802.3az Task Force Layer 2 Ad-Hoc Report

29th April 2009, Quebec City, Quebec, Canada

Wael William Diab Chair, IEEE 802.3az Layer 2 Ad-Hoc wdiab@broadcom.com

Ad-Hoc Participants – Thank You!

Name Mike Bennett Wael William Diab Bryan Dietz John Fuller Eric Mann Anoop Vetteth Affiliation LBNL Broadcom Alcatel-Lucent LBNL Intel Cisco

Agenda

- Report on April ad-hoc meeting
 - Meeting agenda
 - Outcome of draft review
 - Contributions
 - Straw polls
 - Consensus recommendations
 - Big ticket items
- Motions to adopt ad-hoc recommendations
- Future work discussion

April Ad-Hoc Meeting

- Met 1 time on 16th of April at 11.30AM PST for 1.5 hours
- Agenda of meeting
 - Review the patent policy
 - Review changed / new portions of the L2 related sections in D1.3
 - Discussion on L2 / management section support for LLDP and alignment with P802.3bc
 - Consider and review any new proposals or submissions
 - Make a list of big ticket items for L2 / LLDP
 - Discuss next meeting / steps of the Ad Hoc

Outcome of Draft Review

- Spent about 50% of the ad-hoc time walking through the draft section by section
- No BIG errors
- Minor errors descried in consensus section

Consensus Recommendations

- Section 78.4.3
 - Replace "An EEE link partner shall send an LLDPDU containing an EEE TLV within 10 seconds of the Link Layer capability exchange being enabled as indicated by the variable dll_enabled."
 - with "An EEE link partner shall send an LLDPDU containing an EEE TLV within 10 seconds of the Link Layer capability exchange being enabled when both the variables dll_enabled and dll_ready are asserted."
- State Machine
 - The state diagram transition condition between TX UPDATE and SYSTEM REALLOCATION contains an "OR" that should be an "AND".
 - Replace the use of the term CHANGED with a temporary variables for both TX and RX machines same as 802.3at
 - CAPS on NEW_RX_VALUE

Contributions

- Discussed proposal for fallback states
 - Unanimous consensus on developing the idea
 - Request that detail editorial changes be presented to the TF
 - See diab_vetteth_01_0409.pdf
- Discussed proposal for triggering L2 SM after the EEE capability discovery
 - Request to minimize changes to the auto-negotiation
- Consensus recommendation was to entertain detailed proposals above for review and recommendation to the Task Force

Proposal to Trigger Layer 2

- Goal is to not touch the auto-negotiation machines
 - Detail of proposal was not reviewed in ad-hoc
- Proposal
 - Create a Clause 30 attribute that
 - Is 0 by default
 - Is 1 when
 - Indicates whether Auto-Negotiation signaling has completed AND
 - If you have received a EEE Technology Message Code with any of the bits set to a 1

Straw Polls

- Would like to see a proposal for EEE Fallback States
 - Y: All present*
 - N: 0
- * Note: Request to submit a detailed proposal with editorial changes to minimize any schedule impact

L2 and LLDP Work Plan

- Need to realign draft with 802.3bc
- Consensus was to do going into WG preview but after 802.3bc is stable
- L2 ad-hoc willing to work with editorial team on review to align with 802.3bc and latest 802.3at. Areas include
 - Changing nomenclature to match .3bc
 - Changing TLV section to be edits to C79
 - Adding attributes, packages and object classes to C30

Big Ticket Items for Layer 2

- L2 and LLDP edits to align with 802.3bc
- Complete open proposals
 - Triggering L2 from auto-negotiation capability exchange
 - Fallback states
- Complete the management section

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Motion

- Move
 - IEEE P802.3az Task Force adopt the consensus recommendations and proposal to trigger the Layer 2 as captured in ad-hoc report, diab_01_0409.pdf pages 6, 7 and 8. Editorial team to incorporate changes into D1.4.
 - M: W. Diab
 - S: A. Vetteth
 - All Y:12 N:0 A:2
 - Tech (75%)
 - Motion Passes 4.09PM April 29th 2009

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Future Work of the Ad-Hoc

 Suggest another meeting to allow for additional review