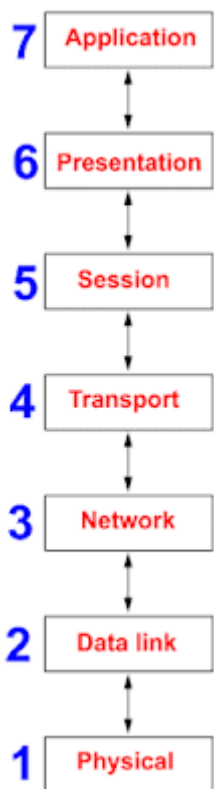


Data link layer is the second layer in OSI model.

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 sending 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.

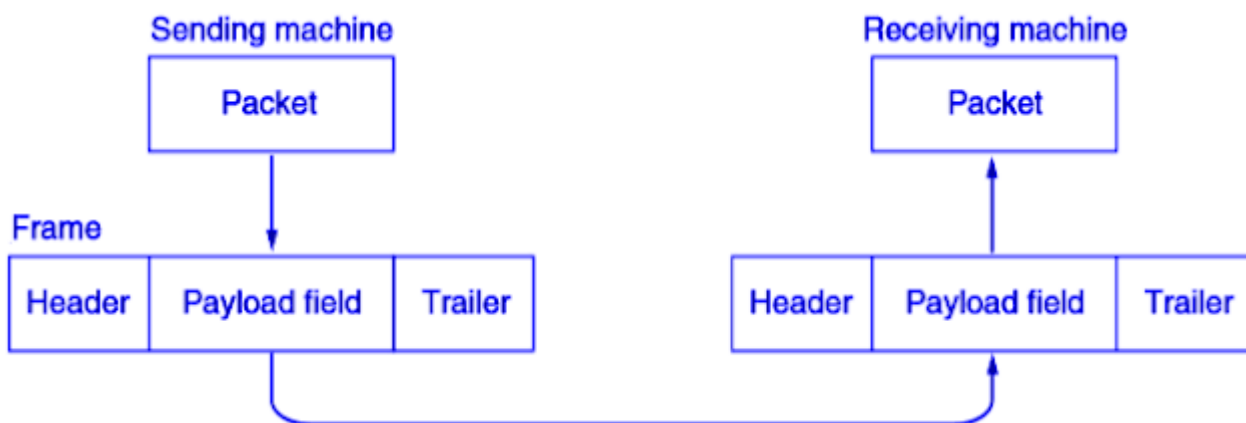
How data link layer accompanies its functions ?

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),

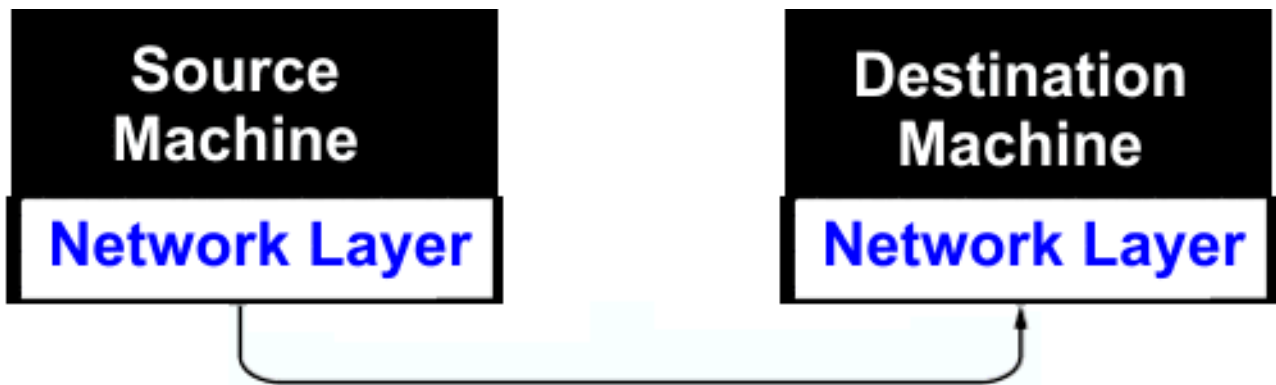
1. A frame header
2. A payload field for holding the packet
3. A frame trailer



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.



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