61850-7-5 and 61850-7-500 - IEC61850-7-5 #6725

Simultaneous change of InRef.setSrcRef and InRef.setSrcCB for dynamic commutation

02/29/2024 09:03 AM - Vladan Cvejic

Status: In Progress Start date: 05/31/2022

Priority: Normal Due date:

Assignee: Maud Merley % Done: 0%

Category:

Target version:

Source: RTE **TF 7-5 Project** IEC 61850-7-5, IEC 61850-7-500

document:

Category: Not yet categorized Related TISSUE:

Description

A simple static communication description in SCD based on "Input/ExtRef" combined with later binding is not always sufficient for all applications. Indeed, one of the most important use cases is redundancy management. For example, it may be necessary for a protection function to switch the subscription between SV streams published by two redundant MU or between GOOSE streams published by two redundant SCU.

The associated configuration used by Rte is based on the DO "InRef". This DO allows to point to different IEC 61850 addresses and also to manage the test streams. The dynamic change to another SV or GOOSE stream is based on updating the Data Attributes (DA) "setSrcCB" and "setSrcRef".

- 1. It seems required to have the capability of changing simultaneously the DA setSrcRef / setSrcCB of an InRef DO. If not, there is a risk that the application use the wrong input signal while setSrcRef has changed and setSrcCB has not, for instance.
- 2. It seems required to have the capability of changing simultaneously the DA setSrcRef / setSrcCB of multiple InRef DO of a same LD.

If not, there is a risk that the application use for instance an input signal on SAMU A, and other inputs signal from SAMU B, which is discrepant from a system perspective.

Related issues:

Copied from IEC TC57 WG10 Future Work - WG10 Future Work #5934: Simultaneous ... New 05/31/2022

History

#1 - 02/29/2024 09:03 AM - Vladan Cvejic

- Copied from WG10 Future Work #5934: Simultaneous change of InRef.setSrcRef and InRef.setSrcCB for dynamic commutation added

#2 - 02/29/2024 09:07 AM - Keith Gray

- Status changed from New to In Progress
- Assignee set to Maud Merley

Maud kicked off this topic in the 2024/02/29 TF meeting. She will set up separate meetings to discuss this topic an report back to the TF group.

Subgroup members include: Maud, Karen, Thierry, Christoph Brunner, Karen, and Marcel.

Files

Multiplexer.PNG 15.9 KB 06/07/2022 Vladan Cvejic

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