

## Examrace

### Functions of OSI Layers Seven Layers in OSI: Introduction to OSI, Layers in OSI and Importance of 7 Layers in OSI

Get top class preparation for competitive exams right from your home: [get questions, notes, tests, video lectures and more](#)- for all subjects of your exam.

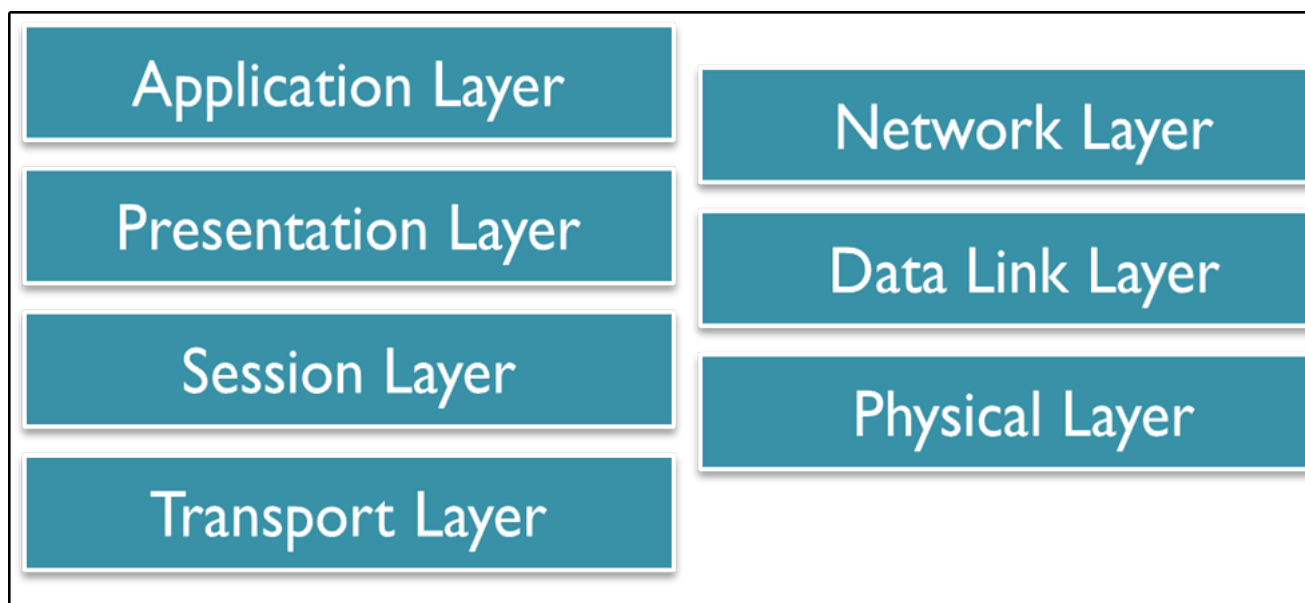
#### Functions of OSI Layers: Seven Layers in OSI (Computer Science)

##### Topics

1. Introduction on OSI
2. Seven layers of OSI
3. Functions of OSI layers
4. Name of unit exchanged in different layers

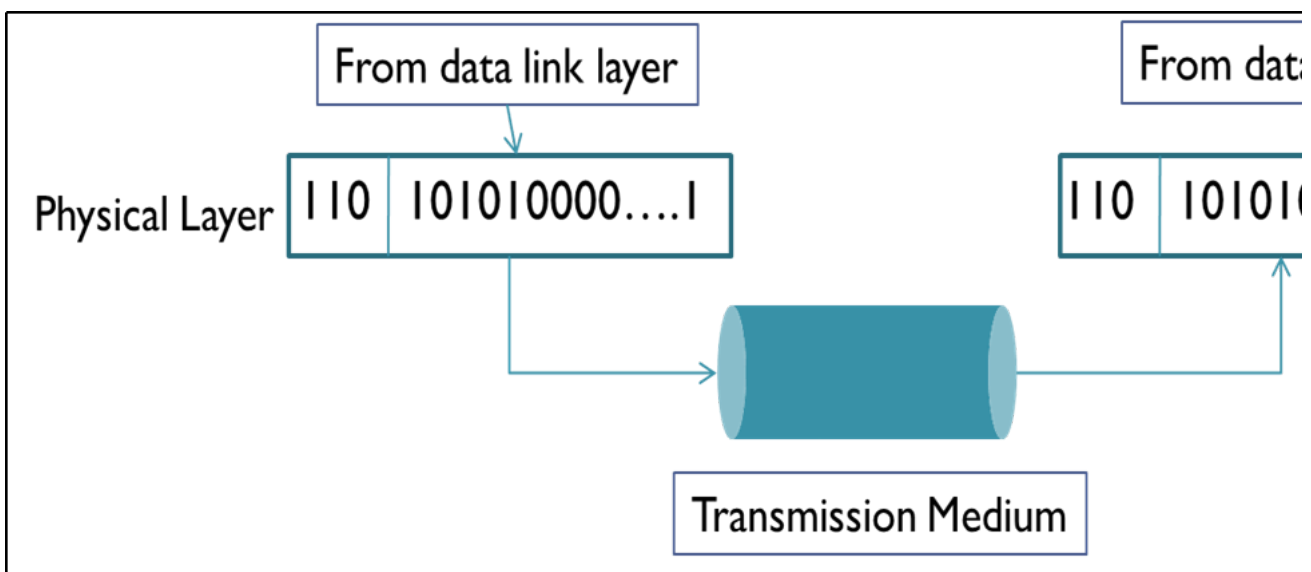
##### Introduction on OSI

- OSI stands for 'Open System Interconnection'
- It was established in 1970 by ISO i.e., International Standards Organisation .
- It is an 'open source' structure which means that it can be openly used for any environment and network easily for communication purpose.
- It is a seven layered structured architecture.



## 1) Physical Layer:

- Physical layer is responsible for movement of bits from one node to another.
- Hardware cabling, wireless or wireline, everything is defined here.

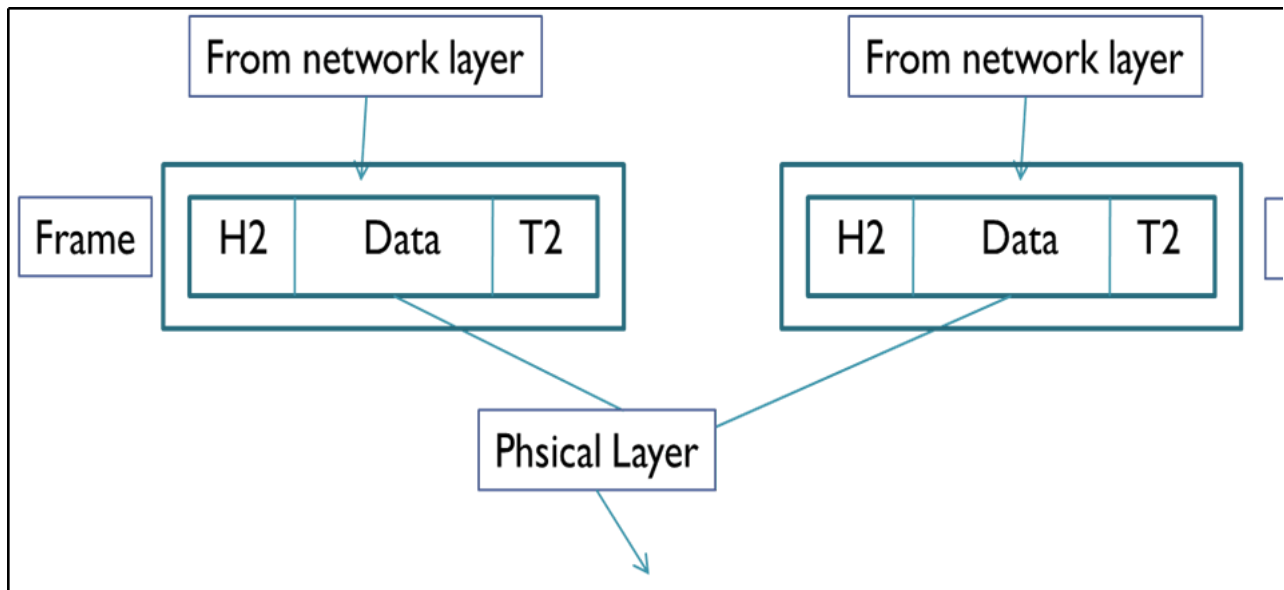


©Examrace. Report ©violations @<https://tips.fbi.gov/>

- Synchronization of bits is also concerned here.

## 2) Data Link Layer:

- It divides stream of bits received from network layer into units called frames.
- It is also responsible for:
  - Flow control
  - Error control
  - Access control

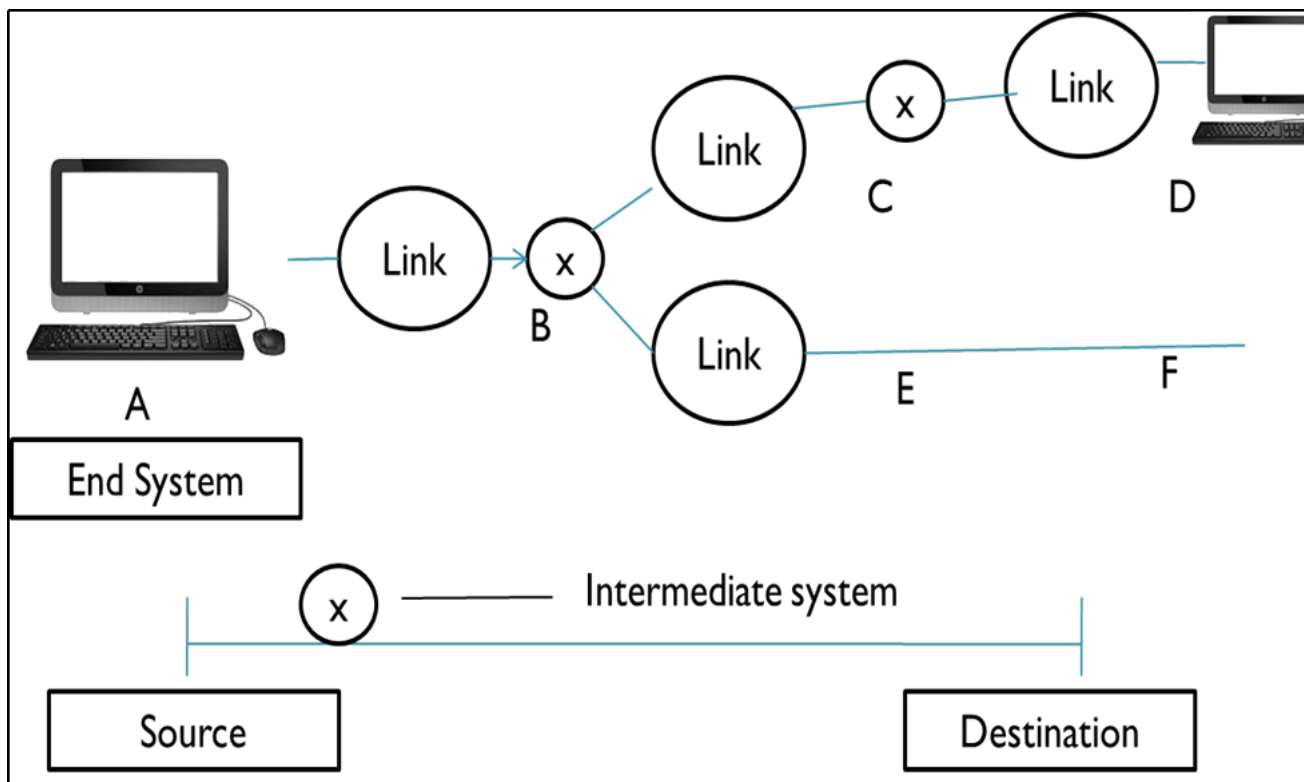


©Examrace. Report @violations @<https://tips.fbi.gov/>

It is also responsible for physical addressing of frames.

### 3) Network Layer:

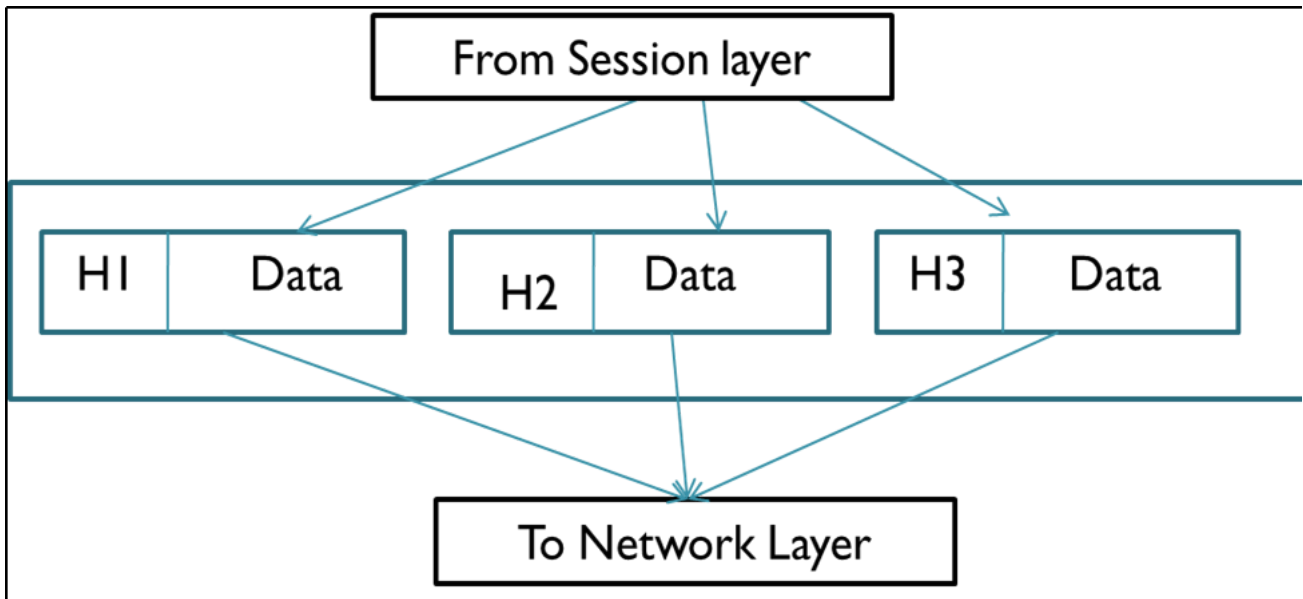
- It is responsible for source to destination delivery of a packets across various networks.
- It is also responsible for:
  - Logical addressing
  - Routing
  - Switching



©Examrace.Report ©violations @<https://tips.fbi.gov/>

#### 4) Transport Layer:

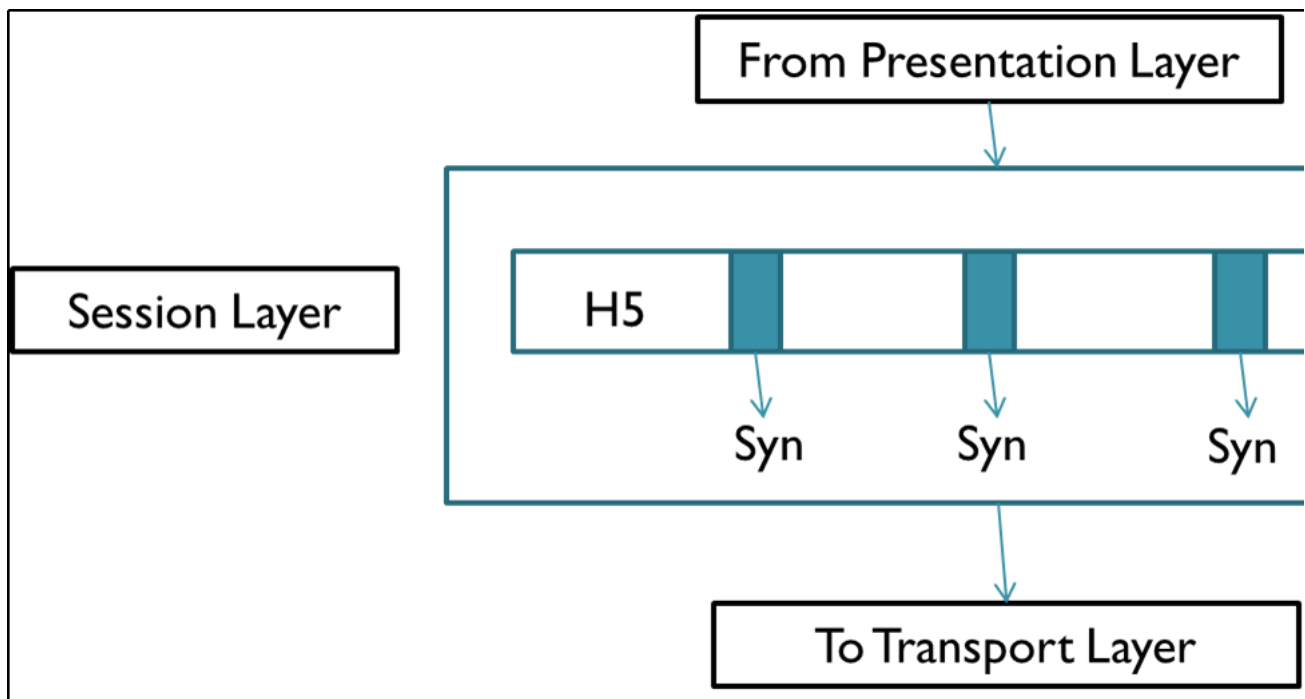
- It is responsible for:
- Segmentation with sequence numbers
- Reassembly of segments
- Connection control
- Flow control
- Error control
- Delivery of Message from one process to another



©Examrace. Report @violations @<https://tips.fbi.gov/>

5) Session Layer:

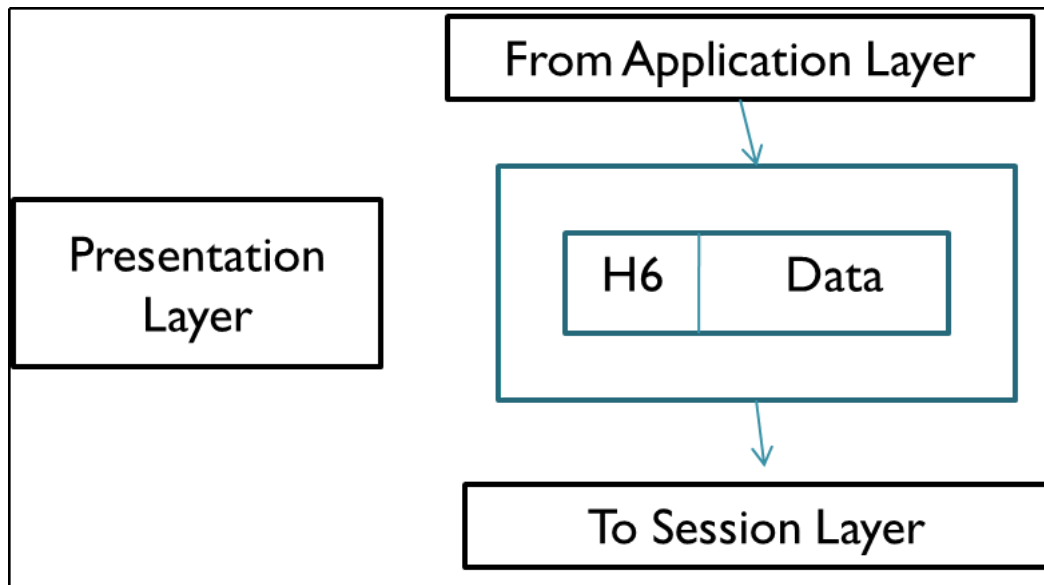
- It is responsible for:
- Dialog Control
- Synchronization



©Examrace.Report ©violations @<https://tips.fbi.gov/>

6) Presentation Layer:

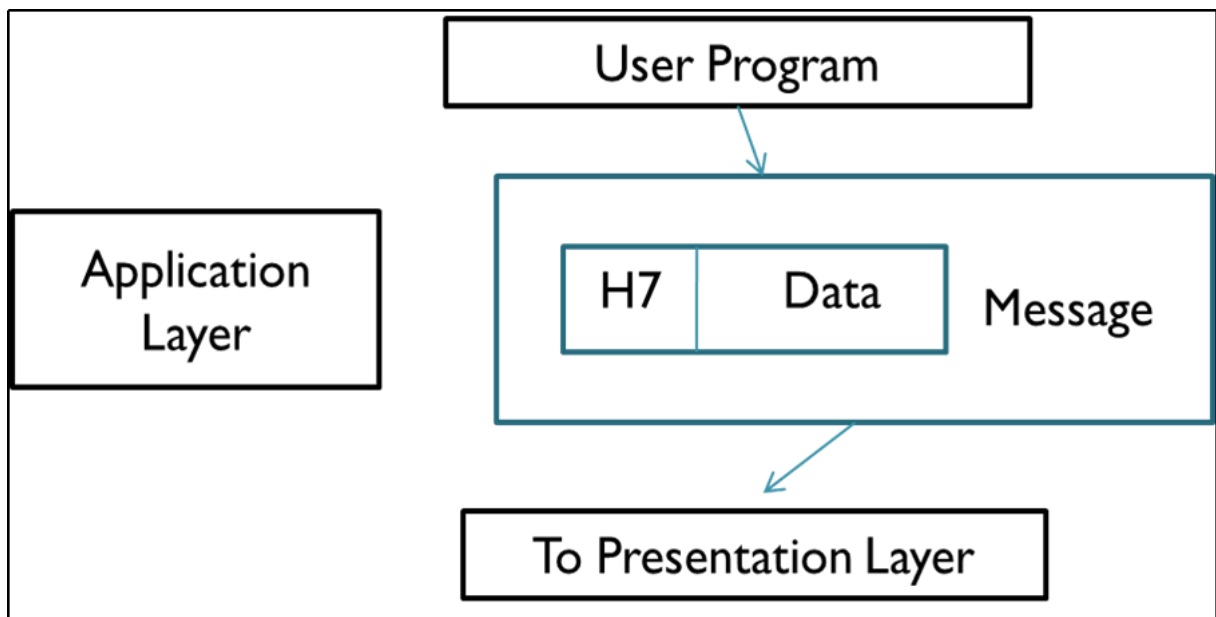
- It is responsible for:
- Translation (for encoding scheme)
- Encryption
- Compression



©Examrace. Report ©violations @<https://tips.fbi.gov/>

7) Application Layer:

- It is responsible for:
- File transfer
- Management
- Directory services



©Examrace. Report ©violations @<https://tips.fbi.gov/>

#OSI Layers

#Function of Physical Layer

#Function of Data Link Layer

#Function of Network Layer

#Function of Transport Layer

#Function of Session Layer

#Function of Presentation Layer

#Function of Application Layer

✉ Mayank

Developed by: [Mindsprite Solutions](#)