Framing (Part 2)

1. Framing in the data link layer separates a frame distinguishable from another frame.
2. Frame = header + network layer PDU + Trailer
3. In packet switched networks, the block of data called frames are exchanged between nodes, not bits streams.
4. When node A wishes to transmit a frame to node B, it tells its adaptor to transmit a frame from the node’s memory.
5. This results in a sequence of bits being sent over the link.
6. The adaptor on node B then collects together the sequence of bits arriving on the link and deposits the corresponding frame in B’s memory.
7. Challenge: What set of bits constitute a frame?
8. Type of framing
   1. Fixed size framing
      1. Here the size of the frame is fixed and co the frame length acts as delimiter of the frame
      2. Consequently it does not require additional boundary bits to identify the start and end of the frame.
   2. Variable size framing
      1. Here the size of each frame to be transmitted may be different.
      2. So additional mechanisms are kept to mark the end of one frame and the beginning of the next frame.
9. Various framing approaches
   1. Bit oriented
   2. Byte Oriented