

GeoNetwork Opensource

The geospatial metadata catalogue

FOSS4G2010 - Barcelona

Jeroen Ticheler



Director

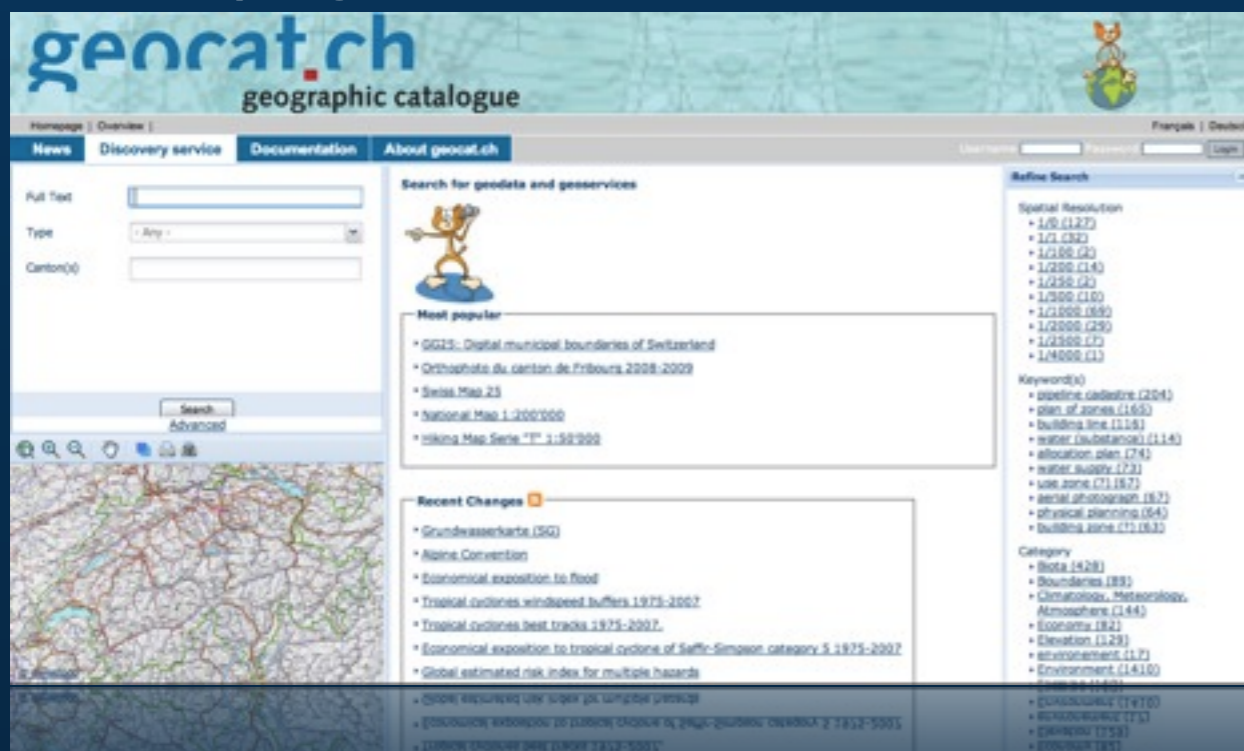


Founder and chair

GeoNetwork opensource



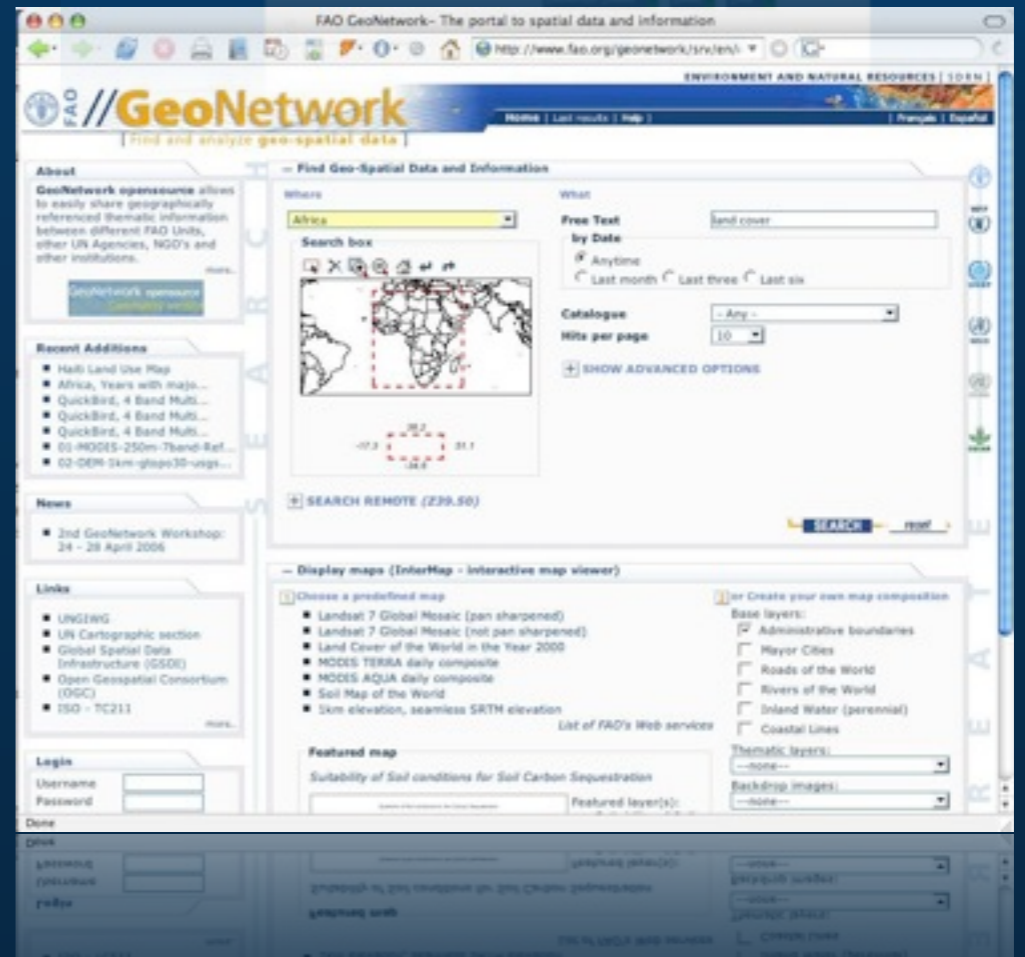
SwissTopo geocat.ch



Dutch National Geo Registry



FAO GeoNetwork



GeoNetwork history at a Glimpse

- Prototyping by FAO (2000-2001)
- Version 1 by FAO & WFP (released 2003)
- Version 2 by FAO, WFP & UNEP (released 2005)
- Version 2.1 (released September 2007)
- Version 2.2 (released April 2008)
- Version 2.4 (released July 2009)
- Version 2.6 (September 2010)
- Version 2.8 and 3.0 in progress (under development)



UNEP



Users

- United Nations: FAO, WFP, UNEP, WHO, OCHA, UNHCR
- Other: FGDC, JRC, CGIAR
- Netherlands, Swiss, Norway, Denmark, Sweden, Finland, Spain, France, Czech, UK, Australia, South Africa, ...
- ESA Heterogenous Mission Accessibility project
- Global Earth Observation System of Systems (GEOSS) GEOportal
- et cetera...

The glue in a Spatial Data Infrastructure



An interactive map library on the Internet

Build on Standards,
Standards, Standards, Standards, Standards, ...

The Basic Building Blocks

- ISO TC211 Standards
- OGC Standards
(Open Geospatial Consortium)

Standards

Metadata

- ISO19115:2003, ISO19119:2005, ISO19139:2007, FGDC, Dublin Core

Catalog interfaces

- OGC CSW 2.0 (client & server)
- Z39.50/ISO23950 (client & server)
- OAI-PMH (client & server)
- Geo-OpenSearch (server)
- GeoRSS (server)
- WebDAV (client)

Web Mapping Client

- WMS, WMC

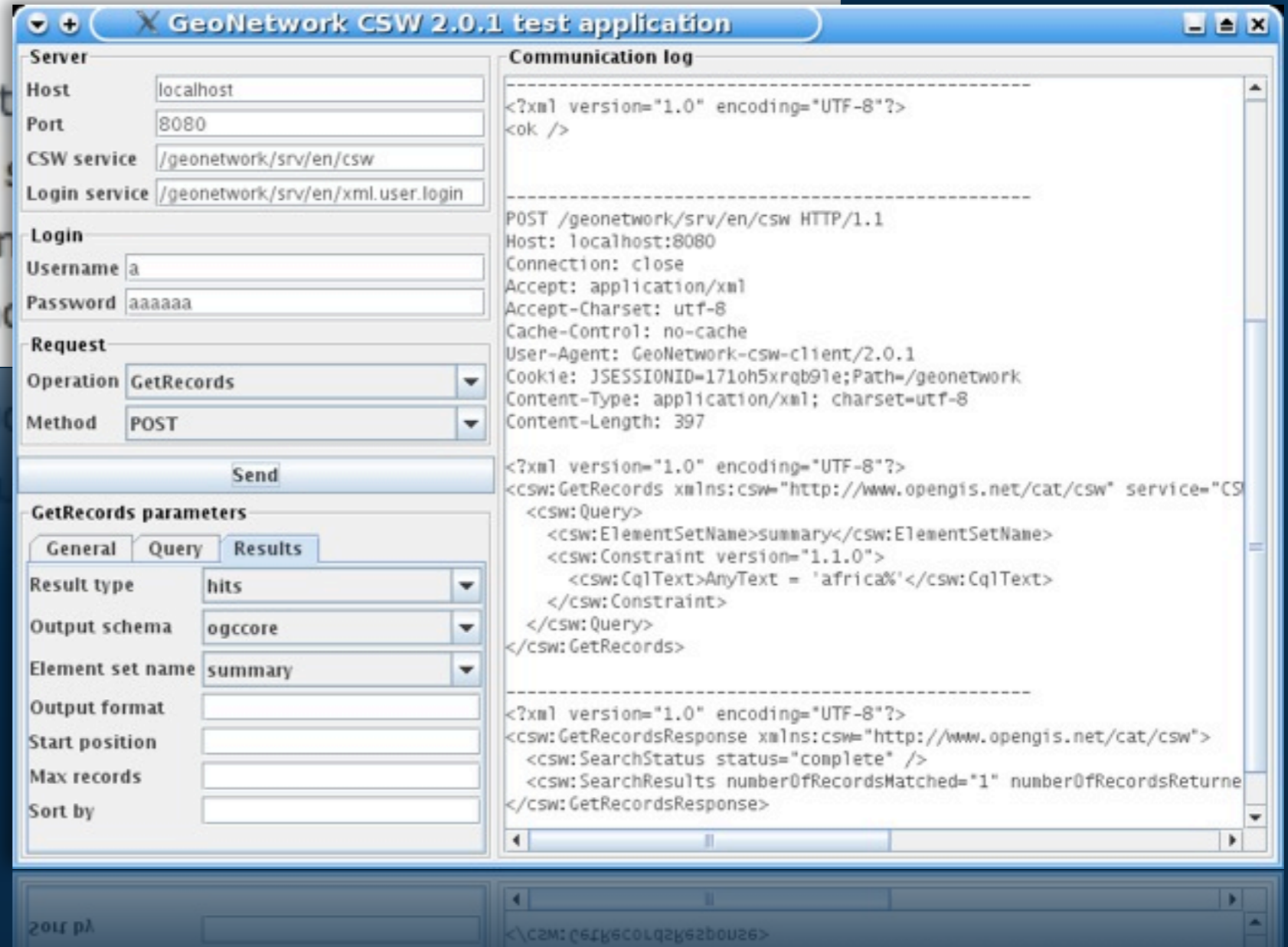
Web Map Server (through GeoServer)

- WMS, WFS, WFS-t, WCS, KML

Catalogue Services/Web 2.0.1

- Developed by: [United Nations Food and Agriculture Organization \(UN FAO\)](#)
- Product Name: GeoNetwork
- License: GNU GPL

GeoNetwork opensource is a standard catalog application to manage data on the web. It provides powerful metadata as well as an embedded interface



The screenshot shows a web browser window titled "GeoNetwork CSW 2.0.1 test application". The interface is divided into several sections:

- Server:** Host: localhost, Port: 8080, CSW service: /geonetwork/srv/en/csw, Login service: /geonetwork/srv/en/xml.user.login
- Login:** Username: a, Password: aaaaaa
- Request:** Operation: GetRecords, Method: POST
- Send:** A button to execute the request.
- GetRecords parameters:** General, Query, Results tabs. Fields include: Result type (hits), Output schema (ogccore), Element set name (summary), Output format, Start position, Max records, and Sort by.
- Communication log:** Shows the raw HTTP request and XML response. The request is a POST to /geonetwork/srv/en/csw with a CSW GetRecords query. The response is an XML document indicating a successful search for records matching the constraint "africa%".

Catalog Interfaces

Technologies

- Java language (platform independent)
- Servlet environment (Tomcat, Jetty, ...)
- XML data representation (JDOM)
- XSL templates for presentation (XALAN)
- JDBC for database access (runs on any compliant DBMS)
- Lucene search capabilities
- XML Schema for metadata editing

Users

- Search in multiple catalogues through one website
- File download
- Data visualization through web map viewer

Data Providers

- Standardized process to document and publish
- Online metadata editor
- Different metadata standards
- Different sharing / security levels
- File upload

Administrators

- Easy to install
- Easy to maintain
- Groups and users management
- Harvesting management
- Migration support
- Active user and developer communities

Open Source Software Development & Community

GeoNetwork
opensource

The Open Source Geospatial Foundation - osgeo.org



OSGeo Projects

Web Mapping

deegree *
Mapbender
MapBuilder
MapGuide Open Source
MapServer *
OpenLayers

Desktop Applications

GRASS GIS
OSSIM *
Quantum GIS
gvSIG *

Geospatial Libraries

FDO
GDAL/OGR
GEOS *
GeoTools *

Metadata Catalog

GeoNetwork

Other Projects

Public Geospatial Data
Education and Curriculum

(* in incubation)

The Open Source Geospatial Foundation - osgeo.org



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Geospatial Libraries

FDO
GDAL/OGR
GEOS *
GeoTools *

Metadata Catalog

GeoNetwork

Other Projects

Public Geospatial Data
Education and Curriculum

(* in incubation)

Formalized project governance

- Advisory Board
- Project Steering Committee (day-to-day)
- Proposals for new developments
- Release strategy



Some Screenshots

GeoNetwork v2.6

The screenshot displays the GeoNetwork v2.6 web interface. At the top right, the logo reads "GeoNetwork OpenSource" with the tagline "Geographic data sharing for everyone". Below the logo is a navigation bar with links for "Home", "Contact us", "Links", "About", and "Help". A search bar is present with a "Search" button and a "Reset" button. A "Language" dropdown menu is set to "English".

The main content area is divided into several sections:

- WHAT? / WHERE?:** A search interface with a "WHAT?" input field and a "WHERE?" section featuring a world map and a search button.
- Map viewer:** A central map showing a geographical area with various layers. The "Layer tree" on the left includes "Base Layer", "Overlays", "Borders", "Population Density", and "Average Sea Surface Temperature". A "Legend" section is also visible.
- FIND INTERACTIVE MAPS, GIS DATASETS, SATELLITE IMAGERY AND RELATED APPLICATIONS:** A search results section showing "Aggregate Results matching search criteria : 1-7/7 (page 1/1), 0 selected". It includes a "Select" dropdown (set to "all") and a "Sort by" dropdown (set to "Relevance").
- Search Results:** Two results are visible:
 - PHYSIOGRAPHIC MAP OF NORTH AND CENTRAL EURASIA (SAMPLE RECORD, PLEASE REMOVE!)**: Includes an abstract, keywords ("physiography, soil, Eurasia"), and buttons for "Metadata", "Download", and "Interactive Map".
 - GEOSCIENCE AUSTRALIA'S OPEN DAY PHOTOGRAPHS 26TH AUGUST 2007**: Includes an abstract and a "No preview available" message.

Dutch National Georegistry

The screenshot shows the Dutch National Georegistry (NATIONAAL GEOREGISTER.nl) website. The header features the logo and a navigation menu with options: Deutsch - English - Français, Zoeken, Kaart, Organisaties, Publiceren, Feedback, Informatie, and Help. The main content area is divided into three sections: 'Wat?' (What?), 'Waar?' (Where?), and 'Wanneer?' (When?).

Wat? This section contains search criteria: 'Met al deze woorden', 'Met een van deze woorden', 'Met de exacte woordcombinatie', and 'Zonder de woorden'. It also includes a 'Nauwkeurigheid' (Precision) slider set to 'precies' and a 'Sorteren' (Sort) dropdown menu set to 'Relevantie'. The 'Bezoeken per pagina' (Items per page) slider is set to 10.

Waar? This section features a map of the Netherlands with a search area highlighted in yellow. Below the map, there are fields for 'Ruimtelijk zoeken' (Spatial search) with options 'overlapt met' and 'zoekkader', and coordinate fields for 'lat (max)', 'long (max)', 'long (min)', and 'lat (min)'. The 'Wanneer?' section includes radio buttons for 'Willekeurig tijdstip', 'Opties' (set to 'vanaf 1 jaar geleden'), and 'Van' to 'Tot' date range.

On the right side, there are statistics: 'Totaal aantal datasets in het Nationaal Georegister: 1054' and 'Aantal datasets toegevoegd deze maand: 17'. At the bottom, there are sections for 'Nieuws' (News) and 'Populaire datasets' (Popular datasets).

Dutch National georegistry nominated as government ICT-project of the year!

Please vote before 23 September 2010 at:

<http://www2.computable.nl/computableawards/stem/>

Search results

Links | About | Help | English

User: Jeroen Ticheler Logout

Show map


FIND INTERACTIVE MAPS, GIS DATASETS, SATELLITE IMAGERY AND RELATED APPLICATIONS

Aggregate Results matching search criteria : 1-10/56 (page 1/6), 0 selected


Select : [all](#), [none](#)

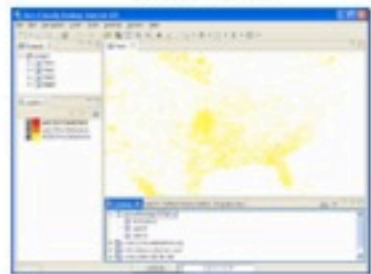
Sort by

MY CORE DATA


 Abstract The ISO19115 metadata standard is the preferred metadata standard to use. This template is multilingual with a default language set to english. Other language could be used to translate part of the m...

Keywords Netherlands


Owner: admin 




MY FOSS4G2010 GEOSERVER WEB MAP SERVICE

 Abstract A compliant implementation of WMS 1.1.1 plus most of the SLD 1.0 extension (dynamic styling). Can also generate PDF, SVG, KML, GeoRSS


Keywords WFS, WMS, GeoServer, GeoNetwork

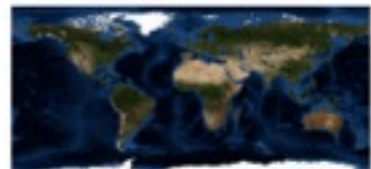



BLUE MARBLE WORLD IMAGE

 Abstract

Keywords Blue, Marble, world, topography, bathymetry, 200407







ISO 19115:2003 with ISO 19139:2007 encoding

Default view
Advanced view
XML view

Create Edit Delete Privileges Categories


Logo HYDROLOGICAL BASINS IN AFRICA

```
<?xml version="1.0" encoding="UTF-8"?>
<gmd:MD_Metadata xmlns:gmd="http://www.isotc211.org/2005/gmd" xmlns:xsi="http://www
xmlns:gts="http://www.isotc211.org/2005/gts" xmlns:gco="http://www.isotc211.org/2005/gco

  <gmd:fileIdentifier>
    <gco:CharacterString>85813034-3879-4cb3-8756-8c465ee1c0bf</gco:Chara
  </gmd:fileIdentifier>
  <gmd:language>
    <gco:CharacterString>eng</gco:CharacterString>
  </gmd:language>
  <gmd:characterSet>
    <gmd:MD_CharacterSetCode codeListValue="utf8" codeList="/resources/cod
  </gmd:characterSet>
  <gmd:contact>
    <gmd:CI_ResponsibleParty>
      <gmd:individualName>
        <gco:CharacterString>Jippe Hoogeveen</gco:CharacterStrin
      </gmd:individualName>
      <gmd:organisationName>
        <gco:CharacterString>FAO - NRCW</gco:CharacterString>
      </gmd:organisationName>
      <gmd:positionName>
        <gco:CharacterString>Technical Officer</gco:CharacterStrin
      </gmd:positionName>
      <gmd:contactInfo>
        <gmd:CI_Contact>
          <gmd:phone>
```


Online editor

Advanced view
XML view



::Identification Info *

Title * Hydrological Basins in Africa

Date * 2000-07-19T14:45:00

Date type * creation

Edition First

Presentation form mapDigital

Abstract * Major hydrological basins and their sub-basins. This dataset
Abstract
brief narrative summary of the content of the resource(s)
mandatory

Purpose This dataset is developed as part of a GIS-based information system on water resources for the African continent. It has been published in the framework of the AQUASTAT - programme of the Land and Water Division of the Food and Agriculture Organization of the United Nations, as part of FAO Land and Water Digital Media

Status completed

Point of contact PointOfContact

Point of contact PointOfContact

Status completed

Harvesting

GeoNetwork- The portal to spatial data and information - Mozilla Firefox

http://localhost:8080/geonetwork/srv/en/harvest

GeoNetwork™
opensource v2.1
Geographic data sharing for everyone

Home | Administration | Contact us | Links | About | Help

English | Français | Español | 中文

User: admin admin Logout

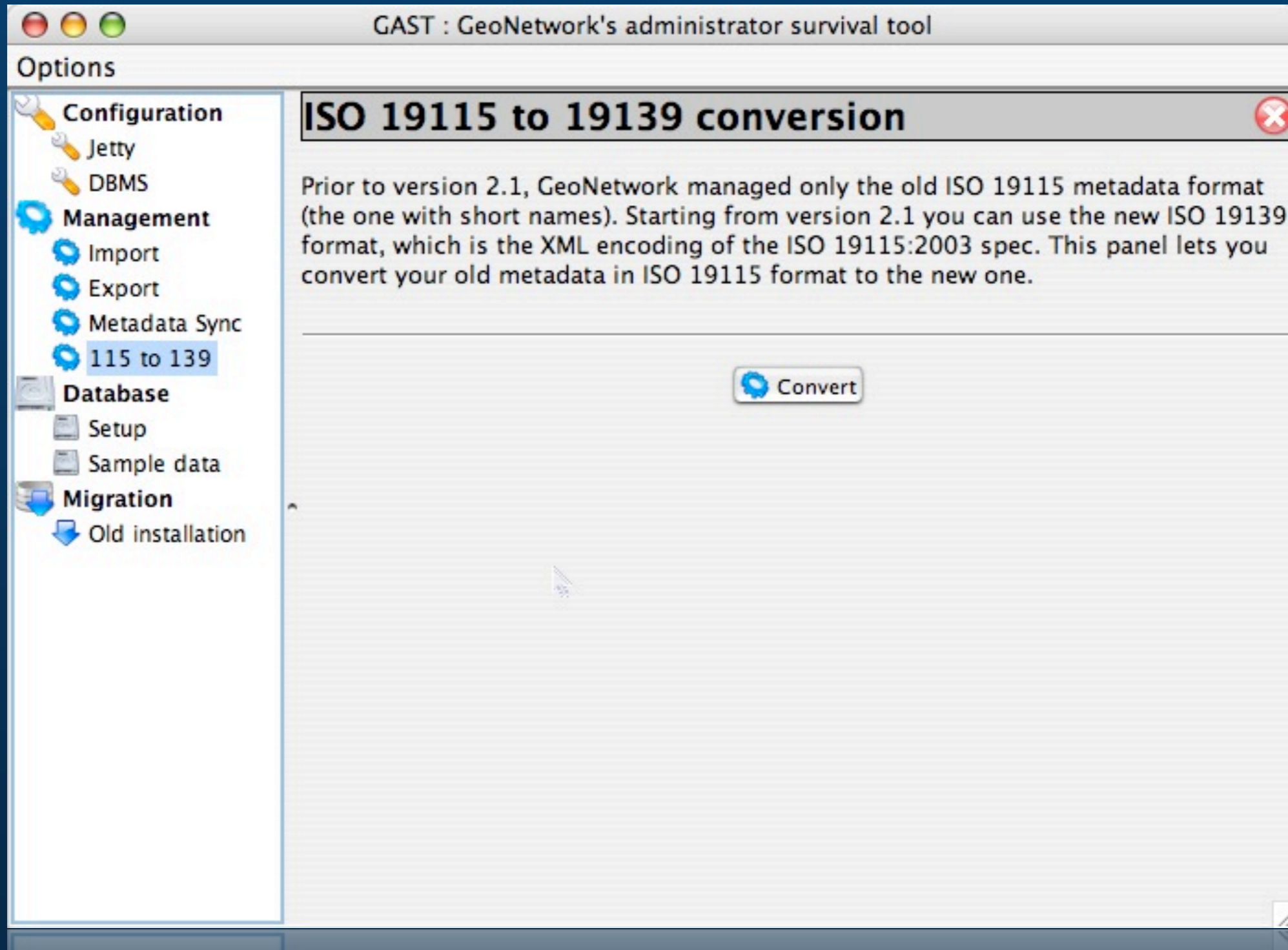
HARVESTING MANAGEMENT

Select	Name	Type	Status	Errors	Every	Last run	Operation
<input type="checkbox"/>	sandre	GeoNetwork 2.0	⊗	✓	0:0:5	2007-09-04 13:58:34	Edit
<input type="checkbox"/>	exist	Web DAV	⊗	✓	0:0:10	2007-09-04 14:01:38	Edit
<input type="checkbox"/>	Fao	GeoNetwork 2.0	⊗	✓	0:0:5	2007-09-04 14:04:12	Edit

Activate Deactivate Run Remove

Back Add Refresh

System Administration



New in version 2.6

INSPIRE Search

INSPIRE search options

Only INSPIRE metadata

Titel

Annex

Source type

Service type

Organisation

INSPIRE Theme

Annex I

- Geographic names
- Administrative units
- Addresses
- Cadastral parcels
- Transport networks
- Hydrography
- Protected sites

Annex II

- Elevation
- Land cover

Land cover

Elevation

Annex II

Protected sites

Hyperlinks

CLICKABLE HYPERLINKS
Enable

LOCAL RATING
Enable

binnen- en buitenland. De begrenzings zijn voor een groot deel gebaseerd op de Top10Vector, bij het interpreteren zijn luchtfoto's leidend. De gegevens zijn ingevuld met gegevens van de zomer van 2003. In 2007 en 2008 is dit het meest actuele bestand van het bodemgebruik. Vanaf begin van 2009 wordt het Bestand Bodemgebruik 2006 gepubliceerd.

Status compleet

Contactgegevens voor de data

Organisatie	Centraal Bureau voor de Statistiek
Online bronnen	www.cbs.nl
Rol	maker

Voorbeeldweergave

Voorbeeld	bbg800bij800_s.png
omschrijving	thumbnail
bestand	
Bestandstype	png

URLs recognized and made into links

bestandsnaam bua
bestand thumbnail
omschrijving bodemgebruik_2006_bua

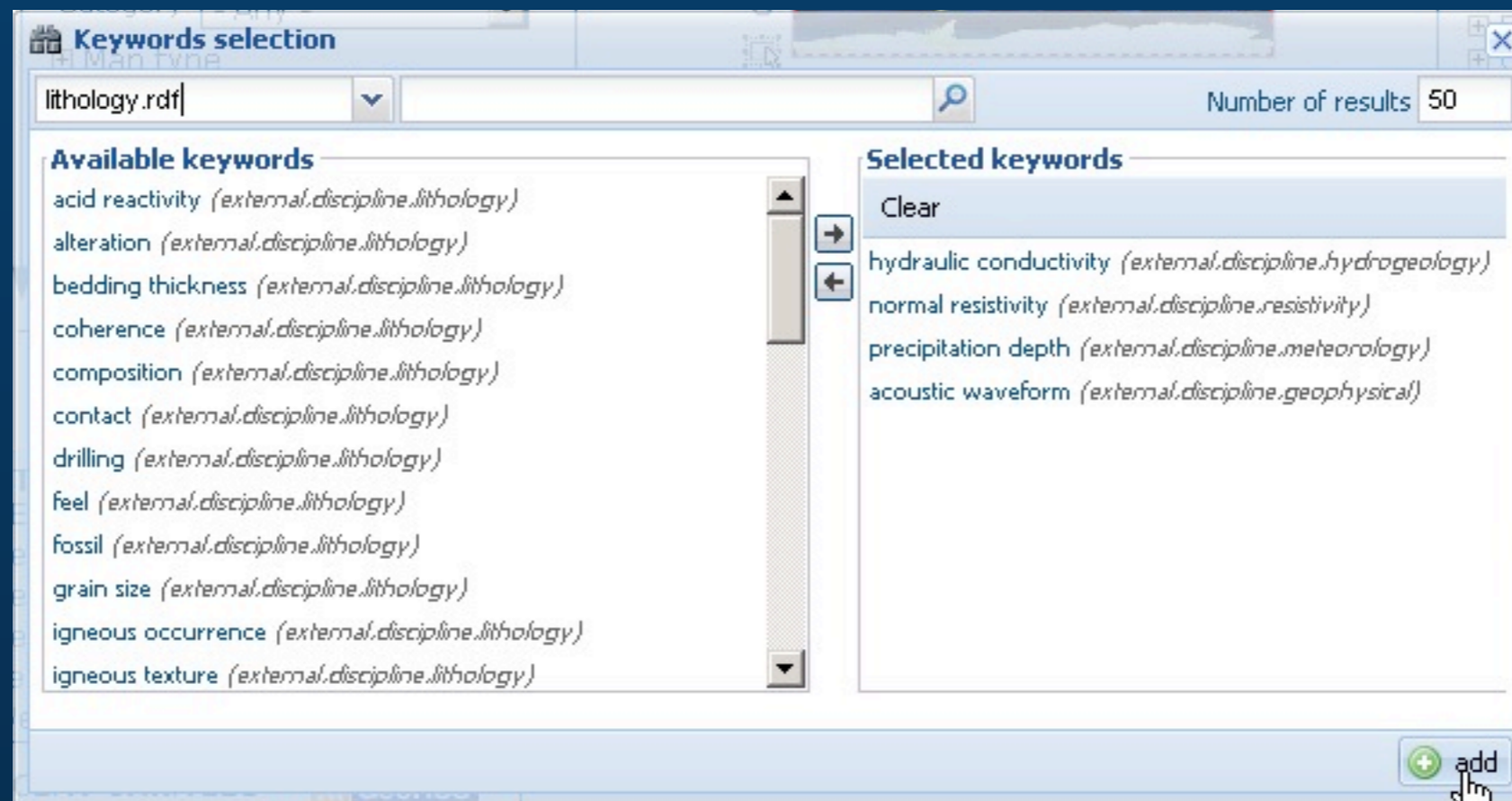
Local Rating

CLICKABLE HYPERLINKS
Enable

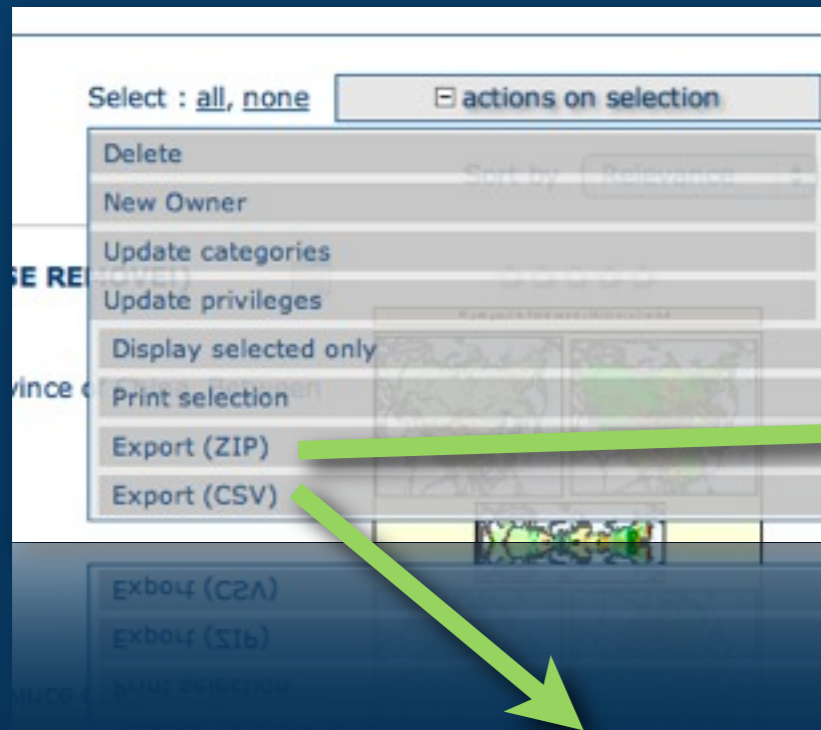
LOCAL RATING
Enable



Keywords selection panel (In Search and in Edit)

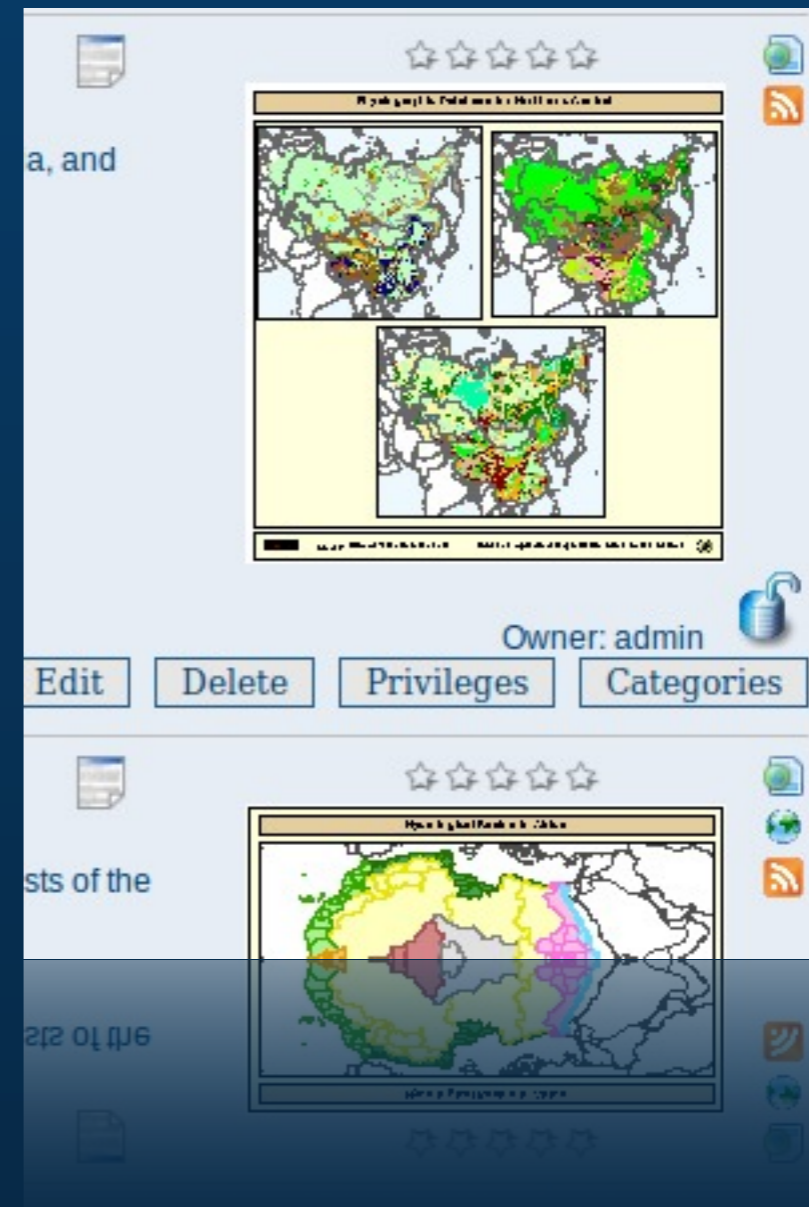
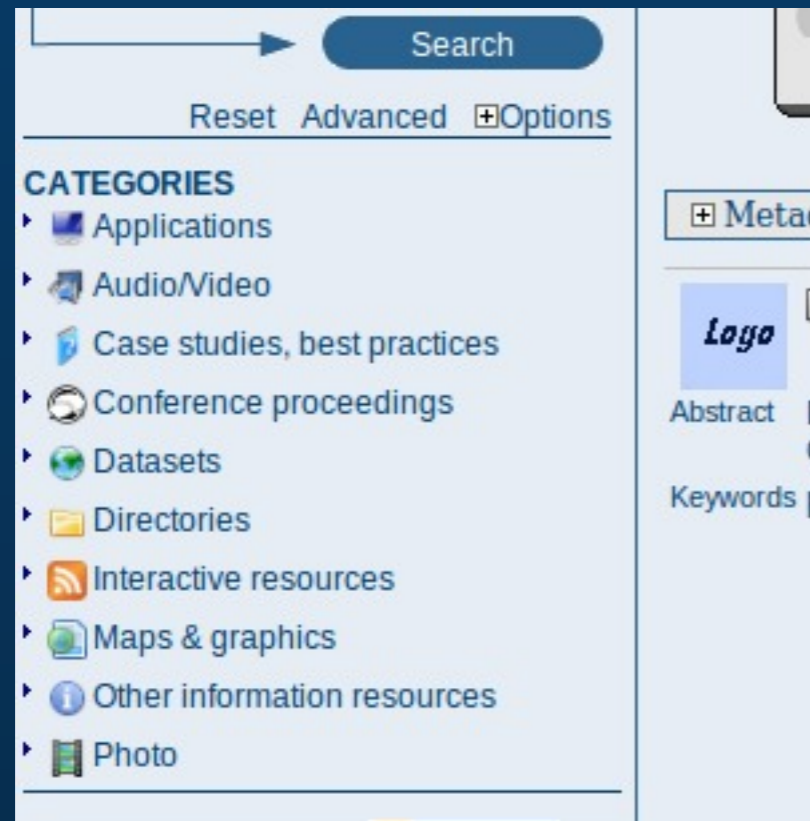


Export ZIP & CSV



```
schema;id;title;abstract;keyword;geoBox;Constraints;image;link;
iso19139;10;Hydrological Basins in Africa (Sample record, please remove!);Major hydrological basins and their sub-
iso19139;14;Physiographic Map of North and Central Eurasia (Sample record, please remove!);Physiographic maps for
iso19139;16;Template for WMS in INSPIRE mode;The ISO19139/119 metadata standard is the preferred metadata standard
iso19139;15;Template for INSPIRE;The ISO19115 metadata standard is the preferred metadata standard to use. If unus
schema;id;title;abstract;keyword;geoBox;image;
iso19115;12;Hydrological basins in Europe;Major hydrological basins and their sub-basins. This dataset divides the
schema;id;title;abstract;keyword;link;geoBox;
fgdc-std;13;Globally threatened species of the world;Contains information on animals and plants threatened at the
schema;id;title;abstract;keyword;link;geoBox;
dubj|n-core:]]:Natural polar ecosystems:A harmonised database of natural ecosystems in the Circumpolar Arctic. bas
schema;id;title;abstract;keyword;link;geoBox;
fgdc-std;13;Globally threatened species of the world;Contains information on animals and plants threatened at the
schema;id;title;abstract;keyword;link;geoBox;
```

Improved Categories



Temporal extent search

Temporal Extent

From  To  

Multilingual metadata

Identification info ⓘ

Title* Nationale Bedeutung: historischer Verlauf German ▾

Date* 2008-12-02T10:02:24 clear

Date type* revision ▾

Abstract* Nationale Bedeutung: Historische Verkehrswege sind von nationaler Bedeutung, wenn sie eine herausragende historische Bedeutung oder eine ausserordentliche traditionelle Wegsubstanz aufweisen. Historischer Verlauf: historischer Verlauf bedeutet, dass der historische Verkehrsweg in seinem Verlauf (als Linie) noch zu erkennen ist, dieser Verlauf aber keine oder nur geringe Elemente in traditioneller Form mehr

German ▾

019139 (multilingual) English ▾

Clear

English
French
German
Chinese (Other)
Arabic
Spanish; Castilian
Russian


Use Google translation service to suggest a translation for selected language.

Metadata relations

User: admin admin Logout

Create Edit Delete Privileges Categories

CA (SAMPLE RECORD, PLEASE REMOVE!)



Parent/child metadata:

- ▶ [Physiographic Map of North and Central Eurasia \(Sample record, please remove!\)](#)
- ▶ [Hydrological Basins in Africa \(Sample record, please remove!\)](#)
 - ▶ [A children of a parent](#)
 - ▶ [Another children of a parent](#)

Related service metadata:

- ▶ [WMS Service for environmental data](#)
- ▶ [service with no connect point](#)
- ▶ [WMS Service for environmental data test](#)
- ▶ [Sandre](#)

Related feature catalogues:

- ▶ [Feature catalogue](#)

Hydrological Basins in Africa (Sample record, please remove!)

2007-19T14:45:00

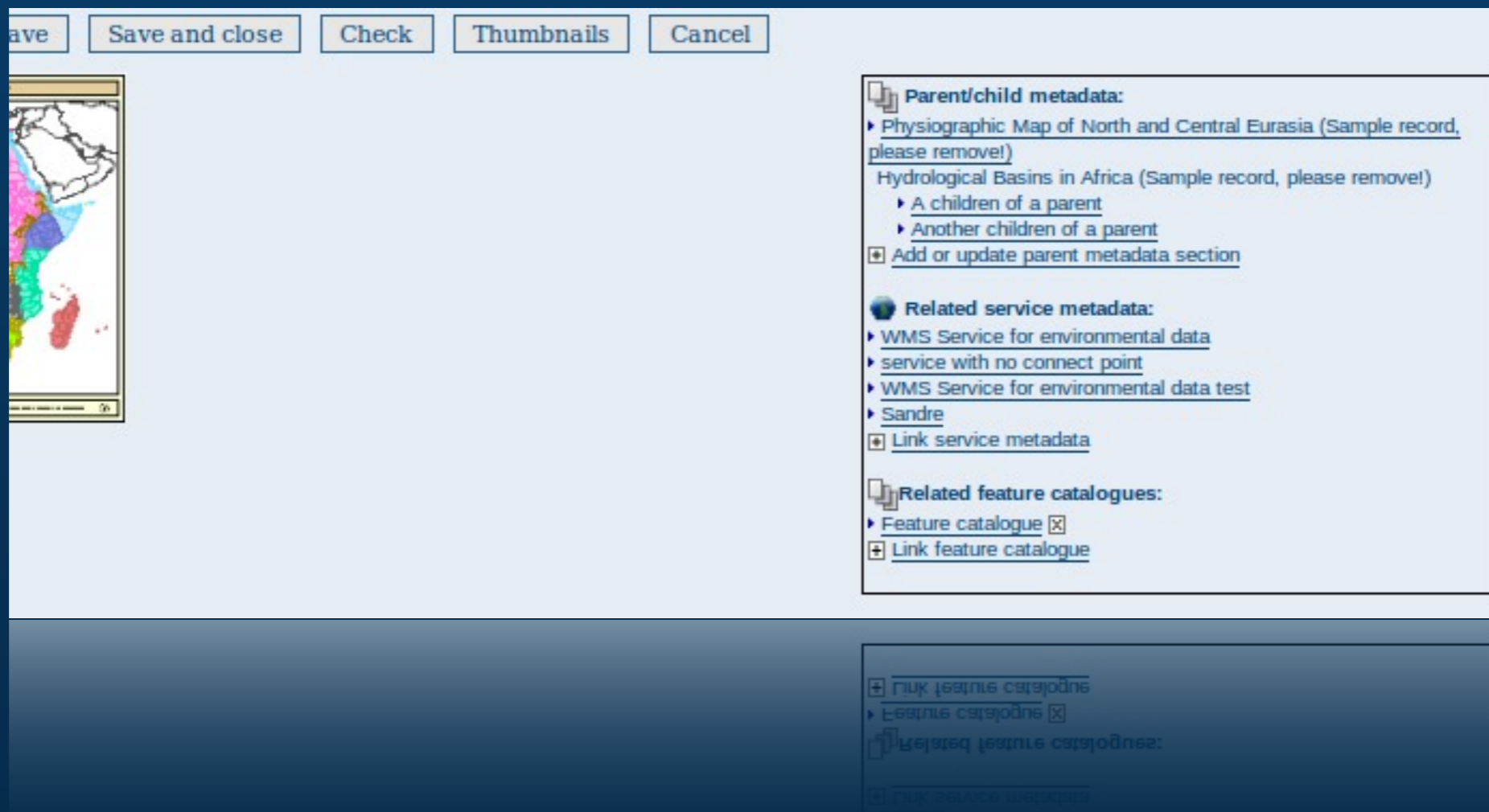
Creation: Date identifies when the resource was brought into existence

Modification: Date identifies when the resource was brought into existence

2007-19T14:42:00

Hydrological Basins in Africa (Sample record, please remove!)

Metadata relations (Editing)



The screenshot displays a web-based metadata editing interface. At the top, there is a toolbar with buttons for 'Save', 'Save and close', 'Check', 'Thumbnails', and 'Cancel'. On the left side, a small map shows a geographical area with various colored regions. The main area on the right contains a list of metadata relations, organized into three sections:

- Parent/child metadata:**
 - ▶ [Physiographic Map of North and Central Eurasia \(Sample record, please remove!\)](#)
 - ▶ [Hydrological Basins in Africa \(Sample record, please remove!\)](#)
 - ▶ [A children of a parent](#)
 - ▶ [Another children of a parent](#)
 - ✚ [Add or update parent metadata section](#)
- Related service metadata:**
 - ▶ [WMS Service for environmental data](#)
 - ▶ [service with no connect point](#)
 - ▶ [WMS Service for environmental data test](#)
 - ▶ [Sandre](#)
 - ✚ [Link service metadata](#)
- Related feature catalogues:**
 - ▶ [Feature catalogue](#) ✕
 - ✚ [Link feature catalogue](#)

The bottom portion of the screenshot is a blurred, semi-transparent view of the same interface, showing the same list of metadata relations.

Metadata relations (Editing)

Parent identifier 3eba75d3-055a-4d6b-be96-

Hierarchy level
Hierarchy level name
Date stamp

Metadata standard name
Metadata standard version
Metadata constraints
Metadata maintenance

Contact
Individual name Jippe He
Organisation name FAO - NI
Position name Technica
Role Point of

Dataset URI
Other language
IRU tested

Related metadata selection

basins Number of results 20

Metadata title	Keywords	uri
<input checked="" type="checkbox"/> Hydrological Basins in Africa (Sample record, please remove!)	watersheds ,river t	http://services.san
<input type="checkbox"/> Hydrological basins in Europe	watersheds ,Euro	resources.get?id=

Create relation


Edit/View Geographic Extent

Extent [icon] [icon] [icon]

Extent
Description [icon]

Geographic element [icon] [icon] [icon]
Geographic bounding box


EPSG:4326 EPSG:27572
North bound
West bound
East bound
South bound



Geographic element [icon] [icon] [icon]
Extent type code [icon] Polygon

Geographic element [icon] [icon] [icon]
Polygon

Choose a geographic feature

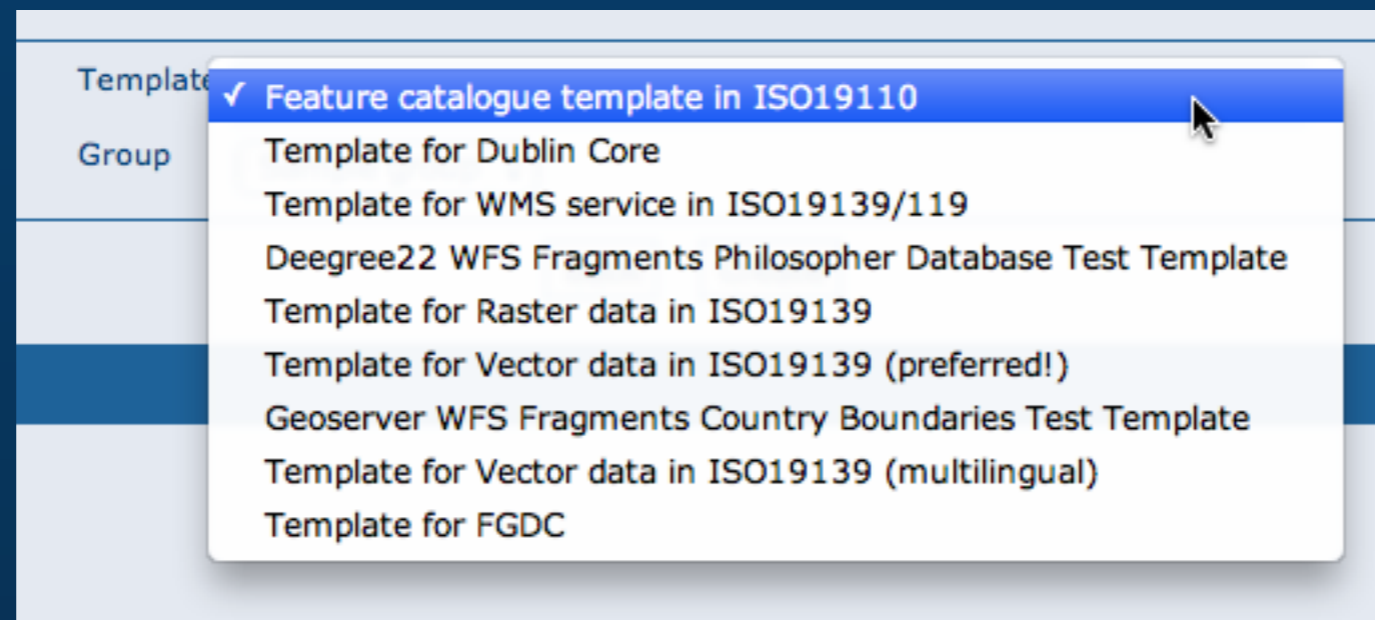


Extent type code [icon]
Geographic element [icon]

Geographic element [icon]

Extent type code [icon]
Geographic element [icon]

Feature catalogue support (ISO19110)



Feature catalog support (ISO19110)

Reset Save Save and close Check Cancel

Name: Feature catalogue template in ISO19110
Scope:
Version: 1.0
Date: 2009-07-22T16:32:48 Clear

Catalog producer
Individual name:
Organisation name:
Position name:
Role: Principal Investigator

Contact info
Contact:
Phone:
Telephone:
Voice:
Facsimile:
Address:

inherits to: **Elements**

Attribute

Member name
Label: Attribute name
Definition:

Cardinalities
Lower cardinality: 0 Upper cardinality: n

Value type
Type name: TEXT
Type name: (Suggestions:

Codelist
Codelist:
Label: Value 1
Code: 1
Definition: Definition of value 1

Codelist
Codelist:
Label: Value 2
Code: 2
Definition:

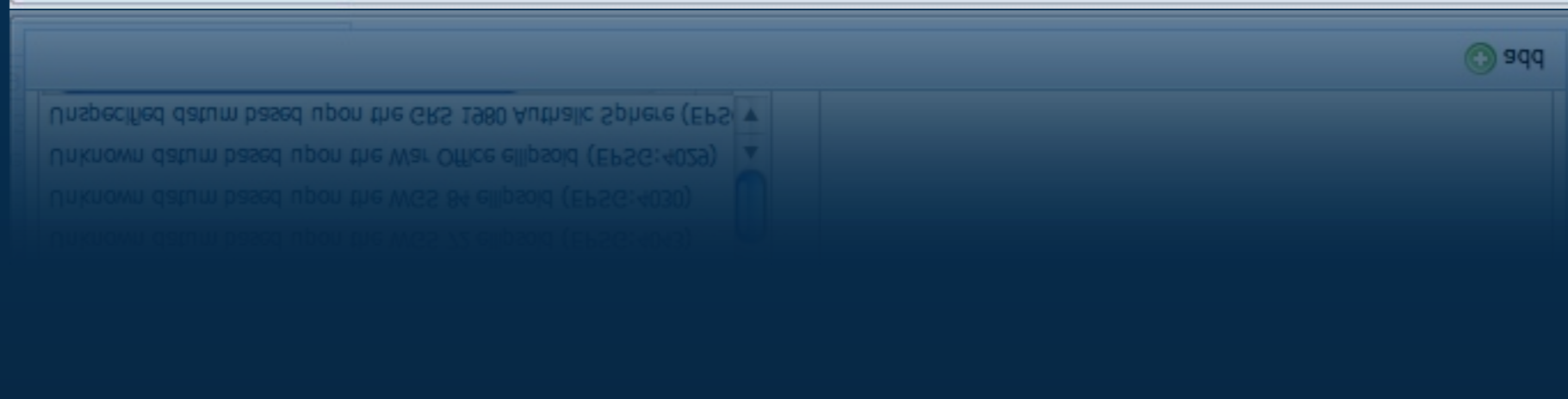
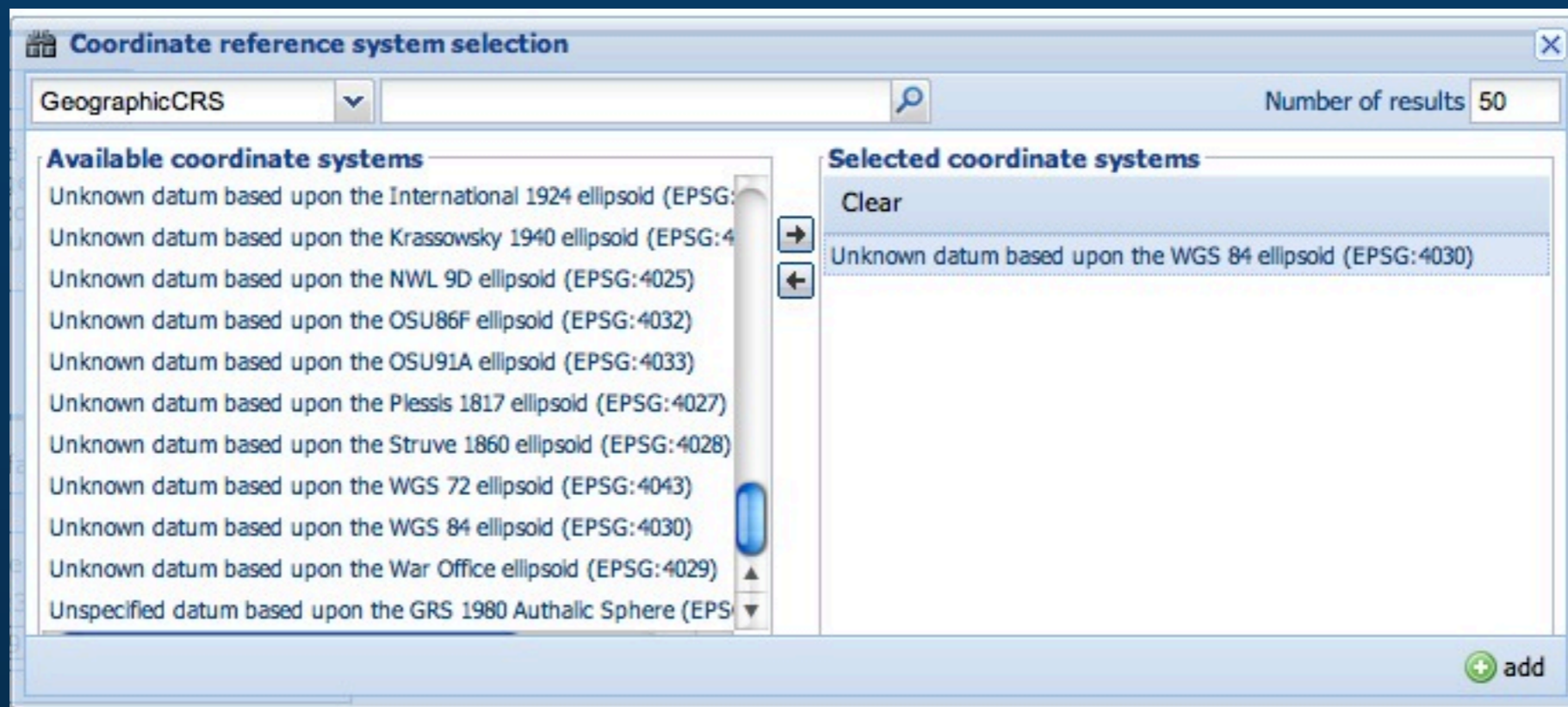
Codelist
Codelist:
Label: Value 3
Code: 3
Code: 3
Label: Value 3
Code: 3

Compute extent

The image illustrates a workflow in a GIS application for computing the extent of a region based on keywords. It is divided into three main stages:

- Keywords Selection:** A dialog box titled "Keywords selection" is shown over a metadata editor. The search term "gua" is entered, and a list of "Available keywords" is displayed, including "Guadeloupe (external.place.regions)". The "Selected keywords" list on the right includes "France (external.place.regions)", "Guyana (external.place.regions)", "Martinique (external.place.regions)", and "Guadeloupe (external.place.regions)".
- Map Interaction:** A "Other actions" menu is open, showing options: "Thumbnails", "Compute extent (replace)", and "Compute extent (add)". A green arrow points from the "Compute extent (add)" option to the right.
- Map Results:** Three map panels are shown, each displaying a map of Europe with a highlighted orange area representing the computed extent. The maps are labeled "France", "Martinique", and "Guadeloupe", showing the extent for each keyword.

CRS system selection



Visual warnings in the editor

Identifier	<input type="text" value="geoservertest.citation"/>
Title *	<input type="text" value="Geoserver WFS Fragments Country Boundari"/>
Abstract *	<input type="text" value=""/>
Identifier	<input type="text" value="geoservertest.abstract"/>

The image shows a form with four rows. The first row has 'Identifier' and a text box containing 'geoservertest.citation'. The second row has 'Title *' and a text box containing 'Geoserver WFS Fragments Country Boundari'. The third row has 'Abstract *' and an empty text box, which is highlighted with a red border. The fourth row has 'Identifier' and a text box containing 'geoservertest.abstract'. The form is reflected below it.

Propagate changes to child records

Update children

Replace sections Add sections

- Contact
- Identification info
 - Point of contact
 - Descriptive keywords
 - Extent
- Metadata maintenance
- Metadata constraints
- Spatial representation info
- Reference System Information
- Distribution Information
- Data quality info
- Application schema info
- Portrayal catalogue info
- Content Information
- Metadata Extension Information

Update children

MORE DETAILS

Update all children related to current metadata record. Select the strategy to be applied on each main sections.

Add will preserve child section and add the parent equivalent section after the child ones. **Replace** will remove child section by parent equivalent section.

Children identifier, character set, language, parent identifier, hierarchy level, dataset URI and identification section (excluding extent and keywords) are always preserved. Parent locales are always replaced.

Distribution and maintenance section are always replaced (even in add mode) because ISO19115 does not allow to have more than one.

Parent/child metadata:

Physiographic Map of North and Central Eurasia (Sample record, please remove!)

▸ [child test](#)

⊕ [Update children](#)



INSPIRE view

The screenshot displays the INSPIRE metadata editor interface. On the left, a list of metadata elements is shown, each with a checkbox and a horizontal line: **IDENTIFICATION**, **CLASSIFICATION OF SPATIAL DATA AND SERVICES**, **KEYWORDS & INSPIRE THEMES**, **GEOGRAPHIC LOCATION**, **TEMPORAL REFERENCE**, **QUALITY AND VALIDITY**, **CONFORMITY**, **CONSTRAINT RELATED TO ACCESS AND USE**, **ORGANISATIONS RESPONSIBLE FOR THE ESTABLISHMENT, MANAGEMENT, MAINTENANCE AND DISTRIBUTION**, and **METADATA**. The **METADATA** section is expanded, showing sub-sections for **Metadata** and **Contact**. The **Metadata** section includes fields for **File identifier** (8e40297-e1ce-43ae-aa3e-31bf3fcode92), **Metadata language** (English), and **Character set** (UTF8: 8-bit variable size UCS Transfer Format, based on ISO/IEC 10646). The **Contact** section is partially visible. On the right, a dropdown menu is open, listing various views: **Default view**, **INSPIRE view** (highlighted), **By Group**, **ISO Minimum**, **ISO Core**, **ISO All**, **By Package**, **Metadata**, **Identification**, **Maintenance**, **Constraints**, **Spat. Info**, **Ref. system**, **Distribution**, **Data quality**, **App. schema**, **Catalog**, **Content info**, **Ext. Info**, and **XML view**. Below the dropdown, the **Identification** section is visible, with fields for **Title** and **Abstract**. A **Template for INSPIRE** box contains the text: "The ISO19115 metadata standard to use. If you start with, use this one." A **Re** button is visible in the top right corner.

Schematron validation report improvements

The image shows a software interface with a metadata form on the left and a 'Validation report' window on the right. The form includes fields for 'Creation' (2000-07-19T14:45:00), 'First', 'Date (gco:Date)', and 'Identifier (gmd:MD_Identifier)'. Below these are several empty input fields, one of which is highlighted with a red box. A dropdown menu is set to 'A VALID CONTACT', and another dropdown is set to 'Digital map'. The 'Validation report' window is titled 'Validation report' and contains the following sections:

- View errors only**
- Compliance to metadata standard (XML Schema) (8 errors)**
 - ❌ cvc-datatype-valid.1.2.1: " " is not a valid value for 'integer'. (Element: gco:Integer with parent element: gmd:numberOfDimensions)
 - ❌ cvc-type.3.1.3: The value " " of element 'gco:Integer' is not valid. (Element: gco:Integer with parent element: gmd:numberOfDimensions)
 - ❌ cvc-enumeration-valid: Value " " is not facet-valid with respect to enumeration [center, lowerLeft, lowerRight, upperRight, upperLeft]. It must be a value from the enumeration. (Element: gmd:MD_PixelOrientationCode with parent element: gmd:pointInPixel)
 - ❌ cvc-type.3.1.3: The value " " of element 'gmd:MD_PixelOrientationCode' is not valid. (Element: gmd:MD_PixelOrientationCode with parent element: gmd:pointInPixel)
 - ❌ cvc-datatype-valid.1.2.1: " " is not a valid value for 'double'. (Element: gco:Real with parent element: gmd:minValue)
 - ❌ cvc-type.3.1.3: The value " " of element 'gco:Real' is not valid. (Element: gco:Real with parent element: gmd:minValue)
 - ❌ cvc-datatype-valid.1.2.1: " " is not a valid value for 'double'. (Element: gco:Real with parent element: gmd:density)
 - ❌ cvc-type.3.1.3: The value " " of element 'gco:Real' is not valid. (Element: gco:Real with parent element: gmd:density)
- Compliance to metadata recommendations (Schematron)**
- INSPIRE implementing rules (16 errors)**
 - ✅ [INSPIRE] - Title is mandatory
 - ❌ [INSPIRE] - Abstract is mandatory
 - INSPIRE - ABSTRACT IS MANDATORY
 - Example:
Dataset contains large scale (1:1.000) topography, which covers the whole country.
 - ✅ [INSPIRE] - Resource type is mandatory
 - ❌ [INSPIRE] - Unique resource identifier is mandatory

A tooltip is visible over the report, displaying the XPath: `#5:ERROR-XPath: gmd:dimension/gmd:MD_`

Other changes

- Performance improvements (on search and on indexing)
- CSW ISO AP automated testing
- MEF format support for multiple metadata
- Composed Metadata Records (using xlink)
- Z39.50 improvements

Other changes

- Maven build process
- Test automation
- Deployment through a war file

New documentation and website (based on ReStructured text, thanks GeoServer!)

The screenshot shows the GeoNetwork OpenSource website documentation page. At the top left is the logo "GeoNetwork OpenSource" in blue and yellow. To the right is a search bar labeled "Search Documentation...". Below the logo is a navigation menu with links for "Documentation", "Download", "Community", "Gallery", and "Development". The main content area features a header "GeoNetwork 2.6 Home" and a sub-header "GeoNetwork opensource" with an "index" link. The main text describes GeoNetwork opensource as a catalog application for managing spatially referenced resources, highlighting its metadata editing and search capabilities. It also mentions the software's development based on modern architecture, FOSS principles, and adherence to ISO/TC211 and OGC standards. Below the text are three images: a screenshot of the GeoNetwork web interface, the OSGeo Project logo, and a poster for the FOSS4G 2010 Barcelona conference. A right-hand sidebar contains a "Table Of Contents" section with links to "GeoNetwork opensource", "Main features", and "Using GeoNetwork". Below this are sections for "This Page" (with a "Show Source" link), "Download" (noting the current release is 2.6), and "Latest posts" with several discussion links. At the bottom of the page, there is a repeated navigation menu and a "Join the discussion" link.

GeoNetwork OpenSource

Search Documentation...

Documentation | Download | Community | Gallery | Development

GeoNetwork 2.6 Home

[index](#)

GeoNetwork opensource

GeoNetwork opensource 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.

GeoNetwork opensource 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).



FOSS4G 2010
Barcelona
Free and Open Source Software
for Geospatial CONFERENCE
SEP 6th - 9th

Documentation | Download | Community | Gallery | Development

Join the discussion

Table Of Contents

- GeoNetwork opensource
 - » Main features
 - » Using GeoNetwork

This Page

- » Show Source

Download

Current release: 2.6

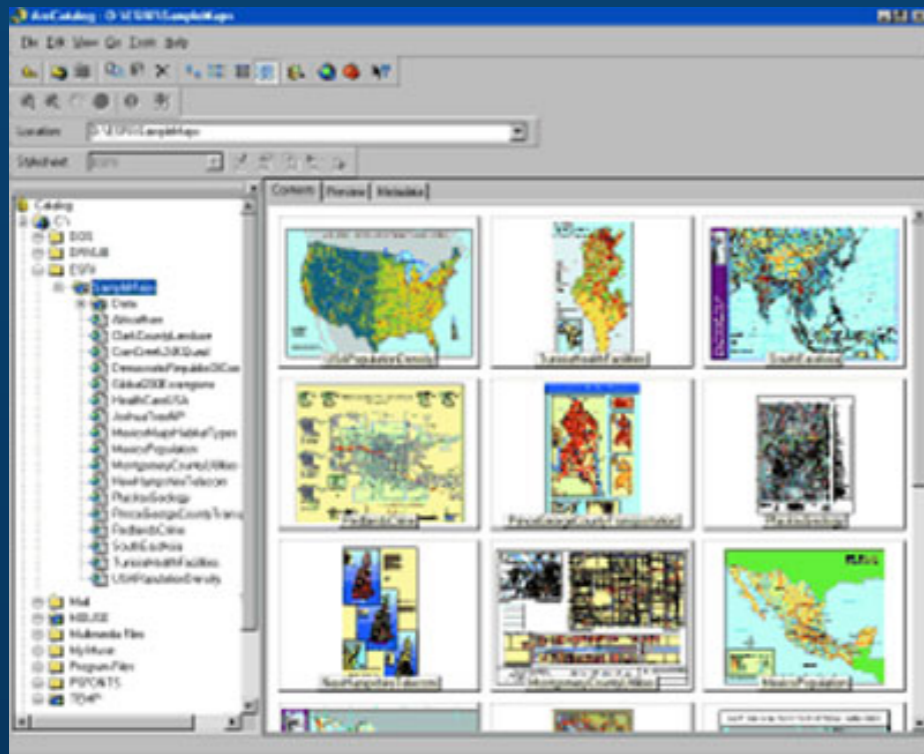
Latest posts

- » Re: ask:language change??
- » Fwd: maxClauseCount Problem
- » Re: GeoServer could not be started
- » Re: Release of GeoNetwork opensource 2.6.0RC2
- » Re: Release of GeoNetwork opensource 2.6.0RC2

Join the discussion

Tool integration

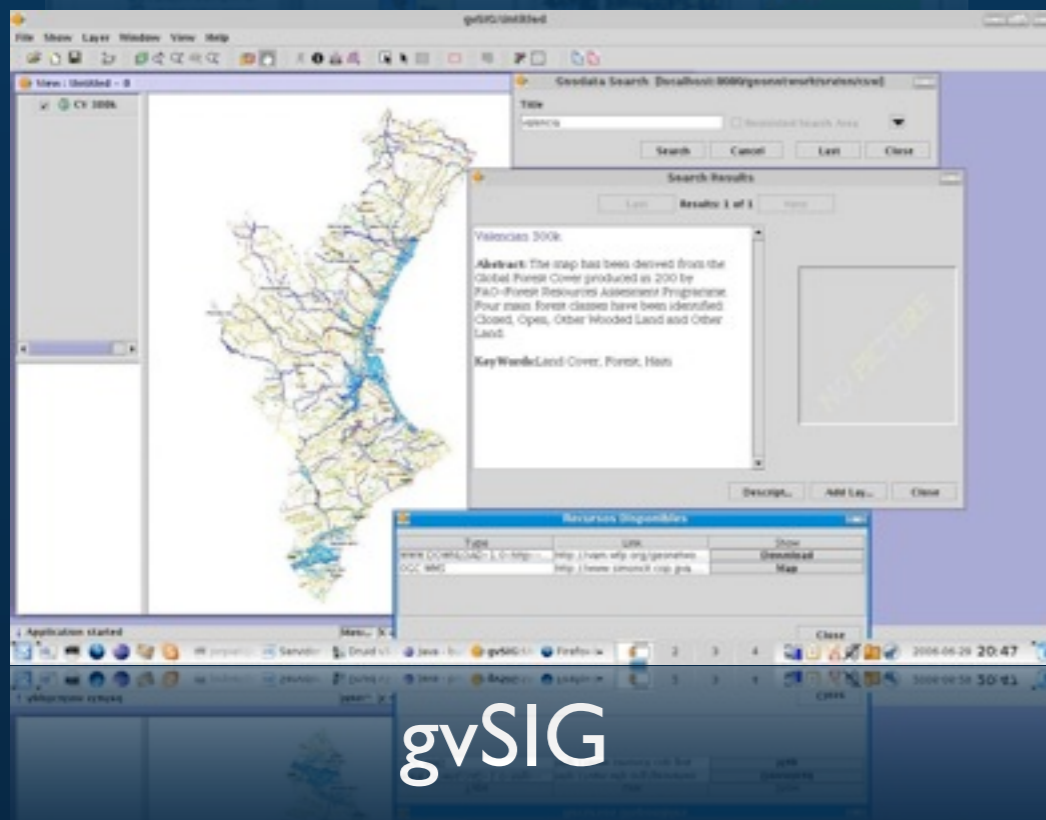
GeoNetwork



ESRI ArcCatalog



Export/import
metadata & data



gvSIG

Thanks to the GeoNetwork Developers and Users!!!

And to you for listening!

Don't forget to vote :-)

<http://www2.computable.nl/computableawards/stem/>