TRILL Fine Grained Labeling

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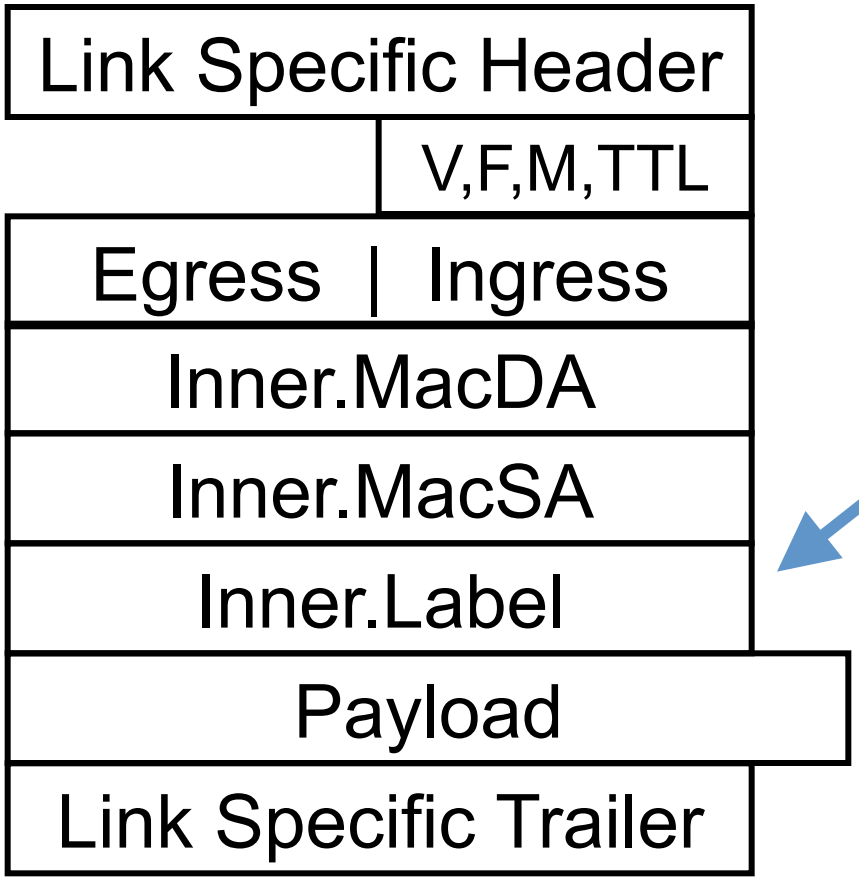
Fine Grained Labeling

- A way to label TRILL data with >4K labels.
- Frames on Ethernet links still have regular VLAN labels with 12-bit VLAN IDs. Appointed Forwarder still in terms of VLAN.
- A detailed presentation was given at the last IETF meeting in Quebec City.
- draft-eastlake-trill-rbridge-fine-labeling-02.txt

Fine Grained Labeling

- Latest news:
  - IEEE Registration Authority has granted EtherType 0x893B for use in TRILL fine-grained labeling.

TRILL Label Format



If Header Flag needed
F = 0 -> Inner.VLAN
F = 1 -> Inner.Label

TRILL Label Format

- Comparison of
  1. C-tag + EX-tag
     - In current draft
  2. EX-tag + C-tag
     - An alternative

TRILL Label Format

1. C-tag + EX-tag
   - Maximum backwards compatibility
   - Handling of legacy RBridges in the same network fully specified in current draft
   - Requires a header flag (or EtherType stripping on input and look-ahead on parsing)

TRILL Label Format

2. EX-tag + C-tag
   - Requires software/firmware upgrade
   - Would need to work out how to isolate legacy RBridges, which might drop new frames, in a campus
   - No header flag required

END

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