IEC/IEEE 60802
PTP Instance Translation
as requested by D2.0 comment #443

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Table 15 – gPTP domains

<table>
<thead>
<tr>
<th>gPTP Domain</th>
<th>descriptionDS.userDescription</th>
</tr>
</thead>
<tbody>
<tr>
<td>Working Clock</td>
<td>String contains “WorkingClock” and, if the Working Clock is assigned to an end station interface, the InterfaceName (IETF interface-list entry)</td>
</tr>
<tr>
<td>Global Time</td>
<td>String contains “GlobalTime” and, if Global Time is assigned to an end station interface, the InterfaceName (IETF interface-list entry)</td>
</tr>
</tbody>
</table>

Comment Type: TR  Comment Status: X

Table 15 should be more elaborated to also include primary/secondary domains and domains, which are used for Working Clock and Global Time; it should be discussed whether the InterfaceName is really needed in the userDescription of the PTP instance when the interfaces of the associated PTP Ports are also available by the underlying-interface leaf in the port list of the PTP Instance.

Suggested Remedy
a contribution with an elaborated Table 15 could be provided
IEC/IEEE 60802 D2.0 comment #443

(1) IETF-Interfaces of PTP Instances

module: ieee1588-ptp
    ++++rw ptp
    ++++rw instances
        |  ++++rw instance* [instance-index]
        |  |  ++++rw default-ds
        |  |  |  ++- ...
        ...
        |  ++++rw description-ds
        |  |  ++++rw user-description? String
        |  |  |  ++- ...
        ...
        |  ++++rw ports
        |  |  ++++rw port* [port-index]
        |  |  |  ++++rw underlying-interface? if:interface-ref
        ...

Note: affects also resolution of D2.0 comment #22

There is no need to duplicate the interface names to descriptionDS.userDescription.

Text proposal to be added after Table 15:

“The descriptionDS.userDescription attribute is represented in the ieee1588-ptp YANG module by the user-description leaf in the description-ds container of a PTP Instance.

The linking between a PTP Instance and the IETF interfaces is provided by the underlying-interface leaves in the port list of the PTP Instance.”
Proposal to change Table 15 and preceding text:

“Any valid gPTP domain number as specified in IEEE 802.1AS-2020 can be used. The IEEE Std 1588-2019 attribute descriptionDS.userDescription shall be used according to Table 15 to support the translation of PTP Instances and middleware as described in 4.6.2. One gPTP domain can be used for both Working Clock and Global Time. If only one gPTP domain is used, then the requirements for the Working Clock apply (see 6.2.7).

Additionally, the linking between the PTP Instance and the IETF interface is done by referring 1939 from the descriptionDS.userDescription to InterfaceName (see 4.6.2).”

Table 15 – descriptionDS.userDescription of gPTP Domains

<table>
<thead>
<tr>
<th>gPTP Domain</th>
<th>descriptionDS.userDescription</th>
</tr>
</thead>
<tbody>
<tr>
<td>Working Clock (no hot standby configured)</td>
<td>&quot;60802-WorkingClock&quot;</td>
</tr>
<tr>
<td>Primary Working Clock (with configured hot standby)</td>
<td>&quot;60802-Primary-WorkingClock&quot;</td>
</tr>
<tr>
<td>Secondary Working Clock (with configured hot standby)</td>
<td>&quot;60802-Secondary-WorkingClock&quot;</td>
</tr>
<tr>
<td>Global Time (no hot standby configured)</td>
<td>&quot;60802-GlobalTime&quot;</td>
</tr>
<tr>
<td>Primary Global Time (with configured hot standby)</td>
<td>&quot;60802-Primary-GlobalTime&quot;</td>
</tr>
<tr>
<td>Secondary Global Time (with configured hot standby)</td>
<td>&quot;60802-Secondary-GlobalTime&quot;</td>
</tr>
<tr>
<td>GlobalTime and WorkingClock (no hot standby configured)</td>
<td>&quot;60802-GlobalTime-WorkingClock&quot;</td>
</tr>
<tr>
<td>Primary GlobalTime and WorkingClock (with configured hot standby)</td>
<td>&quot;60802-Primary-GlobalTime-WorkingClock&quot;</td>
</tr>
<tr>
<td>Secondary GlobalTime and WorkingClock (with hot standby configured)</td>
<td>&quot;60802-Secondary-GlobalTime-WorkingClock&quot;</td>
</tr>
</tbody>
</table>
Thank You