Vendor Channel Protocol

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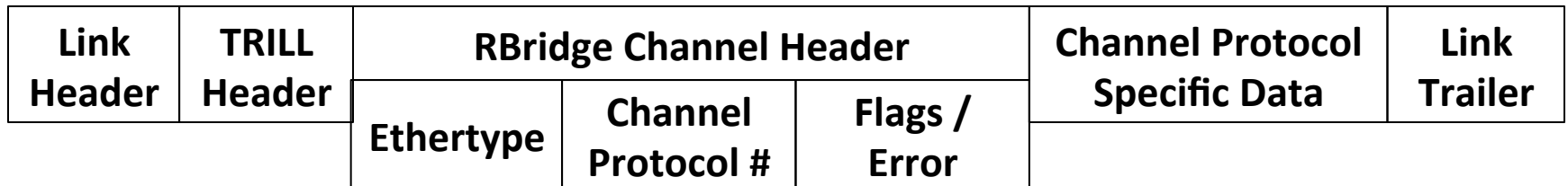
Ayan Banerjee ayabaner@gmail.com
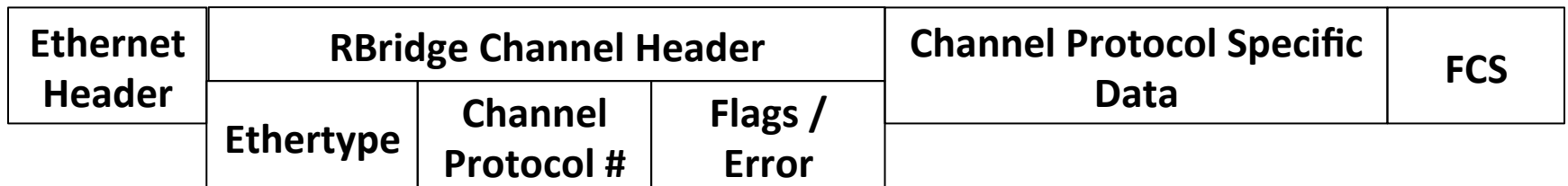
Cisco

TRILL RBridge Channel

- RBridge Channel is a facility for sending typed messages between
  - RBridges in the same campus
  - End stations and RBridges on the same link
- RBridge Channel specified in RFC 7178
- Examples of use
  - TRILL BFD encapsulation: RFC 7175
  - TRILL Pull Directory messages: RFC 8171

TRILL RBridge Channel
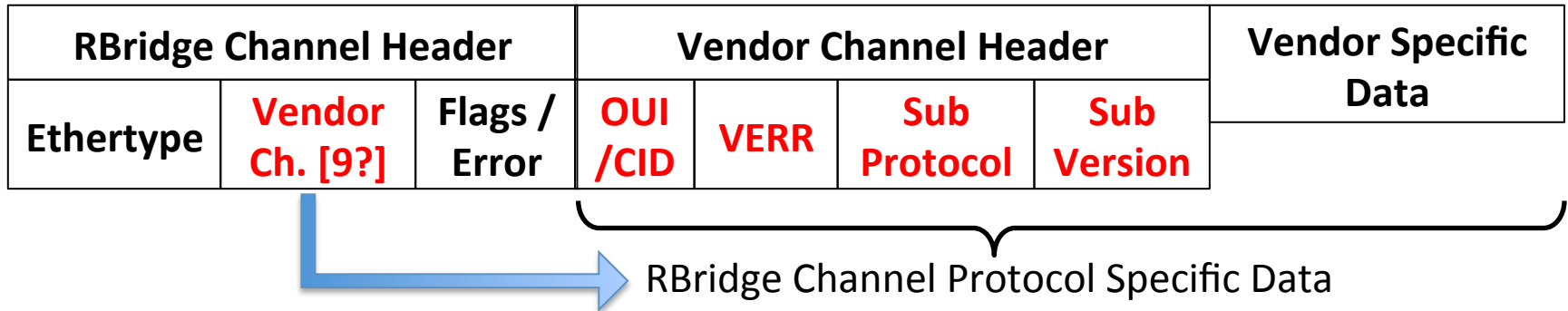
- Between RBridges in the same campus

Link Header	TRILL Header	RBridge Channel Header			Channel Protocol Specific Data	Link Trailer
		Ethertype	Channel Protocol #	Flags / Error		

- Between end stations and RBridges on the same link

Ethernet Header	RBridge Channel Header			Channel Protocol Specific Data	FCS
	Ethertype	Channel Protocol #	Flags / Error		

Vendor Channel Purpose

- Provides a way for RBridge manufactures to send messages between instances of their equipment in a TRILL campus.

- This might be easier if RBridges were required to have IP addresses or MAC addresses but they are not. They have nickname(s).

- RBridge Channel messages address RBridges by
  - nickname, or
  - data label scoped set of RBridges

Vendor Channel Protocol

RBridge Channel Header			Vendor Channel Header				Vendor Specific Data
Ethertype	Vendor Ch. [9?]	Flags / Error	OUI /CID	VERR	Sub Protocol	Sub Version	

RBridge Channel Protocol Specific Data

- The Vendor Channel value in the RBridge Channel Protocol number means the Channel protocol specific data starts with a Vendor Channel Header:
    - Mandatory OUI/CID (IEEE Organizational Unique Identifier or Company Identifier)
    - Optional but recommended fields for vendor error reporting and to indicate a sub-protocol and the version of that sub-protocol

END

TRILL Vendor Channel Protocol