Clarification Request

References: BTL Test Plan 12.0, addendum 135-2008k

Date of BTL-WG Response: February 20, 2014

Background:

in Addendum 135-2008k with Protocoll Revision 10 support for UTF8 was introduced into BACnet.

in TP 12 EPICS Consistency Tests we have Testing Hints:

The EPICS, PICS and the IUT Configuration must match exactly. The pre-tester should check them vigorously before submitting the IUT to the BTL. The EPICS must note the existence of every object and property, resolution, min/max values. All writable properties must be claimed.

This sentence does leave much of the details open but it seems to imply, that the tester should check EPICS and PICS for correctness.

So although there are currently no special tests for handling of charactersets in the BTL-testplan at least the consistency of the documents in relation to the claimed BACnet standard support could be checked.

The point in question is whether a device, claiming a protocol revision before introduction of UTF8 should be allowed to claim support for UTF8 and be successfully tested.

One could argue, that supporting UTF8 does introduce only minor interoperability issues (unexpected codepoints beyond 127); on the other hand one could argue, that a vendor, that wants to provide UTF8 is free to implement protocoll revision 10 and be done without any doubts.

Question:

Should a device claiming Protocol Revision 7 be failed if the PICS and/or EPICS documents claim support for UTF8?

Response:

No, the product should not be failed. The PICS is not used in testing though the EPICS is. The EPICS should reflect the character sets available in the claimed Protocol_Revision, when referring to character set 0. It is worthy of note that the adoption of UTF-8 is usable for all devices, even earlier Protocol_Revisions. That is why character set 0 was chosen.