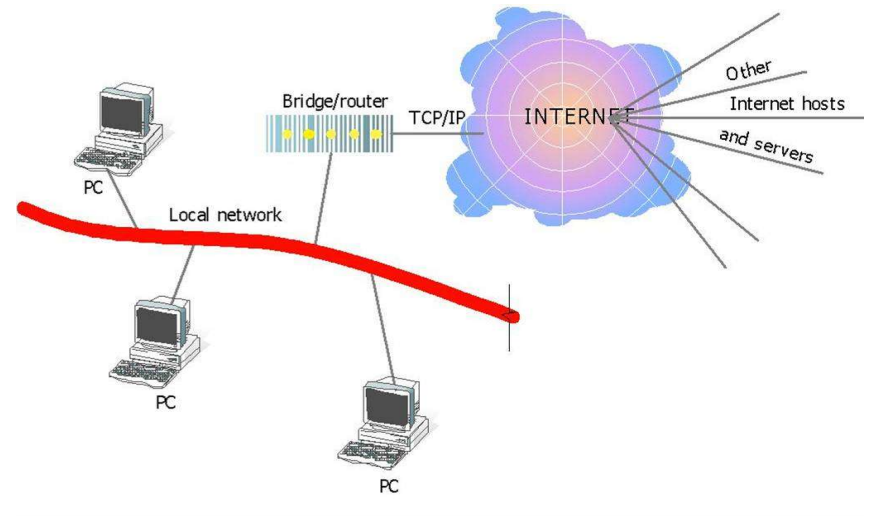


# How the Internet Works

Anyone with access to the Internet  
can exchange text, data files, and  
programs with any other user who  
also is connected to the Internet.



# The Internet Started Out As ARPANET/NSFnet

In 1969, the Advanced Research Projects Agency (ARPA) of the U.S. Department of Defense created the Internet when it connected the computers at universities and defense contractors. This system was called ARPANET.

In 1985 the ARPANET gets turned over to the National Science Foundation



# Ways to Connect to the Internet

LAN

Modem

High-speed data link

ISDN

DSL

Cable



# Internet Service Provider (ISP)

Provides local access to the Internet  
backbone



# TCP/IP

TCP/IP is the set of rules--or protocols--that every computer connected to the Internet uses to control the way data is formatted and transmitted



# How Data Moves on the Internet

- ✦ Internet protocol address (IP address):  
four-part numeric address
- ✦ Domain name system (DNS) address:  
an address that uses words instead of numbers



# DNS Addresses Have Two Parts

- ✦ Host name

- ✦ Domain

  - ✦ .COM

  - ✦ .EDU

  - ✦ .NET

  - ✦ .ORG

  - ✦ .GOV



# World Wide Web (the Web)

Created in 1989, the Web is a type of service available to those using the Internet. Web and Internet are not synonymous.



# Web Site

A collection of related Web pages  
housed on a Web server



# Web Browser

Software application that finds hypertext documents on the Web and opens them on the user's computer.

First Web browser, Mosaic, debuted in 1993.



# Uniform Resource Locator (URL)

- ✦ A URL is a file's location on the Web
- ✦ Access URLs with a Web browser



# Examples of Online Communication

- ✦ E-mail
- ✦ IRC
- ✦ Newsgroup



# Internet Relay Chat (IRC)

A popular way for Internet users to communicate in real-time with other users



# Telnet

Internet tool for using one computer to access another



# File Transfer Protocol (FTP)

Internet tool used to copy files from one computer to another



# Intranet

A LAN or WAN that uses TCP/IP protocols but belongs exclusively to a corporation, school or organization

