

# TRILL Working Group

TRansparent Interconnection of Lots of Links

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# Agenda

MONDAY, 1300-1500, Room: Vienna/Madrid

Chairs: Erik Nordmark, Donald E. Eastlake 3<sup>rd</sup>

- 4 min. Administrivia (scribes etc), Agenda Bashing, Chairs
- 8 min. Review of New Charter, Existing Milestones, Document Status, Code Point Allocations, Interops, Chairs
- 4 min. Rbridge MIB Update, Anil Rijhsinghani  
draft-ietf-trill-rbridge-mib-02.txt
- 14 min. OAM and BFD Support for TRILL, Vishwas Manral, David Bond, Donald Eastlake 3<sup>rd</sup>, draft-eastlake-trill-rbridge-channel-00.txt, draft-bond-trill-rbridge-oam-01.txt, draft-manral-trill-bfd-encaps-01.txt
- 14 min. Directory Based Encapsulation, Linda Dunbar  
draft-dunbar-trill-server-assisted-edge-00.txt
- 24 min. RBridges: Multilevel TRILL, Radia Perlman  
draft-perlman-trill-rbridge-multilevel-01.txt
- 14 min. VRRP for Rbridges, Hongjun Zhai, Fangwei Hu  
draft-hu-trill-rbridge-vrrp-00.txt
- 14 min. TRILL Header Extensions, Donald Eastlake  
draft-ietf-trill-rbridge-options-04.txt
- 14 min. VLAN Load Balancing, Mingui Zhang  
draft-zhang-trill-vlan-assign-00.txt
- 4 min. Wrap-Up, Chairs

# New Charter Is In Place

- New charter includes:
  - TRILL MIB
  - Broadcast/multicast frame reduction
    - Example: ARP/ND optimization using ESADI
  - TRILL Header Options
  - TRILL OAM
  - Implementation Report
  - Analyze IS-IS security in TRILL
  - Description of adjacency state machine

# New Goals and Milestones

- COMPLETED
  - (Many earlier milestones not listed.)
  - First draft showing what is needed for MIB
  - Initial WG draft on VLAN Mapping
  - Initial WG draft TRILL Header Options
  - Initial WG draft on RBridge MIB module
  - Initial WG draft on trill adjacency state machine

# Goals and Milestones (cont.)

- OVERDUE
  - Feb 2011      Submit TRILL adjacency state machine to IESG for publication as Proposed Standard
  - Feb 2011      Submit RBridge MIB module to IESG for publication as Proposed Standard

# Goals and Milestones (cont.)

- FUTURE

- Mar 2011 Submit TRILL Header Options to IESG for publication as Proposed Standard
- Mar 2011 Initial WG draft on ARP/ND optimizations
- Mar 2011 Initial WG draft on RBridge OAM
- May 2011 Submit TRILL ARP/ND optimizations to IESG for publication as Proposed Standard
- Jun 2011 Submit RBridge support of Data Center Bridging to IESG for publication as Proposed Standard
- Jul 2011 Submit RBridge OAM to IESG for publication as Proposed Standard
- Jul 2012 Re-charter or shut down the WG

# Document Status

## TRILL Working Group, in RFC Editor queue

- TRILL: Problem and Applicability Statement
  - RFC 5556
- RBridges: Base Protocol Specification
  - [draft-ietf-trill-rbridge-protocol-16](#)
  - Approved 15 March 2010

## ISIS Working Group, in RFC Editor queue

- TRILL Use of IS-IS
  - [draft-ietf-isis-trill-05.txt](#)
- IS-IS Extensions for Layer 2 Systems
  - [draft-ietf-isis-layer2-11.txt](#)



# Document Status (cont.)

Some Other TRILL WG Drafts:

- RBridges: Adjacency
  - [draft-ietf-trill-adj-04](#)
- Definitions of Managed Objects for RBridges
  - [draft-ietf-trill-rbridge-mib-02](#)
- RBridges: TRILL Header Options
  - [draft-ietf-trill-rbridge-options-04](#)
  - [draft-eastlake-trill-rbridge-more-options-01](#)

# Document Status (cont.)

## Some Other TRILL WG Drafts (cont.):

- OAM (Operations, Administration, & Management)
  - RBridges: OAM Channel Support in TRILL  
[draft-eastlake-trill-rbridge-channel-00](#)
  - RBridges: Operations, Administration, and Maintenance (OAM) Support  
[draft-bond-trill-rbridge-oam-01](#)
  - Bidirectional Forwarding Detection (BFD) for TRILL  
[draft-manral-trill-bfd-encaps-01](#)

# Document Status (cont.)

## Unposted drafts:

- Currently at
  - [www.pothole.com/~dee3/drafts](http://www.pothole.com/~dee3/drafts)
- Next version of the adjacency draft
  - draft-ietf-trill-adj-05.txt
- A draft on Appointed Forwarders, a topic out of scope for the adjacency draft
  - draft-perlman-trill-af-00.txt
- Possible next steps:
  - Make Appointed Forwarders a WG document
  - Advance adjacency document

# Relevant non-TRILL WG Drafts

- PPP TRILL Protocol Control Protocol
  - [draft-ietf-pppext-trill-protocol-02.txt](#)

# TRILL Base Protocol

## Non-IETF Code Points

- Ethertypes and Multicast Addresses Block have been allocated by the IEEE Registration Authority:
  - Ethertypes
    - TRILL = 0x22F3, L2-IS-IS = 0x22F4
  - Multicast Addresses
    - 01-80-C2-00-00-40 All-RBridges
    - 01-80-C2-00-00-41 All-IS-IS-RBridges
    - 01-80-C2-00-00-42 All-ESADI-RBridges
    - 01-80-C2-00-00-43 to 01-80-C2-00-00-4F Unassigned
- NLPID – Network Layer Protocol ID
  - 0xC0 has been allocated for TRILL.

# Interoperability Testing

- First plug-fest held at the University of New Hampshire Interoperability Laboratory (UNH IOL) at the beginning of August 2010.

— White Paper available at  
[TRILL\\_Deployment\\_Nears.pdf](#)

- Planning underway for a second plug-fest in 2011. Contact UNH IOL for further information.  
[TRILL\\_plugfest.php](#)