

TCP / IP Five Layer Network Model

Transmission Control Protocol and Internet Protocol :

#	Layer Name	Protocol	Protocol Data Unit	Addressing
5	Application	HTTP, SMTP, etc..	Messages	n/a
4	Transport	TCP/UDP	Segment	Port #'s
3	Network	IP	Datagram	IP address
2	Data Link	Ethernet, Wi-Fi	Frames	MAC Address
1	Physical	10 Base T, 802.11	Bits	n/a

you'll be able to identify and describe each layer and what purpose it serves.

1) Physical Layer : Represents the physical devices that interconnect computers.

- This Includes the specifications for networking cables and the connectors that join devices together along with specifications describing how signals are sent over these connections.

2) Data Link Layer : Responsible for defining a common way of interpreting these signals so network devices can communicate.

- Lots of protocols exist at the data link layer, but the most common is known as "Ethernet"

- The Ethernet standards also define a protocol responsible for getting data to nodes on the same network or link.

3) Network Layer (Internet Layer) : Allows different networks to communicate with each other through devices known as routers.

Internetwork : A collection of networks connected together through routers, the most famous of these being the Internet.

- The Network Layer is responsible for getting data delivered across a collection of networks.
- The Most common protocol used at this layer is known as IP or Internet Protocol.
- The Network Layer delivers data between two individual nodes.

4) Transport Layer : Sorts out which client and server programs are supposed to get that data.

- The Protocol most commonly used in the Transport Layer, is known as TCP : Transmission Control Protocol.

5) Application Layer : The Lots of Protocols in this layer. They are application specific

- Protocols used to allow you to browser the web or send receive email are some common ones.