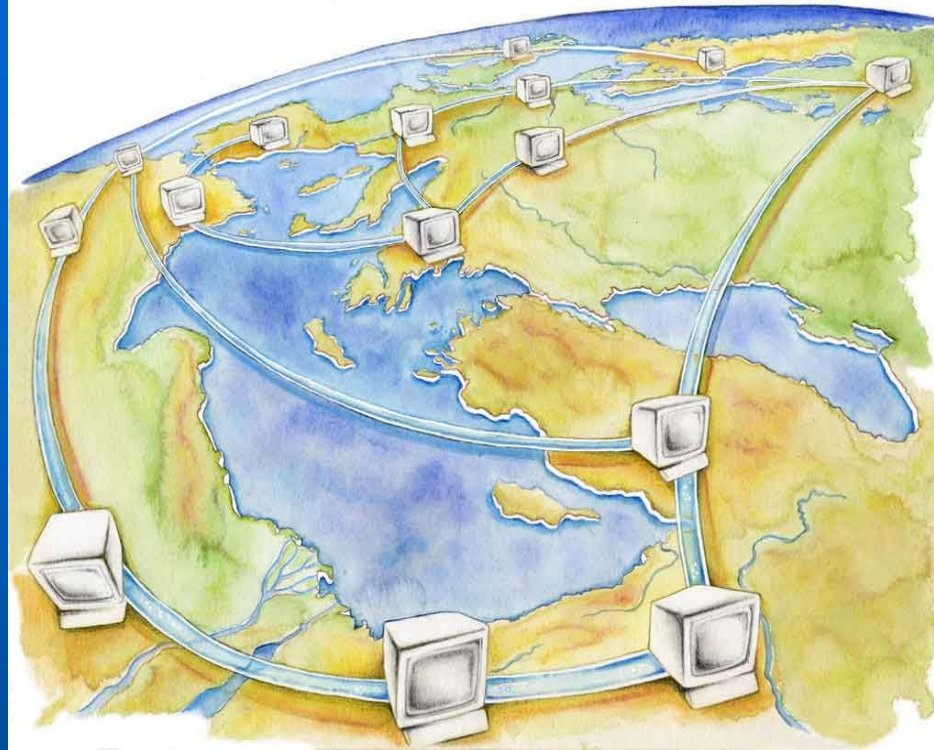


SEMIDE  
EMWIS

SEMIDE

[www.semide.net](http://www.semide.net)

Système Euro-  
Méditerranéen  
d'information sur les  
savoir-faire dans le  
domaine de l'Eau



النظام المعلوماتي الأورومتوسطي  
للمعرفة في مجال المياه

A prototype catalogue for water  
information discovery

Eric MINO



EMWIS

[www.emwis.net](http://www.emwis.net)

Euro-Mediterranean  
Information System  
on know how in the  
water sector

DG ENV

EURO-MEDITERRANEAN PARTNERSHIP





# Objective

- Declare and search for sources of data on the Mediterranean water sector.
- View, download data and access to data services are subject to the level of access defined by the data providers.



# Purpose

- Use standards metadata for:
  - Register of dataset or services
  - Discovery services i.e. search for data/services
  - View, download services
- Focus on:
  - supporting water management (data and services sharing): use of standards categories
  - being compatible with EU technical recommendations: WISE & INSPIRE
  - interoperability (OGC and ISO standards) with spatial web services



# Software package set-up

- all-in-one solutions for Spatial Data Infrastructure (catalogue, map server & map viewer, Transformation)
- easy to use with simple installation process
- multi-platforms support
- wide and free access (using Free & Open Source Software projects, documentation and guidelines)



← GeoServer REST API for configuration →



# Architecture



-  Catalogue
-  WMS service
-  Harvesting
-  Remote users





# Discovery & visualization interface

## • Discovery perspective

- Search form
- Search results
- Metadata visualization
- Tag clouds

## • Visualization perspective

- Map navigation
- Layer management
- Legend
- Add layer from registered WMS in the catalogue



# Discovery perspective

Mediterranean Water Information Datasource Catalog **Discovery** Visualization

username \*\*\*\*\* Login

Full text search:

Restrict search to map extent



Options

**Find Interactive Maps, GIS datasets, Satellite Imagery and Related Applications**

**Quick links**

FRANCE Jordan Morocco Tunisia administrative boundary  
environmental data hydrography intake use discharge  
monitoring  
water supply sanitation services




geo.semide.net/geonetwork/apps/search/#

Mediterranean Water Information Datasour **Discovery** Visualization Administration Logout English

Full text search:  None selected | Select: all in page, all, none Sort by Change date

Resource type:

Restrict search to map extent




Options

**Medstat environmental data sets** (5 stars)  
 Statistical data of the Mediterranean partner countries produced in the framework of the MEDSTAT II programme are freely accessible through the Eurostat's Reference Databases. The focus of this domain is on the following countries: \* Algeria, E ... WATER QUANTITIES, EMISSIONS, MEDITERRANEAN PARTNER COUNTRIES

**Physionomie de la couverture forestière du bassin du Sébou** (4 stars)  
 Couverture forestière du bassin du Sebou ... MAROC

**Springs in palestine** (5 stars)  
 The ISO19115 metadata standard is the preferred metadata standard to use. If unsure

**Metadata (uuid: 83bdd3d9-0305-479b-9e2a-b0b05c432136)**



**IDENTIFICATION INFO**

Title	Physionomie de la couverture forestière du bassin du Sébou
Date type	<b>Publication:</b> Date identifies when the resource was issued
Presentation form	<b>Digital map:</b> Map represented in raster or vector form
Abstract	Couverture forestière du bassin du Sebou
Status	<b>On going:</b> Data is continually being updated

**Point of contact**



# View perspective




Mediterranean Water Information Datasource Catalog **Discovery** Visualization username \*\*\*\*\* Login English Help

1 selected | Select: all , none

**Carte de situation du bassin du Sébou** ★★★★★

MAROC  
admin  
view



**Groundwater stations (oued) on Sebu river basin** ★★★★★

Localisation des stations et paramètres ...  
MAROC  
admin  
view

**Rainfall stations in the basin of Sebu** ★★★★★

Localisation des stations et paramètres ...  
MAROC  
admin  
view

**Climatological data on the basin of the Sebu** ★★★★★

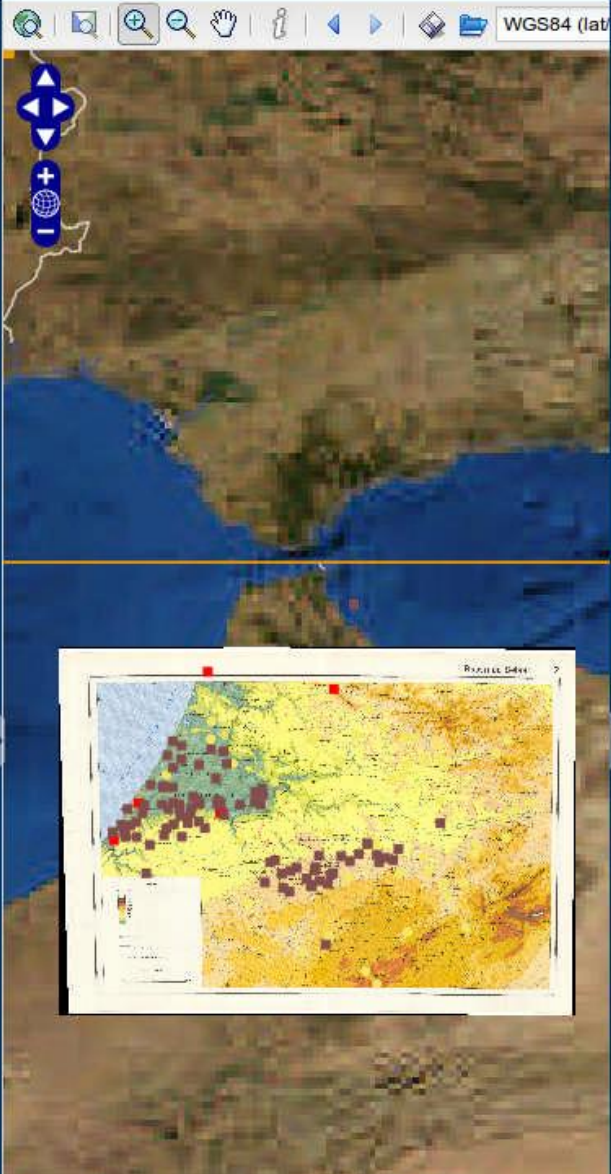
Localisation des stations et paramètres ...  
MAROC  
admin  
view

**Groundwater stations on Sebu river basin** ★★★★★

Localisation des stations et paramètres ...  
MAROC  
admin  
view

**Site web de l'agence du bassin hydraulique du Sebou** ★★★★★

Site web de l'agence du bassin hydraulique du Sebou comportant d'importantes rubriques relatives à la gestion des reesources en eau, la gestion du domaine



WGS84 (lat)

Layer tree

- Base Layer
- Overlays
  - sebou\_qualite\_nap
  - sebou\_climato
  - sebou\_pluvio
  - bassin\_sebou\_wgs
  - Metadata results

Legend

- sebou\_qualite\_nappe
- sebou\_climato
- sebou\_pluvio
- bassin\_sebou\_wgs
- Metadata results
  - default
- Background layer
  - Borders
  - Coastline
  - Other borders



# Access remote services

The screenshot shows a web application interface with a main content area on the left and a modal dialog box in the center. The main area displays a search result for a Web Map Service (WMS) from the European Environment Agency (EEA). The modal dialog, titled "Add layer from a WMS service", contains a text input field with the URL "http://158.109.55.144/cgi-bin/wms?", a "Connect" button, and a tree view of a Geoserver catalog. The tree view lists various datasets, with "WISE Main Lakes" selected. A "Preview layer" window on the right shows a map of Europe with blue dots representing the selected dataset.

None selected | Select: all in page , all , none

Sort by Relevance

Web Map Service.European Topic Centre on Land Use and Land-Use Change  
European Environment Agency (EEA)

WMS maintained by European Topic Centre on Land Use and Land-Use Change reference datasets at European scale. ...  
WMS, EEA, UAB

http://158.109.55.144/cgi-bin/wms?

Connect

Geoserver

- Web Map Service.European Topic Centre on Land Use and Land-Use Change
  - Erosion
  - Biogeographical Regions
  - EU Mountain Areas
  - Green Urban Areas
  - Urban Morphological Zones
  - Green Background of Europe
  - Dominant Landscape Types
  - Reference Grids
  - Elevation Breakdown
  - Corine Land Cover
  - WISE
    - WISE Main Rivers extracted from ECRINS Database
    - WISE Main Lakes
  - Hydrography
  - WPS results
  - Noise

Preview layer



# View remote services

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

File Edit View History Bookmarks Tools Help

http://geo.semide.net/geonetwork/apps/search/#

Most Visited Water Scarcity Private ... HP templates & images Euro-Mediterranean In... Sedna Système Euro-Méditer... http192.70.34.1948081s... EMWISSEMIDE Public ... p0154\_1.pdf (Objet ap...

GeoNetwork - The portal to spatial d...

Mediterranean Water Information Datasource Catalogue

Discovery Visualization username ..... Login English Help

None selected | Select: all in page , all , none Sort by Relevance

Web Map Service.European Topic Centre on Land Use and Spatial Information. European Environment Agency (EEA)  
WMS maintained by European Topic Centre on Land Use and Spatial Information. This services includes information about Corine Land Cover at diferent resolutions among other reference datasets at European scale. ...  
WMS, EEA, UAB

<< | >> | 1-1 result(s) / 1

Done

WGS84 (lat/lon)

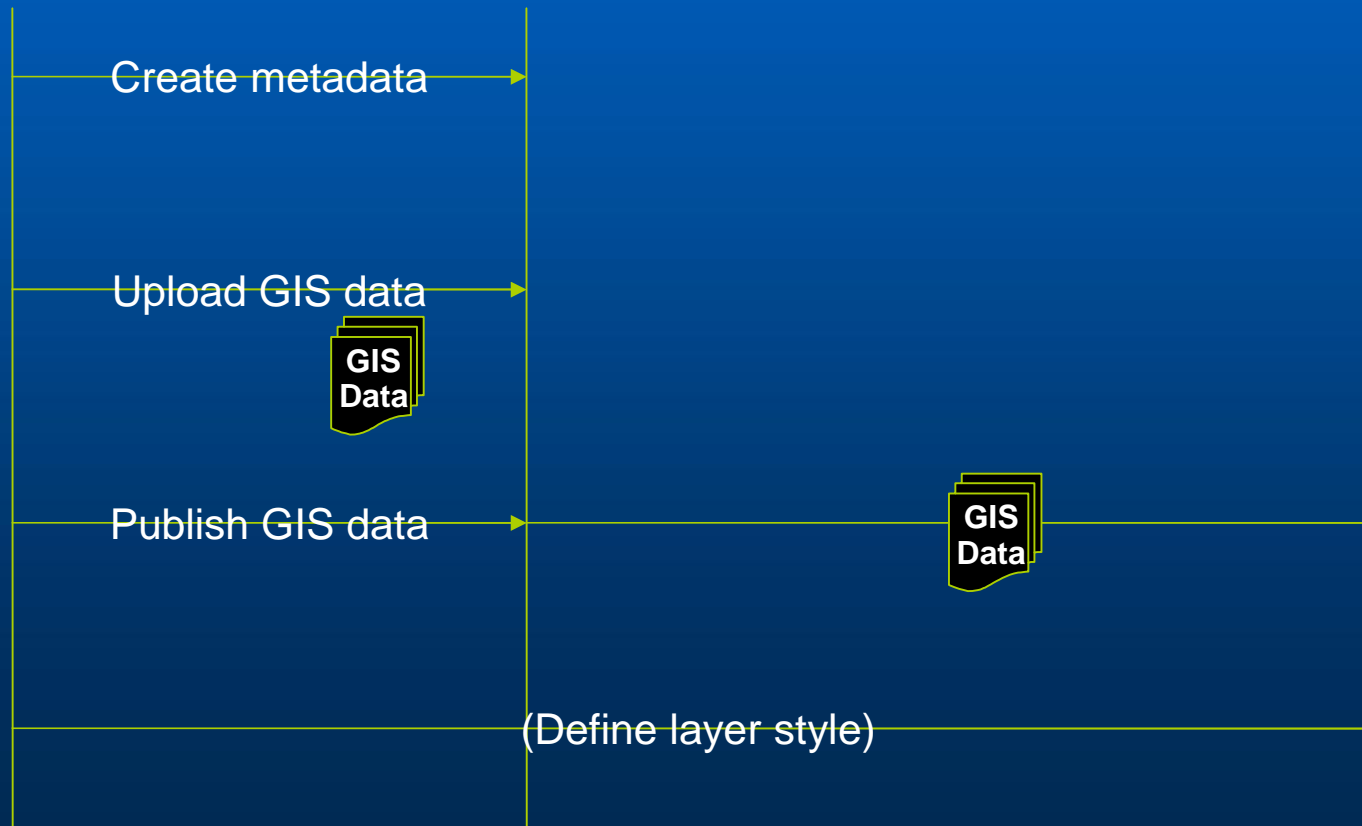
1000 mi 1 : 69755965

# Publish metadata and data



Discovery  
Service

View  
Service



# Create metadata ... using a template



geo.semide.net/geonetwork/srv/en/metadata.update

Reset Save Save and close Check Other actions Cancel

No preview available

- Parent/child metadata:
  - Add or update parent metadata section
- Related service metadata:
  - Link service metadata
- Related feature catalogues:
  - Link feature catalogue

**IDENTIFICATION**

Title \* Datasource and dataset registry English

Abstract \*  English

Hierarchy level Scope code (gmd:MD\_ScopeCode)

**Distribution format**

Name \* ## xls, csv, shapefile, report, etc. ## English

Version \* ## version of the format define above. English

Amendment number Specification File decompression technique Format distributor

**OnLine resource**

**OnLine resource**

URL \*

Protocol Web address (URL)

Application profile Name of the resource

- [Error validation report \(including INSPIRE rules\) and highlighter](#)
- [Compute extent from keyword analysis](#)
- [Suggestion list and thesaurus \(eg. GEMET\)](#)
- [Parent/child relationship link](#)
- ...



# Restricting access

GeoNetwork - The portal to spatial ... x GeoNetwork - The portal to spati... x

Mediterranean Water Information Datasource Catalogue Discovery Visualization Administration

Full text search:  ▼

Resource type:  ▼

Restrict search to map extent

Options

MAROC Maroc Morocco hydrography monitoring

None selected | Select: all in page, all, none Sort by

Site web de l'agence du bassin hydraulique du Sebou comportant d'importantes rubriques relatives a la ge...  
reources en eau, la gestion du domaine public hydraulique et un volet cartographique. ...  
HYDROGRAPHY, MONITORING, MOROCCO

Groundwater stations (oued) on Sebu river basin  
Localisation des stations et parametres ...  
MAROC

Rainfall sta... Sebu  
Localisation de... S ...

Climatolog...  
Localisation de...  
MAROC

Groundwater stations on Sebu river basin  
Localisation des stations et parametres ...  
MAROC

... de la structure fonctionnelle du bassin du Sebou

- Edit
- Delete
- Other actions
  - Duplicate
  - Create child
  - Privileges
  - Categories
- View
- Zoom to
- Save as XML



# Priviledges setting

- Limiting metadata access
- Restricting data access

GeoNetwork - The portal to spatial ...

Mediterranean Water Information Datas

Full text search:

Resource type:

Restrict search to map extent

Options

Search

**Set privileges**

Groups	Publish	Download	Interactive Map	Featured	Editing	Notify		
All	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			Set All	Clear All
Intranet	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			Set All	Clear All
Guest	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			Set All	Clear All
<All (Internet)>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Set All	Clear All
Sample group	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Set All	Clear All

Submit



# Thank you

Full text search:

Resource type:

Restrict search to map extent

Options

Frontière administrative **Jordan** User polluter

administrative boundary environmental data groundwater

hydrography intake use discharge monitoring

water supply sanitation services

None selected | Select: all in page, all, none

Sort by: Relevance

- ? **WELLS SHAPEFILE** ★★★★★  
This shapefile contains the wells in Jordan. It is a point shapefile available in JTM coordinates ...  
USER POLLUTER, MONITORING, GROUNDWATER, JORDAN
- ? **IRRIGATION CENTERS SHAPEFILE** ★★★★★  
This shapefile contains the center points of irrigation areas in Jordan. it is a point shapefile and available in JTM coordinates....  
USER POLLUTER, JORDAN
- ? **SPRINGS SHAPEFILES** ★★★★★  
This shapefile contains the springs locations in Jordan. It is a point shapefile and available in JTM coordinates. ....  
HYDROGRAPHY, JORDAN

<http://geo.semide.net/geonetwork>