

Clarification Request

References:

BTL Test Plan 18.0-final – 8.14.3

Standard 135.1-2019 – 9.24.1.1

Standard 135-2020 – 21.2.4

Date of BTL-WG Response: April 1, 2021

☒ All Actions Necessitated have been Completed

Problem:

There seems to be disagreement about how a test lab should execute test 9.24.1.1 (from 135.1). Here is the section of BTL Test Plan 18.0 that describes how to execute test 9.24.1.1, with emphasis added:

8.14.3 Supports Receiving a DeviceCommunicationControl Service Request with no Password

The IUT does not require, or can be made to not require, a password parameter in a DeviceCommunicationControl service request.

135.1-2019 - 9.24.1.3 - Finite Time Duration		
	Test Conditionality	If the IUT does not support an internal clock this test may be skipped and test 9.24.1.1 shall be executed.
	Test Directives	The service request shall not contain a password.
	Testing Hints	
135.1-2019 - 9.24.1.1 - Indefinite Time Duration Restored by DeviceCommunicationControl		
	Test Conditionality	If the IUT does not support indefinite time duration, this test shall be skipped.
	Test Directives	The service request shall not contain a password.
	Testing Hints	

When executing test 9.24.1.1, a test lab included a password of zero length in the DeviceCommunicationControl-Request, which appears to be contrary to the BACnet standard. Here is the ASN.1 production from Standard 135-2020, Clause 21.2.4, with emphasis added:

```
DeviceCommunicationControl-Request ::= SEQUENCE {
    time-duration [0] Unsigned16 OPTIONAL,
    enable-disable [1] ENUMERATED {
        enable (0),
        -- disable - deprecated in version 1 revision 20
        disable-initiation (2)
    },
    password [2] CharacterString (SIZE (1..20)) OPTIONAL }
```

Our interpretation is that the password parameter of the service request is optional, but if the password parameter is present it must have a length of at least one character and at most twenty characters.

Question:

1. In executing test 9.24.1.1 according to the BTL's test directives ("The service request shall not contain a password"), should the test lab send a DCC service request that does not contain the password parameter?
2. Or should the test lab send a DCC service request that contains a zero-length password?
3. Does the BTL agree with our interpretation of Standard 135-2020, Clause 21.2.4?
4. If so, how should the IUT respond if it receives a DCC service request with a zero-length password?

Response:

1. Yes.
2. **No. The standard explicitly states the password should contain between 1 and 20 characters.**
3. Yes
4. **The standard does not provide sufficient direction on how a device should respond when it receives a zero-length password. The BTL will accept a device that ignores a zero-length password, responds with an error (SERVICES- VALUE_OUT_OF_RANGE, SERVICES-PARAMETER_OUT_OF_RANGE), or responds with a reject with a reason of PARAMETER_OUT_OF_RANGE.**