
EGN - local service

First attempt v_1.0

<http://egn.gov.si/deegree-wfs/>

NMCA Slovenia (SMCA)

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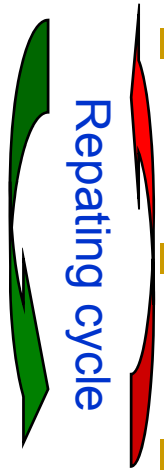
Goal

- To build local EGN service in the testing phase for testing purpose in the “EGN environment” (Postgres+PostGis+Deegree)
- To get knowledge about data model and data mapping between existing SMCA G.names and EGN ;
- To study - build in future local EGN service in “SMCA environment” (Oracle + ‘Geoserver’) as a final solution

Steps

- Study of models
 - EGN conceptual shema
 - EGN model \leftrightarrow Slovenian model
 - Mapping data between the models
- Instalation of the local service:
 - PostgreeSql + PostGis
 - Deegree
 - Security issues
 - firewall, proxy, list of allowed IP

Steps



Repeating cycle

- Export data from Slovenian model
 - Names are derived from the 1:25 000
 - Import data into EGN model (PostgreSql)
 - About 15 min for 54932 names
 - Testing
-
- Coordinate conversions
 - EPSG 3787 ---> EPSG 4258
 - Version 6.15 – 15 April 2008; New data for Azerbaijan, Bermuda, Canada, Croatia, Cuba, France, New Zeland, Pitcairn, Portugal, **Slovenia**, United States and Uruguay

EGN compliance check

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EGN compliance check for WFS servers, version 0.1

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Test subject 1: GetCapabilities

URL used for testing: <http://localhost:8090/deegree-wfs-dev/services?service=WFS&version=1.1.0&request=GetCapabilities>

>> Test 1.1: Is a response received?

Result: PASSED

Remark(s):

>> Test 1.2: Is the response received in time?

Result: PASSED

Remark(s): Response was received in 0.046 seconds.

>> Test 1.3: Is the response well-formed?

Result: FAILED

Remark(s): Error parsing XML: mismatched tag: line 1, column 1015

>> Test 1.4: Are the required feature types present?

EGN compliance checker
was not yet updated

Deegree generic client

Address  http://egn.gov.si/deegree-wfs/client/client.html  Go  Links 

deegree Version: 2.1 (2007/11/08 09:57 build-327-official) **[Home]**

deegree generic OGC WebService client

Service URL:

Choose example request: Example: Request:

```
<wfs:Query typeName="egn:LocationInstanceName" >
<ogc:Filter>
<ogc:PropertyIsLike wildCard="*" singleChar="#" escapeChar="!">

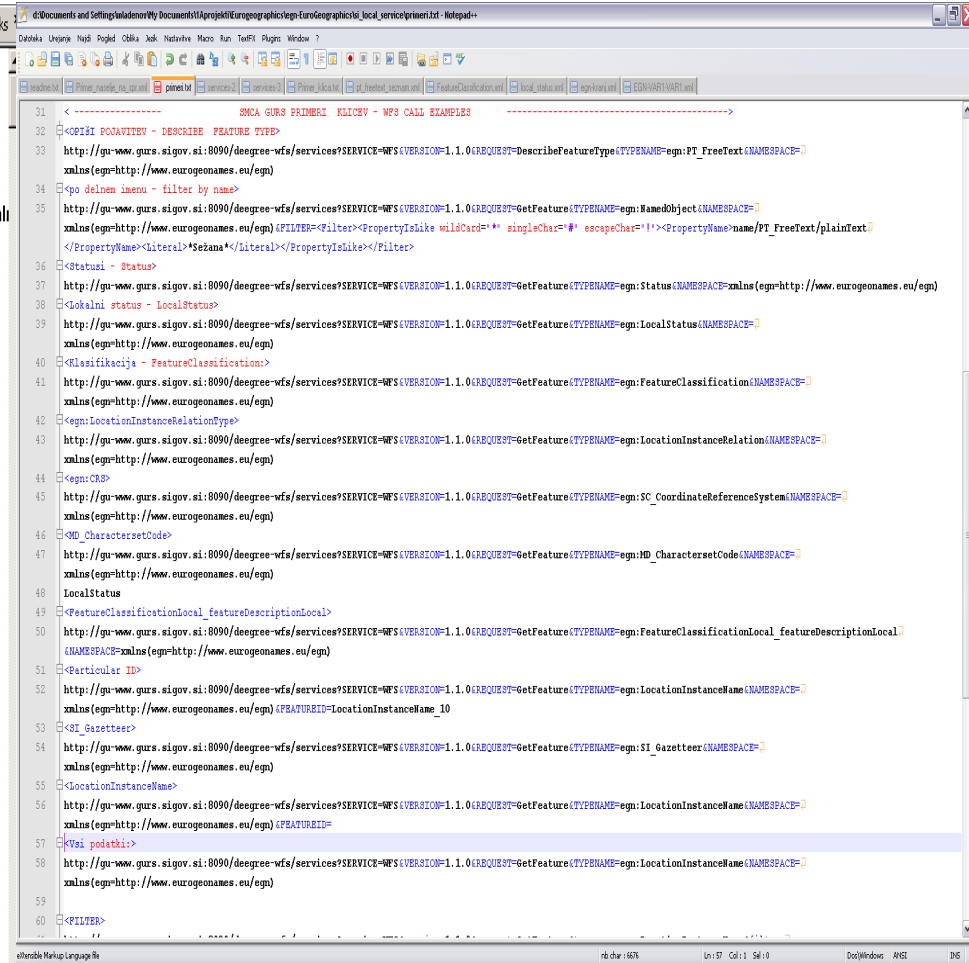
<ogc:PropertyName>egn:name/egn:PT_FreeText/egn:plainText</ogc:PropertyName>
<ogc:Literal>*Sežana*</ogc:Literal>
</ogc:PropertyIsLike>
</ogc:Filter>
</wfs:Query>
</wfs:GetFeature>
```

more info at deegree dot org and lat/lon, Bonn, Germany **[^]**

```
<gml:Point srsName="EPSG:31466" >
  <gml:coordinates cs="," decimal="."
    ts="">14.217734688536005,0.5707184307231963</gml:coordinates>
</gml:Point>
</egn:position>
<egn:administrator>GURS</egn:administrator>
<egn:historicalStartDate>1500-01-01T00:00:00</egn:historicalStartDate>
<egn:lastUpdateDate>2008-05-28T11:37:37</egn:lastUpdateDate>
<egn:locationType xlink:href="#FeatureClassification_7" />
<egn:locationTypeLocal xlink:href="#FeatureClassificationLocal_1101" />
</egn:LocationInstance>
</egn:LocationInstance>
</egn:LocationInstanceName>
</gml:featureMember>
</wfs:FeatureCollection>
```

[http://egn.sigov.si/deegree-wfs/services?SERVICE=WFS&VERSION=1.1.0&REQUEST=GetFeature&TYPENAME=egn:FeatureClassification&NAMESPACE=xmlns\(egn=http://www.eurogeonames.eu/egn\)](http://egn.sigov.si/deegree-wfs/services?SERVICE=WFS&VERSION=1.1.0&REQUEST=GetFeature&TYPENAME=egn:FeatureClassification&NAMESPACE=xmlns(egn=http://www.eurogeonames.eu/egn))

```
<?xml version="1.0" encoding="UTF-8" ?>
- <wfs:FeatureCollection numberofFeatures="35" xmlns:egn="http://www.eurogeonames.eu/egn"
  xmlns:gml="http://www.opengis.net/gml" xmlns:wfs="http://www.opengis.net/wfs"
  xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xmlns:xlink="http://www.w3.org/1999/xlink"
  xsi:schemaLocation="http://www.eurogeonames.eu/egn http://egn.gov.si/deegree-wfs/services?
  SERVICE=WFS&VERSION=1.1.0&REQUEST=DescribeFeatureType&TYPENAME=egn:FeatureClassification&NAMESPACE=xmlns
  (egn=http://www.eurogeonames.eu/egn) http://www.opengis.net/wfs
  http://schemas.opengis.net/wfs/1.1.0/wfs.xsd">
- <gml:FeatureMember>
- <egn:FeatureClassification gml:id="FeatureClassification_1">
- <egn:featureType>
- <egn:FeatureClassification_featureType gml:id="FeatureClassification_featureType_1">
- <egn:featureType>
- <egn:PT_FreeText gml:id="PT_FreeText_12">
  <egn:languageCode>eng</egn:languageCode>
- <egn:characterSetCode>
- <egn:MD_CharacterSetCode gml:id="MD_CharacterSetCode_4">
  <egn:text>utf8</egn:text>
  </egn:MD_CharacterSetCode>
  </egn:characterSetCode>
  <egn:plainText>Countries, administrative areas and other areas</egn:plainText>
  </egn:PT_FreeText>
  </egn:featureType>
  </egn:FeatureClassification_featureType>
  </egn:featureType>
  <egn:classificationScheme>EuroGeoNames</egn:classificationScheme>
- <egn:parent>
- <egn:FeatureClassificationRelation gml:id="FeatureClassificationRelation_1">
  <egn:parent xlink:href="#FeatureClassification_1" />
- <egn:child>
- <egn:FeatureClassification gml:id="FeatureClassification_2">
  <egn:featureType>
  <egn:FeatureClassification_featureType gml:id="FeatureClassification_featureType_2">
    <egn:featureType>
```



IS XML O.K. ?

```
6 <gml:pos srsDimension="2">14.221315941324043 0.5726988050930659</gml:pos>
7 </gml:Envelope>
8 </gml:boundedBy>
9 - <gml:featureMember>
10 - <egn:LocationInstanceName gml:id="LocationInstanceName_32739">
11 - <gml:boundedBy>
12 - <gml:Envelope srsName="EPSG:4258">
13 <gml:pos srsDimension="2">14.201145056359008 0.5726801030527207</gml:pos>
14 <gml:pos srsDimension="2">14.204584496162651 0.5726988050930659</gml:pos>
15 </gml:Envelope>
16 </gml:boundedBy>
17 <egn:locationInstanceNameID>32739</egn:locationInstanceNameID>
18 - <egn:name>
19 - <egn:PT_FreeText gml:id="PT_FreeText_32838">
20 <egn:languageCode>slv</egn:languageCode>
21 - <egn:characteretCode>
22 - <egn:MD_CharacteretCode gml:id="MD_CharacteretCode_4">
23 <egn:text>utf8</egn:text>
24 </egn:MD_CharacteretCode>
25 </egn:characteretCode>
26 <egn:plainText>"SeDana"</egn:plainText>
27 </egn:PT_FreeText>
28 </egn:name>
29 - <egn:status>
```

sezana_xml_v2.xml

Errors XPath Results Bookmarks Find in Files

[Xerces-J 2.7.1] Checking "sezana_xml_v2.xml" for Well-formedness ...
Well-formed Document.

Problems infrastructure

■ Infrastructure:

□ In general no problems

■ Windows XP

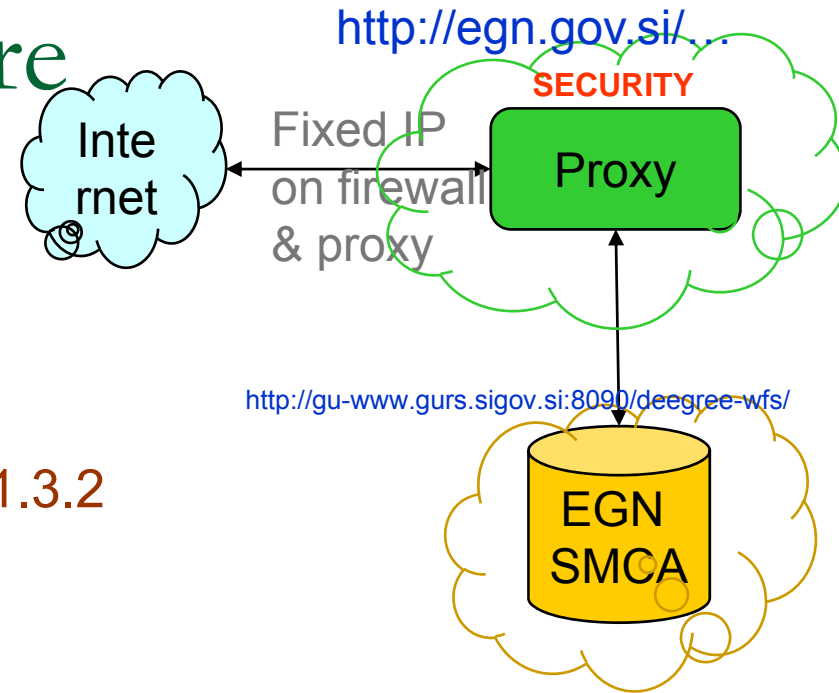
- PostgreSQL 8.2 + PostGIS 1.3.2
- Apache Tomcat/6.0.16
- deegree v.2

■ Linux SUSE 10

- PostgreSQL 8.2 + PostGIS 1.3.2
- Apache Tomcat/6.0.22
- deegree v.2

■ Proxy : time of inactivity (building index)

- *Query timed out*



Problems: model, data

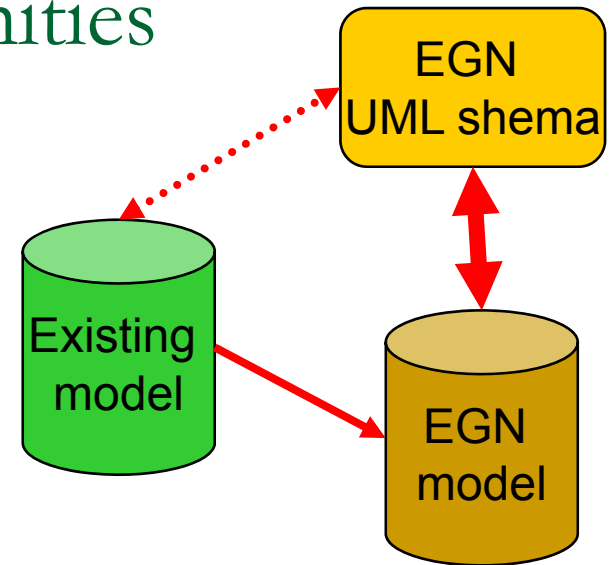
- Understanding of logical model (UMS Schema) and de-facto data model;
- Mapping data between the internal SMCA model and EGN model

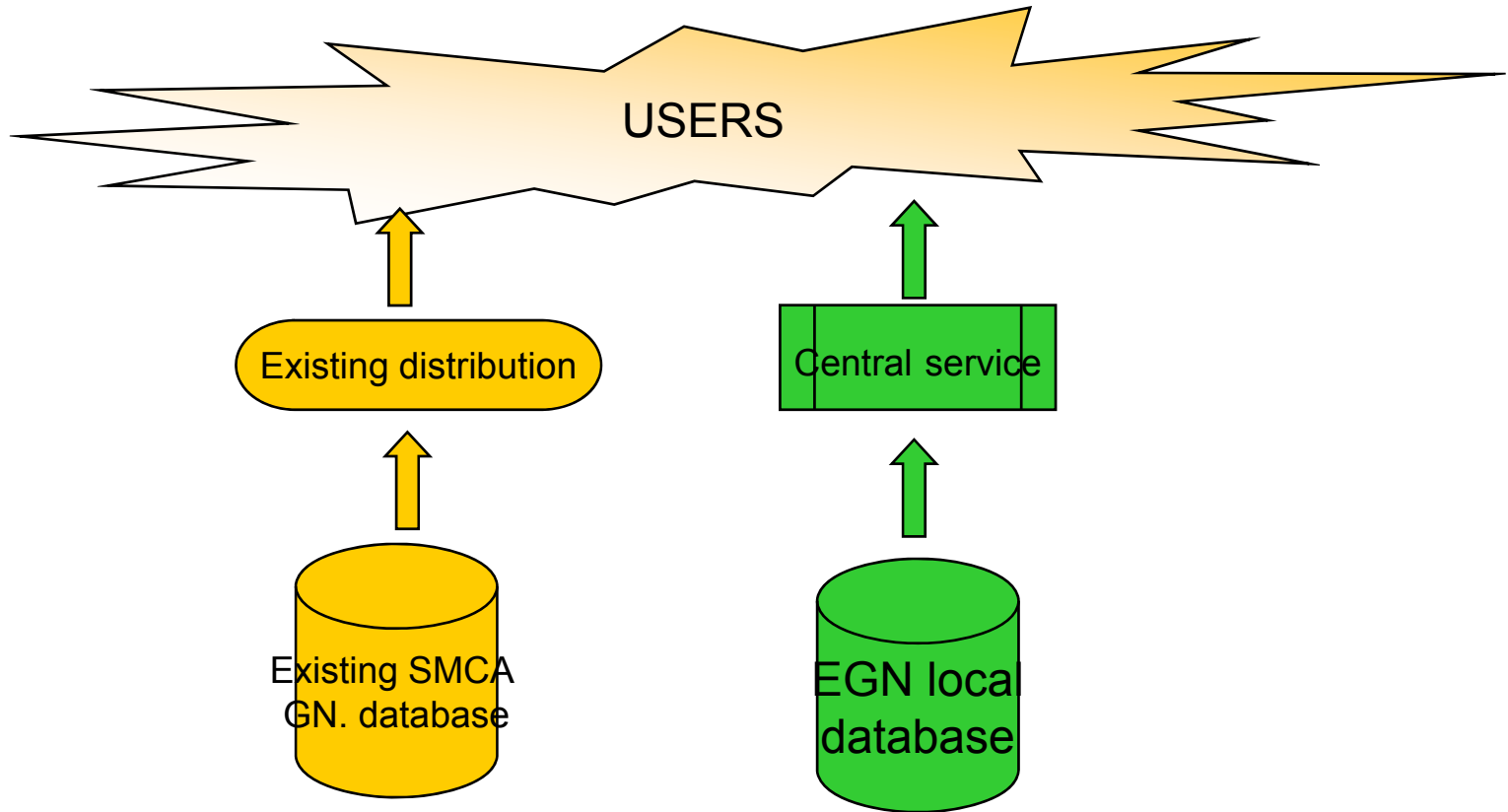
SMCA:

- Quality of existing data
- More cartographic approach – no object approach
 - No spatial object, geographic extend ?
 - Which position to take – first, second.. (river ...)?

Suggestions, threats, opportunities

- Conceptual schema, EGN data model and existing data model should be studied in detail before loading the data
- Windows – easy installation
- Linux, unix – some more work (PostGIS)
- Data model is still in evolution ?
-> modifications of data loading procedures
- INSPIRE ?
- Ability to add addresses, administrative units..

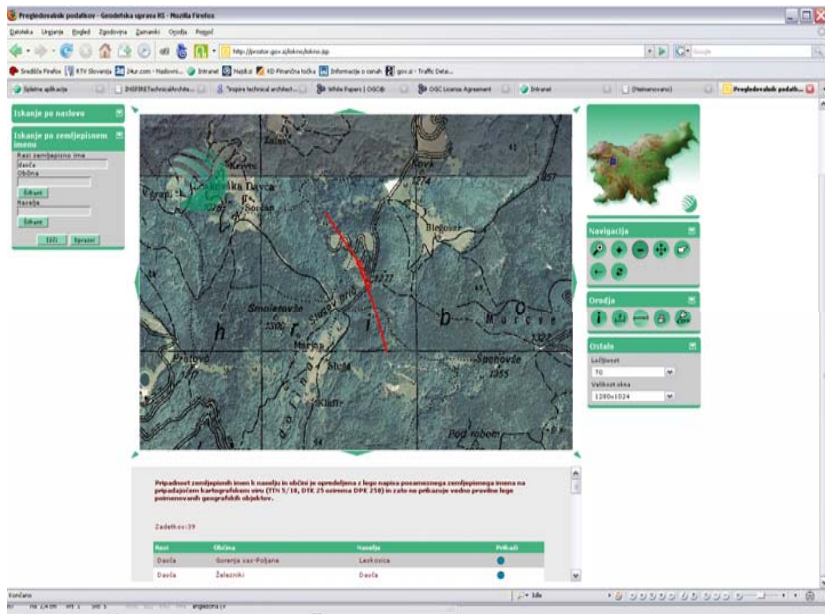




Data updating

Discussion

SMCA public viewer



Reference application

