OSI Definitions	OSI Model	TCP/IP Model	TCP/IP Definitions	Protocols	PDU
This layer provides an interface between the communications software and any applications that need to communicate outside the computer on which the application resides.	**Application**	**Application**	Represents data to the user, plus encoding and dialog control	DNS, BOOTP, DHCP, SMTP, POP, IMAP, FTP, TFSP, HTTP	Data
This layer provides an interface between the communications software and any applications that need to communicate outside the computer on which the application resides.	**Presentation**				
This layer defines how to start, control, and end conversations (called sessions). This includes the control and management of multiple bidirectional messages so that the application can be notified if only some of a series of messages are completed.	**Session**				
Transport layer defines services to segment, transfer, and reassemble the data for the individual communications between end devices.	**Transport**	**Transport**	Supports communication between diverse devices across diverse networks. Controls size and rate of messages between client and server.	UPD, TCP	Segment
This layer defines three main features: logical addressing, routing (forwarding), and path determination. Routing defines how devices (typically routers) forward packets to their final destination. Logical addressing defines how each device can have an address that can be used by the routing process. Path determination refers to the work done by routing protocols to learn all possible routes and choose the best route.	**Network**	**Internet**	Determines the best path through the network	IP, NAT, ICMP, OSPF, EIGRP	Packet
This layer defines the rules that determine when a device can send data over a particular medium. Data link protocols also define the format of a header and trailer that allows devices attached to the medium to successfully send and receive data.	**Data Link**	**Network Access**	Controls the hardware devices and media that make up the network. How signals are sent and interpreted.	ARP, PPP, ETHERNET, Interface Drivers	Frame
The physical layer protocols describe the mechanical, eletrical, functional, and procedural means to activate, maintain, and deactivate physical ocnnections for bit transmissions to and from a network.	**Physical**				