

Clarification Request

References: 135.1 - 2007 - 7.3.2.24.5 COV_Resubscription_Interval Test

Background / Proposed Solution:

135-2008 Section 13.1 contains text "... the COV-server is not required to guarantee preservation of subscriptions across power failures or "restarts." Periodic resubscription is allowed and expected and shall simply succeed as if the subscription were new, extending the lifetime of the subscription."

135-2008 Section 19.3 contains text "... When a device is powered on, when it restarts due to a ReinitializeDevice service (COLDSTART or WARMSTART), or when it restarts for some other reason, the device shall transmit an UnconfirmedCOVNotification request. The 'Subscriber Process Identifier' parameter shall be 0, ..."

All of the above concerns B-side behavior, which is not specifically my concern here. I included the section 19.3 excerpt because its choice of transmitting 0, instead of a specific 'Subscriber Process Identifier' parameter, perhaps bears upon interpreting intent in the standard. I am wondering if A-side Test behaviour should have more leniency.

Below is the 135.1 - 2007 - 7.3.2.24.5 COV_Resubscription_Interval, A-side Test

Test Steps:

1. IF (the IUT uses SubscribeCOV) THEN
 - RECEIVE SubscribeCOV-Request,
 - 'Subscriber Process Identifier' = (any value),
 - 'Monitored Object Identifier' = (the object to be monitored),
 - 'Issue Confirmed Notifications' = (TRUE or FALSE),
 - 'Lifetime' = (2 * COV_Resubscription_Interval)
 - ELSE
 - RECEIVE SubscribeCOVProperty-Request,
 - 'Subscriber Process Identifier' = (any value),
 - 'Monitored Object Identifier' = (the object to be monitored),
 - 'Issue Confirmed Notifications' = (TRUE | FALSE),
 - 'Lifetime' = (2 * COV_Resubscription_Interval),
 - 'Monitored Property Identifier' = (the property to be monitored),
 - 'COV Increment' = (Client_COV_Increment -- optional)
2. IF ('Issue Confirmed Notification' = TRUE) THEN
 - TRANSMIT ConfirmedCOVNotification-Request,
 - 'Subscriber Process Identifier' = (corresponding value in step 1),
 - 'Initiating Object Identifier' = (Device object identifier of the TD),
 - 'Monitored Object Identifier' = (corresponding value in step 1),
 - 'Issue Confirmed Notifications' = (corresponding value in step 1),
 - 'Time Remaining' = (2 * COV_Resubscription_Interval),
 - 'List of Values' = (appropriate BACnetPropertyValue(s))

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ELSE
    TRANSMIT UnconfirmedCOVNotification,
        'Subscriber Process identifier' = (corresponding value in step 1),
        'Initiating Object Identifier' = (Device object identifier of the TD),
        'Monitored Object Identifier' = (corresponding value in step 1),
        'Issue Confirmed Notifications' = (corresponding value in step 1),
        'Time Remaining' = (2 * COV_Resubscription_Interval),
        'List of Values' = (appropriate BACnetPropertyValue(s))
3. WAIT (COV_Resubscription_Interval – Notification Fail Time)
4. BEFORE (2 * Notification Fail Time)
    IF (the IUT uses SubscribeCOV)
        RECEIVE SubscribeCOV-Request,
            'Subscriber Process Identifier' = (corresponding value in step 1),
            'Monitored Object Identifier' = (corresponding value in step 1),
            'Issue Confirmed Notifications' = (corresponding value in step 1),
            'Lifetime' = (corresponding value in step 1)
    ELSE
        RECEIVE SubscribeCOVProperty-Request,
            'Subscriber Process Identifier' = (corresponding value in step 1),
            'Monitored Object Identifier' = (corresponding value in step 1),
            'Issue Confirmed Notifications' = (corresponding value in step 1),
            'Lifetime' = (corresponding value in step 1),
            'Monitored Property Identifier' = (corresponding value in step 1),
            'COV Increment' = (corresponding value in step 1)

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I realize there is a BTL - 7.3.2.6.5, but it is longer and the differences don't bear on the issue being raised here, so I used the shorter test above to illuminate this clarification request.

Question:

In Step 4, if IUT has executed a ReinitializeDevice since Step 1, does 'Subscriber Process Identifier' = (corresponding value in step 1), still have to be complied with? I.e. is an IUT using COV under any obligation not to consume multiple COV subscriptions, which it would if it varies the 'Subscriber Process Identifier'? In this scenario, the B-side device didn't restart, and the COV subscription of step 1, continues to exist until it expires.

In this request, I chose: "executed a ReinitializeDevice", because that seems extreme enough that I expect the answer to be 'No'. The real question facing testers is where the line changes from 'Yes' to 'No'. Obtaining an answer to that is the real purpose of the clarification request. Is IUT permitted to consume multiple COV subscriptions (until the earlier one expires) for no good reason at all? For a good reason? How about if the IUT has a really *good* reason?

Response:

The original test is correct. By definition, a resubscription uses the same 'Subscriber Process Identifier'. Subscriptions that occur after a reset may be considered a new subscription. During testing of the COV_Resubscription_Interval, the IUT is not allowed to reset, and therefore that has no impact on the test step.