

# 802.1 EC motions and supporting material – November 2007

# MOTION

- 802.1 resolves to approve the following response to the outstanding 802.1AB interpretation request and to request EC approval to forward it to the IEEE as an approved response:

"The requester is correct in his assertion that bit 0 of the ifMauAutoNegCapAdvertisedBits data type would properly be encoded in bit 8 (the most significant bit) of the first octet of the LLDP PMD auto-negotiation advertised capability field, and that bits 0 through 7 of the bitstring are encoded in bits 8 through 1 of the capability field, respectively, with bits 8 through 15 of the bitstring being encoded in bits 8 through 1 of the second octet of the field.

The above describes the bit and octet ordering in the LLDPDU that is passed across the MAC service boundary between LLDP and the underlying MAC service. Naturally, the representation of the data in this field in the MAC data frames, and the subsequent physical encoding, will follow whatever rules apply to the MAC/PHY technology that supports the operation of the protocol."

- Proposed: congdon Seconded: finn
- For 22 Against 0 Abstain 25
- EC proposed: Jeffree second: Grow

- Please read the following and respond with whether this is a true assessment of the standard or is this incorrect. Thank you.

IEEE Std 802.1AB-2005

G.2.2 PMD auto-negotiation advertised capability field the PMD auto-negotiation advertised capability field shall contain an integer value as defined by the ifMauAutoNegCapAdvertisedBits object in IETF RFC 3636

RFC 3636 says:

ifMauAutoNegCapAdvertisedBits OBJECT-TYPE

```
SYNTAX BITS {
    bOther(0),      -- other or unknown
    b10baseT(1),    -- 10BASE-T half duplex mode
    b10baseTFD(2),  -- 10BASE-T full duplex mode
    b100baseT4(3),  -- 100BASE-T4
    b100baseTX(4),  -- 100BASE-TX half duplex mode
    b100baseTXFD(5), -- 100BASE-TX full duplex mode
    b100baseT2(6),  -- 100BASE-T2 half duplex mode
    b100baseT2FD(7), -- 100BASE-T2 full duplex mode
    bFdxPause(8),   -- PAUSE for full-duplex links
    bFdxAPause(9),  -- Asymmetric PAUSE for full-duplex
                    -- links
    bFdxSPause(10), -- Symmetric PAUSE for full-duplex
                    -- links
    bFdxBPause(11), -- Asymmetric and Symmetric PAUSE for
                    -- full-duplex links
    b1000baseX(12), -- 1000BASE-X, -LX, -SX, -CX half
                    -- duplex mode
    b1000baseXFD(13), -- 1000BASE-X, -LX, -SX, -CX full
                    -- duplex mode
    b1000baseT(14), -- 1000BASE-T half duplex mode
    b1000baseTFD(15) -- 1000BASE-T full duplex mode
}
```

RFC 1906 says:

(3) When encoding an object whose syntax is described using the BITS construct, the value is encoded as an OCTET STRING, in which all the named bits in (the definition of) the bitstring, commencing with the first bit and proceeding to the last bit, are placed in bits 8 to 1 of the first octet, followed by bits 8 to 1 of each subsequent octet in turn, followed by as many bits as are needed of the final subsequent octet, commencing with bit 8. Remaining bits, if any, of the final octet are set to zero on generation and ignored on receipt.

ITU-T Recommendation X.690 says:

6.2 For the purposes of this Recommendation | International Standard only, the bits of an octet are numbered from 8 to 1, where bit 8 is the "most significant bit", and bit 1 is the "least significant bit".

From this, I conclude that bOther is the MSB of the first octet, b10baseT is the next octet down, and so on. That would make a field value of 0x0136 as being:

b100baseT2FD, bFdxSPause, bFdxBPause, b1000baseXFD, b1000baseT

I.e., at least as I read the standards in question, Wireshark is dissecting the packet correctly, and if that's not what the folks at XXXX intended, they misread the standard.

# Motion

- EC retroactively approves all 802.1 interpretations posted since November 2005, as documented here:
- <http://www.ieee802.org/1/pages/interpretations.html>
- Proposed: Jeffree second: Grow

# MOTION

- 802.1 requests EC approval to forward the draft PAR for 802.1X-REV, to NesCom, and to withdraw the P802.1af PAR that it replaces.
- 802.1: Proposed: Seaman Second: wright
- For: 40 Against: 0 Abstain: 9
- EC proposed: Jeffree second: Grow

# P802.1X REV supporting information:

- Draft PAR pre-circulated to the EC Tuesday morning. Text is here:
- <http://www.ieee802.org/1/files/public/docs2007/x-revision-draft-par-1107.pdf>

# MOTION

- 802.1 requests EC approval to forward the draft PAR for 802.1Qaz, to NesCom.
- 802.1: Proposed: Thaler Second: wadekar
- For: 38    Against: 1    Abstain: **16**
- EC proposed: Jeffree second: Grow

# P802.1Qaz supporting information:

- Draft PAR and 5C pre-circulated to the EC as per 30-day rule. Text is here:
- <http://www.ieee802.org/1/files/public/docs2007/new-cm-thaler-trans-select-par-0709-v2.pdf>
- <http://www.ieee802.org/1/files/public/docs2007/new-cm-thaler-trans-select-5c-0709.pdf>
- No comments received
- No changes to the text this week

# MOTION

- 802.1 requests permission of the EC to forward P802.1ah to Sponsor ballot.
- Proposed: haddock Second: bottorff
- For: 44 Against: 0 Abstain: 7
- EC proposed: Jeffree Second:

# P802.1ah supporting information:

- Recirculation ballot on draft 3.8 closed 22<sup>nd</sup> October 2007
- 4 negative ballots; all comments resolved to the balloters' satisfaction and all have changed their vote to Approve
- Final voting tally is 87 voters, 77 votes cast (88.5% response), vote was 39/0/43 (100% approval).

# MOTION

- 802.1 resolves to forward the attached liaison contribution to DSL Forum re: Subscriber Authentication in DSL Networks. The original liaison was <http://www.ieee802.org/1/files/public/docs2007/liaison-dsl-forum-auth-for-wt146-0707.doc>.
- Proposed: seaman Second: wright
- For: 28 Against: 0 Abstain: 8

Thank you for your liaison re: Subscriber Authentication in DSL (May 25th 2007)

<http://www.ieee802.org/1/files/public/docs2007/liaison-dsl-forum-auth-for-wt146-0707.doc>

we would like to draw your attention to the possibility of using P802.1af in conjunction with P802.1aj to meet a number of your requirements.

Attachments:

P802.1aj D2.2 TPMR (Amendment to IEEE Std 802.1Q: Two Port Mac Relay)  
P802.1af D1.7 Key Agreement for MAC Security

It is anticipated that Project 802.1af will soon be formally identified as a full revision of P802.1X.

# MOTION

- 802.1 authorize the WG Chair to forward the attached liaison contribution to OIF.
- Proposed: Haddock Second: bottorff
- For: 29 Against: 1 Abstain: 6
- liaison-oif2007-280-03-1107.pdf

# OIF – Liaison response

To: Mr. Jim Jones, OIF TC Chair

Cc: Mr. Lyndon Ong, Ciena Corporation, [lyong@ciena.com](mailto:lyong@ciena.com)  
Mr. Alex Conta, TranSwitch Corporation, [aconta@txc.com](mailto:aconta@txc.com)  
Mr. Stephen Shew, Nortel Networks, [sdshew@nortel.com](mailto:sdshew@nortel.com)

From: Mr. Tony Jeffree, IEEE 802.1 Working Group Chair, [tony@jeffree.co.uk](mailto:tony@jeffree.co.uk)

Subject: Liaison response to OIF on Ethernet Software Application Programming Interface (API)

Dear Mr Jones,

Thank you for your liaison on Ethernet Software Application Programming Interface (API). We have made a note of your activities on Software API definition work in the OIF Software Working Group.

You can always view our on-going activities at <http://www.ieee802.org/1>.

Thank you.

Tony Jeffree  
IEEE 802.1 Working Group Chair

# MOTION

- 802.1 authorizes its Chair to forward the liaison response to ITUT – original liaison contained in: liaison-itut-ls-117-1007.pdf
- Proposed: Haddock Second: wright
- For: 40 Against: 0 Abstain: 2

# Liaison to ITU-T

■ To: Mr. Dave Sidor, Nortel, [djsidor@nortel.com](mailto:djsidor@nortel.com)

From: Mr. Tony Jeffree, IEEE 802.1 Working Group Chair, [tony@jeffree.co.uk](mailto:tony@jeffree.co.uk)

Subject: Liaison response to ITU-T SG4 on Rechartering of the NGN Management Focus Group

Dear Dave ,

Thank you for your liaison providing updates on the NGN Management Focus Group (NGNMFG).

We currently have a number of on-going projects which can be viewed at <http://www.ieee802.org/1>. Some on-going activities that might be of interest to you for NGNMFG include:

- P802.1ap - "Management Information Base (MIB) definitions for VLAN Bridges" which plans to define SMIv2 MIB modules for the management of VLAN-aware Bridge capabilities including Spanning Tree Protocols, Provider Bridges, and Provider Backbone Bridges. This standards is also planning to update and complete SMIv2 MIB modules that support standardized management of the capabilities defined in Std 802.1Q
- In addition to P802.1ap, all other on-going standard projects also define relevant Bridge Management Objects (Clause 12 extensions) and MIB (Clause 17 extensions).

We would also like to thank you for extending an invitation to IEEE 802.1 participants to register at the offered website to follow NGNMFG activities and documentation. This offer has been communicated to the IEEE 802.1 members.

Thank you.  
Tony Jeffree  
IEEE 802.1 Working Group Chair

# Motion

Approve the attached liaison response to MEF.

moved: messenger

second: wright

For 35 against 0 abstain 4

- To: MEF Technical Committee
- From: IEEE P802.1
- Date: November 2007
- Thank you for your liaison dated 30th October 2007 regarding your NID project. Please find enclosed the latest draft 2.2 of 802.1aj Two Port MAC Relay. We would encourage you to consider referencing this document in your work. This project currently has an end date of December 2008, but we are not able to predict when the project is likely to complete at this stage.
- Regards,
- Tony Jeffree, Chair, IEEE P802.1