

### Clarification Request

**References:** BACnet 135 clause 5.1 The Application Layer model, 5.4 Application Protocol State Machine

**Date of BTL-WG Response:** 26-Apr-2015

☒ All actions necessitated have been completed

#### Background:

From 135-2012, clause 5.1 The Application Layer Model:

The BACnet User Element carries out several functions in addition to supporting the local API. It represents the implementation of the "service procedure" portion of each application service. It is responsible for maintaining information about the context of a transaction, including generating invoke IDs and remembering which invoke ID goes with which application service request (response) to (from) which device. It is also responsible for maintaining the time-out counters that are required for the retrying of a transmission. The BACnet User Element also presides over the mapping of a device's activities into BACnet objects.

From 135-2012, clause 5.4 Application Protocol State Machine:

Both the requesting and the responding BACnet-user shall create and maintain a Transaction State Machine (TSM) for each transaction. The TSM shall be created when the transaction begins and shall be disposed of when the transaction ends. In the state machine descriptions that follow, the creation of a TSM is represented by a transition out of the IDLE state, and the disposal of a TSM is represented by a transition into the IDLE state. A transaction is uniquely identified by the client BACnetAddress, the server BACnetAddress, and the Invoke ID (if any).

When a PDU is received from the network layer, the PDU type, the source and destination BACnetAddresses, and the Invoke ID (if any) of the PDU shall be examined to determine the type (requesting BACnet-user or responding BACnet-user) and the identity of the TSM to which the PDU shall be passed. If no such TSM exists, one shall be created.

#### Question:

Is it permissible for a device sending a response, to return the response with the proper Invoke ID but a different SA?

If not, should a test in the test plan detect this?

#### Response:

**No, that is not correct behavior. The issue will be investigated, and we shall ensure that such implementations are caught.**