



# Length Field in RoE Packets

Kevin Bross

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# Length Field

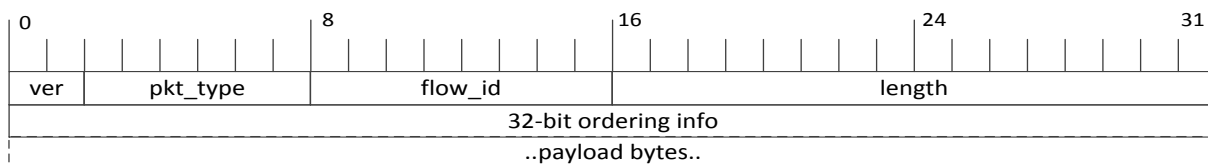
- Presentation purpose:
  - Provide recommendations for including length field in RoE packets

# Need for Length Field

- ❑ Length field in Ethernet header will be used for Ethertype field for RoE packet type designation
- ❑ Although Ethernet NICs can determine the length of packets through low-level encoding features, these length fields are not implicitly available to higher layers or when packets are sent through other transports
- ❑ Best industry practices (i.e., IPv4 and IPv6) are to include length field as part of protocol header

# Suggested Length Location

- ❑ Recommended position is in bits 16-31 of RoE header:



- ❑ Jumbo packets will require 14 bits, so 16-bit allocation for length is not too onerous
  - Upper 2 bits could be repurposed if we wanted...
  - Also allows 32-bit ordering info field to be on one line for simplicity (no visual wrap)
- ❑ Length includes ROE header + payload