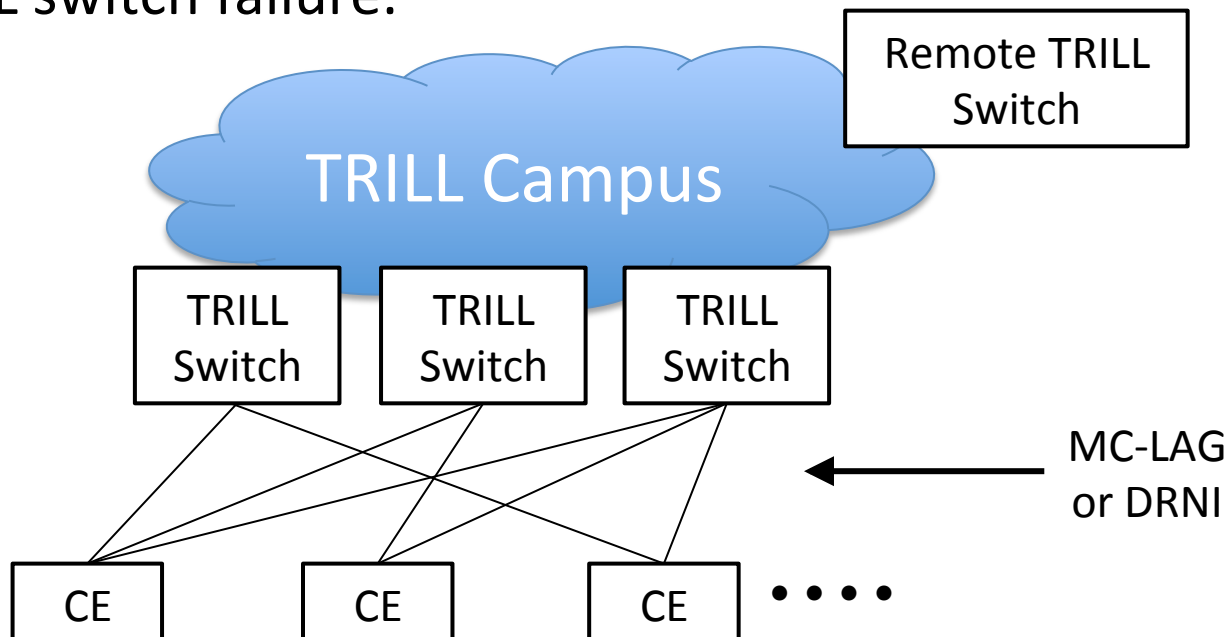# TRILL Active-Active Edge Status

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Active-Active TRILL Edge

- Scenario: one or more CE (real or virtual servers or bridges) multiply connected to the TRILL campus via multiple TRILL switches with all connections active and the need for flow level traffic spreading and rapid fail-over the in case of link or TRILL switch failure.

Active-Active TRILL Edge

- **RFC 7379: Problem Statement and Goals for Active-Active Connection at the TRILL Edge**
- Three alternatives
    1. Use of a pseudo-nickname to represent the group of edge TRILL switches on ingress: trill-pseudonode-nickname
    2. Edge TRILL switches use their own nickname to ingress but divide work by {data label, MAC} and tunnel within edge group when necessary. Coordination too difficult.
    3. Edge TRILL switches use their own nickname to ingress and remote TRILL switches remember multiple attachments: trill-aa-multi-attach
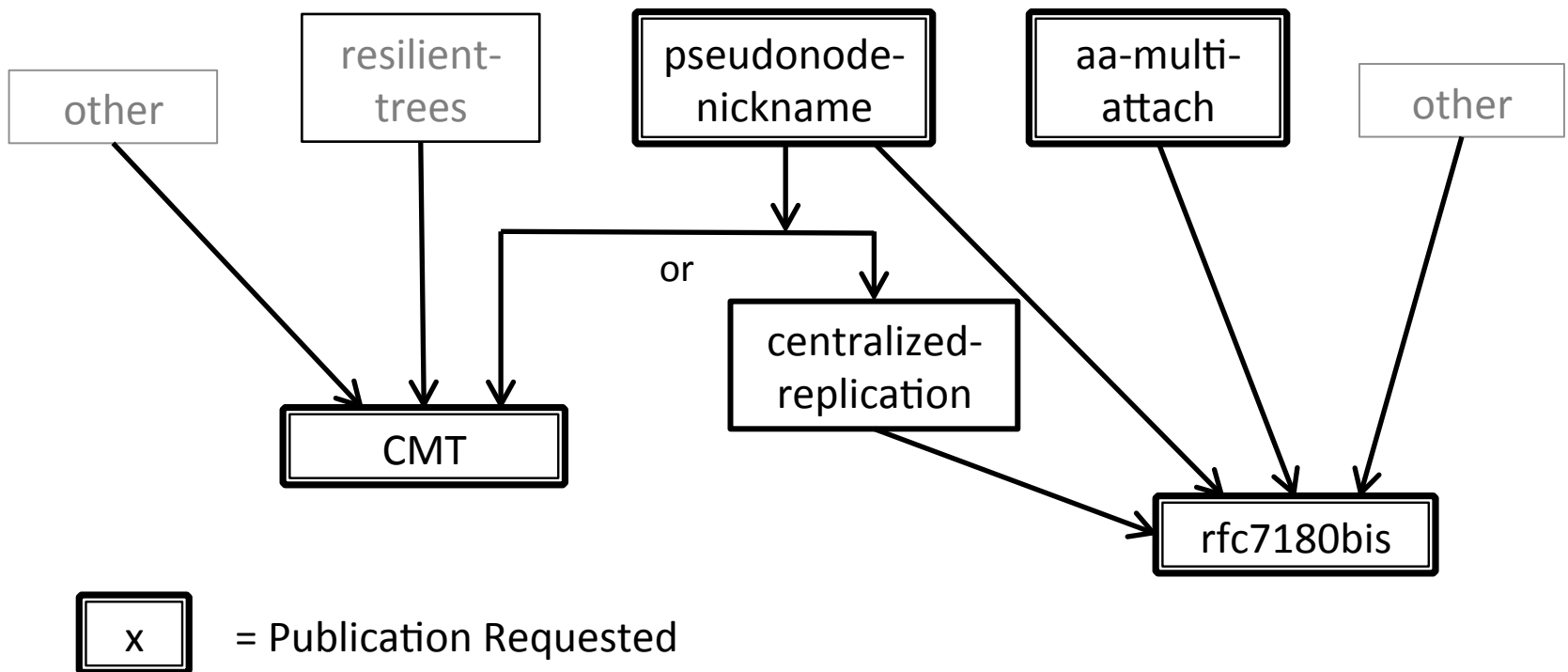
Active-Active TRILL Edge

- Drafts
  - draft-ietf-trill-pseudonode-nickname-04.txt
    - AAE group represented by a pseudo-nickname so members look like they are attached to a pseudo TRILL switch
    - No change at remote TRILL switches if campus supports CMT or Centralized Replication.
  - draft-ietf-trill-cmt-06.txt
    - Solves RPF check problem with pseudo-nickname, has other uses.
  - draft-ietf-trill-aa-multi-attach-03.txt
    - The multiple attachment of AAE group members is visible throughout the TRILL campus
    - No change at remote TRILL switches if they use ESADI (RFC 7357) instead of data plane learning

Active-Active TRILL Edge

- More Drafts
  - draft-ietf-trill-centralized-replication-01.txt
    - Solves RPFC for pseudonode-nickname by supporting unidirectional trees for multi-destination distribution.
  - draft-ietf-trill-rfc7180bis-03.txt
    - Revision of TRILL Clarifications, Corrections, and Updates
    - Requires support for E-L1FS FS-LSPs [RFC 7356].
    - Not specific to Active-Active.

Active-Active TRILL Edge

- Draft dependencies

= Publication Requested

Active-Active TRILL Edge

- Other Recent Presentations:
  - Survey of solutions
    - http://www.ietf.org/proceedings/89/slides/slides-89-trill-3.pdf
  - draft-ietf-trill-pseudonode-nickname
    - http://www.ietf.org/proceedings/90/slides/slides-90-trill-4.pdf
  - draft-ietf-trill-aa-multi-attach
    - http://www.ietf.org/proceedings/90/slides/slides-90-trill-1.pdf
  - draft-ietf-trill-cmt
    - http://www.ietf.org/proceedings/83/slides/slides-83-trill-3.pdf

Active-Active TRILL Edge

- Other Recent Presentations:
  - draft-ietf-trill-centralized-replication
    - http://www.ietf.org/proceedings/91/slides/slides-91-trill-1.pdf
  - draft-ietf-trill-rfc-7180bis
    - http://www.ietf.org/proceedings/91/slides/slides-91-trill-3.pdf

END

TRILL Active-Active