

Glossary terms

Terms and definitions

Bandwidth: The maximum data transmission capacity over a network, measured by bits per second

Cloud computing: The practice of using remote servers, applications, and network services that are hosted on the internet instead of on local physical devices

Cloud network: A collection of servers or computers that stores resources and data in remote data centers that can be accessed via the internet

Data packet: A basic unit of information that travels from one device to another within a network

Hub: A network device that broadcasts information to every device on the network

Internet Protocol (IP): A set of standards used for routing and addressing data packets as they travel between devices on a network

Internet Protocol (IP) address: A unique string of characters that identifies the location of a device on the internet

Local Area Network (LAN): A network that spans small areas like an office building, a school, or a home

Media Access Control (MAC) address: A unique alphanumeric identifier that is assigned to each physical device on a network

Modem: A device that connects your router to the internet and brings internet access to the LAN

Network: A group of connected devices

Open systems interconnection (OSI) model: A standardized concept that describes the seven layers computers use to communicate and send data over the network

Packet sniffing: The practice of capturing and inspecting data packets across a network

Port: A software-based location that organizes the sending and receiving of data between devices on a network

Router: A network device that connects multiple networks together

Speed: The rate at which a device sends and receives data, measured by bits per second

Switch: A device that makes connections between specific devices on a network by sending and receiving data between them

TCP/IP model: A framework used to visualize how data is organized and transmitted across a network

Transmission Control Protocol (TCP): An internet communication protocol that allows two devices to form a connection and stream data

User Datagram Protocol (UDP): A connectionless protocol that does not establish a connection between devices before transmissions

Wide Area Network (WAN): A network that spans a large geographic area like a city, state, or country