Hochschule Karlsruhe
Technik und Wirtschaft
UNIVERSITY OF APPLIED SCIENCES
Näher dran.

Development of a data platform for the Cultural Heritage Project Maulbronn Monastery

Introduction

The objective is to investigate the best solution to create a data platform to manage the cultural heritage of the monastery of Maulbronn. So, the data can be easily located through their metadata, and some users can add new data to the platform.
To find out the best solution, different geoportal has been analysed. After the analysis, the application or geoportal was developed with the best option.

Fig. 1 Maulbronn monastery

Comparison

Different geoportals developed with Portal for ArcGis, Geoportal Server, GvSig Online and Web Programming have been taken into account.
After an exhaustive analysis, the Portal for ArcGis option has been chosen as the most suitable for this project.
This decision has been taken because it is an already created platform, for this reason, the geoportal can be done more easily and quickly. Portal for ArcGis has almost all functions and tools that this Geoportal needs. Additionally, it is also possible to use Web AppBuilder for Developers, which is a platform that allows you to perform different tools.

Solution with Portal for ArcGis

To get the final application, some steps has to be followed.
The first step is to publish the data. A shapefile was created in which the extensions of all the data were digitized. Then, the attribute table was edited and the metadata of all the data were added. In addition, the data were published in the University Webserver, this generates a URL for each of the data that is added in the attribute table to access the data. Moreover, domains were created to facilitate the task of filling in metadata by adding data from the platform.
The second step has been to publish the previously created layer. Subsequently, a style has been assigned and the application has been created and configured. In the application, in addition to the basic Widget, other specifications for this application have been added:

- Filter Widget: used to search for data using its metadata (data type, year or by the author).
- Query Widget: it allows to locate data by the extension of the map or it shows the data that are within a polygon drawn by the user
- Edit Widget: allows adding new data to the platform, the extension is first drawn and then its metadata is included.

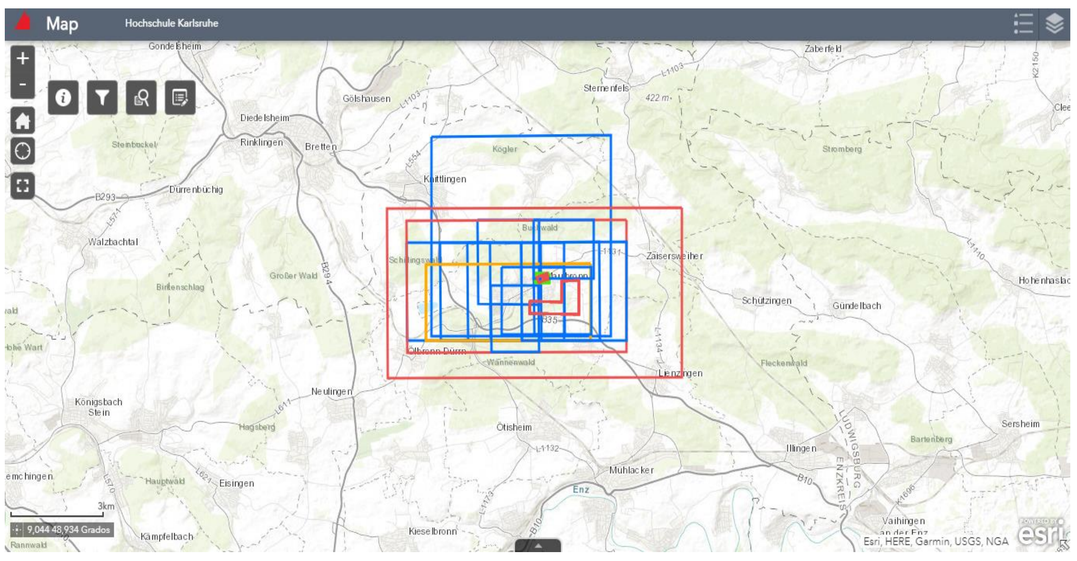

Fig. 2 Final result

Hochschule Karlsruhe – Technik und Wirtschaft
Fakultät IMM • Geomatics Master
www.hs-karlsruhe.de
Author: Jesús Nicolás Sánchez Martínez (saje1016@hs-karlsruhe.de)
Supervisor: Prof. Dr.-Ing. H. Saler
Dipl.- Ing. (FH) C. Stern
Prof. Ing. Eloina Coll