

Difference between OSI and TCP Address Model.

OSI is seven layered reference model.

Internetworking is not supported.

It clearly distinguishes between service, interface and protocols.

TCP Address Model

- It is four layered model.
- ⇒ TCP/IP support internal working.
- ⇒ This model fails to distinguish between service interface and protocol.

Network layer provide both connectionless and connection-oriented services.

⇒ Internal layer provides connectionless services.

Difference between peer to peer and client server network.

Client Server model

It is network architecture in which each computer or process on the network either client or a server.

Peer to peer.

⇒ P2P network is created when two or more PCs are connected and shared their resources without communication with separate server computer.

- Client depends on server → All the PC's are independent. If one computer's crash, all network does not crash at all.
- if server is crashed client cannot get into motion.
- It is not robust.
- It is more robust than client and server.

Q. What are 7 layers of OSI model, and write briefly about each of their function.

a. Physical layer

- It is concerned with the transmission of raw digital bits over communication line.
- It is concerned with characteristic issue of the physical media connector, the type of modulation being used.
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b) Layer 2: Data link layer

- It provides a direct link control on the network.
- It is concerned with the reliable transfer of data over the communication channel provided by physical layer.
- It breaks the data into data frame, transmit it from sequentially over the channel and check for transmission error.

Layer 3: Network layer:

- It provides routing and related functions that enable multiple data link to be combined.

- into an internet work.
- It does network addressing and data transmission between subnets.

Layer 4: Transport layer.

- It accepts data from above layer splits into smaller unit and passes these to lower isolation from each other.
- It manages end to end connection and data delivery between two host.

Layer 5: Session layer.

- Session layer allows different machine to establish session between them.
- It includes setting of various communication parameter like synchronization, ideolog control.

Layer 6: Presentation layer.

- It provides data structure, provides transfer syntax and semantics.
- It maintain the format of data and ensure data is readable application.

Layer 7:

- It interface between host communication

software and any external application.

→ It provides standards for supporting a variety of application independent service.

TCP/IP

Layer 1: Host - to - Network Layer:

It is used to connect to the host so that packet are send over it.

Layer 2: Internal Layer:

- It allows the host to insert packet into any network and make them travel independently to destination.
- It defines the packet format and a protocol.

Layer 3: Transportation Layer:

- It allows devices or peers on the source and destination hosts to carry on a conversation.
- It carries out function such as multiplexing or splitting into the data.
- It adds header information to the data and breaks the message into small unit so that

they are handled more efficiently by
the network layer.

Layer 4: Application layer:

→ It uses higher-level protocol where
user typically interact with the
network.