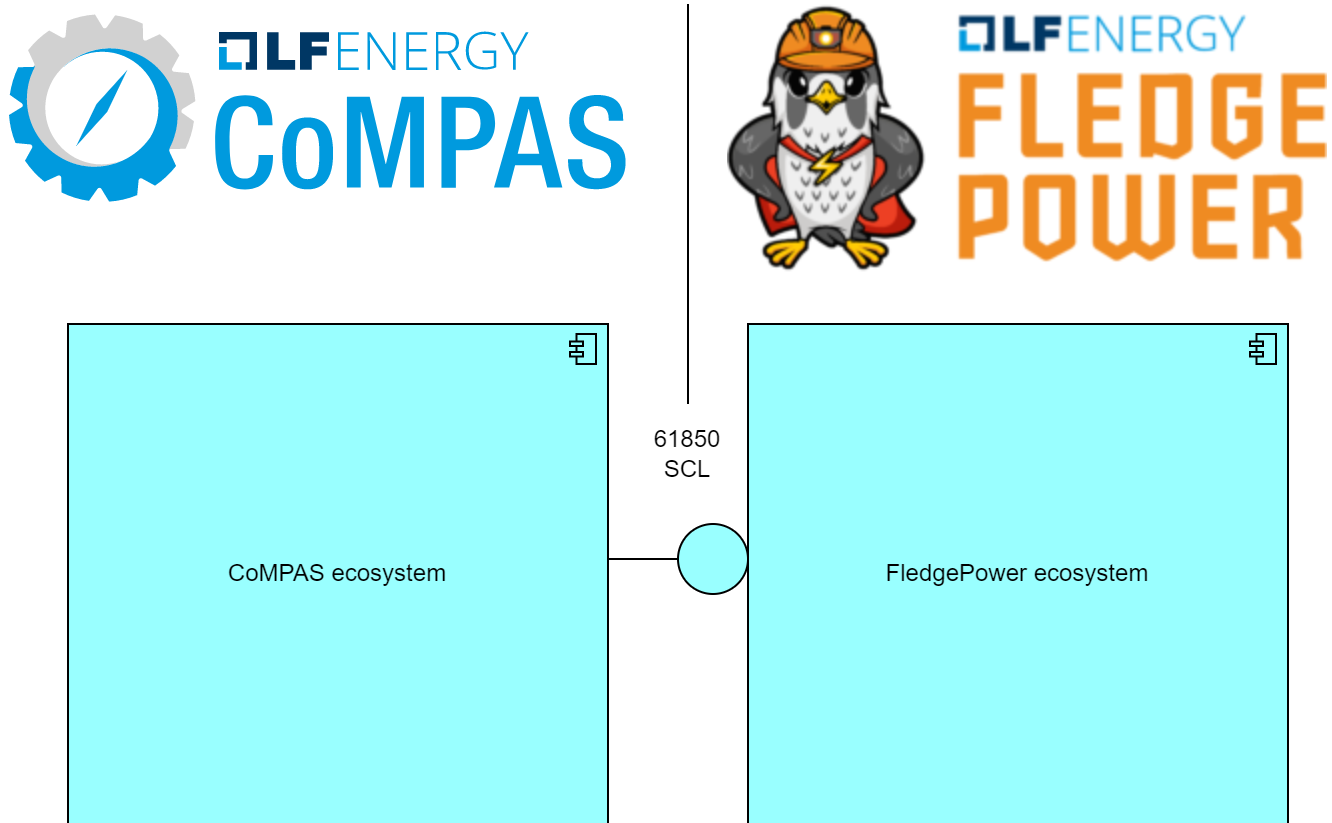# PowerConf - CoMPAS/FledgePower integration

CoMPAS provides software to build IEC61850 based configurations using 61850 system configuration language (SCL). This is standardized by the IEC and used my many (IED) vendors. In order to be interobable with current market trends, it would be nice if Fledge can support SCL input to configure FledgePower. FledgePower can be seen as a IED in 61850 terms (IED; intelligent electronic device). Fledge should be feed by a CID (configured IED description).

Idea of us using IEC 61850 SCL as intermediate format for configuring IEC61850.
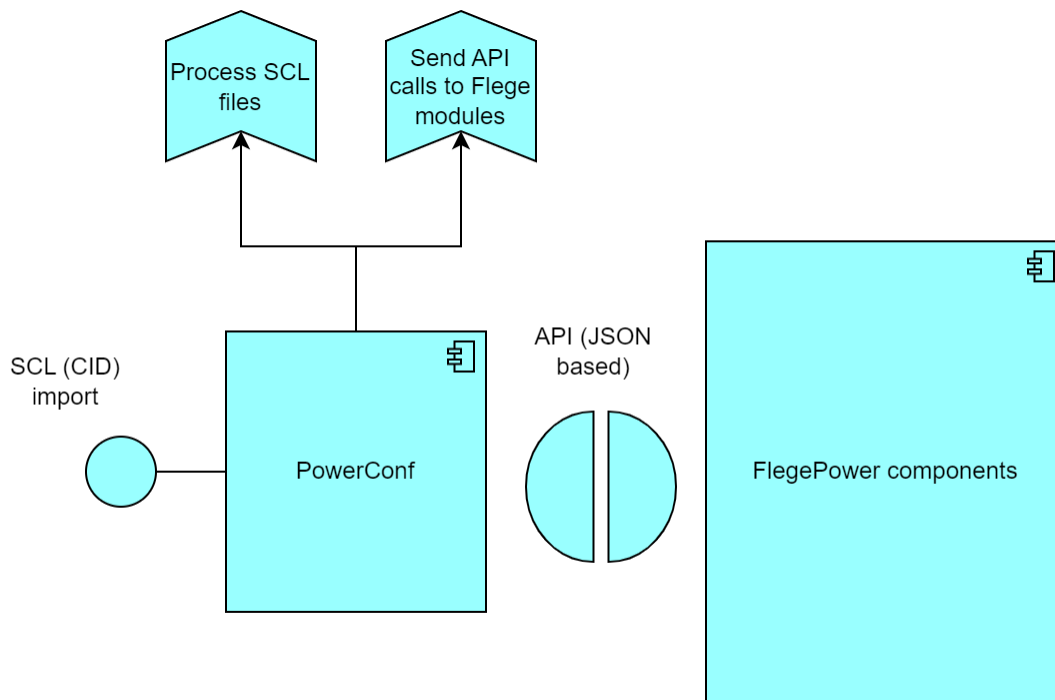
61850
SCL

CoMPAS ecosystem

FledgePower ecosystem

Open questions:

Does fledge need private extensions?

Where does FlegePower process the SCL file?

Solutions suggestion:

Process SCL files   **Send API calls to Flege modules**

SCL (CID) import

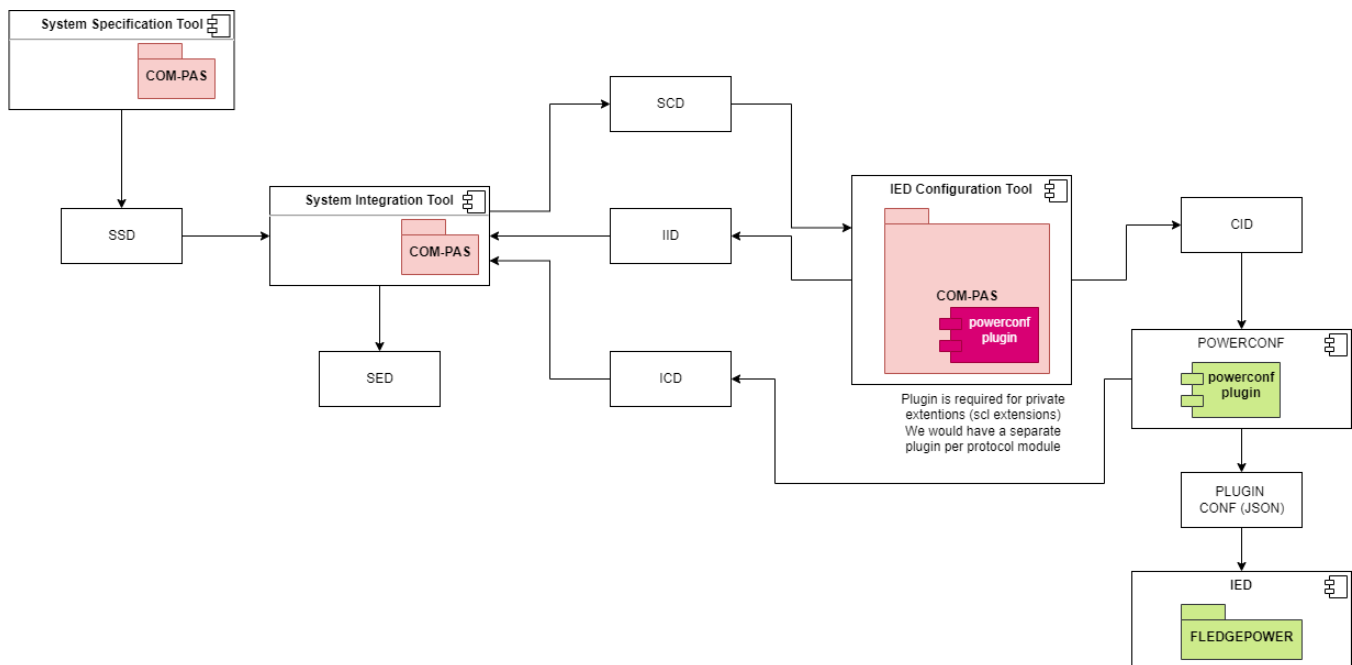**PowerConf**

API (JSON based)

FlegePower components

Build an SCL importer that can read the SCL based XML and covert it into API call to configure relevant Fledge plug-ins.

The SCL importer can be hosted centrally or on the local device itself.

61850 tooling and Fledge

Mapping between the 61850 engineering process and the tools

System Specification Tool	COM-PAS

SSD → System Integration Tool (COM-PAS) → SCD → IID → IED Configuration Tool (COM-PAS — powerconf plugin) → CID → POWERCONF (powerconf plugin) → PLUGIN CONF (JSON) → IED (FLEDGEPOWER)

SED, ICD

Plugin is required for private extentions (scl extensions) We would have a separate plugin per protocol module

Their is only a CoMPAS powerconf plugin needed is IEC 61850 <private> types are needed.

61850 to 104 gateway

In order to configure FledgePower as an 61850/104 gateway; The following IEC documents provide direction:

61850-80-1

61850-90-2

First tries:

[marcvanraalte/fledge-configuration (github.com)](github.com)