



GeoNetwork
open source

GeoNetwork Workshop

FOSS4G 2022 - Firenze, IT



GeoNetwork workshop - FOSS4G 2022 - Firenze, IT

- <https://talks.osgeo.org/foss4g-2022-workshops/talk/QGEHMJ/>
- In this workshop,
 - We are using **GeoNetwork version 4.2.0 and coming 4.2.1**
 - We can use online demo catalogues (or install it)
 - A GeoCat.BV Live instance
 - <https://apps.titellus.net/geonetwork> (login admin/admin)
- Date: 2022-08-22
- Time: 4 hours
- Who is presenting?

Workshop agenda

- Quick overview
- “Tour de table”, any particular expectations?
- 3 main topics

INSPIRE



- Going further

Harvesting



Thematic portals



Workshop agenda

- Quick overview
- “Tour de table”, any particular expectations?
- 3 main topics **with 3 user story**

INSPIRE



Harvesting



Thematic portals



Workshop presentation

<https://tinyurl.com/nhe4swxd>

Installation from ZIP, WAR, docker, source

Java 8

Download GeoNetwork

Download Elasticsearch

(optional) Download Kibana

Start GeoNetwork

Start Elasticsearch

(optional) Start Kibana

The docker way

```
git clone https://github.com/geonetwork/docker-geonetwork.git  
cd docker-geonetwork/4.2.0  
docker-compose up
```

```
GN_VERSION=4.2.0
ES_VERSION=7.17.5
```

```
mkdir gn
cd gn
wget
https://sourceforge.net/projects/geonetwork/files/GeoNetwork_opensource/v$GN_VERSION/geonetwork-bundle-$GN_VERSION-0
.zip
mkdir geonetwork
cd geonetwork
mkdir data
unzip geonetwork-bundle-$GN_VERSION-0.zip
cd ..
```

```
wget https://artifacts.elastic.co/downloads/elasticsearch/elasticsearch-$ES_VERSION-linux-x86_64.tar.gz
tar xvfz elasticsearch-$ES_VERSION-linux-x86_64.tar.gz
```

```
wget https://artifacts.elastic.co/downloads/kibana/kibana-$ES_VERSION-linux-x86_64.tar.gz
tar xvfz kibana-$ES_VERSION-linux-x86_64.tar.gz
```

```
cat <<EOF >> kibana-$ES_VERSION-linux-x86_64/config/kibana.yml
server.basePath: "/geonetwork/dashboards"
kibana.index: ".dashboards"
EOF
```

```
nohup ./elasticsearch-$ES_VERSION/bin/elasticsearch &
nohup ./kibana-$ES_VERSION-linux-x86_64/bin/kibana &
nohup ./geonetwork/bin/startup.sh &
```


Installation / Good practices

eg. bin/startup.sh

[Configure database](#)

```
export GEONETWORK_DB_NAME=$CURRENT_DIR/../data/gndb
```

[Configure data directory](#)

```
export JAVA_OPTS="$JAVA_OPTS
```

```
    -Dgeonetwork.dir=$CURRENT_DIR/../data
```

```
    -Dgeonetwork.schema.dir=$CURRENT_DIR/../web/geonetwork/WEB-INF/data/config/schema_plugins
```

```
    -Dgeonetwork.indexConfig.dir=$CURRENT_DIR/../web/geonetwork/WEB-INF/data/config/index
```

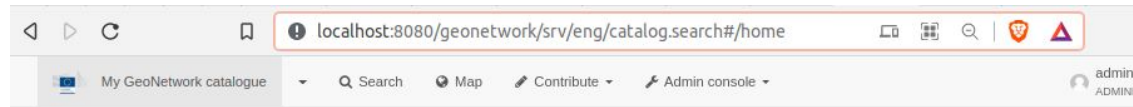
```
    -Dgeonetwork.formatter.dir=$CURRENT_DIR/../web/geonetwork/WEB-INF/data/data/formatter"
```

GeoNetwork instances to use for the workshop

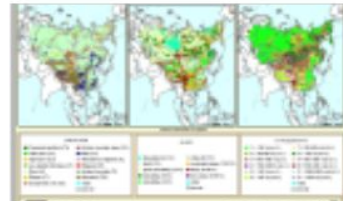
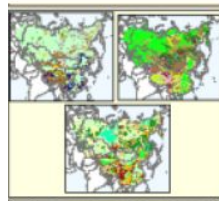
- GeoCat live instance (4.2.0)
 - <https://foss4g-2022-live1.geocat.live> (admin/WelcomeToFOSS4G2022!)
 - <https://foss4g-2022-live2.geocat.live>
 - <https://foss4g-2022-live3.geocat.live>
- titellus demo (coming 4.2.1)
 - <https://apps.titellus.net/geonetwork> (admin/admin for login)
- or you run it from your machine

Quickstart

- Sign in admin/admin
- Admin > Metadata > Load samples
- Searching
- Discovering information
- Browsing data



Search 3 data sets, services and maps, ...



Tour de table / What do you expect? Any particular topics?

- Relation between records
- Moving to GN4
- Integration with other apps. See API
-



INSPIRE

INSPIRE / User story / Service Public de Wallonie

Wallonia region [main metadata catalogue](#) (using [ISO19115-3](#) standard)

also expose a [thematic node dedicated to INSPIRE](#)

Specific CSW end point for [all](#) and for [INSPIRE](#)

Validation using remote validator of [all records in the scope of the Directive](#) using specific [CSW post process](#) ([INSPIRE monitoring results](#))

<https://metawal.wallonie.be/geonetwork/>

<https://metawal.wallonie.be/geonetwork/inspire>



INSPIRE / Hands-on

- Import from Registry [GeoNetwork load codelists from Registry](#)
 - INSPIRE themes
 - Priority datasets
 - Spatial scope
- Import [GEMET](#) from [here](#)
- Setting up INSPIRE validator <https://youtu.be/V2lbzD5iaNk>
 - INSPIRE validator configuration
 - Test validator URL <https://validator.geocat.live/validator>
- Creating a new record from [TG2 template](#)
- Validating
- Adding priority datasets and spatial scope in search aggregations
- Publishing an INSPIRE CSW endpoint

More on this in "[Revamped INSPIRE Geoportal - Cooking the next generation of spatial data catalogues](#)"
If interested in migration to INSPIRE TG2, [check Metawal presentation](#) and [documentation](#)



Harvesting
from various sources
and various protocols



- Catalog harvesters
- Catalog harvester report
- Feature harvesters

Harvester

FISE

▶ **FISE/CH** (OGC CSW 2.0.2)
Last run : 10 months ago
Harvested records

▶ **FISE/IT** (OGC CSW 2.0.2)
Last run : 10 months ago
Harvested records

- ArcSDE
- Directory
- GeoNetwork (2.0)
- GeoNetwork (from 2.1 to 3.x)
- GeoPortal REST
- OAI/PMH
- OGC CSW 2.0.2
- OGC Web Services
- OGC WFS GetF
- Simple URL
- Thredds catalog
- WebDAV / WAF

Paste harvester config

+ Harvest from Clone

Harvest the GetCapabilities document from an OGC WCS, SOS, WPS, CSW).

Harvesting / User story / Ifremer - Sextant



- Create metadata of services using OGC service harvester
- Populate contact directory using harvester
- Harvest other catalogues using CSW
- Use batch editing to categorise harvested records
- Apply transformation to import custom format eg. JSON Seanoé format
- and index data for in-depth data discovery

The screenshot shows the web application interface for Sextant. At the top, the URL <http://www.ifremer.fr/sextant> is displayed. The main content area features a world map with a color-coded overlay representing sea surface temperatures, ranging from blue (cold) to red (hot). The Ifremer logo is in the top right corner. On the left side, there is a vertical navigation menu with the following items: SHARING of spatial data, VALORISATION of spatial data, INTEROPERABILITY of metadata, data and services. On the right side, there is another vertical navigation menu with the following items: Discovery services (Catalogue), View services (Geoviewer), Download services (Basket). At the bottom left, the Sextant logo is shown, which consists of a stylized compass rose and the word "Sextant" in a bold, sans-serif font. At the bottom right, there is a descriptive paragraph: "Sextant is the French spatial data infrastructure for marine environments. Sextant is a support for marine studies and decision making in fields such as biodiversity, marine renewable energy, integrated coastal zone management, fisheries, coastal and deep-sea environment, exploration and exploitation of the seabed."

Create service metadata using OGC harvester



```
<wfs:WFS_Capabilities xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xmlns="http://www.opengis.net/wfs/2.0" xmlns:ows="http://www.opengis.net/ows/2.0" xmlns:fes="http://www.opengis.net/fes/2.0" xmlns:xlir="http://www.opengis.net/xlir/1.0" xmlns:inspire_common="http://inspire.ec.europa.eu/schemas/common/1.0.0" xmlns:inspire="http://inspire.ec.europa.eu/schemas/inspire/1.0.0" xmlns:ogc="http://www.opengis.net/ogc" xmlns:ogcwxs="http://www.opengis.net/ogcwxs/1.0" xsi:schemaLocation="http://www.opengis.net/wfs/2.0 http://inspire.ec.europa.eu/schemas/inspire_dis/1.0 http://www.opengis.net/wfs/2.0" updateSequence="947">
  <ows:ServiceIdentification>
    <ows:Title>EMODnet Bathymetry WFS</ows:Title>
    <ows:Abstract/>
    <ows:ServiceType>WFS</ows:ServiceType>
    <ows:ServiceTypeVersion>2.0.0</ows:ServiceTypeVersion>
    <ows:Fees/>
    <ows:AccessConstraints/>
  </ows:ServiceIdentification>
  <ows:ServiceProvider>
    <ows:ProviderName>N4M5</ows:ProviderName>
    <ows:ServiceContact>
      <ows:IndividualName>Niels Meijer</ows:IndividualName>
      <ows:PositionName/>
      <ows:ContactInfo/>
      <ows:Phone/>
      <ows:Voice/>
      <ows:Facsimile/>
      </ows:Phone>
      <ows:Address>
        <ows:DeliveryPoint/>
        <ows:City>Bunnik</ows:City>
        <ows:AdministrativeArea/>
        <ows:PostalCode/>
        <ows:Country>The Netherlands</ows:Country>
        <ows:ElectronicMailAddress>niels@n4m5.nl</ows:ElectronicMailAddress>
      </ows:Address>
      </ows:ContactInfo>
    </ows:ServiceContact>
  </ows:ServiceProvider>
  <ows:OperationsMetadata>
    <ows:Operation name="GetCapabilities">
      <ows:DCP>
        <ows:HTTP>
          <ows:Get xlink:href="http://ows.emodnet-bathymetry.eu/ows/GetCapabilities" />
          <ows:Post xlink:href="http://ows.emodnet-bathymetry.eu/ows/PostCapabilities" />
        </ows:HTTP>
      </ows:DCP>
      <ows:Parameter name="AcceptVersions">
        <ows:AllowedValues>
          <ows:Value>1.0.0</ows:Value>
          <ows:Value>1.1.0</ows:Value>
          <ows:Value>2.0.0</ows:Value>
        </ows:AllowedValues>
      </ows:Parameter>
      <ows:Parameter name="AcceptFormats">
        <ows:AllowedValues>
          <ows:Value>text/xml</ows:Value>
          <ows:Value>application/xml</ows:Value>
        </ows:AllowedValues>
      </ows:Parameter>
    </ows:Operation>
  </ows:OperationsMetadata>
</wfs:WFS_Capabilities>
```

Harvester

WFS

- ▶ EMODnet Bathymetry - WFS (OGC Web Services)
Last run : 5 days ago
Harvested records: 1
- ▶ EMODnet Bathymetry - WFS - CDI Data Discovery and access service (OGC Web Services)
Last run : 5 days ago
Harvested records: 1
- ▶ EMODnet Chemistry - WFS - CDI Data Discovery and access service (OGC Web Services)
Last run : 5 days ago
Harvested records: 1
- ▶ EMODnet Chemistry - WFS - Contaminants (OGC Web Services)
Last run : 5 days ago
Harvested records: 1
- ▶ EMODnet Chemistry - WFS - Distribution of CDI observations (OGC Web Services)
Last run : 5 days ago
Harvested records: 1

Settings | Harvester history | Metadata records

Update harvester EMODnet Bathymetry - WFS

Delete Save Harvest

Identification

Schedule Enable disable

Node name and logo

EMODnet Bathymetry

The name describing the remote node.

Group

EMODNET Hydrography - PRODU

Group which owns the harvested records. Only the catalog administrator or user admin of this group can manage this node.

User

User who owns the harvested records

Configuration for protocol OGC Web Service

Service URL

https://ows.emodnet-bathymetry.eu/wfs

Web service URL without GetCapabilities parameters

Service type

WFS1.1.0

Service type

Advanced options for protocol ogcwxs

Harvested records

Assign 1 records to local node Remove 1 records

1 record

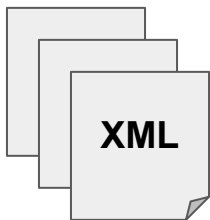
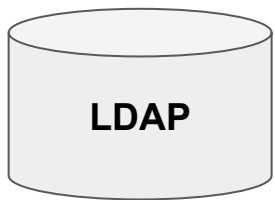
EMODnet Bathymetry WFS

10 Results

[Facilitate add layer on map](#)

Easier metadata (including links between service and layers)

Populate contact directory using harvester



Harvester

Filter

- II CAMOON metadata (Directory)
Last run : 9 years ago
- ▶ CEREMA (OGC CSW 2.0.2)
Last run : 6 days ago
Harvested records: 544
- ▶ CONTACTS_EDMERP (Directory)
Last run : 5 days ago
- II CONTACTS_EDMO (Directory)
Last run : 5 months ago
- II CONTACTS_IFREMER (Directory)**
Last run : 6 months ago
- ▶ CarmenCarto (OGC CSW 2.0.2)
Last run : 5 days ago
- ▶ EMODnet Bathymetry - WCS (OGC Web Services)
Last run : 5 days ago
Harvested records: 1
- ▶ EMODnet Bathymetry - WFS (OGC Web Services)
Last run : 5 days ago
Harvested records: 1
- ▶ EMODnet Bathymetry - WFS - CDI Data Discovery and access service (OGC Web Services)
Last run : 5 days ago

Settings Harvester history Metadata records

Update harvester CONTACTS_IFREMER ✕ Delete

Identification

Node name and logo

CONTACTS_IFREMER

The name describing the remote node.

Group

CONTACTS_IFREMER

Group which owns the harvested records. Only the catalog administrator or user admin of this group can manage this node.

User

User who owns the harvested records

Action on UUID collision

Skip record (default)

When a harvester finds the same uuid on a record collected by another method (another harvester, importer, dashboard editor,...), should this record be skipped (default), overridden or generate a new UUID?

Configuration for protocol Directory

Directory

/home/isi/sextant/directory/contacts/ifremer

File path to the directory to harvest on the server

Type of record

Advanced options for protocol filesystem

Also search in subfolders

Manage directory

This screen allows you to edit directory entries such as contacts, formats, etc. including template management.

+ Add New Entry + Create a template

Entry Types

- Organizations & contacts 7838
- Online resources 1
- gmd:MD_Metadata 1

Entries Templates treg

< < 3 Results > >

Sorted by relevancy

- IFREMER (Treguer Mickael)
Owner: Mickael TREGUER Updated: 6 months ago Actions
- CNRS (Treguer Anna Marie)

8K contacts dispatched in groups

Populate contact directory using harvester



Manage directory

This screen allows you to edit directory entries such as contacts, formats, etc. including template management.

The screenshot displays the Ifremer directory management interface. At the top, there are buttons for '+ Add New Entry' and '+ Create a template'. Below these, a search bar contains the text 'treg' and shows '3 Results'. The main content area is titled 'Bathymétrie - Eventail du Congo (synthèse, 2013) | All changes saved'. It features several tabs: 'Identification', 'Contacts', 'Spatial & temporal references', and 'Usage'. The 'Contacts' tab is active, showing a table of contact information. The table has columns for 'Organisation name', 'Individual name', and 'Electronic mail address'. Two entries are visible, both for 'Ifremer' with email addresses 'sismer@ifremer.fr' and 'gmcarto@ifremer.fr'. Below the table, there is a 'Contact for the resource' section with a search bar. On the right side, a 'Search directory' panel is open, showing a search bar and a list of filters. The filters include a 'Catalogue' section with various categories like 'ATL_CHK (5102)', 'BS_CHK (5102)', 'CONTACTS_EDMO (5102)', 'EMODNET_Chemistry (5102)', 'EMODNET_HYDROGRAPHY_CPRD (5102)', 'MEDCHECKPOINT (5102)', 'SEADATANET (5102)', 'INTERNET (2689)', 'CONTACTS_IFREMER (1933)', and 'CONTACTS_MYOCLEAN (45)'. A 'Filter' section is also visible, and a sidebar on the right shows '7837 record(s)' with a list of entries, each with a question mark icon and a partial name like 'IFREMER (Tre)'. At the bottom, there is a '+ Search for a contact ...' button.

Harvest other catalogues

OGC CSW

GeoNetwork protocol

OAI-PMH

Harvester

shom

▶ SHOM (OGC CSW 2.0.2)
Last run : 6 days ago
Harvested records: 102


+ Harvest from ▾ Clone ▾ ↻

Need help

Settings Harvester history Metadata records

Update harvester SHOM Delete Save Harvest

Identification Enable disable

Node name and logo
SHOM 

The name describing the remote node.

Group
SHOM ▾
Group which owns the harvested records. Only the catalog administrator or user admin of this group can manage this node.


User
▾
User who owns the harvested records

Action on UUID collision
Skip record (default) ▾
When a harvester finds the same uuid on a record collected by another method (another harvester, importer, dashboard editor,...), should this record be skipped (default), overridden or generate a new UUID?

Configuration for protocol OGC CSW 2.0.2

Service URL

CSW URL with or without GetCapabilities parameters

Schedule
Frequency
0 0 12 * * ? 
Time in cron expression will be interpreted as in Europe/Paris (GMT+02:00 / CEST) timezone.
 Only one run
This harvester will run once only.

Categorize harvested records using your classification systems

Batch editing can be used to modify harvested records eg.

- adding keywords
- anonymize
- ...

eg. [SHOM](#)

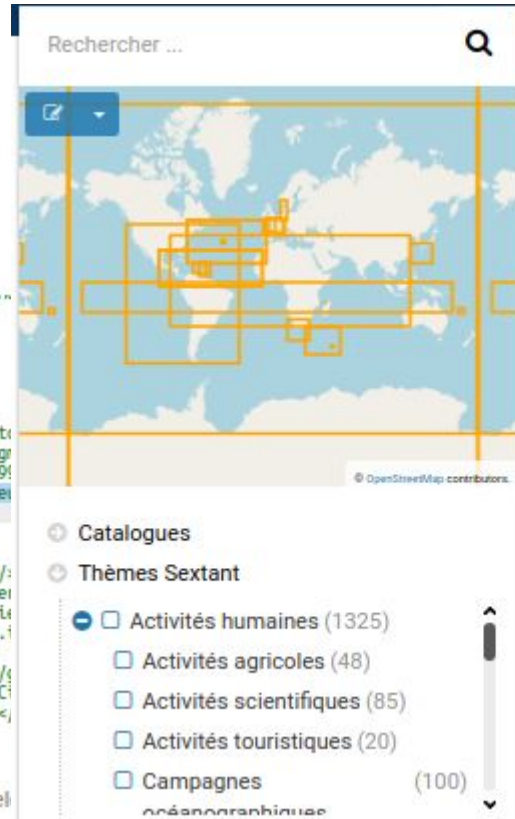
Batch edits

```

6   },
7   {
8   "condition": "count(//gmd:fileIdentifier[*]/text() =
9   'MNT_COTIER_PORT_SM_PAPI_SM_5n_WGS84_ZNEG.xml') > 0",
10  "xpath": "/gmd:identificationInfo/gmd:MD_DataIdentification",
    "value": "<gn_add><gmd:descriptiveKeywords xmlns:gmd='http://www.isotc
/2005/gmd' xmlns:gco='http://www.isotc211.org/2005/gco' xmlns:gn
://www.isotc211.org/2005/gnx' xmlns:xlink='http://www.w3.org/199
><gmd:MD_Keywords><gmd:keyword><gco:CharacterString>/Etat du Milieu
/Bathymétrie</gco:CharacterString></gmd:keyword><gmd:type><gmd
:MD_KeywordTypeCode codeList='http://standards.iso.org/ittf
/PubliclyAvailableStandards/ISO_19139_Schemas/resources/codelist
/ML_gnxCodeLists.xml#MD_KeywordTypeCode' codeListValue='theme'/>
:type><gmd:thesaurusName><gmd:CI_Citation><gmd:title><gco:Character
>Thématiques - SIMM</gco:CharacterString></gmd:title><gmd:identifi
:MD_Identifier><gmd:code><gmx:Anchor xlink:href='https://sextant.i
.fr/geonetwork/srv/eng/thesaurus.download?ref=local.theme.simm
.thematiques'>geonetwork.thesaurus.local.theme.simm.thematiques</
:Anchor></gmd:code></gmd:MD_Identifier></gmd:identifier></gmd:CI_Ci
></gmd:thesaurusName></gmd:MD_Keywords></gmd:descriptiveKeywords></
    },
11  },
12  {
13  "condition": "count(//gmd:fileIdentifier[*]/text() =

```

Batch edits allow to update harvested records. It can be use to add, replace or del element.



Rechercher ...

Catalogues

Thèmes Sextant

- Activités humaines (1325)
- Activités agricoles (48)
- Activités scientifiques (85)
- Activités touristiques (20)
- Campagnes (100)

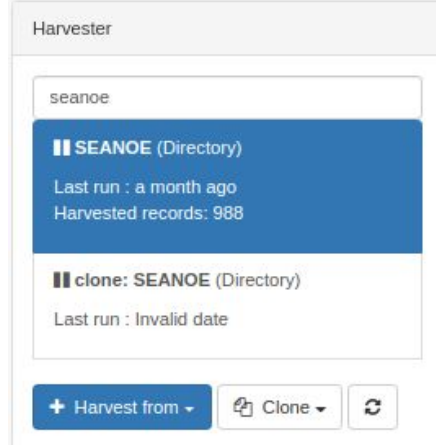
Apply transformation

Import custom JSON files

Convert to ISO19139

eg. [Seano](#) to [Sextant](#)

See also simple JSON harvester




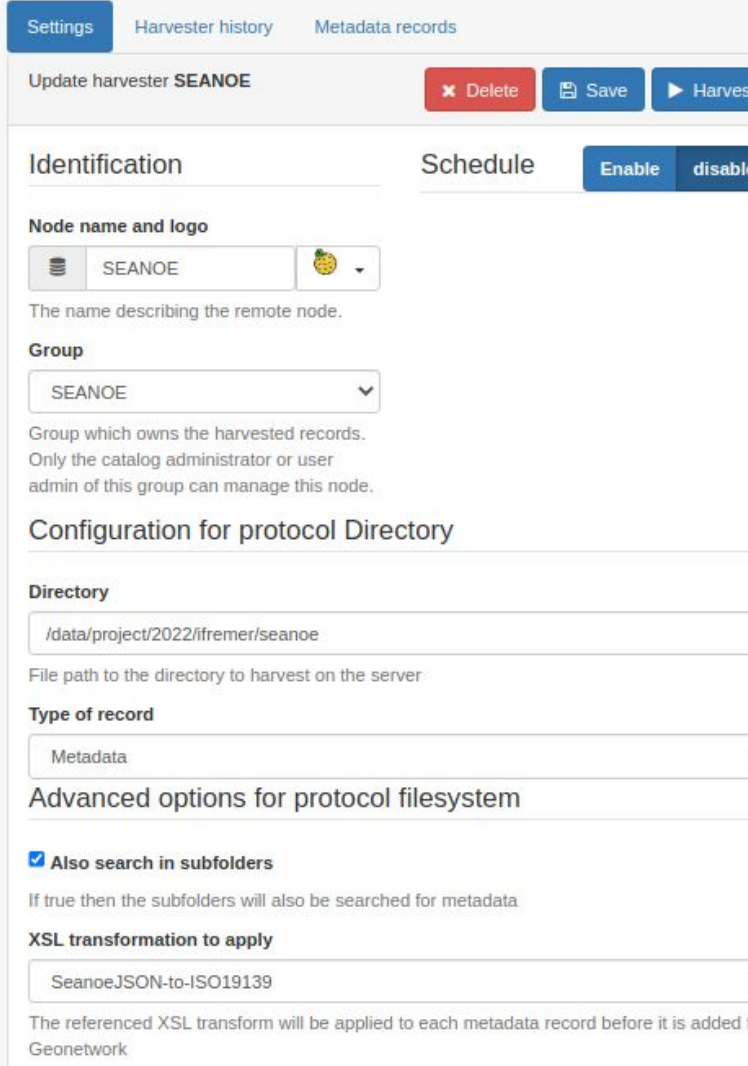
Harvester

seano

- SEANO (Directory)**
Last run : a month ago
Harvested records: 988
- clone: SEANO (Directory)**
Last run : Invalid date

+ Harvest from ▾ Clone ▾ ↻

 Need help





Settings Harvester history Metadata records

Update harvester **SEANO** ✕ Delete 📄 Save ▶ Harvest

Identification Schedule Enable disabl

Node name and logo

 SEANO 

The name describing the remote node.

Group

SEANO ▾

Group which owns the harvested records.
Only the catalog administrator or user admin of this group can manage this node.

Configuration for protocol Directory

Directory

/data/project/2022/fifremer/seano

File path to the directory to harvest on the server

Type of record

Metadata

Advanced options for protocol filesystem

Also search in subfolders

If true then the subfolders will also be searched for metadata

XSL transformation to apply

SeanoJSON-to-ISO19139

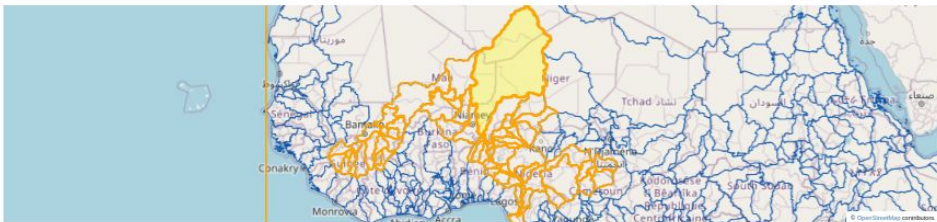
The referenced XSL transform will be applied to each metadata record before it is added to Geonetwork

Indexing data

name of the sub-basin (SUB_BAS and SUB_NAME);
 - area of the sub-basin in square km (SUB_AREA);
 - numerical code of the sub-basin towards which the sub-basin flows (TO_SUBBAS) (the codes -888 and -999 have been assigned respectively to internal sub-basins and to sub-basins draining into the sea)



Discover data



70 / 1,776 feature(s)

- maj_area
- sub_area
- sub_name
- to_subbas
- maj_name
- sub_bas
- maj_bas
- gnbbox

maj_bas	sub_bas	maj_name	sub_name	to_subbas	maj_area	sub_area
2.0	86.0	Niger River Basin	Dallol Bosso	859.0	2136780.0	534043.0
2.0	879.0	Niger River Basin	Niger 16	877.0	2136780.0	131887.0
2.0	823.0	Niger River Basin	Benue 2	821.0	2136780.0	114275.0
2.0	878.0	Niger River Basin	Tilemsi	877.0	2136780.0	84784.0
2.0	854.0	Niger River Basin	Dallol Maouri	853.0	2136780.0	73748.0

WFS Indexing Dashboard

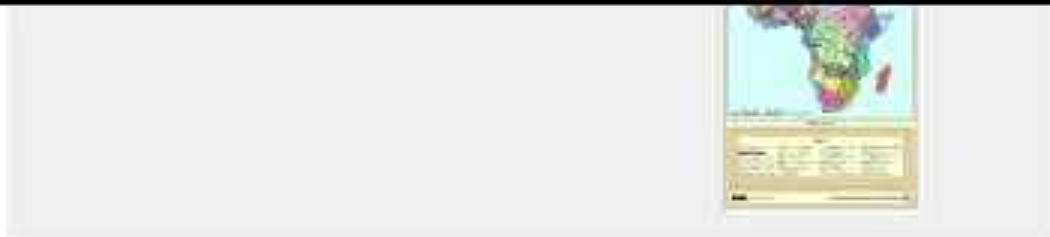
Here are listed the ongoing and finished jobs for indexing features from remote WFS services. Once indexed, features can then be filtered according to their attributes and the filter applied to the original map layer.

Filter Refresh Add WFS harvester

Loading, please wait...

Associated metadata	WFS service URL	Feature count	Last indexing date	Status	Scheduled?	
Observation and Monitoring Locations 0e98c96f-6a93-428b-9fa8-933632260d2	https://sextant.ifremer.fr/services/wfs/environnement_marin-GetCapabilities Feature type: referentiel_Lieux_quadrigie_point	9372	5 days ago	success	Yes	<input type="button" value="Schedule"/> <input type="button" value="Start"/> <input type="button" value="Delete"/>
Surveys - Données par paramètre cf5948f6-5bbf-4e44-ba74-e0f429af51ea	https://sextant.ifremer.fr/services/wfs/environnement_marin-GetCapabilities Feature type: surval_parametre_point	7303	5 days ago	success	Yes	<input type="button" value="Schedule"/> <input type="button" value="Start"/> <input type="button" value="Delete"/>
Lieux d'observation et de surveillance - Thème Contaminants chimiques et Ecotoxicologie 54c75193-38af-4e59-998a-aaa487558678	https://sextant.ifremer.fr/services/wfs/environnement_marin-GetCapabilities Feature type: surval_parametre_theme_chimie_ecotoxicologie_point	3206	5 days ago	success	Yes	<input type="button" value="Schedule"/> <input type="button" value="Start"/> <input type="button" value="Delete"/>
Lieux d'observation et de surveillance - Inventaire des lieux actifs des réseaux 88d2834a-28ed-43d5-8f2c-4bcdfbc445d	https://sextant.ifremer.fr/services/wfs/environnement_marin-GetCapabilities Feature type: surval_lieux_actifs_point	2430	5 days ago	success	Yes	<input type="button" value="Schedule"/> <input type="button" value="Start"/> <input type="button" value="Delete"/>
Lieux d'observation et de surveillance - Thème Benthos don't Recifs coralliens 9b7fd7f1-2bb6-46c5-918f-999db5e827ab	https://sextant.ifremer.fr/services/wfs/environnement_marin-GetCapabilities Feature type: surval_parametre_theme_benthos_point	2105	5 days ago	success	Yes	<input type="button" value="Schedule"/> <input type="button" value="Start"/> <input type="button" value="Delete"/>
Lieux d'observation et de surveillance - Thème Phytoplankton et Hydrologie ba34c628-5761-4d88-b030-720543295519	https://sextant.ifremer.fr/services/wfs/environnement_marin-GetCapabilities Feature type: surval_parametre_theme_phytoplankton_hydrologie_point	2018	5 days ago	success	Yes	<input type="button" value="Schedule"/> <input type="button" value="Start"/> <input type="button" value="Delete"/>
ROCC Network Observation and Monitoring Locations eddc7998-5b1b-499f-83a9-411a887c5b17	https://sextant.ifremer.fr/services/wfs/environnement_marin-GetCapabilities Feature type: surval_parametre_ROCC_sediment_point	1374	5 days ago	success	Yes	<input type="button" value="Schedule"/> <input type="button" value="Start"/> <input type="button" value="Delete"/>
Lieux d'observation et de surveillance - Thème Microbiologie 1b89c9e1-ab86-4d15-b84b-41789a12a947	https://sextant.ifremer.fr/services/wfs/environnement_marin-GetCapabilities Feature type: surval_parametre_theme_microbiologie_point	1243	5 days ago	success	Yes	<input type="button" value="Schedule"/> <input type="button" value="Start"/> <input type="button" value="Delete"/>
Lieux d'observation et de surveillance - Inventaire des lieux actifs benthiques côtiers BENTHOS - Inventaire des lieux actifs dc54e99c-6991-4792-92b9-f9c146c2b2d8	https://sextant.ifremer.fr/services/wfs/environnement_marin-GetCapabilities Feature type: surval_Lieux_actifs_BENTHOS_point	1041	5 days ago	success	Yes	<input type="button" value="Schedule"/> <input type="button" value="Start"/> <input type="button" value="Delete"/>
REPHY/REPHYTOX Observation and Monitoring Locations aa8fe568-62c6-4b53-abbb-d9fcef2b5293	https://sextant.ifremer.fr/services/wfs/environnement_marin-GetCapabilities Feature type: surval_parametre_REPHY_point	839	5 days ago	success	Yes	<input type="button" value="Schedule"/> <input type="button" value="Start"/> <input type="button" value="Delete"/>

Showing 1 to 10 of 61 rows rows per page



Discover data



All roads
 All roads

All roads

- All roads
- All roads
- All roads
- All roads
- All roads
- All roads
- All roads
- All roads
- All roads
- All roads

API

All roads
 government roads

All roads

Harvesting / Hands-on

- CSW
 - <https://www.nationaalgeoregister.nl/geonetwork/srv/csw>
 - <https://www.sandre.eaufrance.fr/atlas/srv/eng/csw>
- WMS
 - <https://services.sandre.eaufrance.fr/geo/zagri>
 - <https://services.sandre.eaufrance.fr/geo/obs>
 - <http://geoservices.brgm.fr/geologie>
- Harvesting data
 - for data harvesting “River basin of Africa”, “[Obstacles à l’écoulement](#)”

Harvesting / Related talks this week

Revamped INSPIRE Geoportal - Cooking the next generation of spatial data catalogues

2022-08-25, 11:30-12:00 (Europe/Rome), Auditorium

<https://talks.osgeo.org/foss4g-2022/talk/MBDB3W/>





Biodiversity
Biodiversity related datasets



Climate-ADAPT
Climate Change Adaptation related datasets



Copernicus Land
Copernicus Land Monitoring Service Pan-European and Local products



EARL
Environmental Accounting Reference Layers



External Datasets
Datasets not owned by EEA



Forest Information System for Europe
FISE metadata catalogue (BETA)



GEOSS
EEA datasets exposed through the GEOSS portal



Geospatial reference
Datasets for geospatial reference

Thematic portals

Portal / User story / EEA

EEA thematic nodes <https://sdi.eea.europa.eu/>



Biodiversity

Biodiversity related datasets



Climate-ADAPT

Climate Change Adaptation related datasets



Copernicus Land

Copernicus Land Monitoring Service Pan-European and Local products



EARL

Environmental Accounting Reference Layers



External Datasets

Datasets not owned by EEA



Forest Information System for Europe

FISE metadata catalogue (BETA)



GEOSS

EEA datasets exposed through the GEOSS portal



Geospatial reference

Datasets for geospatial reference



INSPIRE Priority Datasets



Marine

Marine related datasets



Water

Water related datasets



European Environment Agency

Portal / Hands-on

- Create a new portal from Admin > Settings > Sources (see [GeoNetwork multi-portal configuration](#))
 - Current catalogue portal ?
<https://sdi.eea.europa.eu/catalogue/srv/api/sources>
 - [Request a portal which does not exist](#)
 - Upload logo and set portal logo
- Learning queries
- UI configuration (eg. modules, facets, ...)

Portal filter / Learning queries

[+any.default:IDP *](#) = full text search

[+resourceIdentifier.code:copernicus*](#) = resource identifier starts with

[-resourceIdentifier.code:eea* -resourceIdentifier.code:copernicus*](#) = NOT using “-”

[-cl_status.key:obsolete -cl_status.key:superseded +cat:biodiversity](#) = NOT status and category

[+th_httpinspireceuropaeumetadataacodelistPriorityDataset-PriorityDataset:*](#) = Thesaurus used

[+cat:fise +_exists_:resourceTitleObject](#) = **Category AND field exist**

[+th_rod-eionet-europa-euNumber:\[1 TO *\]](#) = **1 or more reporting obligations**

[More on Elasticsearch doc](#), [fields list](#) or check search results

[Test queries using q\(...\) in full text search field](#)

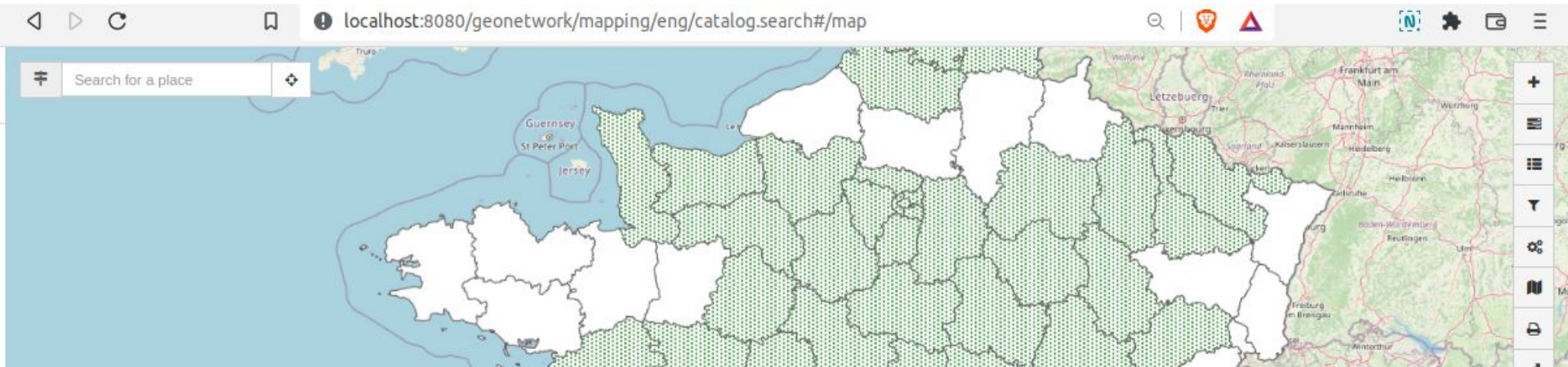
Portal config / User Interface

Enable/disable apps eg. only search, only mapping

Configuring languages

Configuring facets/aggregations

Configuring search



Portal config / UI / Learning aggregations

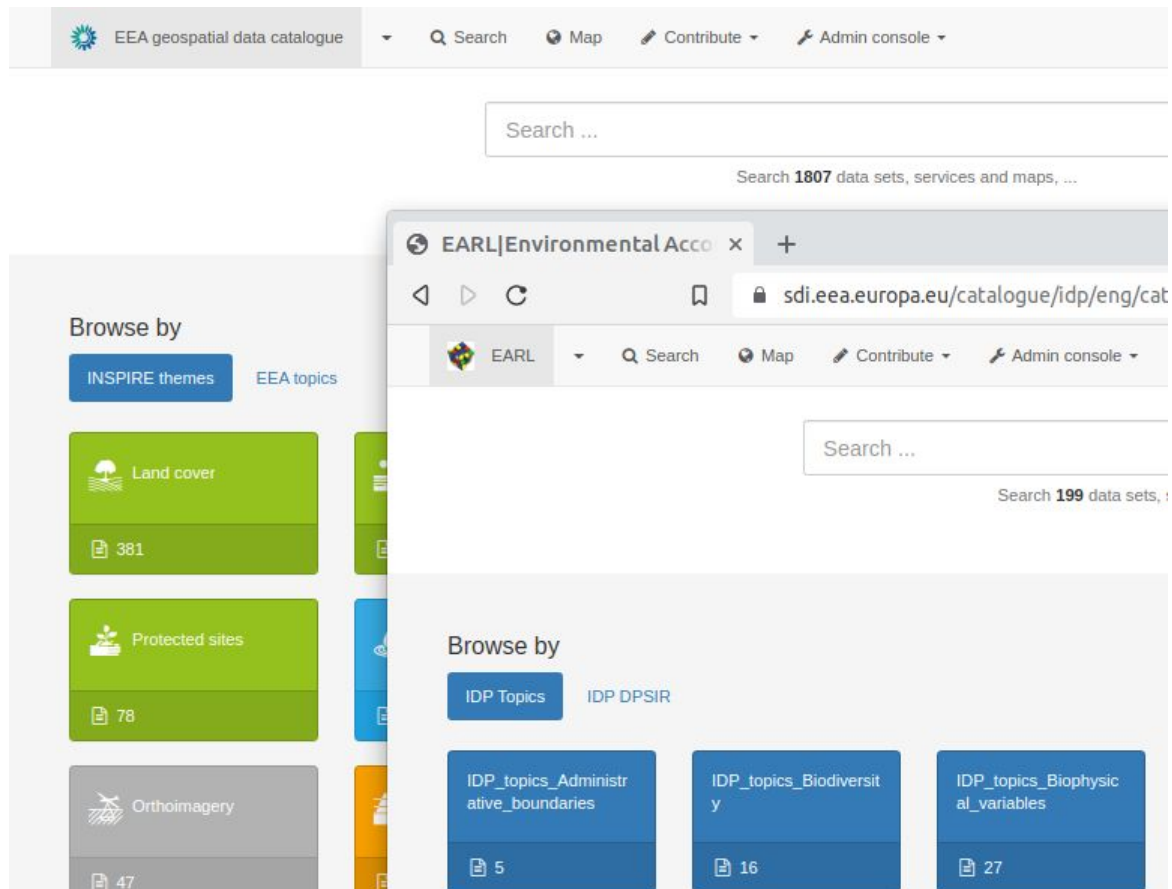
Home page

Search filters

Dashboards

Statistics

Directory filters



Portal config / UI / Learning aggregations

[Documentation](#) and [default configuration](#)

[More on Elasticsearch aggregations](#)



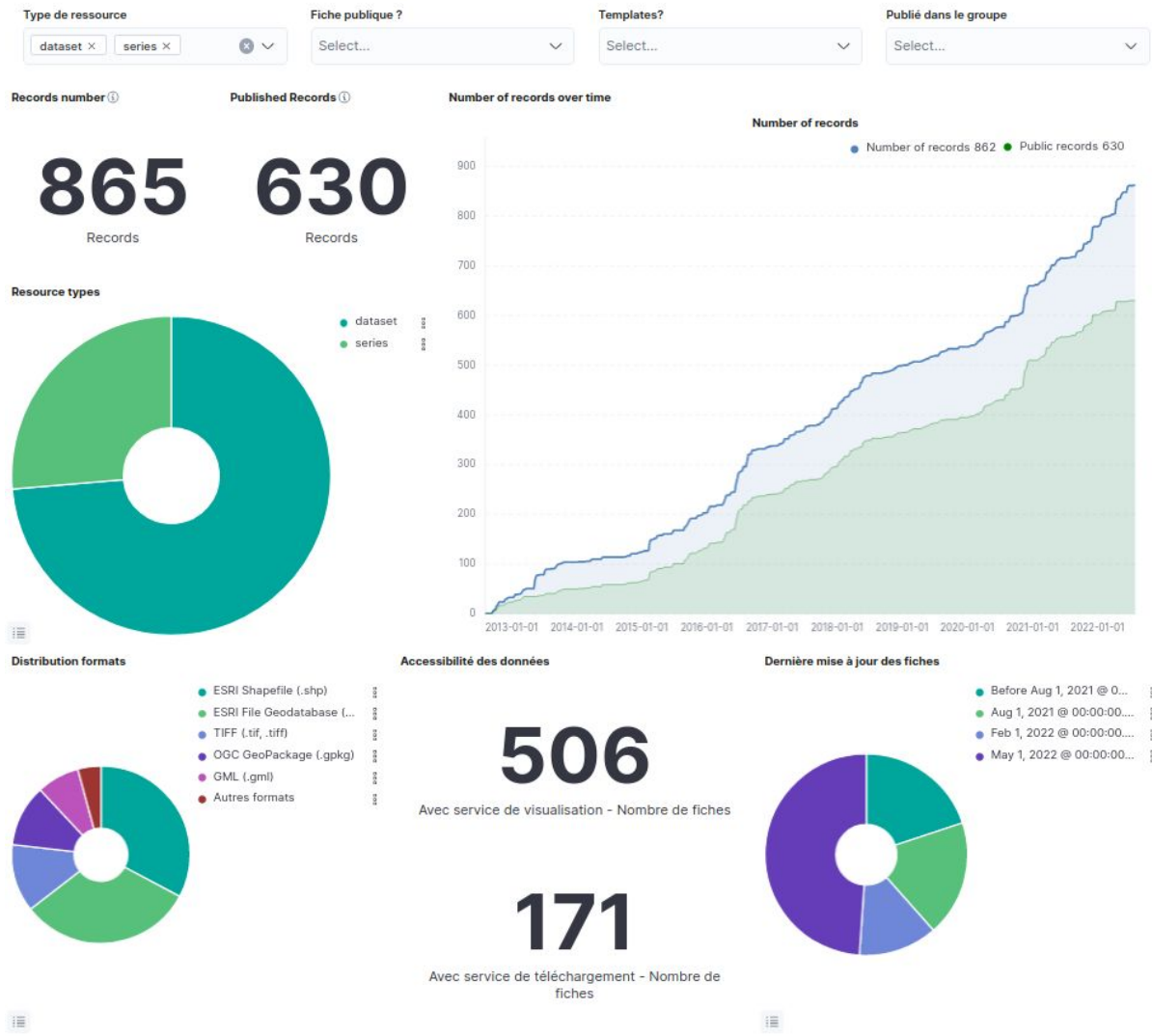
Going further

GeoNetwork
open source

More topics

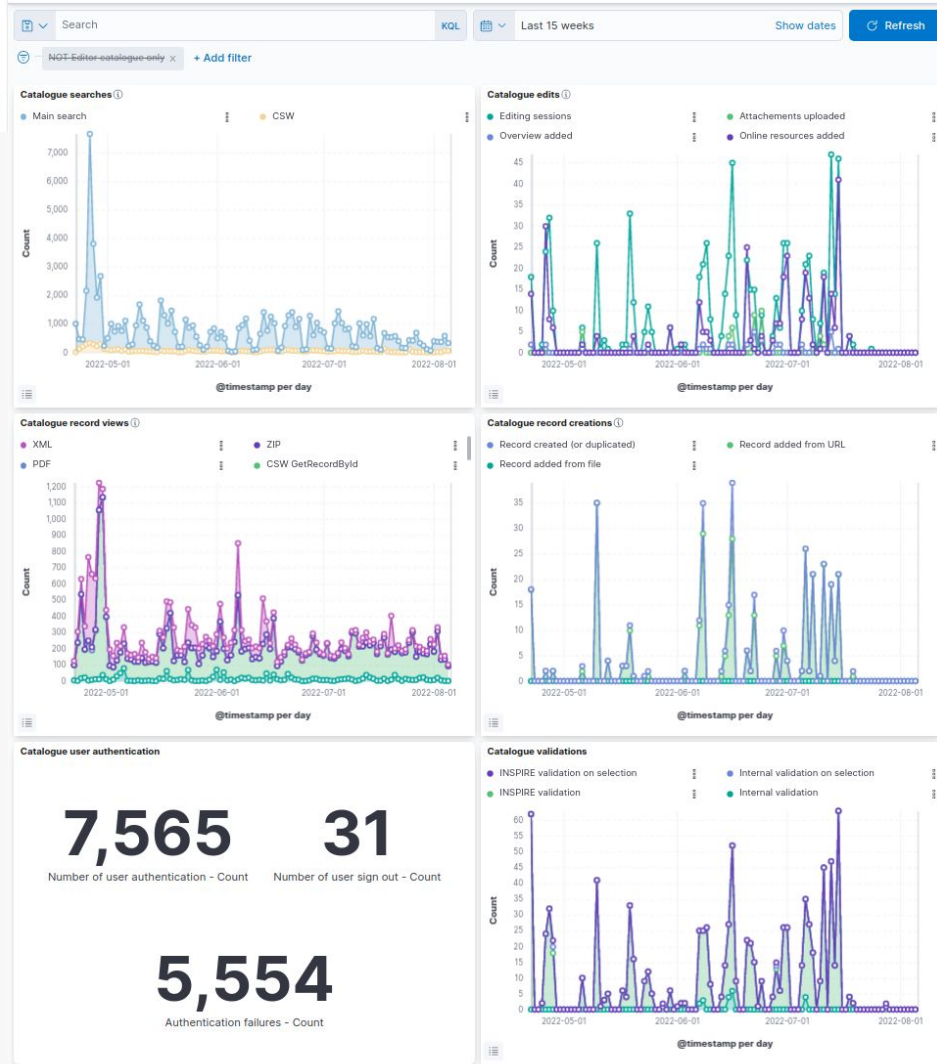
- Analysis & dashboards examples
- [Using the API](#)
- [Building your own editor](#)
- [Editing in batch](#)
- ... depending on your questions

Dashboards



Dashboards

Follow catalogue activity



Using the OpenAPI

GeoNetwork 4.2.1 OpenAPI Documentation 4.2.1 OAS3

../srv/api/doc

This is the description of the GeoNetwork OpenAPI. Use this API to manage your catalog.

[GeoNetwork user mailing list - Website](#)

[Send email to GeoNetwork user mailing list](#)

[GPL 2.0](#)

[Learn how to access the catalog using the GeoNetwork REST API.](#)

Servers

{catalog}/{portal}/api - My GeoNetwork ▾

Computed URL: <http://localhost:8080/geonetwork/srv/api>

Server variables

catalog

<http://localhost:8080/geonetwork> ▾

portal

[srv](#) ▾

atom ATOM

GET

[/atom/describe/resource](#) Describe resource

Building your own editor

Total nutrient input to agroecosystems 2010, Feb. ...

Categories Group Validation Close Save & close Save metadata

Identification of resource

Title *

Total nutrient input to agroecosystems 2010, Feb. 2015

The title should be self-explanatory and should not contain acronyms unless they are widely known. In any case, should an acronym be used in the title, it shall be made explicit in the abstract. For datasets with versions please follow this convention

Code *

eea_r_3035_1_k_total-nutrient-input_p_2010_v01_r00

The dataset identifier shall be unique and ideally meaningful, following this convention.

Edition *

01.00

The version and revision numbers of the dataset should be encoded in this element, separated by a point (VersionNumber.RevisionNumber)

Date *

Creation 24/02/2015

+


Set at least the creation date for the dataset, and publication date if the dataset is published on the EEA website. There shall be not more than one date of creation and publication. Optionally, date of last revision can be added when relevant. When available, a foreseeable date for the next update can be added.

Abstract *

The total nitrogen input to agricultural soils for the year 2010 is represented in kgN/ha/yr at a 1 km resolution. Nitrogen input includes organic manure application, inorganic fertilizer input, atmospheric deposition and biological fixation. The data comes from the EEA nutrient accounts, developed by EEA and ETC-ULS, and is based on spatial reference data on crop and livestock distribution, yield and livestock statistics, and official conversion factors (see lineage for details).
The geographic coverage is EU 27 (2007).

This is a brief narrative summary of the content of the resource. The abstract provides a clear and concise statement that enables the reader to understand the content of the data or service. Ideally it should also contain information about the coverage (linguistic transcriptions of the extent or location), main attributes, data sources, legal references and importance of the work. Acronyms should be written in full when first used. When the metadata refers to a revision of an already existing dataset, it is important to indicate as well the main changes on this new version.

Overview



Choose or drop an image here

Associated resources

Add

Online resources

Sort by Protocol Uri Title

- WWW:URL
<https://sdi.eea.europa.eu/data/eb306a29-f0db-49b-...>
Direct download (Eionet authentication)
- OGC:WMS
<https://land.discomap.eea.europa.eu/arcgis/servic...>
0
Total nitrogen input 2010 (kg/ha/yr)
- ESRI:REST
<https://land.discomap.eea.europa.eu/arcgis/rest/se...>
- EEA:FILEPATH
<https://sdi.eea.europa.eu/webdav/continental/euro...>

When available, please add the link to the web download using the Web address (URL) protocol, to the WMS GetCapabilities and corresponding layer using "OGC:WMS" protocol as well as the link to the ESRI Rest service using the "ESRI:REST" protocol. Links for internal access, the graphic overview and related data sources will be added by the SDI Team during the registration process.


Validation

For more details about how to create EEA metadata using the Editor please read the SDI Editor User Guide. Elements with a * are mandatory with respect to the EEA metadata guidelines.

If you have any questions, please contact sdi[at]eea.europa.eu.


Batch editing example

Select records, define changes, preview and save.



Add "requires authentication" in the download link laber for all Copernicus metadata entries

Added by **Jose Rubio** about 15 hours ago. Updated about 12 hours ago.


Status:	NEW	Start date:	2022-08-15
Priority:	= Normal	Due date:	-
Assignee:	François Prunayre 	% Done:	<div style="width: 0%;"><div></div></div> 0%
Category:	GeoNetwork		
Target version:	-		
Keywords:			

Description

For all those entries which identifier starts with "copernicus-" the download requires a sign-in (which is managed externally) - see currently here: https://land.copernicus.eu/pan-european/high-resolution-layers/grassland/status-maps/grassland-2018/login?came_from=https://land.copernicus.eu/pan-european/high-resolution-layers/grassland/status-maps/grassland-2018?tab=download

They are not restricted (as the policy we have now) but simply requires log in. As users can use an Eionet account or a Copernicus local account, I think we can just say "requires authentication".

"Direct download (requires authentication)"

 Quote

```
<gmd:onLine>
  <gmd:CI_OnlineResource>
    <gmd:linkage>
      <gmd:URL>https://land.copernicus.eu/imagery-in-situ/eu-dem/eu-dem-v1.1?tab=download</gmd:URL>
    </gmd:linkage>
    <gmd:protocol>
      <gco:CharacterString></gco:CharacterString>
    </gmd:protocol>
    <gmd:name>
      <gco:CharacterString>Download</gco:CharacterString>
    </gmd:name>
  </gmd:CI_OnlineResource>
</gmd:onLine>
```

```
<gmd:onLine>
  <gmd:CI_OnlineResource>
    <gmd:linkage>
      <gmd:URL>https://land.copernicus.eu/imagery-in-situ/eu-dem/eu-dem-v1.1?tab=download</gmd:URL>
    </gmd:linkage>
    <gmd:protocol>
      <gco:CharacterString></gco:CharacterString>
    </gmd:protocol>
    <gmd:name>
      <gco:CharacterString>Download (require authentication)</gco:CharacterString>
    </gmd:name>
  </gmd:CI_OnlineResource>
</gmd:onLine>
```

Batch editing

Batch editing example

1. Choose a set of records

2. Define edits

3. Apply changes

22 record(s) in selection.

↻ Search and replace </> XPath editing 📄 Form editing

Updating records using XPath needs careful definition of the changes. A change is defined by:

- an optional title ✓
- a type of update ✓
- a mandatory XPath to point to the element(s) to update. XPath may contain a filter expression. ✓
- a value, which could be an XML snippet if the mode is not 'delete' ✓

Examples ▾

Distribution / Replacing a protocol value

Add the element or value (in the first matching parent) or create it

```
/gmd:distributionInfo/*/gmd:transferOptions/*/gmd:onLine*[substring(gmd:linkage*/text(), string-length(gmd:linkage*/text()) - string-length('?tab=
```

```
<gmd:name xmlns:gmd="http://www.isotc211.org/2005/gmd"><gco:CharacterString xmlns:gco="http://www.isotc211.org/2005/gco">Download (re authentication)</gco:CharacterString></gmd:name>
```



Reset changes

Batch editing example

JSON configuration that you can paste in the interface:

```
{  
  "field": "Distribution / Replacing a link name",  
  "insertMode": "gn_add",  
  "xpath": "/gmd:distributionInfo/*/gmd:transferOptions/*/gmd:onLine/*[substring(gmd:linkage/*/text(),  
string-length(gmd:linkage/*/text()) - string-length('?tab=download') + 1) = '?tab=download']",  
  "value": "<gmd:name xmlns:gmd='http://www.isotc211.org/2005/gmd'><gco:CharacterString  
xmlns:gco='http://www.isotc211.org/2005/gco'>Download (requires authentication)</gco:CharacterString></gmd:name>"  
}
```

User can preview changes:

Update the modification date in the metadata document (for example, gmd:dateStamp for ISO 19139)

Process preview

```
1 - <preview>[@@ -35891,32 +35891,180 @@  
2 /gnd:protocol>  
3  
4 + <gnd:name>  
5 <gco:CharacterString>Download (requires authentication)</gco:CharacterString>  
6 </gnd:name>  
7  
8 </gn  
9 ]</preview>
```

Related records

eg. [superseded](#)

Any other questions?

FOSS4G 2022 - Firenze, IT

More on GeoNetwork this week

[State of GeoNetwork](#)

[GeoNetwork and a11y: Introducing accessibility in OSGeo applications](#)

Where to learn and contribute

<https://geonetwork-opensource.org/>

<https://github.com/geonetwork/core-geonetwork>

<https://gitter.im/geonetwork/core-geonetwork>

