

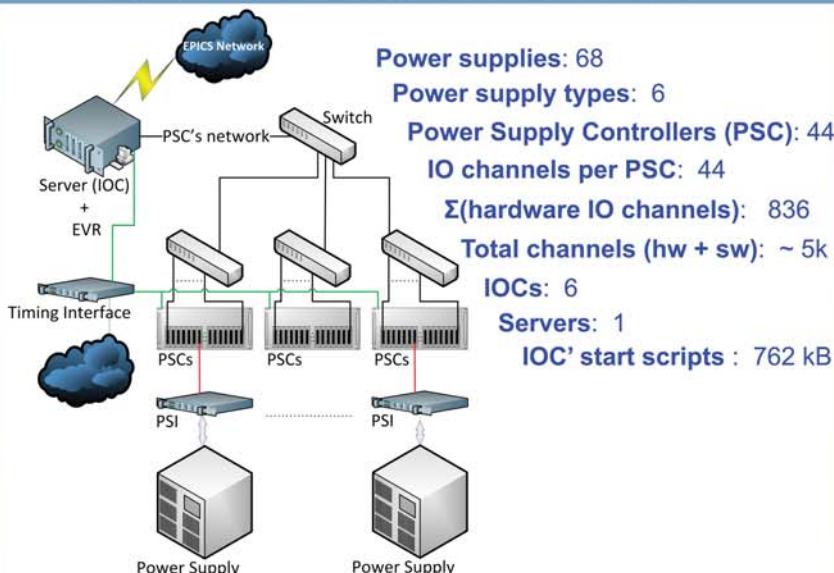
CONFIGURATION SYSTEM OF THE NSLS-II BOOSTER CONTROL SYSTEM ELECTRONICS



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Configuration information for any control systems comprises a large amount of data with non-trivial relations and dependencies...

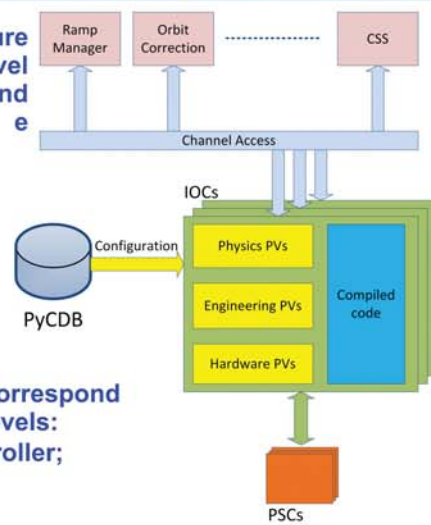
MAGNETIC SYSTEM



Creation and support of such amount of information is problematic without some means of automation.

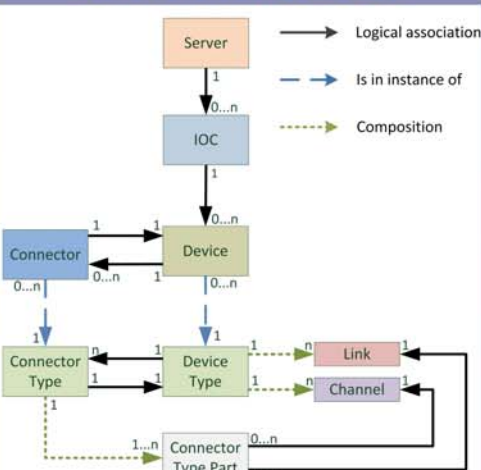
MAGNETIC SYSTEM SOFTWARE ARCHITECTURE

Three-layer architecture incorporates High Level Applications, IOCs and Hardware



PyCDB is a specialized tool, enabling centralized creation, editing and automated export to local storages information required for control system configuration.

DATA MODEL

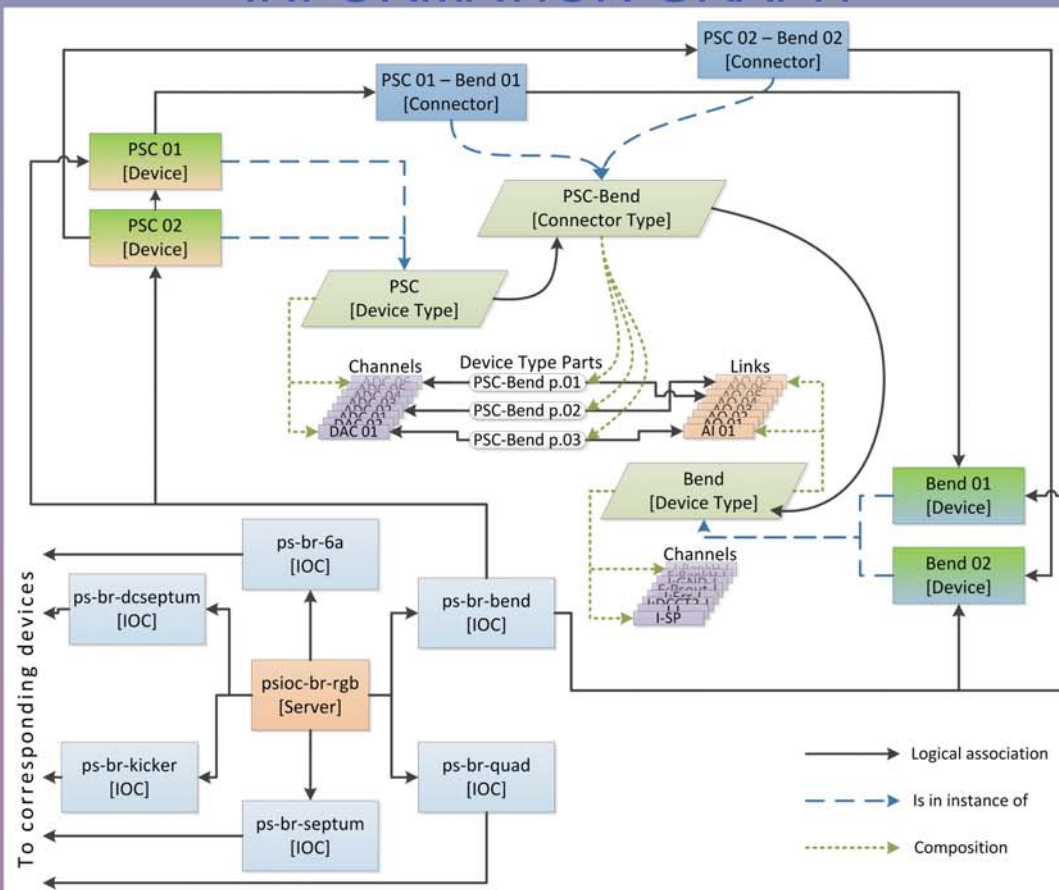


Data model allows to describe a structure of whole configuration information in the unified form by defining:

- entities with attributes;
- links between them;
- types of links;
- directions;
- multiplicity.

PyCDB use significantly decreases control system maintenance costs and minimizes human factor-related problems.

CONFIGURATION INFORMATION GRAPH



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