

Notes to accompany unresolved negative comments on IEEE Draft P802.3.1/D2.3

1. 21 comments are contained in the report.
These are the only remaining unresolved negative comments on IEEE Draft P802.3.1, including:
3 comments from D. Romascanu (#10123, 10124, 10125) that were not accompanied by a ballot.
These comments have been treated as unresolved negative comments out of an abundance of caution.
2. All comments have been considered and all unresolved negative comments have been recirculated.
3. No comments were received on the third and final WG recirculation ballot.
4. Comments numbered 10XXX were received on the initial WG ballot.
Comments numbered 20XXX were received on the first WG recirculation ballot.
Comments numbered 30XXX were received on the second WG recirculation ballot.
5. All changes to the draft have been recirculated
6. 1 unresolved negative vote remains: P. Dawe.
7. The draft currently enjoys an approval ratio of 98.5%
8. 18 unresolved negative comments remain

Cl 00 SC 0 PO L0 # 10123
 Romascanu, Dan Avaya

Comment Type ER Comment Status R order

I could not figure out the logic of the order of the inclusion of the MIB modules. Maybe it is explained some place and I missed it.

SuggestedRemedy

As this order will probably stay with the evolution of the document I would suggest to follow the order of the development of the MIB modules - Ethernet Interfaces, Repeater, MAU, PoE, EPON, EFM, WAN, LLDP.

Response Response Status W

REJECT.
 An attempt was made to follow a "top-down" layering model, wherein modules corresponding to higher layers (e.g. LLDP) are described before modules corresponding to lower layers (e.g. MAU).
 This was decided in a Task Force meeting in Quebec City, May 2009.
 (See also correspondence between the commenter and Geoff Thompson on the reflector).
 Straw poll:
 Leave it as is - 4
 Chronological order (IETF, IEEE going forward) - 4
 As the straw poll is evenly divided, there is no concensus for change, therefore the order of clauses will remain as is.

Cl 00 SC 0 P1 L41 # 20089
 Dawe, Piers IPtronics

Comment Type ER Comment Status R

This draft of 802.3.1 has virtually no material to set the context or explain what it is about. No explanation of MIBs or SNMP, although there are a few references to IETF documents.

The introductory material for individual clauses ranges from two lines to 8 pages. It is extremely unbalanced and very lacking for "mainstream" Ethernet port types.
 5. Ethernet logical link discovery protocol (LLDP) extension MIB module has only two lines to set the context and explain what LLDP extension is about.
 6. Ethernet operations, administration, and maintenance (OAM) MIB module has a page and a half.
 7. Ethernet repeater device MIB module has half a page, which don't say what a repeater or repeater device is or how it works, but do provide references.
 8. Ethernet data terminal equipment (DTE) power via medium dependent interface (MDI) MIB module has a couple of paragraphs, doesn't have a reference to PoE.
 9. Ethernet passive optical networks (EPON) MIB module has 8 pages! Including a complete general-purpose teach-in for 1G-EPON.
 10. Ethernet-like interface MIB module has just two paragraphs,
 ""This clause defines a portion of the Management Information Base (MIB) for use with network management protocols in the Internet community. In particular, it defines objects for managing Ethernet-like interfaces.
 Instances of these object types represent attributes of an interface to an Ethernet-like communications medium."" No scope, no references, no background, architecture or meaningful introduction. Compare Clause 9.
 11. Ethernet in the first mile copper (EFMCu) interfaces MIB module has 1/3 page.
 12. Ethernet wide area network (WAN) interface sublayer (WIS) MIB module has 1/3 page.
 13. Ethernet medium attachment units (MAUs) MIB module has 1/3 page, containing a little useful history, but no primer on MAUs, CSMA/CD, 802.3 port types, network topology, ...

SuggestedRemedy

Originally I intended to abstain on this draft standard because I did not know what it was about. Now, I am voting against, because the draft fails to give the reader a reasonable chance to learn what it is about, what the scope and purpose of the overall document is, and of the individual clauses. The whole document needs an introduction, not just a description of document rearrangements. Clauses 10 and 13 need introductions. The balance between different clauses should be improved.

Response Response Status W

REJECT.
 The EPON text serves to educate users who may not be as familiar with this newer technology as they are with point to point or CSMA/CD Ethernet.

This standard is intended to be used by implementers of SMIv2 MIB modules for use with the SNMP network management protocol. Therefore, it should not be necessary to provide tutorial information about MIBs or SMIv2, or SNMP, especially since the normative references and bibliography provide ample background material.

Cl 01 SC 1 P15 L42 # 30143
 Dawe, Piers IPtronics

Comment Type TR Comment Status A

Draft says "This document, as with other documents issued by this working group, reflects a certain stage in the evolution of Ethernet technology." but this is misleading. Draft does not represent the stage of the evolution of Ethernet technology as with other documents issued by this working group, but represents an out-of-date stage, without 802.3av, 802.3ba. Similarly, 1.1 Scope is misleading "This standard contains the MIB module specifications for IEEE Std 802.3 ... as well as extensions resulting from recent amendments to IEEE Std 802.3." The scope contradicts the invitation to ballot, which says "MIB module specifications for IEEE Std 802.3-2008 and IEEE Std 802.3bc-2009 Amendment 2: Ethernet TLVs."

SuggestedRemedy

Change to "This standard supports [or is compatible with] IEEE Std 802.3-2008 (as published in 2008) and IEEE Std 802.3bc-2009 Amendment 2: Ethernet TLVs. A future amendment is expected to support recent amendments of 802.3 including 802.3at, 802.3av, 802.3az and 802.3ba." or insert this sentence at line 65. Add 802.3bc to the normative references.

Response Response Status U

ACCEPT IN PRINCIPLE.

The draft does in fact reflect a certain stage in the evolution of Ethernet. It reflects the stage identified in the project objectives, and this information is spelled out on page iii of the introduction.

There is an error in the introduction, in that IEEE Std 802.3-2008 superceeded the listed amendments. This will be corrected in the next draft.

It is not necessary to add 802.3bc to the normative references, because the undated reference includes all currently approved amendments.

Cl 01 SC 1.1 P13 L36 # 20087
 Dawe, Piers IPtronics

Comment Type ER Comment Status R

Supporting Dan Romascanu's comment "I could not figure out the logic of the order of the inclusion of the MIB modules."

SuggestedRemedy

Whether you change the order or not, add text somewhere in Clause 1 (it could be a new "1.5 Organization of this standard" to tell the reader what's going on and where to find things.

Response Response Status W

REJECT.

There is no concensus to change the order of the modules. Introductory text would be considered if it were contributed. The table of contents provides an outline of the document.

Cl 01 SC 1.1 P13 L46 # 20099
 Dawe, Piers IPtronics

Comment Type TR Comment Status R

Text says "This standard contains the Management Information Base (MIB) module specifications for IEEE Std 802.3, also known as Ethernet." That means all of 802.3, including all recent amendments (the entry in 2. Normative references is undated). Also it says "...as well as extensions resulting from recent amendments to IEEE Std 802.3." Yet response to e.g. D2.0 comments 190 and 297 say e.g. "updates resulting from 802.3at, 802.3av, 802.3az, 802.3ba will be considered in a future amendment to 802.3.1".

SuggestedRemedy

Delete "as well as extensions resulting from recent amendments to IEEE Std 802.3." Insert "This standard addresses the published 802.3-2008 [and 802.3xx if any amendments since 802.3-2008 are indeed included]. It does not address 802.3at, 802.3av, 802.3az, or 802.3ba."

Date the reference to 802.3 in Clause 2. It would be as well to list what's in and what's out there also.

Response Response Status W

REJECT.

The scope statement exactly matches the approved PAR. The scope statement was written so as not to require modification for each amendment to P802.3.1. The list of recent amendments to 802.3 that are included in the scope of the initial version of P802.3.1 was approved at the time the PAR was approved, and is reflected in the project objectives.

Cl 10 SC 10 P211 L1 # 30141
 Dawe, Piers IPtronics

Comment Type TR Comment Status R

The explanation in the response to D2.1 comment 98 hasn't been implemented enough. It said "Clause 10 applies to the MAC sublayer, and Clause 13 applies to the PHY. Clause 13 applies to all Ethernet ports. Clause 10 applies to all Ethernet DTEs, while Clause 7 applies to repeaters." It is necessary to clean this up so that an implementer (of anything) knows which clauses he must read and which are not relevant to what he is trying to implement: see D2.1 comment 89.

SuggestedRemedy

Change "Ethernet-like interface MIB module" to "Ethernet MAC MIB module".
 Change "In particular, it defines objects for managing Ethernet-like interfaces." to "In particular, it defines objects for managing Ethernet MACs and the MAC Control sublayer in DTEs."
 In 10.2 change "Instances of these object types represent attributes of an interface to an Ethernet-like communications medium." to "Instances of these object types represent attributes of an Ethernet MAC or MAC Control entity."

Response Response Status U

REJECT.
 The Ethernet-like interface MIB module is an adjunct of the Interface MIB defined in IETF RFC 2863, and is defined in that context.

Cl 10 SC 10.2.2.2 P212 L17 # 30126
 Dawe, Piers IPtronics

Comment Type ER Comment Status A

10.2.2.3 mentions "the Interfaces MIB"? 10.2.2 p211 has "The Interface MIB defined in IETF RFC 2863" (note no s). 2 has "IETF RFC 2863, The Interfaces Group MIB" (note "Group" inserted).

SuggestedRemedy

Use the same name for the same thing every time, so that the reader can string search for it.

Response Response Status W

ACCEPT IN PRINCIPLE.
 Consistently use "Interface MIB"
 [Ed. RFC 2863 is titled Interfaces Group MIB, and this is what should be used.]

Cl 10 SC 10.2.2.2 P212 L18 # 30140
 Dawe, Piers IPtronics

Comment Type TR Comment Status R

Specification of ifType in Clause 10 (which seems to be the management of MAC and MAC control) tries to say "All Ethernet-like interfaces shall also implement the MAU-MIB defined in Clause 13." It's quite unacceptable to bury a "shall" for one thing in a subclause about something else.

SuggestedRemedy

If the requirement is appropriate, change "All Ethernet-like interfaces shall also implement" to "Ethernet ports? management agents? are required to implement... (see n.m)" with a cross-reference, and check that there is a "shall" in the appropriate place (Clause 1?). If the requirement is excessive, use "should" or "recommended". Check the draft for any other misplaced shalls.

Response Response Status U

REJECT.
 It's not a misplaced shall. The following is an explanation, not an editing instruction: Anything that implements the Ethernet-like MIB module shall also implement the MAU-MIB because an SNMP network management system learns things like the port type, operating speed, duplex mode, etc, from the MAU-MIB.
 It would be difficult, if not impossible, to perform any useful network management of an Ethernet interface without this information

Cl 10 SC 10.2.2.4 P214 L3 # 30127
 Dawe, Piers IPtronics

Comment Type ER Comment Status A

Bad terminology "Ethernet interface layer". It's neither interface nor layer.

SuggestedRemedy

Change "To better understand the issues surrounding the mapping of the IF-MIB packet and octet counters to an Ethernet interface, it is useful ... proper interpretation for the Ethernet interface layer." to "To better understand the issues surrounding the mapping of the IF-MIB packet and octet counters to an Ethernet MAC and MAC Control entity, it is useful ... proper interpretation for the Ethernet interface layer."
 In Figure 10-1, change "layer above" to "Sublayer above" (the bottom of the MAC is a full layer boundary, so "layer below" is OK).

Response Response Status U

ACCEPT IN PRINCIPLE.
 Delete "layer" from the text.
 Change "layer above" to "sublayer above" at the top of the figure.

CI 10 SC 10.2.3 P217 L46 # 30136
 Dawe, Piers IPtronics

Comment Type TR Comment Status R

Draft says "Support for the mauModIfCompl3 compliance statement of the MAU-MIB defined in Clause 13 is required for Ethernet-like interfaces. This MIB module is needed in order to allow applications to determine the current MAU type in use by the interface, and to control autonegotiation and duplex mode for the interface. Implementing this MIB module without implementing the MAU-MIB would leave applications with no standard way to determine the media type in use, and no standard way to control the duplex mode of the interface."

However, The word "interface" is misused (for 802.3), and not well defined in 802.3.1 - but it a reader might think it means a port. Management is optional, so none of this is required. Maybe the words in their previous setting had a more constrained context; in an 802.3 document this is too wide. If the speed is known to be 10G (and in practice, 1G) there is no need to "control the duplex mode of the interface". Many port types do not have autonegotiation.

SuggestedRemedy

You might say something like "A management entity for an Ethernet port is required to support the mauModIfCompl3 compliance statement of the MAU-MIB module defined in Clause 13." Change "This MIB module is needed in order to allow applications..." to "This MIB module may be used by applications..."

Response Response Status U

REJECT. "interface" has a defined meaning in the context of SNMP MIB modules. The comment is on unchanged portions of the text. See also the response to comment # 30140.

CI 10 SC 10.2.3 P218 L46 # 30139
 Dawe, Piers IPtronics

Comment Type TR Comment Status R

Draft says "Implementing this MIB module without implementing the MAU-MIB would leave applications with no standard way to determine the media type in use, and no standard way to control the duplex mode of the interface."

The second part is not true: for 10G ports there is nothing to do, it's always full duplex. As media (being metal, plastic and glass) are not managed anyway, the first part is false also. If it was meant that the "application" (whatever that is) would have no standard way to precisely determine the port type (e.g. is it 10GBASE-SR or 10GBASE-LR) - so what, we have layering so it usually doesn't need to know.

SuggestedRemedy

Delete the sentence.

Response Response Status U

REJECT. Both parts of the sentence are true statements.

CI 12 SC 12.5 P267 L22 # 10125
 Romascanu, Dan Avaya

Comment Type TR Comment Status A IANA

Did the WG discuss what will happen with modules that are being maintained by IANA? Is the plan to take over the administration and move the registry control under IEEE, or to continue to require IANA to maintain the modules? This will obviously impact the content of the IANA considerations sections like 12.5 or 14.5.

SuggestedRemedy

In any case IANA should be contacted after the WG makes a decision, and the process needs to be confirmed before the final approval of the document.

Response Response Status W

ACCEPT IN PRINCIPLE. For discussion in committee. To this point, the assumption has been that we will maintain the status quo regarding the division of labor with IANA, that is IANA continues to maintain IANA MAU-MIB, and we incorporate by reference.

CI 13 SC 13 P339 L1 # 30142 Dawe, Piers IPtronics

Comment Type TR Comment Status R

The explanation in the response to D2.1 comment 98 hasn't been implemented enough. It said "Clause 10 applies to the MAC sublayer, and Clause 13 applies to the PHY. Clause 13 applies to all Ethernet ports. Clause 10 applies to all Ethernet DTEs, while Clause 7 applies to repeaters."

It is necessary to clean this up so that an implementer (of anything) knows which clauses he must read and which are not relevant to what he is trying to implement: see D2.1 comment 89.

Note that 802.3 1.4.219 defines MAU as: A device containing an Attachment Unit Interface (AUI), Physical Medium Attachment (PMA), and Medium Dependent Interface (MDI) that is used to connect a repeater or data terminal equipment (DTE) to a transmission medium. From that, I can see that a port type that isn't 10 Mb/s (without an AUI) does not have a MAU, so 13 does not apply - which may not be the intention.

SuggestedRemedy

Change "Ethernet medium attachment units (MAUs) MIB module" to "Ethernet MAU and PHY MIB module". Change "In particular, it defines objects for managing IEEE 802.3 Medium Attachment Units (MAUs)." to "In particular, it defines objects for managing IEEE 802.3 Medium Attachment Units (MAUs) and Physical Layer entities (PHYs). In this clause, the term "MAU" includes PHY if appropriate."

Response Response Status U

REJECT. The module in question has been known as the MAU-MIB for decades. It would cause harmful confusion in the user community for this standard to change the name now.

CI 13 SC 13.1 P359 L9 # 20098 Dawe, Piers IPtronics

Comment Type TR Comment Status A

What is this clause for? As we use "MAU type" for all 802.3 port types, does this clause apply to all Ethernet ports? Does 10 apply to some and 13 to others? Or what?

SuggestedRemedy

Please explain.

Response Response Status W

ACCEPT IN PRINCIPLE. Clause 10 applies to the MAC sublayer, and Clause 13 applies to the PHY. Clause 13 applies to all Ethernet ports. Clause 10 applies to all Ethernet DTEs, while Clause 7 applies to repeaters.

The SNMP-based network management community understands the word "interface" to mean the "network interface device or controller (e.g. a NIC) residing below the internet protocol (IP)." It is more than a dividing line between sublayers, or the MDI that appears on the bulkhead of a piece of equipment.

CI 99 SC 99 P2 L # 20100 Dawe, Piers IPtronics

Comment Type TR Comment Status R

Abstract says "This standard contains the Management Information Base (MIB) module specifications for IEEE Std 802.3, also known as Ethernet." That means all of 802.3, including all recent amendments (the entry in 2. Normative references is undated). Also it says "...as well as extensions resulting from recent amendments to IEEE Std 802.3." Yet response to e.g. D2.0 comments 190 and 297 say e.g. "updates resulting from 802.3at, 802.3av, 802.3az, 802.3ba will be considered in a future amendment to 802.3.1".

SuggestedRemedy

Delete "as well as extensions resulting from recent amendments to IEEE Std 802.3." Insert "This standard addresses the published 802.3-2008 [and 802.3xx if any amendments since 802.3-2008 are indeed included]. It does not address 802.3at, 802.3av, 802.3az, or 802.3ba."

Response Response Status W

REJECT. The abstract is intended to be timeless, and not require updating every time the standard is amended.

CI A SC A P383 L 10 # 10186 Dawe, Piers IPtronics

Comment Type ER Comment Status A ref

Cross-referencing could be improved.

SuggestedRemedy

Please number the normative references 1, 2 and so on and refer to them with hyperlinks [1], [2] and so on.

Response Response Status W

ACCEPT IN PRINCIPLE. Cross-referencing accepted. Numbering of normative references is contrary to both the IEEE style manual and the style used in IEEE Std 802.3.

CI A SC A P383 L 10 # 10185 Dawe, Piers IPtronics

Comment Type ER Comment Status A cross

Cross-referencing could be improved.

SuggestedRemedy

Please number the bibliography entries A1, A2 and so on and refer to them with hyperlinks as [A1], [A2] and so on, as in 802.3.

Response Response Status W

ACCEPT.