Remote MAC Address Flush

draft-hao-trill-address-flush-01.txt

Yizhou Li liyizhou@huawei.com
Weiguo Hao haoweiguo@huawei.com

Huawei Technologies
TRILL Address Learning

• As listed in [RFC6325] Section 4.8.1, R Bridges can learn MAC address to RBridge nickname mappings in 5 ways:
  – Data plane learning on ingress (1) and egress (2)
  – ESADI [RFC7357] (3) (data label constrained link-state flooding)
  – Layer 2 registration protocols (4) (such as Wi-Fi Association)
  – Manual configuration (5)
TRILL Address Forgetting

• Data plane learning on ingress (1) and egress (2)
  – Based on time outs. Can lead to black holes.

• ESADI [RFC7357] (3) (data label constrained link-state flooding)
  – Flood updated information.

• Layer 2 registration protocols (4) (such as Wi-Fi Association)
  – Unregister.

• Manual configuration (5)
  – Change the configuration.
Alternative Discussed

• There was discussion at the last TRILL WG meeting (at the Yokohama IETF meeting) and follow-up discussion on the TRILL mailing list about:
  – Using an RBridge Channel message to flush addresses learned from the data plane.
  – Using ESADI for this purpose.

• I believe the conclusion was to use an RBridge Channel message.
Proposal in the draft

- Specify an RBridge Channel protocol message to flush \{ MAC address, Data Label, RBridge nickname \} tuples that have been learned from the data plan.
- Send by the RBridge where that MAC address is attached because it has better local knowledge.
- Variations:
  - Flush a single entry
  - Flush entries for a Data Label
  - Flush entries for a set of Data Labels: All, Range, Bit Map, or List

November 2015
Next Steps

• Please look at the draft.
• It has been updated from -00 based on discussions.
• Next step should be a call for WG adoption.
Yizhou Li liyizhou@huawei.com
Weiguo Hao haoweiguo@huawei.com
Huawei Technologies