42. P2P protocol

Point to Point Protocol –

* Lies in the list of Byte oriented protocol in the data link layer.
* PPP is a WAN protocol and which is commonly run over Internet Links.
* It is widely used in broadband communication having heavy loads and high speeds.
* It is used to connect two end nodes directly for transmission of data.

Point to Point Protocol frame format –

8 8 8 16 8 8 bits

Flag Address Control Protocol Payload Checksum Flag

The details of Point to Point Protocol –

Flag – It consists of 1byte i.e. 8 bits data – 01111110

Address – 1 byte which is set to 11111111 in case of broadcast.

Control – 1 byte set to a constant value of 11000000

Protocol – 1 or 2 byte (8 to 6 bits) info which define the type of data is in the Payload.

Payload – The payload carries the data from the Network layer to the Data link layer. The maximum capacity of the payload is 1500bytes. But still the routers/ data carriers negotiate the maximum load a payload can handle each time.

Checksum – Like the Cyclic Redundant Check in the Bit Oriented protocol, the Checksum acts as the error detection in the Point to Point Protocol.

Whenever there is a flag sequence (data bits same as flag or SYNC) in the payload, the bit stuffing or Character Stuffing is used.