Computer Science Definitions

Terminal - A computer terminal is an electronic or electromechanical hardware device that is used for entering data into, and displaying data from, a computer or a computing system.

Ethernet - the standard way to connect computers on a network over a wired connection. It provides a simple interface and for connecting multiple devices, such computers, routers, and switches.

Switch - A network switch is a networking device that connects devices together on a computer network by using packet switching to receive, process, and forward data to the destination device.

Server - A server is a software program, or the computer on which that program runs, that provides a specific kind of service to client software running on the same computer or other computers on a network. ... It is a major element of modern operating system and network design.

Hub - a hub is the most basic networking device that connects multiple computers or other network devices together. Unlike a network switch or router, a network hub has no routing tables or intelligence on where to send information and broadcasts all network data across each connection.

IP address - An Internet Protocol address (IP address) is a numerical label assigned to each device connected to a computer network that uses the Internet Protocol for communication. An IP address serves two principal functions: host or network interface identification and location addressing.

Packet - This is a small amount of computer data sent over a network. Any time you receive data from the Internet, it comes to your computer in the form of many little packets. Each packet contains the address of its origin and destination, and information that connects it to the related packets being sent.

Domain Name Server - Short for Domain Name Server, an Internet service that translates domain names into IP addresses.

 Ping  - ping is a utility used to verify whether or not a network data packet is capable of being distributed to an address without errors. The ping utility is commonly used to check for network errors.

 IPv4 versus IPv6 - IPv4 is the most widely used version of the Internet Protocol. It defines IP addresses in a 32-bit format, which looks like 123.123.123.123. ... During this transitional process from IPv4 to IPv6, systems connected to the Internet may be assigned both an IPv4 and IPv6 address. The basics of IPv6 are similar to those of IPv4 -- devices can use IPv6 as source and destination addresses to pass packets over a network, and tools like ping work for network testing as they do in IPv4, with some slight variations.

DDoS attack - DDoS is short for Distributed Denial of Service. DDoS is a type of DOS attack where multiple compromised systems, which are often infected with a Trojan, are used to target a single system causing a Denial of Service (DoS) attack.

How do critical services such as banking, military and government servers defend against DDoS attacks – many of them use a service provided by amazon web services (AWS) called AWS shield this protects against DDoS attacks and is used by many people. Others have their own similar versions of this service but primarily people choose to use a service like AWS shield.