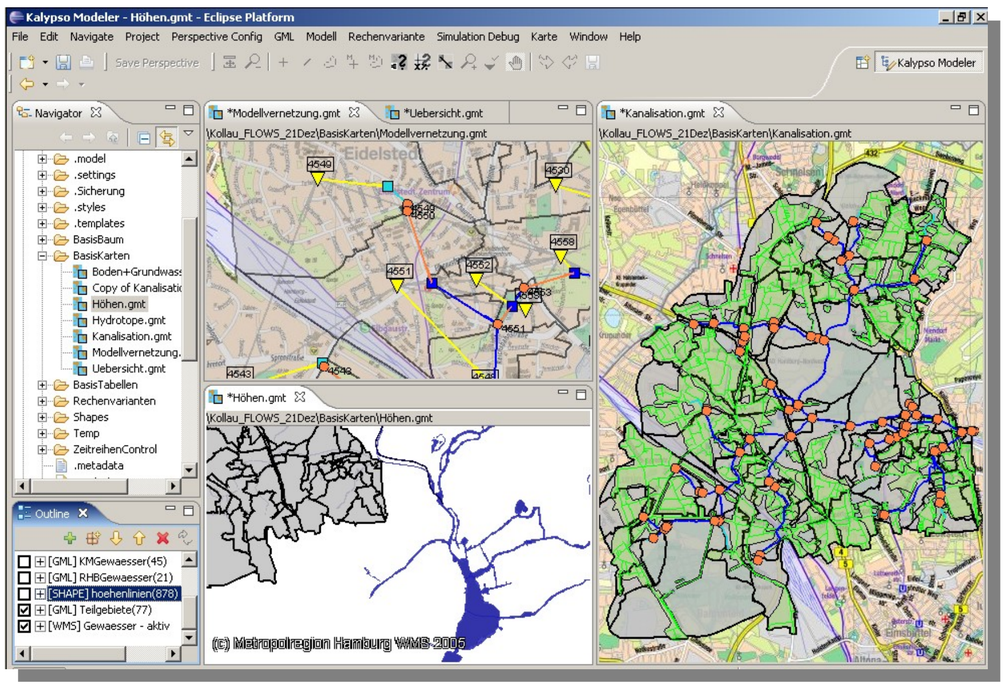
Kalypso-Simulation-Platform

an open source geospatial modelling and simulation platform



Visualization of a Rainfall-Runoff-Model in Kalypso, including arrow-like xlink-visualization.

Kalypso is a modelling and simulation platform for GML-based models. It is primarily developed to be a user friendly tool for the simulation of hydrological and hydraulic numerical models.

Thanks to Kalypso's underlying generic approaches of the GML implementation, one can use the platform to handle GML models of arbitrary nature.

Kalypso parses GML application schemas including depending ones such as the GML base schemas itself into a strong feature- and property-typed system by building on top of standard XML techniques such as SAX and Java API for XML-Binding.

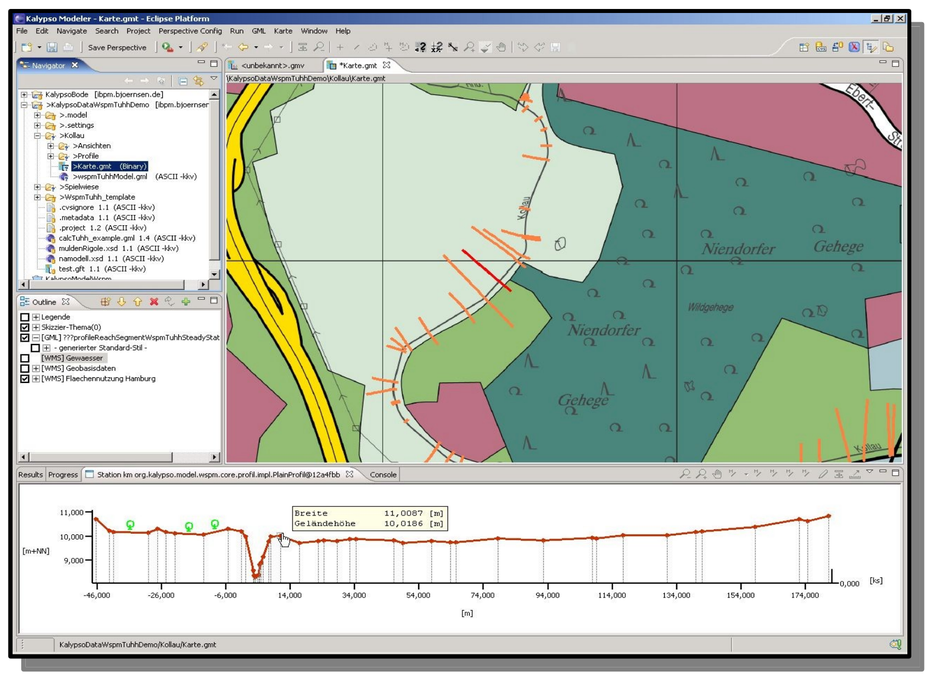
GML data can be visualized and edited in a generic way. Beneath generic GML views and editors such as map view, table view and tree view, other views can be registered to Kalypso via a plug-in interface for named feature types. This enables Kalypso for example to support GML-based modelling of river profiles (aka cross-sections) via a registered observation-profile editor for a river-profile.

Kalypso brings a service oriented architecture to integrate simulation-processes. Currently several numerical (hydrological and hydraulic) models for various river basins in Germany have been adapted.

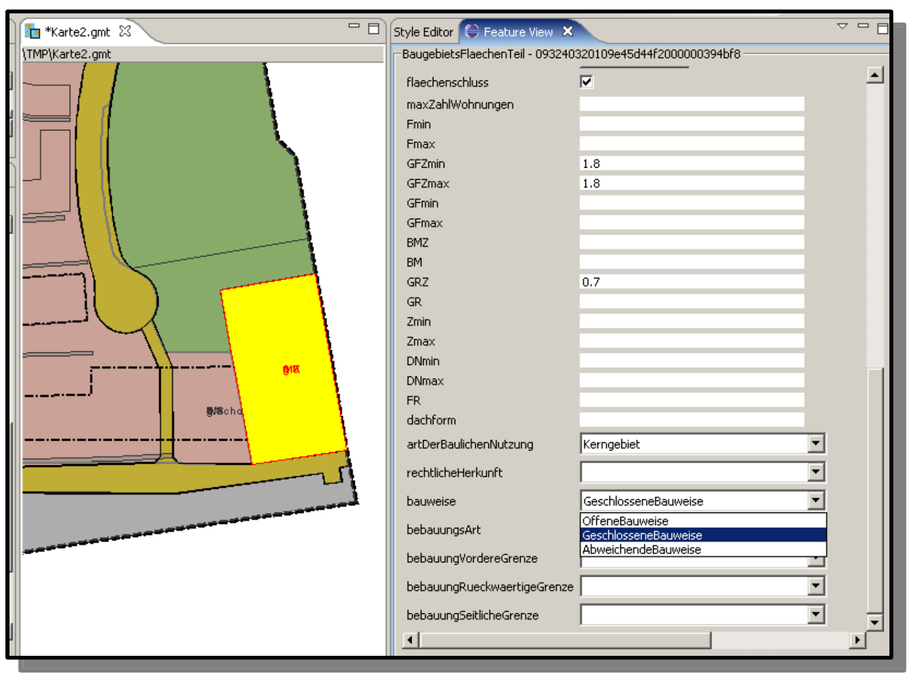
Kalypso is also a client for several OGC WebServices, such as WMS and WFS. The development of an SOS client is being undertaken as well.

Kalypso is a LGPL open source java application and among others it is based on the Eclipse Platform and on deegree.

Please visit http://www.kalypso-simulation-platform.org



Map-Editor visualizes river-profiles based on GML-observations (background: WMS). The user can edit the selected GML-observation via a registered river profile editor.



Kalypso`s Map-Editor on the left side and a detailed Feature-Editor to alter the selected Feature on the right.

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