



The Geoportal of Rhineland-Palatinate

Central component for a SDI on regional level

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History



2005

- I. Establishment of a an organization to coordinate the buildup of the SDI for Rhineland-Palatinate by cabinet order
- II. Development of the concept for constructing a central Geoportal solution based on widespread used OGC standards <u>and</u> Open Source Software
- III. Tender for realizing the concept

2006:

Phase of realization

- IV. Development of fine-concept
- V. Programming of the needed modules

01/2007:

Opening the portal for public access

GDI-RP® 2007 - now:

Adopting the software to meet the additional requirements of users and INSPIRE

Key Points for the concept



Problems at the beginning

- Many mapservers had unclean implementations of the OGC standards
- Only a small number of institutions had OGC WMS
- There was no functional catalogue service specification to exchange standardized metadata (no encoding rules exists for ISO19115)
- The catalogue service specification don't support metadata about webservices! (the idea of a soa publish/find/bind concept could not be implemented at this time)
- Searching for single layer of a WMS or single featuretypes of a WFS was not possible

Consequences:

- The central component of the portal is a service registry based on a special relational database schema in which the service metadata xml files are cached and can be and qualified by the registrating person
- The search modules are not based on searching over OGC catalogue service interfaces, but on a direct sql search
- GDI-RP® The search goes down to the content of the OWS Capabilties documents the Rheinland Pfalz content of a hierarchial WMS is atomized to every single layer

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Key Points of the used software



Free and Open Source Software

- No costs for licences
- Freely distributable to other organisations/countries
- Scaleable without further software costs
- Many companies can work independent

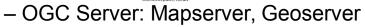
Only Software with big communities

Reducing the chance that the development will end some day

Used Software:

- CMS: Typo3 Typo3 met ♥
- RDBMS: mysql, postgresql/postgis
- Mediawiki











OGC Catalogue Broker (experimental): geonetwork-opensource











Key Points of Mapbender

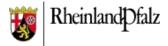


OGC Client

- → parallel requests of WMS
- → clientside:lightweight javascript client
- → serverside: php based
- → configurations: stored in postgres rdbms
- → multi GUI system
- → decentral administration of GUI's
- → supported standards: WMS / WFS / WFS-T / WMC / geojson / gml / georss
- → stateless integrable in external webpages (export of the wmc client configuration as an openlayers-javascript client HOWTO)



Key Points of Mapbender



Service Registry

- monitoring of registrated services
- central notification system for service provider
- subscription system for notification of service user
- central serving of all ows capabilities documents (per id) for the whole country
- Supporting UpdateSequence parameter for OWS capabilities caching
- central security component based on http-digest authentication
- can act as a OWS-proxy for the registrated services
- access thru proxy can be logged to database
- central user management and authorization system
- only one account for accessing all secured services in Rhineland-Palatinate



Live Demo



http://www.google.de/

Geoportal.rlp



What is Geoportal.rlp not?



- It's not a metadata broker
- it actually cannot harvest metadata from catalogue services
- by other metadata brokers but a very fast interface to publish the service metadata in the central german Environmental Information Portal (www.portalu.de)
- It's not an OWS Server only a facade for the capabilities documents



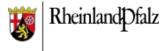
Use Case for a central Registry



- The concept was developed for a country with 4 mio people
 - → 24 NUTS 3 level regions
 - 163 LAU 1 level regions with own administrations
 - 2258 LAU 2 level regions without own administrations
- for the reasons mentioned above the maximum amount of OWS in this infrastructure would not become more than 5000



At the End



But it's **fast**, **relieable**, can serve many use cases – and the users like it!

Thanks for your attention!

