension of a corporate intranet using World Wide Web technology to facilitate communication with the corporation's suppliers, customers, and business partners. An extranet allows limited access to a company's intranet in order to enhance the speed and efficiency of their business relationship.*

*Yes, both terms are necessary—if we take net to mean network then intranet means internal network and extranet means external network, which makes it easier to understand how that type of network is being used.*

*Networking can be a complicated subject, so when you can capture the meaning of something in a single word it helps the public grasp a concept in a simple way. Yes, it can be a catchy marketing tool, but if it's useful it will continue to be used over time. Intranet and extranet have become useful words such that they are now part of the networking lexicon.*

3. Provide a brief overview of each of the four basic features common to all VPN connections.

**Sample answer:**

**The four basic features common to all VPN connections are:**

**Authentication:** *The process of assuring the person who is accessing the VPN is really the person who is authorized to use the system.*

**Authorization:** *The capability of limiting access to only authorized users to the VPN.*

**Confidentiality:** *The capability of preventing anyone else from reading the data outside of the VPN.*

**Data integrity:** *The process of ensuring the data that leaves the source and arrives at the destination has not been tampered with while passing through the VPN.*

4. A company wants to connect all employees' computers so they can share information without accessing the Internet—what type of network should they implement?

**Sample answer:**

*An intranet would be the best network for this company.*