

# NETWORKING



# LAN (LOCAL AREA NETWORK)

- ◉ A network is a collection of computers that communicate with each other through a shared network medium.
- ◉ LANs are networks confined to an area such as a building or a campus.
- ◉ LANs may link as few as three computers, but often link hundreds of computers.
- ◉ The development of standard networking protocols has resulted in worldwide proliferation of LANs throughout businesses and educational organizations.

# WANS (WIDE AREA NETWORKS)

- Wide area networks combine multiple LANs that are geographically separate. The LANs are connected using services such as dedicated leased phone lines, dial-up phone lines, satellite links, and data packet carrier services.

# WANS (WIDE AREA NETWORKS)

- Wide area networking can be
  - a modem and remote access server for employees to connect
    - or
  - it can be hundreds of branch offices globally linked using special routing protocols and filters to minimize the expense of sending data sent over vast distances

# INTERNET

- The Internet is a system of worldwide linked networks that facilitate data communication services such as remote login, file transfer, electronic mail, the World Wide Web, and newsgroups.
- With the large demand for connectivity, the Internet has become a communications highway for millions of users.

# INTERNET

- The Internet was initially restricted to military and academic institutions, but now it is for any and all forms of information and commerce.
- Internet Web sites now provide personal, educational, political, and economic resources to anyone.



# INTRANET

- ◉ An intranet is a private network using Internet-type tools
- ◉ Available only within that organization
- ◉ For large organizations, an intranet provides access to information for employees



# NETWORK INTERFACE CARDS

Network interface cards, or NICs, are used to connect a PC to a network. The NIC provides a connection between the networking cable and the computer's internal bus.

