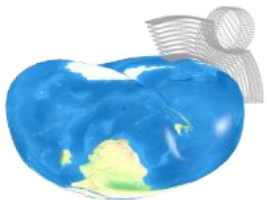




GeoNetwork & INSPIRE

Paul van Genuchten
GWF-INSPIRE 2015 Lisbon





- SME (8 employees) in Netherlands and Spain
- Founder of GeoNetwork opensource project
- Provides services, training and hosting around GeoNetwork and related SDI software



GeoNetwork opensource

- Catalogue for (spatial) data, services and maps
- Data Discovery, Management, Conversion, Harvesting, Validation
- Support for OGC, W3C, TC211 & INSPIRE standards
- <http://geonetwork-opensource.org>



GeoNetwork 3 released

- Total rewrite of User Interface (AngularJS/Bootstrap)
- Components moved to Spring MVC + hibernate
- Configurable metadata editing forms and views
- OpenLayers 3
- ISO19115-3
- Monitoring and reporting options

Search ...



Sorted by low scale first 1 - 20 on 5108

TYPE OF RESOURCES

- Dataset 4749
- Service 325
- Series 30
- service-view 3
- Collection session 2
- [1 more](#)

TOPICS

- Climatology, meteorology, atmosphere 34
- Structure 10
- Imagery base maps earth cover 7
- Location 5
- Boundaries 2
- [4 more](#)


KEYWORDS

- Climatology, meteorology, atmosphere 23
- climate 22
- klimaat 22
- neerslag 14
- precipitation 11
- [10 more](#)

CONTACT FOR THE RESOURCE

Categories

☆☆☆☆☆



Financiële kenmerken

Categories


☆☆☆☆☆



WOZ-waardeontwikkeling van een gemeente

Categories


☆☆☆☆☆



Long term average 1981-2010 - Average yearly minimum temperature
Royal Netherlands Meteorological Institute (KNMI)

Categories


☆☆☆☆☆



KNMI'14 transformed time series: reference evapotranspiration (Makkink)
Royal Netherlands Meteorological Institute (KNMI)

Categories

☆☆☆☆☆



kaart WOZ-waarde per inhoud van een gemeente

Categories

☆☆☆☆☆



KNMI14 Daily precipitation GL
Royal Netherlands Meteorological Institute (KNMI)





paul van genuchten (Administrator)



Sign out

English



Search a place

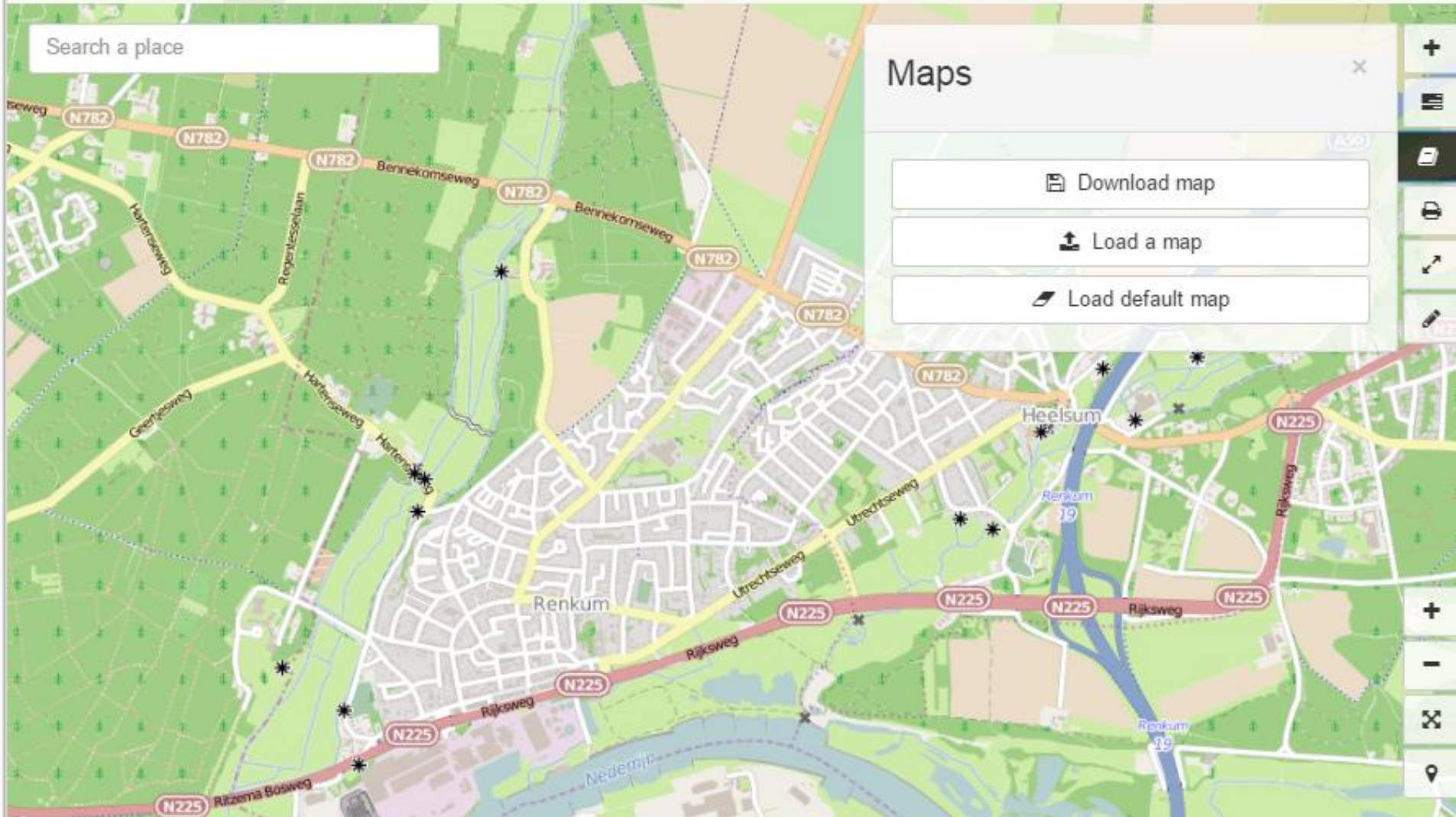
Maps



Download map




Load a map

Load default map



Create a


Create a Dataset

-  Dataset
-  Map
-  Service


From Deegree22 WFS Fragments Philosopher Database Test Template

- Deegree22 WFS Fragments Philosopher Database Test Template
- Geoserver WFS Fragments Country Boundaries Test Template
- HARVESTING TEMPLATE - THREDDS - UNIDATA DISCOVERY
- Template for Raster data in ISO19139
- Template for Vector data in ISO19139 (preferred!)
- Template for Vector data in ISO19139 (multilingual)


In ...

Sample group 


 + Create 




Metadata and templates




Harvesting




Statistics and status




Reports




Classification systems




Standards



Users and groups



Settings



Tools

4754

Dataset

325

Service

30

Series

3

service-view

2

Collection session

1

service-download

5113

records in the catalog



GeoNetwork to set up INSPIRE services



Configure GeoNetwork

- Activate INSPIRE extension
- Configure CSW server
- Register dataset by uploading data and publish to GeoServer
- Configure GeoServer CSW harvest (iso19115)
- Configure WMS, WMTS, WFS, WCS or Atom service harvest (iso19119)

INSPIRE Directive configuration

INSPIRE

Enable INSPIRE CSW (ie. language support and INSPIRE GetCapabilities document) and INSPIRE indexing. INSPIRE themes thesaurus MUST be installed to properly index themes and annexes.

INSPIRE search panel

Enable search panel (Ext search only).

Atom feed

 Execute harvester

Schedule for feed retrieval

Atom protocol value



- Data Server supporting WM(T)S, WCS, WFS
- Embedded in GeoNetwork
- Publish data from GeoNetwork to GeoServer and/or harvest metadata from GeoServer



Configuring GeoServer

- Install INSPIRE and CSW extension
- Set properties of CSW
- Fill required form fields when creating workspaces, services and layers

INSPIRE Extension



GeoServer

[About](#) | [Blog](#) | [Download](#) | [Documentation](#)

Search Documentation...



[GeoServer 2.8.x User Manual](#) » [Extensions](#) » [INSPIRE](#) » [Installing the INSPIRE extension](#)

[previous](#) | [next](#)

Installing the INSPIRE extension

The INSPIRE extension is an official extension available at [GeoServer download](#) pages (starting with GeoServer 2.3.2).

1. Download the inspire zip release file from the download page of your version of GeoServer
2. Extract the archive and copy the contents into the `<GEOSERVER_ROOT>/WEB-INF/lib` directory.
3. Restart GeoServer.

To verify that the extension was installed successfully, please see the next section on [Using the INSPIRE extension](#).

Previous: [INSPIRE](#)

Next: [Using the INSPIRE extension](#)

Continue Reading

» [Previous: INSPIRE](#)

» [Next: Using the INSPIRE extension](#)

This Page

» [Show Source](#)



Some related themes



Iso19139 to DCAT RDF

- Link with Open Data Community (import in CKAN)
- Export iso19139 from GeoNetwork (as DCAT)
- Import in Virtuoso (sparql)
- JRC has a working group on dcat-ap-geo
- Questions:
 - How to encode geometry
 - How to link to data (data encoding)
 - persistent URI's for geometry records
 - Map service metadata to DCAT-catalog?



Conformance testing (MIWP-5)

- Use cases for testing – ATS – ETS
 - <https://github.com/inspire-eu-validation>
- Some expect ETS could be based on Team Engine
 - <https://github.com/opengeospatial/teamengine>
- Alternative Testing Framework (SoapUI)
 - <http://elfproject.eu/documentation/geotool/etf>
- <http://inspire-geoportal.ec.europa.eu/validator2>

GeoNetwork & Citizen Science

- GeoCat is part of an FP7 research project to improve data acquisition and reuse of data in citizen science; COBWEBproject.eu
- Observations from mobile phones are managed as sensor readings
- Exposed to GEOSS/INSPIRE as Sensor Observation Services
- Data is conflated with other datasets to validate the quality



COBWEB
Citizen Observatory Web

Software in COBWEB

- GeoNetwork improved for SAML support and Sensor services.
- FieldtripOpen is a mobile framework to support data acquisition on phones
- GeoServer and 52North for OGC services
- (Virtuoso?) for SPARQL/RDF services
- Sixth is a sensor framework
- R for statistical analysis



COBWEB
Citizen Observatory Web



Find a survey and start contributing



Featured surveys

Take a tour


Calendar



(MEET) Underwater Experience

"Mediterranean Experience of Ecotourism" Record the fish species that you encountered.
Καταγράψτε τα είδη ψαριών που συναντήσατε στην υποβρύχια

[Read more](#)



Ysgol Bro Hyddgen Tree Survey Edit 2

Help us find what species of tree grow in and around your school.

[Read more](#)



LLL Bird Sounds

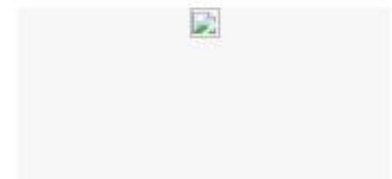
A test to Identify Birds within Coed Gwern

[Read more](#)

Surveys

Sort by

[Search](#)





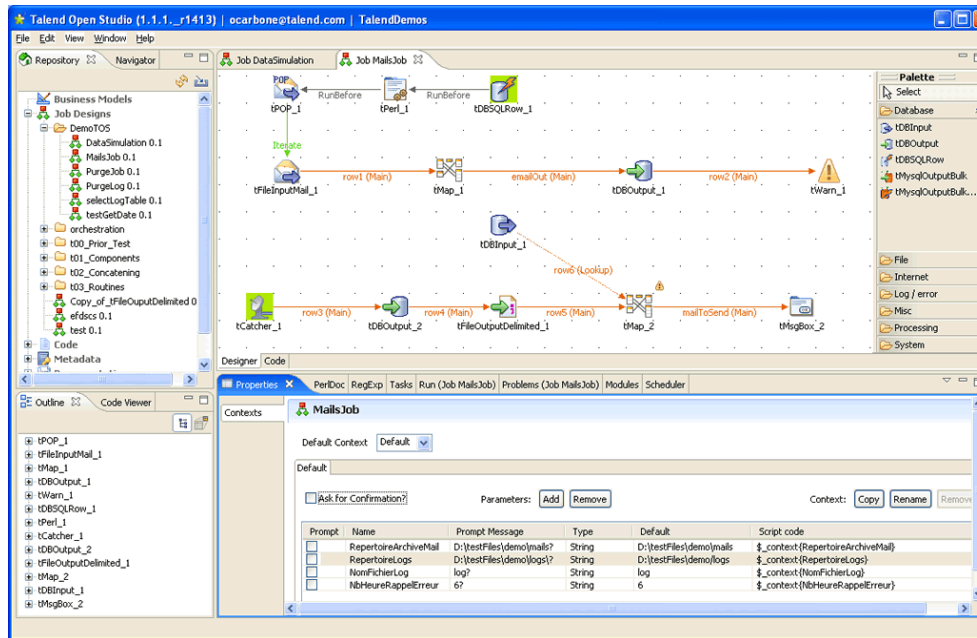
Some related Software Packages



- Framework for INSPIRE services based on deegree
- Embedded ETL and Web GUI to define ETL
- Creates required metadata from web forms

<https://github.com/CDS-INSPIRE/InSpider>

SpatialDataIntegrator.org



- Spatial extension on Talend Open Studio
- GUI to define ETL and export as jar

stETL.org

- Streaming ETL
- Python scripting framework based on XSLT and GDAL/OGR
 - Shape -> OGR -> GML -> xslt -> INSPIRE GML
 - Streaming (chunks of xml)
- Originated at dutch cadaster and maintained by nlextract.nl community

GeoCat Bridge



- Extension for ArcGIS to publish data from ArcMap to Mapserver, Geoserver, Postgis and/or GeoNetwork
 - Converts and uploads data
 - Creates SLD from ArcMap styles
 - Converts metadata to INSPIRE profile

DAOBS

- INSPIRE Monitoring and Reporting tool
- Based on Banana (SOLR port of Kibana)
- Harvesting based on Apache Camel

<https://github.com/titellus/daobs>





Thank you