

Clarification Request

References: BTL Test Plan 12.0.final, 9.24.1.1, 9.24.1.2, 9.24.1.3

Date of BTL-WG Response: March 7, 2013

Background:

BTL tests 9.24.1.1, 9.24.1.2, 9.24.1.3 are shown here verbatim from BTL Specified Tests-12.0 All ~~strike through~~ *italics* is already in the BTL Specified Tests versions.

9.24.1.1 Indefinite Time Duration Restored by DeviceCommunicationControl

Reason for Change: To verify that the IUT does not initiate service requests while the communication is disabled, the Who-Is service request was added to step 4 and a WHILE loop was added to step 4 to make sure that the IUT does not enable the communication prematurely. Modified test to remove dependency on EPICS values.

Purpose: To verify the correct execution of the DeviceCommunicationControl request service procedure when indefinite time duration is specified and communication is restored using the DeviceCommunicationControl service.

Test Steps:

1. *READ Y = (Device, X), Object_Name*
2. TRANSMIT DeviceCommunicationControl-Request,
 'Enable/Disable' = DISABLE,
 'Password' = (any appropriate password as described in the Configuration Requirements)
3. RECEIVE BACnet-Simple-ACK-PDU
4. **WAIT Internal Processing Fail Time**
5. *WHILE (an arbitrary time > Internal Processing Fail Time selected by the tester has not expired) DO*
 {
 TRANSMIT ReadProperty-Request,
 'Object Identifier' = (Device, X),
 'Property Identifier' = (any required non-array property of the Device object)
 TRANSMIT
 DESTINATION = LOCAL BROADCAST,
 Who-Is-Request
 WAIT (1 second) -- poll delay
 }
~~6. WAIT (an arbitrary time > Internal Processing Fail Time selected by the tester)~~
6. CHECK (Verify that the IUT has not transmitted any messages since the acknowledgment in step 2)
7. TRANSMIT DeviceCommunicationControl-Request,
 'Enable/Disable' = ENABLE,
 'Password' = (any appropriate password as described in the Configuration Requirements)
8. RECEIVE BACnet-Simple-ACK-PDU
9. ~~VERIFY (Device, X), Object_Name = Y (any required non array property) = (the value for this property specified in the EPICS)~~

9.24.1.2 Indefinite Time Duration Restored by ReinitializeDevice

Reason for Change:

- 1) To verify that the IUT does not initiate service requests while the communication is disabled, the Who-Is service request was added to step 4.
- 2) A WHILE loop was added to step 4 to make sure that the IUT does not enable the communication prematurely.

3) Modified test to remove dependency on EPICS values

Purpose: To verify the correct execution of the DeviceCommunicationControl request service procedure when indefinite time duration is specified and communication is restored using the ReinitializeDevice service.

Dependencies: ReinitializeDevice Service Execution Tests, 9.27.

Test Steps:

1. *READ Y = (Device, X), Object_Name*
2. TRANSMIT DeviceCommunicationControl-Request,
 'Enable/Disable' = DISABLE,
 'Password' = (any appropriate password as described in the Configuration Requirements)
3. RECEIVE BACnet-Simple-ACK-PDU
4. **WAIT Internal Processing Fail Time**
5. *WHILE (an arbitrary time > Internal Processing Fail Time selected by the tester has not expired) DO*
 {
 TRANSMIT ReadProperty-Request,
 'Object Identifier' = (Device, X),
 'Property Identifier' = (any required non-array property of the Device object)
 TRANSMIT
 DESTINATION = LOCAL BROADCAST,
 Who-Is-Request
 WAIT (1 second) -- poll delay
 }
~~6. WAIT (an arbitrary time > Internal Processing Fail Time selected by the tester)~~
6. CHECK (Verify that the IUT has not transmitted any messages since the acknowledgment in step 2)
7. TRANSMIT ReinitializeDevice-Request,
 Reinitialized State of Device' = WARMSTART,
 'Password' = (any appropriate password as described in the Configuration Requirements)
8. RECEIVE BACnet-Simple-ACK-PDU
9. CHECK (Did the IUT perform a WARMSTART reboot?)
10. VERIFY (Device, X), *Object_Name = Y*
 ~~(any required non-array property) = (the value for this property specified in the EPICS)~~

9.24.1.3 Finite Time Duration

Reason for Change:

- 1) To verify that the IUT does not initiate service requests while the communication is disabled, the Who-Is service request was added to step 4.
- 2) A WHILE loop was added to step 4 to make sure that the IUT does not enable the communication prematurely.
- 3) Modified test to remove dependency on EPICS values

Purpose: To verify the correct execution of the DeviceCommunicationControl request service procedure when finite time duration is specified.

Test Steps:

1. *READ Y = (Device, X), Object_Name*
2. TRANSMIT DeviceCommunicationControl-Request,
 'Time Duration' = (a value T > 1, in minutes, selected by the tester),
 'Enable/Disable' = DISABLE,
 'Password' = (any appropriate password as described in the Configuration Requirements)
3. RECEIVE BACnet-Simple-ACK-PDU

4. **WAIT Internal Processing Fail Time**
5. *WHILE (Time Duration T since step 1 has not expired) DO {*
 TRANSMIT ReadProperty-Request,
 'Object Identifier' = (Device, X),
 'Property Identifier' = (any required non-array property of the Device object)
 TRANSMIT
 DESTINATION = LOCAL BROADCAST,
 Who-Is-Request
 WAIT (1 second) -- poll delay
 }
- ~~6. WAIT(T)~~
6. CHECK (Verify that the IUT did not transmit any messages between the acknowledgment in step 2 and expiration of timer T)
7. VERIFY (Device, X), *Object_Name = Y*
 ~~(any required non-array property) = (the value for this property specified in the EPICS)~~

These tests do a DCC and then send Local Broadcasts to the IUT to check if the IUT issues an answer when it should not.

Problem:

If the IUT contains a virtual network and the device object of the IUT is attached to this virtual network the LocalBroadcast will logically not reach the IUT.

Questions:

Should the local broadcast be replaced by a remote broadcast when the IUT device object is attached to an internal virtual network?

Response:

Yes. In many tests there is an assumption that TD is on the same network as IUT. When it is not, it is necessary for the tester to modify the messages transmitted accordingly. Depending upon the location of the TD, it may be necessary to issue a Remote Broadcast in order that a LOCAL BROADCAST appears at the IUT.