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|                8802-3/802.3 REVISION REQUEST 1174                |      2
+------------------================================================+      3
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DATE:                  24th Oct, 2005                                     5
NAME:                  Michael Beck                                       6
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REQUESTED REVISION:                                                      10
   STANDARD:           IEEE Std 802.3-2005                               11
   CLAUSE NUMBER:      57                                                12
   CLAUSE TITLE:       Operations, Administration, and Maintenance (OAM) 13
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PROPOSED REVISION TEXT:                                                  15
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In subclause "57.4.3.3 Variable Request OAMPDU", add following           17
paragraph:                                                               18
                                                                        19
The Variable Request OAMPDU Data field may contain one or more Variable  20
Containers, to determine the scope of subsequent Variable Descriptors,   21
as described in 57.6.2.                                                  22
                                                                        23
In subclause "57.6.2 Variable Containers", add following paragraphs:     24
                                                                        25
Additionally, a special Variable Container with Variable Branch and Leaf 26
values corresponding to an object identification number (such as 7/330   27
for a PME ID, or 7/282 for an EPON LLID), Variable Width equal to 2, and 28
Variable Value equal to a 2-octet identification number, may be used in a 29
Variable Request OAMPDU to select a particular instance of a managed     30
object of which multiple instances exist in the remote MIB.             31
                                                                        32
The Variable Value identifies which instance is being addressed.         33
Subsequent Variable Descriptors shall be understood to target the        34
attributes of the selected instance until an other instance selector is  35
received or the Variable Request OAMPDU ends. Each instance selector     36
shall be acknowledged with a Variable Container indicating the same      37
Branch/Leaf and the identifier that was selected, preceding the          38
concerned variables. If no explicit instance selection has taken place,  39
all instances of the concerned object are addressed. In this case, each  40
subsequent Variable Descriptor shall be understood to consecutively      41
target the attributes of all existing instances until an instance        42
selector is received or the Variable Request OAMPDU ends.               43
                                                                        44
If the Variable Width field is set to 0xFF in an instance selector, all  45
instances of the concerned object are addressed. Each subsequent         46
Variable Descriptor shall be understood to consecutively target the      47
attributes of all existing instances until an other instance selector is 48
received or the Variable Request OAMPDU ends. The Variable Containers    49
returned by the far-end OAM client may be transmitted in one or more     50
OAMPDUs, respecting the OAMPDU size limitations.                        51
                                                                        52
NOTE---In the case of PME Aggregation, each PME is identified by a bit    53
position in a 32-bit string during the Handshake process. This position  54
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should be transformed into a number between 0 and 31 before transmission in the Variable Value field.

In subclause "57.6.3 Parsing", add enumeration (f):

(f) Detection of a Variable Container in a Variable Request OAMPDU indicates that subsequent Variable Descriptors shall be applied to the instance of the managed object corresponding to the identification number expressed in the Variable Value field of the Variable Container. In the corresponding Variable Response OAMPDU, a Variable Container indicating the selected instance shall immediately preceed the Variable Containers pertaining to objects of which a particular instance was selected.

RATIONALE FOR REVISION:

In the case of PME Aggregation (bonding), there are multiple instances of the PME object. Currently, there is no way to remotely read the attributes of these different instances. This solution introduces a simple way to select the desired PME prior to requesting particular attributes that have to be read out.

IMPACT ON EXISTING NETWORKS:

The behavior currently mandated by the standard is unaffected, but thenew functionality is obviously not supported.

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| Please attach supporting material, if any                              |
| Submit to:- Bob Grow, Chair IEEE 802.3                                 |
|             E-Mail: Bob.Grow@intel.com                                 |
|                                                                        |
|             +------- For official 802.3 use -----------+               |
|             | REV REQ NUMBER: 1174                      |               |
|             | DATE RECEIVED: 24th Oct, 2005             |               |
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|             | ACCEPTED/DENIED                           |               |
|             | BALLOT REQ'D YES/NO                       |               |
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| For information about this Revision Request see -                      |
|http://www.ieee802.org/3/maint/requests/revision_history.html#REQ1174 |
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