

Clarification Request

References: ["BTL Testplan-5.0.final", "ASHRAE 135.1-2010"]

Background / Proposed Solution:

a couple of tests from the BTL testplan 5.0 are supposed to be applied to properties whose type is list or array of lists. These typically are tests for ReadRange, AddListElement or RemoveListElement functionality. In contrast some negative tests are supposed to be applied to properties that are not a list in order to verify the correct error response. Lets take testplan chapter 8.24.1 test 9.14.2.1 "Adding a list element to a Property that is not a List" as an easy example.

The problem is how to identify a list property:

For most cases it is quite obvious whether a given property is a list but there are some cases for which are not completely clear! Look at the array elements of property weekly schedule from the schedule object or at the array elements of the property action from the command object:

see the following text from the 135-2010

12.24.7 Weekly_Schedule

This property is a BACnetARRAY containing exactly seven elements. Each of the elements 1-7 contains a BACnetDailySchedule. A BACnetDailySchedule consists of a list of BACnetTimeValues that are (time, value) pairs, ...

after reading this you might think that BACnetDailySchedule is a list and that therefor it should be accessible with AddListElement.

If you look at chapter 21 for the formal description you find

```
BACnetDailySchedule ::= SEQUENCE {  
  day-schedule [0] SEQUENCE OF BACnetTimeValue  
}  
BACnetDateRange
```

instead. My interpretation would be that BACnetDailySchedule is not itself a list. Instead it is a sequence with exactly one element "day-schedule". Although day-schedule is a list you can not apply the AddListElement to it because the AddListElement service does not have the addressing scheme to reach into the BACnetDailySchedule and select the sequence member [0]!

Question:

Are the array elements of the properties action and weekly-schedule treated as lists when applying tests?

Response:

The BTL-WG's position at present is that there are no ARRAYs of Lists in the standard. An Interpretation Request will be sent to the SSPC asking them to clarify ARRAYs of Lists in the standard.