

## Clarification Request

**References:** BTL Specified Tests-5.0.final, test 12.1.1.9.x1, few issues

### Background / Proposed Solution:

The test specification introduces some new terms, are these simply typos or are these intended?

#### Question:

1. The test number contains a lower-case 'x', may be replaced by upper-case 'X'.
2. The test specification introduces "Config Recommendations", should it read "requirements" instead?
3. The test specification introduces "Check Conditions", what is this? Are these test steps?

12.1.1.9.x1 is the only test we identified, which uses these terms.

#### Response:

This test should use uppercase X and follow the format and terminology of other tests, i.e.:

### 12.1.1.9.X1 Max Info Frame Check

Reason for Change: No test exists for this functionality. This test is not contained in any SSPC proposal.

Dependencies: None

BACnet Reference Clauses: 9.5.3 and 9.5.6.5

Purpose: This check verifies that the MS/TP Master Node State Machine does not issue more than  $N_{\text{max\_info\_frames}}$  information frames between the time the IUT receives a Token and either the time it passes the Token or initiates a Poll For Master. Unlike tests, checks are not constructed of test steps, but rather conditions that must hold true through the complete testing process. As such, checks are periodically verified during or after the execution of tests.

Testing Hints: If the Max\_Info\_Frames property of the Device object is configurable, it is recommended that this property be set to its minimum setting to reduce the needless bulk of the capture file, for at least some tests involving the MS/TP port.

Test concept: Monitor the MS/TP LAN during operations where the IUT would be expected to issue a number of information frames, and count the number which the IUT emits.

Test steps:

1. CHECK (verify whether the number of information frames which the IUT emits is ever more than)
  - a) the configured value for Max\_Info\_Frames in the interval between receiving and passing the Token (with multiple masters on the LAN), or

- b) the configured value for Max\_Info\_Frames in the interval between receiving the Token and issuing PFM (with multiple masters on the LAN), or
- c) the configured value for Max\_Info\_Frames in the interval between any two consecutive Poll For Master frames except the interval between the issuance of a Poll For Master to  $(TS-1)$  modulo Max\_Master and a Poll For Master to  $(TS+1)$  modulo Max\_Master, (with the IUT as the only master on the LAN), or
- d) 52 times the configured value for Max\_Info\_Frames in the interval between a Poll For Master frame issued to  $(TS-1)$  modulo Max\_Master, and the subsequent Poll For Master frame to  $(TS+1)$  modulo Max\_Master (with the IUT as the only master on the LAN).

If the number of information frames which the IUT emits is ever more than these quantities, then the IUT shall fail this check.

Note: The value 52 is used in d) because an error in the MS/TP state machine defined in Standard 135-2004 caused the Token to be passed 52 times between Poll For Master cycles, instead of 50 times.