

What is a Network?:

-A system of interconnected nodes that move information between them.

-Types of networks include the Internet, telephone networks, transportation networks, cellular networks, and sensor networks.

The Internet:

-A global, decentralized, and scalable network that has transformed business, relationships, learning, and governance.

-Key characteristics: Global connectivity, decentralization, interoperability, scalability, accessibility, multimedia support, real-time communication, and user-driven content.

Network edge:

Hosts (clients and servers) connected to the Internet.

Network Core:

Interconnected routers that forward packets using packet-switching.

Packet Switching:

Breaks data into packets, which are transmitted at full link capacity.

More efficient than circuit switching for bursty data but can experience congestion.

Circuit Switching:

Dedicated resources for a call, commonly used in traditional telephone networks.