

IEC 61850 User Feedback Task Force - Feature #584

SCL validation - Should all name parts of PhV be contained in the doName?

02/03/2021 02:07 PM - Herbert Falk

Status:	Closed	Start date:	
Priority:	Normal	Due date:	
Assignee:		% Done:	0%
Category:	Standard clarification required	Estimated time:	0.00 hour
Target version:		To discuss in WG10:	No
ID:	1122	Short Proposal:	Create a tissue to clarify text
Source:	IOP_2019	Standard(s):	IEC 61850-6
TF Unique ID:	1122 # IOP_2019	Needs More Information:	Yes
WG10 Proposal:	CBL: Create the tissue when the database is available, accept it and update standard.	Assigned TF:	
Estimated Completion:	Once the folder for edition 2.1 is created in the new tissue database. Around June-20 Folder has been created, Camille Bloch to create the tissue (sep-20)		
Discuss in Upcoming Meeting:	No		

Description

SCL validation was performed on ICD files with an SCL validation tool. An error was raised: ERROR: [SemanticConstraints] FCDA (line 189) does not refer any existing DA or BDA in DataTypeTemplates section.

```
<DataSet desc="Analog Data" name="DSet01">
<FCDA IdInst="MET" prefix="MET" InClass="MMXU" InInst="1" doName="TotW" fc="MX" />
<FCDA IdInst="MET" prefix="MET" InClass="MMXU" InInst="1" doName="Hz" daName="mag" fc="MX" />
<FCDA IdInst="MET" prefix="MET" InClass="MMXU" InInst="1" doName="PhV" fc="MX" />
<FCDA IdInst="ANN" prefix="ANN" InClass="GGIO" InInst="1" doName="AnIn01" daName="mag" fc="MX" />
<FCDA IdInst="ANN" prefix="ANN" InClass="GGIO" InInst="1" doName="AnIn02" daName="mag" fc="MX" />
<FCDA IdInst="ANN" prefix="ANN" InClass="GGIO" InInst="1" doName="AnIn03" daName="mag" fc="MX" />
<FCDA IdInst="ANN" prefix="ANN" InClass="GGIO" InInst="1" doName="AnIn04" daName="mag" fc="MX" />
<FCDA IdInst="ANN" prefix="ANN" InClass="GGIO" InInst="1" doName="AnIn05" daName="mag" fc="MX" />
<FCDA IdInst="ANN" prefix="ANN" InClass="GGIO" InInst="1" doName="AnIn06" daName="mag" fc="MX" />
<FCDA IdInst="ANN" prefix="ANN" InClass="GGIO" InInst="1" doName="AnIn07" daName="mag" fc="MX" />
<FCDA IdInst="ANN" prefix="ANN" InClass="GGIO" InInst="1" doName="AnIn08" daName="mag" fc="MX" />
</DataSet>
```

Extract from DatatypeTemplates section:

```
<LNodeType id="MMXU_RTAC" iedType="" InClass="MMXU">
<DO name="Mod" type="ENC_mode_direct_enhanced_5032"/>
<DO name="Beh" type="ENS_behavior_5032"/>
<DO name="Health" type="ENS_health_5032"/>
<!-- Status information -->
<DO name="TotW" type="MV_5032"/>
<DO name="Hz" type="MV_5032"/>
<DO name="PhV" type="WYE_RTAC"/> [1]
</LNodeType>

<DOType id="WYE_RTAC" cdc="WYE">
<SDO name="phsA" type="CMV_5032"/> [2]
<SDO name="phsB" type="CMV_5032"/> [2]
<SDO name="phsC" type="CMV_5032"/> [2]
<DA name="phsToNeut" bType="BOOLEAN" valKind="RO" fc="CF">
<Val>true</Val>
</DA>
```

</DOType>

```
<DOType id="CMV_5032" cdc="CMV">
<DA name="instCVal" bType="Struct" type="Vector_5032" fc="MX"/>
<DA name="cVal" bType="Struct" type="Vector_5032" dchg="true" fc="MX"/>
<DA name="q" bType="Quality" qchg="true" fc="MX"/>
<DA name="t" bType="Timestamp" fc="MX"/>
</DOType>
```

The doName "PhV" of type "WYE_RTAC" [1] is a structured object type (SDO)[2] and Riseclipse validation was expecting the following FCDA as per table 22 of IEC 61850-6 Edition 2.1 2018-06 (Page: 95):

```
<FCDA IdInst="MET" prefix="MET" InClass="MMXU" InInst="1" doName="PhV.phsA" fc="MX" />
<FCDA IdInst="MET" prefix="MET" InClass="MMXU" InInst="1" doName="PhV.phsB" fc="MX" />
<FCDA IdInst="MET" prefix="MET" InClass="MMXU" InInst="1" doName="PhV.phsC" fc="MX" />
```

SCL Standard reference: IEC 61850-6 Ed2.1 Table 22 - Attributes of a FCDA element.

Should all name parts of PhV be contained in the doName?

History

#1 - 02/11/2021 07:08 AM - Vladan Cvejic

- Subject changed from SCL validation was performed on ICD files with an SCL validation tool. An error was raised: ERROR: [SemanticConstraints] FCDA (to SCL validation - Should all name parts of PhV be contained in the doName?

- Status changed from New to In Progress

- Standard(s) changed from 6 to IEC 61850-6

- Estimated Completion changed from Once the folder for edition 2.1 is created in the new tissue database. Around june-20 Folder has been created, Camille Bloch to create the tissue (sep-20) to Once the folder for edition 2.1 is created in the new tissue database. Around june-20 Folder has been created, Camille Bloch to create the tissue (sep-20)

- Discuss in Upcoming Meeting set to No

Checking done.

#2 - 06/21/2022 09:30 AM - Carlos Rodriguez del Castillo

- Discuss in Upcoming Meeting changed from No to Yes

#3 - 07/05/2022 08:20 AM - Vladan Cvejic

- Status changed from In Progress to Resolved

- Discuss in Upcoming Meeting changed from Yes to No

- To discuss in WG10 set to No

Editor of Part 6 to create related TISSUE.

#4 - 05/09/2023 09:12 AM - Carlos Rodriguez del Castillo

- Status changed from Resolved to Closed

- Needs More Information set to Yes

Solved in IEC 61850-6 Ed2.1, 7-2 Ed2.1

Conformance test "sDs15" just test all different possibilities of DO hierarchy in a dataset.