Fine Grained Labeling

draft-ietf-trill-fine-labeling-02.txt

Donald E. Eastlake 3rd
Huawei Technologies
d3e3e3@gmail.com
Fine Grained Labeling

• Current protocol data frame:
Fine Grained Labeling

• Multi-tenant applications require substantially more than the $2^{*12} - 2$ isolatable data labels provided by VLANs

• Alternatives for expansion were presented at IETF-84 in Vancouver with a request to contact the authors of the draft.
Fine Grained Labeling

• Consensus among those who contacted the authors:

Priority/DEI in TRILL campus
Ingress priority/DEI, restored on egress
Fine Grained Labeling

• Design is
  – Incompatible with VLAN label only TRILL switches even if they are used only in the transit role. Such switches will discard or mishandle an FGL packet.
    • draft-ietf-trill-fine-labeling-02.txt assumes the intent is for the TRILL campus to be fine grained labeling aware and data isolates any VLAN only TRILL switches.
  – Compatible with much existing hardware.
  – Compatible with the structure of the fine grained label since the initial personal draft July 2011.
Fine Grained Labeling

• One suggested change received in hallway conversation at this IETF meeting:
  – Limit fine grained labels to >4096 to avoid collision with VLAN ID numbers for transition scenarios.

• Such a change seems unnecessary since the fine grained labels in use can be administratively restricted.