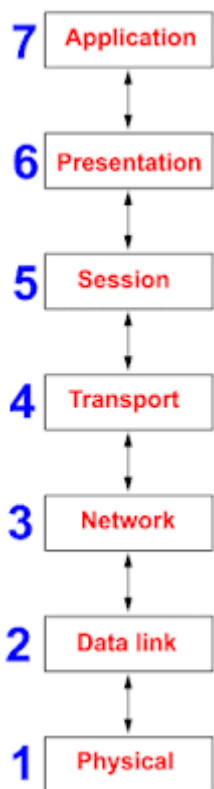


Data link layer is the second layer in OSI model.

As shown in image:



OSI model layers

As seen in the image above, the data link layer uses the services of the physical layer.

These services are used in lending and receiving the bits over the communication channel.

### Functions of data link layer:

1. Providing a well-defined service interface to the network layer

- 2. Dealing with transmission errors.
- 3. Regulating the flow of data so that slow receivers are not swamped by fast senders.

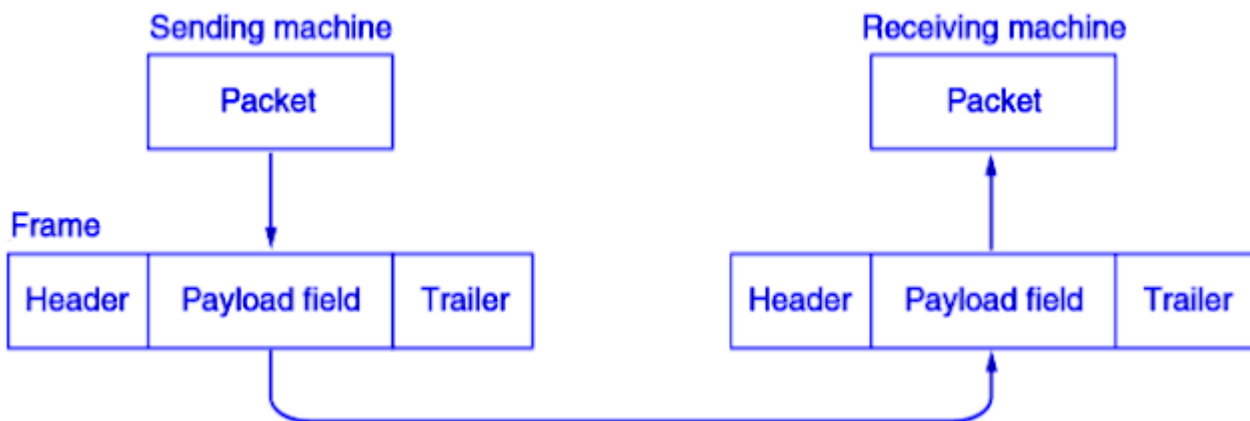
**How data link layer accompanies its functions ?**

From network layer data link layer takes packets. (you can see the image above)

These packets are encapsulated into frames for transmission.

A frame contains (see the image below),

- 1. A frame header
- 2. A payload field for holding the packet
- 3. A frame trailer



Frame management is the heart of data link layers working.



This is the function of data link layer to provide the services to the network layer.



## Data transfer source to destination machine

Data link layer provide the service of data transfer from the network layer on the source machine to the network layer on the destination machine. See in the image above.

The job of the data link layer is to transmit the bits to the destination machine.

Data flow works takes place like, from Source machine network layer to source machine data link layer to source machine physical layer to destination machine physical layer to destination machine data link layer to destination machine network layer.

That means data transfer passes through network layer, data link layer and physical layer.

Related posts:

1. What is computer network
2. Framing
3. Byte count framing method
4. Flag bytes with byte stuffing framing method
5. Flag bits with bit stuffing framing method
6. Physical layer coding violations framing method
7. Error Control in Data link layer
8. Stop and Wait
9. Sliding Window Protocol
10. One bit sliding window protocol
11. A Protocol Using Go-Back-N
12. Selective repeat protocol
13. Net 10
14. Net 9
15. Net 47
16. Net 43
17. OSI vs TCP/IP
18. TCP/IP Reference Model
19. OSI Reference Model
20. Computer Networks Introduction
21. Types of Computer Networks
22. Network Architectures
23. Computer Network Topologies
24. LAN and WAN Protocols
25. Network Address

26. IP Addresses
27. Class Full Addressing
28. Networking Media
29. Networking Devices
30. Structured cabling
31. Types of connectivities in Computer Networks
32. Introduction to Network Operating System(NOS)
33. ARP/RARP
34. Cooperative Caching