

Centralized Replication for BUM traffic in active-active edge connection

draft-hao-trill-centralized-replication-02

Weiguo Hao Huawei

Yizhou Li Huawei

Tao Han Huawei

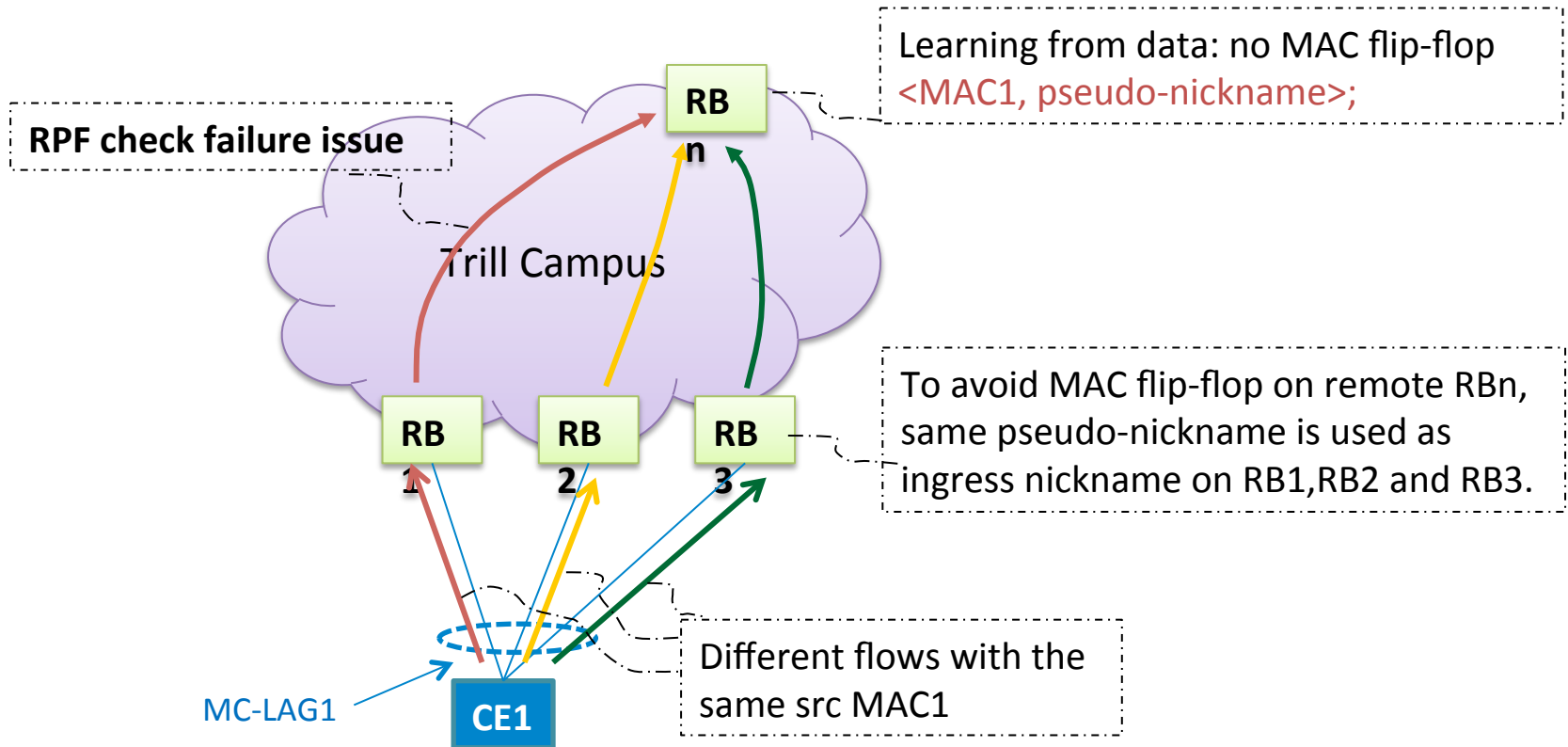
Muhammad Durrani Brocade

Sujay Gupta IP Infusion

Andrew Qu MediaTec

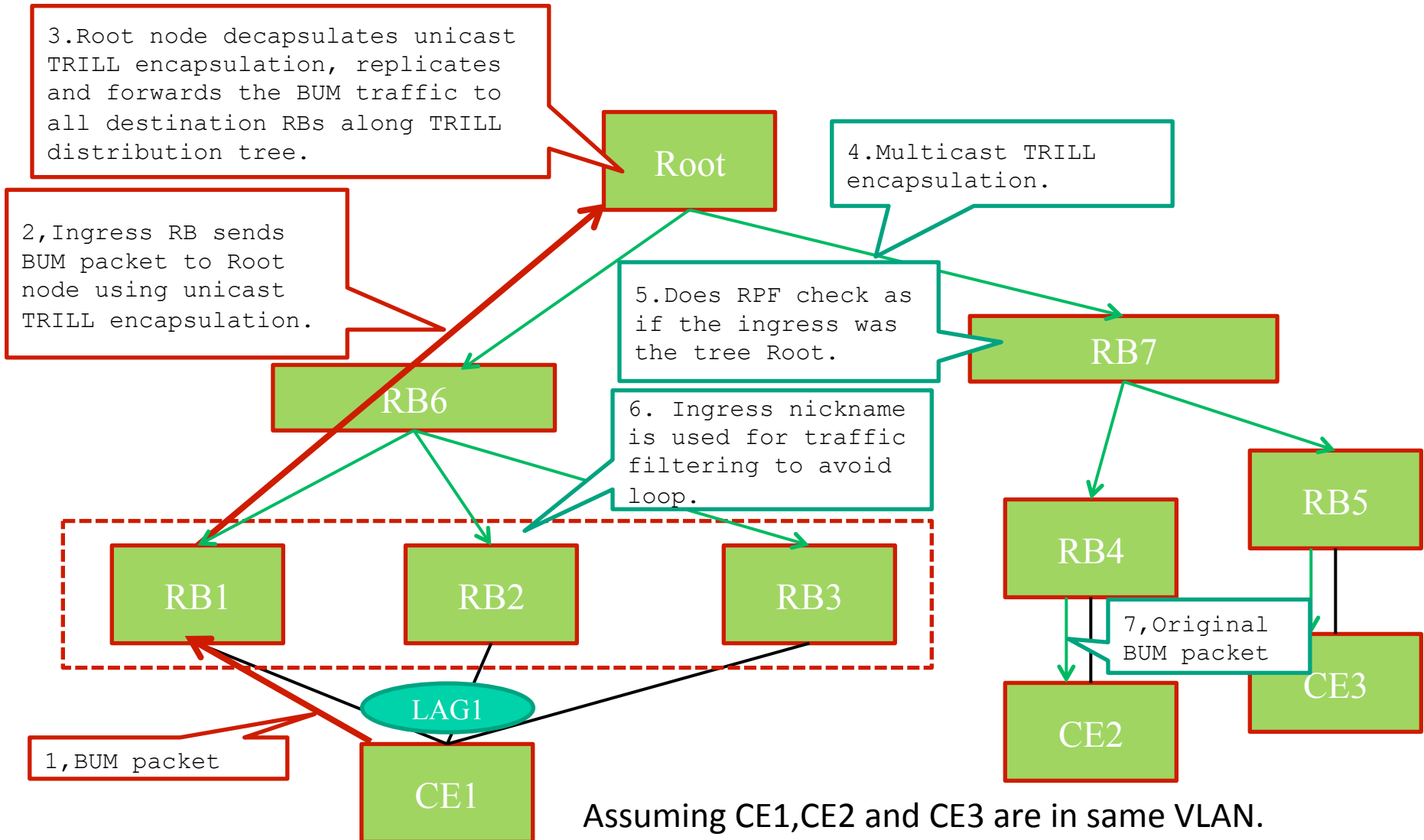
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Motivation



Centralized replication solution can be used to solve RPF check failure issue. Combined with pseudo-nickname, it can provide comprehensive TRILL active-active solution.

Solution Overview



Local forwarding behavior on ingress RBridge(1)

Centralized local forwarding behavior A
(Ingress RB isn't centralized node) :

1. Local replication to the ports associated with the same pseudo-nickname as that associated to the incoming port as per RFC6325.
2. Do not replicate to mc-lag port associated with different pseudo-nickname.
3. Do not replicate to non mc-lag ports.

Local forwarding behavior on ingress RBridge(2)

Centralized local forwarding behavior B
(Ingress RB is centralized node) :

1. Local replication to the ports associated with the same pseudo-nickname as that associated to the incoming port as per RFC6325.
2. Local replication to the mc-lag DF port associated with different pseudo-nickname as per RFC6325.
Do not replicate to mc-lag non-DF port associated with different pseudo-nickname.
3. Local replication to non mc-lag ports.

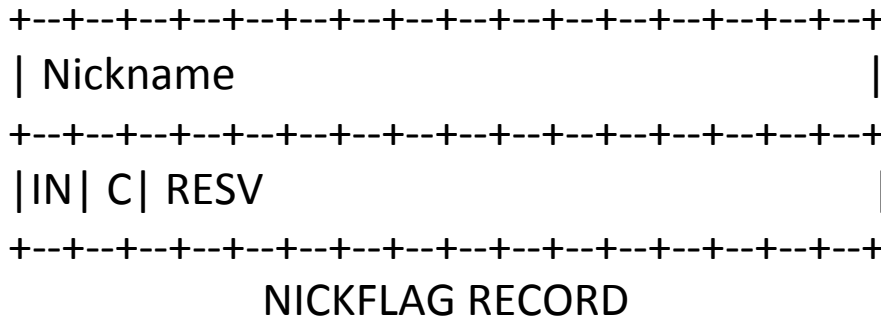
BUM traffic load balancing among multiple centralized nodes

1.VLAN-based load balancing

2.Flow-based load balancing

- Same anycast special use nickname attached to all centralized nodes.
- Anycast nickname used as egress nickname for the unicast TRILL encapsulation BUM traffic from ingress RB. The traffic will arrive at any one of the centralized nodes.

TRILL extension



C: Indicate the Nickname is exclusively used for centralized replication solution purpose. Ingress RBs use the nickname as egress nickname in TRILL header of unicast TRILL encapsulation for BUM traffic.

Next Step

- Seek some comments and feedbacks
- WG adoption?