

Clarification Request

Request from: Lori Tribble (btl-manager@bacnetinternational.org)

References: BTL Implementer's Guide v17, ASHRAE 135-2004.

Stage: ☒Request, ☒Listed, ☒Analysis, ☒Resolved

Background / Proposed Solution:

The BTL has stated in the past that all forms of a service that is 'executed' by a device shall be supported. (see BTL Implementer's Guide, section 2.4).

I recently noticed the following in the service description of DeviceCommunicationControl Service (ASHRAE 135-2004, 16.1.2, pg 326)

If the responding BACnet-user does not have a clock and the time duration is not set to "indefinite", the APDU shall be ignored and a 'Result(-)' service primitive shall be issued.

Addendum M of 135-2004 reinforces the SSPC position by adding similar language to the 'Time Duration' description.

Question:

Is this an exception to the BTL statement in the BTL Implementer's Guide?

Depending on the answer to the above question, we might need to update our BTL Functionality Checklist and Test Plan documents. Our documents currently enforce that if a device supports DM-DCC-B it is required to support the 'Finite' mode of this service (see the Base Requirements section). The documents provide for Optional support of the 'infinite' mode of this service.

The following tests are used by the BTL Test Plan. They all expect the 'Time Duration' parameter to be accepted by the receiving device and the device to behave appropriately.

BTL-9.24.1.3 Finite Time Duration

BTL-9.24.1.4 Finite Time Duration Restored by DeviceCommunicationControl

135.1-2007-9.24.1.5 Finite Time Duration Restored by ReinitializeDevice

Response:

The BTL will make the necessary modifications to the test package and implementer's guide to account for this exception.

Changes Proposed:

BTL Implementer's Guide:

2.4 A device shall execute all forms of a service

When a device is able to execute a service request, it shall be able to execute all forms of the service. This allows a client device to select the form of the service request it chooses and expect successful interoperation. "All forms of the service" include all forms of the service parameters (see **Error! Reference source not found.**, for example), and its application to appropriate objects and services (see **Error! Reference source not found.**).

~~The only exceptions to this rule are the password parameters of the DeviceCommunicationControl and ReinitializeDevice services, where the BACnet standard allows restriction, by requiring the 'password' parameter to be present, for example.~~

Noted Exceptions:

<i>Service</i>	<i>Parameter</i>	<i>Reason</i>
<i>DeviceCommunicationControl, ReinitializeDevice</i>	<i>'Password'</i>	<i>Devices may require the 'password' property to be present and therefore respond with a 'Result(-)' if this parameter is missing.</i>
<i>DeviceCommunicationControl</i>	<i>'Time Duration'</i>	<i>Devices which do not support an internal clock are not required to support this parameter and may return 'Result(-)' if a finite duration is specified.</i>

BTL Functionality Checklist:

Device Management - Device Communication Control - B		
	R	Base Requirements
	C ¹	Supports receiving a DeviceCommunicationControl service request with a password
	C ¹	Supports receiving a DeviceCommunicationControl service request with no password
	C ^{2,3}	Supports receiving a DeviceCommunicationControl service request with a finite duration
	OC ³	Supports receiving a DeviceCommunicationControl service request with an indefinite duration
	O	Supports DM-RD-B
	C ⁴	Supports receiving a DeviceCommunicationControl service request specifying DISABLE_INITIATION.
¹ At least one of these options is required in order to claim conformance to this BIBB. ² This option is required if the device supports an internal clock. ³ At least one of these options is required in order to claim conformance to this BIBB. ²⁴ Required if device implements protocol revision 4 or higher.		

BTL Test Plan:

The tests currently listed under 'Base Requirements' will be moved under the new section 'Supports receiving a DeviceCommunicationControl service request with a finite duration'.

Existing tests in the other sections should be changed to allow the DeviceCommunicationControl message to be sent with or without the 'time duration' parameter depending on the supported option selected in the checklist.