

Clarification Request

References: "ASHRAE 135.1-2003"

Background / Proposed Solution:

Background:

ASHRAE 135.1-2003 tests 14.1.1 and 14.1.2 are negative tests for B/IP devices that are not BBMDs. These are tests for negative responses to Write-Broadcast-Distribution-Table (14.1.1) and Read-Broadcast-Distribution-Table (14.1.2) when the IUT is configured to not be a BBMD. These tests present a problem when the BBMD functionality in a device is configurable based on the contents of the Broadcast-Distribution-Table (BDT). In our company's devices, to enable BBMD functionality, the client must write a BDT that contains the IUT's own IP address. Obviously this will not work if a Write-BDT command is NAK'ed while in the non-BBMD state, so such a device must allow a Write-BDT whether the BBMD function is enabled or not.

Likewise, our device allows a Read-BDT command in either state (BBMD or non-BBMD) to help troubleshoot why the BBMD function may or may not be enabled, since this determination is made based on the contents of the BDT.

Our company chose this method of enabling and disabling BBMD functionality because it allows the BBMD functionality to be enabled and disabled using the same standard BACnet services that are typically used to configure a BBMD. It is essentially an automatic-enable of BBMD functionality. As for potential interoperability problems caused by this behavior, some BACnet clients might use the Read-BDT service as a way of "probing" for BBMD functionality, so the behavior of our devices could cause a problem for those clients. On the other hand, if probed in this manner, the client would determine that our device is a BBMD, which might be the better determination considering that a Write-BDT will be successful and will result in enabling the BBMD functionality.

Question(s):

- 1) If a device will accept a Write-BDT message at any time and configure the BBMD functionality based on the contents of the written BDT, can test 14.1.1 be skipped?
- 2) Is it OK for a device that can be configured to be a BBMD based on the contents of the BDT to always send a positive response to a Read-BDT command, and can the test of such a device skip test 14.1.2?

Response:

BTL regards a device that will always respond to the Read/Write-BDT table commands a device that is always a BBMD device. Therefore these tests do not need to be run against this type of device.