KIELER Pragmatics

The *pragmatics* of model-based design refers to the practical aspects of handling graphical system models. This encompasses a range of activities, such as editing, browsing, or simulating models. We believe that the pragmatics of modeling deserves more attention than it has received so far. We also believe that there is the potential for signicant productivity enhancements, using technology that is largely already available. We address this research area in the following subprojects:

- **Eclipse Layout Kernel (ELK)**
  A key enabler for enhancing productivity is the capability to automatically and quickly compute the layout of a graphical model, which frees the designer from the burden of manual drawing. Therefore we offer an infrastructure for integration and configuration of automatic layout as well as Java-based implementations of high-quality layout algorithms for use in modeling applications.
- **KIELER Lightweight Diagrams (KLighD)**
  Building on the premise that graphical view are synthesized on-the-fly, this component offers a high-performance model browser that can be adapted to any kind of graph-based representation.

A number of examples of pragmatics technologies in action can be found on GitHub. The following might be of particular interest:

- osgiviz
  Visualizes OSGi project structures.
- DebuKViz
  Visualizes of data structures selected in Eclipse's *Variables* view while debugging.
- EcoreViz
  Visualizes EMF Ecore models.
- KlassViz
  Visualizes Java class hierarchies.
- KIELER Ptolemy Browser
  Interactive in-place browsing through hierarchical Ptolemy 2 models.

> There used to be many more project here, however, we don't have the manpower to maintain all of them. If you're interested you can find the old wiki pages in the Discontinued Projects section, which also lists the git commits which removed the corresponding plugins from our repository.