

Clarification Request

Date of BTL-WG Response: 01-Dec-2016

☒ All actions necessitated have been completed

Background:

135-2012 J.7.8 BBMD Operation with Network Address Translation

BTL TP14 9.4.6 BBMD Supports Network Address Translation

The section for NAT BBMD testing in BTL testplan 14 seems to be very much a copy'n paste from "normal" BBMD testing. The necessary editing to adjust to the special situation of NAT BBMD seems to be entirely missing though.

- J.7.8 f reads:

Two-hop distribution shall be used in B/IP networks that contain NAT routers, since one-hop distribution is not possible through NAT routers.

But in the BTL testplan two "OneHop" tests are listed as "must be executed".

- J.7.8 a reads:

For any single B/IP network, only one device on the local side of the NAT router may be accessible from the global side. All other devices on the local side of that NAT router need to be on different BACnet networks so that they can be uniquely addressed using the BACnet network layer. The globally accessible device will contain a BACnet router to those networks. The globally accessible device may be either a BBMD or a foreign device.

But all the BBMD tests make use of a device "D1" which is in the same subnet as the IUT. So none of the tests, defined for that testplan section can be applied without changes to the NAT BBMD situation. Also the referred tests are just the "normal" BBMD tests. The teststeps do not accommodate in any way the special "NAT" situation where Ip-adresses in the BDT need to be different from the original IP-adresses of the NAT-BBMD devices.

Questions:

1. Should OneHop Testing for NAT BBMD be removed from the BTL testplan?
2. Should the existing BBMD tests for two hop be modified to also cover the special case of NAT BBMD?
3. Should testing of the NAT BBMD functionality be skipped as long as new testing rules are not defined?
4. A NAT BBMD is primarily a special variant of a BACnet Router. Are the rules for router tests in the BTL testplan sufficient to cover the NAT BBMD use case?

Responses:

- 1. Yes.**
- 2. Yes. Tests for NAT operation will be added. The existing tests when used in a NAT configuration are not sufficiently prescriptive.**
- 3. Yes, the testing section 9.4.6 should be skipped as long as there are not adequate tests.**
- 4. No. Dedicated tests for NAT operation will be added.**