

TRILL ECN Proposal

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ECN

- Explicit Congestion Notification (ECN) provides forward notification that a packet experienced congestion by marking the packet. ECN marking for IP is specified in RFC 3168 “The Addition of Explicit Congestion Notification to IP”.
- ECN is useful in Active Queue Management (AQM).
- Handling ECN for Tunnels is specified in RFC 6040 “Tunneling of Explicit Congestion Notification”.

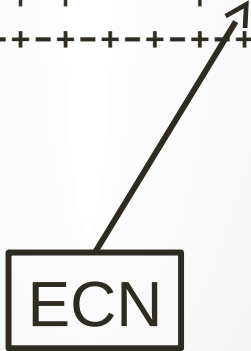
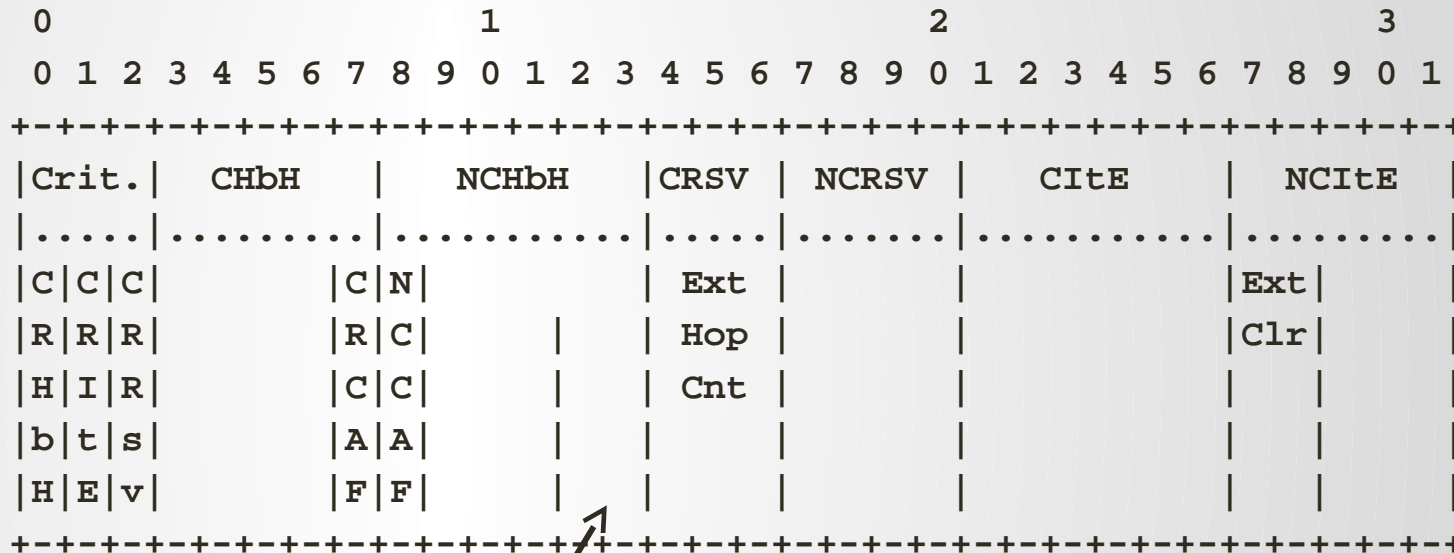
Proposal

- Treat TRILL ingress-to-egress as a tunnel for ECN.
- TRILL ECN marking will be in bits 12 and 13 of the TRILL Header extended flags word. (See Section 10 of draft-ietf-trill-rfc7180bis-07, now in RFC Editor's queue.) These bits have been pre-designated as hop-by-hop, non-critical flags.
- This more or less corresponds to Section 3 of expired draft-ietf-trill-rbridge-options-07.
- At egress, the congestion experienced by the TRILL Data packet is combined with the encapsulated ECN for IP traffic and for any other type of traffic where the egress Rbridge understands the ECN marking

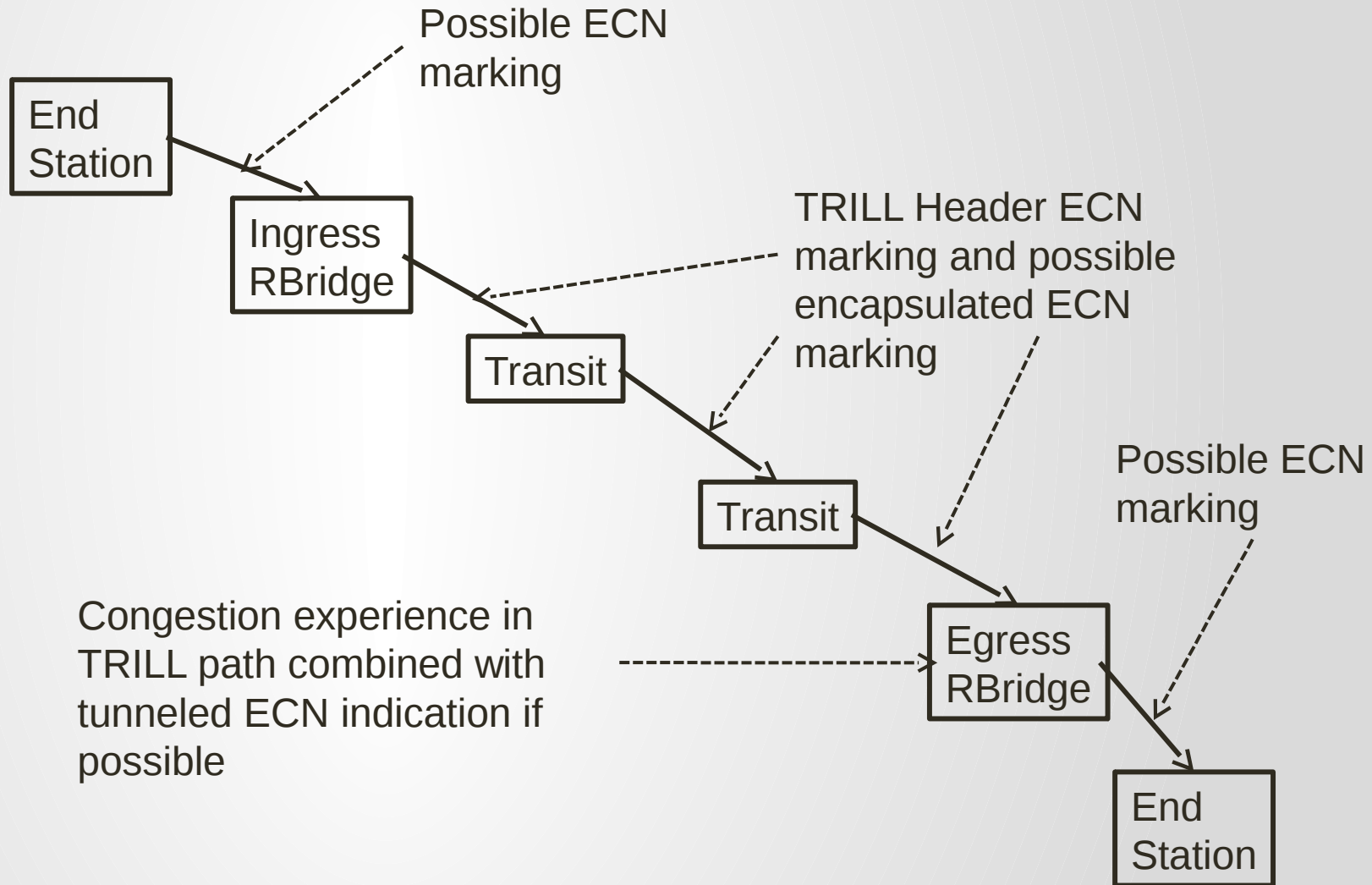
Markings

- ECN markings
 - ECN Ignorant
 - ECN Capable
 - Congestion Experienced

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End

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