

## Clarification Request

**References:** ASHRAE 135.1-2025, ASHRAE 135-2024, Test Package 26.1.

**Date of BTL-WG Response:** June 11, 2026

### Background:

135-2024 Clause 6.4.20 Network-Number-Is

This message is indicated by a Message Type of X'13' followed by a 2-octet network number (most significant octet first), followed by a 1-octet flag, where a value of 1 indicates that the network number was configured, and a value of 0 indicates that the network number was learned by receipt of a previous Network-Number-Is message. This message is used to indicate the local network number to other devices on the local network. It shall be transmitted with a local broadcast address, and shall never be routed. Devices shall ignore Network-Number-Is messages that contain SNET/SADR or DNET/DADR information in the NPCI or that are sent with a local unicast address.

### 7.3.2.46.2 Network-Number-Is Updates Network\_Number\_Quality Test

Purpose: To verify that Network\_Number\_Quality is updated when the IUT learns its Network\_Number from Network-Number-Is.

Test Concept: Write 0 to Network\_Number to set Network\_Number\_Quality to UNKNOWN. Send a Network-Number-Is message to the IUT indicating that the Network\_Number is learned and verify that Network\_Number\_Quality changes to LEARNED. Send a Network-Number-Is message to the IUT indicating that the Network\_Number is configured and verify that Network\_Number\_Quality changes to LEARNED\_CONFIGURED. Write 0 to Network\_Number and verify that Network\_Number\_Quality changes to UNKNOWN.

Configuration Requirements: Select a Network Port object, O1, which is enabled and has a writable Network\_Number. Connect the TD to the network associated with Network Port O1. This test shall be skipped if the TD cannot be directly connected to the IUT's network.

Test Steps:

- set network number quality to UNKNOWN
- 1. WRITE Network\_Number = 0
- 2. TRANSMIT ReinitializeDevice-Request,
  - 'Reinitialized State of Device' = ACTIVATE\_CHANGES,
  - 'Password' = (any valid password)
- 3. RECEIVE BACnet-SimpleACK-PDU
- 4. WAIT **Activate Changes Fail Time**
- 5. VERIFY Network\_Number\_Quality = UNKNOWN
- make IUT learn the network number
- 6. TRANSMIT Network-Number-Is
  - DESTINATION = LOCAL\_BROADCAST IUT,
  - 'Network Number' = (N1: any valid value)
  - 'Flag' = 0 -- learned
- 7. VERIFY Network\_Number\_Quality = LEARNED
- 8. VERIFY Network\_Number = N1
- make IUT learn the network number from a configure device
- 9. TRANSMIT Network-Number-Is

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    DESTINATION = LOCAL_BROADCAST [IUT,
    'Network Number' = (N2: any valid value)
    'Flag' = 1 -- configured
10. VERIFY Network_Number_Quality = LEARNED_CONFIGURED
11. VERIFY Network_Number = N2

-- configure the IUT's network number
12. WRITE Network_Number = (N3: any valid value other than 0)
13. TRANSMIT ReinitializeDevice-Request,
    'Reinitialized State of Device' = ACTIVATE_CHANGES,
    'Password' = (any valid password)
14. RECEIVE BACnet-SimpleACK-PDU
15. WAIT Activate Changes Fail Time
16. VERIFY Network_Number_Quality = CONFIGURED

17. TRANSMIT Network-Number-Is
    DESTINATION = LOCAL_BROADCAST [IUT,
    'Network Number' = (N4: any valid value)
    'Flag' = 1 -- configured
18. VERIFY Network_Number_Quality = CONFIGURED
19. VERIFY Network_Number = N3

-- revert network number quality to UNKNOWN
20. WRITE Network_Number = 0
21. TRANSMIT ReinitializeDevice-Request,
    'Reinitialized State of Device' = ACTIVATE_CHANGES,
    'Password' = (any valid password)
22. RECEIVE BACnet-SimpleACK-PDU
23. WAIT Activate Changes Fail Time
24. VERIFY Network_Number_Quality = UNKNOWN

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**Problem:**

Standard 135-2024 requires Network-Number-Is to only be transmitted as a LOCAL\_BROADCAST. Test 7.3.2.46.2 allows the TD to initiate a unicast Network-Number-Is and expects the IUT to accept the message.

**Question:**

Should Steps 6, 9, and 17 be changed to initiate a Network-Number-Is as a LOCAL\_BROADCAST and not allow a unicast?

**Response:**

**Yes.**