Google Maps Field Editor

Lets assume you have a document and you want to attach a location to that document. For the sake of an example we'll pick landmarks. The Landmark document type will have parts :

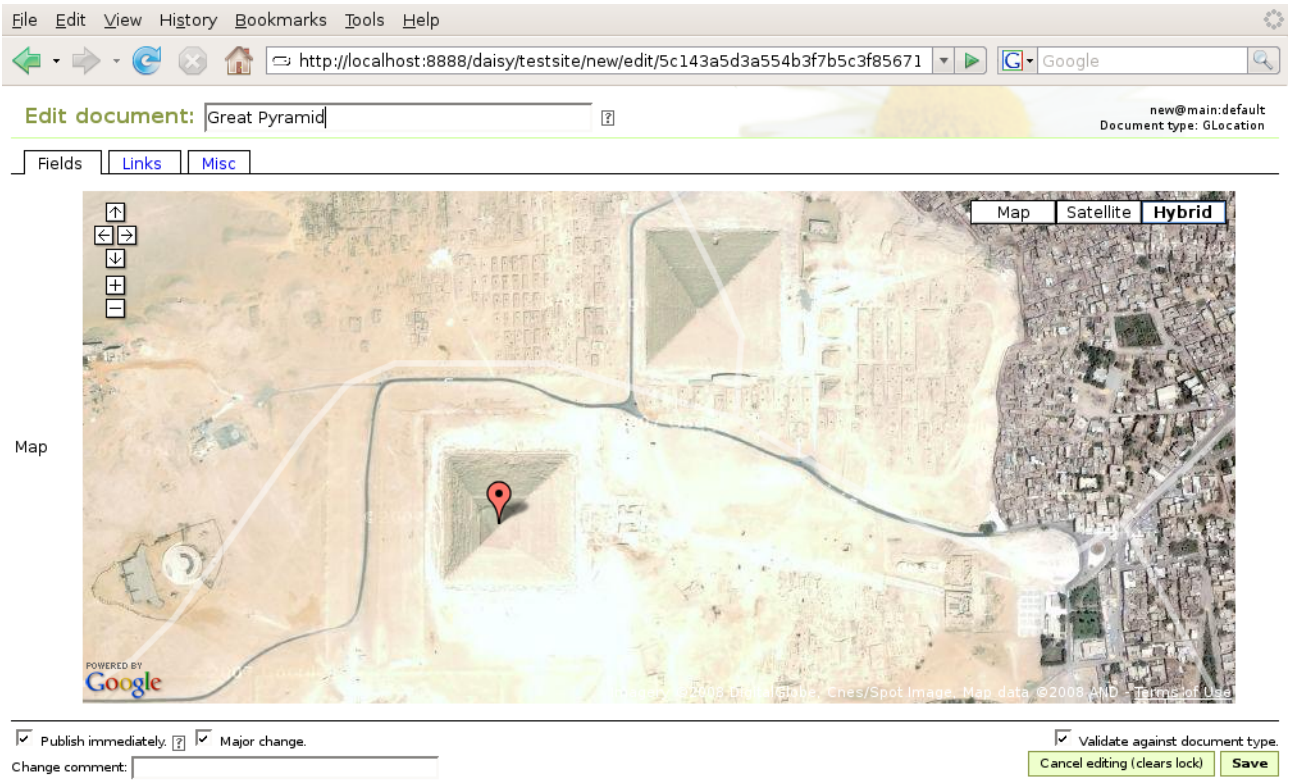
- SimpleDocumentContent : for a little description of what we are looking at (we'll just recycle this part)
- Image : for a picture of the landmark

and fields :

- GmapLocation : the field that will store the location

Now instead of having to figure out the latitude and longitude of the location we just want to use a map to pin point the location on. Enter the idea of a google maps field editor[1].

Here is a screenshot of what will be created.



Sample project

Download the sample files here:

- Daisy 2.4.2: gmapdemo_dsy242[2]

The xml and xsl files should be put under `<wikidata directory>/resources/fieldeditors/`

`The java file should be compiled, and made available via a jar file under <daisy home>/daisy/webapp/WEB-INF/lib.`

`The instructions in the README.txt will install Daisy and deploy everything needed to let you experiment with the Google Map Field Editor.`

GmapLocation

This field will have to contain a number of different values :

- latitude : double

- longitude : double
- zoom : long -- this is google maps specific and just used to store at which zoom level you wish to show the location

We want to store these 3 values in one field since we are talking about one concept, a location, which just happens to fall apart into a number of other primitives. Also a field editor can only handle one field. To solve this we will turn to the hierarchical fields. The position in the 'hierarchy' will thus carry a meaning : 0. latitude, 1. longitude 2. zoom. Since this will all be stored in one field we will store all three values as doubles.

To summarize GmapLocation will be a hierarchical field type of doubles.

Field editor

Configuration

We will start of by configuring our editor. Here we will define which class drives the editor and pass a few parameters :

- google key : this is the gmap api key we generate
- default latitude, longitude & zoom : where the map should be centered when we open up the editor for the first time

The field editor configuration can be found in the sample project under `daisy-main/src/main/dsy-wiki/resources/fieldeditors/GmapLocation.xml`

Editor class

This class extends the AbstractFieldEditor and overrides a number of methods. To compile this class you must have the following classes in your classpath (these can be found in <daisy wiki home>/webapp/WEB-INF/lib)

- avalon-framework-api-4.3.jar
- cocoon-2.1.11-dev.jar
- cocoon-forms-block.jar
- daisy-repository-api-2.2-dev.jar
- daisy-util-2.2-dev.jar
- daisywiki-frontend-2.2-dev.jar

The field editor class can be found in the sample project under `daisywiki-extensions/src/main/java/com/example/gmapdemo/GoogleMapFieldEditor.java`

Form definition

This is a blurb of cforms definition xml that will be inserted into the grand form of the field editor tab. Here we don't use base type 'double' but 'string' since the representation of the hierarchy is not a double but a string.

The form definition can be found in the sample project under `daisy-main/src/main/dsy-wiki/resources/fieldeditors/gmaplocation_definition.xsl.`

Form template

In this template the field where the actual hierarchical value goes is hidden and a google map is shown in it's stead. The map is centered on the default location when there is no value in the GmapLocation field. If there is one then the map will be centered there.

The form template can be found in the sample project under `daisy-main/src/main/dsy-wiki/resources/fieldeditors/gmaplocation_template.xsl`.

Fields

Name	Value
Category	Frontend (wiki) tutorials & extensions

1. /daisy-wiki/563-daisy.html?branch=daisydocs-2_2
2. /daisy-wiki/659-daisy.html?language=default