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| IEEE 802.1 REVISION REQUEST 0121                                 |
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DATE: 09-07-2013
NAME: Ajith. Adapa
COMPANY/AFFILIATION: IPInfusion
E-MAIL: adapa.ajith@gmail.com

REQUESTED REVISION:
    STANDARD: IEEE 802.1AB-2009
    CLAUSE NUMBER: 8.5.8, 11.2, 11.5.2
    CLAUSE TITLE: System Capabilities TLV, Structure of the LLDP MIB, LLDP MIB module - version 2

RATIONALE FOR REVISION:

1. In Section 8.5.8 Figure 8-10, System Capabilities TLV is shown to have a "Chassis ID subtype" as shown below, which is wrong. Chassis-ID subtype should be part of Chassis-ID TLV.

```
|----------------------------------------------------------------------------------------------------
|
| TLVTYPE | TLV information string length | Chassis-ID subtype | System Capabilities | Enabled Capabilites
|
|----------------------------------------------------------------------------------------------------
|
```

2. In Section 11.2, Table 11-2 — LLDP MIB structure and object cross reference, below MIB objects are maintained globally instead of per LLDP Agent

lldpV2MessageTxInterval
lldpV2MessageTxHoldMultiplier
lldpV2ReinitDelay
lldpV2NotificationInterval
lldpV2TxCreditMax
lldpV2MessageFastTx
lldpV2TxFastInit

As per the mapping shown in the table for above MIB objects, they map to variables maintained per LLDP Agent.

3. In Section 11.5.2 for lldpV2MessageTxHoldMultiplier OBJECT-TYPE, TTL value is computed as per the logic shown below

TTL = min(65535, (lldpV2MessageTxInterval * lldpV2MessageTxHoldMultiplier))

PROPOSED REVISION TEXT:

1. Correct System Capabilities TLV format should be as shown below

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|----------------------------------------------------------------------------|
| TLVTYPE | TLV information string length | System Capabilities | Enabled Capabilites |
|----------------------------------------------------------------------------|
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2. As per the section 9.2.5 msgTxInterval, msgTxHold, reinitDelay, txCreditMax, msgFastTx and txFastInit
are per LLDP Agent variables.
Per Agent MIB objects should be maintained under lldpV2PortConfigTable.

```
<BEFORE>
lldpV2PortConfigTable
  lldpV2PortConfigIfIndex                    (Table index)
  lldpV2PortConfigDestAddressIndex           (Table index)
  lldpV2PortConfigAdminStatus                adminStatus, 9.2.5.1
  lldpV2PortConfigNotificationEnable         -
  lldpV2PortConfigTLVsTxEnable               9.1.2.1

<AFTER>
lldpV2PortConfigTable
  lldpV2PortConfigIfIndex                    (Table index)
  lldpV2PortConfigDestAddressIndex           (Table index)
  lldpV2PortConfigAdminStatus                adminStatus, 9.2.5.1
  lldpV2MessageTxInterval                    msgTxInterval, 9.2.5.7
  lldpV2MessageTxHoldMultiplier              msgTxHold, 9.2.5.6
  lldpV2ReinitDelay                          reinitDelay, 9.2.5.10
  lldpV2NotificationInterval                 msgTxInterval, 9.2.5.7
  lldpV2TxCreditMax                          txCreditMax, 9.2.5.17
  lldpV2MessageFastTx                        msgFastTx, 9.2.5.5
  lldpV2TxFastInit                           txFastInit, 9.2.5.19
  lldpV2PortConfigNotificationEnable         -
  lldpV2PortConfigTLVsTxEnable               9.1.2.1
```

3. In Section 11.5.2 for lldpV2MessageTxHoldMultiplier OBJECT-TYPE, TTL value should be computed as shown
below according to section 9.2.5.22

TTL = min(65535, (lldpV2MessageTxInterval * lldpV2MessageTxHoldMultiplier) + 1)

IMPACT ON EXISTING NETWORKS:

1. Wrong system capability TLV is sent in LLDPDU.
2. Current 802.1AB-2009 MIB has no option to obtain variables per-agent.

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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                        |
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|               | REV REQ NUMBER:  0121                     |         |
|               | DATE RECEIVED: 09/07/2013                 |         |
|               | EDITORIAL/TECHNICAL                       |         |
|               | ACCEPTED/DENIED                           |         |
|               | BALLOT REQ'D YES/NO                       |         |
|               | Status: R                                 |         |
|               +-------------------------------------------+         |
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