

Developing the glue for a global geospatial data infrastructure

Jeroen Ticheler







Founder and Chair



GeoCat focus is on knowledge of specific parts of the SDI

Describe - Publish - Find

SERVICES GEONETWORK OPENSOURCE IMPLEMENTATION









GeoCat focus is on knowledge of

Open Source Software Development



GeoNetwork Opensource

Server software









Desktop or portable applications



It started in 2000 at



with initial support from:









A very comprehensive metadata editing and management system

The Basic Building Blocks

ISO TC2 | I Standards

OGC Standards
 (Open Geospatial Consortium)

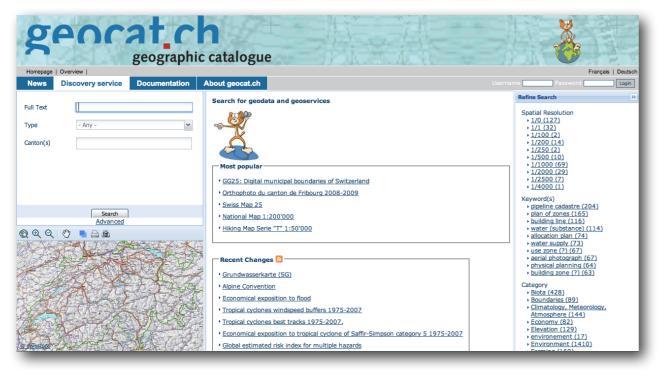
The glue in a Spatial Data Infrastructure



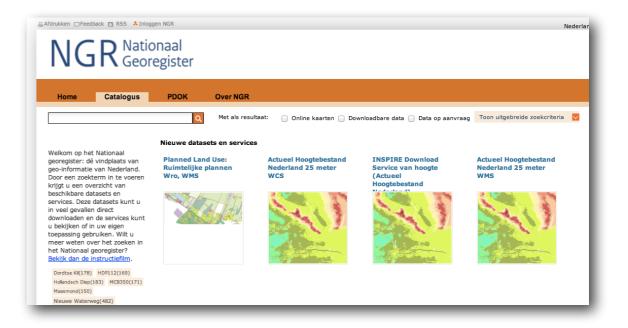
GeoNetwork opensource



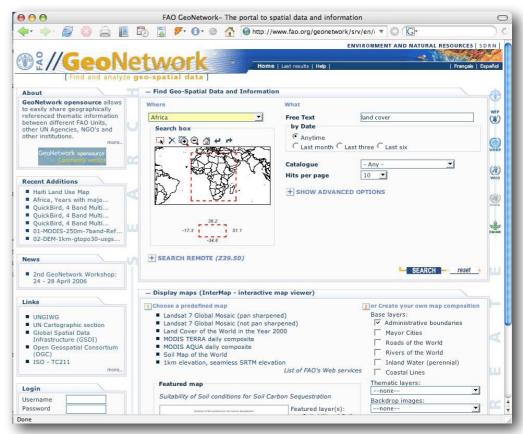
SwissTopo geocat.ch



Dutch National Geo Registry



FAO GeoNetwork



How is it developed?

A Community Driven Project

GeoNetwork

Search Documentation..



Documentation Download Community Gallery

Development

Home

next | index

GeoNetwork opensource

GeoNetwork is a catalog application to manage spatially referenced resources. It provides powerful metadata editing and search functions as well as an embedded interactive web map viewer. It is currently used in numerous Spatial Data Infrastructure initiatives across the world.

GeoNetwork has been developed to connect spatial information communities and their data using a modern architecture, which is at the same time powerful and low cost, based on the principles of Free and Open Source Software (FOSS) and International and Open Standards for services and protocols (a.o. from ISO/TC211 and OGC).

The software provides an easy to use web interface to search geospatial data across multiple catalogs, combine distributed map services in the embedded map viewer, publish geospatial data using the online metadata editing tools and

optionally the embedded GeoServer map server. Administrators have the option to manage user and group accounts, configure the server through web based and desktop utilities and schedule metadata harvesting from other catalogs.

Main features

- Immediate search access to local and distributed geospatial catalogues
- Up- and downloading of data, graphics, documents, pdf files and any other content type
- An interactive Web Map Viewer to combine Web Map Services from distributed servers around the

Table Of Contents GeoNetwork opensource

- » Main features
- » Standards Implemented
- » Platform Independent
- » Community and OSGeo
- » Professional Support

Continue Reading

» Next: News

This Page

» Show Source

Download

Current release: 2.6.4

Latest posts

- » Re: Connection problems
- » Re: Connection problems
- » Connection problems
- » Re: Polish localization of Geonetwork
- » Re: Polish localization of Geonetwork
- » Re: Thredds harvester
- » Re: [GeoNetwork-devel] Batch Import

Join the discussion





800+ on English user list

200+ on French and 200+ on Spanish lists

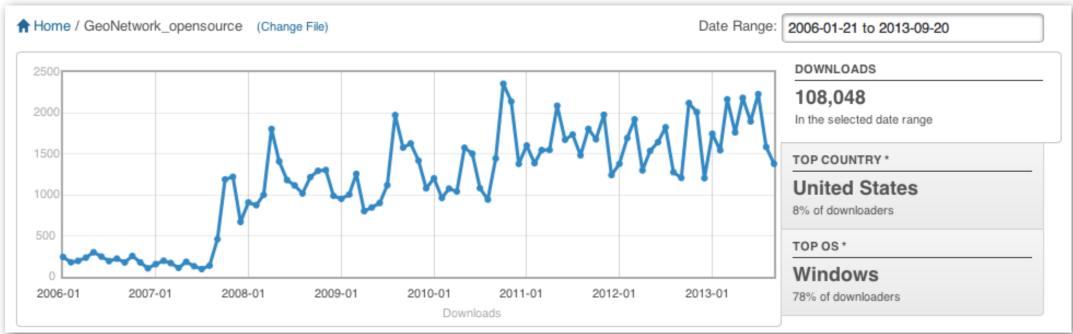
Mailing lists

400+ on developer list

50+ on committer list

0+ active developers





How do we collaborate?

- Community driven governance
 (proposal discussion voting integration)
- Skype, Conference calls and Face-to-face meetings
- Work is split up in small packages
- Continuous contact between user and developer
- Commercial Support Contracts, Consulting, Development

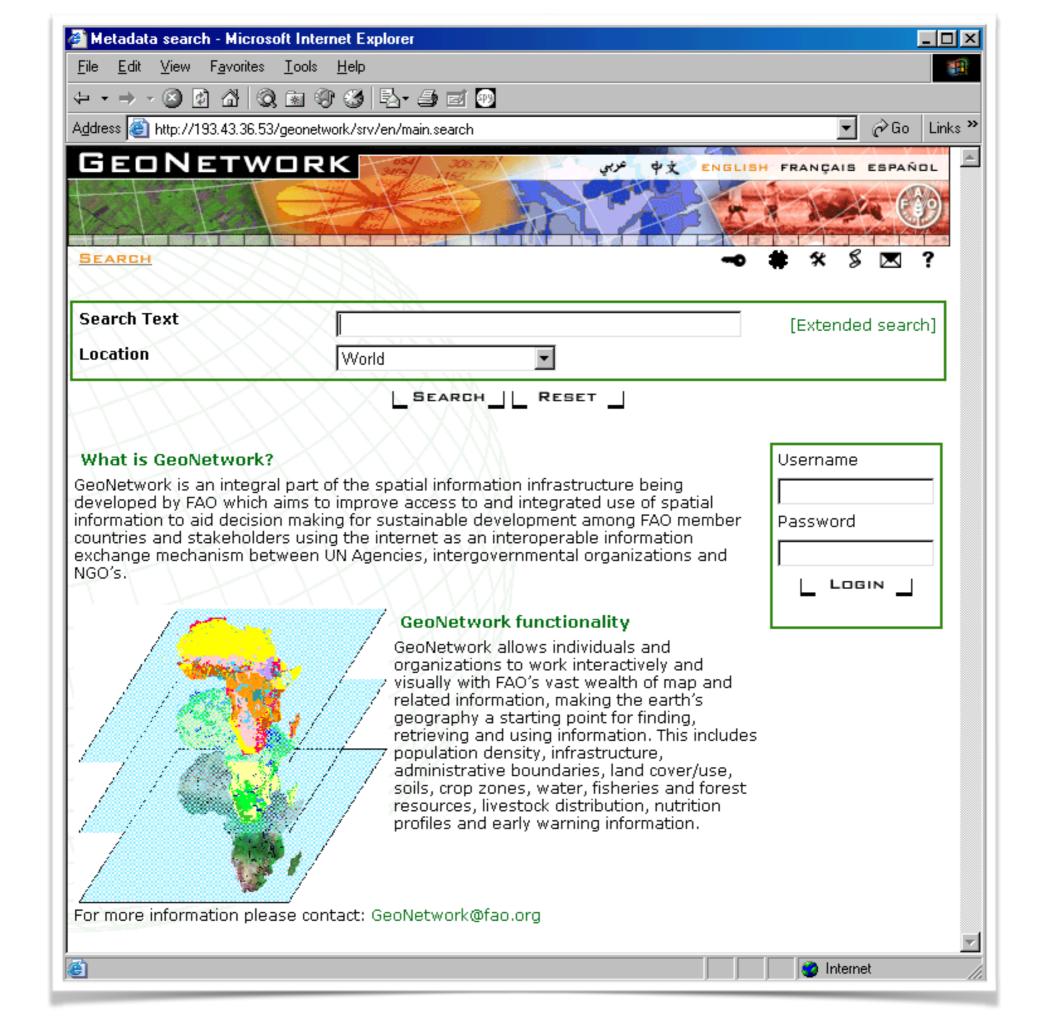
What are the benefits

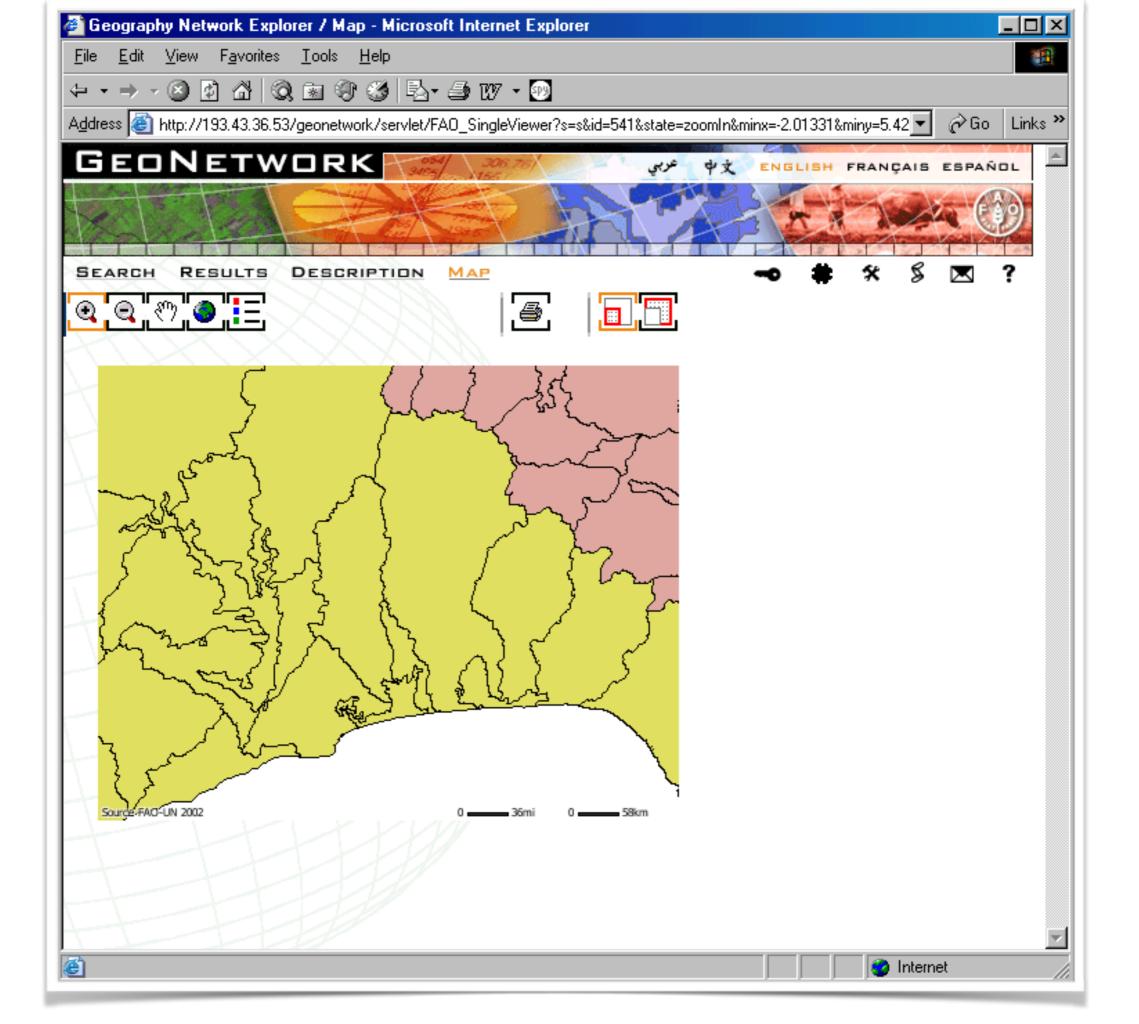
- Support common requirements
- Make testing and compliance easier
- Share cost
- Prevent vendor lock-in
- Fast innovation we all participate



http://www.osgeo.org

Sustainability through wide community support







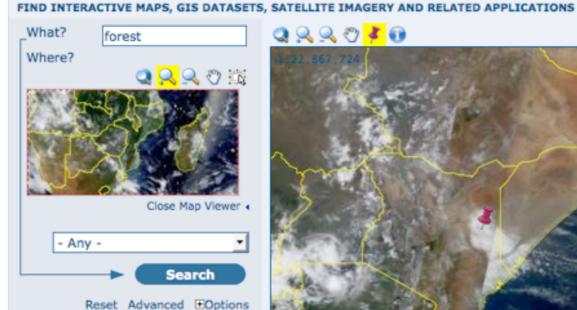




Geographic data sharing for everyone

English | Français | Español | 中文

User: admin admin Logout



CATEGORIES

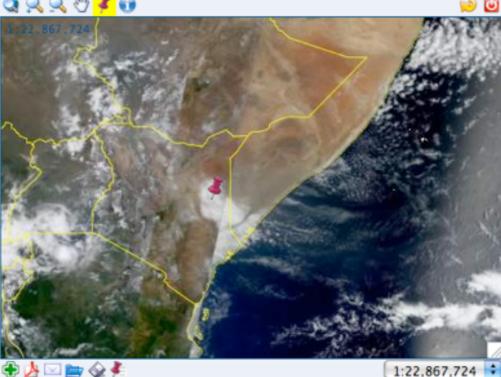
- Applications
- Audio/Video
- Case studies, best practices
- Conference proceedings
- Datasets
- Directories
- Interactive resources
- Maps & graphics
- Other information resources
- Photo

RECENT CHANGES

- Hydrological Basins in Africa
- Physiographic Map of North and Central Eurasia

S GeoRSS ■

- Kosovo Index Map Serbian
- Kosovo Municipalities
- Kosovo Roads bridges and tunnels
- REPUBLIC OF KOREA-Country map
- Nepal Municipality Bounary
- Nepal District Boundary
- Nepal Major Rivers



Layers

Country boundaries

The World's Forests 2000

 Current global view of the earth

Opaque 🗘 🌽 📋

 WMS Global Mosaic, pan sharpened

AGGREGATE RESULTS MATCHING SEARCH CRITERIA: 1-10/97 (PAGE 1/10), SORT BY RELEVANCE



FOREST MAP OF KENYA

Abstract Expanding on the recently completed U.S. Geological Survey (USGS) global land cover characteristics database, USGS EROS Data Center is producing a global forest cover map for the United Nations Food ...

Keywords FORESTRY, FOREST RESOURCES, FOREST LAND, Kenya



Metadata



HAITI, FOREST COVER

Abstract The map has been derived from the Global Forest Cover produced in 200 by FAO-Forest Resources Assesment Programme. Four main forest classes have been identified: Closed Open Other Wooded Land and O







Organizations

FILTER

Provincie Zuid-Holland Directie Leefomgeving en Bestuur (6) Provincie Gelderland (2) Provincie Flevoland (1) Provincie Limburg (1) Provincie Groningen (1)

Keywords

society (8) cultuurhistorie (7) geschiedenis (6) cultuur (6) archeologie (6) cultuurhistorische waardenkaarten (6) environment (4) + Show more

Types

Dataset (11)

Scale denominators

250000(1) 100000(2) 50000 (7)

Cultuurhistorische...



Last update: 2012-06-07

Cultuurhistorische...

Sort by relevance



Last update: 2012-06-07

Nationaal Landschap...



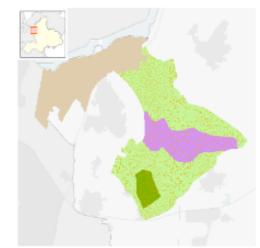
Last update: 2012-12-11

0 Selected - Other actions -

Cultuurhistorie- DNA-kaart, Landschap, provincie Gelderland

@www.demis.nl

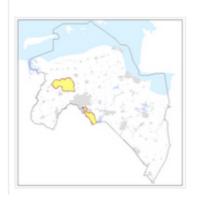
PREVIEW



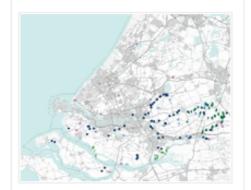
Cultuurhistorische...



Nationaal Landschap



☐ Cultuurhistorische...



National INSPIRE Catalogs in Europe

based on GeoNetwork

NGR Nationaal Georegister

1000 (3) 0 (289)

2012 (200) 2011 (222) 2010 (72) 2009 (236)

Years 2013 (344)

Home Catalog **PDOK About NGR** BROWSE >> SEARCH RESULTS show advanced options Online data
 Data for download
 No direct data access (contact point) **▼**| ■ □ □ FILTER 1-50 result(s) / 4269 >> Sort by Relevance Organizations Rijkswaterstaat Centrale Informatievoorziening Digitale Digitale Digitale Zuid-Holland service... (CIV) - Regionale Meet- en terreinmodellen... terreinmodellen... terreinmodellen... Informatiedienstverlening (4269) Rijkswaterstaat Centrale Informatievoorziening (CIV) (4262) Keywords aardrijkskunde (4269) water (4269) hoogte (4269) elevation (4269) landschap (4269) transportation (4263) MCB350 (180) + Show more Licenses OtherConstraints (4268) Rijkswaterstaat Centrale Rijkswaterstaat Centrale Rijkswaterstaat Centrale Rijkswaterstaat Centrale CC0 (1) Informatievoorziening (CIV) -Informatievoorziening (CIV) -Informatievoorziening (CIV) -Informatievoorziening (CIV) -Resource types Regionale Meet- en Regionale Meet- en Regionale Meet- en Regionale Meet- en Informatiedienstverlening Informatiedienstverlening Informatiedienstverlening Informatiedienstverlening dataset (4262) Preview series (6) service (1) Digitale Digitale Digitale **Afgedamde Maas** Service types terreinmodellen... terreinmodellen... terreinmodellen... Nederhemert... view (1) Scale denominators 10000 (1) 5000 (3974) 2000 (1)

Duit

Luxemburg



)) Simpel søgning

>> Avanceret søgning

Geodata-info.dk gør det muligt at søge og finde relevante geografiske data og tjenester med udgangspunkt i korte, beskrivende oplysninger - metadata.



Søg efter geografiske data







Nyheder

Om geodata-info.dk | Links | Hjælp | Log ind |

Geodata-info.dk er blevet opdateret med nye søgemuligheder i den avancerede søgning, popups med printervenlig præsentation af søgeresultaterne samt links til visning og download af metadata.



Genvej/Browse

Emnekategori

Landbrug

Biota

Grænser

Klimatologi/Meteorologi/Atmosfære

Økonomi

Højde

Miljø

Geovidenskabelig information

Sundhed

Billeder grundkort/Jorddække

Efterretninger/Militær

Dataansvarlig

Banedanmark

By- og Landskabsstyrelsen, Miljøministeriet

DAGI-datasættet er et standardiseret referenceda

Danmarks Miljøportal EMD International A/S

Erhvervs- og Byggestyrelsen

Fiskeridirektoratet

Kommunerne

Kort & Matrikelstyrelsen, Miljøministeriet

Kulturarvsstyrelsen

Miliacenter Aalbora Miliaministeriet



Sidst opdateret

- Danmarks Højdemodel, DHM/Terræn
- Danmarks Højdemodel,

DHM/Overflade

- FrededeFortidsminder
- Beskyttede sten- og jorddiger.
- Geodata-info.dk



Searching all content at National level





Governme of Canada Gouvernemen



Environment Canada Data Catalogue Describe, Publish, Discover

Home	Search∀	Browse	Мар	Request an account	Log In	Help	
Home							
Home							
							1
		Ту	pe Sear	ch keywords here			
						EC Data Catalogue Search	

The Environment Canada (EC) Data Catalogue is a one stop solution for (1) describing, (2) publishing and (3) discovering EC datasets.

- 1. Describe: Data stewards create metadata within the catalogue to describe EC Datasets.
- Publish: Data stewards publish EC datasets to the Data Catalogue tool (intranet) and external data portals (internet), such as Government of Canada Open Data Portal
 and GeoConnections Data Portal (Canadian Geospatial Data Infrastructure).
- 3. Discover: Stakeholders search the published datasets to discover and access EC data.

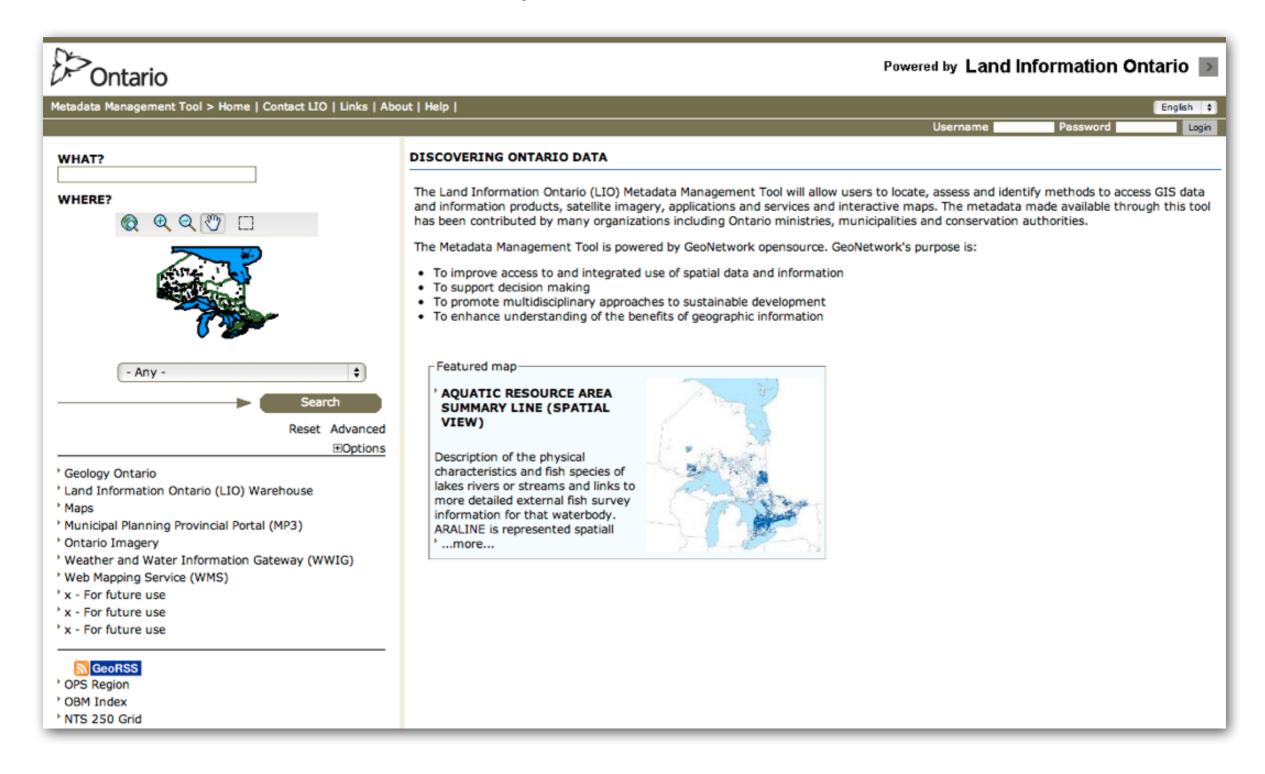
EC Data Catalogue Benefits:

- · EC's data assets are identified.
- EC's data assets are preserved over time
- . EC's datasets can be found and accessed in a timely manner.
- EC's datasets can be easily published internally and externally, without having to maintain many copies of metadata on several portals.
- Canadians, scientists and other stakeholders can easily find and leverage EC datasets to their full potential increasing the value and transparency of EC data!

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Ministry of Natural Resources



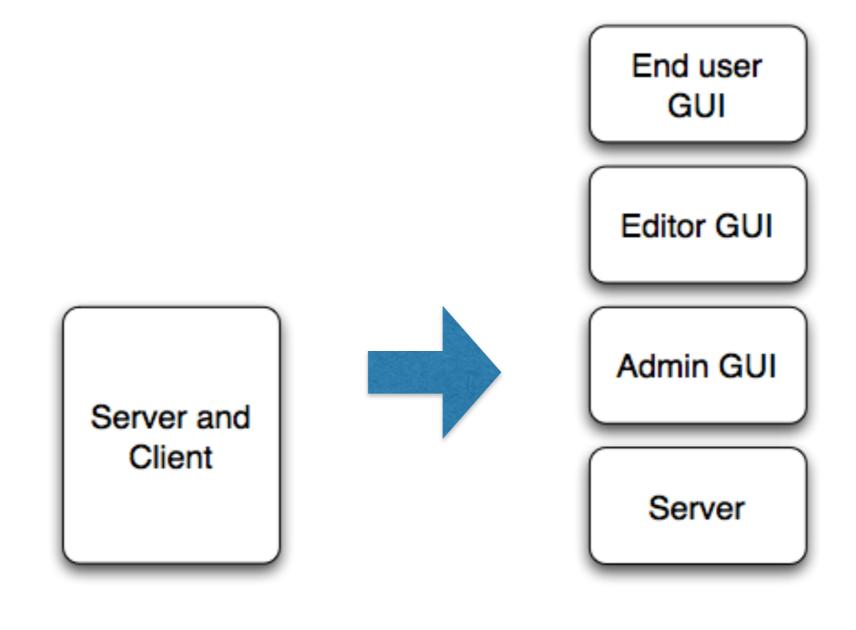
What are we working on?

Development of version 3.0

- New administration User Interface
- New metadata editor User Interface
- New Search User Interface

Most of this is build upon existing functionality in v2.10!

Changing Architecture

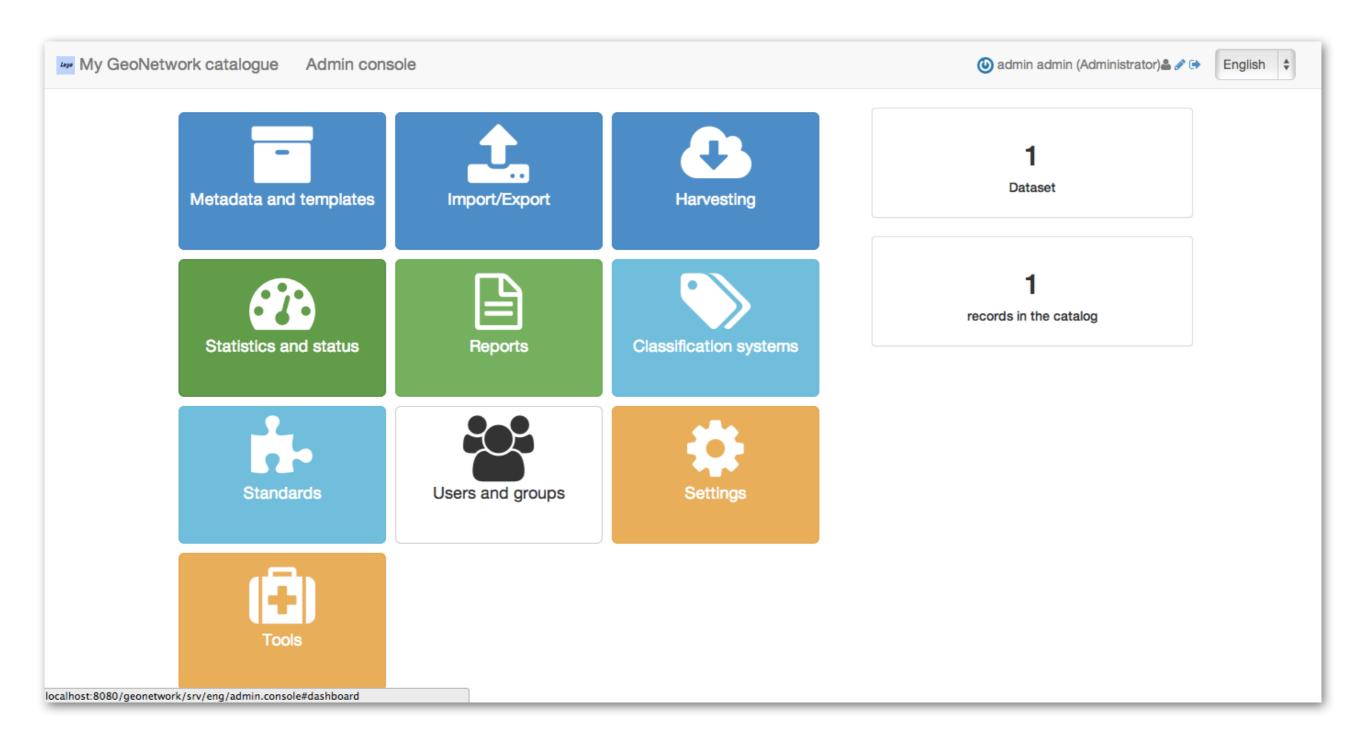


Until v2.6 From v2.8

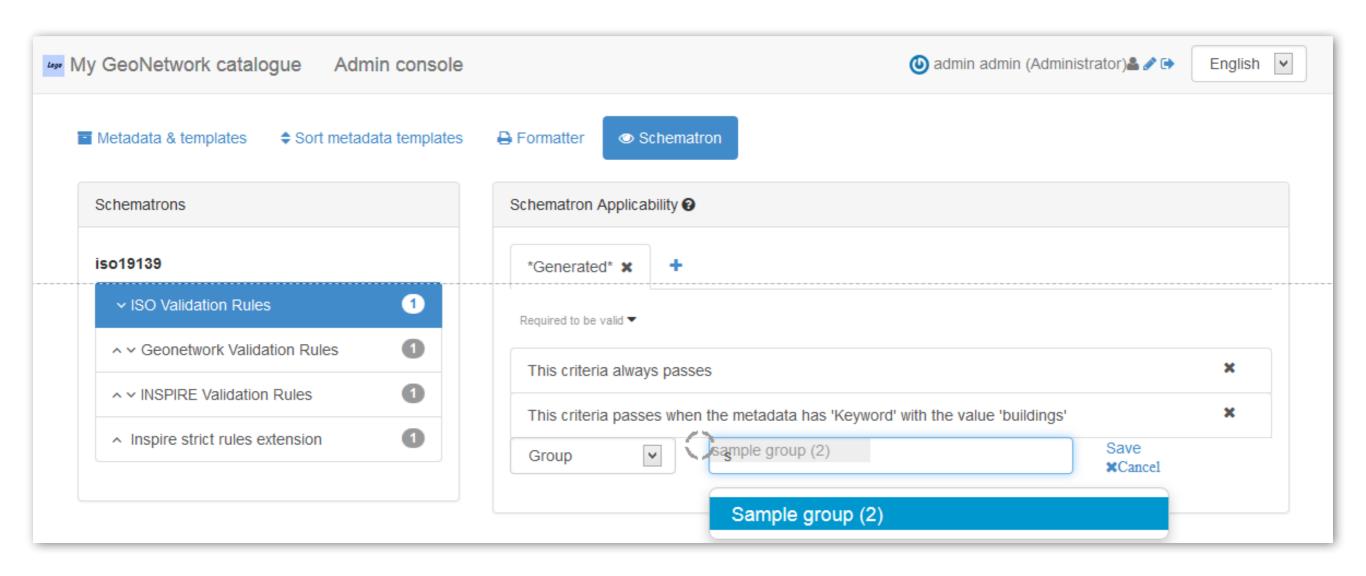
New Administration UI

Based on Angular.js, D3 and Bootstrap

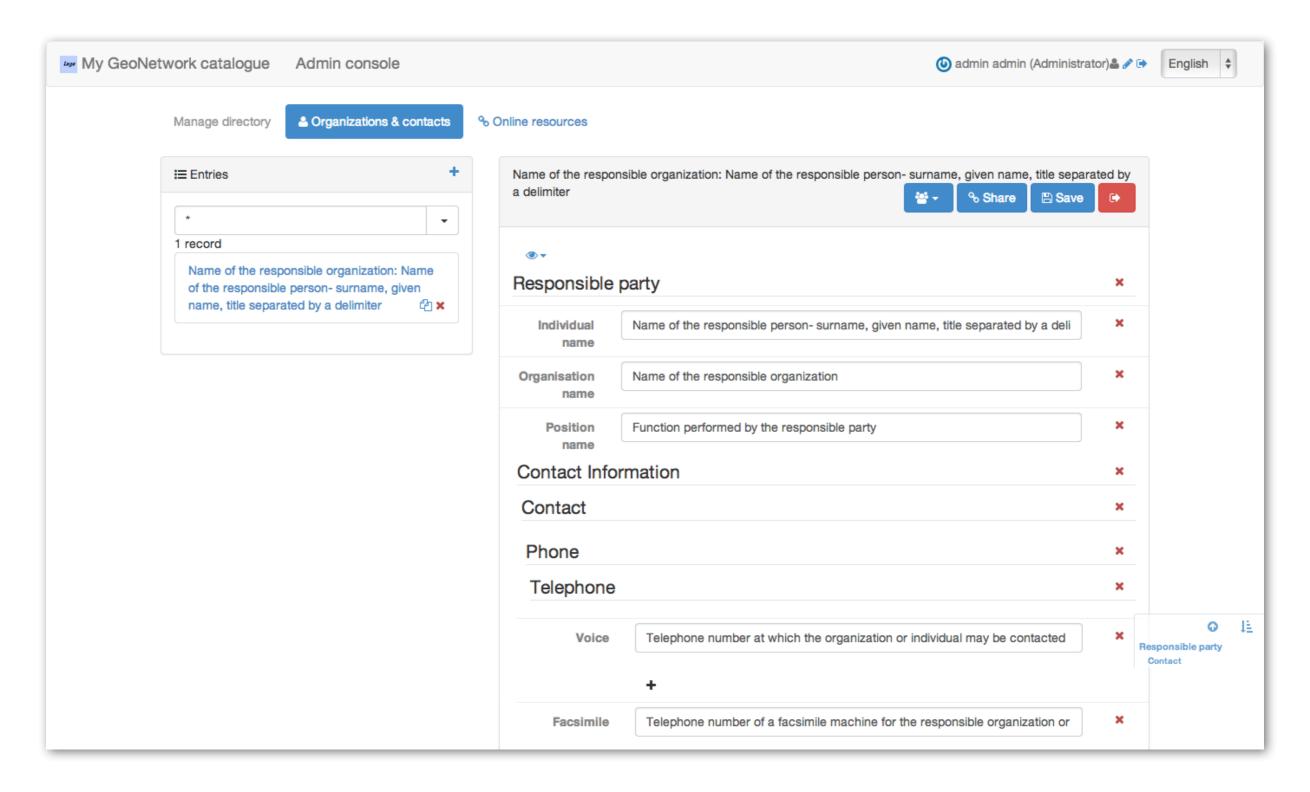
Administration console



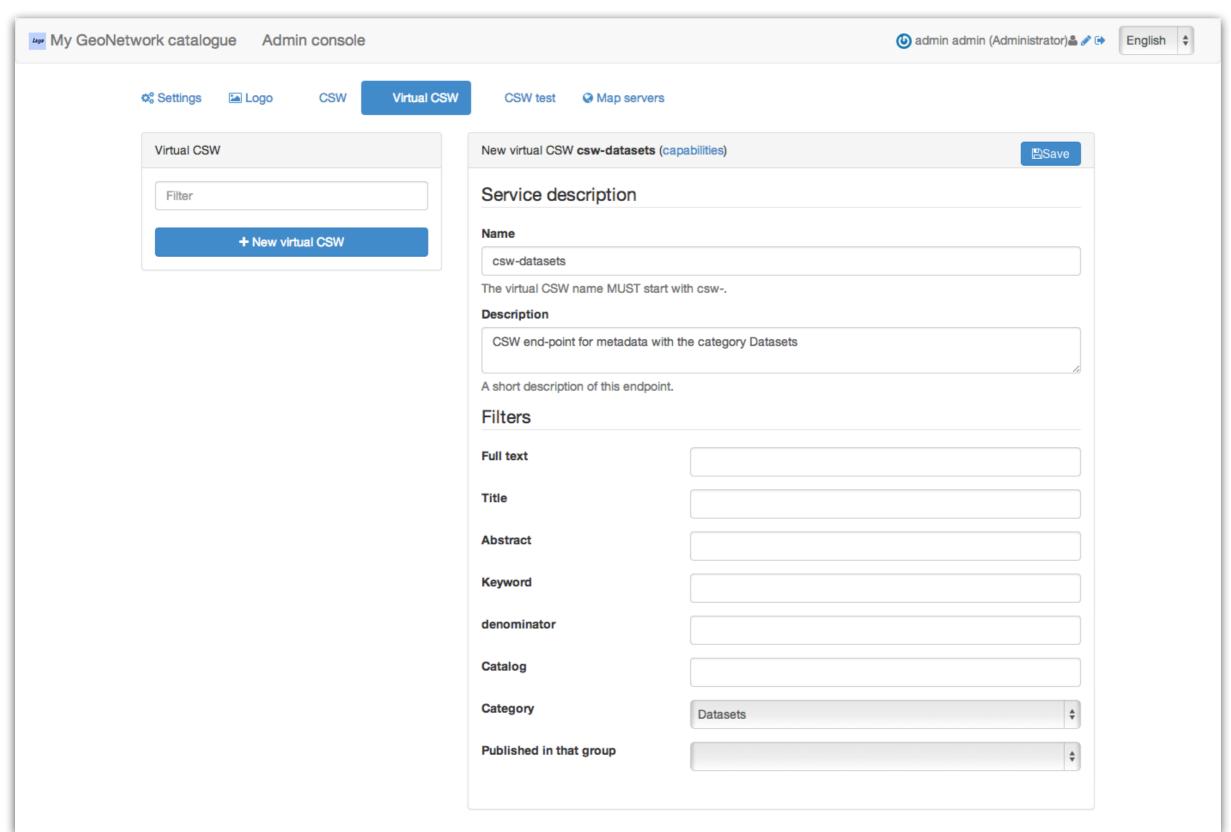
Define schematron rules



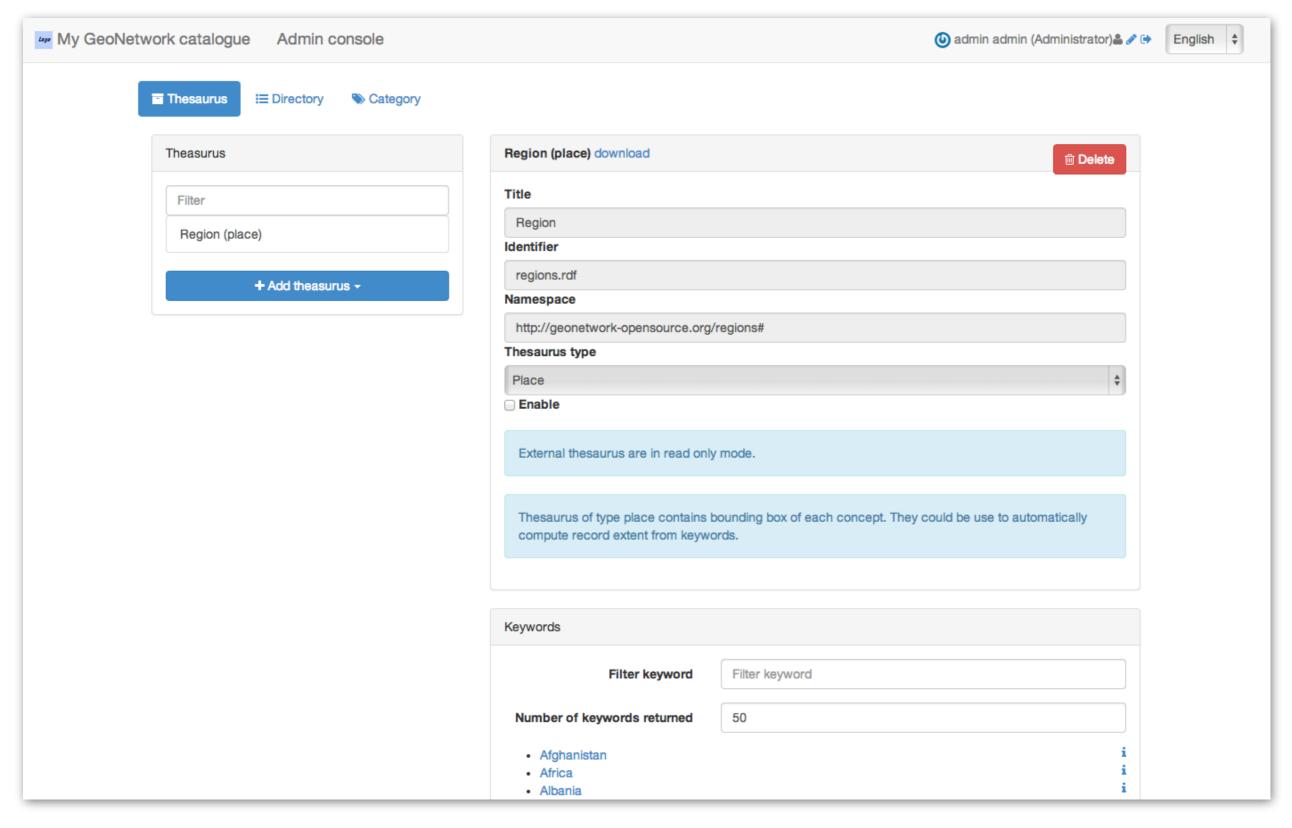
Contact directory

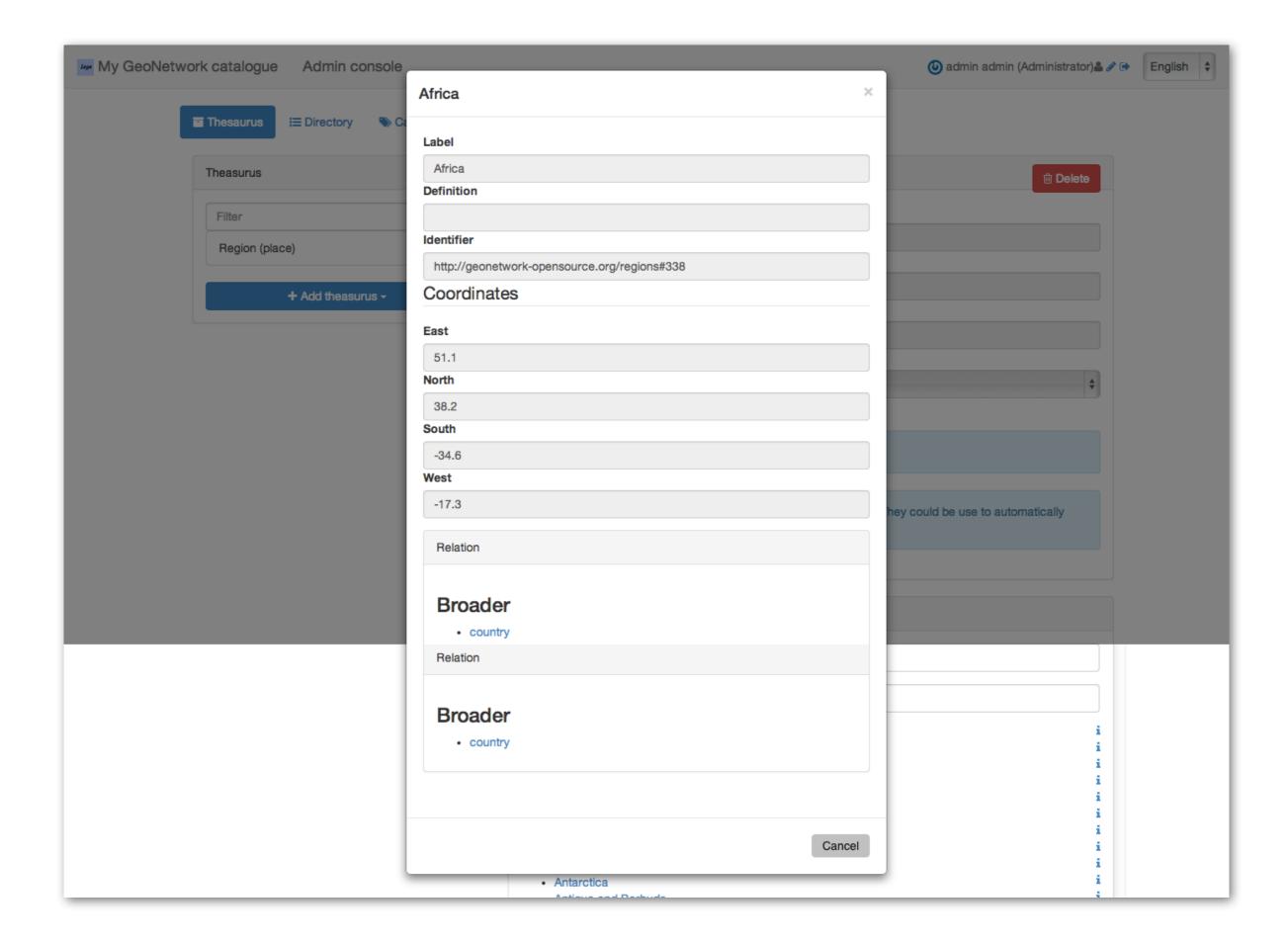


Virtual CSW configuration

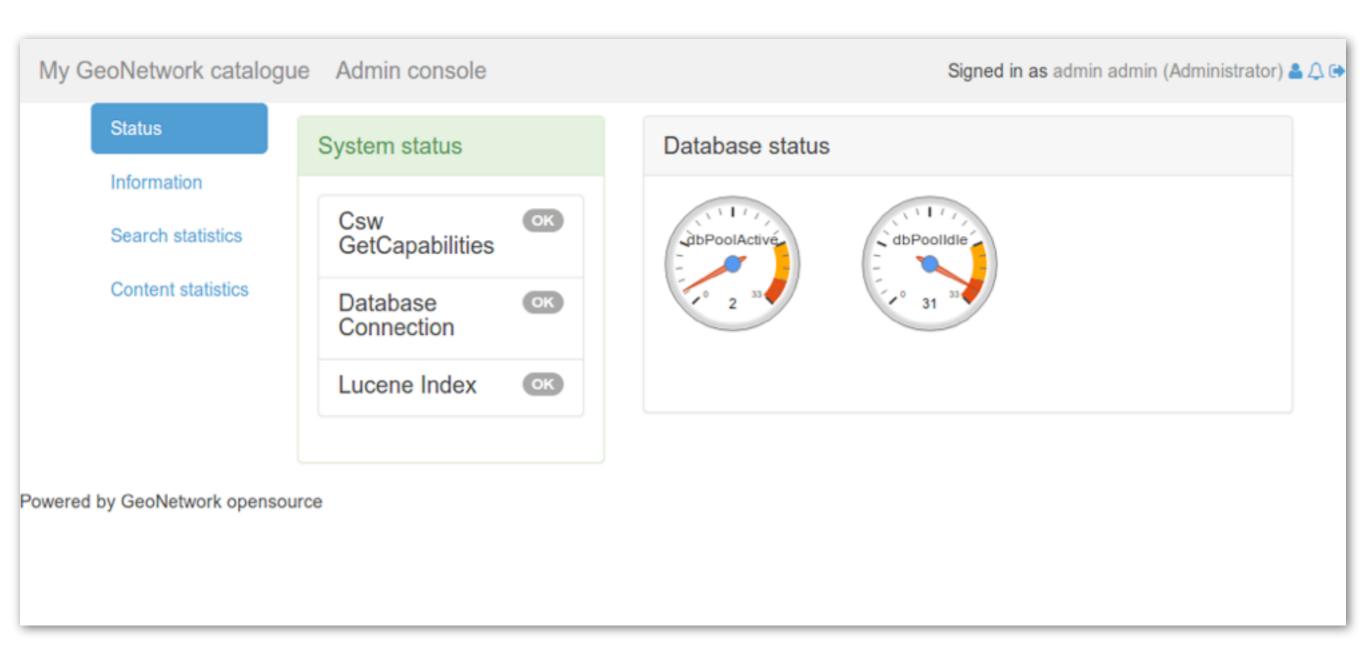


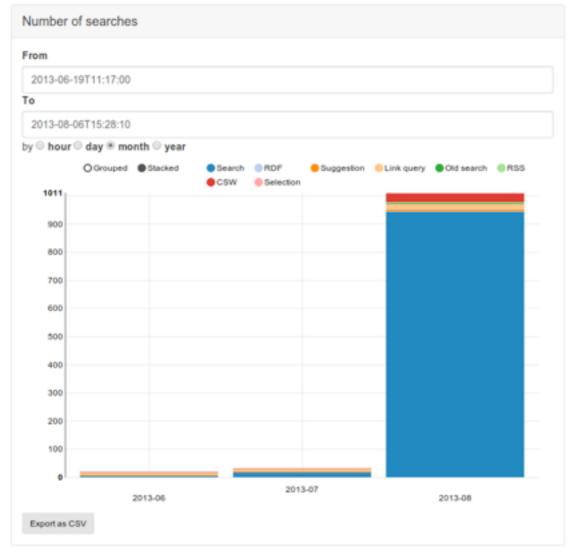
Thesaurus management

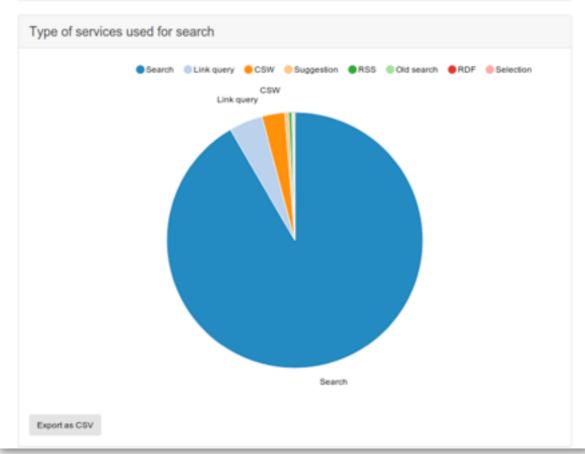


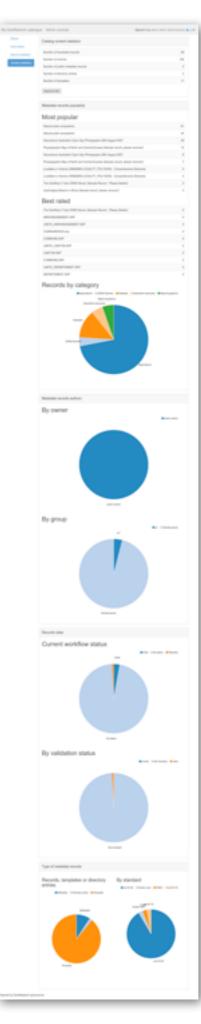


System Status

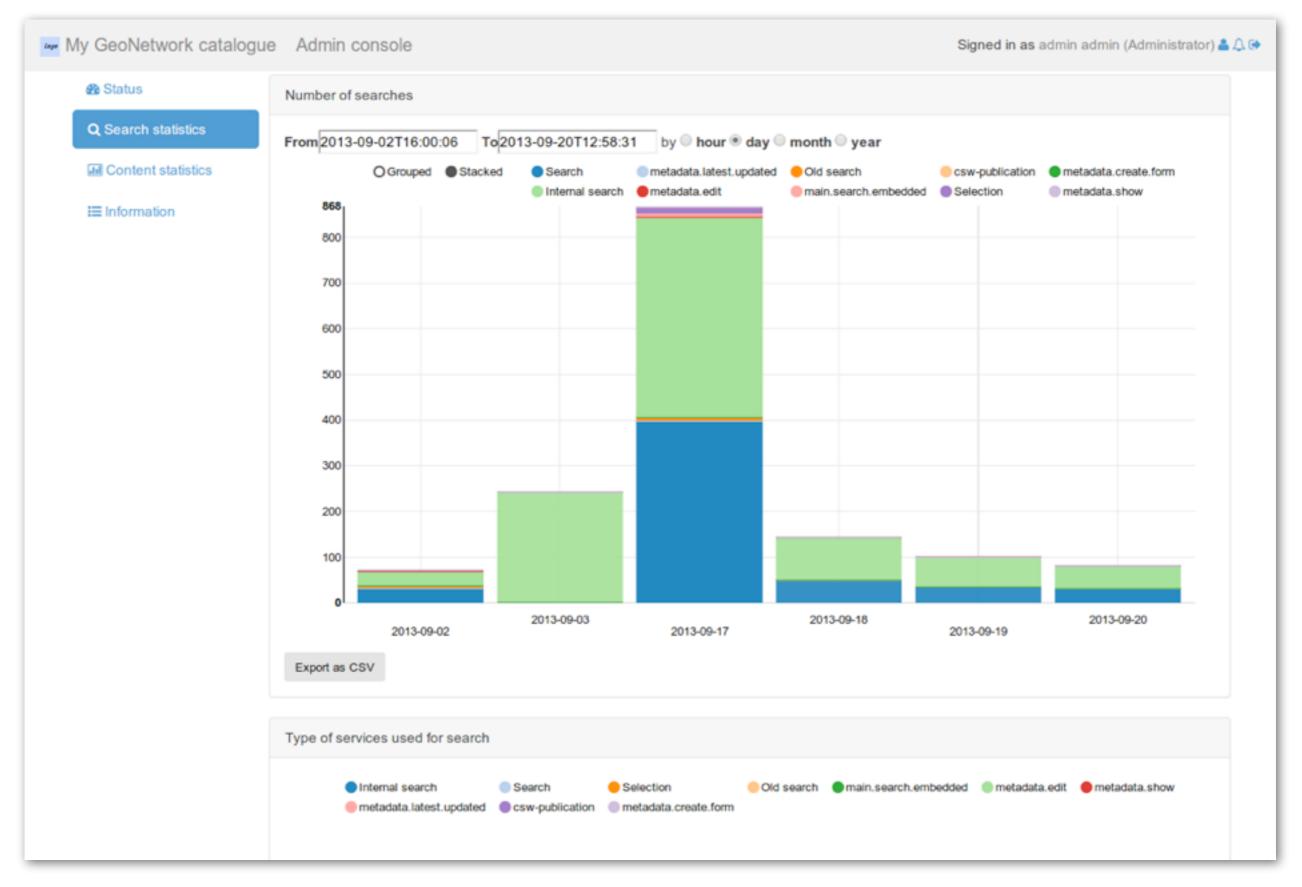




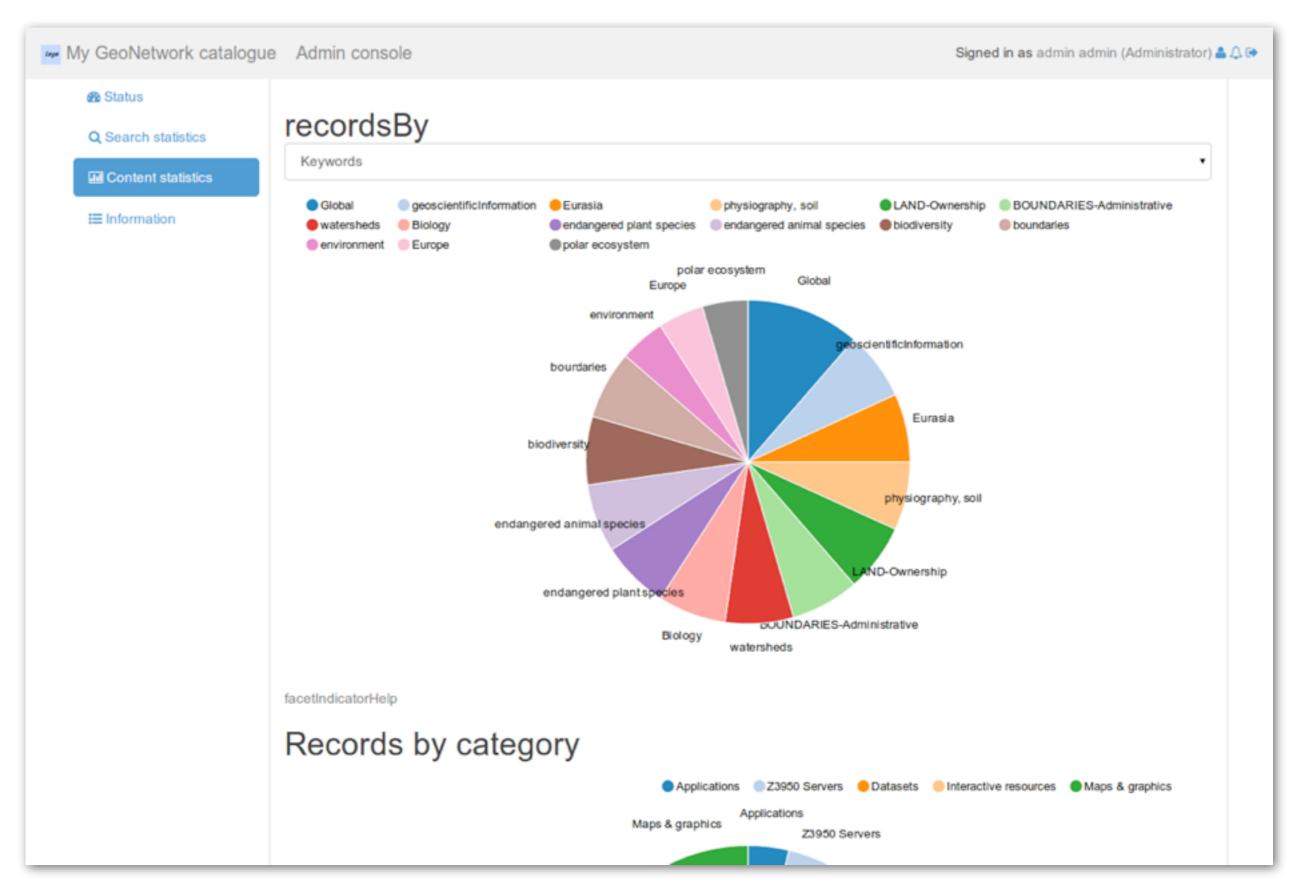




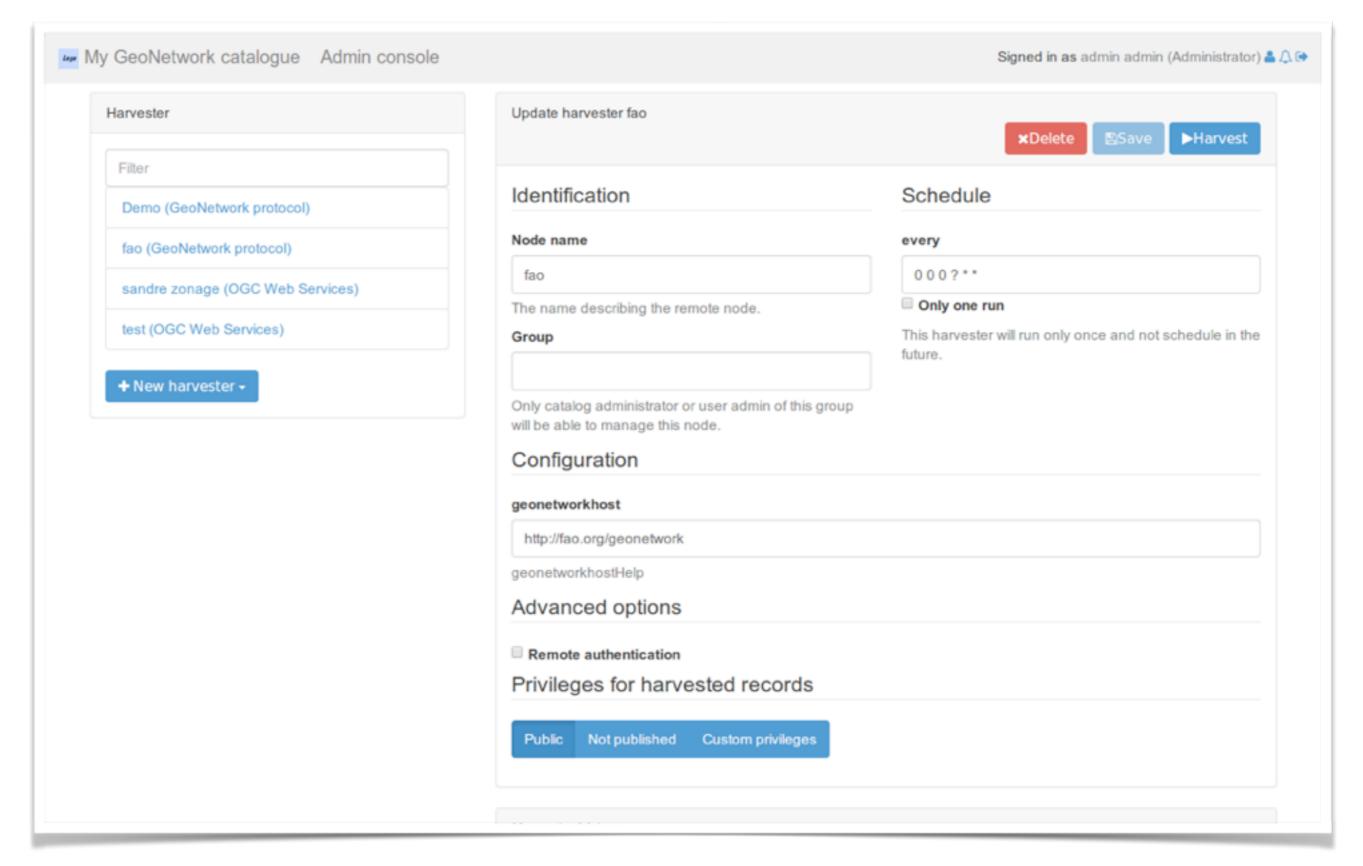
Search statistics



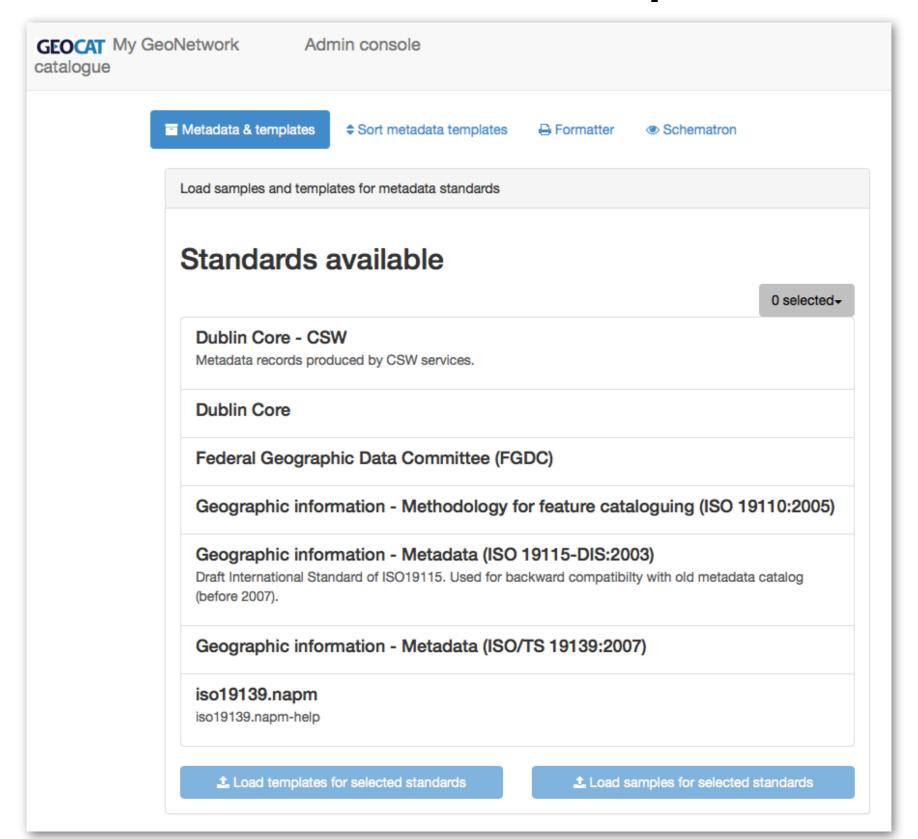
Content statistics



Harvester configuration



Metadata templates



Metadata Schema Plugin

METADATA SCHEMA OPERATIONS	
Enter a name for the schema to be added	
Source of schema zip archive:	
Path to Schema Zip Archive	
URL of Schema Zip Archive	
UUID of local metadata record with GeoNetwork Metadata Schema Archive (URL) as online resource	
	Add

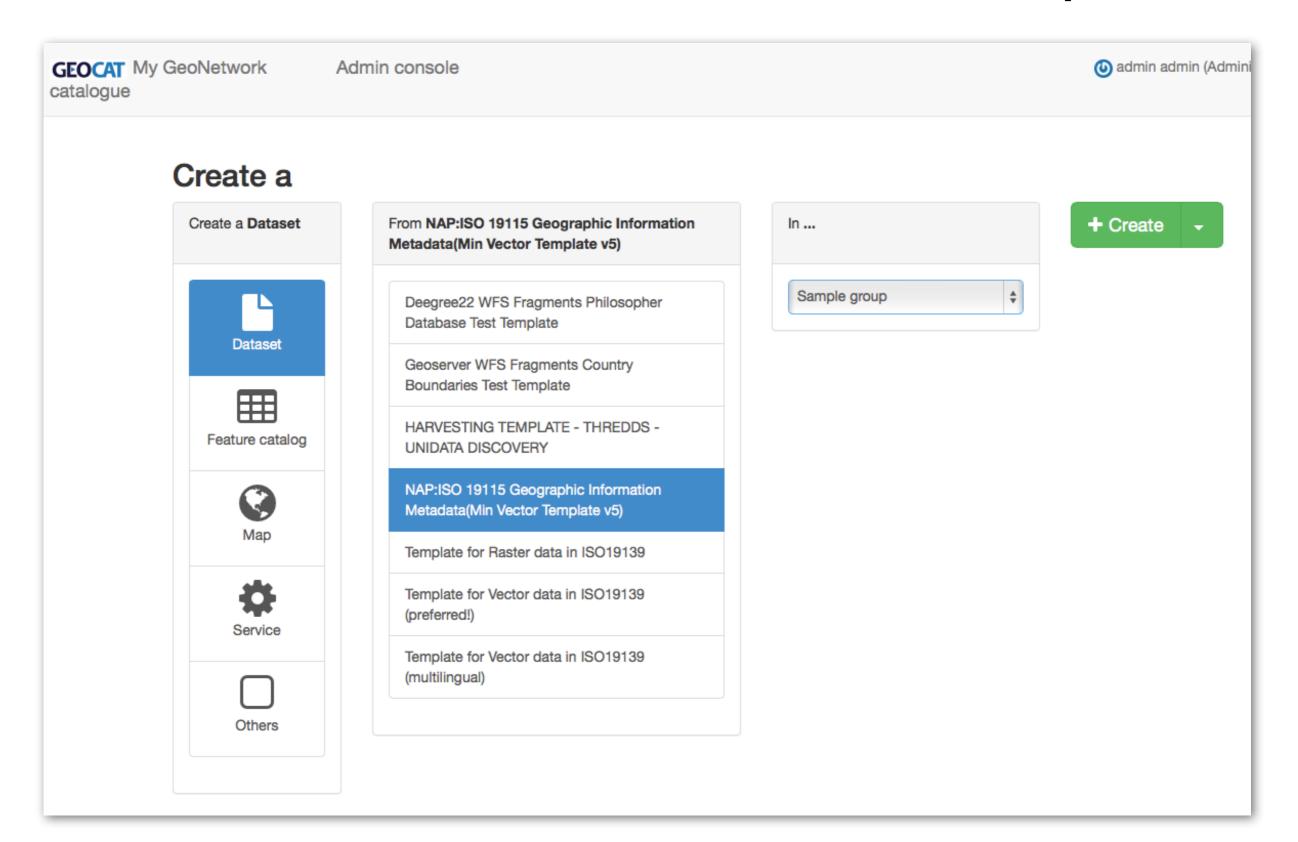
http://metadata101.org

- A location to collect, develop and maintain metadata profiles
- Easy collaboration
- Github repository
- Versioning
- Permissive licensing to allow incorporation in open source and proprietary software

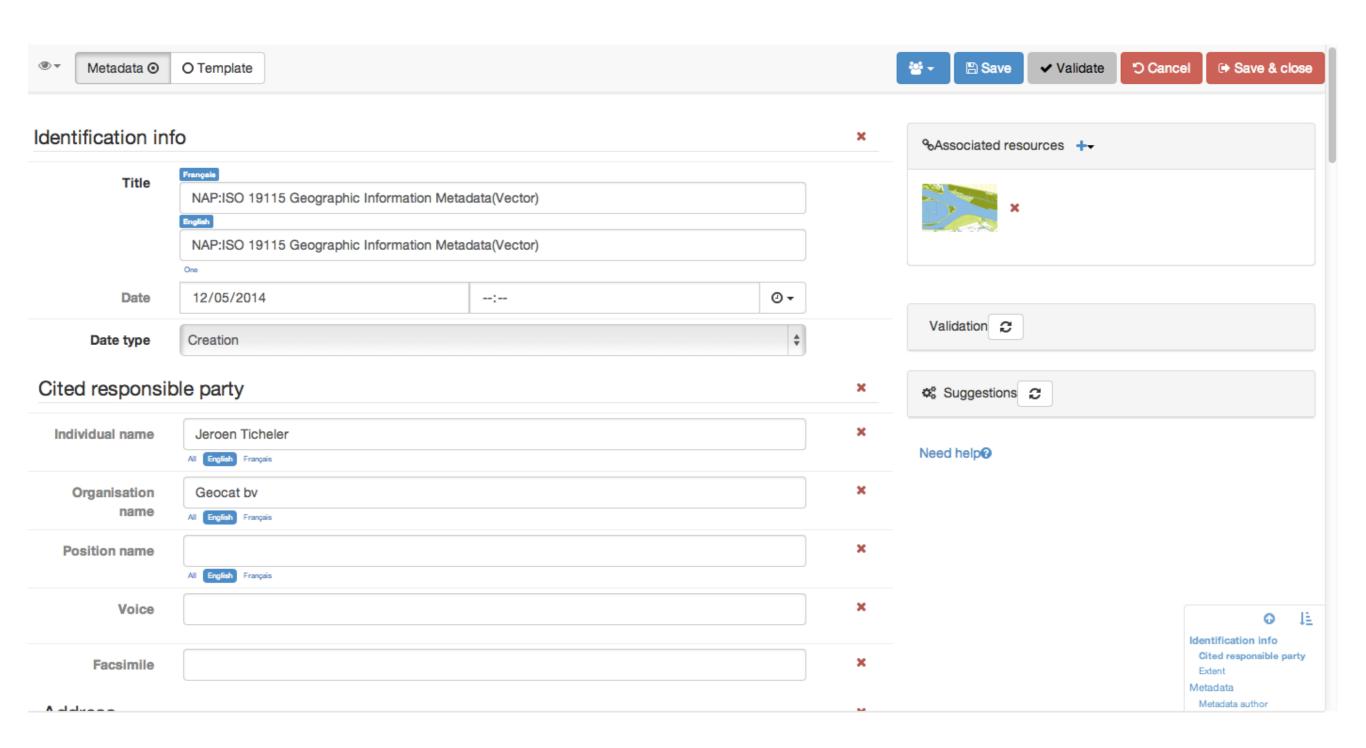
New Editor UI

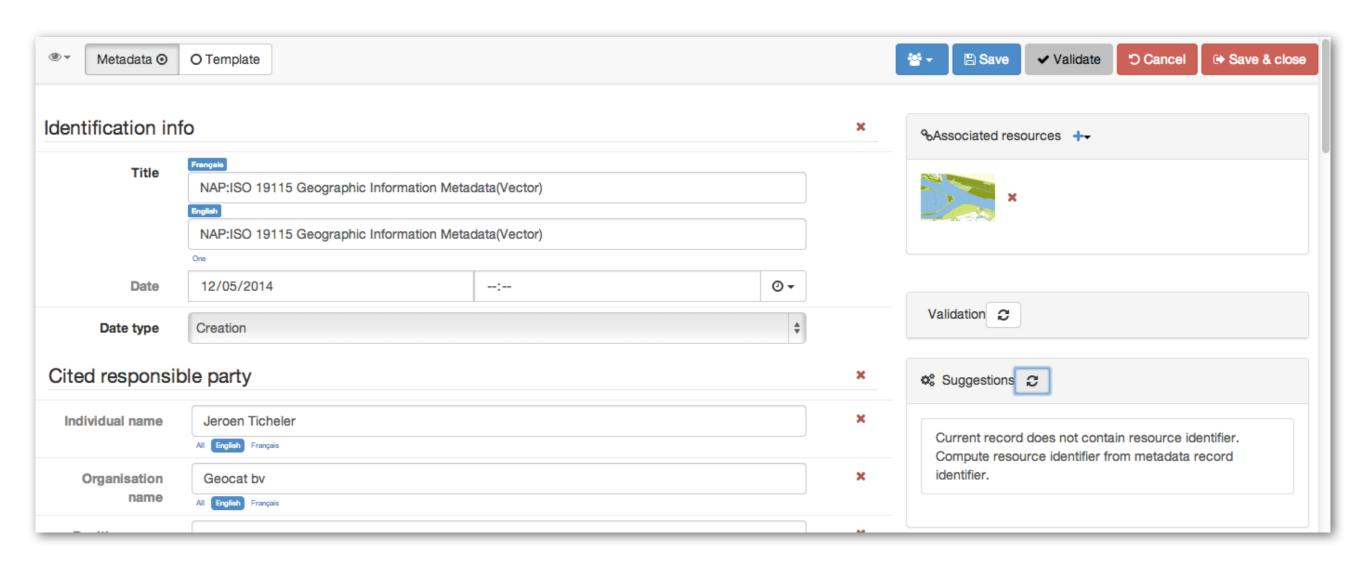
Based on Angular.js, D3 and Bootstrap

Select a metadata template

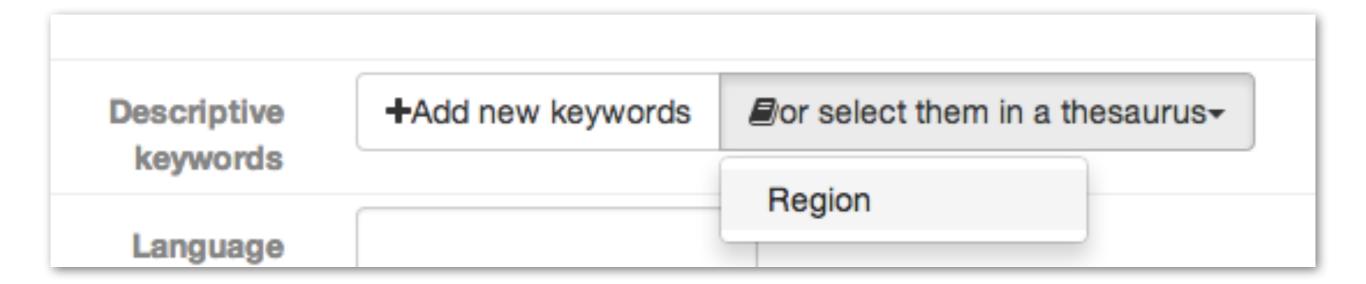


Metadata editor

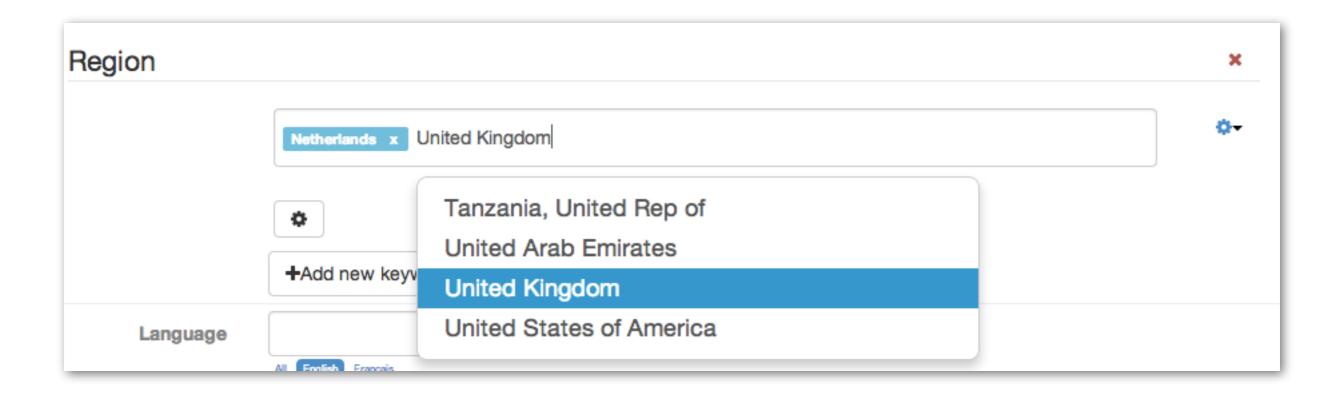




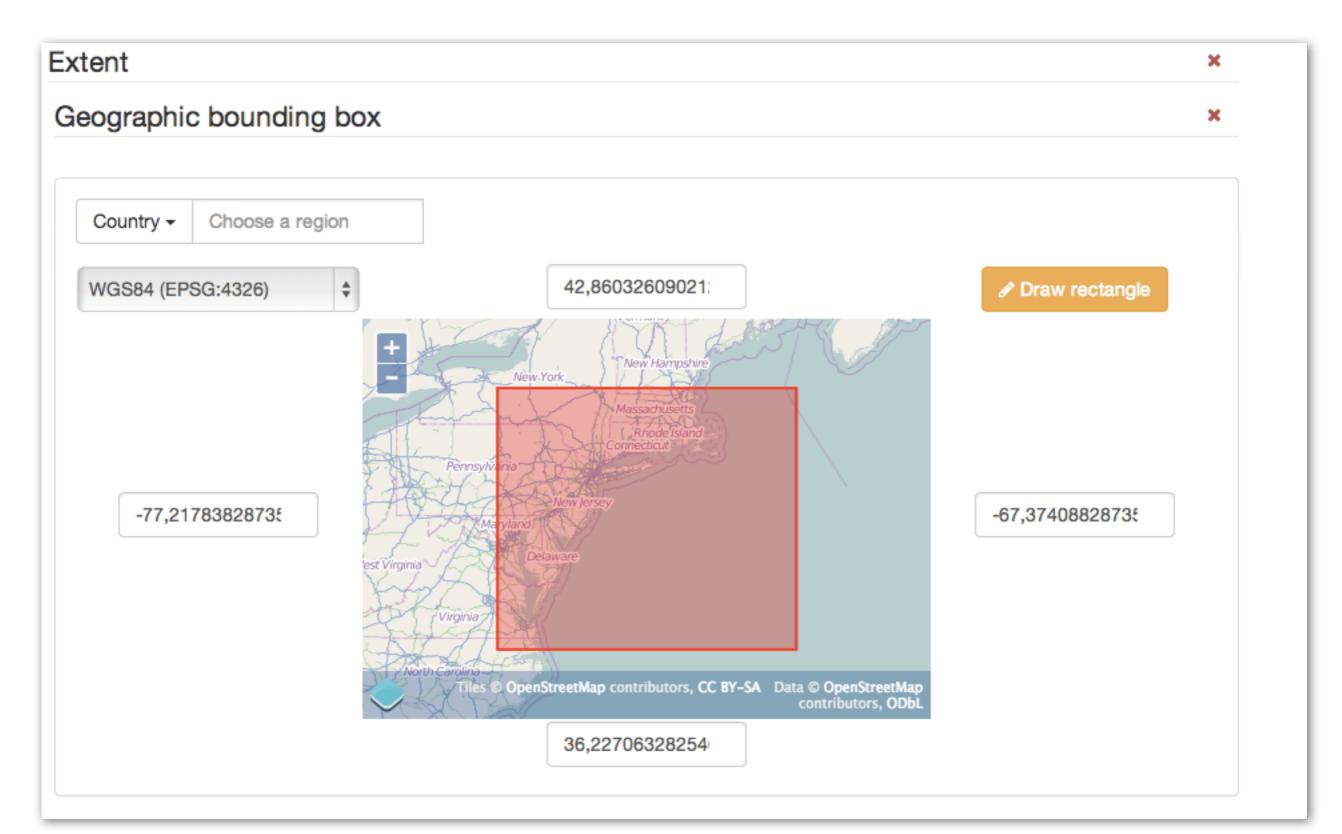
Select or add keywords



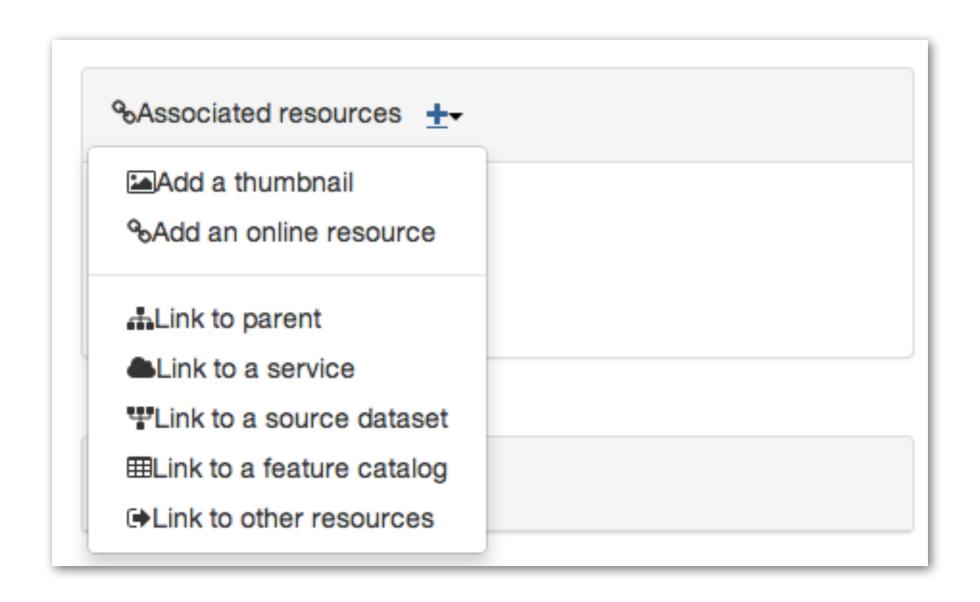
Select regions



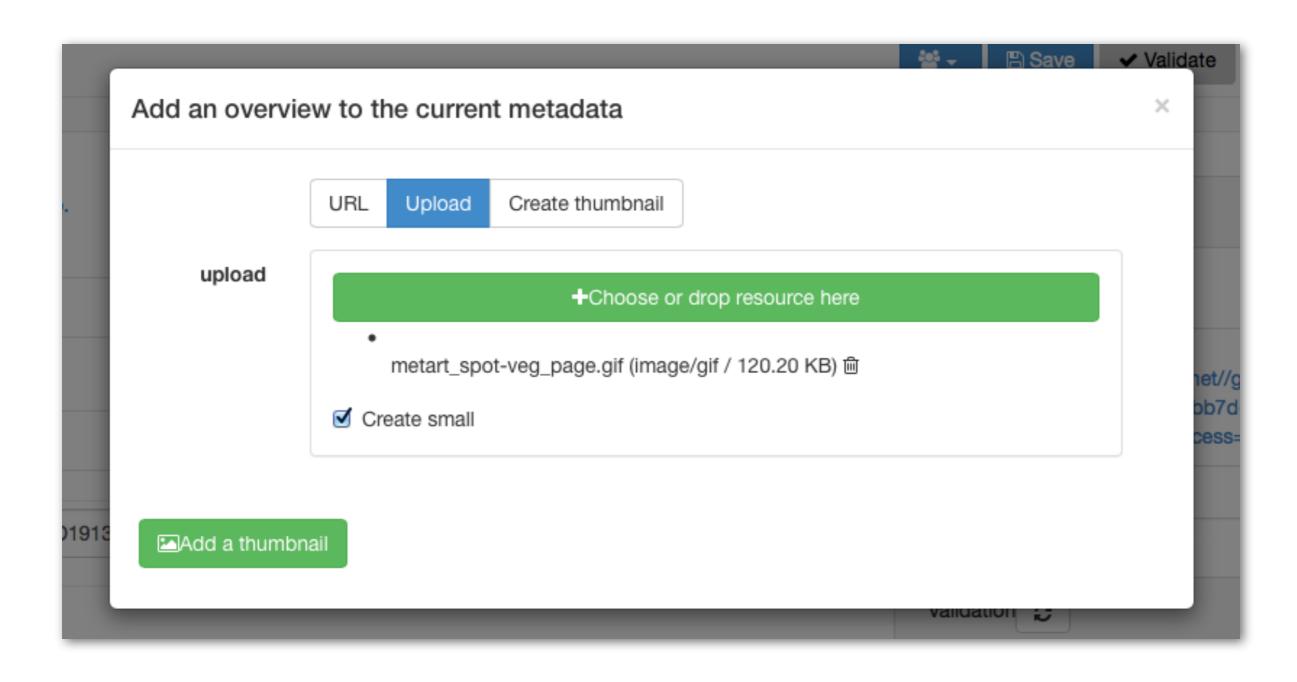
Bounding boxes



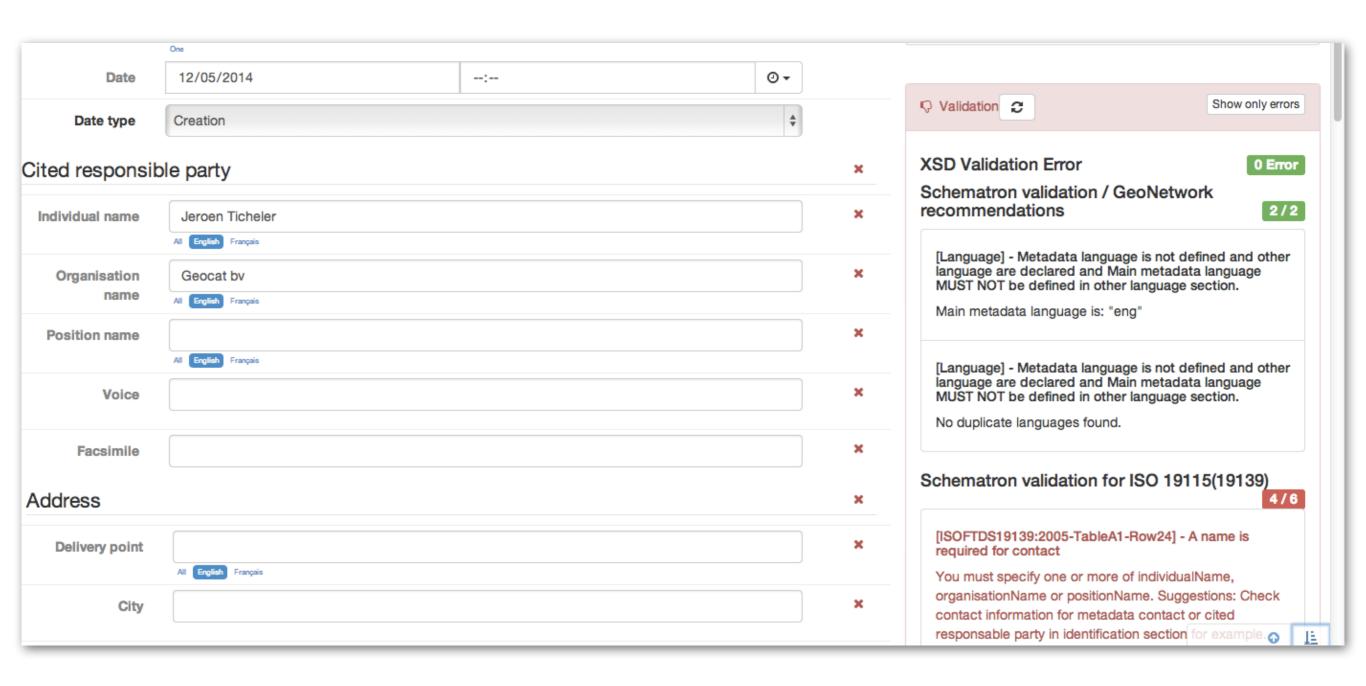
Add associated resources



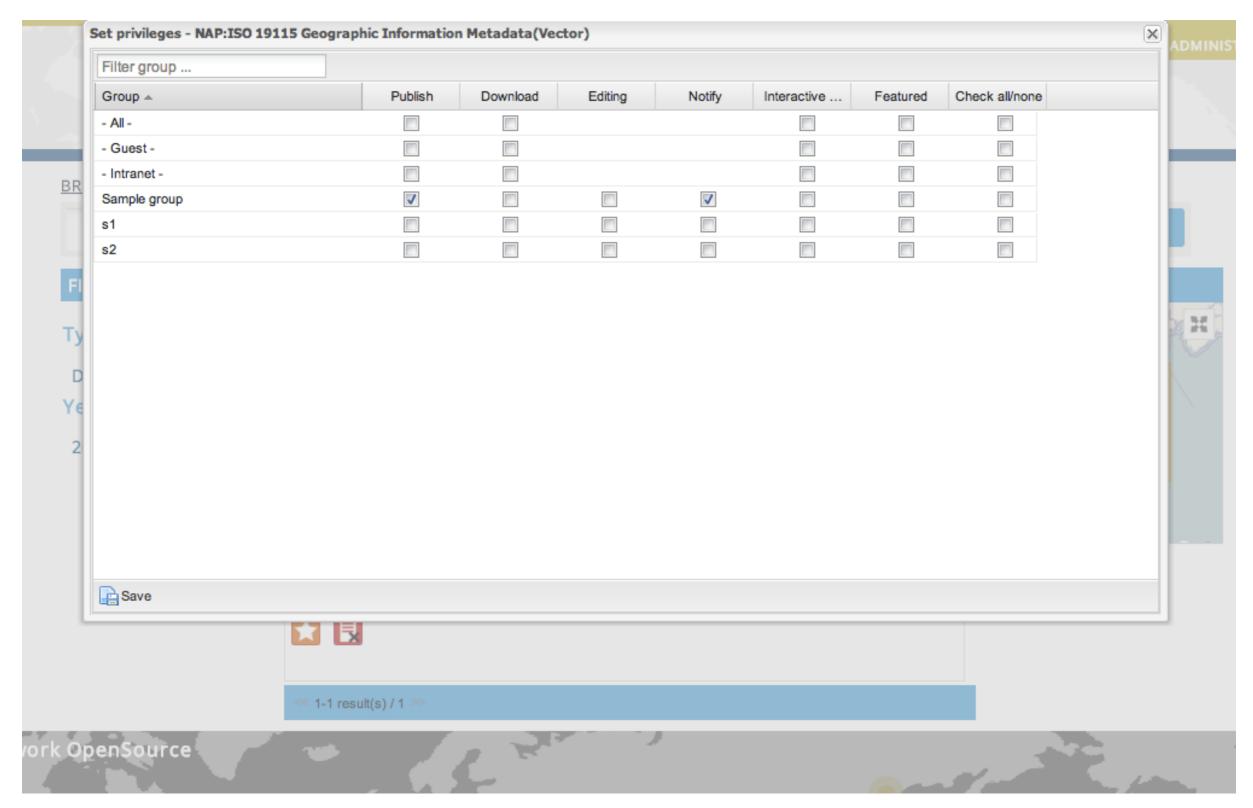
Add a thumbnail



Validation of metadata



Set privileges



If you have ideas or needs, please join and help

Our goal is for GeoNetwork to be the best geographic metadata catalog in the world

Questions?

Jeroen Ticheler





