

## Clarification Request

**Request from:** Buddy Lott blott@kmcccontrols

**References:** "BTL Specified Test 2.2.8 & 2.2.9, ", "BTL Test Plan Section 9.1.1", "ASHRAE 135-2004 sections 12.11.31 & 12.11.32",

**Stage:** ☒ Request, ☒ Listed, ☒ Analysis, ☒ Resolved

### Background / Proposed Solution:

BTL Specified Test 2.2.8 & 2.2.9 test the MS/TP related properties of the Device Object as accessed via MS/TP. However, the test does not cover what should happen if the router supports multiple MS/TP links or if the device is not "homed" on the MS/TP link.

ASHRAE 135-2004 sections 12.11.31 & 12.11.32 state that the Max-Master and Max-Info-Frames are present if the device is a master node on the MSTP network. If the MS/TP bus being tested by "BTL Specified Test 2.2.8 & 2.2.9, " is part of a router then the following implications arise:

- 1) If the MS/TP under test is the home port and the router supports multiple MS/TP bus, then values reported will be the values for bus under test.
- 2) If the MS/TP under test is NOT the home port and the router supports multiple MS/TP ports and one of other MS/TP ports is the home port, then values reported will be the values for THAT bus (the changes will be reflected on the other bus and not the one under test).
- 3) If the MS/TP under test is not the home port and the router supports NON-MS/TP bus (ex. IP, Ethernet, Etc), and one of these NON-MS/TP bus is the home port, then the Max-Info-Frames and Max-Master values will not be present.

### Question:

Do my implications reflect how BTL will evaluate "BTL Specified Test 2.2.8 & 2.2.9"?

Can "BTL Specified Test 2.2.8 & 2.2.9, " & "BTL Test Plan Section 9.1.1 be updated to reflect these implications.

### Response:

If an IUT supports a single MS/TP port and this port is enabled, then the properties of the Device object shall exist and shall specify the values of that port regardless of whether the IUT is a router 'homed' on the MS/TP port or another network segment. No change to the test is required for this scenario.

It is important to note that a router to an MS/TP network is a node on that MS/TP network regardless of whether or not it is 'homed' on that network.

If an IUT supports multiple MS/TP ports and one or more of these ports is enabled, the specification is clear that these properties shall exist in the Device object however it is unclear on the expected interaction of these properties with the multiple MS/TP ports. The BTL therefore

does not require any specific behavior. In these cases, the vendor should provide IUT Special Test Instructions to the BTL with regards to how their device functions so that the tests may be performed.

Improved support for multiple ports will be addressed when the SSPC 135 finalizes the Network Port object.