P802.3ad Draft 2.0 Working Group Ballot Comment Database, Revision 2.0. This document includes all comments submitted during the first WG Ballot, along with the resolution of each comment as determined during the September 1999 Interim Meeting in York.

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#### Ballot Results are as follows:

Qualified Voters (includes all 802.3 voting members plus those 802.1 members participating in this ballot): 174

Total Votes Received: 114 (65.5% of total, meets 50% minimum requirement)

Approval Votes: 76 Disapproval Votes: 6 Abstentions: 32

Approval ratio [Approvals/(Approval + Disapproval)]: 92.7% (meets 75% minimum requirement for approval)

Abstention ratio [Abstentions/Total Votes]: 28.1% (meets 30% maximum requirement for valid ballot)

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## **Comment Summary:**

Total comments received: 216

Editorial: 115

Editorial/Required: 9

Technical: 65

Technical/Required: 27

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CommentNumber: 1

CommenterName: Brian MacLeod CommenterEmail: bmacleod@cet.com CommenterPhone: 509-892-6955 CommenterCompany: Project 101, Inc.

Clause: Subclause: Page: Line:

CommentType: (E, T, ER, or TR): TR

Comment:

I am unable to approve as I was unsuccessful retreiving the draft from the private area on the IEEE website. The problem seems to be caused by some interaction of Active X controls or requests from the IEEE site clashing with security policies at my end.

## CommentEnd:

# SuggestedRemedy:

Provide me with the draft in another form (e.g. e-mail the pdf to me or snail mail a paper copy. I may then be able to provide detailed comments or reverse my position.

RemedyEnd:

Editor' RecommendationStart:

The commenter did not report any problem with the web site until shortly before the ballot closed. There was not time during the active period of the ballot to provide him with a draft. No other commenter reported any similar problem. Propose that we send him a draft as he requests.

Editor'sRecommendationEnd:

ResolutionStart:

Accept. Tony will make sure he receives the PDF via Email.

ResolutionEnd:

CommentNumber: 2

CommenterName: Henry Hinrichs

CommenterEmail: henryhinrichs@pulseeng.com

CommenterPhone: (858) 674-8208 CommenterCompany: Pulse Clause: - Throughout document -

Subclause: Page: Line:

CommentType: (E, T, ER, or TR): E

Comment and SuggestedRemedy: : Globally change spelling of "Behaviour" to the American equivalent "Behavior" throughout document.

RemedyEnd:

Editor' RecommendationStart:

Accept in principle. The use of the British spelling "Behaviour" within the formal definition of management objects and attributes in Clause 30 is consistent with the rest of 802.3, is also consistent with the GDMO standard language for managed object definitions, and should be retained. The spelling should be changed to the American "behavior" in all other cases.

Editor's Recommendation End:

ResolutionStart:

Accept Editor's Recommendation.

## ResolutionEnd:

CommentNumber: 3

CommenterName: Anil Rijsinghani CommenterEmail: anil@cabletron.com CommenterPhone: 978-684-1295

CommenterCompany: Cabletron Systems

Clause: 1 Subclause: 1.3 Page: 3 Line: 26

CommentType: (E, T, ER, or TR): TR

Comment:

The RFC used as a basis for the MIB in this document, RFC 1573, is obsolete, and has been for a long time. RFC 1573 was obsoleted by RFC 2222, which was published in Newsonker 1007.

by RFC 2233, which was published in November 1997.

CommentEnd:

# SuggestedRemedy:

Replace the reference to RFC 1573 here, as well as everywhere in the document it is used (too numerous to reproduce here, suggest a search by the editor to yield all of them), by RFC 2233. However, ensure that any references to RFC 1573 are still valid for RFC 2233.

RemedyEnd:

Editor' RecommendationStart:

Accept.

Editor's Recommendation End:

ResolutionStart:

Accept.

#### ResolutionEnd:

CommentNumber: 4

CommenterName: Robert Grow CommenterEmail: bob.grow@intel.com CommenterPhone: 858-487-9320x232

CommenterCompany: Intel

Clause: 1 Subclause: 1.4 Page: 4 Line: 34

CommentType: (E, T, ER, or TR): T

Comment:

No date is given for ISO/IEC 15802-3, and therefore the statement may become false when the referenced document is revised. (The document is not listed in the Normative References where a date would be specified allowing the more simplified reference.)

CommentEnd: SuggestedRemedy:

The last sentence should be enclosed in << >> (to be removed prior to

publication). RemedyEnd:

Editor' RecommendationStart:

Accept in principle. Rather than remove the useful information that the definition is consistent with 802.1D, rather include the sentence concerned as a NOTE, and add the date of the standard just in case it does change in the future.

Editor's Recommendation End:

ResolutionStart:

Accept Editor's Recommendation.

#### ResolutionEnd:

CommentNumber: 5

CommenterName: Walter Thirion

CommenterEmail: wthirion@jatotech.com

CommenterPhone: 512-306-1521

CommenterCompany: JatoTech Ventures

Clause: 1 Subclause:4 Page:4 Line:37

CommentType: (E, T, ER, or TR): TR

Comment:

The definition of "conversation", a very important part of deciding the distribution algorithm

is never clearly defined and is somewhat circular. 43A.2 gives some parameters that could be used

to define a conversation, but there is no specification of what must be

used to define a conversation, but there is no specification of what must be used to define a conversation.

Therefore, different implementers may choose different parameters and, therefore, different assumptions about ordering of frames.

#### CommentEnd:

SuggestedRemedy:

I think the minimum set of parameters that define a conversation should

be specified, i.e. is it (DA, SA), (DA, SA, Type), or ????

RemedyEnd:

Editor' RecommendationStart:

Reject. The commenter's point that different implementers may choose different parameters to define a conversation is quite correct, and the intent of the standard. There is no lowest common denominator that is valid across the range of possible aggregating devices (e.g., routers, bridges, servers).

Editor'sRecommendationEnd:

ResolutionStart:

Accept Editor's Recommendation.

ResolutionEnd:

CommentNumber: 6 CommenterName: Tasker

CommenterEmail: r.tasker@dl.ac.uk CommenterPhone: +44 1925 603758

CommenterCompany: Daresbury Laboratory

Clause: 1.4 Subclause: Page: 5 Line:

CommentType: (E, T, ER, or TR): E Comment: Abbreviation for UCT missing

CommentEnd:

SuggestedRemedy: Add it.

RemedyEnd:

Editor' RecommendationStart:

Reject. UCT is defined in the state machine conventions of 1.2.1.

Editor'sRecommendationEnd:

ResolutionStart:

Accept Editor's Recommendation.

ResolutionEnd:

CommentNumber: 7

CommenterName: Robert Grow

CommenterEmail: bob.grow@intel.com CommenterPhone: 858-487-9320x232

CommenterCompany: Intel

Clause: 2 Subclause: 1.4 Page: 6 Line: 6

CommentType: (E, T, ER, or TR): E

Comment:

Typo (though not part of the standard, it can be corrected for future

ballots)
CommentEnd:
SuggestedRemedy:

Change "pproved" to "approved".

RemedyEnd:

Editor' RecommendationStart:

Accept.

Editor'sRecommendationEnd:

ResolutionStart:

Accept.

ResolutionEnd:

CommentNumber: 8

CommenterName: Tom Mathey

CommenterEmail: tmathey@concentric.net

CommenterPhone: 408-865-1763 CommenterCompany: Independent

Clause: 2

Subclause: 2.3.1.2

Page: 7 Line: 19

CommentType: (E, T, ER, or TR): T

Comment:

Please place the added parameter "frame\_check\_sequence" just after the m\_sdu parameter. This matches normal sequence of usage, and follows what was done for MA\_DATA.indication.

CommentEnd:

SuggestedRemedy:

Move "frame\_check\_sequence" to follow m\_sdu. Revise corresponding text in rest of document.

RemedyEnd:

Editor' RecommendationStart:

Accept.

Editor'sRecommendationEnd:

ResolutionStart:

Accept.

ResolutionEnd:

CommentNumber: 9

CommenterName: Tom Mathey

CommenterEmail: tmathey@concentric.net

CommenterPhone: 408-865-1763 CommenterCompany: Independent

Clause: 2

Subclause: 2.3.1.2

Page: 7 Line: 31

CommentType: (E, T, ER, or TR): T

Comment:

For the transmit function, the sentence "the local MAC sublayer entity uses the supplied value rather than performing the calcualtion." is in conflict with 4.2.3.1.1 and 4.2.3.1.2. These paragraphs allow no optional use of a transmit fcs field supplied by the MAC client.

The sentence is also in conflict with the clause 4 Pascal. For example, (1998, p63, line 15) procedure TransmitDataEncap has fcsField := CRC32(outgoingFrame);

which allows no usage of the optional service interface parameter.

#### CommentEnd:

SuggestedRemedy:

Correct: 4.2.3.1.1, 4.2.3.1.2, all usage in Pascal, etc.

There are also numerious other places ,such as usage in MAC Control (1998, p792, line 23, Figure 31-2), (1998, p794, line 53, no mention of fcs) which may want to show fcs as being passed over the service interface.

RemedyEnd:

Editor' RecommendationStart:

Reject. This change to the service interface was made to resolve the long-standing inconsistency between 802.3 and 802.1. While it is true that this service interface is inconsistent with the Clause 4 Pascal, this is not a real concern. The Clause 4 Pascal code uses a different style of interface (Transmit and Receive function calls), inherited from the original DIX Ethernet specification; it makes no use of the MA\_DATA.request/indication primitives at all.

There is no problem with real implementations, which already provide means for a client to provide the FCS so they can work properly in bridges.

Editor's Recommendation End:

ResolutionStart:

Reject for reasons stated in Editor's Recommendation. The commenter is invited to raise this as an 802.3 maintenance item.

#### ResolutionEnd:

CommentNumber: 10

CommenterName: Tom Mathey

CommenterEmail: tmathey@concentric.net

CommenterPhone: 408-865-1763 CommenterCompany: Independent

Clause: 2

Subclause: 2.3.2.2

Page: 8 Line: 4

CommentType: (E, T, ER, or TR): T

Comment:

For the receive function, there is no support in the clause 4 Pascal for passing the fcs up to a higher layer. For example (1998, 69, line 11) function ReceiveFrame needs to have added (an optional)

var crcParam: CRCValue

along with a corresponding assignment of the recieved fcs field to the var.

There are also numerious other places ,such as usage in MAC Control, which may want to show fcs as being passed over the service interface.

CommentEnd:

SuggestedRemedy:

RemedyEnd:

Editor' RecommendationStart:

Reject. See comment 9.

Editor's Recommendation End:

ResolutionStart:

Accept Editor's Recommendation.

ResolutionEnd:

CommentNumber: 11

CommenterName: Tom Mathey

CommenterEmail: tmathey@concentric.net

CommenterPhone: 408-865-1763 CommenterCompany: Independent

Clause: 2

Subclause: 2.3.2.2

Page: 8 Line: 6

CommentType: (E, T, ER, or TR): E

Comment:

It would be nice to add something like the SuggestedRemedy to the end of this paragraph, since the requirement is not obvious and is stated some distance away.

#### CommentEnd:

SuggestedRemedy:

Add: The contents of invalid MAC frames shall not be passed to the LLC or MAC Control sublayers (see 3.4).

RemedyEnd:

Editor' RecommendationStart:

Reject. This is not a service interface issue. Clearly, the standard already ensures that invalid MAC frames are not passed up. In addition, it is generally inappropriate to have a conformance requirement (shall statement) in a service interface, since it is untestable; service interfaces are normally not exposed or observable.

Editor's Recommendation End:

ResolutionStart:

Reject as per Editor's Recommendation.

## ResolutionEnd:

CommentNumber: 12

CommenterName: Walter Thirion

CommenterEmail: wthirion@jatotech.com

CommenterPhone: 512-306-1521

CommenterCompany: JatoTech Ventures

Clause: 30, 40 Subclause:2 Page:10 Line:21

CommentType: (E, T, ER, or TR): E

Comment:

"behavior" is sometimes spelled behavior and other times it is spelled "behaviour" (pg 11, line 47). The spelling is inconsistent across the clauses.

CommentEnd:

SuggestedRemedy:

Pick either the American or English spelling and make the document consistent.

RemedyEnd:

Editor' RecommendationStart:

See comment 2.

Editor's Recommendation End:

ResolutionStart:

See Comment 2.

ResolutionEnd:

CommentNumber: 13

CommenterName: Ted Schroeder CommenterEmail: ted@alteon.com CommenterPhone: (408) 360-5511

CommenterCompany: Alteon WebSystems, Inc.

Clause: 30 Subclause: 2.5 Page: 12 Line: 41

CommentType: (E, T, ER, or TR): E

Comment:

Figure Title is inconsistent with Clause title

CommentEnd:

SuggestedRemedy: Change to "10/100/1000 Mb/s, Mac Control and Link

Aggregation entityt relationship diagram"

RemedyEnd:

Editor' RecommendationStart:

Accept in principle. Rename the figure "10/100/1000 Mb/s MAC, Control, and Link Aggregation entity relationship diagram". (The comma after the word MAC is significant.)

Editor'sRecommendationEnd:

ResolutionStart:

Accept Editor's Recommendation.

ResolutionEnd:

CommentNumber: 14

CommenterName: Ted Schroeder CommenterEmail: ted@alteon.com CommenterPhone: (408) 360-5511

CommenterCompany: Alteon WebSystems, Inc.

Clause: 30 Subclause: 2.5 Page: 13 Line: 28

CommentType: (E, T, ER, or TR): TR

Comment:

aAggActorSystemPriority is said to only support the GET operation. It

should be both GET and SET.

CommentEnd:

SuggestedRemedy: Change to GET-SET

RemedyEnd:

Editor' RecommendationStart:

Reject. The System Priority is settable per Port as currently defined; hence, the Aggregator then reflects the priority associated with the port(s) that are attached.

Editor's Recommendation End:

ResolutionStart:

Accept. Also make aAggActorSystemID read/write. See also comment 150. Add a paragraph associated with the managed object defs that explains that for the protocol description, we consider only a single system; however, the management controls allow multiple systems to be configured within a single box.

#### ResolutionEnd:

CommentNumber: 15

CommenterName: Tom Mathey

CommenterEmail: tmathey@concentric.net

CommenterPhone: 408-865-1763 CommenterCompany: Independent

Clause: 30

Subclause: Table 30-2

Page: 13 Line: 44

CommentType: (E, T, ER, or TR): E

Comment:

In the column for aAggOctetsTxOK, there is an extra symbol, a "-"

## CommentEnd:

SuggestedRemedy:

delete

RemedyEnd:

Editor' RecommendationStart:

Accept.

Editor's Recommendation End:

ResolutionStart:

Accept.

## ResolutionEnd:

CommentNumber: 16

CommenterName: Tom Mathey

CommenterEmail: tmathey@concentric.net

CommenterPhone: 408-865-1763 CommenterCompany: Independent

Clause: 30 Subclause: 30.7.1

Page: 17 Line: 2

CommentType: (E, T, ER, or TR): E

Comment:

Grammar: there appears to be an extra "be" in the sentence.

## CommentEnd:

SuggestedRemedy: delete the second "be"

RemedyEnd:

Editor' RecommendationStart:

Accept.

Editor's Recommendation End:

ResolutionStart:

Accept.

ResolutionEnd:

CommentNumber: 17

CommenterName: Tom Mathey

CommenterEmail: tmathey@concentric.net

CommenterPhone: 408-865-1763 CommenterCompany: Independent

Clause: 30 Subclause: 30.7.1

Page: 17 Line: 8

CommentType: (E, T, ER, or TR): E

Comment:

Link Agg applies only to full duplex.

CommentEnd:

SuggestedRemedy: change "half" to "full".

RemedyEnd:

Editor' RecommendationStart:

Reject. The text is correct as it stands. The point is that, even though aggregation of multiple links is only supported on full duplex links, a half-duplex individual link can architecturally be attached to an aggregator, so the half duplex counters need to be present for consistency of presentation in this case.

Editor'sRecommendationEnd:

ResolutionStart:

Accept in principle. Add a Note explaining why this happens - a link may autonegotiate to half duplex; if this happens it is useful to have the management view stay the same.

## ResolutionEnd:

CommentNumber: 18

CommenterName: Ted Schroeder CommenterEmail: ted@alteon.com CommenterPhone: (408) 360-5511

CommenterCompany: Alteon WebSystems, Inc.

Clause: 30 Subclause: 7.1.5 Page: 18

Line: 27 CommentType: (E, T, ER, or TR): T

Comment:

Indication is that the aAggActorSystemPriority is read-only. It should

be read-write

CommentEnd:

## SuggestedRemedy:

Change "A 2-octet read-only" to "A 2-octet read-write" in accordance with this being a GET-SET operation.

RemedyEnd:

Editor' RecommendationStart:

See Comment 14.

Editor's Recommendation End:

ResolutionStart:

Accept. (see also comment 14).

ResolutionEnd:

CommentNumber: 19

CommenterName: Ted Schroeder CommenterEmail: ted@alteon.com CommenterPhone: (408) 360-5511

CommenterCompany: Alteon WebSystems, Inc.

Clause: 30 Subclause: 7.1.11

Page: 20 Line: 2

CommentType: (E, T, ER, or TR): E

Comment:

Missing indication that the aAggPartnerSystemPriority field can be manually

configured.

CommentEnd:

SuggestedRemedy:

Add sentence, "If the aggregation is manually configured, this Priority value will be a value assigned by the local system."

RemedyEnd:

Editor' RecommendationStart:

Accept.

Editor'sRecommendationEnd:

ResolutionStart:

Accept.

ResolutionEnd:

CommentNumber: 20

CommenterName: Tom Mathey

CommenterEmail: tmathey@concentric.net

CommenterPhone: 408-865-1763 CommenterCompany: Independent

Clause: 30

Subclause: 30.7.1.14

Page: 20 Line: 54

CommentType: (E, T, ER, or TR): T

Comment:
I can find no variable named aAggAdminStatus in this document.
CommentEnd:
SuggestedRemedy:
Is the name aAggAdminState what is intended?
RemedyEnd: Editor' RecommendationStart:
Accept. Change to aAggAdminState.
Editor'sRecommendationEnd: ResolutionStart:
Accept.
ResolutionEnd:
CommenterName: Darrell Furlong CommenterEmail: dfurlong@lancast.com CommenterPhone: 603-880-1833 x 103 CommenterCompany: Lancast, Inc. Clause: 30 Subclause: 7.1.17 through 7.1.29 Page: 21 through 25 Line: CommentType: (E, T, ER, or TR): E Comment:
On my printed copy the numbers 1,230,000 and 16,000 are missing the comma in the number.
CommentEnd:
SuggestedRemedy:
Change 1 230 000 to read 1,230,000 and change 16 000 to read 16,000
RemedyEnd: Editor' RecommendationStart:
Reject. The use of spaces rather than commas is proper notation and consistent with the rest of Clause 30.
Editor'sRecommendationEnd: ResolutionStart:
Accept Editor's Recommendation.
ResolutionEnd:
CommentNumber: 22 CommenterName: Tom Mathey CommenterEmail: tmathey@concentric.net CommenterPhone: 408-865-1763 CommenterCompany: Independent Clause: 30

Subclause: 30.7.1.17 Page: 21 Line: 1742 CommentType: (E, T, ER, or TR): E Comment: commas seem to be missing from the number 1230000CommentEnd: SuggestedRemedy: replace blank spaces with ",". RemedyEnd: Editor' RecommendationStart: See comment 21. Editor's Recommendation End: ResolutionStart: See comment 21. ResolutionEnd: CommentNumber: 23 CommenterName: Tom Mathey CommenterEmail: tmathey@concentric.net CommenterPhone: 408-865-1763 CommenterCompany: Independent Clause: 30 Subclause: 30.7.1.15 Page: 21 Line: 17 CommentType: (E, T, ER, or TR): E Add the word "Annex" to (F.2.1) as an aid to the reader who would not normally go all the way to the back of the book to look for a reference. CommentEnd: SuggestedRemedy: Add here and on p.36 for 30.7.4.3s RemedyEnd: Editor' RecommendationStart: Accept. Editor's Recommendation End: ResolutionStart: Accept.

ResolutionEnd:

CommentNumber: 24

CommenterName: Ted Schroeder CommenterEmail: ted@alteon.com CommenterPhone: (408) 360-5511 CommenterCompany: Alteon WebSystems, Inc.

Clause: 30 Subclause: 7.1.17

Page: 21 Line: 43

CommentType: (E, T, ER, or TR): E

Comment:

The sentence "This counter has a maximum increment rate of 1 230 000

per second at 10 Mb/s" is ambiguous.

#### CommentEnd:

#### SuggestedRemedy:

Change the sentence to read, "This counter has a maximum increment rate of 1 230 000 per second at for a single 10 Mb/s aggregation"

RemedyEnd:

Editor' RecommendationStart:

Accept.

Editor's Recommendation End:

ResolutionStart:

Accept. Lose the "at" from the suggested remedy.

#### ResolutionEnd:

CommentNumber: 25

CommenterName: Ted Schroeder CommenterEmail: ted@alteon.com CommenterPhone: (408) 360-5511

CommenterCompany: Alteon WebSystems, Inc.

Clause: 30 Subclause: 7.1.18 Page: 22

Page: 22 Line: 7

CommentType: (E, T, ER, or TR): E

Comment:

The sentence "This counter has a maximum increment rate of 1 230 000 per second at  $10\,\mathrm{Mb/s}$ " is ambiguous.

#### CommentEnd:

## SuggestedRemedy:

Change the sentence to read, "This counter has a maximum increment rate of 1 230 000 per second at for a single 10 Mb/s aggregation"

RemedvEnd:

Editor' RecommendationStart:

Accept.

Editor's Recommendation End:

ResolutionStart:

Accept. See comment 24.

ResolutionEnd:

CommentNumber: 26

CommenterName: Ted Schroeder CommenterEmail: ted@alteon.com CommenterPhone: (408) 360-5511

CommenterCompany: Alteon WebSystems, Inc.

Clause: 30 Subclause: 7.1.19

Page: 22 Line: 24

CommentType: (E, T, ER, or TR): E

Comment:

The sentence "This counter has a maximum increment rate of 16 000 per second at  $10 \, \text{Mb/s}$ " is ambiguous.

#### CommentEnd:

#### SuggestedRemedy:

Change the sentence to read, "This counter has a maximum increment rate of 16 000 per second at for a single 10 Mb/s aggregation"

## RemedyEnd:

Editor' RecommendationStart:

Accept.

Editor's Recommendation End:

ResolutionStart:

Accept. See comment 24.

#### ResolutionEnd:

CommentNumber: 27

CommenterName: Ted Schroeder CommenterEmail: ted@alteon.com CommenterPhone: (408) 360-5511

CommenterCompany: Alteon WebSystems, Inc.

Clause: 30 Subclause: 7.1.20

Page: 22 Line: 41

CommentType: (E, T, ER, or TR): E

Comment:

The sentence "This counter has a maximum increment rate of 16 000 per second at 10 Mb/s" is ambiguous.

## CommentEnd:

#### SuggestedRemedy:

Change the sentence to read, "This counter has a maximum increment rate of 16 000 per second at for a single 10 Mb/s aggregation"  $\,$ 

## RemedyEnd:

Editor' RecommendationStart:

Accept.

Editor'sRecommendationEnd:

ResolutionStart:

## Accept. See comment 24.

#### ResolutionEnd:

CommentNumber: 28

CommenterName: Ted Schroeder CommenterEmail: ted@alteon.com CommenterPhone: (408) 360-5511

CommenterCompany: Alteon WebSystems, Inc.

Clause: 30

Subclause: 7.1.21 Page: 23

Line: 2

CommentType: (E, T, ER, or TR): E

Comment:

The sentence "This counter has a maximum increment rate of 16 000 per second at 10 Mb/s" is ambiguous.

## CommentEnd:

#### SuggestedRemedy:

Change the sentence to read, "This counter has a maximum increment rate of 16 000 per second at for a single 10 Mb/s aggregation"

#### RemedyEnd:

Editor' RecommendationStart:

#### Accept.

Editor's Recommendation End:

ResolutionStart:

Accept. See comment 24.

#### ResolutionEnd:

CommentNumber: 29

CommenterName: Ted Schroeder CommenterEmail: ted@alteon.com CommenterPhone: (408) 360-5511

CommenterCompany: Alteon WebSystems, Inc.

Clause: 30 Subclause: 7.1.22

Page: 23 Line: 18

CommentType: (E, T, ER, or TR): E

Comment:

The sentence "This counter has a maximum increment rate of 16 000 per second at  $10 \, \text{Mb/s}$ " is ambiguous.

#### CommentEnd:

## SuggestedRemedy:

Change the sentence to read, "This counter has a maximum increment rate of 16 000 per second at for a single 10 Mb/s aggregation"

#### RemedyEnd:

Editor' RecommendationStart:

Accept.

Editor's Recommendation End:

ResolutionStart:

Accept. See comment 24.

ResolutionEnd:

CommentNumber: 30

CommenterName: Ted Schroeder CommenterEmail: ted@alteon.com CommenterPhone: (408) 360-5511

CommenterCompany: Alteon WebSystems, Inc.

Clause: 30 Subclause: 7.1.23

Page: 23 Line: 36

CommentType: (E, T, ER, or TR): E

Comment:

The sentence "This counter has a maximum increment rate of 16 000 per second at  $10 \, \text{Mb/s}$ " is ambiguous.

CommentEnd:

SuggestedRemedy:

Change the sentence to read, "This counter has a maximum increment rate of 16 000 per second at for a single 10 Mb/s aggregation"

RemedyEnd:

Editor' RecommendationStart:

Accept.

Editor's Recommendation End:

ResolutionStart:

Accept. See comment 24.

ResolutionEnd:

CommentNumber: 31

CommenterName: Ted Schroeder CommenterEmail: ted@alteon.com CommenterPhone: (408) 360-5511

CommenterCompany: Alteon WebSystems, Inc.

Clause: 30 Subclause: 7.1.24

Page: 23 Line: 53

CommentType: (E, T, ER, or TR): E

Comment:

The sentence "This counter has a maximum increment rate of 16 000 per second at  $10 \, \text{Mb/s}$ " is ambiguous.

CommentEnd:

SuggestedRemedy:

Change the sentence to read, "This counter has a maximum increment rate of 16 000 per second at for a single 10 Mb/s aggregation"

RemedyEnd:

Editor' RecommendationStart:

Accept.

Editor'sRecommendationEnd:

ResolutionStart:

Accept. See comment 24.

ResolutionEnd:

CommentNumber: 32

CommenterName: Ted Schroeder CommenterEmail: ted@alteon.com CommenterPhone: (408) 360-5511

CommenterCompany: Alteon WebSystems, Inc.

Clause: 30 Subclause: 7.1.25

Page: 24 Line: 16

CommentType: (E, T, ER, or TR): E

Comment:

The sentence "This counter has a maximum increment rate of 16 000

per second at 10 Mb/s" is ambiguous.

CommentEnd:

SuggestedRemedy:

Change the sentence to read, "This counter has a maximum increment rate of 16 000 per second at for a single 10 Mb/s aggregation"

RemedyEnd:

Editor' RecommendationStart:

Accept.

Editor'sRecommendationEnd:

ResolutionStart:

Accept. See comment 24.

ResolutionEnd:

CommentNumber: 33

CommenterName: Tom Mathey

CommenterEmail: tmathey@concentric.net

CommenterPhone: 408-865-1763 CommenterCompany: Independent

Clause: 30

Subclause: 30.7.1.25

Page: 24 Line: 23, 54

CommentType: (E, T, ER, or TR): T

Comment:

There are no collisions in full duplex.

CommentEnd:

# SuggestedRemedy: Delete sentence on lines 23 and 54 RemedyEnd: Editor' RecommendationStart: Reject. See comment 17. Editor'sRecommendationEnd: ResolutionStart: Accept Editor's Recommendation. ResolutionEnd: CommentNumber: 34 CommenterName: Ted Schroeder CommenterEmail: ted@alteon.com CommenterPhone: (408) 360-5511 CommenterCompany: Alteon WebSystems, Inc. Clause: 30 Subclause: 7.1.26 Page: 24 Line: 32 CommentType: (E, T, ER, or TR): E Comment: The sentence "This counter has a maximum increment rate of 16 000 per second at 10 Mb/s" is ambiguous. CommentEnd: SuggestedRemedy: Change the sentence to read, "This counter has a maximum increment rate of 16 000 per second at for a single 10 Mb/s aggregation" RemedyEnd: Editor' RecommendationStart:

Accept.

Editor'sRecommendationEnd:

ResolutionStart:

Accept. See comment 24.

ResolutionEnd:

CommentNumber: 35

CommenterName: Ted Schroeder CommenterEmail: ted@alteon.com CommenterPhone: (408) 360-5511

CommenterCompany: Alteon WebSystems, Inc.

Clause: 30 Subclause: 7.1.27

Page: 24 Line: 47

CommentType: (E, T, ER, or TR): E

Comment:

The sentence "This counter has a maximum increment rate of 16 000

per second at 10 Mb/s" is ambiguous.

#### CommentEnd:

SuggestedRemedy:

Change the sentence to read, "This counter has a maximum increment rate of 16 000 per second at for a single 10 Mb/s aggregation"

RemedyEnd:

Editor' RecommendationStart:

Accept.

Editor's Recommendation End:

ResolutionStart:

Accept. See comment 24.

#### ResolutionEnd:

CommentNumber: 36

CommenterName: Ted Schroeder CommenterEmail: ted@alteon.com CommenterPhone: (408) 360-5511

CommenterCompany: Alteon WebSystems, Inc.

Clause: 30 Subclause: 7.1.28

Page: 25 Line: 8

CommentType: (E, T, ER, or TR): E

Comment:

The sentence "This counter has a maximum increment rate of 16 000 per second at 10 Mb/s" is ambiguous.

#### CommentEnd:

SuggestedRemedy:

Change the sentence to read, "This counter has a maximum increment rate of 16 000 per second at for a single 10 Mb/s aggregation"

RemedyEnd:

Editor' RecommendationStart:

Accept.

Editor's Recommendation End:

ResolutionStart:

Accept. See comment 24.

ResolutionEnd:

CommentNumber: 37

CommenterName: Ted Schroeder CommenterEmail: ted@alteon.com CommenterPhone: (408) 360-5511

CommenterCompany: Alteon WebSystems, Inc.

Clause: 30 Subclause: 7.1.29

Page: 25

Line: 24

CommentType: (E, T, ER, or TR): E

Comment:

The sentence "This counter has a maximum increment rate of 16 000 per second at 10 Mb/s" is ambiguous.

CommentEnd:

SuggestedRemedy:

Change the sentence to read, "This counter has a maximum increment rate of 16 000 per second at for a single 10 Mb/s aggregation"

RemedyEnd:

Editor' RecommendationStart:

Accept.

Editor's Recommendation End:

ResolutionStart:

Accept. See comment 24.

ResolutionEnd:

CommentNumber: 38

CommenterName: Tom Mathey

CommenterEmail: tmathey@concentric.net

CommenterPhone: 408-865-1763 CommenterCompany: Independent

Clause: 30

Subclause: 30.7.1.31

Page: 26 Line: 5

CommentType: (E, T, ER, or TR): T

Comment:

I can find no variable named oLinkUpDownNotificationEnable in this document.

CommentEnd:

SuggestedRemedy:

Is the name aAggLinkUpDownNotificationEnable what is intended?

Same comment for line 20.

RemedyEnd:

Editor' RecommendationStart:

Accept. Do global search and correct.

Editor'sRecommendationEnd:

ResolutionStart:

Accept Editor's Recommendation.

ResolutionEnd:

CommentNumber: 39

CommenterName: Tom Mathey

CommenterEmail: tmathey@concentric.net

CommenterPhone: 408-865-1763

CommenterCompany: Independent

Clause: 30

Subclause: 30.7.1.34

Page: 26 Line: 50

CommentType: (E, T, ER, or TR): T

Comment:

A matter of style. Requirement is directed at the Frame Collector by external forces, not internally.

CommentEnd:

SuggestedRemedy:

Change text from: "that may be imposed by the Frame Collector"

To: "that is imposed upon the Frame Collector,"

Note addition of "," for better seperation of grammar.

RemedyEnd:

Editor' RecommendationStart:

Reject. In fact, the parameter \*is\* a function of the Frame Collector, and is not an externally-imposed restriction.

Editor's Recommendation End:

ResolutionStart:

Accept Editor's Recommendation. Note that the units are now tens of microseconds. (Do a global check here.)

ResolutionEnd:

CommentNumber: 40

CommenterName: Ted Schroeder CommenterEmail: ted@alteon.com CommenterPhone: (408) 360-5511

CommenterCompany: Alteon WebSystems, Inc.

Clause: 30 Subclause: 7.2.5 Page: 28

Line: 16 CommentType: (E, T, ER, or TR): TR

Comment:

Refers to the key for the Aggregator instead of the key for the aggregation

port.

CommentEnd:

SuggestedRemedy:

Change "Key for the Aggregator" to "Key for the Aggregation Port"

RemedyEnd:

Editor' RecommendationStart:

Accept.

Editor's Recommendation End:

ResolutionStart:

Accept.

#### ResolutionEnd:

CommentNumber: 41

CommenterName: Ted Schroeder CommenterEmail: ted@alteon.com CommenterPhone: (408) 360-5511

CommenterCompany: Alteon WebSystems, Inc.

Clause: 30 Subclause: 7.2.8 Page: 29

Page: 29 Line: 3

CommentType: (E, T, ER, or TR): E

Comment:

To be consistent with 30.7.2.6 the description should be expanded.

## CommentEnd:

## SuggestedRemedy:

Change "assigned value is used in order" to "assigned value is used along with the value of aAggPortPartnerAdminSystemPriority, aAggPortPartnerAdminKey, aAggPortPartnerAdminPort, and aAggPortPartnerAdminPortPrioirty, in order"

RemedyEnd:

Editor' RecommendationStart:

Accept.

Editor's Recommendation End:

ResolutionStart:

Accept.

## ResolutionEnd:

CommentNumber: 42

CommenterName: Ted Schroeder CommenterEmail: ted@alteon.com CommenterPhone: (408) 360-5511

CommenterCompany: Alteon WebSystems, Inc.

Clause: 30 Subclause: 7.2.10 Page: 29

Line: 33

CommentType: (E, T, ER, or TR): E

Comment:

To be consistent with 30.7.2.6 the description should be expanded.

#### CommentEnd:

## SuggestedRemedy:

Change "assigned value is used in order" to "assigned value is used along with the value of aAggPortPartnerAdminSystemPriority, aAggPortPartnerAdminSystemID, aAggPortPartnerAdminPort, and aAggPortPartnerAdminPortPrioirty, in order"

RemedyEnd:

Editor' RecommendationStart:

Accept.

Editor'sRecommendationEnd: ResolutionStart:
Accept.
ResolutionEnd:
CommenterName: 43 CommenterName: Ted Schroeder CommenterEmail: ted@alteon.com CommenterPhone: (408) 360-5511 CommenterCompany: Alteon WebSystems, Inc. Clause: 30 Subclause: 7.2.16 Page: 31 Line: 7 CommentType: (E, T, ER, or TR): E Comment: To be consistent with 30.7.2.6 the description should be expanded.
CommentEnd:
SuggestedRemedy: Change "assigned value is used in order" to "assigned value is used along with the value of aAggPortPartnerAdminSystemPriority, aAggPortPartnerAdminSystemID, aAggPortPartnerAdminKey, and aAggPortPartnerAdminPortPriority, in order"
RemedyEnd: Editor' RecommendationStart:
Accept.
Editor'sRecommendationEnd: ResolutionStart:
Accept.
ResolutionEnd:
CommentNumber: 44 CommenterName: Darrell Furlong CommenterEmail: dfurlong@lancast.com CommenterPhone: 603-880-1833 x 103 CommenterCompany: Lancast, Inc. Clause: 30 Subclause: 7.2.17 Page: 31 Line: 21 CommentType: (E, T, ER, or TR): T Comment:
Missing value size.
CommentEnd:
SuggestedRemedy:
Change text from "This value is read only,:" to "This 16-bit value is read-only,;"

RemedyEnd: Editor' RecommendationStart: Accept.

Editor'sRecommendationEnd:

ResolutionStart:

Accept.

ResolutionEnd:

CommentNumber: 45

CommenterName: Ted Schroeder CommenterEmail: ted@alteon.com CommenterPhone: (408) 360-5511

CommenterCompany: Alteon WebSystems, Inc.

Clause: 30 Subclause: 7.2.18

Page: 31 Line: 35

CommentType: (E, T, ER, or TR): E

Comment:

To be consistent with 30.7.2.6 the description should be expanded.

CommentEnd:

SuggestedRemedy:

Change "assigned value is used in order" to "assigned value is used along with the value of aAggPortPartnerAdminSystemPriority, aAggPortPartnerAdminSystemID, aAggPortPartnerAdminKey, and aAggPortPartnerAdminPort, in order"

RemedyEnd:

Editor' RecommendationStart:

Accept.

Editor's Recommendation End:

ResolutionStart:

Accept.

ResolutionEnd:

CommentNumber: 46

CommenterName: Ted Schroeder CommenterEmail: ted@alteon.com CommenterPhone: (408) 360-5511

CommenterCompany: Alteon WebSystems, Inc.

Clause: 30 Subclause: 7.4.4

Page: 37 Line: 3

CommentType: (E, T, ER, or TR): E

Comment:

Reference to old, nonexistent state machine, Match machine

CommentEnd:

Suggested Remedy:

Replace "Match machine" with "Receive machine"

RemedyEnd:

Editor' RecommendationStart:

Accept.

Editor's Recommendation End:

ResolutionStart:

Accept.

ResolutionEnd:

CommentNumber: 47

CommenterName: Tom Mathey

CommenterEmail: tmathey@concentric.net

CommenterPhone: 408-865-1763 CommenterCompany: Independent

Clause: 30

Subclause: 30.7.4.7

Page: 38 Line: 3

CommentType: (E, T, ER, or TR): E

Comment:

There is an extra letter b in the word "thatbthe"

CommentEnd:

SuggestedRemedy: replace "b" with " "

RemedyEnd:

Editor' RecommendationStart:

Accept.

Editor's Recommendation End:

ResolutionStart:

Accept.

ResolutionEnd:

CommentNumber: 48

CommenterName: Tom Mathey

CommenterEmail: tmathey@concentric.net

CommenterPhone: 408-865-1763 CommenterCompany: Independent

Clause: 30

Subclause: 30.7.4.11

Page: 38 Line: 52

CommentType: (E, T, ER, or TR): T

Comment:

In the name for this attribute, if by "NearEnd" is meant "Actor", then please change name. Also for all other usage of NearEnd and FarEnd. As far as I can tell, these attributes (and p.39, line 8) are the only usage of text NearEnd and is confusing if Actor is the common usage.

CommentEnd:

SuggestedRemedy:

 $Change\ from\ "aAggPortDebugNearEndSyncTransitionCount"\\ to\ "aAggPortDebugActorSyncTransitionCount"$ 

RemedyEnd:

Editor' RecommendationStart:

Accept. Change "NearEnd" to "Actor" and "FarEnd" to "Partner" in 30.7.4.11 through 30.7.4.14. Fix any other references.

Editor's Recommendation End:

ResolutionStart:

Accept in principle. Make consistent with the decision on terminology made against comment 61.

ResolutionEnd:

CommentNumber: 49

CommenterName: Tom Mathey

CommenterEmail: tmathey@concentric.net

CommenterPhone: 408-865-1763 CommenterCompany: Independent

Clause: 30

Subclause: 30.7.4.14

Page: 39 Line: 40

CommentType: (E, T, ER, or TR): T

Comment:

Please provide a pointer to were LAG ID is defined.

CommentEnd:

SuggestedRemedy:

Add text: (see 43.3.6.1)

RemedyEnd:

Editor' RecommendationStart:

Accept.

Editor's Recommendation End:

ResolutionStart:

Accept.

ResolutionEnd:

CommentNumber: 50

CommenterName: Anil Rijsinghani CommenterEmail: anil@cabletron.com CommenterPhone: 978-684-1295

CommenterCompany: Cabletron Systems

Clause: 30

Subclause: 30C.4.3

Page: 72

Line: 10

CommentType: (E, T, ER, or TR): T

Comment:

 $if Type\ uses\ a\ generic\ type,\ "prop Virtual",\ which\ can confuse\ an\ 802.3ad\ trunking\ implementation\ with$ 

other protocols at the interface level.

Need to use a unique type to make this object useful.

CommentEnd:

SuggestedRemedy:

Request from IANA and use a new if Type, "8023ad\_trunk".

RemedyEnd:

Editor' RecommendationStart:

Accept in principle. Name the ifType "8023ad\_aggregation"

Editor'sRecommendationEnd:

ResolutionStart:

Accept in principle. Use the name "ieee8023adLag". Include a pointer to the IANA website, also the value when known..

ResolutionEnd:

CommentNumber: 51

CommenterName: Tom Mathey

CommenterEmail: tmathey@concentric.net

CommenterPhone: 408-865-1763 CommenterCompany: Independent

Clause: 30C

Subclause: Table 30C-2

Page: 72 Line: 12

CommentType: (E, T, ER, or TR): T

Comment:

The largest frame size is not 1500. 1500 is the largest data size for untagged frames.

CommentEnd:

SuggestedRemedy:

Replace text with: largest data size (untagged frames) - 1500 bytes

RemedyEnd:

Editor' RecommendationStart:

Accept in principle. Use either "largest MAC Client SDU", or "largest MAC Client payload". Note that the ifMTU is 1500 regardless of whether the frame is tagged or not, so the second part of the commenter's recommendation is irrelevant.

Editor'sRecommendationEnd:

ResolutionStart:

Accept in principle. Use "largest MAC Client SDU".

ResolutionEnd:

CommentNumber: 52

CommenterName: Anil Rijsinghani CommenterEmail: anil@cabletron.com CommenterPhone: 978-684-1295 CommenterCompany: Cabletron Systems

Clause: 30

Subclause: 30C.4.3

Page: 72 Line: 33

CommentType: (E, T, ER, or TR): TR

Comment:

ifInNUcastPkts has been deprecated in RFC 2233 (and even

in the obsolete RFC 1573).

CommentEnd:

SuggestedRemedy:

In the "Definition" column, remove description and show this

object as "Deprecated".

RemedyEnd:

Editor' RecommendationStart:

Accept.

Editor's Recommendation End:

ResolutionStart:

Accept.

ResolutionEnd:

CommentNumber: 53

CommenterName: Anil Rijsinghani CommenterEmail: anil@cabletron.com CommenterPhone: 978-684-1295

CommenterCompany: Cabletron Systems

Clause: 30

Subclause: 30C.4.3

Page: 73 Line: 5

CommentType: (E, T, ER, or TR): TR

Comment:

ifOutNUcastPkts has been deprecated in RFC 2233 (and even

in the obsolete RFC 1573).

CommentEnd:

SuggestedRemedy:

In the "Definition" column, remove description and show this

object as "Deprecated".

RemedyEnd:

Editor' RecommendationStart:

Accept.

Editor'sRecommendationEnd:

ResolutionStart:

See comment 52.

ResolutionEnd:

CommentNumber: 54

CommenterName: Anil Rijsinghani CommenterEmail: anil@cabletron.com CommenterPhone: 978-684-1295 CommenterCompany: Cabletron Systems

Clause: 30

Subclause: 30C.4.3

Page: 73 Line: 20

CommentType: (E, T, ER, or TR): TR

Comment:

ifConnectorPresent is shown as "not supported". This is not correct based on the definition of the object in RFC 2233.

CommentEnd:

SuggestedRemedy:

The value reported should be "false", per its description in RFC 2233.

This object is a TruthValue.

RemedyEnd:

Editor' RecommendationStart:

Accept.

Editor's Recommendation End:

ResolutionStart:

Accept.

#### ResolutionEnd:

CommentNumber: 55

CommenterName: Anil Rijsinghani CommenterEmail: anil@cabletron.com CommenterPhone: 978-684-1295

CommenterCompany: Cabletron Systems

Clause: 30

Subclause: 30C.5.3

Page: 74 Line: 49

CommentType: (E, T, ER, or TR): TR

Comment:

The MIB forces an arbitrary "read-only" semantic on the ifStackTable. This is not compliant with RFC 2233.

CommentEnd:

SuggestedRemedy:

Remove the restriction. There are many uses for a "read-write"

implementation, as described in RFC 2233.

RemedyEnd:

Editor' RecommendationStart:

Reject. The point of the restriction is to enforce hierarchy between Aggregators and Ports, not to make a blanket statement about the read/write nature of the table.

Editor's Recommendation End:

ResolutionStart:

Reject. Add a Note indicating the rationale, as in Editor's Recommendation.

ResolutionEnd:

CommentNumber: 56

CommenterName: Anil Rijsinghani CommenterEmail: anil@cabletron.com CommenterPhone: 978-684-1295

CommenterCompany: Cabletron Systems

Clause: 30 Subclause: 30C.6

Page: 75 Line: 21

CommentType: (E, T, ER, or TR): T

Comment:

An additional object would be very useful for the trunking protocol,

to indicate which, if any, is in use.

CommentEnd:

#### SuggestedRemedy:

Add an object to specify the type of trunking protocol in place, with enumerations "none, 802.3ad, other". This will both allow the protocol to be turned off in a straightforward way (as decided early on in the project), and also allow co-existence with other protocols already in place.

RemedvEnd:

Editor' RecommendationStart:

Accept.

Editor'sRecommendationEnd:

ResolutionStart:

Reject. This can be done properly in a private MIB with explicit values for "other".

#### ResolutionEnd:

CommentNumber: 57

CommenterName: Anil Rijsinghani CommenterEmail: anil@cabletron.com CommenterPhone: 978-684-1295

CommenterCompany: Cabletron Systems

Clause: 30 Subclause: 30.C.6

Page: 75 Line: 21

CommentType: (E, T, ER, or TR): T

Comment:

The tables in the MIB are difficult to poll for change. It is necessary for a manager to go through several objects in a table to determine if there has been any change. This can cause significant network management traffic on a periodic polling basis.

CommentEnd:

#### SuggestedRemedy:

Standard practice in MIBs is to have a LastChanged object in tables which are typically not updated often, to indicate the up time (with respect to the agent) at which the last change occured in this table. Each of the tables dot3adAggTable, dot3AggPortListTable, and dot3AggPortTable would benefit from such a LastChanged object associated with them. Then, the manager need only compare the object with its value the last time it went through the table, to determine if it needs to go through the table again to refresh its info.

RemedyEnd:

Editor' RecommendationStart:

#### Accept.

#### Editor'sRecommendationEnd:

ResolutionStart:

Accept in principle. Add a single object that specifies which tables it covers. As changes would likely change more than one table, a single object should suffice. Also, polling one object makes detection simpler.

#### ResolutionEnd:

CommentNumber: 58

CommenterName: Anil Rijsinghani CommenterEmail: anil@cabletron.com CommenterPhone: 978-684-1295

CommenterCompany: Cabletron Systems

Clause:

Subclause: 30C.5.1

Page: 74 Line: 6

CommentType: (E, T, ER, or TR): T

Comment:

Nothing in the MIB describes clearly how the MIB deals

with hot-swap, and its effect on Port numbering.

CommentEnd:

#### SuggestedRemedy:

Add clarification to describe the relationship and mapping between interfaces and ports, especially in the context of interfaces physically being added and removed.

RemedyEnd:

Editor' RecommendationStart:

Reject in principle. Such clarification could be useful; however, the commenter does not offer any suggestion as to how the point should be clarified.

## Editor'sRecommendationEnd:

ResolutionStart:

Reject. It is not common practice for MIB definitions to address this point.

## ResolutionEnd:

CommentNumber: 59

CommenterName: Tony Jeffree CommenterEmail: tony@jeffree.co.uk CommenterPhone: +44-161-973-4278

CommenterCompany: Independent Consultant

Clause: 30C Subclause: 30C.6

Page: 79 Line: 40/41

CommentType: (E, T, ER, or TR): TR

Comment:

AggPartnerSystemPriority should be Read Only to correspond with the earlier object definitions.

## CommentEnd:

## SuggestedRemedy:

On line 40/41, change "read-write" to "read-only".

RemedyEnd:

Editor' RecommendationStart:

Discuss whether this object should be read-only or read-write, and make all changes needed for consistency. (Note: earlier comments requested making this read-write; this comment requests read-only.)

Editor'sRecommendationEnd:

ResolutionStart:

Accept.

ResolutionEnd:

CommentNumber: 60

CommenterName: Robert Grow

CommenterEmail: bob.grow@intel.com CommenterPhone: 858-487-9320x232

CommenterCompany: Intel

Clause: 43 Subclause: 43 Page: General

Line:

CommentType: (E, T, ER, or TR): TR

Comment:

The use of the Mux states are inconsistent and confusing. The desire to not constrain the implementer (Editors Note at the top of page 143) has apparently encouraged the editor(s) to be similarly unconstrained. There are at least five different representations of the mux states, for example: "In Sync" (page 125 line 43), "in sync" (page 142 line 31), "In\_Sync" [Italic] (page 121 line 45), "In\_Sync" (page 142 line 33), and IN\_SYNC (page 132 line 21). (A cursory examination of clause 30 only found the usage IN\_SYNC.) It would be clearer if there were a state diagram for an example MUX (even if some readers may incorrectly infer constraints from it).

CommentEnd:

SuggestedRemedy:

Search the document for all of the above variations (and any others the editor can conjecture) for both in and out uses and change to IN\_SYNC and OUT\_OF\_SYNC respectively.

OUI\_OF\_STINC respectively.

Add a figure for an example Mux state machine to 43.4.14.

RemedyEnd:

Editor' RecommendationStart:

Accept terminology clarification. Discuss the need for a Mux state machine. (Later comments appear on this issue as well.)

Editor's Recommendation End:

ResolutionStart:

Resolved by Comment # 177, 179.

ResolutionEnd:

CommentNumber: 61

CommenterName: Tom Mathey

CommenterEmail: tmathey@concentric.net

CommenterPhone: 408-865-1763 CommenterCompany: Independent Clause: 43 Subclause: all Page: misc Line: misc

CommentType: (E, T, ER, or TR): E

Comment:

The text Actor, Local, and NearEnd all seem to mean the same thing.

Unless there is an overwhelming reason to use multiple names for the same item, I suggest replacing all usage of Local and NearEnd with Actor.

Same for Partner, Remote, and FarEnd.

CommentEnd:

SuggestedRemedy:

To be consistent in the document:

Replace usage of Local and NearEnd with Actor. Replace usage of Remote, and FarEnd with Partner.

RemedyEnd:

Editor' RecommendationStart:

Accept in principle. Discuss what the proper terminology should be, and make global changes as necessary for consistency.

Editor'sRecommendationEnd:

ResolutionStart:

Accept in principle. Use "Actor" and "Partner" where LACP protocol roles are being discussed. Use "Local" and "Remote" elsewhere.

#### ResolutionEnd:

CommentNumber: 62

CommenterName: Shimon Muller

CommenterEmail: shimon.muller@Eng.sun.com

CommenterPhone: (650)-688-9572 CommenterCompany: Sun Microsystems

Clause: 43.1 Subclause: 43.1.1 Page: N/A Line: N/A

CommentType: (E, T, ER, or TR): ER

Comment:

One of the main benefits of Link Aggregation is to provide bandwidth increments in unit multiples. This is an important new concept for the 802.3 standard and should therefore be mentioned in the standard overview.

CommentEnd:

SuggestedRemedy:

Add the following sentence to the end of the paragraph in 43.1.1:

"In addition, it specifies a method for linearly incrementing a system's data rate by aggregating multiple physical links of same speeds into one logical link".

RemedyEnd:

Editor' RecommendationStart:

Reject. This is not an overview issue, and linearly-incremental bandwidth is listed as the second item under 43.1.2, the first page of the clause.

Editor's Recommendation End:

ResolutionStart:

Accept. The sentence should be added to the end of 1.1 Overview (not 43.1.1 as erroneously recorded above).

## ResolutionEnd:

CommentNumber: 63

CommenterName: Darrell Furlong CommenterEmail: dfurlong@lancast.com CommenterPhone: 603-880-1833 x 103 CommenterCompany: Lancast, Inc.

Clause: 43 Subclause: 43.1.2 Page: 100 Line: 20

CommentType: (E, T, ER, or TR): T

Comment:

I find the heading "Goals and Objectives" in a standard confusing. I can not tell by reading this section what the requirements are?

CommentEnd:

SuggestedRemedy:

Change the section heading to "Introduction", then summarize what the standard provides. Also, delete in line 43 "with high probability". The standard requires that there are no duplicate or mis-ordered frames.

RemedyEnd:

Editor' RecommendationStart:

Reject. These \*are\* the goals and objectives of the standard, and neither an introduction nor a requirements list. Also, the use of "high probability" is correct; the standard cannot guarantee non-duplication or proper ordering, except to a high degree of probability (hopefully, high enough so that the issue can be ignored by higher layer protocols).

Editor'sRecommendationEnd:

ResolutionStart:

Accept Editor's Recommendation.

## ResolutionEnd:

CommentNumber: 64

CommenterName: Shimon Muller

CommenterEmail: shimon.muller@Eng.sun.com

CommenterPhone: (650)-688-9572 CommenterCompany: Sun Microsystems

Clause: 43 Subclause: 43.1.2 Page: 100

Line: 23

CommentType: (E, T, ER, or TR): E Comment:

Typo.

CommentEnd:

SuggestedRemedy:

Replace "are" with "is".

Alternatively, replace "capacity" with "capacities".

RemedyEnd: Editor' RecommendationStart:
Accept. Replace "are" with "is".

Editor's Recommendation End:

ResolutionStart:

Accept.

ResolutionEnd:

CommentNumber: 65

CommenterName: Tony Jeffree CommenterEmail: tony@jeffree.co.uk CommenterPhone: +44-161-973-4278

CommenterCompany: Independent Consultant

Clause: 43

Subclause: 43.1.2 g)

Page: 100 Line: 37

CommentType: (E, T, ER, or TR): E

Comment:

The phrase "depending on the algorithm chosen" could be taken to imply that the entire aggregation algorithm itself is the subject of choice, whereas it is really only referring to the choice of selection algorithm.

CommentEnd:

SuggestedRemedy:

Replace "depending on the algorithm chosen" with "depending on the selection algorithm chosen".

RemedyEnd:

Editor' RecommendationStart:

Accept.

Editor's Recommendation End:

ResolutionStart:

Accept.

ResolutionEnd:

CommentNumber: 66

CommenterName: Tony Jeffree CommenterEmail: tony@jeffree.co.uk CommenterPhone: +44-161-973-4278

CommenterCompany: Independent Consultant

Clause: 43

Subclause: Various Page: Various (e.g., p100) Line: Various (e.g., p100 line 6) CommentType: (E, T, ER, or TR): E

Comment:

802 editing rules specify that "Clause" should only be capitalized when it specifies a clause number (e.g., "see Clause 43") but not where it does not (e.g., "as specified in this clause").

uggestedRemedy:	S
Tix the capitalization of all occurrences of "clause" or "clauses" to conform to editing rules. Global search & destroy needed.	F
RemedyEnd: Editor' RecommendationStart:	
Accept.	A
Editor'sRecommendationEnd: ResolutionStart:	
Accept.	A
ResolutionEnd:	R
CommenterNumber: 67 CommenterName: Robert Grow CommenterEmail: bob.grow@intel.com CommenterPhone: 858-487-9320x232 CommenterCompany: Intel Clause: 43 Cubclause: 43.1.1 Cage: 100 Cine: 16 CommentType: (E, T, ER, or TR): E Comment: Clause is inconsistently capitalized. CommentEnd: Co	C C C C C C C C C C C C C C C C C C C
ee comment 66.	So
Editor'sRecommendationEnd: ResolutionStart:	
ee Comment 66.	So
ResolutionEnd:	R
CommentNumber: 67a CommenterName: Tasker CommenterEmail: r.tasker@dl.ac.uk CommenterPhone: +44 1925 603758 CommenterCompany: Daresbury Laboratory Clause: 43.1.2 Subclause: c Page: 100 Line: 28 CommentType: (E, T, ER, or TR): T Comment: This is not strictly true, in general terms Link Aggregation will Improve availability, but for a conversation (see 43.2.1 (f) and (g)) this Is not the case.	C C C C Si P: C C

CommentEnd:

CommentEnd:

SuggestedRemedy: Re-word accordingly.

RemedyEnd:

Editor' RecommendationStart:

Reject. The expression" ...need not cause failure..." (as opposed to "...will not cause failure...") implies that failures may still occur, depending on the nature of the aggregation and/or the client.

Editor'sRecommendationEnd:

ResolutionStart:

Accept Editor's Recommendation.

### ResolutionEnd:

CommentNumber: 68

CommenterName: Shimon Muller

CommenterEmail: shimon.muller@Eng.sun.com

CommenterPhone: (650)-688-9572

CommenterCompany: Sun Microsystems

Clause: 43 Subclause: 43.1.2 Page: 100 Line: 43

CommentType: (E, T, ER, or TR): E

Comment: Typo.

CommentEnd:

SuggestedRemedy:

Replace "of" with "to" after "required".

RemedyEnd:

Editor' RecommendationStart:

Accept.

Editor's Recommendation End:

ResolutionStart:

Accept.

### ResolutionEnd:

CommentNumber: 69

CommenterName: Geoff Thompson

CommenterEmail: gthompso@nortelnetworks.com

CommenterPhone: +1 408 495 1339 CommenterCompany: Nortel Networks

Clause: 43

Subclause: 43.1.2 Page: 100 Line: 46

CommentType: (E, T, ER, or TR): T

Comment:

Incomplete set of conditions

# CommentEnd:

SuggestedRemedy:

Add text so that it reads:

Backwards compatibility with aggregation-unaware devices links that cannot take part in link

aggregation, either because of their inherent capabilities, management configuration, or of the capabilities of the devices to which they attach, operate as normal, individual 802.3 links.

RemedyEnd:

Editor' RecommendationStart:

Accept.

Editor's Recommendation End:

ResolutionStart:

Accept.

ResolutionEnd:

CommentNumber: 70

CommenterName: Ted Schroeder CommenterEmail: ted@alteon.com CommenterPhone: (408) 360-5511

CommenterCompany: Alteon WebSystems, Inc.

Clause: 43 Subclause: 1.2 Page: 100 Line: 50

CommentType: (E, T, ER, or TR): E

Comment:

Use of passive is contraindicated

CommentEnd:

SuggestedRemedy:

Change "should be" to "are"

RemedyEnd:

Editor' RecommendationStart:

Accept in principle. We may want to wordsmith this so that it doesn't appear that Link Aggregation can make incompatible devices aggregatable.

Editor's Recommendation End:

ResolutionStart:

Accept in principle. Change "should be" to "are, to the extent possible".

ResolutionEnd:

CommentNumber: 71

CommenterName: Ted Schroeder CommenterEmail: ted@alteon.com CommenterPhone: (408) 360-5511

CommenterCompany: Alteon WebSystems, Inc.

Clause: 43 Subclause: 1.2 Page: 101 Line: 6-12

CommentType: (E, T, ER, or TR): E

Comment:

List numbering starts over within same section

CommentEnd:

SuggestedRemedy:

Continue list items replacing a with n, etc.

RemedyEnd: Editor' RecommendationStart:	
Accept.	
Editor'sRecommendationEnd: ResolutionStart:	
Accept.	
ResolutionEnd:	
CommentNumber: 72 CommenterName: Tom Mathey CommenterEmail: tmathey@concentric.net CommenterPhone: 408-865-1763 CommenterCompany: Independent Clause: 43 Subclause: 43.1.4 Page: 101 Line: 54 CommentType: (E, T, ER, or TR): T Comment:	
I can find no PICS entry to support the shall in this sentence.	
CommentEnd:	
SuggestedRemedy:	
Add	
RemedyEnd: Editor' RecommendationStart:	
Accept in principle. Remove the word "shall" from the statement.	
Editor'sRecommendationEnd: ResolutionStart:	
Accept Editor's Recommendation.	
ResolutionEnd:	
CommentNumber: 73 CommenterName: Geoff Thompson CommenterEmail: gthompso@nortelnetworks.com CommenterPhone: +1 408 495 1339 CommenterCompany: Nortel Networks Clause: 43 Subclause: 43.2 Page: 102 Line: All CommentType: (E, T, ER, or TR): E Comment: No mention or depiction of the existence of a Management Interface	
CommentEnd:	
SuggestedRemedy:	

Show some sort of Management Inerface in Fig 43-2 or put a disclaimer in the text that says that it is not shown for the sake of simplicity.

RemedyEnd:

Editor' RecommendationStart:

Accept the second option; this figure has enough clutter already.

Editor's Recommendation End:

ResolutionStart:

Reject. This comment applies equally to the entire 802.3 standard; the commenter is invited to submit a maintenance request.

#### ResolutionEnd:

CommentNumber: 74

CommenterName: Geoff Thompson

CommenterEmail: gthompso@nortelnetworks.com

CommenterPhone: +1 408 495 1339 CommenterCompany: Nortel Networks

Clause: 43

Subclause: 43.2.1d

Page: 103 Line: 39

CommentType: (E, T, ER, or TR): T

Comment:

Is there (1) one LAC per system or (2) one LAC per Aggregation?

If the answer is (2) then I believe that there needs to be (optional) communication between them.

# CommentEnd:

SuggestedRemedy:

Add clarifying text.

RemedyEnd:

Editor' RecommendationStart:

Accept. Wordsmith to make it clear that there is only one LAC per system.

Editor'sRecommendationEnd:

ResolutionStart:

Accept. Re-word to "... by the Link Aggregation Control function for that system,..."

# ResolutionEnd:

CommentNumber: 75

CommenterName: Hadriel Kaplan

CommenterEmail: hkaplan@nortelnetworks.com

CommenterPhone: (978)288-6160 CommenterCompany: Nortel Networks

Clause: 43 Subclause: 43.2.1 Page: 103

CommentType: (E, T, ER, or TR): TR

Comment:

Line: 43-45

I am a little confused as to whether it is permissible for the LACP PDU exchange to be turned off or not. If a user wants to manually set which ports bind to which ports, the settings are made by means of key values,

but the LACPDU exchange still occurs, right? What I don't want to happen, is this standard to allow a vendor to make a box that does not do the LACPDU exchange but rather only allows user settings. I'm certain this will still happen, but I want that mode to be beyond the spec, so that in order to claim conformance, the vendor MUST allow automatic LACPDU exchange mechanism to take place.

# CommentEnd:

SuggestedRemedy:

Add "Regardless of manual or automatic control, Link Aggregation requires the LACP exchange mechanism to form aggregated links. Manual user settings simply set the key values used in the mechanism - they do not disable the mechanism."

RemedyEnd:

Editor' RecommendationStart:

Reject. The point of the manual configuration capability is to allow aggregation to occur with a device that can aggregate but that does not talk LACP. In such a case, if the LACP aware device is passive, then there will indeed be no LACP exchanges, but aggregation will take place. Not clear how to meet the commenter's expressed need without also destroying the ability to do this.

Editor'sRecommendationEnd:

ResolutionStart:

Accept in principle. Change p131 l9 to add "...otherwise the value of LACP\_Enabled shall be TRUE". Fix any knock-ons into the PICS - p156 l6 in the PICS.

### ResolutionEnd:

CommentNumber: 76

CommenterName: Robert Grow CommenterEmail: bob.grow@intel.com CommenterPhone: 858-487-9320x232

CommenterCompany: Intel

Clause: 43 Subclause: 43.2.1 Page: 103

CommentType: (E, T, ER, or TR): E

Comment:

Line: 50

Because 1.4 is revised with almost every project, a specific reference here just creates more work for the IEEE editor, and it more likely to be  $\frac{1}{2}$ 

incorrect in the next doorstop edition.

CommentEnd: SuggestedRemedy:

Change "see 1.4.xxx" to "see 1.4" and delete the Editor's Note.

RemedyEnd:

Editor' RecommendationStart:

Accept.

Editor'sRecommendationEnd:

ResolutionStart:

Accept.

ResolutionEnd:

CommentNumber: 77

CommenterName: Geoff Thompson

CommenterEmail: gthompso@nortelnetworks.com

CommenterPhone: +1 408 495 1339 CommenterCompany: Nortel Networks

Clause: 43

Subclause: 43.2.1j

Page: 104 Line: 14

CommentType: (E, T, ER, or TR):: E

Comment:

It is not clear from the text here whether of not a Port MAC address can be used in an associated aggregator

#### CommentEnd:

SuggestedRemedy:

Add the following text: "This address may match any of the addresses specified in i)."

RemedyEnd:

Editor' RecommendationStart:

Accept in principle. See comment 78.

Editor'sRecommendationEnd:

ResolutionStart:

Accept in principle. See Comment 78.

### ResolutionEnd:

CommentNumber: 78

CommenterName: Darrell Furlong CommenterEmail: dfurlong@lancast.com CommenterPhone: 603-880-1833 x 103 CommenterCompany: Lancast, Inc.

Clause: 43 Subclause: 2.1 Page: 104 Line: 16

CommentType: (E, T, ER, or TR): T

Comment:

Missing statement that the link aggregator MAC address may be same as one of the ports assigned to it.

### CommentEnd:

# SuggestedRemedy:

 $Add\ the\ following\ sentence.\ The\ MAC\ address\ of\ the\ Link\ Aggregator\ may\ be\ one\ of\ the\ MAC\ addresses\ of\ a\ MAC\ in\ the\ associated\ Link\ Aggregation\ Group.$ 

RemedyEnd:

Editor' RecommendationStart:

Accept in principle. Include the statement plus a cross-reference to the Addressing section.

Editor'sRecommendationEnd:

ResolutionStart:

Accept Editor's Recommendation.

### ResolutionEnd:

CommentNumber: 79

CommenterName: Tom Mathey

CommenterEmail: tmathey@concentric.net

CommenterPhone: 408-865-1763 CommenterCompany: Independent

Clause: 43 Subclause: 43.2.2

Page: 104 Line: 31

CommentType: (E, T, ER, or TR): T

Comment:

Since a system may contain multiple aggregators (p. 103, line 36), there should be an allowance in the service interface between the MAC Client and the set of aggregators to provide selection of a particular aggregator.

Thus the prefix "Agg:" in the service interface to the MAC Client should be changed to "AggN:" with an appropriate definition of "N" similar to that used on p.104, lines 34, 36, or 38.

Also add a new Figure which shows a "box" with multiple MAC Clients and multiple aggregators, and simple interfaces between then

How to select one-of-N MAC Clients is beyond the scope of this comment.

CommentEnd:

SuggestedRemedy:

Change "Agg:" to "AggN" and ripple the change thru-out the document.

RemedvEnd:

Editor' RecommendationStart:

Reject. We made a conscious decision to write the standard from the perspective of a single Aggregator; the notation reflects that decision.

Editor'sRecommendationEnd:

ResolutionStart:

Reject for reasons stated in Editor's Recommendation.

#### ResolutionEnd:

CommentNumber: 80

CommenterName: Geoff Thompson

CommenterEmail: gthompso@nortelnetworks.com

CommenterPhone: +1 408 495 1339 CommenterCompany: Nortel Networks

Clause: 43

Subclause: 43.2.3 et seq

Page: 105 Line: 6

CommentType: (E, T, ER, or TR): E

Comment:

Style issue: The state diagram is referred to by sub-clause number rather than by figure designation.

This is not consistant with the rest of the draft and the published standard.

CommentEnd:

SuggestedRemedy:

Change reference to "Figure 43-3"

Search for other occurances of this style error and repair

RemedyEnd:

Editor' RecommendationStart:

Reject. This was a conscious choice; the section referred to includes both the figure AND the constant/variable/message definitions; the requirement is to conform to the entire set of items, not the figure separate from the definitions. As an alternative, the statement could require conformance to the figure AND the associated definitions.

Editor's Recommendation End:

ResolutionStart:

Accept in principle. State that conformance to the figure AND the associated definitions is required. Do this consistently for the other SM's as well.

#### ResolutionEnd:

CommentNumber: 81

CommenterName: Luc Pariseau

CommenterEmail: lparisea@nortelnetworks.com

CommenterPhone: (978) 645-2835 CommenterCompany: Nortel Networks

Clause: 43

Subclause: 43.2.3.1.1

Page: 105 Line: 14

CommentType: (E, T, ER, or TR): ER

Comment:

I was a little confused about CollectorMaxDelay. The understanding I had was that this was a minimum amount of time for the Partner to wait when moving a conversation from one member to another member of an aggragation if not using Markers. But this was not made clear until I reached Annex 43A (page 163, lines 5-13.)

Further confusion resulted from the fact that this attribute is read-write. Why? My guess is that the implementation used a default CollectorMaxDelay that isn't long enough, therefore the network admin wants to increase this value.

Final piece of confusion, what does it mean when CollectorMaxDelay is 0. Drop all frames because I have ANY delay?

# CommentEnd:

SuggestedRemedy:

Can we move/copy the the text from the annex to page 106 (around lines 5-10)?

Can we try to explain why this is read/write?

Define what 0 means: two options

1) Don't allow 0

2) 0 just means less than 1 milliseconds.

RemedyEnd:

Editor' RecommendationStart:

Accept in principle. Either include a pointer from the definition to the Annex, or replicate the Annex information in an informative note at this point.

The value of zero indicates to a partner that the Collector imposes no additional delay. The only delay that must be considered when moving conversations among links is therefore the propagation delay of the physical channel.

Editor's Recommendation End:

ResolutionStart:

Accept in principle. Add a pointer to the definition in the Annex. Add clarification to the Annex that the value of zero indicates to a partner that the Collector imposes less than 1 millisecond delay. The only delay that must be considered when moving conversations among links is therefore the propagation delay of the physical channel.

### ResolutionEnd:

CommentNumber: 82

CommenterName: Tom Mathey

CommenterEmail: tmathey@concentric.net

CommenterPhone: 408-865-1763 CommenterCompany: Independent

Clause: 43

Subclause: 43.2.3.1.4, Figure 43-3

Page: 105 Line: 14

CommentType: (E, T, ER, or TR): T

Comment:

The constant "CollectorMaxDelay" is listed but not used in the state diagram.

CommentEnd:

SuggestedRemedy:

Add to figure, or delete from list of constants.

RemedyEnd:

Editor' RecommendationStart:

Reject. CollectorMaxDelay is dealt with in the text following the figure (p 106 lines 5-7), which is part of section 43.2.3.1.4 State Diagram.

Editor's Recommendation End:

ResolutionStart:

Reject as per Editor's Recommendation.

ResolutionEnd:

CommentNumber: 83

CommenterName: Darrell Furlong CommenterEmail: dfurlong@lancast.com CommenterPhone: 603-880-1833 x 103 CommenterCompany: Lancast, Inc.

Clause: 43 Subclause: 2.3.1.1

Page: 105 Line: 15

CommentType: (E, T, ER, or TR): T

Comment:

I believe having the CollectorMaxDelay value expressed in milliseconds is to big. On a gigabit network 1 millisecond would translate to about 1,500 packets. In the future someone could implement this standard in hardware. With this value

expressed in ms the standard would preclude someone from implementing a rapid re-convergence design for Gigabit applications. CommentEnd: SuggestedRemedy: Change units from milliseconds to microseconds. RemedyEnd: Editor' RecommendationStart: Discuss. Changing to microseconds would imply increasing the width of the variable from 16 to 32 bits, which affects the LACPDU frame format and alignment. Editor'sRecommendationEnd: ResolutionStart: Accept in principle. Change resolution to tens of microseconds, giving around .65 seconds as the upper limit of the 16-bit value. Check for knock-ons. ResolutionEnd: CommentNumber: 84 CommenterName: Tom Mathey CommenterEmail: tmathey@concentric.net CommenterPhone: 408-865-1763 CommenterCompany: Independent Clause: 43 Subclause: 43.2.3.1.1 Page: 105 Line: 17 CommentType: (E, T, ER, or TR): E Comment: Add a pointer to where the constant CollectorMaxDelay is assigned. CommentEnd: SuggestedRemedy: Add: (See 30.7.1.34) RemedyEnd: Editor' RecommendationStart: Reject. None of the other state constants and variables point to their management object definition. Editor's Recommendation End:

ResolutionStart:

Reject as per Editor's Recommendation.

ResolutionEnd:

CommentNumber: 85

CommenterName: Tom Mathey

CommenterEmail: tmathey@concentric.net

CommenterPhone: 408-865-1763 CommenterCompany: Independent Clause: 43

Subclause: 43.2.3.1.4

Page: 105 Line: 39

CommentType: (E, T, ER, or TR): T

Comment:

- 1. The variable "BEGIN" is used in this state diagram (and in all of the others) without any definition or source.
- 2. None of the state diagrams show a "power on reset" variable.
- 3. None of the state diagrams allow for a management initiated reset. The closest is variable "Reinitialize" on p. 131, line 3 which provides no source for the signal.

#### CommentEnd:

# SuggestedRemedy:

Provide definition and source. Add "power on reset". Add a management variable. A reasonable definition of BEGIN is given in 802.3, 1998 on page 1047, along with a usage with "power on reset" on page 1050.

### RemedyEnd:

Editor' RecommendationStart:

Reject. This use of "BEGIN" is consistent with the state diagram convention used throughout the rest of 802.3 (e.g., all of the state machines in 802.3u). No "power-on reset" is required by either the state diagram convention, or by Link Aggregation. Sufficient management control of Link Aggregation (including the ability to enable/disable aggregation, and both the Collector and Distributor, etc.) is already provided.

#### Editor's Recommendation End:

ResolutionStart:

Accept in principle. Add Begin to the variable list; define it as Boolean variable that is set TRUE when the system is reinitialized and is set FALSE when reinitialization has completed. Change instances of Reinitialize to Begin.

### ResolutionEnd:

CommentNumber: 86

CommenterName: Geoff Thompson

CommenterEmail: gthompso@nortelnetworks.com

CommenterPhone: +1 408 495 1339 CommenterCompany: Nortel Networks

Clause: 43

Subclause: 43.2.4

Page: 106 Line: 25

CommentType: (E, T, ER, or TR): TR

Comment:

Maintaining Frame Order in a given coversation is a requirement of this standard

There is no "shall" statement.

# CommentEnd:

### SuggestedRemedy:

Change text to read: "The requirement to maintain frame ordering shall be met by ensuring that all frames that compose..."

### RemedyEnd:

Editor' RecommendationStart:

Reject. The "shall" statement requested is already present on line 19-24.

### Editor'sRecommendationEnd:

### ResolutionStart:

Accept in principle. Change the text to read "The above requirement to maintain ..."

# ResolutionEnd:

CommentNumber: 87 does not exist

CommentNumber: 88

CommenterName: Geoff Thompson

CommenterEmail: gthompso@nortelnetworks.com

CommenterPhone: +1 408 495 1339 CommenterCompany: Nortel Networks

Clause: 43

Subclause: 43.2.5

Page: 107 Line: 32

CommentType: (E, T, ER, or TR): E

Comment:

Horrible run-on sentence.

### CommentEnd:

SuggestedRemedy:

Please break up into at least 2 sentences

RemedyEnd:

Editor' RecommendationStart:

Accept in principle. The commenter is enjoined to provide a suggestion.

Editor's Recommendation End:

ResolutionStart:

Reject. The sentence is considered to be OK.

# ResolutionEnd:

CommentNumber: 89

CommenterName: Ted Schroeder CommenterEmail: ted@alteon.com CommenterPhone: (408) 360-5511

CommenterCompany: Alteon WebSystems, Inc.

Clause: 43

Subclause: 2.7.1.2

Page: 108 Line: 43

CommentType: (E, T, ER, or TR): E

Comment:

Shouldn't use Ethernet word

CommentEnd:

SuggestedRemedy:

Replace "Ethernet" with "802.3"

RemedyEnd:

Editor' RecommendationStart:

Accept in principle. Delete the word "Ethernet" altogether. Also, there is no prohibition against using the "E" word; it is used extensively in Clauses 34-42 (Gigabit Ethernet).

Editor'sRecommendationEnd:

ResolutionStart:

Accept Editor's Recommendation.

# ResolutionEnd:

CommentNumber: 90

CommenterName: Hadriel Kaplan

CommenterEmail: hkaplan@nortelnetworks.com

CommenterPhone: (978)288-6160 CommenterCompany: Nortel Networks

Clause: 43

Subclause: 43.2.7.1.4

Page: 109 Line: 24-39

CommentType: (E, T, ER, or TR): T

Comment:

Although it might be too picky, notice that the function

"AggMuxN:MA\_DATA.indication(DA,SA,m\_sdu)" is called 3 times in this state

machine, yet it's actual function/result is not intended to be identical in each state the data is meant to be passed to different entities. We can tell this because the labels for the states say so. Unfortunately, the labels are not normative - they are merely descriptive. So if we want to be completely accurate, we need different functions for each. (this happens

again in figure 43-6, page 111)

CommentEnd:

SuggestedRemedy:

Just add a note to that effect under the state diagrams. (or if we're really bored, we could define independent functions for each)

RemedyEnd:

Editor' RecommendationStart:

Discuss. There would need to be a REALLY good reason to define new, independent functions for this purpose.

Editor's Recommendation End:

ResolutionStart:

Accept in principle. Inside the 3 boxes concerned, modify to say "Generate AggMux.... to <relevant entity>." Applies also to Figure 43-6.

# ResolutionEnd:

CommentNumber: 91

CommenterName: Shimon Muller

CommenterEmail: shimon.muller@Eng.sun.com

CommenterPhone: (650)-688-9572 CommenterCompany: Sun Microsystems

Clause: 43

Subclause: 43.2.7.1.4

Page: 109 Line: 28,32

CommentType: (E, T, ER, or TR): ER

Comment:

The MA\_DATA.indication primitive in states PASS TO MARKER RESPONDER and PASS TO

MARKER RECEIVER is missing the FCS and status parameters.

CommentEnd:

SuggestedRemedy:

Add the FCS and status parameters to the MA\_DATA.indication primitive in both

states.

RemedyEnd:

Editor' RecommendationStart:

Reject. This is a conscious decision, as those entities do not use either field. (There is no need to include primitive parameters that are unused.)

Editor'sRecommendationEnd:

ResolutionStart:

Reject as per Editor's Recommendation.

ResolutionEnd:

CommentNumber: 92

CommenterName: Tom Mathey

CommenterEmail: tmathey@concentric.net

CommenterPhone: 408-865-1763 CommenterCompany: Independent

Clause: 43

Subclause: 43.2.7.1.4

Page: 109 Line: 28

CommentType: (E, T, ER, or TR): T

Comment:

Is there a technical reason why, for "AggMuxN:MA\_DATA.indication(DA, SA, m\_sdu)", there is no FCS and status passed to the Marker Responder. IE., if there is no status, how do you know when ReceiveStatus is "receiveOK".

There are a couple of other places where FCS and status are not shown.

CommentEnd:

SuggestedRemedy:

Add variables, or add text to explain why variables are missing.

RemedvEnd:

Editor' RecommendationStart:

See comment 91.

Editor's Recommendation End:

ResolutionStart:

Reject as per Editor's Recommendation.

ResolutionEnd:

CommentNumber: 93

CommenterName: Tony Jeffree CommenterEmail: tony@jeffree.co.uk CommenterPhone: +44-161-973-4278

CommenterCompany: Independent Consultant

Clause: 43

Subclause: 43.2.7.1.4

Page: 109 Line: 41, 42 CommentType: (E, T, ER, or TR): TR

Comment:

The Note attached to Figure 43-5 should be elevated to the status of normative text, and stated as a requirement of the standard. Also, at this point in the architecture, the frames go to the Frame Collector (and from there to the MAC Client), not directly to the MAC Client.

CommentEnd:

SuggestedRemedy:

Replace "NOTE: The actions...implemented." with "If the optional Marker Receiver is not implemented, Marker Responses shall be passed to the Frame Collector."

RemedyEnd:

Editor' RecommendationStart:

Accept.

Editor'sRecommendationEnd:

ResolutionStart:

Accept

ResolutionEnd:

CommentNumber: 94

CommenterName: Ted Schroeder CommenterEmail: ted@alteon.com CommenterPhone: (408) 360-5511

CommenterCompany: Alteon WebSystems, Inc.

Clause: 43 Subclause: 2.9.1.2

Page: 110 Line: 53

CommentType: (E, T, ER, or TR): E

Comment:

Shouldn't use Ethernet word

CommentEnd:

SuggestedRemedy:

Replace "Ethernet" with "802.3"

RemedvEnd:

Editor' RecommendationStart:

See comment 89.

Editor'sRecommendationEnd:

ResolutionStart:

See comment 89.

ResolutionEnd:

CommentNumber: 95

CommenterName: Shimon Muller

CommenterEmail: shimon.muller@Eng.sun.com

CommenterPhone: (650)-688-9572

CommenterCompany: Sun Microsystems

Clause: 43

Subclause: 43.2.9.1.4

Page: 111 Line: 34

CommentType: (E, T, ER, or TR): ER

Comment:

The MA\_DATA.indication primitive in state PASS TO LACP is missing the FCS and

status parameters. CommentEnd:

SuggestedRemedy:

Add the FCS and status parameters to the MA\_DATA.indication primitive in above

state.

RemedyEnd:

Editor' RecommendationStart:

See comment 91.

Editor's Recommendation End:

ResolutionStart:

See comment 91.

ResolutionEnd:

CommentNumber: 96

CommenterName: Tony Jeffree CommenterEmail: tony@jeffree.co.uk CommenterPhone: +44-161-973-4278

CommenterCompany: Independent Consultant

Clause: 43

Subclause: 43.2.10

Page: 111 Line: 43-49

CommentType: (E, T, ER, or TR): E

Comment:

This para could usefully be split into two & the wording tightened up. In particular, the phrase "In addition to the individual MAC address.," is slightly misleading, as the subsequent text points out that the Aggregator address need not be additional.

CommentEnd:

SuggestedRemedy:

Re-word this paragraph as follows:

"Each 802.3 MAC has a globally-unique individual MAC address, whether that MAC is used for Link Aggregation or not (See 4.2.9).

Each Aggregator shall have a globally-unique individual MAC address. The MAC address of the Aggregator may be the globally-unique individual MAC address of one of the MACs in the associated Link Aggregation Group, or it may be a distinct MAC address. The manner in which such addresses are chosen is not constrained by this standard."

RemedyEnd:

Editor' RecommendationStart:

Accept.

Editor's Recommendation End:

ResolutionStart:

Accept. Change to "...not otherwise constrained..." in final sentence.

### ResolutionEnd:

CommentNumber: 97

CommenterName: Geoff Thompson

CommenterEmail: gthompso@nortelnetworks.com

CommenterPhone: +1 408 495 1339 CommenterCompany: Nortel Networks

Clause: 43

**Subclause:** 43.2.10

Page: 111 Line: 45

CommentType: (E, T, ER, or TR): TR

Comment:

I believe that the phrase "In addition to the individual MAC address associated with each MAC," is not consistent with the rest of the paragraph.

Paragraph needs compliance style statement.

#### CommentEnd:

#### SuggestedRemedy:

Change to read:

"Each 802.3 MAC, in a system compliant with this clause, shall have an associated globally-unique individual MAC address, whether that MAC is used for Link Aggregation or not (See 4.2.9). Each Aggregator shall have an associated globally-unique individual MAC address. The MAC address of the Aggregator may be one of the MAC addresses of a MAC in the associated Link Aggregation Group, or it may be a distinct MAC address. The manner in which such addresses are chosen is not constrained by this standard."

### RemedvEnd:

Editor' RecommendationStart:

See comment 96.

Editor'sRecommendationEnd:

ResolutionStart:

Resolved by resolution of 96.

### ResolutionEnd:

CommentNumber: 98

CommenterName: Stephen Haddock

CommenterEmail: shaddock@extremenetworks.com

CommenterPhone: (408) 579-2812 CommenterCompany: Extreme Networks

Clause: 43

Subclause: 43.2.10

Page: 111 Line: 46

CommentType: (E, T, ER, or TR): T

Comment:

The requirement that each Aggregator shall be assigned a globally-unique individual MAC address is stated in two places: 43.2.10 and in 43.3.3. I believe this is considered poor form in standard-speak. The appropriate location for the requirement seems to be in 43.3.3 as this gives more detail and normative restrictions on how the address is assigned. CommentEnd:

SuggestedRemedy:

in 43.2.10, replace "shall have" with "has".

RemedyEnd:

Editor' RecommendationStart:

Accept. (Make this change in addition to the change recommended in comment 96.)

Editor's Recommendation End:

ResolutionStart:

Accept. Check for PICS knock-ons.

ResolutionEnd:

CommentNumber: 99

CommenterName: Stephen Haddock

Commencervanie. Stephen Haddock

CommenterEmail: shaddock@extremenetworks.com

CommenterPhone: (408) 579-2812 CommenterCompany: Extreme Networks

Clause: 43

**Subclause: 43.2.10** 

Page: 112 Line: 7

CommentType: (E, T, ER, or TR): T

Comment:

The sentence beginning "The multiplexing of MAC Clients ..." is confusing and seems out of place. I think the best remedy is to delete the sentence. Alternatively it could be moved to the end of 43.2.2, where it would at least be in context.

CommentEnd:

SuggestedRemedy:

Delete the sentence.

RemedyEnd:

Editor' RecommendationStart:

Accept. Move the sentence to 43.2.2. The intent of the statement is to make it clear that the standard does not address the use of a link as individual (for one client) and aggregated (for another).

Editor'sRecommendationEnd:

ResolutionStart:

Accept Editor's Recommendation.

ResolutionEnd:

CommentNumber: 100

CommenterName: Stephen Haddock

CommenterEmail: shaddock@extremenetworks.com

CommenterPhone: (408) 579-2812 CommenterCompany: Extreme Networks

Clause: 43 Subclause: 43.3 Page: 112 Line: 37

CommentType: (E, T, ER, or TR): E

Comment:

The phrase "creation of the group and associated Aggregator" implies that Aggregators are created/destroyed dynamically. According to the

architectural model and the way the rest of the standard reads (ex page 110

line 10), Aggregators are relatively static and it is only the Link

Aggregation Groups that are created or eliminated dynamically.

CommentEnd:

SuggestedRemedy:

Delete the words "and associated Aggregator".

RemedyEnd:

Editor' RecommendationStart:

Accept.

Editor'sRecommendationEnd:

ResolutionStart:

Accept.

ResolutionEnd:

CommentNumber: 101

CommenterName: **Geoff Thompson** 

gthompso@nortelnetworks.com CommenterEmail:

CommenterPhone: +1 408 495 1339 Nortel Networks CommenterCompany:

Clause: 43

Subclause: 43.3i

Page: 112 Line: 47

CommentType: (E, T, ER, or TR): TR

Comment:

This text is not clear as to whether or not the globally unique identifier for the system can reuse a port or aggregator id or whether it needs a totally separate id.

CommentEnd:

SuggestedRemedy:

Further addition of clarifying text.

RemedvEnd:

Editor' RecommendationStart:

Accept. The commenter is enjoined to provide appropriate text.

Editor'sRecommendationEnd:

ResolutionStart:

Accept in principle. Refer forward to 43.3.2.

ResolutionEnd:

CommentNumber: 102

CommenterName: Tony Jeffree CommenterEmail: tony@jeffree.co.uk CommenterPhone: +44-161-973-4278

CommenterCompany: Independent Consultant

Clause: 43 Subclause: 43.3.1

Page: 113 Line: 1

CommentType: (E, T, ER, or TR): E

Comment:

"Objectives" seems a little strange in the title; the list reads more like a statement of the characteristics of LAC, rather than its objectives. CommentEnd: SuggestedRemedy: Change "Objectives" to "Characteristics". RemedyEnd: Editor' RecommendationStart: Accept. Editor'sRecommendationEnd: ResolutionStart: Accept. ResolutionEnd: CommentNumber: 103 CommenterName: Tasker CommenterEmail: r.tasker@dl.ac.uk CommenterPhone: +44 1925 603758 CommenterCompany: Daresbury Laboratory Clause: 43.3.1 Subclause: (f) Page: 113 Line: 22 CommentType: (E, T, ER, or TR): E Comment: "is achieved with at most a short time" isn't particularly useful of informative even for Objectives. CommentEnd: SuggestedRemedy: be a little more specific! RemedyEnd: Editor' RecommendationStart: Discuss. This was intentionally left somewhat vague, since the protocol does not enforce any particular bound on convergence time.

Editor's Recommendation End:

ResolutionStart:

Accept. Replace last two sentences with "Convergence can be achieved by the exchange of three LACPDUs, without dependence upon timer values."

### ResolutionEnd:

CommentNumber: 104

CommenterName: Geoff Thompson

CommenterEmail: gthompso@nortelnetworks.com

CommenterPhone: +1 408 495 1339 CommenterCompany: Nortel Networks

Clause: 43

Subclause: 43.3.1

Page: 113 Line: 23

CommentType: (E, T, ER, or TR): E

# Comment:

For the text: "...achieved within at most a short time..." the "at most" needs to be set off with commas or parentheses.

# SuggestedRemedy:

Add punctuation

RemedyEnd:

Editor' RecommendationStart:

See comment 103.

Editor's Recommendation End:

ResolutionStart:

Resolved by 103.

ResolutionEnd:

CommentNumber: 105 CommenterName: Tasker

CommenterEmail: r.tasker@dl.ac.uk CommenterPhone: +44 1925 603758

CommenterCompany: Daresbury Laboratory

Clause: 43.3.2 Subclause: (b) Page: 113 Line: 52

CommentType: (E, T, ER, or TR): E
Comment: replace "nest" with "next"!

CommentEnd:

SuggestedRemedy: do it.

RemedyEnd:

Editor' RecommendationStart:

Accept.

Editor's Recommendation End:

ResolutionStart:

Accept.

### ResolutionEnd:

CommentNumber: 106

CommenterName: Keith Balmer

CommenterEmail: Keith.Balmer@tiuk.ti.com CommenterPhone: (+44) 1604 663408

CommenterCompany: Texas Instruments Ltd.

Clause: 43 Subclause: 43.3.2 Page: 113

Page: 113 Line: 52

CommentType: (E, T, ER, or TR): E

Comment:

Typo. Change 'nest' to 'next'.

CommentEnd:

SuggestedRemedy:

Change 'nest' to 'next'.

RemedyEnd:

# Editor' RecommendationStart: See comment 105. Editor's Recommendation End: ResolutionStart: See comment 105. ResolutionEnd: CommentNumber: 107 CommenterName: Shimon Muller CommenterEmail: shimon.muller@Eng.sun.com CommenterPhone: (650)-688-9572 CommenterCompany: Sun Microsystems Clause: 43 Subclause: 43.3.2 Page: 113 Line: 52 CommentType: (E, T, ER, or TR): E Comment: Typo. CommentEnd: SuggestedRemedy: Replace "nest" with "next". RemedyEnd: Editor' RecommendationStart: See comment 105. Editor's Recommendation End: ResolutionStart: See comment 105. ResolutionEnd: CommentNumber: 108 CommenterName: Ted Schroeder CommenterEmail: ted@alteon.com CommenterPhone: (408) 360-5511 CommenterCompany: Alteon WebSystems, Inc. Clause: 43 Subclause: 3.2 Page: 113 Line: 52 CommentType: (E, T, ER, or TR): E Comment: Typo CommentEnd: SuggestedRemedy: Replace "nest" with "next" RemedyEnd: Editor' RecommendationStart:

See comment 105.

 $This paragraph, and also the contents of 43.2.10 \ Addressing, states that each Aggregator has a MAC \ address. \ Is this true:$ 

- At all times; or

Editor's Recommendation End:

- Only when the Aggregator has one or more ports attached?

If the former, then a system that has N ports needs a minimum of 2N-1 MAC addresses, even if the system uses addresses of bound ports, in order to cope with the case where all ports bind to one aggregator, and in order not to violate the requirement stated in the second sentence ("No aggregator ... .within the system.").

If the latter, then a system can manage with only N MAC addresses, as the Aggregators that are inactive (no attached ports) have no address, and the others use the address of an attached port.

I don't see that there is any requirement for an Aggregator to have a MAC address unless it also has some attached ports (the ifIndex is sufficient to find it if it needs to be managed). I believe that it is desirable (and consistent with past positions on addressing) to allow the case where only

N addresses are used, in order to reduce wastage of this finite resource.

CommentEnd:

SuggestedRemedy:

Clarify (here and in 43.2.10) that Aggregators only need a MAC address when they have one or more ports attached.

RemedyEnd:

Editor' RecommendationStart:

Accept.

Editor's Recommendation End:

ResolutionStart:

Accept. Editor to fix the text appropriately.

ResolutionEnd:

CommentNumber: 111

CommenterName: Hadriel Kaplan

CommenterEmail: hkaplan@nortelnetworks.com

CommenterPhone: (978)288-6160 CommenterCompany: Nortel Networks

Clause: 43 Subclause: 43.3.3

Page: 114 Line: 5-6

CommentType: (E, T, ER, or TR): T

Comment:

This line states no aggregator can use the same MAC address as that of a port that's bound to another aggregator. Wouldn't this limit the ability of implementers to define their own selection rules? Specifically for those that want the most redundant implementation, if ports 1-6 were in agg 1, and then port 1 became disconnected and later reconnected to a new partner, the agg would have to re-assign the MAC address. Oh wait... this makes sense... so the wording should say "Thus for a truly redundant selection implementation, aggregators would use unique MAC addresses (not one of the ports' address)."

CommentEnd:

SuggestedRemedy:

Add "Thus for a truly redundant selection implementation, aggregators would use unique MAC addresses (not one of the ports' address)."

RemedyEnd:

Editor' RecommendationStart:

Accept in principle. The commenter's conclusion is correct; however, it is not clear that there is any need to make the statement in the standard.

Editor'sRecommendationEnd:

### ResolutionStart:

Accept in principle. Add to the NOTE on p114 line 9 that the restriction as stated may have implications with regard to the choice of selection algorithm.

# ResolutionEnd:

CommentNumber: 112

CommenterName: Stephen Haddock

CommenterEmail: shaddock@extremenetworks.com

CommenterPhone: (408) 579-2812 CommenterCompany: Extreme Networks

Clause: 43 Subclause: 43.3.3

Page: 114 Line: 12

CommentType: (E, T, ER, or TR): T

Comment:

The assignment of integer identifier to an Aggregator should be required just as it is for a port (see page 114 line 20). Is there a desire to reserve aggregator number 0?

CommentEnd:

SuggestedRemedy:

Replace "An aggregator is also assigned" with "An aggregator also

shall be assigned". RemedyEnd:

Editor' RecommendationStart:

Accept.

Editor's Recommendation End:

ResolutionStart:

Accept. Check for PICS entry.

### ResolutionEnd:

CommentNumber: 113

CommenterName: Stephen Haddock

CommenterEmail: shaddock@extremenetworks.com

CommenterPhone: (408) 579-2812 CommenterCompany: Extreme Networks

Clause: 43 Subclause: 43.3.4 Page: 114

Line: 18

CommentType: (E, T, ER, or TR): T

Comment:

The first sentence of this subclause is out of place since it is redundant with the first sentence of 43.2.10 Addressing, and has nothing to do with Port Identification for purposes of Link Aggregation. The construction of a Port Identifier from the Port Priority and Port Number should be spelled out as it is for System Identifiers. CommentEnd:

# SuggestedRemedy:

Delete the first sentence of 43.3.4 and the word "also" in the second sentence. Capitalize Port Priority (and Port Number?) for consistency with capitalization of System Priority. Add text:

"When it is necessary to perform numerical comparisons between Port Identifiers, each Port Identifier is considered to be a three octet unsigned binary number constructed as follows:

- a) The most significant octet is the Port Priority.
- b) The second and third most significant octets are the

first and second most significant octets of the Port Number, respectively."

RemedyEnd:

Editor' RecommendationStart:

Reject the deletion of the first sentence. It is useful to make this statement here, and it provides a consistent presentation with respect to 43.3.3 (Aggregator Identification). Accept the proposed additional text.

Editor's Recommendation End:

ResolutionStart:

Accept.

ResolutionEnd:

CommentNumber: 114

CommenterName: Tony Jeffree CommenterEmail: tony@jeffree.co.uk CommenterPhone: +44-161-973-4278

CommenterCompany: Independent Consultant

Clause: 43 Subclause: 43.3.5

Page: 114 Line: 31, 35

CommentType: (E, T, ER, or TR): E

Comment:

L31: Does "duplexity" exist in the English language? I think not.

L35: Typo.

CommentEnd:

SuggestedRemedy:

L31 "duplexity" -> "full duplex or half duplex"

L35 "limitation" -> "limitations".

RemedyEnd:

Editor' RecommendationStart:

"Duplexity" does exist (at least in my American Heritage Dictionary). Accept the second change.

Editor'sRecommendationEnd:

ResolutionStart:

Accept Editor's Recommendation.

ResolutionEnd:

CommentNumber: 115

CommenterName: Ted Schroeder CommenterEmail: ted@alteon.com CommenterPhone: (408) 360-5511 CommenterCompany: Alteon WebSystems, Inc.

Clause: 43 Subclause: 3.5 Page: 114 Line: 35

CommentType: (E, T, ER, or TR): E

Comment: Typo

CommentEnd:

SuggestedRemedy:

Replace "limitation" with "limitations"

RemedyEnd:

Editor' RecommendationStart:

See comment 114.

Editor'sRecommendationEnd:

ResolutionStart:

See comment 114.

ResolutionEnd:

CommentNumber: 116

CommenterName: Hadriel Kaplan

CommenterEmail: hkaplan@nortelnetworks.com

CommenterPhone: (978)288-6160 CommenterCompany: Nortel Networks

Clause: 43 Subclause: 43.3.5 Page: 115 Line: 6-10

CommentType: (E, T, ER, or TR): TR

Comment:

This paragraph implies (explicitly) that a link with no other active links of the same key is Individual,

even if its physical characteristics allow aggregation. Lines 36-38 of the

same page say an Aggregatable

link can be a set of one link. Which is correct? If only 1 link is active

right now while the other ports

of the same keys, etc. are inactive, is the 1 link Individual or Aggregatable?

CommentEnd: SuggestedRemedy: Clear this up. :)

RemedyEnd:

Editor' RecommendationStart:

Reject. There is no inconsistency, and both statements cited are correct. The first case talks about the Actor determining, from its own knowledge, that a given link can never aggregate (for example, it is the only one with that value of Key assigned by the Actor). The second case recognizes that, even if all links in a system can potentially aggregate (they might all be of the same type, same key...etc), there may still be aggregations of one aggregatable link, by virtue of where those similar links are terminated, and the key values assigned by the Partner. Systems A and B may consider all their links to be aggregatable; however, if only one of their links actually joins A and B, then they will crerate an aggregation of one (aggregatable) link.

Editor's Recommendation End:

ResolutionStart:

Accept Editor's Recommendation.

### ResolutionEnd:

CommentNumber: 117

CommenterName: Ted Schroeder CommenterEmail: ted@alteon.com CommenterPhone: (408) 360-5511

CommenterCompany: Alteon WebSystems, Inc.

Clause: 43 Subclause: 3.6.1 Page: 115 Line: 47-50

CommentType: (E, T, ER, or TR): E

Comment:

Numbering doesn't restart in new subclause

CommentEnd:

SuggestedRemedy:

Start list with a) instead of c)

RemedyEnd:

Editor' RecommendationStart:

Accept.

Editor's Recommendation End:

ResolutionStart:

Accept.

# ResolutionEnd:

CommentNumber: 118

CommenterName: Stephen Haddock

CommenterEmail: shaddock@extremenetworks.com

CommenterPhone: (408) 579-2812 CommenterCompany: Extreme Networks

Clause: 43

Subclause: 43.3.6.1

Page: 115 Line: 51

CommentType: (E, T, ER, or TR): E

Comment:

This paragraph is the only place where the terms "Actor" and "Partner" are used prior to the description of the Link Aggregation Control Protocol (43.4) where the terms are defined. Throughout 43.3 the terms "local" and "remote" are used. I recommend that the local/remote terms be used in the general description, and the Actor/Partner terms be used strictly within the context of the Link Aggregation Control Protocol. CommentEnd:

SuggestedRemedy:

Replace "actor" with "local system" in two places within this paragraph, and replace "partner" with "remote system" in two places. RemedvEnd:

Editor' RecommendationStart:

Coordinate this change with Comment 16.

Editor's Recommendation End:

ResolutionStart:

### Resolved by comment 61.

### ResolutionEnd:

CommentNumber: 119

CommenterName: Keith Balmer

CommenterEmail: Keith.Balmer@tiuk.ti.com CommenterPhone: (+44) 1604 663408

CommenterCompany: Texas Instruments Ltd.

Clause: 43

Subclause: 43.3.11

Page: 118 Line: 36

CommentType: (E, T, ER, or TR): E

Comment:

Grammar. "In implementation where this is not possible..."

CommentEnd:

SuggestedRemedy:

Insert "an" after "In" (or add "s" to end of "implementation").

RemedyEnd:

Editor' RecommendationStart:

Insert "an" as suggested.

Editor's Recommendation End:

ResolutionStart:

Accept Editor's Recommendation.

### ResolutionEnd:

CommentNumber: 120

CommenterName: Stephen Haddock

CommenterEmail: shaddock@extremenetworks.com

CommenterPhone: (408) 579-2812

CommenterCompany: Extreme Networks

Clause: 43

Subclause: 43.3.11

Page: 118 Line: 40

CommentType: (E, T, ER, or TR): ER

Comment:

When referring to enabling or disabling the Collector and Distributor, the document is inconsistent in whether there is a Collector/Distributor per Aggregator or per Port. The architectural block diagram in Figure 43-2 shows a single Collector/Distributor per Aggregator, and I believe it is best to make all references consistent with that model. Furthermore it is the Mux Control and Logic of subclause 43.4.14 that controls enabling/disabling collecting and distributing per port. The best way to clarify this is that "Collector" and "Distributor" always refer to the single Collector/Distributor per Aggregator, that what can be enabled/disabled is the "collecting" and "distributing" functions of the Mux (Aggregator Parser/Multiplexer). This usage is consistent with the "collecting" and "distributing" bits in the Port\_State variables. CommentEnd:

Commentana.

SuggestedRemedy:

Page 118 line 39, replace the last paragraph of the subclause with:

"If at least one port's Mux in the Link Aggregation Group is Collecting, the the Receive state of the corresponding Aggregator will be Enabled. If at least one port's Mux in the Link Aggregation Group is Distributing, the the Transmit state of the corresponding Aggregator will be Enabled."

Page 119 line 4 replace "the local Frame Collector and local Frame Distributor states for the port are set to Disabled" with "the Collecting and Distributing states for the port are set to False".

Page 119 line 33-40

Replace "Collection Enabled" with "Collecting True" in two places.

Replace "Collection Disabled" with "Collecting False".

Replace "Distribution Enabled" with "Distributing True" in two places.

Replace "Distribution Disabled" with "Distributing False".

Page 119 line 53

Replace "Collection Enabled" with "Collecting".

Replace "Distribution Enabled" with "Distributing".

Page 127 line 44, replace the "Collector\_State" variable to "Receive\_State" and change the description to read:

"The Receive\_State of the Aggregator will be Enabled if one or more ports attached to the Aggregator are Collecting (i.e.

Actor\_Oper\_Port\_State.Collecting is TRUE for any port). Otherwise the Receive\_State is Disabled"

Page 127 line 50, replace the "Distributor\_State" variable to

"Transmit\_State" and change the description to read:

"The Transmit\_State of the Aggregator will be Enabled if one or more ports attached to the Aggregator are Distributing (i.e.

Actor\_Oper\_Port\_State.Distributing is TRUE for any port). Otherwise the Transmit\_State is Disabled"

Page 105 line 6-8, delete the last paragraph of 43.2.3.

Page 107 line 52-54, delete the words "Frame Distributor," from the sentence, and add a second sentence:

"The Aggregator Multiplexer shall provide transparent pass-through of frames submitted by the Frame Distributor to the port specified in the transmission request only when the port state is Distributing; otherwise such frames shall be discarded."

Page 108 line 1-3, end the sentence at "selected entity" and replace the remainder of the sentence with a new sentence:

"The Aggregator Parser shall pass all other frames to the Frame Collector for passage to the MAC client only when the port state is Collecting; otherwise such frames shall be discarded."

Page 109 Figure 43-5 add a note:

"If the port state is not Collecting, all frames that would have been passed to the MAC Client through the Collector will be discarded."

RemedyEnd:

Editor' RecommendationStart:

Accept.

Editor's Recommendation End:

ResolutionStart:
Accept.
ResolutionEnd:
CommentNumber: 121 CommenterName: Tony Jeffree CommenterEmail: tony@jeffree.co.uk CommenterPhone: +44-161-973-4278 CommenterCompany: Independent Consultant Clause: 43 Subclause: 43.3.13 Page: 118 Line: 54 CommentType: (E, T, ER, or TR): E Comment:
Capitalization of Key. May be other occurences elsewhere.
CommentEnd:
SuggestedRemedy:
"key" -> "Key". Do global check.
RemedyEnd: Editor' RecommendationStart:
Accept.
Editor's Recommendation End: Resolution Start:
Accept.
ResolutionEnd:
CommentNumber: 122 CommenterName: Keith Balmer CommenterEmail: Keith.Balmer@tiuk.ti.com CommenterPhone: (+44) 1604 663408 CommenterCompany: Texas Instruments Ltd. Clause: 43 Subclause: 43.3.14 Page: 119 Line: 17 CommentType: (E, T, ER, or TR): E
Comment: Spurious "." on end of title. CommentEnd:
SuggestedRemedy: Remove "." RemedyEnd: Editor' RecommendationStart:
Accept.
Editor'sRecommendationEnd:

ResolutionStart:
Accept.
ResolutionEnd:
CommentNumber: 123 CommenterName: Tony Jeffree CommenterEmail: tony@jeffree.co.uk CommenterPhone: +44-161-973-4278 CommenterCompany: Independent Consultant Clause: 43 Subclause: 43.3.15 Page: 119 Line: 51 CommentType: (E, T, ER, or TR): E Comment:
Redundant wording - "of the status of the Collection and Distribution status"
CommentEnd:
SuggestedRemedy:
Strike "of the status".
RemedyEnd: Editor' RecommendationStart:
Accept.
Editor's Recommendation End: Resolution Start:
Accept.
Accept.  ResolutionEnd:
•
ResolutionEnd:  CommentNumber: 124 CommenterName: Tony Jeffree CommenterEmail: tony@jeffree.co.uk CommenterPhone: +44-161-973-4278 CommenterCompany: Independent Consultant Clause: 43 Subclause: 43.3.15 Page: 120 Line: 1 CommentType: (E, T, ER, or TR): E
ResolutionEnd:  CommentNumber: 124 CommenterName: Tony Jeffree CommenterEmail: tony@jeffree.co.uk CommenterPhone: +44-161-973-4278 CommenterCompany: Independent Consultant Clause: 43 Subclause: 43.3.15 Page: 120 Line: 1 CommentType: (E, T, ER, or TR): E Comment:
ResolutionEnd:  CommentNumber: 124 CommenterName: Tony Jeffree CommenterEmail: tony@jeffree.co.uk CommenterPhone: +44-161-973-4278 CommenterCompany: Independent Consultant Clause: 43 Subclause: 43.3.15 Page: 120 Line: 1 CommentType: (E, T, ER, or TR): E Comment: Inconsistency - Transmit/Receive should be Frame Collection and Frame Distribution.
ResolutionEnd:  CommentNumber: 124 CommenterName: Tony Jeffree CommenterEmail: tony@jeffree.co.uk CommenterPhone: +44-161-973-4278 CommenterCompany: Independent Consultant Clause: 43 Subclause: 43.3.15 Page: 120 Line: 1 CommentType: (E, T, ER, or TR): E Comment: Inconsistency - Transmit/Receive should be Frame Collection and Frame Distribution. CommentEnd:

# Editor' RecommendationStart:

Accept.

Editor's Recommendation End:

ResolutionStart:

Accept - make consistent with comment 120.

ResolutionEnd:

CommentNumber: 125

CommenterName: Keith Balmer

CommenterEmail: Keith.Balmer@tiuk.ti.com CommenterPhone: (+44) 1604 663408

CommenterCompany: Texas Instruments Ltd.

Clause: 43 Subclause: 43.4.1 Page: 120

Page: 120 Line: 32

CommentType: (E, T, ER, or TR): E

Comment:

Consistent terminology: Change "Need To Tell" to "Need To Transmit"

CommentEnd:

SuggestedRemedy:

Change "Need To Tell" to "Need To Transmit"

RemedyEnd:

Editor' RecommendationStart:

Accept.

Editor's Recommendation End:

Resolution Start:

Accept.

ResolutionEnd:

CommentNumber: 126

CommenterName: Stephen Haddock

CommenterEmail: shaddock@extremenetworks.com

CommenterPhone: (408) 579-2812 CommenterCompany: Extreme Networks

Clause: 43 Subclause: 43.4.1 Page: 120 Line: 33

CommentType: (E, T, ER, or TR): E

Comment:

This is the only place where "NTT" is expanded to "Need To Tell".

Elsewhere it is "Need To Transmit".

CommentEnd:

SuggestedRemedy:

Replace "Tell" with "Transmit".

RemedyEnd:

Editor' RecommendationStart:

See comment 125.

Editor's Recommendation End:

ResolutionStart:

Accept Editor's Recommendation.

### ResolutionEnd:

CommentNumber: 127

CommenterName: Ted Schroeder CommenterEmail: ted@alteon.com CommenterPhone: (408) 360-5511

CommenterCompany: Alteon WebSystems, Inc.

Clause: 43 Subclause: 4.2.2 Page: 121-124 Line: all

CommentType: (E, T, ER, or TR): T

Comment:

The TLV-tuple thing seems badly out of place in this protocol. Given the limitations for making sure that revision N of the protocol can talk with revision 1 implementation (everything having to be in the same order and have the same length) it seems like there is a lot of extra unnecessary data in the frame format. If the protocol uses TLV-tuples then it should be able to reorder the tuples as it chooses and the decoder should be able to deal with the tuples in any order it wants.

CommentEnd:

# SuggestedRemedy:

Simplify the protocol by removing all the TLV-tuple information and just putting fixed fields into the frame. You still get the same capability of being able to have backward compatible structures (tack data on at the end) without the complexities of filling in the TLV-type/len fields. RemedyEnd:

Editor' RecommendationStart:

Discuss.

Editor'sRecommendationEnd:

ResolutionStart:

Reject.

# ResolutionEnd:

CommentNumber: 128

CommenterName: Robert Grow CommenterEmail: bob.grow@intel.com CommenterPhone: 858-487-9320x232

CommenterCompany: Intel

Clause: 43

Subclause: 43.4.2.2

Page: 122 Line: 41

CommentType: (E, T, ER, or TR): TR

Comment:

The use of the TLV length field is inconsistent. The Terminator\_Length does

not include T and L. CommentEnd: SuggestedRemedy: Change "Terminator\_Length" = 0" to "Terminator\_Length = 2".

RemedyEnd:

Editor' RecommendationStart:

Discuss.

Editor'sRecommendationEnd:

ResolutionStart:

Reject. The inconsistency is considered to be an additional indication that the end has been reached. Other standards (e.g., ASN.1) use this convention.

#### ResolutionEnd:

CommentNumber: 129

CommenterName: Tony Jeffree CommenterEmail: tony@jeffree.co.uk CommenterPhone: +44-161-973-4278

CommenterCompany: Independent Consultant

Clause: 43

Subclause: 43.4.2.2

Page: 122

Line: Figure 43-7

CommentType: (E, T, ER, or TR): TR

Comment:

On the last Task Force ballot, I believe that we agreed to change the port priority fields to 2 octets & to modify the padding to maintain field alignment. This seems to have slipped through the cracks in the editing process.

# CommentEnd:

SuggestedRemedy:

Fix it as agreed on the Task Force ballot.

RemedyEnd:

Editor' RecommendationStart:

Reject. I do not believe that the result of the Task Force ballot was to make this change. In fact, I believe it was agreed to leave it at 1 byte to maintain consistency with 802.1D. The change mandated at the TF meeting was to realign the fields in the frame.

Editor'sRecommendationEnd:

ResolutionStart:

Accept. The meeting could not recall the outcome of previous discussion on this point, but agreed to do this. Extend the port priority to 2 octets and pad the TLVs to a 20 octet length.

### ResolutionEnd:

CommentNumber: 130

CommenterName: Stephen Haddock

CommenterEmail: shaddock@extremenetworks.com

CommenterPhone: (408) 579-2812

CommenterCompany: Extreme Networks

Clause: 43

Subclause: 43.4.2.2

Page: 123 Line: 36

CommentType: (E, T, ER, or TR): E

#### Comment:

The exception for bits 6 and 7 is obsolete since these bits have been defined. It is text hanging around from previous drafts when these bits were reserved.

CommentEnd:

## SuggestedRemedy:

Delete "with the exception that bits 6 and 7 are ignored upon receipt, but on transmission, these bits contain the corresponding values from the Actor's state field of the most recently received LACPDU" RemedyEnd:

Editor' RecommendationStart:

Accept.

Editor's Recommendation End:

ResolutionStart:

Accept.

#### ResolutionEnd:

CommentNumber: 131

CommenterName: Ted Schroeder CommenterEmail: ted@alteon.com CommenterPhone: (408) 360-5511

CommenterCompany: Alteon WebSystems, Inc.

Clause: 43 Subclause: 4.2.2 Page: 124 Line: 1-2

CommentType: (E, T, ER, or TR): T

Comment:

If my previous comment about the use of TLV-tuples is accepted this

comment may be ignored.

The Terminator\_Length field is inconsistent with all the other length fields in the TLV-tuples. It is set to 0 instead of 2. In all other uses of the length fiels in the TLV-tuple the length refers to the length of the entire field including the type and length bytes. CommentEnd:

SuggestedRemedy:

Change "uses a length value of 0 (0x00)" to "uses a length value of 2 (0x02)"

RemedyEnd:

Editor' RecommendationStart:

See comment 128.

Editor's Recommendation End:

ResolutionStart:

See comment 128.

ResolutionEnd:

CommentNumber: 132

CommenterName: Robert Grow

CommenterEmail: bob.grow@intel.com CommenterPhone: 858-487-9320x232

CommenterCompany: Intel

Clause: 43

Subclause: 43.4.2.2

Page: 124 Line: 2

CommentType: (E, T, ER, or TR): TR

Comment:

The use of the TLV length field is inconsistent. The Terminator\_Length does

not include T and L. CommentEnd: SuggestedRemedy: Change "0x00" to "0x02".

RemedyEnd:

Editor' RecommendationStart:

See comment 128.

Editor's Recommendation End:

ResolutionStart:

See comment 128.

ResolutionEnd:

CommentNumber: 133

CommenterName: Robert Grow

CommenterEmail: bob.grow@intel.com CommenterPhone: 858-487-9320x232

CommenterCompany: Intel

Clause: 43

Subclause: 43.4.2.2

Page: 124 Line: 2

CommentType: (E, T, ER, or TR): E

Comment:

The use of the TLV length field is inconsistent. Most lengths are defined to include T and L in the length value, but not all. The encoding of the tuple deserves description or the following section.

CommentEnd: SuggestedRemedy:

Add a paragraph describing tuples and their fields to 43.4.2.1 or 43.4.2.2.

RemedyEnd:

Editor' RecommendationStart:

Discuss the need for this explanation, pending the resolution of comment 128 and 127.

Editor's Recommendation End:

ResolutionStart:

Accept in principle. Add a Note to the terminator definition (p124 l1) that makes it clear that the length of 0 is intentional, and that it is in line with common practice in other TLV schemes.

ResolutionEnd:

CommentNumber: 134

CommenterName: Geoff Thompson

CommenterEmail: gthompso@nortelnetworks.com

CommenterPhone: +1 408 495 1339 CommenterCompany: Nortel Networks

Clause: 43

Subclause: 43.4.2.2ab

Page: 124 Line: 3

CommentType: (E, T, ER, or TR): TR

Comment:

Needs compliance statement

CommentEnd:

# SuggestedRemedy:

Change text to read:

"Reserved. These 58 octets are reserved for use in future extensions to the protocol. They are ignored on receipt and shall be transmitted as zeroes to claim compliance with Version 1 of this clause."

Also add the following text to the end of note (i.e. at line 11): "Future versions of this standard expect to have these octets available for their use."

RemedyEnd:

Editor' RecommendationStart:

Accept in principle. Use "Version 1 of this protocol" instead of "clause". Also in the next sentence, say "future versions of this protocol".

Editor'sRecommendationEnd:

ResolutionStart:

Accept in principle. Accept Editor's recommendation; also change "They are ignored..." to "They shall be ignored...". Fix up PICS as well.

ResolutionEnd:

CommentNumber: 135

CommenterName: Tony Jeffree CommenterEmail: tony@jeffree.co.uk CommenterPhone: +44-161-973-4278

CommenterCompany: Independent Consultant

Clause: 43 Subclause: 43.4.3 Page: 124

Page: 124 Line: 37

CommentType: (E, T, ER, or TR): E

Comment:

Clarification.

CommentEnd:

SuggestedRemedy:

"(either..." -> "(periodic LACPDU exchanges occur if either..."

RemedyEnd:

Editor' RecommendationStart:

Accept.

Editor's Recommendation End:

ResolutionStart:

Accept.

#### ResolutionEnd:

CommentNumber: 136

CommenterName: Tom Mathey

CommenterEmail: tmathey@concentric.net

CommenterPhone: 408-865-1763 CommenterCompany: Independent

Clause: 43

Subclause: 43.4.2.2

Page: 124 Line: 9

CommentType: (E, T, ER, or TR): T

Comment:

The sentence states: "not to re-define the structure and semantics of information" This means a user could rearrange the structure, keep the semantics the same, and claim conformance since both "structure and semantics" were not changed. I think "or" is what was implied.

# CommentEnd:

# SuggestedRemedy:

Change and to or here and also on p.147, line 49.

RemedyEnd:

Editor' RecommendationStart:

Accept.

Editor'sRecommendationEnd:

ResolutionStart:

Accept.

# ResolutionEnd:

CommentNumber: 137

CommenterName: Ted Schroeder CommenterEmail: ted@alteon.com CommenterPhone: (408) 360-5511

CommenterCompany: Alteon WebSystems, Inc.

Clause: 43 Subclause: 4.3 Page: 125 Line: 31

CommentType: (E, T, ER, or TR): T

Comment:

State diagram indicates "LACPDU Transmitted", but what really happens

is the TX state machine requests the Control Parser/Multiplexer to

send an LACPUD.
CommentEnd:

# SuggestedRemedy:

Change "LACPDU Transmitted" to LinkAgg:MA\_DATA.Request(LACPDU). Notice that

I've added a new prefix that didn't exist before, LinkAgg. This has

implications in section 43.2.2.

RemedyEnd:

Editor' RecommendationStart:

Accept in principle. What is actually requested is: CtrlMuxN:MA\_DATA.Request(LACPDU). No new prefix is needed.

Editor'sRecommendationEnd:

ResolutionStart:

Accept Editor's Recommendation.

#### ResolutionEnd:

CommentNumber: 138

CommenterName: Stephen Haddock

CommenterEmail: shaddock@extremenetworks.com

CommenterPhone: (408) 579-2812

CommenterCompany: Extreme Networks

Clause: 43

Subclause: 43.4.4

Page: 126 Line: 36

CommentType: (E, T, ER, or TR): E

Comment:

This note describes a behavior, whereas the section is simply describing the timers. It is also redundant with the note on page 141 line

CommentEnd:

SuggestedRemedy:

Delete the note.

RemedyEnd:

Editor' RecommendationStart:

Accept.

Editor's Recommendation End:

Resolution Start:

Accept.

#### ResolutionEnd:

CommentNumber: 139

CommenterName: Stephen Haddock

CommenterEmail: shaddock@extremenetworks.com

CommenterPhone: (408) 579-2812 CommenterCompany: Extreme Networks

Clause: 43 Subclause: 43.4.5 Page: 126

Line: 52

CommentType: (E, T, ER, or TR): T

Comment:

Given that it is already challenging to keep track of which parameters are tied to an Aggregator versus a Port except by the keyword "Port", the name "Individual\_Port" is an unfortunate choice for an Aggregator variable. The easy fix would be to rename it "Individual\_Aggregator" (or, to make it consistent with Port\_State.Aggregation rename it "Aggregator\_Aggregation"). It turns out this variable is only referenced in one place and that is the recommended selection logic in 43.4.13.2. It is not clear that this variable adds any value. All the selection logic says is that it must be false. There is no indication of how selection rules are affected if it is true. I think that

any purpose it serves can also be achieved by giving the Aggregator and corresponding port a unique key, and/or setting the corresponding Actor\_Admin\_Port\_State.Aggregation to individual. CommentEnd:

Commentana.

SuggestedRemedy:

Preferred remedy:

Delete the Individual\_Port variable and delete bullet e) in subclause 43.4.13.2 page 140 line 33.

Alternate remedy:

Replace "Individual\_Port" with "Individual\_Aggregator" on page 126

line 52 and page 140 line 33.

RemedyEnd:

Editor' RecommendationStart:

Accept preferred remedy.

Editor's Recommendation End:

ResolutionStart:

Accept preferred remedy and add the following to bullet h page 139 l1: ". Any port that is Aggregatable shall not select an Aggregator to which an Individual port is already attached". Check PICS.

#### ResolutionEnd:

CommentNumber: 140

CommenterName: Stephen Haddock

CommenterEmail: shaddock@extremenetworks.com

CommenterPhone: (408) 579-2812 CommenterCompany: Extreme Networks

Clause: 43 Subclause: 43.4.5

Page: 127 Line: 17

CommentType: (E, T, ER, or TR): E

Comment:

The variable names for port variables put the "Admin/Oper" qualification immediately after Actor/Partner, whereas the aggregator variables position this qualification differently. It's a trivial point, but it would be nice to be consistent on this. Also, even though the aggregator only has a variable for the partners operational key, the port has variables for both a partner operation and administrative key. Therefore it would be more clear to explicitly label the aggregator variable as an operational value.

CommentEnd:

SuggestedRemedy:

Global change "Actor\_Aggregator\_Admin\_Key" to

"Actor\_Admin\_Aggregator\_Key".

 $Global\ change\ "Actor\_Aggregator\_Oper\_Key"\ to\ "Actor\_Oper\_Aggregator\_Key".$ 

Global change "Partner\_Aggregator\_Key" to "Partner\_Oper\_Aggregator\_Key".

RemedyEnd:

Editor' RecommendationStart:

Accept.

Editor's Recommendation End:

ResolutionStart:

#### Accept.

#### ResolutionEnd:

CommentNumber: 141

CommenterName: Stephen Haddock

CommenterEmail: shaddock@extremenetworks.com

CommenterPhone: (408) 579-2812

CommenterCompany: Extreme Networks

Clause: 43 Subclause: 43.4.5

Page: 127 Line: 25

CommentType: (E, T, ER, or TR): E

Comment:

In the descriptions of the Aggregator and Port variables that have Administered and Operational values, some are described as "assigned by administrator or system policy", some are described as "assigned by the Actor", and, in the case of the Partner variables, described as "an administrative value assigned by the Actor". Adding to the confusion, several of the Partner\_Admin variables are described as "value assigned to this link by the Partner." It would be more clear, and I think more accurate, to describe the Admin variables which are relatively static as "assigned by administrator or system policy", and the operational values which can be dynamically changes as "assigned by the Actor". The Partner\_Admin variables should be described as "assigned by administrator or system policy to be used when the Partner's information is unknown or expired."

CommentEnd:

SuggestedRemedy:

Page 127 line 25 (Actor\_Aggregator\_Oper\_Key): change "by administrator or system policy" to "by the Actor".

Page 128 line 39 (Actor\_Admin\_Port\_Key): change "by the Actor" to "by administrator or system policy".

Page 129 line 25 (Partner\_Oper\_System): change "The value is either the Actor's view of the Partner's parameter, or an administrative value assigned by the Actor" to "The Actor sets this variable either to the value received from the Partner in an LACPDU, or to the value of Partner Admin System".

Analogous changes to:

Page 129 line 35 (Partner\_Oper\_System\_Priority)

Page 129 line 44 (Partner\_Oper\_Key)

Page 129 line 53 (Partner\_Oper\_Port\_Number)

Page 130 line 10 (Partner\_Oper\_Port\_Priority)

Page 130 line 31 (Partner\_Oper\_Port\_State)

Page 129 line 19 (Partner\_Admin\_System): Replace "The Actor's administrative value of the MAC address component of the System Identifier of the Partner" with "Default value for the MAC address component of the System Identifier of the Partner, assigned by administrator or system policy for use when the Partner's information is unknown or expired."

Analogous changes to:

Page 129 line 29 (Partner\_Admin\_System\_Priority)

Page 129 line 39 (Partner\_Admin\_Key)

Page 129 line 48 (Partner\_Admin\_Port\_Number)

Page 130 line 3 (Partner\_Admin\_Port\_Priority)

Page 130 line 15 (Partner\_Admin\_Port\_State)

RemedyEnd:

Editor' RecommendationStart:

#### Accept.

Editor'sRecommendationEnd:

ResolutionStart:

Accept.

#### ResolutionEnd:

CommentNumber: 142

CommenterName: Stephen Haddock

CommenterEmail: shaddock@extremenetworks.com

CommenterPhone: (408) 579-2812

CommenterCompany: Extreme Networks

Clause: 43

Subclause: 43.4.6

Page: 128 Line: 14

CommentType: (E, T, ER, or TR): E

Comment:

The variable definition for Port Priority should explicitly state that it is a 8 bit integer, to differentiate it from all other integer

variables which are 16 bit.

CommentEnd:

SuggestedRemedy:

Replace "integer" with "8-bit integer" for Actor\_Port\_Priority (page

128 line 14), Partner\_Admin\_Port\_Priority (page 130 line 5), and

Partner\_Oper\_Port\_Priority (page 130 line 12).

RemedyEnd:

Editor' RecommendationStart:

Accept in principle. Coordinate with the resolution of comment 129.

Editor's Recommendation End:

ResolutionStart:

Reject. Earlier comment has changed this to 16 bits.

#### ResolutionEnd:

CommentNumber: 143

CommenterName: Ted Schroeder CommenterEmail: ted@alteon.com CommenterPhone: (408) 360-5511

CommenterCompany: Alteon WebSystems, Inc.

Clause: 43 Subclause: 4.7 Page: 131 Line: 3-5

CommentType: (E, T, ER, or TR): T

Comment:

The Reinitialize "signal" is in the variables section when it is really an event. According to section 21.5 a variable holds its state after it has been set. It is never indicated in this specification how the

reinialize signal is set or cleared.

CommentEnd:

# SuggestedRemedy:

Create a new section for "events" or really use the Reinitialize "signal"

as a variable. Also define how it gets set and cleared.

RemedyEnd:

Editor' RecommendationStart:

Reject. The Reinitialize signal \*IS\* a variable, not an event. It is set by external forces that cause system initialization, which is outside the scope of this clause.

Editor'sRecommendationEnd:

ResolutionStart:

Resolved by comment 85.

ResolutionEnd:

CommentNumber: 144

CommenterName: Ted Schroeder CommenterEmail: ted@alteon.com CommenterPhone: (408) 360-5511

CommenterCompany: Alteon WebSystems, Inc.

Clause: 43 Subclause: 4.7 Page: 131 Line: 7-10

CommentType: (E, T, ER, or TR): T

Comment:

LACP\_Enabled "signal" should be called a "variable". The description for

how it is set should be an if and only if description.

CommentEnd:

SuggestedRemedy:

Change "If the port" to "If and only if the port"

RemedyEnd:

Editor' RecommendationStart:

Discuss. I don't have a problem with the word "signal" in the definition of a variable. Also, if the statement says "if and only if"; this would imply that duplexity is the one and only reason for disabling LACP. I'm not sure this is the understanding of the TF.

Editor's Recommendation End:

ResolutionStart:

Accept change of "signal" to "variable" (global change within variable definitions). "If and only if" aspect resolved by comment 75.

# ResolutionEnd:

CommentNumber: 145

CommenterName: Ted Schroeder CommenterEmail: ted@alteon.com CommenterPhone: (408) 360-5511

CommenterCompany: Alteon WebSystems, Inc.

Clause: 43 Subclause: 4.7 Page: 131 Line: 13

CommentType: (E, T, ER, or TR): E

Comment:

Signal isn't a valid word in this context

CommentEnd:

SuggestedRemedy:

Change "signal" to variable

RemedyEnd:

Editor' RecommendationStart:

See comment 144. I believe signal is an appropriate term to describe a variable. Architecturally, it is a "variable" in the context of the state machine, however it is indeed a logical "signal" that indicates a condition.

Editor'sRecommendationEnd:

ResolutionStart:

See 144.

ResolutionEnd:

CommentNumber: 146

CommenterName: Ted Schroeder CommenterEmail: ted@alteon.com CommenterPhone: (408) 360-5511

CommenterCompany: Alteon WebSystems, Inc.

Clause: 43 Subclause: 4.7 Page: 131 Line: 19

CommentType: (E, T, ER, or TR): E

Comment:

Signal isn't a valid word in this context

CommentEnd:

SuggestedRemedy:

Change "signal" to variable

RemedyEnd:

Editor' RecommendationStart:

See comment 145.

Editor's Recommendation End:

ResolutionStart:

See 144.

ResolutionEnd:

CommentNumber: 147

CommenterName: Ted Schroeder CommenterEmail: ted@alteon.com CommenterPhone: (408) 360-5511

CommenterCompany: Alteon WebSystems, Inc.

Clause: 43 Subclause: 4.7 Page: 131-132 Line: 48-55/1-23

CommentType: (E, T, ER, or TR): TR

Comment:

The definition of the Matched variable tells how it is set TRUE and how it is set FALSE. This seems really wrong. Instead it should describe how it is set TRUE and say, else it is FALSE.

CommentEnd:

SuggestedRemedy:

Change the description to:

This variable has a value of TRUE if the Receive state machine has determined that:

The current operational parameters for the Actor (Actor\_Port\_Number, Actor\_Port\_Priority, Actor\_System, Actor\_System\_Priority, Actor\_Oper\_Port\_Key, Actor\_Oper\_Port\_state.Aggregation) match the corresponding parameters received in the latest LACPUD (Partner\_Port, Partner\_Port\_Priority, Partner\_System, Partner\_System\_Priority, Parner\_Key, and Partner\_State.Aggregation);

or

The Partner is Individual:

or

The Receive state machine is using default values for the Partner's operational state;

or

LACP operation is disabled;

and

The port is enabled;

and

The protocol information received from the partner is valid (isn't in a state where it has expired but hasn't been set to the default values).

RemedyEnd:

Editor' RecommendationStart:

See comment 151.

Editor's Recommendation End:

ResolutionStart:

Resolved by 151.

ResolutionEnd:

CommentNumber: 148

CommenterName: Stephen Haddock

CommenterEmail: shaddock@extremenetworks.com

CommenterPhone: (408) 579-2812

CommenterCompany: Extreme Networks

Clause: 43

Subclause: 43.4.7

Page: 131 Line: 33

CommentType: (E, T, ER, or TR): E

Comment:

The use of the word "ready" is overused in the description of the variables "ready" and "ready\_N". It is also confusing as to whether a requirement for ready to be set TRUE is that the port's own ready\_N variable

is set TRUE (the description of ready implies yes because it says "all ports", but the description of ready\_N implies no because it says it is only used by "other ports").

CommentEnd:

SuggestedRemedy:

Replace the description of the ready variable with:

"The logical AND of the ready\_N variable for all ports, including this port, that are waiting (ie the Selection Machine is in the Waiting state) to attach to the Aggregator selected for this port."

Replace the description of the ready\_N variable with:

"A value of TRUE indicates that this port is waiting (i.e. the
Selection Machine is in the Waiting state) to attach to an Aggregator, and
either the wait\_while timer for this port has expired or all other ports
that could potentially attach to the same Aggregator are already attached or
are also waiting to attach."

RemedvEnd:

Editor' RecommendationStart:

Accept.

Editor'sRecommendationEnd:

ResolutionStart:

Accept in principle. Replace description of Ready with "Ready: The Selection Logic asserts Ready TRUE when the values of Ready\_N for all ports that are waiting to attach to a given Aggregator are TRUE. If there are no ports waiting to attach to that Aggregator the value is FALSE. Otherwise, its value is FALSE. There is one Ready value per Aggregator." replace Ready\_N with "Ready\_N: The port asserts Ready\_N TRUE to indicate to the Selection logic that the wait\_while timer has expired and it is waiting (i.e., is in the WAITING state) to attach to an Aggregator. There is one Ready\_N value for each port. Otherwise, its value is FALSE.". Swap the order of Ready\_N and Ready.

#### ResolutionEnd:

CommentNumber: 149

CommenterName: Tom Mathey

CommenterEmail: tmathey@concentric.net

CommenterPhone: 408-865-1763 CommenterCompany: Independent

Clause: 43 Subclause: 43.4.7

Page: 131 Line: 42

CommentType: (E, T, ER, or TR): E

Comment:

The underscore is missing.

CommentEnd:

SuggestedRemedy:

Change from "wait while timer" to "wait while timer" to match definition on p. 134, line 36.

Also fix on: p.141, line 8, 9 (twice); p173, line 36.

RemedyEnd:

Editor' RecommendationStart:

#### Accept.

Editor'sRecommendationEnd:

ResolutionStart:

Accept.

#### ResolutionEnd:

CommentNumber: 150

CommenterName: Stephen Haddock

CommenterEmail: shaddock@extremenetworks.com

CommenterPhone: (408) 579-2812

CommenterCompany: Extreme Networks

Clause: 43

Subclause: 43.4.7

Page: 131 Line: 51

CommentType: (E, T, ER, or TR): T

Comment:

The Actor\_Port\_System and Actor\_Port\_System\_Priority variables are never used. They should either be eliminated, or they should be used by the Receive machines for each port. In either case the Matched variable, choose\_Matched function, and UpdateNTT function should not be using variables associated with an Aggregator.

CommentEnd:

#### SuggestedRemedy:

Preferred remedy:

Eliminate the Actor\_Port\_System and

Actor\_Port\_System\_Priority variables, and move the Actor\_System and Actor\_System\_Priority variables to a new subclause titled "Variables associated with the System".

Alternate remedy:

Replace "Actor\_System" with "Actor\_Port\_System".

Replace "Actor\_System\_Priority" with

"Actor\_Port\_System\_Priority".

Each of the above replacements needs to be made on page 131

line 51, on page 132 line 10, on page 133 line 40, and on page 134 line 7.

#### RemedvEnd:

Editor' RecommendationStart:

Discuss. The System and System Priority values are used for arbitrating dynamic key changes, and for determining the LAG ID.

#### Editor'sRecommendationEnd:

ResolutionStart:

Accept Preferred remedy for the state machines. For the MIB, need to be able to associate both ports and aggregators with a system.

#### ResolutionEnd:

CommentNumber: 151

CommenterName: Stephen Haddock

CommenterEmail: shaddock@extremenetworks.com

CommenterPhone: (408) 579-2812

CommenterCompany: Extreme Networks

Clause: 43 Subclause: 43.4.7

Page: 131 Line: 49

CommentType: (E, T, ER, or TR): ER

Comment:

The conditions described for the Matched variable to have a value of TRUE or FALSE are not mutually exclusive. For example, if the port is using default values for the Partner's operational state, and the port is disabled, then the conditions for both TRUE and FALSE have been met. The conditions for setting Matched TRUE or FALSE are defined unambiguously in the Receive Machine state diagram and the choose\_Matched functions; it is not necessary to attempt to describe them in the variable definition. CommentEnd:

SuggestedRemedy:

Delete all but the last sentence (beginning "The value of Matched ...") of the description of the Matched variable.

RemedyEnd:

Editor' RecommendationStart:

Accept.

Editor's Recommendation End:

ResolutionStart:

Accept in principle. Replace the definition with "The value of Matched is determined by the Receive machine. The MATCHED variable is used to qualify the Partner's synchronization state."

#### ResolutionEnd:

CommentNumber: 152

CommenterName: Ted Schroeder CommenterEmail: ted@alteon.com CommenterPhone: (408) 360-5511

CommenterCompany: Alteon WebSystems, Inc.

Clause: 43 Subclause: 4.7 Page: 132 Line: 24

CommentType: (E, T, ER, or TR): ER

Comment:

The values allowed for the Selected variable are TRUE, FALSE, and STANDBY. TRUE and FALSE are bad words to use outside of the context of a boolean.

CommentEnd:

SuggestedRemedy:

Change the name of the Selected variable to Selection\_State and change the variable states from TRUE to SELECTED and FALSE to UNSELECTED, here and throughout the document.

RemedyEnd:

Editor' RecommendationStart:

Accept.

Editor's Recommendation End:

ResolutionStart:

Accept.

#### ResolutionEnd:

CommentNumber: 153

CommenterName: Ted Schroeder CommenterEmail: ted@alteon.com CommenterPhone: (408) 360-5511

CommenterCompany: Alteon WebSystems, Inc.

Clause: 43 Subclause: 4.7 Page: 132 Line: 39

CommentType: (E, T, ER, or TR): E

Comment:

Signal isn't a valid word in this context

CommentEnd:

SuggestedRemedy:

Change "signal" to variable

RemedyEnd:

Editor' RecommendationStart:

See comments 144 and 145.

Editor's Recommendation End:

ResolutionStart:

Accept. See 144.

ResolutionEnd:

CommentNumber: 154

CommenterName: Tony Jeffree CommenterEmail: tony@jeffree.co.uk CommenterPhone: +44-161-973-4278

CommenterCompany: Independent Consultant

Clause: 43

Subclause: 43.4.11 Page: 132, 135, 136

Line: P132 lines 38-43, Fig 43-10, and P136 lines 30-39

CommentType: (E, T, ER, or TR): TR

Comment:

The operation of "port\_moved" doesn't quite work yet. If the port\_enabled is FALSE and Reinitialise is FALSE, then the global entry to PORT\_DISABLED effectively prevents the port\_moved = TRUE exit from being meaningful. The global transition needs further qualification to fix this properly. The definition of port\_moved also needs cleaning up to achieve this; the condition for setting it TRUE is correct, but it will need to be cleared in INITIALIZE in order to fix the rest of the problem.

#### CommentEnd:

# SuggestedRemedy:

Change the global entry into PORT\_DISABLED to read "(Reinitialize = FALSE)

\* (port\_enabled = FALSE) \* port\_moved = FALSE)"

In the INITIALIZE state, add the action "port\_moved = FALSE" after the three current actions.

Re-word the definition of the port\_moved variable (Page 132 Lines 38-43) as follows:

"This variable is set to TRUE if the receive machine for a port is in the PORT\_DISABLED state, and the combination of Partner\_Oper\_System and Partner\_Oper\_Port\_Number in use by that port has been received in an incoming LACPDU on a different port. This variable is set to FALSE once the INITIALIZE state has set the Partner information for the port to administrative default values."

Re-word P136 L30-39 as follows:

"If the port becomes inoperable and a reinitialization has not occurred, the state machine enters the PORT\_DISABLED state. Matched is set to FALSE and the current\_while timer is stopped. This state allows the current Selection state to remain undisturbed, so that, in the event that the port is still connected to the same Partner and Partner port when it becomes operable again, there will be no disturbance caused to higher layers by unneccessary reconfiguration. If the same Actor System ID and Port are seen in a LACPDU received on a different Port (port\_moved is set to TRUE), this indicates that the physical connectivity has changed, and causes the state machine to enter the INITIALIZE state. This state is also entered if a Reinitialize event occurs.

The INITIALIZE state causes the administrative values of the Partner parameters to be used as the current operational values, and sets Selected to FALSE. These actions force the selection state machine to detach the port from its current Aggregator. The variable port\_moved is set to FALSE; if the entry to INITIALIZE occurred as a result of port\_moved being set to TRUE, then the state machine will immediately transition back to the PORT\_DISABLED state."

RemedyEnd:
Editor' RecommendationStart:

Accept.

Editor'sRecommendationEnd: ResolutionStart:

Accept.

ResolutionEnd:

CommentNumber: 155

CommenterName: Tom Mathey

CommenterEmail: tmathey@concentric.net

CommenterPhone: 408-865-1763 CommenterCompany: Independent

Clause: 43 Subclause: 43.4.8

Page: 133 Line: 35

CommentType: (E, T, ER, or TR): T

Comment:

Since this function is an update, change function name to match.

CommentEnd:

SuggestedRemedy:

Change name from "choose\_Matched" to "update\_Matched".

RemedyEnd:

Editor' RecommendationStart:

Accept.

Editor'sRecommendationEnd:

ResolutionStart:

#### Reject.

#### ResolutionEnd:

CommentNumber: 156

CommenterName: Tom Mathey

CommenterEmail: tmathey@concentric.net

CommenterPhone: 408-865-1763 CommenterCompany: Independent

Clause: 43 Subclause: 43.4.8

Page: 133 Line: 35

CommentType: (E, T, ER, or TR): T

Comment:

The text for choose\_Matched describes not only what the function uses as its variables, but also other conditions of assigning TRUE or FALSE to the variable Matched. On page 131 is also text describing how and when variable Matched is set to TRUE or FALSE. Page 131 includes a lot more conditions than page 133. It is confusing to the reader to have multiple places providing similar, if not identical, actions.

#### CommentEnd:

#### SuggestedRemedy:

Try to place all TRUE / FALSE settings in one place, remove those which are identical. No text is provided.

RemedvEnd:

Editor' RecommendationStart:

Accept in principle. See comment 151.

Editor's Recommendation End:

ResolutionStart:

Accept in principle. See comment 151.

#### ResolutionEnd:

CommentNumber: 157

CommenterName: Stephen Haddock

CommenterEmail: shaddock@extremenetworks.com

CommenterPhone: (408) 579-2812 CommenterCompany: Extreme Networks

Clause: 43 Subclause: 43.4.8

Page: 133 Line: 36

CommentType: (E, T, ER, or TR): T

Comment:

The description is difficult to read, particularly with the sub-function of "LACP will actively maintain the link." I believe that the text can be simplified by incorporating the \_State.Aggregation bits into the list of parameters to be compared rather than separating them out. It can be simplified further by incorporating the \_State.LACP\_Activity bits into the list of parameters to be compared as well, but this does cause a subtle technical change. In the case when the Actor\_Oper\_Port\_State.LACP\_Activity does not match the PDU's Partner\_State.LACP\_Activity but the PDU's Actor\_State.LACP\_Activity is TRUE, the current definition would set Matched TRUE whereas my proposed remedy would set Matched FALSE. I do not believe

it is a problem, and it is likely desirable, to make sure that the Partner is echoing back the correct value for the Actor's LACP\_Activity variable. CommentEnd:

SuggestedRemedy:

Add "Partner\_State.Aggregation" and "Partner\_State.LACP\_Activity" to the parenthetical list of received PDU parameters to be compared (line 37).

Add "Actor\_Oper\_Port\_State.Aggregation" and "Acotr\_Oper\_Port\_State.LACP\_Activity" to the parenthetical list of Actor parameters to be compared (line39).

Replace the last sentence of the first paragraph (line 40-42) with: "Matched is set to TRUE if all of these parameters match and periodic LACPDU transmissions will be sent (indicated by Actor\_Oper\_Port\_State.LACP\_Activity or Partner\_Oper\_Port\_State.LACP\_Activity being TRUE)."

Replace the second paragraph (line 44-46) with: "Matched is also set to TRUE if the value of Actor\_State.Aggregation in the received PDU is set to FALSE (indicating an Individual link) and periodic LACPDU transmissions will be sent (indicated by Actor\_Oper\_Port\_State.LACP\_Activity or Partner\_Oper\_Port\_State.LACP\_Activity being TRUE)."

Delete the last paragraph (line 49-52).

RemedyEnd:

Editor' RecommendationStart:

Discuss.

Editor'sRecommendationEnd:

ResolutionStart:

Accept in principle. Put the text "i.e., indicates an Individual link" in parentheses in para 2 of the definition. In Para 1, incorporate the test expressed in the second sentence in the two lists in the first sentence.

#### ResolutionEnd:

CommentNumber: 158

CommenterName: Stephen Haddock

 $Commenter Email: \ shaddock@extremenetworks.com$ 

CommenterPhone: (408) 579-2812

CommenterCompany: Extreme Networks

Clause: 43

Subclause: 43.4.8

Page: 134 Line: 5

CommentType: (E, T, ER, or TR): E

Comment:

Inconsistent spelling of the port state Synchronization.

CommentEnd:

SuggestedRemedy:

Change "Synchronisation" to "Synchronization".

Same change in three places in Figure 43-14 on page 144. Same change in three places in Figure 43-14 on page 145.

RemedyEnd:

Editor' RecommendationStart:

# Accept. Editor'sRecommendationEnd: ResolutionStart: Accept. ResolutionEnd: CommentNumber: 159 CommenterName: Tom Mathey CommenterEmail: tmathey@concentric.net CommenterPhone: 408-865-1763 CommenterCompany: Independent

CommenterCompany: Clause: 43

Subclause: 43.4.9 Page: 134 Line: 16

CommentType: (E, T, ER, or TR): E

Comment:

For each of the timers, provide a pointer to where the constand is defined, and a value is assigned.

CommentEnd:

SuggestedRemedy:

For example, for line 38, change from "using the value Aggregate\_Wait\_Time." to "using the value Aggregate\_Wait\_Time (see 43.4.4)."

RemedyEnd:

Editor' RecommendationStart:

Accept.

Editor's Recommendation End:

ResolutionStart:

Accept.

ResolutionEnd:

CommentNumber: 160

CommenterName: Ted Schroeder CommenterEmail: ted@alteon.com CommenterPhone: (408) 360-5511

CommenterCompany: Alteon WebSystems, Inc.

Clause: 43 Subclause: 4.10 Page: 134 Line: 46

CommentType: (E, T, ER, or TR): T

Comment:

 $Need\ AggCntl: MA\_DATA. request (LACPDU)\ assuming\ change\ to\ TX\ state\ machine$ 

and main state diagram

CommentEnd:

SuggestedRemedy:

Add AggCntl:MA\_DATA.request(LACPDU)

RemedyEnd:

Editor' RecommendationStart:

See comment 137.

Editor's Recommendation End:

ResolutionStart:

Reject. See comment 137.

ResolutionEnd:

CommentNumber: 161

CommenterName: Tom Mathey

CommenterEmail: tmathey@concentric.net

CommenterPhone: 408-865-1763 CommenterCompany: Independent

Clause: 43

Subclause: Figure 43-10

Page: 135 Line:

CommentType: (E, T, ER, or TR): T

Comment:

In order to have the state diagrams conform to the definition in 21.5, I make the following suggestions:

- 1. For actions within state blocks, use assignment symbol "<=" in place of the equality test symbol "=".
- 2. Replace a "function call" with "result of function call is assigned to a variable".

CommentEnd:

SuggestedRemedy:

At all suitable places, make the following type of change: change from "update\_NTT" to "NTT <= update\_NTT.

RemedyEnd:

Editor' RecommendationStart:

Accept the first recommendation. The second change is not needed, as the function already performs the required actions and replacements.

Editor's Recommendation End:

ResolutionStart:

Accept first recommendation (note that this is a special left- arrow symbol, not a "<="). Reject second recommendation.

ResolutionEnd:

CommentNumber: 162

CommenterName: Geoff Thompson

CommenterEmail: gthompso@nortelnetworks.com

CommenterPhone: +1 408 495 1339 CommenterCompany: Nortel Networks

Clause: 43

Subclause: 43.4.11

Page: 135 Line: 47

CommentType: (E, T, ER, or TR): E

Comment:

Style issue: Your notes here and elsewhere is some areas of the draft are numbered.

This is not normally done in our established style except where 2 notes are actually adjascent.

#### CommentEnd:

SuggestedRemedy:

Remove numbering from notes or from their style sheet

Do global search on the term "NOTE"

RemedyEnd:

Editor' RecommendationStart:

Accept in principle. Make sure that all NOTEs adhere to the IEEE style rules - namely, if there is more than one NOTE in a subclause, then they are sequentially numbered from 1 (regardless of whether or not they are adjacent).

Editor's Recommendation End:

ResolutionStart:

Accept Editor's Recommendation.

#### ResolutionEnd:

CommentNumber: 163

CommenterName: Stephen Haddock

Commenter Email: shaddock@extremenetworks.com

CommenterPhone: (408) 579-2812

CommenterCompany: Extreme Networks

Clause: 43

Subclause: 43.4.11

Page: 136 Line: 7

CommentType: (E, T, ER, or TR): T

Comment:

The requirements for validating a LACPDU differ from the requirements for validating a Marker PDU (page 149 line 24) for non-obvious reasons. I don't think there is any reason for excluding "Pad" from the LACPDU list, including "TLV\_Type" in the LACPDU list, or including "Destination Address" in the Marker list.

CommentEnd:

SuggestedRemedy:

Replace the current sentence fragment with "shall not validate the Version Number, Pad, or Reserved fields" on page 136 line 7 and on page 149 line 24.

RemedyEnd:

Editor' RecommendationStart:

Accept.

Editor's Recommendation End:

ResolutionStart:

Accept.

ResolutionEnd:

CommentNumber: 164

CommenterName: Ted Schroeder CommenterEmail: ted@alteon.com CommenterPhone: (408) 360-5511 CommenterCompany: Alteon WebSystems, Inc.

Clause: 43 Subclause: 4.11 Page: 136 Line: 15

CommentType: (E, T, ER, or TR): T

Comment:

There is no place in the description of the Receive state machine or the state diagram where the port\_moved variable is set to TRUE.

CommentEnd:

SuggestedRemedy:

Add a paragraph that says something like, "If the LACPDU contains the combination of Partner\_Oper\_System and Partner\_Oper\_Number that matches the values of these for a different port that is in the PORT\_DISABLED state set the port\_moved variable for the other port to TRUE."

RemedyEnd:

Editor' RecommendationStart:

See comment 154.

Editor's Recommendation End:

ResolutionStart:

Resolved by 154.

ResolutionEnd:

CommentNumber: 165

CommenterName: Tom Mathey

CommenterEmail: tmathey@concentric.net

CommenterPhone: 408-865-1763 CommenterCompany: Independent

Clause: 43

Subclause: 43.4.11

Page: 136 Line: 32

CommentType: (E, T, ER, or TR): T

Comment:

For the sentence "and the current\_while timer is stopped.", no such action is shown in the PORT\_DISABLED block of p.135, line 12, Figure 43-10.

CommentEnd:

Suggested Remedy:

Add action.

RemedyEnd:

Editor' RecommendationStart:

Accept in principle. Remove the statement that the current\_while\_timer is stopped, and leave the state machine as is.

Editor'sRecommendationEnd:

ResolutionStart:

Accept Editor's Recommendation.

ResolutionEnd:

CommentNumber: 166

CommenterName: Stephen Haddock

CommenterEmail: shaddock@extremenetworks.com

CommenterPhone: (408) 579-2812 CommenterCompany: Extreme Networks

Clause: 43

Subclause: 43.4.12

Page: 137 Line: 1

CommentType: (E, T, ER, or TR): E

Comment:

There should not be two global transitions in a state machine that are not mutually exclusive.

Similarly there should only be a single transition between

Slow\_Periodic and Periodic\_Tx states.

CommentEnd:

SuggestedRemedy:

Merge the two global transitions to a single transition with the

```
"(Reinitialize = TRUE) +
(LACP_Enabled = FALSE) +
(port_enabled = FALSE) +
((Actor_Oper_Port_State.LACP_Activity = PASSIVE) *
(Partner_Oper_Port_State.LACP_Activity = PASSIVE))"
```

Merge the two transitions between Slow\_Periodic and Periodic\_Tx to a single transition with the condition:

```
"periodic_timer_expired + (Partner_Oper_Port_State.LACP_Timeout = Short_Timeout)"
```

RemedyEnd:

Editor' RecommendationStart:

Accept.

Editor'sRecommendationEnd:

ResolutionStart:

Accept.

ResolutionEnd:

CommentNumber: 167

CommenterName: Ted Schroeder CommenterEmail: ted@alteon.com CommenterPhone: (408) 360-5511

CommenterCompany: Alteon WebSystems, Inc.

Clause: 43 Subclause: 4.12 Page: 137 Line: 8

CommentType: (E, T, ER, or TR): T

Comment:

There is an UCT from NO\_PERIODIC, but the periodic timer is supposed to be disabled if the entry states of the NO\_PERIODIC state are true.

CommentEnd:

SuggestedRemedy:

Change the UCT to (Reinitialize = FALSE) \* (LACP\_ENABLED = TRUE) \* (port\_enabled = TRUE) + (Actor\_Oper\_Port\_State.LACP\_Activity = ACTIVE) + (Partner\_Oper\_Port\_State.LACP\_Activity = ACTIVE).

RemedyEnd:

Editor' RecommendationStart:

While the proposed change is valid, it is not really needed. Global transitions such as the entry states to NO\_PERIODIC override all other actions, including UCTs.

Editor'sRecommendationEnd:

ResolutionStart:

Reject.

ResolutionEnd:

CommentNumber: 168

CommenterName: Tony Jeffree CommenterEmail: tony@jeffree.co.uk CommenterPhone: +44-161-973-4278

CommenterCompany: Independent Consultant

Clause: 43

Subclause: 43.4.12

Page: 137 Line: 26

CommentType: (E, T, ER, or TR): E

Comment:

"Partner" inconsistently capitalized. Global problem.

CommentEnd:

SuggestedRemedy:

"partner" -> "Partner"; global search/replace.

RemedyEnd:

Editor' RecommendationStart:

Accept.

Editor'sRecommendationEnd:

ResolutionStart:

Accept.

ResolutionEnd:

CommentNumber: 169

CommenterName: Ted Schroeder CommenterEmail: ted@alteon.com CommenterPhone: (408) 360-5511

CommenterCompany: Alteon WebSystems, Inc.

Clause: 43 Subclause: 4.13 Page: 138 Line: 3

CommentType: (E, T, ER, or TR): E

Comment:

Grammatical typo

# CommentEnd: SuggestedRemedy: Change "using port's LAGID" to "using the port's LAGID" RemedyEnd: Editor' RecommendationStart: Accept. Editor'sRecommendationEnd: ResolutionStart: Accept. ResolutionEnd: CommentNumber: 170 CommenterName: Tony Jeffree CommenterEmail: tony@jeffree.co.uk CommenterPhone: +44-161-973-4278 CommenterCompany: Independent Consultant Clause: 43 Subclause: 43.4.13.1 Page: 139 Line: 30 CommentType: (E, T, ER, or TR): E Comment: Comma should be fullstop. CommentEnd: SuggestedRemedy: "," -> ".". RemedyEnd: Editor' RecommendationStart: Accept. Editor's Recommendation End:ResolutionStart: Accept. ResolutionEnd: CommentNumber: 171 CommenterName: Ted Schroeder CommenterEmail: ted@alteon.com CommenterPhone: (408) 360-5511 CommenterCompany: Alteon WebSystems, Inc. Clause: 43 Subclause: 4.13.3 Page: 140 Line: 41,42 CommentType: (E, T, ER, or TR): E Comment: Refers to Mux machine when should refer to Mux control and logic

# CommentEnd: SuggestedRemedy: Change two instances of "Mux machine" to "Mux control and logic" RemedyEnd: Editor' RecommendationStart: Accept. Editor'sRecommendationEnd: ResolutionStart: Accept. ResolutionEnd: CommentNumber: 172 CommenterName: Ted Schroeder CommenterEmail: ted@alteon.com CommenterPhone: (408) 360-5511 CommenterCompany: Alteon WebSystems, Inc. Clause: 43 Subclause: 4.13.3 Page: 140 Line: 53 CommentType: (E, T, ER, or TR): E Comment: Grammar bug CommentEnd: SuggestedRemedy: Change "state, when" to "and" RemedyEnd: Editor' RecommendationStart: Accept. Editor's Recommendation End: ResolutionStart: Accept. ResolutionEnd: CommentNumber: 173 CommenterName: Tasker

CommenterEmail: r.tasker@dl.ac.uk CommenterPhone: +44 1925 603758

CommenterCompany: Daresbury Laboratory

Clause: 43.4.13.3 Subclause: (c) Page: 141 Line: 1

CommentType: (E, T, ER, or TR): E

Comment: The first sentence (sic) isn't one.

CommentEnd:

SuggestedRemedy: Combine the 2 sentences of (c) into something

meaningful.

RemedyEnd:

Editor' RecommendationStart:

Reject. The first phrase isn't intended to be a complete sentence. It is part of a list started by the sentence on p150 line 45, including list items (a), (b), and (c).

Editor'sRecommendationEnd:

ResolutionStart:

Reject.

ResolutionEnd:

CommentNumber: 174

CommenterName: Shimon Muller

CommenterEmail: shimon.muller@Eng.sun.com

CommenterPhone: (650)-688-9572

CommenterCompany: Sun Microsystems

Clause: 43

Subclause: 43.4.13.3

Page: 141 Line: 14

CommentType: (E, T, ER, or TR): E

Comment:

Incorrect reference. CommentEnd:

SuggestedRemedy: Replace "b)" with "e)".

RemedyEnd:

Editor' RecommendationStart:

Accept.

Editor's Recommendation End:

ResolutionStart:

Accept.

ResolutionEnd:

CommentNumber: 175

CommenterName: Shimon Muller

CommenterEmail: shimon.muller@Eng.sun.com

CommenterPhone: (650)-688-9572

CommenterCompany: Sun Microsystems

Clause: 43

Subclause: 43.4.13.3

Page: 141 Line: 24

CommentType: (E, T, ER, or TR): E

Comment:

Incorrect reference.
CommentEnd:

SuggestedRemedy:

Replace "a)" with "d)".

RemedyEnd:

Editor' RecommendationStart:

Editor'sRecommendationEnd:

ResolutionStart:

Accept.

ResolutionEnd:

CommentNumber: 176

CommenterName: Tom Mathey

CommenterEmail: tmathey@concentric.net

CommenterPhone: 408-865-1763 CommenterCompany: Independent

Clause: 43

Subclause: 43.4.14

Page: 141 Line: 41

CommentType: (E, T, ER, or TR): E

Comment:

For this area, it would be usefull if the text was split up into both a  $\,$ 

43.4.14.1 area for Requirements and a 43.4.14.2 area for Mux Logic and Machine. This would make it consistent with other sections. It might then help with a better organization of the "shalls".

CommentEnd:

SuggestedRemedy:

No text provided.

RemedyEnd:

Editor' RecommendationStart:

Discuss.

Editor's Recommendation End:

ResolutionStart:

Resolved by 177/179.

ResolutionEnd:

CommentNumber: 177

CommenterName: Stephen Haddock

CommenterEmail: shaddock@extremenetworks.com

CommenterPhone: (408) 579-2812 CommenterCompany: Extreme Networks

Clause: 43

Subclause: 43.4.14

Page: 142 Line: 1

CommentType: (E, T, ER, or TR): TR

Comment:

There is ambiguity regarding what state machine In\_Sync and

Out-Of\_Sync are derived from and how they are tied to

Actor\_Oper\_Port\_State.Synchronization. In\_Sync and Out\_Of\_Sync are declared

to be states of the Mux (page 142 line 26) but described as sub-states of the Attached state in the Selection machine (page 142 line 33). The only place they are directly connected to the port state Synchronization is in the update\_Selected and update\_Default\_Selected functions of the receive machine, but the state is only set to Out\_Of\_Sync and never to In\_Sync. I think the best place to control the Synchronization state is in the Selection Machine. This can be done without ambiguity by adding two states to the Selection Machine, and will fulfill the rules of items a), g), and h) on page 142.

CommentEnd:

SuggestedRemedy:

In Figure 43-13:

Add two new states: "IN\_SYNC" and "OUT\_OF\_SYNC".

 $Inside \ the \ IN\_SYNC \ state \ are \ two \ operations: \ "NTT = TRUE" \\ and \ "Actor\_Oper\_Port\_State.Synchronization = TRUE".$ 

 $Inside \ the \ OUT\_OF\_SYNC \ state \ are \ two \ operations: \ "NTT = TRUE" \ and \ "Actor\_Oper\_Port\_State.Synchronization = FALSE".$ 

 $Add\ a\ transition\ from\ ATTACHED\ to\ IN\_SYNC\ with\ the\ condition\ "(Selected=TRUE)* (Matched=TRUE)".$ 

Add a transition from ATTACHED to  $OUT\_OF\_SYNC$  with the condition "(Selected = TRUE) \* (Matched = FALSE)".

Add a transition from OUT\_OF\_SYNC to IN\_SYNC with the condition "(Selected = TRUE) \* (Matched = TRUE)".

Add a transition from IN\_SYNC to OUT\_OF\_SYNC with the condition "(Selected = FALSE) + (Selected = STANDBY) + (Matched = FALSE)".

 $Add\ a\ transition\ from\ OUT\_OF\_SYNC\ to\ DETACHING\ with\ the\ condition\ "(Selected = FALSE) + (Selected = STANDBY)".$ 

For proper initialization, add an operation inside the DETACHED state: "Actor\_Oper\_Port\_State.Synchronization = FALSE".

Delete bullet a) on page 142 line 33-35. Delete bullet g) on page 142 line 50.

Delete bullet h) on page 142 line 51.

On page 142 line 26, delete the last sentence of this paragraph.

On page 133 line 31, delete "and

Actor\_Oper\_Port\_State.Synchronization is set to Out\_Of\_Sync".

On page 133 line 19, delete "and

Actor\_Oper\_Port\_State.Synchronization is set to Out\_Of\_Sync".

RemedvEnd:

Editor' RecommendationStart:

Discuss.

Editor's Recommendation End:

ResolutionStart:

Accept in principle.

Delete bullet a) on page 142 line 33-35.

Delete bullet g) on page 142 line 50.

Delete bullet h) on page 142 line 51.

On page 142 line 26, delete the last sentence of this paragraph.

On page 133 line 31, delete "and Actor\_Oper\_Port\_State.Synchronization is set to Out\_Of\_Sync". On page 133 line 19, delete "and Actor\_Oper\_Port\_State.Synchronization is set to Out\_Of\_Sync".

In the ATTACHED state, add actions actor\_port\_state.synchronization <= TRUE and NTT <= TRUE. In the DETACHING state, add actions actor\_port\_state.synchronization <= FALSE and NTT <= TRUE. In the DETACHED state, add actions actor\_port\_state.synchronization <= FALSE.

In the Receive machine, in Record PDU, set partner\_port\_state.synchronisation to TRUE if Matched = TRUE and received LACPDU actor\_state.synchronization = TRUE, else FALSE.

#### ResolutionEnd:

CommentNumber: 178 CommenterName: Tasker

CommenterEmail: r.tasker@dl.ac.uk CommenterPhone: +44 1925 603758

CommenterCompany: Daresbury Laboratory

Clause: 43.4.14 Subclause: Page:142 Line: 24 - 25

CommentType: (E, T, ER, or TR): E

Comment: "using the concepts of administrative vs operational states" wasn't

immediately obvious in meaning to me.

CommentEnd:

SuggestedRemedy: Add a cross reference to this discussion.

RemedyEnd:

Editor' RecommendationStart:

Accept in principle, however there is currently no section that explicitly discusses the concepts of administrative vs. operational states.

Editor'sRecommendationEnd:

ResolutionStart:

Resolved by 179.

#### ResolutionEnd:

CommentNumber: 179

CommenterName: Stephen Haddock

CommenterEmail: shaddock@extremenetworks.com

CommenterPhone: (408) 579-2812 CommenterCompany: Extreme Networks

Clause: 43

Subclause: 43.4.14

Page: 142 Line: 29

CommentType: (E, T, ER, or TR): TR

Comment:

There is ambiguity in what are the actual states of the Mux. In\_Sync and Out\_Of\_Sync are described as Mux states (inaccurately I believe -- see my previous comment tied to page 142 line 1). There is a Mux\_state signal going to the Selection Machine that takes on values of Attached or Detached. The Collecting and Distributing functions per port are described as states of the Mux. It is most accurate to describe the Mux as having

four states: Detached, Attached, Collecting, and Distributing. This is best represented as a state machine that controls the variables mux\_state, Actor\_Oper\_Port\_State.Collecting, and Actor\_Oper\_Port\_State.Distributing. This fulfills all of the rules defined on page 142 in bullets b), c), d), e), f), i), and j). CommentEnd:

SuggestedRemedy:

Add a Aggregator Multiplexer Machine state diagram with six states: DETACHED, ATTACHED, COLLECTING, DISTRIBUTING, LOST SYNC, and DESELECTED.

Add a global transition into DETACHED with the condition: "Reinitialize = TRUE".

Inside the DETACHED state add three operations:

"mux\_state = DETACHED",.

"Actor\_Oper\_Port\_State.Collecting = FALSE", and "Actor\_Oper\_Port\_State.Distributing = FALSE".

Add a transition from DETACHED to ATTACHED with the

condition:

"mux\_request = ATTACH".

Add a transition from ATTACHED to DETACHED with the

condition:

"mux\_request = DETACH".

Inside the ATTACHED state add an operation:

"mux\_state = ATTACHED".

Add a transition from ATTACHED to COLLECTING with the

condition:

"(mux\_request = ATTACH) \*
(Actor\_Oper\_Port\_State.Synchronization = TRUE) \*
(Partner\_Oper\_Port\_State.Synchronization = TRUE)".

Inside the COLLECTING state add three operations:

"NTT = TRUE",

"Actor\_Oper\_Port\_State.Collecting = TRUE", and "Actor\_Oper\_Port\_State.Distributing = FALSE".

Add a transition from COLLECTING to DISTRIBUTING with the

condition:

"(mux\_request = ATTACH) \*
(Actor\_Oper\_Port\_State.Synchronization = TRUE) \*
(Partner\_Oper\_Port\_State.Synchronization = TRUE) \*
(Partner\_Oper\_Port\_State.Collecting = TRUE)".

Add a transition from DISTRIBUTING to COLLECTING with the

condition:

"(mux\_request = ATTACH) \*
(Actor\_Oper\_Port\_State.Synchronization = TRUE) \*
(Partner\_Oper\_Port\_State.Synchronization = TRUE) \*
(Partner\_Oper\_Port\_State.Collecting = FALSE)".

Inside the DISTRIBUTING state add three operations:

"NTT = TRUE",

"Actor\_Oper\_Port\_State.Collecting = TRUE", and "Actor\_Oper\_Port\_State.Distributing = TRUE".

Add a transition from DISTRIBUTING to DESELECTED with the condition: "mux\_request = DETACH". Add a transition from COLLECTING to DESELECTED with the condition: "mux\_request = DETACH". Inside the DESELECTED state add an operation: "NTT = TRUE". Add a transition from DESELECTED to DETACHED with the condition: UCT. Add a transition from DISTRIBUTING to LOST\_SYNC with the condition: "(mux\_request = ATTACH) \* ((Actor\_Oper\_Port\_State.Synchronization = FALSE) + (Partner\_Oper\_Port\_State.Synchronization = FALSE))". Add a transition from COLLECTING to LOST\_SYNC with the condition: "(mux\_request = ATTACH) \* ((Actor\_Oper\_Port\_State.Synchronization = FALSE) + (Partner\_Oper\_Port\_State.Synchronization = FALSE))". Inside the LOST\_SYNC state add thre operations: "NTT = TRUE"."Actor\_Oper\_Port\_State.Collecting = FALSE", and "Actor\_Oper\_Port\_State.Distributing = FALSE". Add a transition from LOST\_SYNC to ATTACHED with the

UCT.

Make the COLLECTING state optional (dotted line box) and add

a note:

condition:

"If the Mux hardware is incapable of controlling collecting and distributing independently then the COLLECTING state is not implemented and transition from ATTACHED to COLLECTING goes directly to DISTRIBUTING."

On page 142 lines 29-55, delete all text.

RemedyEnd:

Editor' RecommendationStart:

Discuss.

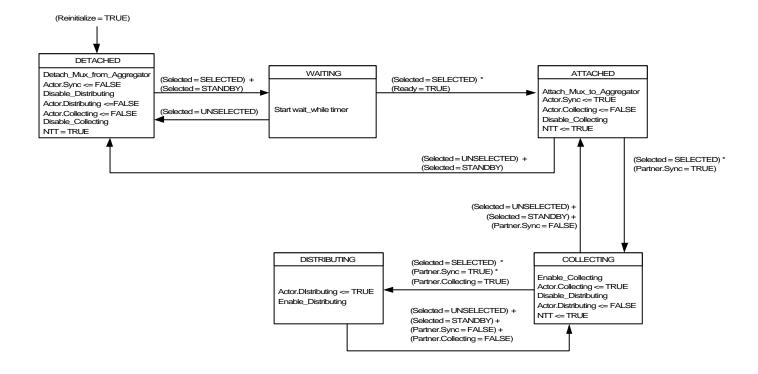
Editor'sRecommendationEnd:

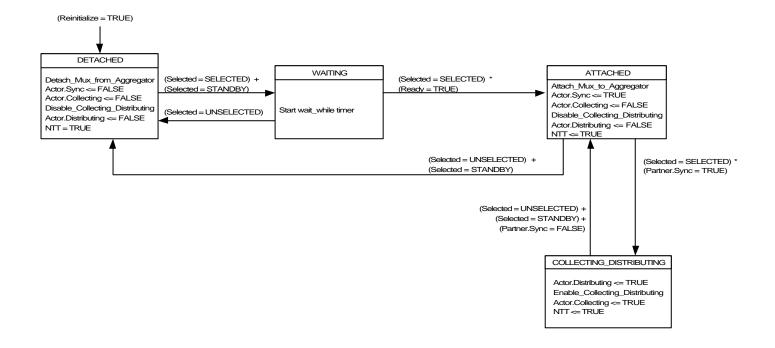
ResolutionStart:

Accept in principle.

Combine section "43.4.13.3 Selection Machine" and section "43.4.14 Mux Control and Logic" into a single section "43.4.14 Mux Machine".

Replace "Figure 43-13 – Selection Machine state diagram" with "Figure 43-13a – Mux Machine State Diagram (independent control)" and "Figure 43-13b – Mux Machine State Diagram (coupled control)" as shown below:





Move the text currently in 43.4.13.3 to 43.4.14, modifying it to reflect the name change from Selection Machine to Mux Machine, and to reflect the removal of the ATTACHING and DETACHING states. Replace all of the current text of 43.4.14 with a description of the COLLECTING, DISTRIBUTING, and COLLECTING\_DISTRIBUTING states. Text should include mention that the "independent control" machine is the preferred implementation to the "coupled control". Text should also include the following comments regarding the time it takes in practice to attach, detach, and enable/disable collecting/distributing: "The state machine conventions in 21.5 assert that all in-state actions are instantaneous, are performed in sequence, and are performed prior to evaluating any exit conditions. While the Mux Machine will operate correctly if all actions can be performed instantaneously, this will not be realistic in many implementations. Correct operation is maintained even if actions are not completed instantaneously as long as each action completes prior to initiating the next sequential action and all actions complete prior to evaluating any exit conditions."

It is necessary to add 8 function definitions to "43.4.8 Functions" for Attach\_Mux\_to\_Aggregator, Enable\_Collector, etc., or are they sufficiently descriptive to be self-defining. Define these functions and make it clear that these functions affect the Aggregator parser/mux for each Port.

Search for references to the Selection Machine or Mux Logic and modify them to refer to the Mux Machine. Clean up the references to selection logic and mux machine.

In Figure 43-9, make the following modifications:

- 1) Delete the "Matched" signal in two places. This is a result of the resolution to comment #177, as now the matched variable is only used internal to the Receive machine (in the recordPDU function (and recordDefaultPDU?) function).
- 2) The "selected" variable also goes to the MUX machine.
- 3) Delete the "Attach/Detach" and "Attached/Detached" signals.
- 4) Add a "ready" signal from Selection to MUX.
- 5) Use a different symbol for Selection & name it Selection Logic.

Change the name of "43.4.13 Selection Logic and Machine" to "43.4.13 Selection Logic". We need to add text to this section (or subsection 43.4.13.1) describing the generation of the ready signal. Along the lines of: "....Computes Ready from Ready\_N....see variable definitions..."

## ResolutionEnd:

CommentNumber: 180

CommenterName: Stephen Haddock

CommenterEmail: shaddock@extremenetworks.com

CommenterPhone: (408) 579-2812 CommenterCompany: Extreme Networks

Clause: 43

Subclause: 43.4.14

Page: 142 Line: 1

CommentType: (E, T, ER, or TR): T

Comment:

The mux\_request signal from the Selection Machine to the Mux Logic

is not initialized. CommentEnd:

SuggestedRemedy:

In Figure 43-13, inside the DETACHED state add an operation:

"mux\_request = DETACH".

RemedyEnd:

Editor' RecommendationStart:

Accept.

Editor's Recommendation End:

ResolutionStart:

Resolved by 179.

ResolutionEnd:

CommentNumber: 181

CommenterName: Tony Jeffree CommenterEmail: tony@jeffree.co.uk CommenterPhone: +44-161-973-4278

CommenterCompany: Independent Consultant

Clause: 43

**Subclause: 43.4.16** 

Page: 144 Line: 2/3

CommentType: (E, T, ER, or TR): E

Comment:

Ports attach to Aggregators.

CommentEnd:

SuggestedRemedy:

"connect" -> "attach".

RemedyEnd:

Editor' RecommendationStart:

# Accept.

Editor'sRecommendationEnd:

ResolutionStart:

Accept.

#### ResolutionEnd:

CommentNumber: 182

CommenterName: Ted Schroeder CommenterEmail: ted@alteon.com CommenterPhone: (408) 360-5511

CommenterCompany: Alteon WebSystems, Inc.

Clause: 43 Subclause: 4.14 Page: 142 Line: 26

CommentType: (E, T, ER, or TR): E

Comment:

Improper verbification

CommentEnd:

SuggestedRemedy:

Change "be actioned" to "occur"

RemedyEnd:

Editor' RecommendationStart:

Accept in principle. Change to "be serviced".

Editor's Recommendation End:

ResolutionStart:

Resolved by 179.

# ResolutionEnd:

CommentNumber: 183

CommenterName: Ted Schroeder CommenterEmail: ted@alteon.com CommenterPhone: (408) 360-5511

CommenterCompany: Alteon WebSystems, Inc.

Clause: 43 Subclause: 4.14 Page: 142 Line: 31, 39, 40

CommentType: (E, T, ER, or TR): E

Comment:

Generic usage of "in sync" when specific state is meant

CommentEnd:

SuggestedRemedy:

Change "in sync" to "In\_Sync"

RemedyEnd:

Editor' RecommendationStart:

Accept. Coordinate with global change for proper capitalization per comment 60.

Editor'sRecommendationEnd:

ResolutionStart:

# Accept.

# ResolutionEnd:

CommentNumber: 184

CommenterName: Ted Schroeder CommenterEmail: ted@alteon.com CommenterPhone: (408) 360-5511

CommenterCompany: Alteon WebSystems, Inc.

Clause: 43 Subclause: 4.15 Page: 143 Line: 8-39

CommentType: (E, T, ER, or TR): T

Comment:

All references to "transmitting LACPDUs" should be changed to making

AggCntl:MA\_DATA.Request(LACPDU)

CommentEnd:

# SuggestedRemedy:

All references to "transmitting LACPDUs" should be changed to making

AggCntl:MA\_DATA.Request(LACPDU)

RemedyEnd:

Editor' RecommendationStart:

Reject. The formalization of a service primitive is needed in the state diagrams themselves, but not in the textual description of its behavior. The change reduces the readability of the text considerably.

# Editor's Recommendation End:

ResolutionStart:

Accept in principle. On line 27/28: amend to ".... formatted LACPDU (43.4.2) is transmitted (i.e., issue an CtrlMuxN:MA\_DATA.Request(LACPDU) service primitive), subject to....."

#### ResolutionEnd:

CommentNumber: 185

CommenterName: Stephen Haddock

CommenterEmail: shaddock@extremenetworks.com

CommenterPhone: (408) 579-2812 CommenterCompany: Extreme Networks

Clause: 43

Subclause: 43.4.15

Page: 143 Line: 10

CommentType: (E, T, ER, or TR): ER

Comment:

It needs to be noted that the values used in the LACPDU are the

operational values. CommentEnd:

# SuggestedRemedy:

Replace "The Transmit Machine shall assembel the following information, maintained by the other state machines, for transmission in outgoing LACPDUs" with "The Transmit Machine shall create a LACPDU, filling in the following fields with the corresponding operational values for this port".

RemedyEnd:

# Editor' RecommendationStart: Accept. Editor's Recommendation End: ResolutionStart: Accept. ResolutionEnd: CommentNumber: 186 CommenterName: Keith Balmer CommenterEmail: Keith.Balmer@tiuk.ti.com CommenterPhone: (+44) 1604 663408 CommenterCompany: Texas Instruments Ltd. Clause: 43 **Subclause: 43.4.15** Page: 143 Line: 22 CommentType: (E, T, ER, or TR): E Comment: Raise this to ER perhaps....? The Collector Information (CollectorMaxDelay) is included in outgoing LACPDUs - add it to the list? (May not be necessary if it is not considered to be "...information, maintained by the other state machines,..."). If added, then the PICS on p158 at about line 32 will need another entry. CommentEnd: SuggestedRemedy: Add CollectorMaxDelay to the list? If so, then include in the PICS. RemedyEnd: Editor' RecommendationStart: Accept. Editor's Recommendation End: ResolutionStart: Accept. ResolutionEnd: CommentNumber: 187 CommenterName: Tom Mathey

CommenterEmail: tmathey@concentric.net

CommenterPhone: 408-865-1763 CommenterCompany: Independent

Clause: 43

Subclause: 43.4.15

Page: 143 Line: 23

CommentType: (E, T, ER, or TR): T

Comment:

For the sentence "and shall set the value of NTT to FALSE.", no such action is shown in the state diagram of p. 137, Figure 43-11.

CommentEnd:
SuggestedRemedy:
Add action.
RemedyEnd: Editor' RecommendationStart:
Reject. The statement cited clearly indicates that it is the Transmit machine (not the Periodic machine) that does the setting.
Editor'sRecommendationEnd: ResolutionStart:
Accept in principle. Re-word to turn the text following "shall" into bullets i) and j).
ResolutionEnd:
CommentNumber: 188 CommenterName: Tom Mathey CommenterEmail: tmathey@concentric.net CommenterPhone: 408-865-1763 CommenterCompany: Independent Clause: 43 Subclause: 43.4.15 Page: 143 Line: 23 CommentType: (E, T, ER, or TR): T Comment:
For the sentence "When the Periodic Machine is in the NO_PERIODIC state," implies to the reader that some amount of time, perhaps significant, is spent in this state. However, this state is a transient state with an unconditional exit.
CommentEnd:
SuggestedRemedy:
No text is provided.
RemedyEnd: Editor' RecommendationStart:
Reject. The machine may stay in this state indefinitely, based upon the unconditional entry conditions. See comment 167.
Editor'sRecommendationEnd: ResolutionStart:
Accept Editor's Recommendation.
ResolutionEnd:
CommentNumber: 189 CommenterName: Stephen Haddock CommenterEmail: shaddock@extremenetworks.com CommenterPhone: (408) 579-2812 CommenterCompany: Extreme Networks Clause: 43

Subclause: 43.4.15

Page: 143

Line: 32

CommentType: (E, T, ER, or TR): E

Comment:

There are not multiple NTT signals. There is one NTT variable that can be set to TRUE by multiple state machines and is set to FALSE by the Transmit state machine.

CommentEnd:

SuggestedRemedy:

Replace the first sentence of this paragraph with "If the transmission of a LACPDU is delayed due to the above restriction, the information sent in the LACPDU corresponds to the Actor's state at the time of transmission, not at the time when NTT was first set to TRUE."

RemedyEnd:

Editor' RecommendationStart:

Accept.

Editor's Recommendation End:

ResolutionStart:

Accept.

ResolutionEnd:

CommentNumber: 190

CommenterName: Ted Schroeder CommenterEmail: ted@alteon.com CommenterPhone: (408) 360-5511

CommenterCompany: Alteon WebSystems, Inc.

Clause: 43 Subclause: 4.16 Page: 144 Line: 9,12

CommentType: (E, T, ER, or TR): E

Comment:

Capitalization bug CommentEnd:

SuggestedRemedy: Change MUX to Mux RemedyEnd:

Editor' RecommendationStart:

Accept.

Editor's Recommendation End:

ResolutionStart:

Accept.

ResolutionEnd:

CommentNumber: 191

CommenterName: Ted Schroeder CommenterEmail: ted@alteon.com CommenterPhone: (408) 360-5511

CommenterCompany: Alteon WebSystems, Inc.

Clause: 43 Subclause: 4.16 Page: 144 Line: 10

CommentType: (E, T, ER, or TR): E

Comment:

Generic use of out of sync when specific state is meant

CommentEnd:

SuggestedRemedy:

Change "out of sync" to "Out\_Of\_Sync"

RemedyEnd:

Editor' RecommendationStart:

See comment 60.

Editor's Recommendation End:

ResolutionStart:

See comment 60.

ResolutionEnd:

CommentNumber: 192

CommenterName: Tom Mathey

CommenterEmail: tmathey@concentric.net

CommenterPhone: 408-865-1763 CommenterCompany: Independent

Clause: 43 Subclause: 43.5 Page: 144 Line: 40

CommentType: (E, T, ER, or TR): T

Comment:

This comment applies to the whole Marker and Marker Responder text. The document is correct and explaines just what is going on. However, I believe that some of the naming conventions and paths traveled are really confusing.

- 1. A marker frame is generated by an actor within the Frame Distribution, which
- 2. is transmitted to the partner, which
- 3. is received by the marker responder within the Frame Collection.
- 4. The Frame Collection then processes the frame per Figure 43-19.
- $5. \ Then\ a\ marker\ responder\ frame\ is\ transmitted\ by\ the\ partner\ within\ the\ Frame\ Collection,\ which$
- 6. is sent back to the actor, which
- 7. is received by the marker receiver in the Frame Distrubution.

The problem that I have is that (while stated in the document), it is not obvious that:

- a. the Frame Collection also does Frame Distribution, and
- b. the Frame Distribution also does Frame Collection, and
- c. a marker frame is transmitted, not to a marker receiver, but to a marker responder receiver, and
- d. a marker responder frame is transmitted, not to a marker responder receiver, but to a marker receiver, and
- e. use of Figure 43-2 on p. 102 does not help to sort this out.

# CommentEnd:

# SuggestedRemedy:

I humbly suggest that the document be revised so that:

- 1. A marker frame is generated by an actor within the Frame Distribution, which
- 2. is transmitted to the partner, which
- 3. is received by the marker receiver within the Frame Collection.
- 4. The partner Frame Collection then processes the frame, and communicates to the Frame Distribution.

- 5. The partner Frame Distribution then transmitts a marker responder frame back to the actor, which
- 6. is received by the actors marker responder receiver in the Frame Collection.

Also revise Figure 43-2 to match.

This will cause your future readers to smile and say "what a good job those people did back in 2000".

RemedyEnd:

Editor' RecommendationStart:

Discuss the need to change the names of the MarkerReceiver and Marker Responder. However, it is important that the Marker Response be generated within the Frame Collector, not the Frame Distributor, since it indicates that the Collector has reached the desired point in the processing of received frames. The response should not be delayed by passing it to a Distributor, or the transfer of conversations can be similarly delayed. In addition, the CollectorMaxDelay parameter would then have to reflect both the Collector and Distributor delays associated with Marker Response frames.

Editor'sRecommendationEnd:

ResolutionStart:

Accept in principle. In Figure 43-16, add "Marker Generator/Receiver" into the L.H. box and "Marker Responder" into the R.H. box.

#### ResolutionEnd:

CommentNumber: 193

CommenterName: Ted Schroeder CommenterEmail: ted@alteon.com CommenterPhone: (408) 360-5511

CommenterCompany: Alteon WebSystems, Inc.

Clause: 43 Subclause: 5.3.2 Page: 146,147 Line: all

CommentType: (E, T, ER, or TR): T

Comment:

Marker Protocol uses TLV-tuple stuff. This is overkill for this simple

protocol. CommentEnd:

SuggestedRemedy: Remove TLV-tuple stuff

RemedyEnd:

Editor' RecommendationStart:

Discuss. It is no great burden, and leaves the protocol open for easy expansion. Also see comment 127.

Editor'sRecommendationEnd:

ResolutionStart:

See comment 127.

#### ResolutionEnd:

CommentNumber: 194

CommenterName: Tom Mathey

CommenterEmail: tmathey@concentric.net

CommenterPhone: 408-865-1763 CommenterCompany: Independent

Clause: 43

Subclause: 43.5.3.2

Page: 146

Line: 20

CommentType: (E, T, ER, or TR): T

Comment:

I am a great believer in having one and only place in a document where constants are defined and a value is assigned. Within this document, there are numerious places when a value is associated with a constant.

For example,

p.108, line 17 assignes Marker\_subtype as integer value 2

p.146, line 35 in Figure 43-18 assignes Subtype = Marker with no value

p.147, line 9 assignes d) Subtye. with value 0x02 and no length

p.168, line 9 assignes Marker Protocol with integer value 2.

This same type of comment applies to variables, and the range of allowable values.

CommentEnd:

SuggestedRemedy:

In one place: provide the name of each constant; provide the definition of each constant; provide its value (and length) as integer, hex, or other in a Figure or a Table; for each usage, provide a pointer to the defining location.

RemedyEnd:

Editor' RecommendationStart:

Discuss. I don't believe that variables and constants are ever DEFINED in multiple places. IEEE 802 conventions call for the definitions to be co-located with the state machine or protocol specification in which they are used, rather than having one "master dictionary" for all values.

Editor'sRecommendationEnd:

ResolutionStart:

Reject.

ResolutionEnd:

CommentNumber: 195

CommenterName: Tom Mathey

CommenterEmail: tmathey@concentric.net

CommenterPhone: 408-865-1763 CommenterCompany: Independent

Clause: 43

Subclause: 43.5.3.2

Page: 147 Line: 3

CommentType: (E, T, ER, or TR): T

Comment:

I can find no PICS entry to support the shall in this sentence.

CommentEnd:

SuggestedRemedy:

Add.

RemedyEnd:

Editor' RecommendationStart:

Accept.

Editor'sRecommendationEnd: ResolutionStart:
Accept.
ResolutionEnd:
CommenterNumber: 196 CommenterEmail: tony@jeffree CommenterPhone: +44-161-973-4278 CommenterCompany: Independent Consultant Clause: 43 Subclause: 43.5.3.2 Page: 147 Line: 32, 46 CommentType: (E, T, ER, or TR): E Comment:
Multiple NOTEs in a subclause should be sequentially numbered.
CommentEnd:
SuggestedRemedy:
L32: "NOTE" -> "NOTE 1" L46: "NOTE" -> "NOTE 2"
RemedyEnd: Editor' RecommendationStart:
See Comment 162.
Editor'sRecommendationEnd: ResolutionStart:
See Comment 162.
ResolutionEnd:
CommenterName: Tony Jeffree CommenterEmail: tony@jeffree.co.uk CommenterPhone: +44-161-973-4278 CommenterCompany: Independent Consultant Clause: 43 Subclause: 43.5.1, 43.5.4.1, 43.5.4.2. Page: 145, 148 Line: CommentType: (E, T, ER, or TR): TR Comment:
We seem to have lost any explicit requirement to implement the Marker Responder (although there still seems to be a PICS entry for it). I believe that this is non-controversial - just a matter of making the text reflect existing agreement.
CommentEnd:
SuggestedRemedy:

P145 L31.5: Extend the first sentence thusly, to introduce the requirement to respond to Markers: "The use of the Marker protocol is optional; however, the ability to respond to Marker PDUs, as defined for the operation of the Marker Responder (43.5.4.1, 43.5.4.2), is mandatory."

P148 L30: Insert the following sentence: "The Marker Responder shall implement the function specified in Figure 43-19, with its associated parameters (43.5.4.2.1) through 43.5.4.2.3."

Fix any knock-ons in the PICS tables.

RemedyEnd:

Editor' RecommendationStart:

Accept.

Editor's Recommendation End:

ResolutionStart:

Accept.

ResolutionEnd:

CommentNumber: 198

CommenterName: Tony Jeffree CommenterEmail: tony@jeffree.co.uk CommenterPhone: +44-161-973-4278

CommenterCompany: Independent Consultant

Clause: 43 Subclause: 43.6.1 Page: 149

Page: 149 Line: 34-35

CommentType: (E, T, ER, or TR): E

Comment:

The first sentence is not quite true any more - it may well be that multiple Individual links share the same {SK, TL}. A slight clarification is needed to indicate that this is talking about LAGs of Aggregatable links.

CommentEnd:

SuggestedRemedy:

Rewrite the first sentence thusly: "The formulation chosen for the Link Aggregation Group identifier (43.3.6) has the consequence that it is not possible to represent two or more Link Aggregation Groups, comprising aggregatable links, that share the same combination of  $\{SK, TL\}$ ."

RemedyEnd:

Editor' RecommendationStart:

Accept.

Editor'sRecommendationEnd:

ResolutionStart:

Accept.

ResolutionEnd:

CommentNumber: 199

CommenterName: Ted Schroeder CommenterEmail: ted@alteon.com CommenterPhone: (408) 360-5511 CommenterCompany: Alteon WebSystems, Inc.

Clause: 43 Subclause: 7 Page: 152 Line: 1

CommentType: (E, T, ER, or TR): E

Comment: Typo

CommentEnd:

SuggestedRemedy:

Change "Statement(PICS)" to "Statement (PICS)"

RemedyEnd:

Editor' RecommendationStart:

Accept.

Editor's Recommendation End:

ResolutionStart:

Accept.

ResolutionEnd:

CommentNumber: 200

CommenterName: Keith Balmer

CommenterPhone: (+44) 1604 663408

CommenterCompany: Texas Instruments Ltd.

Clause: 43 Subclause: 43.7.4 Page: 153

Line: 21 CommentType: (E, T, ER, or TR): E

Comment:

subclause reference for PICS FC2 should be 43.2.3.1.4

CommentEnd:

SuggestedRemedy:

Change subclause reference for PICS FC2 to 43.2.3.1.4

RemedyEnd:

Editor' RecommendationStart:

Reject. The conformance requirement is in 43.2.3. The PICS entry refers to the definition in 43.2.3.1.4.

Editor'sRecommendationEnd:

ResolutionStart:

Accept.

ResolutionEnd:

CommentNumber: 201

CommenterName: Keith Balmer

CommenterEmail: Keith.Balmer@tiuk.ti.com CommenterPhone: (+44) 1604 663408

CommenterCompany: Texas Instruments Ltd.

Clause: 43

**Subclause: 43.7.15** 

Page: 155

Line: 51,53

CommentType: (E, T, ER, or TR): E

Comment:

subclause references for PICS LPS1 and LPS2 should be 43.4.2.2

CommentEnd:

SuggestedRemedy:

Change subclause references for PICS LPS1 and LPS2 to 43.4.2.2

RemedyEnd:

Editor' RecommendationStart:

Accept.

Editor's Recommendation End:

ResolutionStart:

Accept.

ResolutionEnd:

CommentNumber: 202

CommenterName: Tom Mathey

CommenterEmail: tmathey@concentric.net

CommenterPhone: 408-865-1763 CommenterCompany: Independent

Clause: 43 Subclause: 43.7.21

Page: 158 Line: 36

CommentType: (E, T, ER, or TR): T

Comment:

I believe that this line needs: change "sent" to "TRUE", and an additional qualification of "not rate limited". If accepted, then change line 39 "sent" to "TRUE".

CommentEnd:

SuggestedRemedy:

Change text from: "Action when LACP\_Enabled is TRUE and NTT signal is sent". To: "Action when LACP\_Enabled is TRUE, NTT signal is TRUE, and not rate limited".

RemedyEnd:

Editor' RecommendationStart:

Accept.

Editor's Recommendation End:

ResolutionStart:

Accept.

ResolutionEnd:

CommentNumber: 203

CommenterName: Tom Mathey

CommenterEmail: tmathey@concentric.net

CommenterPhone: 408-865-1763 CommenterCompany: Independent

Clause: 43

Subclause: 43.7.23 Page: 159 Line: 6 CommentType: (E, T, ER, or TR): T Comment:
I can find no "shall" in text for 43.5.1 or in 43.5.4 to support PICS entry FP1.
CommentEnd:
SuggestedRemedy:
Add.
RemedyEnd: Editor' RecommendationStart:
See comment 197.
Editor'sRecommendationEnd: ResolutionStart:
Resolved by 197.
ResolutionEnd:
CommenterName: Keith Balmer CommenterEmail: Keith.Balmer@tiuk.ti.com CommenterPhone: (+44) 1604 663408 CommenterCompany: Texas Instruments Ltd. Clause: 43 Subclause: 43.7.23 Page: 159 Line: 20 CommentType: (E, T, ER, or TR): E Comment: Raise this to ER perhaps?
Couldn't find the PICS entry for subclause 43.5.4.2.3 p149 line 23;"the Marker Responder shall not validate the Destination Address"  CommentEnd:
SuggestedRemedy: Add PICS entry if necessary. RemedyEnd: Editor' RecommendationStart:
Accept. Also see comment 197.
Editor'sRecommendationEnd: ResolutionStart:
Accept.
ResolutionEnd:
CommentNumber: 205 CommenterName: Tom Mathey

CommenterEmail: tmathey@concentric.net CommenterPhone: 408-865-1763 CommenterCompany: Independent Clause: 43B Subclause: 43B.2 Page: 166 Line: 37 CommentType: (E, T, ER, or TR): T Comment: The PICS entry for SP2 does not have a corresponding "shall". CommentEnd: SuggestedRemedy: Change text from "The maximum number of Slow Protocols is 10." To "The maximum number of Slow Protocols shall be 10.". RemedyEnd: Editor' RecommendationStart: See comment 208. Editor'sRecommendationEnd: ResolutionStart: Resolved by 208. ResolutionEnd: CommentNumber: 206 CommenterName: Tom Mathey CommenterEmail: tmathey@concentric.net CommenterPhone: 408-865-1763 CommenterCompany: Independent Clause: 43B Subclause: 43B.2 Page: 166 Line: 43 CommentType: (E, T, ER, or TR): E Comment: It would be nice to the reader to include the words "basic, not tagged" someplace on this line and be consistent with other places in the document. CommentEnd: SuggestedRemedy: Add.

RemedyEnd:

Editor' RecommendationStart:

Discuss. We did not explicitly consider whether a future slow protocol might want to be VLAN-tagged, or whether we wished to prevent ever doing so. However, maintenance on 802.1Q makes it clear that all such MAC-specific protocols shall not be Tagged.

Editor's Recommendation End:

# ResolutionStart:

Accept in principle. This requirement already appears in bullet d) on the same page.

# ResolutionEnd:

CommentNumber: 207

CommenterName: Darrell Furlong CommenterEmail: dfurlong@lancast.com CommenterPhone: 603-880-1833 x 103 CommenterCompany: Lancast, Inc.

Clause: 43B Subclause: 2.1 Page: 166 Line: 44

CommentType: (E, T, ER, or TR): T

Comment:

The Ethernet packet range indicated is incorrect.

CommentEnd:

SuggestedRemedy:

To keep standard generic I would eliminate the "i.e., in the range 46-1500 octets."

RemedyEnd:

Editor' RecommendationStart:

I fail to see the problem. The length range for MAC Client data in an Ethernet frame is indeed 46-1500 octets.

Editor's Recommendation End:

ResolutionStart:

Accept.

# ResolutionEnd:

CommentNumber: 208

CommenterName: Howard Frazier CommenterEmail: hfrazier@cisco.com CommenterPhone: 408 527 7607 CommenterCompany: Cisco

Clause: 43B

Subclause: 43B.6.2.3

Page: 170 Line: 8

CommentType: (E, T, ER, or TR): ER

Comment:

Item SP2 does not belong in the PICS table, for two reasons:

- 1) There is no "shall" statement corresponding to Item SP2
- 2) Item SP2 reflects a requirement which is imposed on the protocol designers, (us standards weenies), not the protocol implementers. We can't define more than 10 slow protocols, and that will be sufficient to preclude implementations with more than 10 slow protocols.

CommentEnd:

SuggestedRemedy:
Delete item SP2 from PICS table, and renumber SP3 and SP4 accordingly.
RemedyEnd: Editor' RecommendationStart:
Accept.
Editor'sRecommendationEnd: ResolutionStart:
Accept.
ResolutionEnd:
CommenterName: Darrell Furlong CommenterEmail: dfurlong@lancast.com CommenterPhone: 603-880-1833 x 103 CommenterCompany: Lancast, Inc. Clause: 43B Subclause: 6.2.3 Page: 170 Line: 10 CommentType: (E, T, ER, or TR): E Comment:
I would prefer to see this reference the section of the standard that defines frame sizes.
CommentEnd:
SuggestedRemedy:
For Item SP3 change 43B.2 reference to 4.4.2
RemedyEnd: Editor' RecommendationStart:
Accept in principle. The subclause reference is correct, as this is a constraint on the length of a slow protocol frame. We should add the 4.4.2 reference in the comment field.
Editor'sRecommendationEnd: ResolutionStart:
Accept Editor's Recommendation.
ResolutionEnd:
CommentNumber: 210 CommenterName: Tom Mathey CommenterEmail: tmathey@concentric.net

CommenterEmail: tmathey@concentr CommenterPhone: 408-865-1763 CommenterCompany: Independent Clause: Annex 43B Subclause: Page: 43B.2 Line: 53

CommentType: (E, T, ER, or TR): E

Comment:
I believe that the number 50 should be 5.
CommentEnd:
SuggestedRemedy:
Change number from 50 to 5.
RemedyEnd: Editor' RecommendationStart:
Reject. The scheme allows 5 frames per second PER SLOW PROTOCOL, for a maximum of 50 frames per second.
Editor'sRecommendationEnd: ResolutionStart:
Accept Editor's Recommendation.
ResolutionEnd:
CommenterName: Tom Mathey CommenterEmail: tmathey@concentric.net CommenterPhone: 408-865-1763 CommenterCompany: Independent Clause: 43B Subclause: 43B.6.2.4 Page: 170 Line: 22 CommentType: (E, T, ER, or TR): E Comment:
Reference is to wrong paragraph.
CommentEnd:
SuggestedRemedy:
Change in two places the text: "43B.2" to "43B.5"
RemedyEnd: Editor' RecommendationStart:
Accept.
Editor'sRecommendationEnd: ResolutionStart:
Accept.
ResolutionEnd:
CommentNumber: 212 CommenterName: Keith Klamm CommenterEmail: klamm@ods.com

CommenterCompany: ODS Networks Clause: 43C

CommenterPhone: 972-301-3663

Subclause: 5 Page: 174 Line: 28

CommentType: (E, T, ER, or TR): T

Comment:

There are several ambiguities contained in the description of this algorithm. In step 2) I believe that there is an implied "otherwise move to Step 3)" at the end of the last sentence. If this is the case then it would be more precise to so state.

CommentEnd:

SuggestedRemedy:

Add "otherwise move to Step 3)" at the end of Step 2).

RemedyEnd:

Editor' RecommendationStart:

Accept.

Editor's Recommendation End:

ResolutionStart:

Accept in principle. Change the text thusly:

If there is a next port, continue at Step 3.

Otherwise dynamic Key chages for ports with this operational Key are complete.

Note that ports that were once in the same aggregation may have had their operational Keys changed to (further) new values. If so, apply the dynamic Key management algorithm to those ports, beginning with step 1) after the settling time.

Also change 5) as follows:

5) **If** this port is capable:

**retain** the current Key and repeat from step 2).

Otherwise:

**change** the operational Key and repeat from step 2).

ResolutionEnd:

CommentNumber: 213

CommenterName: Keith Klamm CommenterEmail: klamm@ods.com CommenterPhone: 972-301-3663 CommenterCompany: ODS Networks

Clause: 43C Subclause: 5 Page: 174 Line: 42

CommentType: (E, T, ER, or TR): T

Comment:

It is not entirely clear how to get to step 5) from step 4). I believe there is an implied "and go to step 5)" after "Move to the next port".

CommentEnd:

# SuggestedRemedy: Not sure of the intent of the algorithm here so I can't offer a remedy. RemedyEnd:

Accept. Add "and go to step 5)" as suggested in the comment.

Editor'sRecommendationEnd:

Editor' RecommendationStart:

ResolutionStart:

Accept in principle. Change as follows:

Move to the next port.

If there is a next port, continue at Step 5.

Otherwise If there are still ports in the current Link Aggregation Group (which will have the current operational Key), wait for the settling time and apply the dynamic Key management algorithm beginning with the first such port at step 3). Otherwise dynamic Key chages for ports with this operational Key are complete.

# ResolutionEnd:

CommentNumber: 214

CommenterName: Shimon Muller

CommenterEmail: shimon.muller@Eng.sun.com

CommenterPhone: (650)-688-9572 CommenterCompany: Sun Microsystems

Clause: 43C Subclause: 43C.6 Page: 175 Line: 29

CommentType: (E, T, ER, or TR): E

Comment: Typo. CommentEnd:

SuggestedRemedy:

"...attach to links of the same Partner..."

RemedvEnd:

Editor' RecommendationStart:

Accept.

Editor's Recommendation End:

ResolutionStart:

Accept.

ResolutionEnd:

CommentNumber: 215

CommenterName: Shimon Muller

CommenterEmail: shimon.muller@Eng.sun.com

CommenterPhone: (650)-688-9572

CommenterCompany: Sun Microsystems

Clause: 43C

Subclause: 43C.6 Page: 175 Line: 30 CommentType: (E, T, ER, or TR): E Comment: Typo. CommentEnd:
SuggestedRemedy: "would be attached"
RemedyEnd: Editor' RecommendationStart:
Accept in principle. Delete the words "to be". Also change "attach" at the end of the next line to "attached".
Editor'sRecommendationEnd: ResolutionStart:
Accept Editor's Recommendation.
ResolutionEnd:
CommenterName: Shimon Muller CommenterEmail: shimon.muller@Eng.sun.com CommenterPhone: (650)-688-9572 CommenterCompany: Sun Microsystems Clause: 43C Subclause: 43C.7 Page: 176 Line: 51 CommentType: (E, T, ER, or TR): E Comment: Typo. CommentEnd: SuggestedRemedy:
"B2 cannot be aggregated, so B2 is made standby".
RemedyEnd:
Editor' RecommendationStart:
Accept.
Editor'sRecommendationEnd: ResolutionStart:
Accept.
ResolutionEnd: