

**Clarification Request****Date of BTL-WG Response:** June 9, 2016☒ All actions necessitated have been completed**Background:**

Lab has added new negative testing for array index in BACnetARRAY with a 32-bit length including MAX\_UINT32.

**Test****9.18.2.2 Reading Array Properties with an Array Index that is Out of Range**

Purpose: To verify that the IUT can execute ReadProperty service requests when the requested property value is an array but the array index is out of range.

Test Concept: ReadProperty service request is sent to a property which is an array. Any failures in any BACnetARRAY properties would be appropriate to report.

Configuration Requirements: AP is an array property in object O1, that can be used for this test.

Test Steps:

1. TRANSMIT ReadPropertyMultiple-Request,  
    'Object Identifier' = O1,  
    'Property Identifier' = AP,  
    'Property Array Index' =                      (a value larger than the size of AP)
2. RECEIVE BACnet-Error-PDU,  
    Error Class =              PROPERTY,  
    Error Code =              INVALID\_ARRAY\_INDEX

**Question:**

While executing ReadProperty or ReadPropertyMultiple or WriteProperty or WritePropertyMultiple or ReadRange or AddListElement or RemoveListElement or CreateObject involving a property that is a BACnetARRAY, is it required to respond with Error class: property and Error code: INVALID\_ARRAY\_INDEX when the index is longer than 16 bits and longer than the BACnetARRAY? Where has BTL or BACnet derived the mentioned requirement?

**Response:**

**Due to the implied restriction of Array indexes as 16-bit Unsigned values in clauses K1.18 and K1.19, the BTL restricts testing of Array indexes only up to MAX\_UINT16, unless the IUT explicitly indicates that it supports larger values.**