IEEE 802.3 Working Group July 2008 Plenary Week

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Current IEEE 802.3 activities

- IEEE P802.3ar, Congestion Management
- IEEE P802.3at, DTE Power Enhancements
- IEEE P802.3av, 10 Gb/s EPON
- IEEE P802.3az, Energy Efficient Ethernet
- IEEE P802.3ba, 100 Gb/s and 40 Gb/s Ethernet
- IEEE P802.1AX (IEEE 802.3ax), Link Aggregation
- IEEE P802.3 (IEEE 802.3ay), IEEE Std 802.3 revision

IEEE P802.3ar Congestion Management

- Proposed modified project documents failed to gain consensus support in July 2006
- Project is basically in stalemate induced inactivity
  - July 2007 motion to withdraw the project failed
  - On the Dec 2008 administrative withdrawal list
    - Consensus at IEEE P802.3ar Task Force meeting in March was to leave on administrative withdrawal list
    - No action by Working Group to do otherwise
- Meeting plan
  - No meeting planned
    - No reason to revisit the current stalemate

IEEE P802.3at DTE Power Enhancements

- Increase the amount of power delivered over twisted pair copper from that specified by IEEE Std 802.3af-2003 (Clause 33 of IEEE Std 802.3)
  - At least 24 watts at powered device
    - Change from 30 Watts approved at March 2008 meeting
  - Maintain compatibility with IEEE Std 802.3 Clause 33

- Meeting plan
  - Resolve comments on initial Working Group ballot draft IEEE P802.3at/D3.0
  - Technical presentations on new features

IEEE P802.3av 10 Gb/s EPON

- Define higher speed Ethernet passive optical network operation
  - 10 Gb/s downstream/1 Gb/s upstream, single SM fiber
  - 10 Gb/s downstream/10 Gb/s upstream, single SM fiber
  - Up to 3 power budgets that support 1:16 and 1:32 split ratios at distances of at least 10 and at least 20 km
- Meeting plan
  - Technical presentations
  - Draft IEEE P802.3av/D1.8023, submitted to Working Group for approval of Working Group ballot

IEEE P802.3az Energy Efficient Ethernet

- Transition to and from low-power use state in response to network demand
  - PHY energy efficiency enhancements for selected PHY types (popular twisted pair and backplane)
  - Maximize transparency to higher layers
- Meeting plan
  - Review initial editors draft of adopted baseline proposals
  - Continue to consider and refine baseline proposals that meet the scope and purpose of the PAR

IEEE P802.3ba 100 Gb/s & 40 Gb/s Ethernet

- Define operation at 100 Gb/s & 40 Gb/s over adopted objectives for link media / distance
  - 40 Gb/s, at least: 1 m backplane, 10 m copper cable, 100 m OM3 multimode fiber, 10 km single mode fiber
    - 10 km single mode fiber objective addition in March
      - Related 5 criteria update
  - 100 Gb/s, at least: 10 m copper cable, 100 m OM3 multimode fiber, 10 km single mode fiber, 40 km single mode fiber

- Meeting plan
  - Continue to consider and refine baseline proposals that meet the scope and purpose of the PAR

IEEE 802.3/802.1 joint meeting

- Discussion of areas of interaction
  - IEEE 802.1 Audio-Visual Bridging
  - IEEE P802.3az Energy-efficient Ethernet
  - IEEE 802.3 use of IEEE Std 802.1AB LLDP
    - IEEE P802.3at use of LLDP
    - IEEE P802.3az use of LLDP
    - Long term location for IEEE 802.3 related TLVs
- Meeting plan
  - Meet Wednesday morning 8AM to 10AM

IEEE 802.3 Officers

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IEEE P802.3az Energy Efficient Ethernet: Mike Bennett (mjbennett@lbl.gov)

IEEE P802.3ba 100 Gb/s and 40 Gb/s Ethernet: John D'Ambrosia (jdambrosia@ieee.org)

Preliminary Meeting Plan

	Mon	Tue	Wed	Thu
AM	LMSC Plenary	IEEE P802.3at IEEE P802.3av IEEE P802.3az IEEE P802.3ba	IEEE 802.1/3 IEEE P802.3at IEEE P802.3av IEEE P802.3az IEEE P802.3ba Maintenance	IEEE P802.3at IEEE P802.3av IEEE P802.3az IEEE P802.3ba
PM	IEEE 802.3 Opening Plenary	IEEE P802.3at IEEE P802.3av IEEE P802.3az IEEE P802.3ba	IEEE P802.3at IEEE P802.3av IEEE P802.3az IEEE P802.3ba	IEEE 802.3 Closing Plenary

Published Standards

- IEEE Std 802.3^{TM}-2005 *
  - IEEE Std 802.3/Cor 1-2006 *
  - IEEE Std 802.3/Cor 2-2007 *
  - IEEE Std 802.3an^{TM}-2006 *
  - IEEE Std 802.3aq^{TM}-2006 *
  - IEEE Std 802.3as^{TM}-2006 *
  - IEEE Std 802.3ap^{TM}-2007 *

* Available through Get IEEE 802
  http://standards.ieee.org/getieee802/802.3.html

Current project drafts

- IEEE P802.3ar/D1.3 - Congestion Management
  - No active work at this time
- IEEE P802.1AX/D2.1 - Link Aggregation
  - Part of IEEE Std 802.3 revision, extracted from IEEE Std 802.3-2005
  - Sponsor balloting complete but co-contingent on IEEE P802.3
- IEEE P802.3/D2.3 - Revision of IEEE Std 802.3
  - Part of IEEE Std 802.3 revision. Merges 802.3an, 802.3ap, 802.3aq, 802.3as, Cor1, Cor2 and Maint #8 into IEEE Std 802.3-2005
  - 3rd Sponsor recirculation ballot closed prior to meeting
- IEEE P802.3at/D3.0 - DTE Power Enhancements
  - Initial Work Group ballot comment resolution
- IEEE P802.3av/D1.8023 – 10Gb/s EPON
  - In WG preview for WG ballot approval
- IEEE P802.3az/D0.1 – Energy-efficient Ethernet
  - Initial editors draft of adopted baseline proposals