

Title: arKItect graphical DSL workbench

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Abstract:

arKItect workbench, edited by Knowledge Inside, has a consistent track record of customer applications in automotive, railways signaling, energy spatial, finance, and construction domains, e.g. Hitachi rail STS has been using it for SADT modeling as support to safety analysis of SIL4 systems since 2013 or Renault electrical vehicle MBSE started to be modeled in arKItect in 2011.

arKItect key features that make it unique on the market are:

- Simplified and much more intuitive metamodel, w.r.t Eclipse EMF/GMF metamodel or similar Object-Oriented workbenches.
- Interpreted; your changes in the data model are available immediately without compiling.
- low-code.
- Intuitive because just need the concept of sets to understand a data model.
- Usable by non-developers.
- Fully scriptable in Python
- Multi-user and collaborative.
- Generative views. A change anywhere is replicated automatically in every viewpoint where it is filtered.
- 2D views, providing the potential of including 2D/3D design in combination with functional modeling.
- Support for big models (100 000 objects)
- Import / Export capabilities through Python.
- Providing advanced features for user administration and configuration management, including Options, Variants, and Phases.

We will build a data model and a model from scratch in a Demo featuring most of the features.