

Clarification Request

References: ASHRAE 135.1-2025, ASHRAE 135-2024, Test Package 26.0.

Date of BTL-WG Response: November 6, 2025

Background:

13.1 Change of Value Reporting

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It is the responsibility of the COV-server to maintain the list of active subscriptions for each object that supports COV notification. This list of subscriptions shall be capable of holding at least a single subscription for each object that supports COV notification, although multiple subscriptions may be supported at the implementor's option. The list of subscriptions is network-visible through the Device object's Active_COV_Subscriptions property. Subscriptions may be created with finite lifetimes, meaning that the subscription may lapse and be automatically canceled after a period of time. Optionally with SubscribeCOV, the lifetime may be specified as infinite, meaning that no automatic cancellation occurs. However, the COVserver 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.

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K.1.10 BIBB - Data Sharing-Change Of Value-B (DS-COV-B)

The B device is a provider of COV data to device A.

BACnet Service	Initiate	Execute
SubscribeCOV		x
ConfirmedCOVNotification	x	
UnconfirmedCOVNotification	x	

Devices claiming conformance to DS-COV-B shall support a minimum of five concurrent subscriptions. Support for subscriptions of a limited lifetime is required, and support for subscriptions of indefinite lifetime is optional.

9.10.1.11 Ensuring 5 Concurrent COV Subscribers

Reason For Change: Clarified the Test Concept and added Test Conditionality.

Purpose: This test case verifies that the IUT can support 5 concurrent subscriptions.

Test Concept: Have the TD subscribe with 5 different process identifiers, V_1 through V_5 for monitored object O1. After each subscription verify a corresponding notification is sent. Change the monitored object and verify that all 5 notifications were sent, and then check to ensure that 5 notifications are sent when the monitored object changes.

Test Conditionality: The IUT should not have any subscriptions at the start of this test.

Notes to Tester: The notification in step 3 can be received in any order by the TD.

Notes to Tester: Object O1 can be the same object if 5 COV subscriptions are supported in a single object or different objects if no object supports 5 COV subscriptions.

Test Steps:

1. REPEAT (X=V₁ to V₅) DO {
 - TRANSMIT SubscribeCOV-Request,
 - 'Subscriber Process Identifier' = X,
 - 'Monitored Object Identifier' = ~~OI(any object supporting COV notifications),~~
 - 'Issue Confirmed Notifications' = TRUE | FALSE,
 - 'Lifetime' = (any valid value that will allow the subscription to outlast the test)
 - RECEIVE BACnet-SimpleACK-PDU
 - IF (~~if~~ confirmed notifications were requested) THEN
 - BEFORE **Notification Fail Time**
 - RECEIVE ConfirmedCOVNotification-Request,
 - 'Subscriber Process Identifier' = X,
 - 'Initiating Device Identifier' = IUT,
 - 'Monitored Object Identifier' = ~~OI(the same object used in the subscription),~~
 - 'Time Remaining' = (any valid value),
 - 'List of Values' = (the initial Present_Value and initial Status_Flags)
 - TRANSMIT BACnet-SimpleACK-PDU
 - ELSE
 - BEFORE **Notification Fail Time**
 - RECEIVE UnconfirmedCOVNotification-Request,
 - 'Subscriber Process Identifier' = X,
 - 'Initiating Device Identifier' = IUT,
 - 'Monitored Object Identifier' = ~~OI(the same object used in the subscription),~~
 - 'Time Remaining' = (any valid value),
 - 'List of Values' = (the initial Present_Value and initial Status_Flags)
2. MAKE (Present_Value = any value that differs from "initial Present_Value" such that a COV notification would be generated)
3. REPEAT (X=V₁ to V₅) DO {
 - IF (~~if~~ confirmed notifications were requested) THEN
 - RECEIVE ConfirmedCOVNotification-Request,
 - 'Subscriber Process Identifier' = X,
 - 'Initiating Device Identifier' = IUT,
 - 'Monitored Object Identifier' = ~~OI(the same object used in the subscription),~~
 - 'Time Remaining' = (any valid value),
 - 'List of Values' = (the new Present_Value and Status_Flags)
 - TRANSMIT BACnet-SimpleACK-PDU
 - ELSE
 - RECEIVE UnconfirmedCOVNotification-Request,
 - 'Subscriber Process Identifier' = X,
 - 'Initiating Device Identifier' = IUT,
 - 'Monitored Object Identifier' = ~~OI(the same object used in the subscription),~~
 - 'Time Remaining' = (any valid value),
 - 'List of Values' = (the new Present_Value and Status_Flags)

Problem:

Test 9.10.1.11 assumes the IUT supports an object that can accept 5 COV subscriptions.

Question:

Can test 9.10.1.11 be clarified, as indicated in green, so that the TD can subscribe to different objects within the IUT?

Response:

Yes