TRILL Base Protocol Clarifications and Corrections

Donald E. Eastlake, 3rd (Huawei) d3e3e3@gmail.com
Mingui Zhang (Huawei) zhangmingui@huawei.com
Anoop Ghanwani (Dell) anoop@alumni.duke.edu
Ayan Banerjee (Cisco) ayabaner@cisco.com
Vishwas Manral (HP) vishwas.manral@hp.com

TRILL Clarifications and Corrections

- draft-eastlake-trill-rbridge-clear-correct-01
- Covers an accumulation of clarifications that have come up since the TRILL protocol was approved as a standard in March 2010.
- Mostly updates RFC 6325 but also includes one clarification of RFC 6327.
- Corrects three Errata against RFC 6325.

TRILL Clarifications and Corrections

- draft-eastlake-trill-rbridge-clear-correct-01
- Topics in current draft:
  - Overloaded / Unreachable RBridges
  - Distribution Tree Updates
  - Nickname Selection
  - MTU
  - The CFI / DEI bit
  - When LSP synchronization starts

Overloaded / Unreachable RBridges

- When an RBridge campus partitions, an RBridge determines tree roots and calculates distribution trees only within its partition, regardless of LSPs hanging around from Rbridges now unreachable by LSP flooding.
- Discusses receipt and origination of known unicast and multi-destination frames.
  - Adds an optional feature for Overloaded Rbridge Origination of Multi-destination Frames (OOMF).

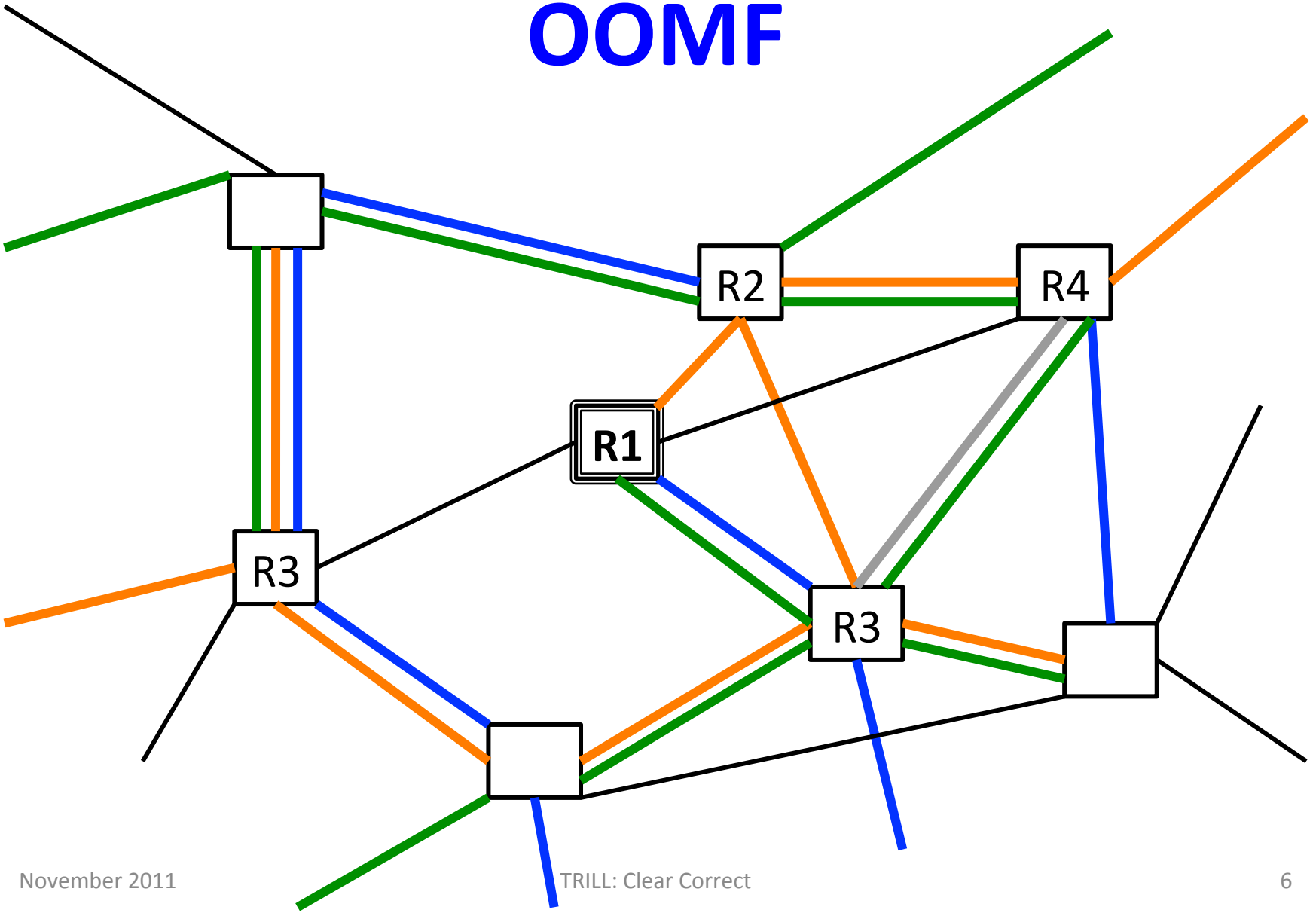
Overloaded RBridges

OOMF

- Overloaded RBridges cannot be trusted to either correctly calculate distribution trees or perform the reserve path forwarding check (RPFC).
- Overloaded Origination of Multi-destination Frames (OOMF) feature:
  - If Rbridge RB1 is in overload but immediate neighbor RB2 is not and
  - RB2 can use a distribution tree on which RB1 is a leaf node from RB2 and
  - RB2 volunteers to offer this service, then
  - RB1 can send the frame to RB2 with a special egress nickname requesting this service.

Overloaded RBridges

OOMF



Distribution Tree Updates

- Recommends that, if nickname N1 ceases to be a tree root and there is enough room in local tables, forwarding and RPFC entries for N1 be retained in case there are frames in flight on that tree.

Nickname Selection

- Fixes Errata in Section 3.7.3 of RFC 6325 related to psuedonodes concerning priorities to hold nicknames.
- Discusses effects of partition on nickname selection.
- Explains effects in the very unlikely case of nickname exhaustion.

MTU

- This section of the draft is intended to provide an exact explanation of what various MTU numbers mean on links of various technologies.

The CFI / DEI Bit

- Update to RFC 6325 to accommodate the IEEE change of the CFI (Canonical Format Indicator) bit in C-VLAN tags to be a DEI (Drop Eligibility Indicator) bit in 802.1Q-2011.

when an RBridge starts to send LSPs on a link.

It is when its state with regard to at least one neighbor out at port is in the two-way or

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