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| IEEE 802.1 REVISION REQUEST 0093                                    |
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DATE: 3 January, 2013
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REQUESTED REVISION:
     STANDARD: 802.1Qbg-2012
     CLAUSE NUMBER: multiple clauses stated in the following text
     CLAUSE TITLE: multiple clauses

RATIONALE FOR REVISION:

The R field of EVB TLV is the maxRetries value for ECP state machine (43.3.7.4).

Most system variables for R are named with "maxRetries" suffix, but some variables
are named with "maxTries", and the ECP Tx state machine (43.3.4) is designed with
"maxTries" in mind.

For example, in the ECP Tx state machine, ECPDU can be sent maximum 3 times when
"maxRetries = 3", although ECPDU should be sent up to 4 times (1 + maxRetries).
Also, if "maxRetries = 0" (which is valid value for R) and no ack was received,
state transition from "transmitECPDU" fails.

So, the ECP Tx state machine should be modified to correctly reflect the meaning of
"maxRetries". Additionally, several system variables such as evbSysEcpDfltMaxTries
(Table 12-17 and Table 12-18 of 12.26.1), ecpAdminMaxTries (Table 12-18 of 12.26.1)
and ecpOperMaxTries (12.27.1, 41.5.5.9, 41.5.5.13, 43.3.7.4) need to be changed
with "MaxRetries" concept.

PROPOSED REVISION TEXT:

1) Change the ECP transmit state machine (Figure 43-3, clause 43.3.4) with the
proposed state machine (see the attached file ECP-transmit-state-machine.pdf)

   In the proposed state machine, inc(retries) action is moved to newly added
"Retry" state.

2) In Table 12-17 of clause 12.26.1, and table 12-18 of clause 12.26.1,

   Change the variable "evbSysEcpDfltMaxTries" to "evbSysEcpDfltMaxRetries".

3) In Table 12-18 of clause 12.26.1,

   Change the variable "ecpAdminMaxTries" to "ecpAdminMaxRetries".

4) In Table 12-26 of clause 12.17.1, clause 41.5.5.9, clause 41.5.5.13, and clause 43.3.7.4,

   Change the variable "ecpOperMaxTries" to "ecpOperMaxRetries".

5) In Table 17-26 EVB MIB structure and object cross referece of clause 17.2.20,

   Change "ieee8021BridgeEvbEcpOperMaxTries" to "ieee8021BridgeEvbEcpOperMaxRetries".

   (Note: Ieee8021BridgeEvbEcpEntry of EVB MIB (17.7.20) is defined with "ieee8021BridgeEvbEcpOperMaxRetries")
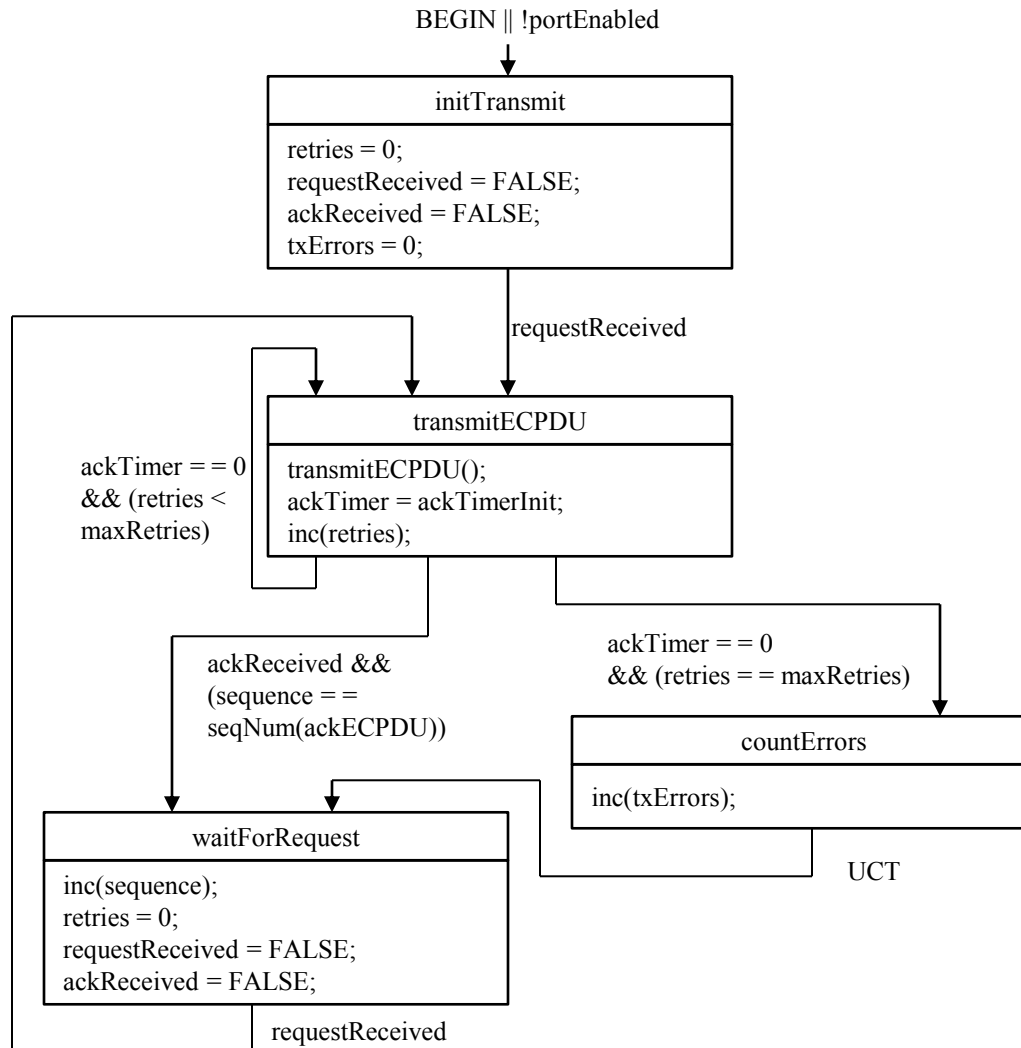

IMPACT ON EXISTING NETWORKS:

An early EVB implementation may have an incompatible MIBs and malfunctioning ECP transmit state machine. This clarification is needed to prevent further incompatible EVB implementations.

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| Please attach supporting material, if any                      |
| Submit to:- Tony Jeffree, Chair IEEE 802.1                     |
|  and copy:- Glenn Parsons, Vice-Chair IEEE 802.1               |
|    E-Mail: stds-802-1-maint-req@ieee.org                       |
|                                                                |
|            +------- For official 802.1 use -----------+        |
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|            | DATE RECEIVED: 01/09/2013                 |        |
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|            | BALLOT REQ'D YES/NO                       |        |
|            | Status: R                                 |        |
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Original ECP transmit state machine

BEGIN || !portEnabled

initTransmit

retries = 0;
requestReceived = FALSE;
ackReceived = FALSE;
txErrors = 0;

requestReceived

ackTimer = = 0
&& (retries <
maxRetries)

transmitECPDU

transmitECPDU();
ackTimer = ackTimerInit;
inc(retries);

ackReceived &&
(sequence = =
seqNum(ackECPDU))

ackTimer = = 0
&& (retries = = maxRetries)

countErrors

inc(txErrors);

waitForRequest

inc(sequence);
retries = 0;
requestReceived = FALSE;
ackReceived = FALSE;

UCT

requestReceived

Proposed ECP transmit state machine