GeoNetwork Opensource

Workshop FOSS4G-E 2017 Marne de la Vallee

What and Where

- The documentation for this workshop
- The software for this workshop

GeoNetwork

GeoNetwork facilitates discovery of spatial resources (datasets/service) in any SDI

The GeoNetwork project was founded at FAO over 10 years ago.

GeoNetwork opensource is the geospatial catalog of choice in most European National portals as well as in many other countries, cities and organisations around the world.

Getting started

We will start with a basic installation to get your own dedicated catalog based on a latest GeoNetwork version 3.x.

Search from QGIS

QGIS (metasearch) will be used as an alternative user interface to query GeoNetwork.

The editor

Author metadata

Develop custom metadata templates

Metadata validation

Configure the editor

Workflow

- Enable workflow on metadata to allow metadata modifications to go through publication states
- Upcoming release will have a draft workspace, which replaces published records once an edit is authorised for publication

Harvesting

Harvesting of spatial data resources from remote servers will be configured

Interfaces

Various different interfaces that GeoNetwork offers, such as the Angular- and Formatter Web Interfaces, Swagger API, the OGC CSW/ISO, OAI-PMH, RDF and INSPIRE Atom interfaces.

Search engines

- · Search engines like fast html pages on fixed URL's
- · GeoNetwork has formatters which offer that, but
 - tweak to get proper layout for formatted metadata
 - configure the sitemap to link to formatted pages
 - update share-links to link to formatted pages
 - add schema.org annotations

Linked data

Modify the iso19139-to-DCAT template inside schema-plugin

Design an effective URI for entity identification and retrieval

Configure Content negotiation on the metadata URI

Configure data services

Set up geospatial web map/feature services using a linked GeoServer and configured for access through the catalog web interface.

Considerations

HTTP(S)

- Embedding http resources in https pages throws "mixed content" errors. But offering login functionality over http is deprecated.
- Java may run into certificate problems when requesting external https resources. Java allows a subset of generally accepted root certificates

Webproxy and CORS

- If a GeoNetwork webclient queries an external server (getcapabilities/getfeatureinfo), it will use a web proxy to prevent cross domain errors, in case the external server does not support CORS.
- CORS is much more favourable due to performance and authorisation aspects.
- Webproxy should be limited to fixed set of domains