

00:43

BIT ORIENTED APPROACH

- ★ It simply views the frame as a collection of bits.

Bit Oriented Protocol

HDLC \leftrightarrow High-Level Data Link Control

NESO ACADEMY

01:30

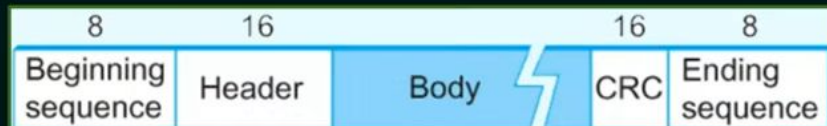
HDLC

- ★ The Synchronous Data Link Control (SDLC) protocol developed by IBM is an example of a bit-oriented protocol.
- ★ SDLC was later standardized by the ISO as the High-Level Data Link Control (HDLC) protocol.
- ★ Bit Oriented Protocol.

NESO ACADEMY

02:00

HDLC – FRAME FORMAT



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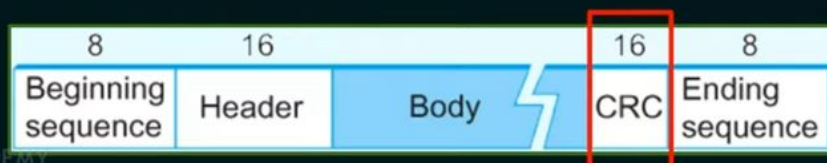
Beginning and Ending Sequences: 01111110

This sequence is also transmitted during any times that the link is idle so that the sender and receiver can keep their clocks synchronized.

Header: Address and Control Field.

Body: Payload (Variable size)

CRC: Cyclic Redundancy check – Error Detection



TYPES OF HDLC FRAMES

The type of frame is determined by the control field.

I-Frame: Information Frame.

S-Frame: Supervisory Frame.

S-Frame, P-Frame, R-Frame

U-Frame: Un-numbered Frame.

I-Frame	1st bit is 0
S-Frame	1st two bits is 10
U-Frame	1st two bits is 11