

Test Procedures Change List (TPCL) for
IEC 61850 server test procedures revision 2.3
Version 1.4

UCA International Users Group
Testing Sub Committee

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Introduction

Problems that are uncovered during conformance testing that impact the IEC 61850 Standard are taken back through the TISSUES Process. However, there are some problems that relate only to the content of the Test Procedures. The UCAiug is the owner of the Test Procedures and so has the responsibility for tracking changes. Given the long time lag between major versions, we have a need to track interim changes that may impact testing. This "Test Procedures Change List (TPCL)" document specifies such interim changes. The UCAiug test sub committee reviews and approves each change. Changes resulting in new test procedures shall be specified in the next revision of the test procedures.

This list:

- Contains changes to the most recent (server) test procedures
- Indicate if a change is:
 - Accepted, resulting in a clarified test procedure (included after the change list table)
 - Denied
 - Added to the next revision
- Shall be used by recognized/accredited test labs
- Should be referenced in the test report only
- Is available at the UCAiug sharepoint for test sub committee members

References

Conformance Test Procedures for Server Devices with IEC 61850-8-1 interface,
Revision 2.3, August 17, 2011

Approved Change List

ID	TEST CASE	CHANGE	FINAL PROPOSAL	RESULT
1	Mdl12	Define the use of name spaces for Ed2 LN used in Ed1 devices	See new test procedure Mdl12	

List of denied and next revision changes

ID	TEST CASE	CHANGE	FINAL PROPOSAL	RESULT
1	-	The certificate template specifies the number of test per conformance blocks. We assumed the total number was incorrect	After second analysis the total numbers of test cases specified in the table on the front page of the certificate is correct	No change

Clarified Test Procedures (in alphabetical order)

Mdl12	Ed2 data model extensions in Ed1 device	<input type="checkbox"/> Passed <input type="checkbox"/> Failed <input type="checkbox"/> Inconclusive
IEC 61850-7-1 clause 14 IEC 61850-7-4 Ed2		
<u>Expected result</u> The SCL file of the Ed1 device <ul style="list-style-type: none"> • Shall use 7-3 Ed1 CDC's also for the Ed2 LN Data objects • Shall use INS/INC/ING instead of ENS/ENC/ENG • Shall NOT use 7-3 Ed2 specific CDC's as for example: VSS, VSG, TSG as ORG • Shall only use the part 8-1 Ed1 basic data types (for example no INT64) The use of name space is as follows: <ul style="list-style-type: none"> • IdNs = IEC 61850-7-4:2003 • Ed1 LN don't need a InNs • Ed2 LN shall have InNs = IEC 61850-7-4:2007 Presence and order of Data Objects (DO) <ul style="list-style-type: none"> • Ed1 LN shall have the mandatory DO's according to Ed1 • Ed2 LN shall have the mandatory DO's according to Ed2 • Ed1 LN shall have the DO's in the same order as specified in Ed1 • The order of DO's for Ed2 LN is not required anymore and not verified The use of dataNs is as follows <ul style="list-style-type: none"> • A private DO in any Ed1/Ed2 LN shall have a private dataNs value • A private DO in a private LN does not need a dataNs • An Ed1 DO in a Ed1 LN does not need a dataNs • An Ed2 DO in a Ed2 LN does not need a dataNs • An Ed2 DO in an Ed1 LN shall have dataNs = IEC 61850-7-4:2007 Note: the presence of the name space attribute is not a valid criterion anymore. When a name space is not needed it means: either the name space is not present or the name space has the same value as the name space on the higher level		

Test description

Scan SCL file for Ed2 logical nodes types and dataobjects

Comment

Ed2 LN types that have a mandatory DO with an Ed2 specific CDC are not allowed

Revision History

Revision	Changes
1.0	Initial version
1.1	<ul style="list-style-type: none">• Updated expected behavior in CtIN2 to allow reset of select timeout again. However the recommended behavior is a negative respond on the second select (and this behaviour will be mandatory in the next version of the server test procedures).• Update test FtN1 to test for both empty and invalid file names in a GetFileAttributeValues.• Updated Srv6, removed EX at step 2 because its already used in step 1
1.2	<ul style="list-style-type: none">• Updated server test specification to version 2.3 and removed all TPCL elements• Removed text "This list: ...should be referenced in the test report only" (the TPCL is now referenced on the conformance certificate).
1.3	<ul style="list-style-type: none">• Add verification of Ed2 LN in Ed1 devices = Mdl12
1.4	<ul style="list-style-type: none">• Add note that the number of test cases on the certificate template is correct