Clarification Request

References: 135-1-2019.pdf

Date of BTL-WG Response: October 7, 2021

Background: This is regarding the Test ID: 135.1-2019 - 8.4.4 having Test Title: 'COMMAND FAILURE Tests (ConfirmedEventNotification)' and clause 12.12.20 and 13.3 mentioned in BACnet Standard. Purpose: To verify the correct operation of the COMMAND_FAILURE algorithm As per test steps 7 and 14 we have to verify pStatusFlags : 5. BEFORE Notification Fail Time **RECEIVE** ConfirmedEventNotification-Request, 'Process Identifier' = (any valid process ID), 'Initiating Device Identifier' = IUT, 'Event Object Identifier' = (the object being tested), 'Time Stamp' = (any valid time stamp), 'Notification Class' = (the configured notification class), 'Priority' = (the value configured to correspond to a TO-OFFNORMAL transition), 'Event Type' = COMMAND FAILURE, 'Message Text' = (optional, any valid message text), 'Notify Type' = EVENT | ALARM, 'AckRequired' = TRUE | FALSE, 'From State' = NORMAL, 'To State' = OFFNORMAL, 'Event Values' = pMonitoredValue, pStatusFlags, pFeedbackValue 6. TRANSMIT BACnet-SimpleACK-PDU 7. IF (Protocol_Revision is present AND Protocol_Revision e 13) THEN VERIFY pStatusFlags = (TRUE, FALSE, ?, ?) 8. VERIFY pCurrentState = OFFNORMAL 9. IF (Protocol Revision is present AND Protocol Revision 1) THEN VERIFY Event Time Stamps = (the timestamp in step 5, *, *) 10. IF (pFeedbackValue is writable) THEN WRITE pFeedbackValue = (a value consistent with pMonitoredValue) ELSE MAKE (pFeedbackValue take on a value consistent with pMonitoredValue) 11. WAIT (pTimeDelayNormal) 12. BEFORE Notification Fail Time RECEIVE ConfirmedEventNotification-Request, 'Process Identifier' = (any valid process ID), 'Initiating Device Identifier' = IUT, 'Event Object Identifier' = (the object being tested), 'Time Stamp' = (any valid time stamp), 'Notification Class' = (the configured notification class), 'Priority' = (the value configured to correspond to a TO-NORMAL transition), 'Event Type' = COMMAND FAILURE, 'Message Text' = (optional, any valid message text), 'Notify Type' = EVENT | ALARM, 'AckRequired' = TRUE | FALSE, 'From State' = OFFNORMAL, 'To State' = NORMAL, 'Event Values' = pMonitoredValue, pStatusFlags, pFeedbackValue

13. TRANSMIT BACnet-SimpleACK-PDU

14. IF (Protocol_Revision is present AND Protocol_Revision e 13) THEN VERIFY pStatusFlags = (FALSE, FALSE, ?, ?)

Our Understanding: Now, in this case whenever there is change in pMonitoredValue with respective to pFeedbackValue, OFFNORMAL alarm is generated. Accordingly, the Status_Flags property of EE Object will only be changed to {T,F,?,?}. But there will be no change in the Status_Flags property of Referenced Object and it will remain as {F,F,?,?}.

Here, as pStatusFlags is of Referenced Object, then in such cases, in step 5(ConfirmedEventNotification-Request) the To_State and pStatusFlags will contradict with each other. (i.e : To_State will have value as Offnormal and Status_Flags(of referenced Object) = {F,F,?,?}) In such cases it is predicted that Alarm for OFFNORMAL state was generated but still Status_Flags(F,F,?,?) conveyed in notification shows In-alarm bit as FALSE.

Question:

- Now as mentioned in step 7 pStatusFlags = (FALSE, FALSE, ?, ?), here Status_Flags of Referenced Object will remain {F,F,F,F} only. So does this step needs to be changed as: VERIFY pStatusFlags = (TRUEFALSE, FALSE, ?, ?)
- If not then, for Algorithmic and External Alarms when generated by EE Object, shall the pStatusFlags should be of EE Object instead of Referenced Object in test steps 5, 7, 13 and 14. (i.e.: To_State will have value as Offnormal and Status_Flags(of EE Object) = {T,F,F,F} in 'Event Values' parameter of ConfirmedEventNotification-Request)
- Or, is there need to change step 7 and 14 where, we will verify StatusFlags property of EE object and not that of Referenced Object: <u>For step 7:</u> VERIFY pStatusFlags = (TRUE, FALSE, ?, ?)

<u>For Step 14:</u> VERIFY pStatusFlags = (FALSE, FALSE, ?, ?)

Proposed Response:

- 1. no
- 2. no
- 3. Yes. The test will be updated to allow Status_Flags property of the Event Enrollment object to be referenced in steps 7 and 14.