

Clarification Request

References: BTL Specified Tests-5.0.final.doc, 9.21.1.3, 9.21.1.4.X1, 9.21.1.X2

Background / Proposed Solution:

There appears to be no ReadRange service execution test for the case where more items matched the request but were not transmittable within the PDU. In such a case, it is clear that the MOREITEMS flag in the Result Flags service parameter should be set to TRUE, but what is not tested is which subset of the requested records should be returned. This is particularly important for a ReadRange service that specifies a Negative Count.

For reference, test 9.21.1.3 from BTL Specified Tests-5.0.final.doc is shown below.

9.21.1.3 Reading Items by Position with Negative Count

Reason For Change: Updated tests to test 2001b ReadRange changes. This change is in JB-020.

Purpose: To verify that the IUT correctly responds to a ReadRange service request to return items specified by indicating a position and the number of items before that position to return.

Test Concept: A ReadRange request is transmitted by the TD requesting a range of items known to be in the Log_Buffer. This range is specified using the 'By Position' option and a negative value for 'Count'. The 'Reference Index' and 'Count' are selected so that the results can be conveyed in a single acknowledgement.

Test Steps:

1. TRANSMIT ReadRange-Request,

'Object Identifier'	= (the Trend Log object configured for this test),
'Property Identifier'	= Log_Buffer,
'Reference Index'	= (any value x: $2 \leq x \leq$ the number of trend records in the buffer),
'Count'	= (any value y: $y < 0$ AND $ y \leq x$)
2. RECEIVE ReadRange-ACK,

'Object Identifier'	= (the Trend Log object configured for this test),
'Property Identifier'	= Log_Buffer,
'Result Flags'	= {FALSE, ?, FALSE},
'Item Count'	= $ y $,
'Item Data'	= (all of the specified trend records in order of increasing position. The items specified include the item at the index specified by x, plus $ y -1$ items preceding.)

Test Example (using the sample buffer at beginning of section):

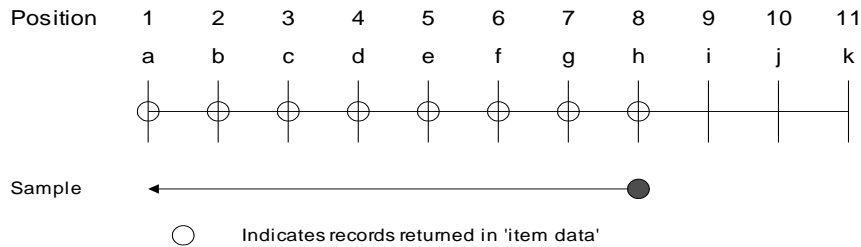
1. TRANSMIT ReadRange-Request,

'Object Identifier'	= (Trend Log, Instance 1),
'Property Identifier'	= Log_Buffer,
'Reference Index'	= 8,
'Count'	= -8

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2. RECEIVE ReadRange-ACK,
 'Object Identifier' = (Trend Log, Instance 1),
 'Property Identifier' = Log_Buffer,
 'Result Flags' = {TRUE, FALSE, FALSE},
 'Item Count' = 8
 'Item Data' = Records < a, b, c, d, e, f, g, h > in that order.

```



**Question:**

If test 9.21.1.3 is executed on an IUT that does not support segmentation and has a maximum PDU such that only 4 of the requested records will fit into the ‘Item Data’, should the records returned be <a,b,c,d> or <e,f,g,h>?

**Response:**

The later records shall be returned if the 'Count' is negative. We will prepare two new tests, an A-side and B-side for Negative Counts.