IMPLEMENTING INSPIRE WITH FOSS4G

A Success Story
AGENDA

- INSPIRE - Intro & Challenge
- INSPIRE - Implementation with FOSS4G
- Success Stories
- Getting Involved
- European SDI spec
- Services
- (Meta)data
Local Data

INSPIRE Data

Web Services

Member countries of the European Union (EU)

WFS
WMS
CSW
WPS

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INSPIRE - CHALLENGES

Advanced ISO/OGC Standards

WFS 2.0 WMS 1.3.0

Complex Application Schemas: GML 3.2.1

Transforming local source data

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IMPLEMENTATION
On-the-fly Transformation

Offline Transformation

National Data (Oracle)

Extract Transform Load (ETL)

INSPIRE Data (PostGIS)

Web Feature Service (WFS)

INSPIRE GML
Architecture

InsPIRE Network Services

GeoExt Web Client

CSW

WMS

WFS

Tomcat

Java J2EE Server

Configurable (XML)

Schema Mapping rules of

simple features to

global (INSPIRE)

Application Schemas (on-the-fly-transform from

PostGIS)

GeoNetwork

harvest

deegree

SLD

Schema Mapping

Inspire-based RDBMS

data model in

PostGIS.

PostGIS

MetaData

DB

Script

XSLT

Unix shell

ETL

Oracle

National data is

transformed and

reprojected with XSLT

to INSPIRE data

model in PostGIS
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WORK IN PROGRESS

Local (National) Data → Extract Transform Load (ETL) → deegree 3 → INSPIRE Publish
1) WFS-T 2) deegree loader → INSPIRE Feature Store (BLOB or Hybrid) → Configuration Data
- INSPIRE Data Themes (XSD)
- Data Mappings (XML)
- WMS Styling (SLD)

INSPIRE Download Service (WFS)
INSPIRE View Service (WMS)
AND SOME FAILURES...
SUCCESS #1
GEONETWORK NL

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SUCCESS #2 ESDIN TESTS

11 participants

★ 10 provided a WFS
★ 6 of 10 provided compliant WFS
★ 4 of 6 used FOSS4G WFS
SUCCESS #3 NL KADASTER

Proprietary  Privative

FOSS4G

DATA TRANSFORMATION AND SERVICES FOR INSPIRE

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FOSS4G FOR INSPIRE - 3 REASONS

Picture from: http://cameronshorter.blogspot.com

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I. INTEGRATION IS KEY
2. SOLVE YOUR OWN PROBLEMS
3. COMMUNITY SUPPORT
GETTING INVOLVED

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INSPIRE @ OSGEO

WIKI

http://wiki.osgeo.org/wiki/INSPIRE_data_experiments

MAILING LIST

http://lists.osgeo.org/mailman/listinfo/inspire-data

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PROJECTS

http://code.google.com/p/geoext-viewer

http://code.google.com/p/inspire-foss

DOCU DEMOS AND INFO

http://inspire.kademo.nl

TRANSFORMATION & SERVICES

http://code.google.com/p/inspire-foss

WEB CLIENT

http://code.google.com/p/geoext-viewer