

1 Network Models

Terminology

TCP/IP Protocol Definition Documents	RFC (Request for Comments)
UDP hands a segment to IP for addressing	[X] Adjacent-Layer Interaction [] Same-Layer Interaction
TCP uses segment numbers to put segments of a stream back in order	[] Adjacent-Layer Interaction [X] Same-Layer Interaction
IPv4 address format X.X.X.X where each X is a number in the range 0-255	Dotted-decimal notation
A network end device, such as a computer or printer	Host
An intermediate device that forwards packets toward a destination IP address	Router
The process where lower-level network layers prepend their header to a PDU	Encapsulation
A network within a single geographic area of business location	LAN (Local Area Network)
A third-party network between a company and its branch office	WAN (Wide Area Network)
Layer-4 (OSI) protocol that acknowledges received segments	TCP (Transmission Control Protocol)

OSI Layer #	OSI Layer Name	TCP Layer Name (current Cisco convention)
1	Physical	Physical
2	Data Link	Data Link
3	Network	Network (formerly Internet)
4	Transport	Transport
5	Session	Application
6	Presentation	Application
7	Application	Application

	OSI Layer #	TCP Layer Name
Logical Addressing, Routing	3	Network
Physical Addressing	2	Data Link
Delivering a stream of data, including error correction by resending missing parts	4	Transport
Frame	2	Data Link
Segment	4	Transport
Packet	3	Network
Interfacing to a particular physical transport technology	2	Data Link
Path Determination	3	Network