

Compliance validation of libiec61850

Implementation of a Python program to validate the compliance of all different data types in libiec61850

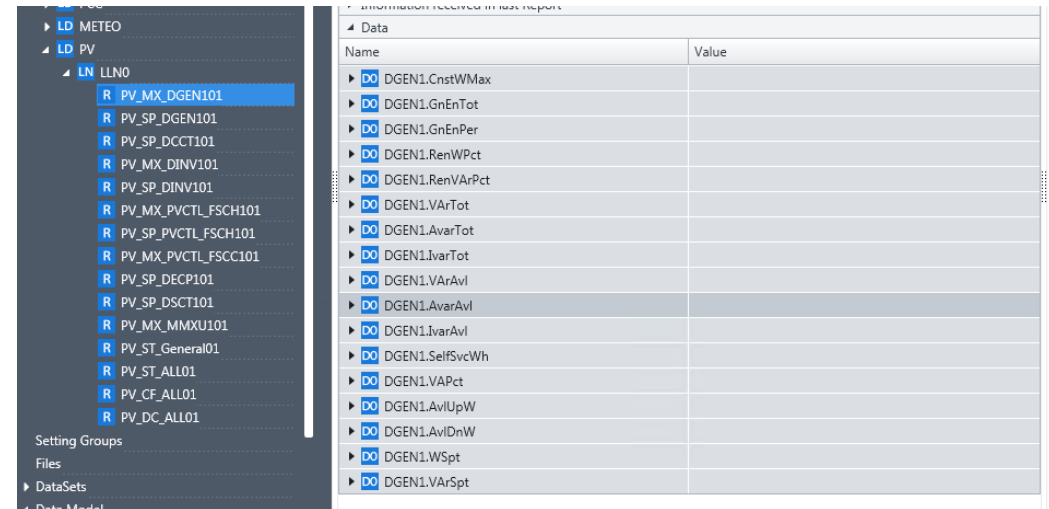
- **Relevante Studiengänge:** EE, EST, SYE, INF, CSE, etc.
- **Objectives:**
 - Which IEC 61850 CDC (Common Data Class) types are currently supported (or NOT supported) in libiec61850?
 - How can the values be read and write?
 - How to implement a framework to automatically validate the compliance of Data Objects of one specific IEC 61850 data model
 - How to systematically evaluate and interpret the results of this compliance validation?

- **How can this project help to build your competence?**

- Basic understanding of data engineering for energy system communication and data management
- Advanced knowledge of IEC 61850 data definition
- Basics in python programming

- Kontakt: Shuo Chen (shuo.chen@thu.de , AEA – W3.206)

- Supervisory professor: Gerd Heilscher (Gerd.Heilscher@thu.de , AEA – W3.204)



The image shows two screenshots from a software application. The left screenshot displays a tree view of data objects under the 'PV' category, with 'PV_MX_DGEN101' selected. The right screenshot shows a table with two columns: 'Name' and 'Value'. The table contains a list of data objects with their corresponding values, all of which are empty.

Name	Value
DGEN1.CnstWMax	
DGEN1.GnEnTot	
DGEN1.GnEnPer	
DGEN1.RenWPct	
DGEN1.RenVArPct	
DGEN1.VArTot	
DGEN1.AvarTot	
DGEN1.IvarTot	
DGEN1.VArAvl	
DGEN1.AvarAvl	
DGEN1.IvarAvl	
DGEN1.SelfSvcWh	
DGEN1.VAPct	
DGEN1.AvlUpW	
DGEN1.AvlDnW	
DGEN1.WSpt	
DGEN1.VArSpt	