802.1aj
Two-Port MAC Relay
Editor’s report

John Messenger, May 2009
v02
Changes in 802.1aj/D3.2

- Many small changes in response to ballot resolution.
- Mandatory SNMP-over-Ethernet removed.
- CFM level-0 MIP issue partially resolved.
  - A further change is needed here to make this mandatory.
- 6.21 “Support of the ISS using signalled priority” added.
- Editorial changes only to address tables 8-1, 8-2 and 8-3.
- 23.1.1 added to give guidance on placement of MAC Status Shim relative to CFM functions.
- 23.x added in an editor’s note to explicitly define the MAC Status Shim.
Main editorial changes

- The capitalization of “Port” where not used as part of a more-specific term has been made more consistent with the majority of 802.1Q and 802.1D. Further changes for better consistency between the 802.1Q amendments may be required in a future 802.1Q/802.1D merge.
- The term “relay” when used alone (as a noun), and not as part of MAC Relay, has been changed to “Bridge” or “TPMR” where appropriate.

PICS changes

- Redrafted to show added and changed lines in PICS tables only, instead of reproducing whole tables, in accordance with ballot resolution.
Mandatory support for one specific management method, over one externally accessible port, was one of the original ideas.

Draft 3.2 removes mandatory support of SNMP-over-Ethernet as decided in comment resolution on Draft 3.1.

Management over at least one of the externally-accessible ports remains mandatory.

Need to resolve how to meet this requirement in order to provide interoperable management.

See ballot comments.
Each port must by default be configured with a level 0 MIP.
  - This allows out-of-the-box detection of the TPMR.
  - This requirement is insufficiently specified in the draft.

There was concern that this would prevent protection of the physical links from the TPMR using level 0 MEPs.
  - We received an MEF liaison on this topic.

However the level 0 MIP can be removed by management just as any bridge can have its CFM configuration changed.

Draft 3.2 has been clarified to point this out in a note.
EISS, ISS and multiple traffic classes

- A TPMR wants to use the priority value in the C-tag of a frame to determine which traffic class the frame belongs to, but to be unaware of the VLAN ID.
  - Comment resolution on Draft 3.1 considered how this could be best achieved.

- Draft 3.2 addresses this using new subclause 6.21 “Support of the ISS with signalled priority”
  - Priority and drop-eligibility are determined from the outermost C- or S-tag using the existing methods from 802.1Q and 802.1ad
  - Frames are not modified on transmission
  - TPMR remains VID-unaware.
  - Text may be unclear as to required conformance to this.
Ballotting

- PAR granted December 2004
  - Initial draft 0.0 May 2005
  - Draft 1.0 July 2005
  - Draft 1.1 August 2005
  - Draft 1.2 November 2005
  - Draft 1.3 May 2006
  - Draft 1.4 June 2006
  - Draft 2.0 January 2007
  - Draft 2.1 May 2007
  - Draft 2.2 October 2007 (Working group ballot)
  - Draft 3.1 September 2008 (WG recirculation ballot)
  - Draft 3.2 May 2009 (WG recirculation ballot)

- 802.1aj Draft 3.2 issued May 2009
  - All D3.1 comments addressed except a few very late comments.
D3.2 WG recirculation ballot results

- Ballot pool comprised those eligible to vote on D2.2
  - Results include D2.2, D3.1 votes and D3.2 vote changes
- 27 responses received on the D3.2 recirculation ballot
- 91 Voters – of which 78 have responded (86%)
  - 30 Approve 86%
  - 5 Disapprove 14%
  - 43 Abstain 55%
- Ballot passed!
D3.2 WG recirculation ballot results

- Disapprove voter breakdown:
  - 3 have responded to D3.2 with new comments
  - 1 has changed to Yes
  - 2 have changed to Yes with comments
  - 1 new No voter
  - 1 is deceased
    - This vote must remain and be explained to the 802 executive committee

- 48 Comments
  - 21 TR
  - 5 T
  - 11 ER
  - 11 E
  - 0 G
Main ballot comment items

- VLAN-awareness
- Modifying frames; priority regeneration
- Management using SNMP over UDP over IPv4
- TPMR MIB module – should it be optional?
- FSM modifications in clause 23
- MAC Status Shim
- Clause 6.10: PIP
- Missing conformance statements in PICS and Clause 5
Should we widen the scope to allow VLAN-awareness as this is what the MEF wants for the NID?

Comments
  - Stephen Haddock: #39
Does the TPMR support priority regeneration? Frames should not be modified when passing through the TPMR.

Comments
- Panagiotis Saltsidis: #22, #17, #34
- Stephen Haddock: #38
- Jessy Rouyer: #44
The TPMR should support mandatory management using SNMP over UDP over IPv4 as recommended by IETF.

Comments
- John Messenger: #1
- Jessy Rouyer: #41
Panos wants the TPMR MIB module to be made optional. The editor doesn’t agree!

Comments
- Panagiotis Saltsidis: #13, #36, #37
FSM modifications in Clause 23

- Initial value of timer linkNotifyWhen should be associated with the linkNotifyRetry value of the \textit{same} port, not the other port.

- Comments
  - Panagiotis Saltsidis: #29
MAC Status Shim

- Should the MAC Status Shim be defined more closely as proposed?

- Comments
  - John Messenger: #3
  - Mick Seaman: #8
  - Panagiotis Saltsidis: #26
  - Jessy Rouyer: #47
Clause 6.10: Support of ISS by PIP

- Was it really intended to replace the content of 6.10?

- Comments
  - Jessy Rouyer: #43
Various conformance statements are missing in clause 5 and the PICS.

Comments
  - Panagiotis Saltsidis: #11, #33, #35
Plan

- Do comment resolution for D3.2 at this meeting
- Generate 802.1aj/D3.3 following this meeting, incorporating
  - Changes agreed this week
- Submit this for WG recirculation ballot.
- Comment resolution at the July plenary.
- Hope to go to sponsor ballot following that meeting.
Thank You

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