

Reference Application for EuroGeoNames Central Service

Demonstration and discussion of the applications first version

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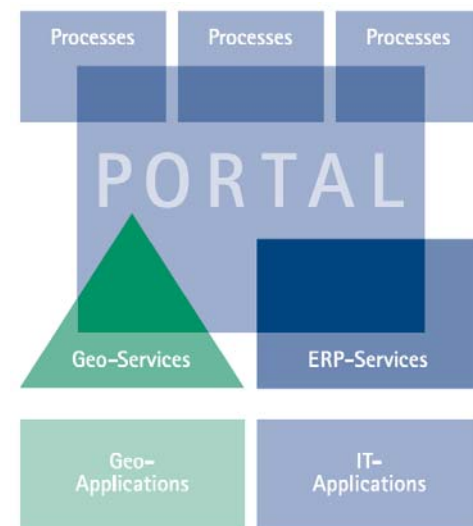
6th EGN Workshop in Freising (DE), 2nd June 2008

Content

- Introduction
 - Scope of the RA
 - Technical overview / Software requirements for end user
 - State of development
- **Demonstration**
- Inside the Reference Application
 - Discussion of technical aspects such as:
framework, multilingualism, map application, WMS Integration
(EuroRegionalMap), metadata and performance.

PRO DV / GeoTask Company Profile

- IT solutions and consulting partner
 - civil security, critical infrastructures, environmental protection, financial solutions, spatial data infrastructures
- Based in Dortmund (hq), Nürnberg, Dresden and Basel (GeoTask AG)
- Technologies
 - service oriented architectures (SOA)
 - portals and geo services



Objectives and Scope

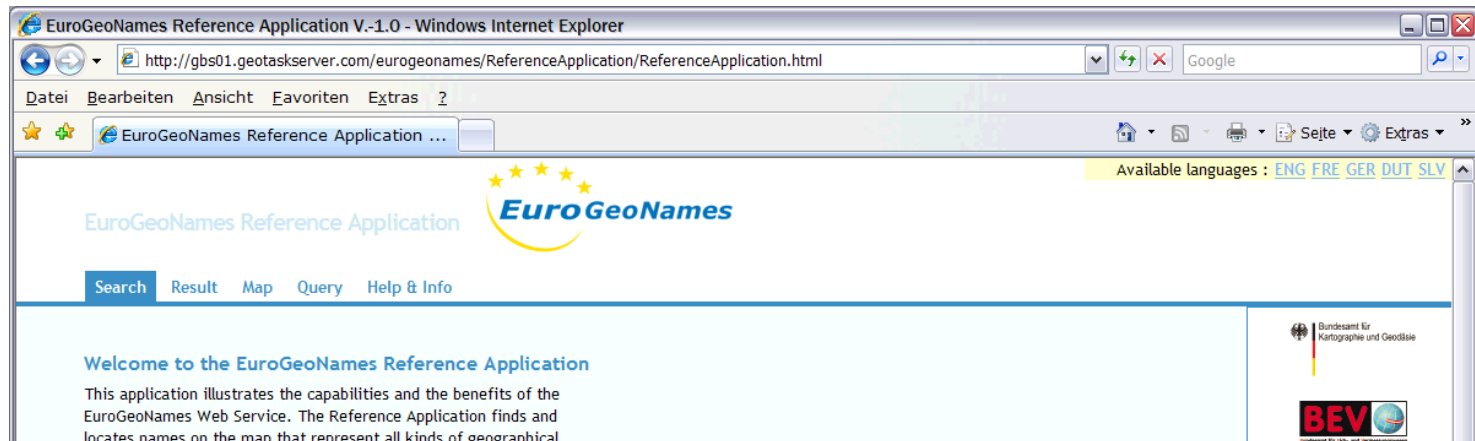
The Reference Application is the „Window“ to the EGN Web Service

What is it for?

- Define name searches and display results
= browsing through the data of EGN WebService
- Demonstrate full functionality of the EGN Web Service
- Illustrate potential usages for professional users
(Use Cases in WP2)

System Overview and Software Requirements

- Application type : Web Application



- Software Requirements

- Internet connection
- Web Browser
 - JavaScript enabled
- No other specific requirements to hardware and software

State of Implementation

- Almost full functionality available
 - Search options (missing: soundex)
 - Result display
 - Map representation of results
- Limited number and detail of geographical names
 - Reference Application uses a test EGN Web Service with limited number of datasets and limited details for geographical names description

Demonstration

- <http://gbs01.geotaskserver.com/eurogeonames>

Try yourself after the workshop:

- <http://www.eurogeonames.com/RefAppl>

System Architecture (1)

- Technologies :
 - Java, JavaScript, XML
 - GWT (Google Web Toolkit)
 - Google maps API
 - Deegree WFS

EGN Web Service Integration

- The Reference Application obtains the data from one single service
- Communication protocol: Web Feature Service (version 1.1) exclusively
- WFS Client integrated degree

Map Integration (1): Data

Two data Sources

1. Google Maps

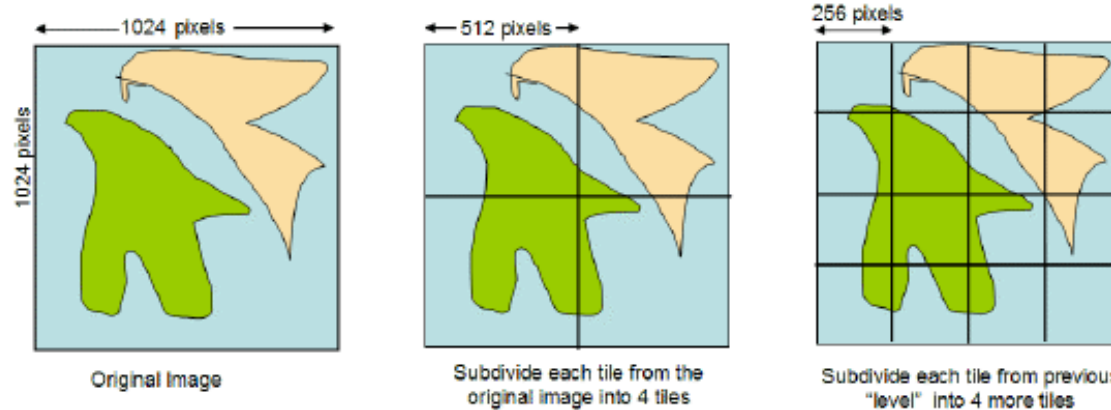
- Communication protocol: native Google Maps API

2. Euro Regional Map

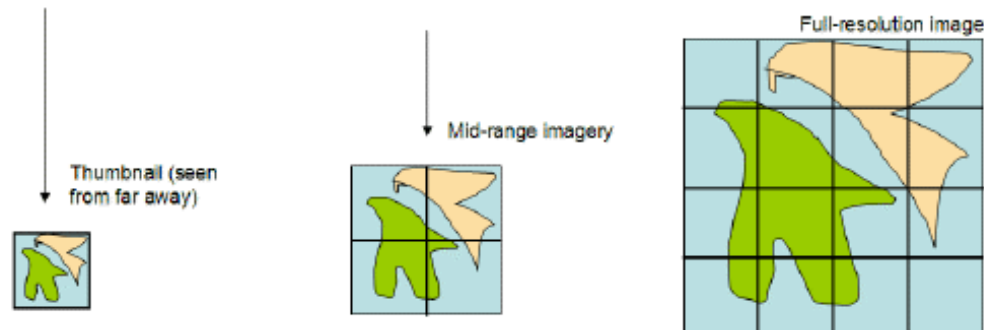
- Communication protocol: Web Map Service (1.1.1)
- Data optimized for usage with Reference Application
- Hosted at BKG (Frankfurt a. Main)

Map Integration (2): WMS Integration

STEP 1: Subdivide into tiles



STEP 2: Resample each tile to 256-by-256 so that we have different levels of detail



Metadata Integration (1)

- Current implementation:
 - RA is using EuroMapFinder <http://www.euromapfinder.net>
 - URL that points to the metadataset for each Local EGN Web Service can be configured in a configuration file.
 - Example Germany:
http://gbs02.geotaskserver.com/eurogg/getPresentationRequestResult.do?fileIdentifier=EuroGGTest_32&profile=GM03Comprehensive&key=gateway0
- Implementation may change in the future

Metadata Integration (2)

Multilingualism

- The Reference Application is prepared for an unlimited number of languages
- How to configure a new language
 1. Translation of codelists of EGN Web Service (languages, countries, feature classification,...)
 2. Translation of texts in user interface and online help

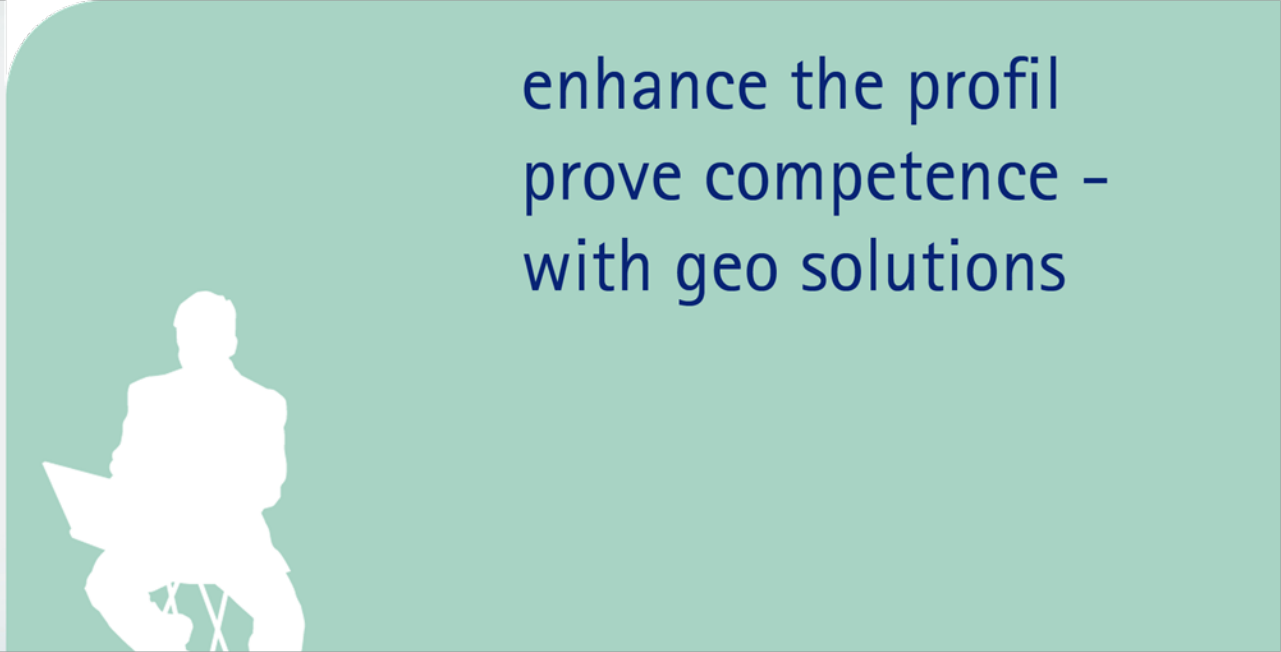
Reference Application fo

Order of Results

- | | |
|---|-------|
| 1. Exact match (endonym et exonym) | XXX |
| 2. Names beginning with search string (endonyms and exonyms mixed) | XXX* |
| 3. Names containing search string (endonyms) | *XXX* |
| 4. Names containing search string (exonyms) | *XXX* |

Next Steps of Development

- Extension of search options
 - Integration of soundex/fuzzy search
- Extension of result display
 - Result representation
 - „alternativeGeographicIdentifiers“
- Improvement of existing functions
 - Performance
 - Map Display (alternative version without Google Maps)
 - Add more languages in user interface



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Thank you for your attention

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