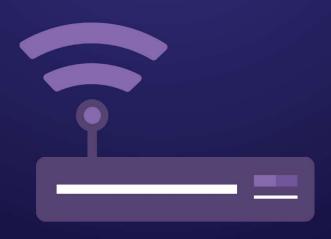




## Network



What is a packet switch responsible for?

- a) Running network applications
- b) Forwarding packets of data
- c) Configuring access networks
- d) Managing routing tables

Which of the following is an example of a communication link?

- a) Ethernet
- b) Skype
- c) Router
- d) IP address

What is the Internet commonly referred to as?

- a) A network of routers
- b) A network of ISPs
- c) A network of networks
- d) A system of packet switches

Which organization defines Internet standards?

- a) IETF
- b) ICANN
- c) IEEE
- d) W3C

Which of the following is an example of a protocol?

- a) HTTP
- b) Router
- c) Switch
- d) Fiber-optic cable



What is the primary function of protocols in the Internet?

- a) Routing packets to specific destinations
- b) Defining rules for message sending and receiving
- c) Creating access networks
- d) Encrypting all communication data

What type of network is WiFi an example of?

- a) Wide Area Network (WAN)
- b) Local Area Network (LAN)
- c) Data Center Network
- d) Satellite Network

Which term describes devices at the 'edge' of the Internet?

- a) Packet switches
- b) Routers
- c) Hosts
- d) Links

In what kind of frequency band does frequency division multiplexing occur?

- a) Single frequency
- b) Multiple frequency bands
- c) Broadband
- d) Satellite links

What is a key feature of HFC (Hybrid Fiber Coax)?

- a) Symmetrical transmission rates
- b) Asymmetric transmission rates
- c) End-to-end delay
- d) Full-duplex operation



Which of the following is an example of a DSL access network?

a) WiFi

- b) Cable modem
- c) DSLAM
- d) Satellite link

What kind of access network connects homes to ISP routers using shared cables?

- a) Ethernet
- b) HFC
- c) DSL
- d) Fiber Optic

Which type of cable supports Ethernet transmission up to 10Gbps?

- a) Category 5
- b) Category 5e
- c) Category 6
- d) Coaxial cable

What kind of media propagates signals freely through the air?

- a) Guided media
- b) Unguided media
- c) Coaxial cable
- d) Fiber-optic cable

What physical medium is most commonly used in enterprise networks?

- a) Coaxial cable
- b) Twisted pair
- c) Fiber-optic cable
- d) Wireless radio



What is the maximum transmission distance for 10Base2 coaxial cable?

a) 185 meters

b) 500 meters

What technology uses light pulses to carry data over long distances?

a) Coaxial cable

c) 100 meters

d) 275 meters

- b) Fiber-optic cable
- c) Ethernet
- d) Wireless radio

Which wireless technology has a short range of approximately 10 meters?

- a) WiFi
- b) Bluetooth
- c) 4G cellular
- d) Terrestrial microwave

What kind of delay is typical in satellite communication?

- a) 10 msec
- b) 270 msec
- c) 100 msec
- d) 50 msec

Which protocol is responsible for requesting files from a web server?

- a) TCP
- b) HTTP
- c) IP
- d) WiFi



Which physical medium has the lowest error rate due to immunity to electromagnetic noise? a) Coaxial cable b) Twisted pair c) Fiber-optic cable d) Serial connection What type of communication link is used in terrestrial microwave communication? a) Point-to-point b) Fiber-optic c) Satellite d) DSL What is the typical transmission rate of 4G cellular networks? a) 10 Mbps b) 45 Mbps c) 100 Mbps d) 10's of Mbps Which of the following connects multiple devices within a building using wireless access? a) Satellite network b) Wired Ethernet c) WiFi d) DSL What are Ethernet switches commonly used for in enterprise networks? a) Connecting wireless devices

- b) Configuring access points
- c) Providing wired access
- d) Controlling bandwidth allocation



True

What network type commonly links high-bandwidth servers in data centers? a) Mobile network b) Home network c) Data center network d) Enterprise network Packet switches forward data by breaking it into smaller packets. **True** False HFC access networks provide equal upstream and downstream transmission rates. True **False** The IETF is responsible for creating Internet protocols and standards. <u>True</u> False Ethernet is an example of a wireless communication link. True **False** Fiber-optic cables are immune to electromagnetic interference. **True** False WiFi operates over a range of several kilometers in wide-area networks. True **False** Category 5 twisted pair cables can support data rates up to 10Gbps.



False

False Control of the
Satellite communication typically introduces low latency.  True  False
Protocols like HTTP define how devices communicate over the Internet  True  False
DSL uses existing telephone lines to connect homes to the Internet.  True  False
Ethernet switches are commonly used in home networks for wired connections.  True  False
Bluetooth technology supports long-range, high-speed data transmission.  True  False
All physical media in networks involve guided signals through solid materials.  True  False
Fiber-optic cables can transmit data over longer distances than coaxial cables.  True  False  Access notworks are used to connect and systems like PCs and servers to the Internet
Access networks are used to connect end systems like PCs and servers to the Internet.  True

