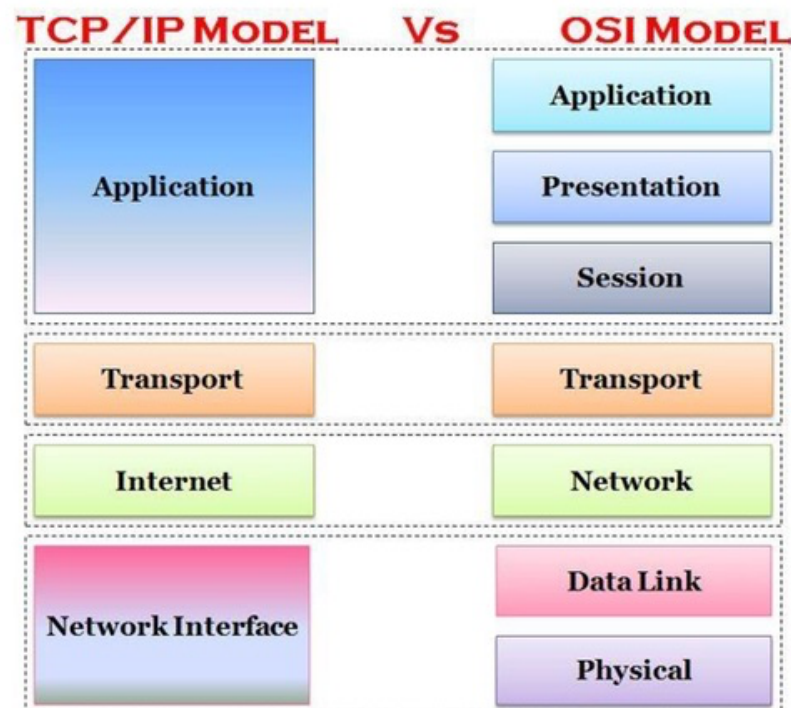


## Comparison between OSI and TCP/IP model



### Key Differences between TCP/IP and OSI Model

1. TCP/IP is a client-server model, i.e. when the client requests for service it is provided by the server. Whereas, OSI is a conceptual model.
2. TCP/IP is a standard protocol used for every network including the Internet, whereas, OSI is not a protocol but a reference model used for understanding and designing the system architecture.
3. TCP/IP is a four layered model, whereas, OSI has seven layers.
4. TCP/IP follows Vertical approach. On the other hand, OSI Model supports Horizontal approach.
5. TCP/IP is Tangible, whereas, OSI is not.
6. TCP/IP follows top to bottom approach, whereas, OSI Model follows a bottom-up approach.

## Comparison of OSI and TCP/IP Reference Model

Now it's time to compare both the reference model that we have learned till now. Let's start by addressing the similarities that both of these models have.

Following are some **similarities** between OSI Reference Model and TCP/IP Reference Model.

- Both have layered architecture.
- Layers provide similar functionalities
- Both are protocol stack.
- Both are reference models.

# Difference between OSI and TCP/IP Reference Model

Following are some major differences between OSI Reference Model and TCP/IP Reference Model, with diagrammatic comparison below.

OSI(Open System Interconnection)	TCP/IP(Transmission Control Protocol / Internet Protocol)
1. OSI is a generic, protocol independent standard, acting as a communication gateway between the network and end user.	1. TCP/IP model is based on standard protocols around which the Internet has developed. It is a communication protocol, which allows connection of hosts over a network.
2. In OSI model the transport layer guarantees the delivery of packets.	2. In TCP/IP model the transport layer does not guarantees delivery of packets. Still the TCP/IP model is more reliable.
3. Follows vertical approach.	3. Follows horizontal approach.
4. OSI model has a separate Presentation layer and Session layer.	4. TCP/IP does not have a separate Presentation layer or Session layer.
5. Transport Layer is Connection Oriented.	5. Transport Layer is both Connection Oriented and Connection less.