

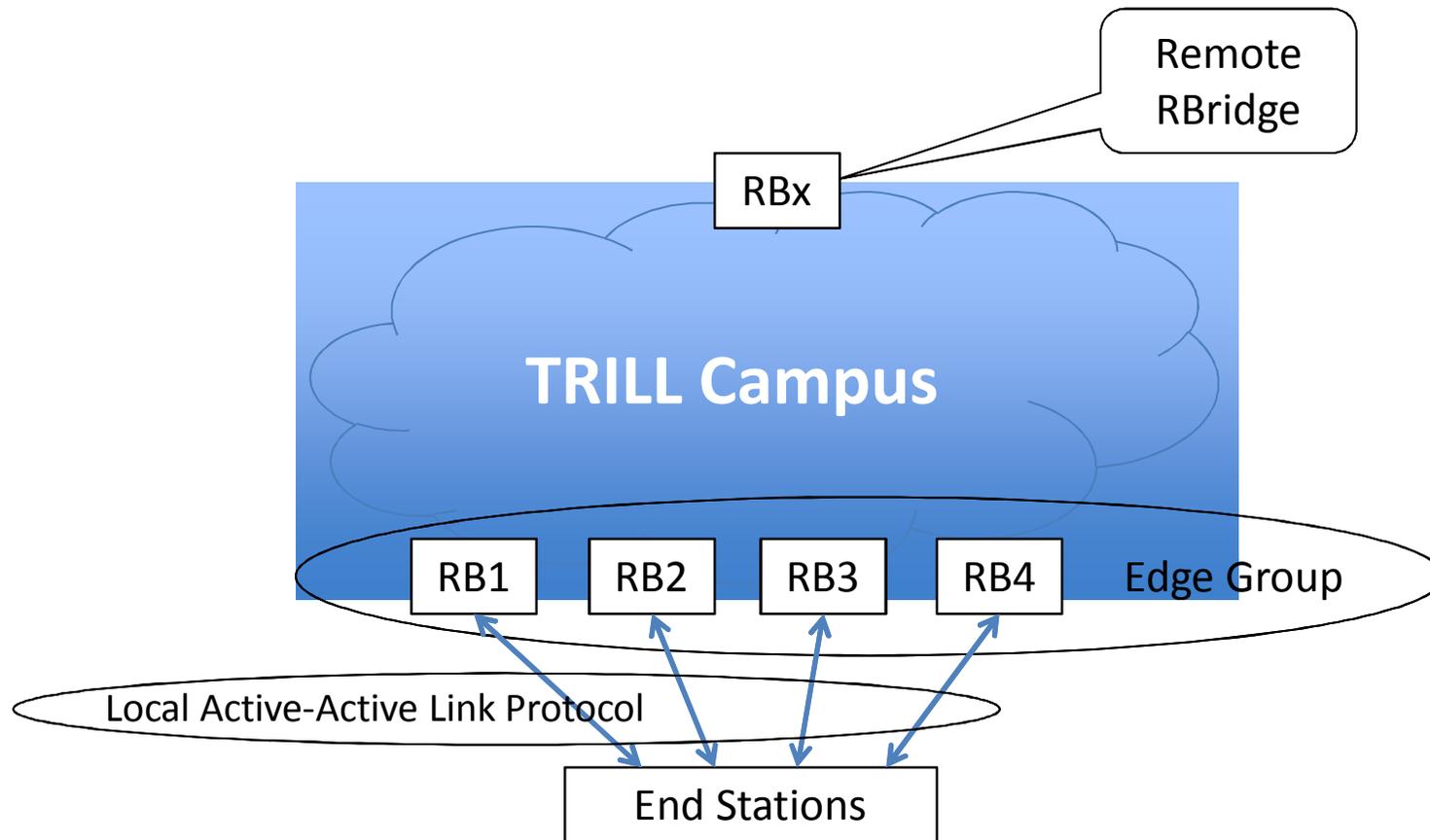
Status and Comparison of Active-Active Drafts

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Active-Active

- “ TRILL provides per-flow load spreading and rapid fail-over between TRILL switches. Active-active extends this to groups of end-stations attached to multiple edge TRILL switches with a local active-active link protocol such as MC-LAG or DRNI.
- “ See RFC 7379: Problem Statement and Goals for Active-Active Connection at the TRILL Edge.

Active-Active



Three Solutions

1. Pseudo nickname: edge group of end-stations is represented by a pseudo nickname. Ingress uses pseudo nickname.
 - . draft-ietf-trill-pseudonode-nickname-02.txt
2. Multi-attach: Ingress uses real nickname of the ingressing edge TRILL switch.
 - . draft-ietf-trill-aa-multi-attach-02.txt
3. Load Splitting: Portions of traffic assigned to different edge TRILL switches. Ingress using the real nickname of the assigned TRILL switch which might not be the ingressing switch.
 - . No draft. Agreement between edge group TRILL switches and fail-over re-allocation of traffic is complex.

Comparison

1. Pseudo nickname:

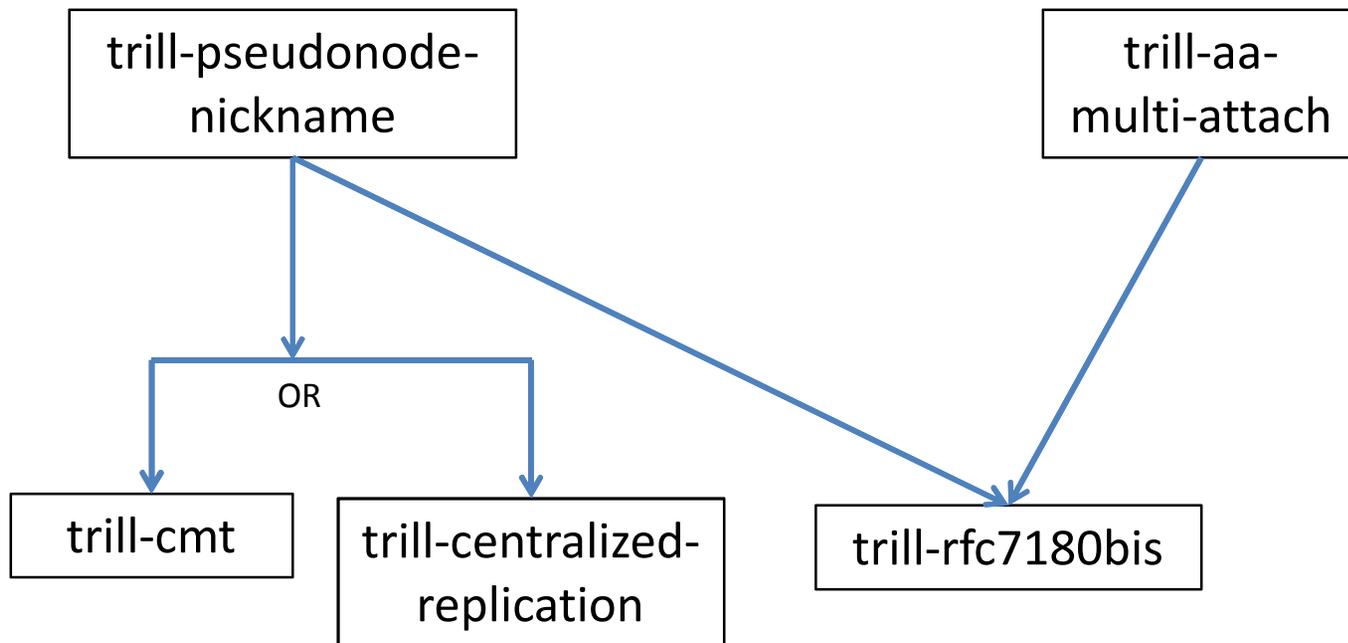
- . Causes RPF check problem which is solved by draft-ietf-trill-cmt or by draft-ietf-trill-centralized-replication.
- . All TRILL switches in the campus must support CMT or all must support centralized replication. Can be done with existing hardware.

2. Multi-attach:

- . Causes address flip-flop problem which is solved by disabling data plane learning and using EASDI [RFC7357] or a directory [RFC7379].
- . Edge TRILL switches interested in a VLAN or FGL in use by an active-active edge group must be using ESADI or a Directory for those data labels (can be done with existing hardware) or support multiple address learning in the data plane (typically requires new hardware).

” Both 1 and 2 can be simultaneously deployed in a campus.

WG Draft Dependencies



Draft Status

- “ trill-pseudonode-nickname
 - . through WG Last Call, awaiting Shepherd review.
- “ trill-aa-multi-attach
 - . through WG Last Call, awaiting edits from Shepherd review, may need 2nd WG LC.
- “ trill-cmt
 - . through WG Last Call, awaiting edits from Shepherd review.
- “ trill-rfc7180bis
 - . WG Last Call requested.
- “ trill-centralized-replication – WG draft.

Questions / Action

“ Questions?