GeoNetwork: metadata and cataloging

French (GeoSource) and Swiss (geocat.ch) experiences
Camptocamp, a Franco-Swiss company

- A Franco-Swiss company employing 42 professionals
  - Switzerland, Lausanne: 26 persons
  - France, Chambéry and Toulouse: 16 persons
- A sustained growth: between 50% and 70% since 2004
Service-oriented Open Source editor

Camptocamp is an Open Source editor and integrator for software

- Initiated by Camptocamp: CartoWeb, MapFish and Spatial Data Integrator (SDI)
- Initiated by well-respected communities (OSGeo): GeoTools, GeoServer, Udig, GeoNetwork, MapServer, PostGIS, Open Layers, GeoExt, Ext
- Initiated by Camptocamp and its partners: OpenERP, Talend Open Studio

Camptocamp helps clients move forward in every part of their businesses with the latest Open Source applications and technologies
Camptocamp's strategic activity domains

Geospatial Solutions
- Web mapping
- GIS
- Spatial Data Infrastructures
- Web Services
- OGC Web Services

Business Solutions
- ERP
- Business Intelligence
- ETL

Infrastructure Solutions
- LINUX
- HTTP, Apache
- Load balancing, replication
- Cloud computing
- Systems deployment
- VoIP

CONSULTING AND R&D (official accreditation)

IMPLEMENTATION

OPEN SOURCE SUPPORT

TRAINING (official accreditation)
Presentation guide

- **Introduction**: Metadata & GeoNetwork

- **GeoSource project** (France - FR)

- **geocat.ch project** (Switzerland - CH)

- **Conclusion**: How to efficiently combine the development of an application with the Open Source community?
Metadata & Cataloging

Metadata:

- The determination...
  - to manage cartographic data
  - to share and exchange data
  - to join a national (GeoPortail/GeoCatalog) or a supranational (INSPIRE) Spatial Data Infrastructure effort

- ...and the search for higher standards
  - regulatory: European directive (INSPIRE) allowing GIS users to identify and access spatial or geographical information from a wide range of sources
  - technical: profusion of Internet use (search and webcasting)
  - commercial: data “marketing”
GeoNetwork

- Metadata catalog initiated by the FAO and supported by OSGeo

- “Basic” functionalities
  - Search of spatial data & Services
  - MetaData files lookup
  - Metadata editing (template, view, validation...)
  - ISO 19139 format MetaDada files export
  - On-line dynamic mapping via OGC Web services
  - Data downloading
  - Various functionalitites: category, group and thesaurus management

- “Advanced” functionalities
  - User management
  - Access rights and privileges management
  - Metadata editing (full view...)
  - Metadata validation and publication
  - Metadata search and webcasting
  - Services: synchronization, harvesting...
GeoNetwork Interface
GeoSource V2 Project
Context

- Initiated by the Direction Générale de la Modernisation de l'Etat (DGME - “eGouvernement” project) then taken over by the Ministère de l'Écologie, de l'Énergie du Développement durable et de l'Aménagement du territoire (MEEDDAT)
- Deployed by the Bureau de Recherche Géologique et Minière (BRGM)
- **Purpose**: to offer administrations and public departments a metadata cataloging solution that is interoperable, compatible with INSPIRE directive, and that can be easily deployed
- **A first version available at the end of 2007**
  - Because of budget and planning constraints
  - Fork of GeoNetwork
  - That procure costly evolving maintenance
- December 2008: release of a **second version in order to converge towards GeoNetwork** (Camptocamp)
GeoSource Interface

Gestion des métadonnées géographiques. Attention, l'application est en version alpha pour test par les utilisateurs. Elle ne doit pas être utilisée en production.

RECHERCHE D'UNE FICHE

Recherche simple

Un mot ou un terme :

Recherche avancée

Niveau des métadonnées : - Tous -

Mots clés : 

Sujet : - Tous -

Date à partir de laquelle :

Organisme : IGN - Tous -

Afficher les fiches associées à la fiche identifiée : Oui ❌ Non ❌

Cartes

CORINE Land Cover

Derniers ajouts

RSS GeRSS

Terminé

GeoNetwork OpenSource

GeoSource - Outil de gestion des métadonnées cartographiques - Mozilla Firefox

Aide et Support:

Aide et Support:

With the GeoSource tool, you can browse the geographic data in French. It's a free catalog of geographic data. If you encounter difficulties, you can use the function AIDE in the menu bar. You can consult the general principles of the GeoSource application in the following link: "Explications générales"
GeoSource: version 2

- GeoSource V2 developments originate from the main GeoNetwork developments: Convergence
- The goal: **Implement GeoSource functionalities in GeoNetwork**
- **Separate GeoSource specificities** (FR profile of the ISO 19139 norm)
- Create a French community within GeoNetwork
- Gains:
  - Resource sharing between French GeoSource community and world GeoNetwork community
  - Durability
  - Evolving and corrective maintenance
Contributions of GeoSource to GeoNetwork

- GeoNetwork integration in process:
  - improve existing massive actions on metadata search results (i.e. delete, filter search...) - http://trac.osgeo.org/geonetwork/wiki/SelectionManager
  - improve existing metadata import module by supporting XML copy/past insert, XML file insert and MEF file insert - http://trac.osgeo.org/geonetwork/wiki/MetadataImport
  - improve synergies between GeoSource (French community) and GeoNetwork project (merge, documentation, communication,...) - http://trac.osgeo.org/geonetwork/wiki/Community_FR

- On-going projects for GeoNetwork & GeoSource
  - Complete support of the CSW spec 2.0.2 (March/April 2009)
geocat.ch project

Certaines informations et schémas proviennent d'information publiques disponibles sur Internet et publiées par swisstopo
geocat.ch II project

- Production of the **new version** of the Swiss GIS cataloging application (geocat.ch)

- **Project conducted** by Camptocamp, BRGM and Geocat BV following an World Commerce Organisation call for bids.

- Project supported by the **Swiss Federal Office of Topography** (swisstopo)

- **Project based on GeoNetwork**
geocat.ch II – Context

- geocat.ch I replacement because of
  - Technical problems
  - Difficulties to extent
- Improvements
  - Input interface simplification
  - Web « Mapping » Services metadata (OWS metadata)
  - New cataloging possibilities
- Interoperability (INSPIRE, OGC, ISO)
- Presence and participation within an community of users
- Potential re-use of the developments by partners
- Integration within the Swiss FSDI (Federal Spatial Data Infrastructure)
geocat.ch II contribution to GeoNetwork

- **Multi-language metadata**
  - ISO19139 norm compliant

- **Xlink support**
  - iterative data management to avoid redundancies
  - allows elements to be inserted into XML documents in order to create and describe links between resources

- **Masking of metadata components**
  - Possibility to mask metadata to some user categories with XPath.

- **Complex spatial queries**
  - Integration of spatial queries with Geo Tools / JTS

- **OpenLayers / Mapfish integration**
  - Advanced GeoNetwork viewer using ExtJS
geocat.ch II: search
geocat.ch II: display
geocat.ch II: service metadata
Conclusion

- How to efficiently harmonize the Open Source community dynamics with the development requirements of an application?

- Implementation of high standards (project methodology)
  - **Community project management culture**
  - **Ability to identify** the project generic functionalities than can and should be Open Source
  - **Methodology** to manage the project specificities based on major Open Source developments
  - **Follow development and quality process methodologies complying with the Open Source community**
  - **Necessity to communicate** with the user community (project life cycle)
  - **Compatibility between « Project » planning and “Open Source component” planning** (without being identical)
  - **Administration system know-how**
    - A project infrastructure in tune with the Open Source project infrastructure
    - Versioning automation