

Topic 5: Physical Layer

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- Physical layer is the lowest level:
 - Understanding that the physical properties of various transmission mediums define the protocols we use
 - Bit by bit encoding of information into physical signal
- Ethernet (copper) cables:
 - Encoded as pulses of electricity
- Fiber cables:
 - Encoded as pulses of light
- Different physical properties so they may have different protocols
- Cabled connections
 - DLL protocol = 802.3 Ethernet
 - Point to point connections (exactly two devices)
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- Wireless connections
 - DLL protocol = 802.11 WiFi
 - Non-directional
 - * All wireless devices go in every direction
 - * Only matters if the device is within the range
 - * Everyone in the recipient range of the device receives the data
 - Encryption by default
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Class 9

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