Clarification Request

References: BTL Specified Tests 5.0

Background / Proposed Solution:

The test BTL-7.3.1.10.X1 Event_Enable Tests for Logging Object does not account for the fact that the Event_Enable property may be read-only. The test should be modified to use the same technique as the BTL-7.3.1.10 Event_Enable Tests.

See test below:

7.3.1.10.X1 Event_Enable Tests for Logging Objects

Reason For Change: There is no test for this functionality. This test is based on 135.1-2003 7.3.1.10. There is no SSPC proposal.

Dependencies: ConfirmedEventNotification Service Initiation Tests, 8.4; UnconfirmedEventNotification Service Initiation Tests, 8.5; ReadProperty Service Execution Tests, 9.18; WriteProperty Service Execution Tests, 9.22.

BACnet Reference Clauses: 12.1.23, 12.2.24, 12.3.20, 12.5.22, 12.6.26, 12.7.24, 12.11.10, 12.14.18, 12.15.18, 12.16.33, 12.17.17, 12.18.18, 12.19.18 and 12.23.23.

Purpose: To verify that notification messages are transmitted only if the bit in Event_Enable corresponding to the event transition has a value of TRUE. This test applies to the Logging objects that support intrinsic reporting.

Test Concept: The IUT is configured such that the Event_Enable property indicates that some event transitions are to trigger an event notification and some are not. Each event transition is triggered and the IUT is monitored to verify that notification messages are transmitted only for those transitions for which the Event_Enable property has a value of TRUE.

Configuration Requirements: If a Notification Class object is being used to configure recipient information the value of the Transitions parameter for all recipients shall be (TRUE, TRUE, TRUE).

1. VERIFY Event_State = NORMAL
2. MAKE(the TO-NORMAL bit of the Event_Enable property equal to TRUE)
3. MAKE (Trend Log object collect number of records specified by Notification_Threshold)
4. BEFORE **Notification Fail Time**
   RECEIVE ConfirmedEventNotification-Request,
   'Process Identifier' = (any valid process ID),
   'Initiating Device Identifier' = IUT,
   'Event Object Identifier' = (any Logging object),
   'Time Stamp' = (the current local time),
   'Notification Class' = (the class corresponding to the object being tested),
   'Priority' = (the value configured to correspond to a TO-NORMAL transition),
   'Event Type' = BUFFER_READY,
   'Notify Type' = EVENT | ALARM,

'AckRequired' = TRUE | FALSE,
'From State' = NORMAL,
'To State' = NORMAL,
'Event Values' = (BACnetObjectIdentifier of the IUT's Device object),
(BACnetObjectIdentifier of the Logging object),
(any valid value),
(any valid value)

TRANSMIT SimpleAck-PDU

5. VERIFY Event_State = NORMAL
6. IF (Event_Enable can be changed such that the TO-NORMAL transition is FALSE) {
   MAKE(the TO-NORMAL bit of the Event_Enable property equal to FALSE)
   MAKE(the Logging object collect number of records specified by Notification_Threshold)
   CHECK (verify that the IUT did not transmit an event notification message)
   }
7. IF (the event-triggering object can be placed into a fault condition) THEN {
   IF (Event_Enable can be modified) THEN
   MAKE(Event_Enable TO-FAULT transition equal TRUE)
   IF (Event_Enable TO-FAULT transition = TRUE) THEN {
   MAKE (the event-triggering object change to a fault condition)
   BEFORE **Notification Fail Time**
   RECEIVE ConfirmedEventNotification-Request,
   'Process Identifier' = (any valid process ID),
   'Initiating Device Identifier' = IUT,
   'Event Object Identifier' = (any Logging object),
   'Time Stamp' = (the current local time),
   'Notification Class' = (the class corresponding to the object being tested),
   'Priority' = (the value configured to correspond to a TO-FAULT transition),
   'Event Type' = BUFFER_READY,
   'Notify Type' = EVENT | ALARM,
   'AckRequired' = TRUE | FALSE,
   'From State' = NORMAL,
   'To State' = FAULT,
   'Event Values' = (BACnetObjectIdentifier of the IUT's Device object),
   (BACnetObjectIdentifier of the Logging object),
   (any valid value),
   (any valid value)
   TRANSMIT SimpleAck-PDU

   VERIFY Event_State = FAULT

   MAKE (the event-triggering object change to a normal condition)
   BEFORE **Notification Fail Time**
   RECEIVE ConfirmedEventNotification-Request,
   'Process Identifier' = (any valid process ID),
   'Initiating Device Identifier' = IUT,
   'Event Object Identifier' = (any Logging object),
   'Time Stamp' = (the current local time),
   'Notification Class' = (the class corresponding to the object being tested),
   'Priority' = (the value configured to correspond to a TO-NORMAL transition),
   'Event Type' = BUFFER_READY,
   'Notify Type' = EVENT | ALARM,
   'AckRequired' = TRUE | FALSE,
   'From State' = FAULT,
   'To State' = NORMAL,

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            'Event Values' =        (BACnetObjectIdentifier of the IUT's Device object),
                                    (BACnetObjectIdentifier of the Logging object),
                                    (any valid value),
                                    (any valid value)
        TRANSMIT SimpleAck-PDU
    }

    IF (Event_Enable can be modified) THEN
            MAKE (Event_Enable TO-FAULT transition equal FALSE)

    IF (Event_Enable TO-FAULT transition = FALSE) THEN {
            MAKE (the event-triggering object change to a fault condition)
            VERIFY Event_State = FAULT
            CHECK (verify that the IUT did not transmit an event notification message)
            MAKE (the event-triggering object change to a normal condition)
    }
```

Notes to Tester: The UnconfirmedEventNotification service may be substituted for the ConfirmedEventNotification service in which case the TD shall skip all of the steps in which a SimpleACK-PDU is sent. The 'Message Text' parameter is omitted in the test description because it is optional. The IUT may include this parameter in the notification messages.

Question:

Should we update this test?

Response:

No. Upon review of this test, this test is specifically designed to test the behaviour of the IUT when the Event_Enable state has the TO-NORMAL = True. In addition this test checks the TO-FAULT behaviour of the log object. If the Event_Enable cannot be configured to have the TO-NORMAL state flag = TRUE, there is no reason to run this test. There are appropriate checks in the remaining portions of the test to handle different settings in the Event_Enable property. If the Event_Enable property can be modified such that the TO-NORMAL or TO-FAULT flags are changed, the test will check for the correct behaviour of the IUT.