# TRILL Working Group

#### TRansparent Interconnection of Lots of Links

Mailing list: <a href="mailto:rbridge@postel.org">rbridge@postel.org</a>

Tools site: <a href="http://tools.ietf.org/wg/trill/">http://tools.ietf.org/wg/trill/</a> Website: <a href="http://www.postel.org/rbridge">http://www.postel.org/rbridge</a>

Co-Chairs:

Erik Nordmark

Donald E. Eastlake, 3rd

erik.nordmark@cisco.com

d3e3e3@gmail.com

Area Director: Ralph Droms

#### **Note Well!**

- Any submission to the IETF intended by the Contributor for publication as all or part of an IETF Internet-Draft or RFC and any statement made within the context of an IETF activity is considered an "IETF Contribution". Such statements include oral statements in IETF sessions, as well as written and electronic communications made at any time or place, which are addressed to:
  - The IETF plenary session
    The IESG, or any member thereof on behalf of the IESG
  - Any IETF mailing list, including the IETF list itself, any working group or design team list, or any other list functioning under IETF auspices
     Any IETF working group or portion thereof
  - The IAB or any member thereof on behalf of the IAB
  - The RFC Editor or the Internet-Drafts function
- All IETF Contributions are subject to the rules of All IETF Contributions are subject to the rules of RFC 5378 and RFC 3979 (updated by RFC 4879).
- Statements made outside of an IETF session, mailing list or other function, that are clearly not intended to be input to an IETF activity, group or function, are not IETF Contributions in the context of this notice.
- Please consult RFC 5378 and RFC 3979 for details.
- A participant in any IETF activity is deemed to accept all IETF rules of process, as documented in Best Current Practices RFCs and IESG Statements.
- A participant in any IETF activity acknowledges that written, audio and video records of meetings may be made and may be available to the public.

# **Agenda**

#### **Grand Hyatt Hotel, Taipei, Taiwan**

Session 1, Tuesday 1300-1500, Room 102 Session 2, Wednesday1510-1610, Room 101B

- Introduction, Chairs
- TRILL Edge Section
- TRILL Link Technology Section
- TRILL Protocol Section
- TRILL OAM Section
- Wrap-Up, Chairs

# Agenda 1/3

- Introduction, Chairs
  - 5 min. Administrativia (scribes etc), Agenda Bashing, Chairs
  - 7 min. Review of Milestones, Doc Status, IPR, Code Point Alloc, Chairs
- TRILL Edge Section
  - 17 min. Pseudonode Nickname, Hongjun Zhai, Radia Perlman draft-hu-trill-pseudonode-nickname-00.txt
  - 17 min. Rbridge Aggregation / VLAN Assignment, Mingui Zhang draft-zhang-trill-aggregation-01.txt draft-zhang-trill-vlan-assignment-02.txt
  - 15 min. Multi-homing Connectivity to TRILL Network,
    Janardhanan Pathangi Narasimhan
  - 12 min. Directory Assisted TRILL Edge/Encapsulation, Linda Dunbar draft-dunbar-trill-directory-assisted-edge-03.txt draft-dunbar-trill-directory-assisted-encap-01.txt

# Agenda 2/3

- TRILL Link Technology Section
  - (Ethernet Links: RFC 6325)
  - (PPP Links: RFC 6361)
  - 9 min. TRILL over MPLS PSN, Lucy Yong, Donald Eastlake draft-yong-trill-trill-o-mpls-00.txt
  - 13 min. TRILL over IP, Margaret Wasserman, Dacheng Zhang draft-mrw-trill-over-ip-00.txt
- TRILL Protocol Section
  - 12 min. Clarifications and Corrections / RFC6326bis, Donald Eastlake draft-eastlake-trill-rbridge-clear-correct-01.txt draft-eastlake-isis-rfc6326bis-01.txt
  - 12 min. MTU Negotiation, Mingui Zhang draft-zhang-trill-mtu-negotiation-01.txt
  - 7 min. TRILL Header Extension, Donald Eastlake draft-ietf-trill-rbridge-extension-00.txt

# Agenda 3/3

- TRILL OAM Section
  - 12 min. ICMP based OAM Solution for TRILL, Tissa Senevirathne draft-tissa-trill-oam-00.txt
  - 12 min. OAM Tool for Multi-Destination Path, Yizhou Li draft-yizhou-trill-multi-destinaiton-ping-01.txt
- Wrap-Up, Chairs
  - 5 min. Wrap-Up, Chairs

### **New Goals and Milestones**

#### COMPLETED

- (Many earlier milestones not listed.)
- Initial WG draft on VLAN Mapping
- Initial WG draft TRILL Header Options
- Submit TRILL adjacency state machine to IESG for publication as Proposed Standard
- Submit RBridge MIB module to IESG for publication as Proposed Standard
- Initial WG draft on RBridge OAM

### Goals and Milestones (cont.)

#### OVERDUE

- Mar 2011 Submit TRILL Header Options to IESG for publication as Proposed Standard
- Mar 2011 Initial WG draft on ARP/ND opt.
- May 2011 Submit TRILL ARP/ND optimizations to IESG for publication as Proposed Standard
- Jun 2011 Submit RBridge support of DCB to IESG for publication as Proposed Standard
  - draft-eastlake-trill-rbridge-dcb-02.txt
- Jul 2011 Submit RBridge OAM to IESG for publication as Proposed Standard

### Goals and Milestones (cont.)

- FUTURE
  - Jul 2012 Re-charter or shut down the WG

### **Document Status**

#### **RFCs**

- RFC 5556, "TRILL: Problem and Applicability Statement"
- RFC 6165, "Extensions to IS-IS for Layer-2 Systems"
- RFC 6325, "RBridges: Base Protocol Specification"
- RFC 6326, "TRILL Use of IS-IS"
- RFC 6327, "RBridges: Adjacency"
- RFC 6328, "IANA Considerations for NLPIDs"
- RFC 6361, "PPP TRILL Protocol Control Protocol"

### **Document Status**

#### In RFC Editor's Queue

RBridges: Appointed Forwarders

#### In IETF Last Call

Definitions of Managed Objects for RBridges

#### Other OAM Drafts

- The following drafts depend on RBridge channel:
  - draft-ietf-trill-rbridge-bfd-01.txt, Vishwas Manral
  - draft-ietf-trill-rbridge-oam-01.txt, David Bond
- Please read the drafts (and not just the two above)!

### **Open Source Implementations**

Oracle: TRILL for Solaris



Defining Futures

- http://hub.opensolaris.org/bin/view/Project+rbridges/WebHome
- Port to Linux (in process):
   National University of Sciences and Technology (NUST), Islamabad,
   Pakistan
  - http://www.wisnet.seecs.nust.edu.pk/people/~khayam/index.php

# 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/All-Egress-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.