

Server - Issues #748

sGos9 use SPS when INS subscribe is not supported

06/29/2021 10:03 AM - Richard Schimmel

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|--|-----------------------------------|
| Status: Resolved | Due date: |
| Priority: Normal | |
| Assignee: Richard Schimmel | |
| Category: | |
| Target version: | |
| Discuss in Upcoming Meeting: No | Updated Test Document: |
| Clause Reference: PIXIT Gs8 | Test Case ID: sGos9 |
| 61850 Standard: 8-1 | Closed Reason: --Not Set-- |
| Triggering Tissue: none | Triggering Tissue 2: |
| Final Decision: See last attachment | Triggering Tissue 3: |
| Initial Test Document: TP2.0.5 | |
| Description | |
| Not all devices support subscribing INS. See PIXIT Gs8. But when INS/ENS is not supported we can't execute sGos9. The proposal is to use SPS in case INS subscribe is not supported. As such the integers in the GOOSE header are still tested | |

History

#1 - 06/29/2021 10:05 AM - Richard Schimmel

- File Solution to redmine sGos9 748.docx added
- Status changed from New to In Progress

added solution

#2 - 06/29/2021 10:18 AM - Thierry Dufaure

I would recommend then to use SPC[ST], with an SPC that contains constructed DA origin.

#3 - 06/30/2021 04:13 AM - Richard Schimmel

I assume if a device does not support INS it also won't support SPC origin. Test procedure is not clear to use FCD or FCDA. Typically GOOSE should use FCDA. We should clarify FCDA/FCD. There is a copy/paste error in the expected result step 4 integer should be boolean.

#4 - 06/30/2021 11:56 AM - Bruce Muschlitz

Solution in "Solution to redmine sGos9 748.docx" is unacceptable because boolean is encoded exactly the same way for both "fixed" and "normal" GOOSE.
If the purpose of the test is to verify that a payload (AllData) encoded with fixed length is correctly processed then the proposed test will not verify this. If the purpose is to verify that GOOSE header (non-payload) data can be encoded with fixed length then we do not need to specify the contents at all. If a subscriber can only subscribe to "fixed" messages which contain the same payload encoding as "normal" GOOSE then it seems that this device cannot demonstrate the test requirement "Subscribe GOOSE message with "fixed length" GOOSE".

We can discuss within the TPWG whether a device which ONLY demonstrates tolerance to header data with fixed length should be deemed compliant to the standard.

#5 - 07/01/2021 04:26 AM - Richard Schimmel

I understand the concern. Some devices only subscribe to boolean values, such devices should/shall be able to ignore other types. That's why the SERVER SIMULATOR should send both boolean and integer. A device supporting integer does process the integer, if not the integer is ignored and device does process the boolean.

#6 - 07/06/2021 04:27 PM - Bruce Muschlitz

The proposed test procedure is not clear that if only boolean is supported then the publisher still sends both boolean and integer. But if the subscriber merely ignores the integer then it really has not shown it can "subscribe" to a "fixed length" GOOSE. I propose to make sGos9 conditional on PIXIT Gs8 declaring something that differs in "fixed GOOSE" compared to "normal GOOSE". We can work out what would be in that "differs" list.

#7 - 07/07/2021 10:19 AM - Thierry Dufaure

I do not understand the answer from Richard:

"I assume if a device does not support INS it also won't support SPC origin. Test procedure is not clear to use FCD or FCDA. Typically GOOSE should use FCDA. We should clarify FCDA/FCD. There is a copy/paste error in the expected result step 4 integer should be boolean."

Subscription of FCD is mandated per standard / test procedures. We can not make it conditional: subscribed only FCD when no integer present. As mentioned later in the discussion: the key thing for a subscriber is to ignore what it does not support.

We can not certify a subscriber that is saying: Support SPC, but not as FCD when SPC contains DA origin. This is otherwise a nightmare for configuration - and will lead to major interop problems when such subscribers are certified compliant to the standard.

#8 - 07/09/2021 12:14 PM - Joel Greene

Agree with Thierry - we should not certify a device that does not support INS or integer.

#9 - 07/13/2021 10:18 AM - Bruce Muschlitz

- File *Solution to redmine sGos9 748 TPWG meeting 20210713.docx* added

- Status changed from *In Progress* to *Resolved*

- Discuss in *Upcoming Meeting* changed from *Yes* to *No*

Resolved at TPWG meeting 20210713:

1. Subscribed GOOSE from simulator will contain a structured ENS Data Object, an integer attribute, and a boolean attribute
2. Expected result when DUT does not process integers will be that published GOOSE from DUT sends a GOOSE containing at least a boolean object/attribute following the subscribed boolean attribute

See attached file "Solution to redmine sGos9 748 TPWG meeting 20210713.docx"

#10 - 07/27/2021 10:07 AM - Richard Schimmel

- Final Decision set to *See last attachment*

Files

| | | | |
|--|---------|------------|------------------|
| Solution to redmine sGos9 748.docx | 17.7 KB | 06/29/2021 | Richard Schimmel |
| Solution to redmine sGos9 748 TPWG meeting 20210713.docx | 19.2 KB | 07/13/2021 | Bruce Muschlitz |