

Clarification Request

References: BTL - 9.22.2.4, BTL - 9.23.2.7 and during Test Configuration for tests in section 8.5.X9 in an Event Enrollment object.

Date of BTL-WG Response: 10-Oct-2018

☒ All Actions Necessitated have been Completed

Background:

Tests of writing properties or transmitting service requests with a range of parameter values, sometimes specify unimplemented optional functionality. The error code tables are not complete for all such situations.

SERVICES and OPTIONAL_FUNCTIONALITY_NOT_SUPPORTED - The parameters of a service are such that the device would be required to exhibit non-supported optional functionality.

appears in the DeviceCommunicationsControl service error table, and

OBJECT and OPTIONAL_FUNCTIONALITY_NOT_SUPPORTED - The requested action cannot be executed because the specified object does not support the optional functionality required.

appears in the SubscribeCOV and SubscribeCOVPropertyMultiple error tables, but

PROPERTY and OPTIONAL_FUNCTIONALITY_NOT_SUPPORTED - An attempt has been made to write a value to a property that would require the device to exhibit non-supported optional functionality.

does not appear in any of the Write services tables.

There is a strong indication by the explicit mention of **PROPERTY OPTIONAL_FUNCTIONALITY_NOT_SUPPORTED** in some Clause 12 property clauses, that a device not supporting optional functionality is permitted to return that Error Class / Error Code pair only in situations where that is mentioned in the applicable Clause 12 property clauses.

Clause **K.5.16 Device Management - ReinitializeDevice - B** with this wording:

Devices claiming conformance to DM-RD-B are only required to support the WARMSTART and COLDSTART service choices. If the device supports a configurable Network Port Object, then it shall also support the restart choice ACTIVATE_CHANGES.

gives us some assurance that within service requests it is not required to support the whole range of parameter values, some of which could thus specify unimplemented optional functionality.

Problem:

A device, that does not support all FAULT algorithms, and which returns OPTIONAL_FUNCTIONALITY_NOT_SUPPORTED to some writes to Fault_Parameters is not one of the situations where that response is explicitly mentioned in the applicable Clause 12 property clause. Nor for non-support of all Event algorithms during writes to Event_Parameters.

Similarly any device that does not support all ReinitializeDevice service choices, and which returns OPTIONAL_FUNCTIONALITY_NOT_SUPPORTED to those which it does not support, that response is not explicitly mentioned in the applicable Clause 16 clause.

Questions:

1. Should the Write services negative tests, when applied to an IUT which does not support all values accept Error Class: PROPERTY Error Code: OPTIONAL_FUNCTIONALITY_NOT_SUPPORTED for those which it does not support?
2. Should the negative ReinitializeDevice when applied to an IUT which does not support all ReinitializeDevice service choices, accept Error Class: SERVICES Error Code: OPTIONAL_FUNCTIONALITY_NOT_SUPPORTED to those which it does not support?

Response:

1. **YES. For the Event_Parameters and Fault_Parameters properties, this is a valid response.**
2. **Test 9.24.2.3 already covers this instance.**