Energy Efficient Ethernet Call-For-Interest Summary and Motion

IEEE 802.3 Working Group

Dallas, TX

November 16, 2006

Presentations for the CFI

- *Network Energy Use*, Bruce Nordman, Lawrence Berkeley National Lab

- *Reducing Ethernet Energy Use*, Hugh Barrass, Cisco

- *The Feasibility of Energy Efficient Ethernet*, Howard Frazier, Broadcom

- *Why Energy Efficiency Now?*, Mike Bennett, Lawrence Berkeley National Lab

CFI Presentation Supporters

David Law	3Com
Brad Booth	AMCC
Bill Woodruff	Aquantia
Scott Powell	Broadcom
Wael Diab	Broadcom
Li Tienan	China Standard Certification Center
Claudio DeSanti	Cisco
Fred Schindler	Cisco
Andrew Fanara	EPA
Paolo Bertoldi	European Commission DG JRC
Joel Goergen	Force10 Networks
John D'Ambrosia	Force10 Networks
Steve Carlson	HSP Design
Petar Pepeljugoski	IBM Research
*Jeffrey Lynch	IBM
Ilango Ganga	Intel
David Chalupsky	Intel
Mike McConnell	KeyEye Communications
Ted Sopher	Lawrence Berkeley National Lab
Gopi Sirineni	Marvell
Alan Flatman	LAN Technologies
Geoff Thompson	Nortel Networks
Joseph Babanezhad	Plato Networks
Geoff Garner	Samsung
Eric Ryu	Samsung
George Zimmerman	Solarflare
Shimon Muller	Sun
*Glen Kramer	Teknovus
Mark Bowman	Tennessee Valley Authority
Rahul Chopra	Teranetics
Sanjay Kasturia	Teranetics
Bob Noseworthy	UNHIOL
Adam Bechtel	Yahoo!

* Requested to be added as supporters at the CFI

Summary

- **Attendance:**

  - **73 people**

  - **37 802.3 voters**

- **Why form a study group now?**

  - **Energy use is a growing issue**

    - **End users want to lower operating costs**

      - **Estimated nearly $500M per year savings if 100% adoption of EEE**

  - **Energy industry is offering incentives for energy efficient products**

    - **U.S. Congress passed H.R. 5646 directing EPA to "study and promote" energy efficient servers**

    - **Energy Star requirements coming in 2009 for "standards that provide for quick transitions among link rates"**

Study group focus

- ## The goal is to:

    – *Reduce power during low link-utilization*

    – *Remain compatible with existing cabling infrastructure*

- ## Issues for study include:

    – **How to minimize transition time?**

    – **How to avoid thrashing between speeds?**

    – **Interaction with higher-layer protocols**

    – **Link utilization on servers**

    – **Interaction with control policy**

Call-For-Interest

- **Should a Study Group be formed for "Energy Efficient Ethernet"?**

   Y: 65   N: 2   A: 6

Straw Polls - Participation

- **I would participate in the "Energy Efficient Ethernet" Study Group in IEEE 802.3.**

    Tally: 26

- **My company would support participation in the "Energy Efficient Ethernet" Study Group in IEEE 802.3**

    Tally:19

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Motion

- **Move that the IEEE 802.3 working group request formation of an *Energy Efficient Ethernet* IEEE 802.3 study group to evaluate methods to reduce energy use by reduction of link speed during periods of low link utilization**

M: Mike Bennett

S: John D'Ambrosia

>50%

802.3 voters: Y: N: A:

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