PowSyBl

Description

PowSyBl, short for Power System Blocks, makes it easy to write complex software to simulate and analyze power systems. PowSyBl uses a modular approach that allows developers to extend or customize its features. PowSyBl provides the code building blocks for the simulations and analyses of power systems, for horizons from real-time operation to investment planning.

PowSyBl provides an internal complete grid model, with substations, voltage levels, AC and DC lines, two and three windings transformers, batteries, generators, loads, shunt and static VAR compensators, and other components. The grid model can be enhanced with extensions that complete the required equipment modeling - dynamic profile, short-circuit profile, monitoring, etc. PowSyBl also provides import and export functions for several common pan-European exchange formats.

Technical Information

- Project roadmap
- Code repositories via GitHub
- Maintainers via GitHub
- Documentation via Github.io, including functional, technical, and user documentation
- User Story via documentation on Github.io
- How to Contribute via GitHub
- License via GitHub

Community

- Mailing list
- Regular meetings

Important Links

- Project Charter
- Web page on llenergy.org
- Documentation at https://www.powsybl.org/docs/getting-started - need to coordinate with project on how to maintain this going forward, including
  - Functional documentation
  - Technical documentation
  - User documentation
- Usage examples at https://www.powsybl.org/docs/user-stories
  - How to run a load flow with PowsyBl?
  - How to calculate capacity for a Regional Security Center?
  - How to deal with topological views in a voltage level?
  - Advanced tutorials https://www.powsybl.org/docs/tutorials/index.html
- Port functional documentation from each page at https://www.powsybl.org:
  - Grid Modeling
  - Grid Simulation
  - Grid Exchange Formats
  - Advanced Features