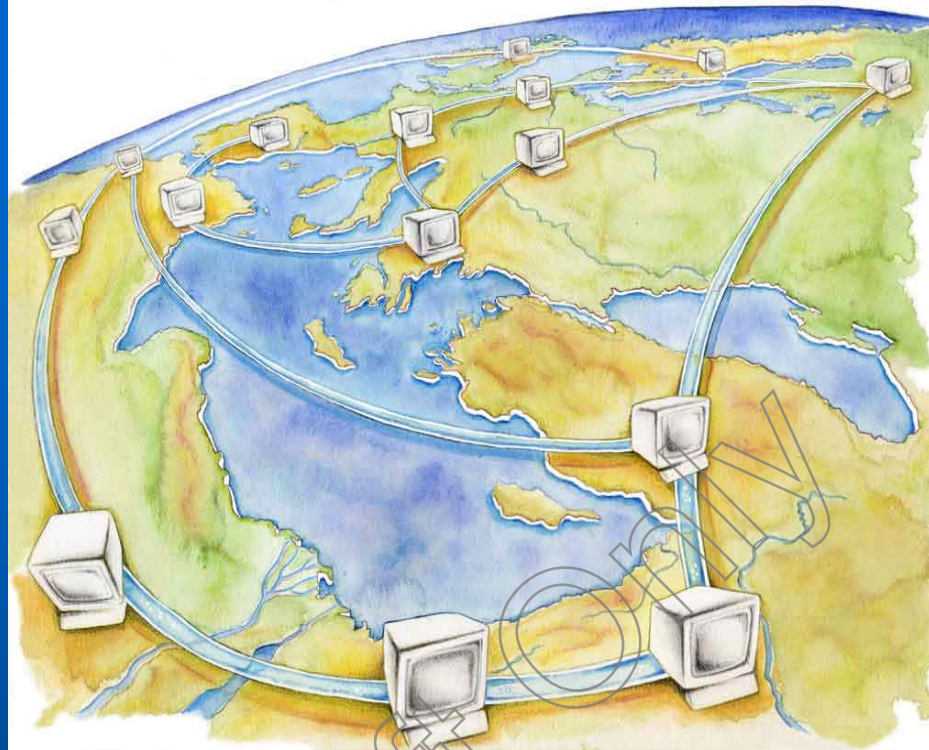


**SEMIDE**  
**EMWIS**

**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 الأورو متوسطي  
للمعرفة في مجال المياه**

**Towards a mediterranean water data  
portal and related tools**

**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**





## Mediterranean Water Data

— or more commonly known as Med-WIS - is your gateway to existing information on inland water issues in the Mediterranean area. It also provides guidance and tools on data management for non EU countries. For European countries, data is provided by WISE.

[about Med-WIS](#)

[National level](#)

[Regional level](#)

[Tools and guidance](#)

[Themes](#)

### Welcome to the Mediterranean Water Data portal

This portal provides useful hints to help Mediterranean countries in setting up Shared National Water Information Systems compatible with European standards namely the INSPIRE implementation rules on spatial information, technical guidelines from the Water Information System for Europe -WISE-In ensuring these compatibility recommendations, systems will also be inline with the latest International standards.

It also provides a discovery service to search for existing datasets, sources of data and geographical layers. Visualisation services are also provided according to access rights.

### Latest news from EMWIS

- The European Environmental Bureau (EEB) is looking for a Secretary General
- Water shortage forces Syria villagers into cities
- IDE desalination seminar trains Jordanians and Palestinians



# Portal Content

- **Themes**
  - Maps, datasets, reports
  - Water scarcity and drought
  - Water quality monitoring
- **Tools and guidance**
  - Generic conceptual data model
  - Interoperability technical guidelines
  - Case studies
  - Geo-catalogue and web map viewer installation pack
- **Regional level**
  - Actors involved in data management at Med level
  - Metadata catalogue
  - Access to Mediterranean level external indicators



# National level

[home](#) | [login](#)

[WISE](#) | [EMWIS portal](#) | [Sitemap](#) | [Search](#)



National level

Regional level

Tools and guidance

Themes

[Mediterranean Water Data](#) » [National level](#) » [Mediterranean partners](#) » [Tunisia](#)

## Countries

### European Union

- [Austria](#)
- [Belgium](#)
- [Cyprus](#)
- [Czech Republic](#)
- [Denmark](#)
- [Estonia](#)
- [Finland](#)
- [France](#)
- [Germany](#)
- [Greece](#)
- [Hungary](#)

### Mediterranean partners

- [Tunisia](#)
- [Egypt](#)
- [Israel](#)
- [Jordan](#)
- [Lebanon](#)
- [Morocco](#)
- [Palestine](#)

## Tunisia

See more detailed country information on the [SEMIDE website](#)

[Data sources](#)

[Reporting obligations](#)

Draft Only



# Reporting obligations



http://192.168.1.4/medwis/show\_country\_obligations?country=Palestinian Territory

home | login WISE | EMWIS portal | Sitemap | Search

National level Regional level Tools and guidance Themes

[Mediterranean Water Data](#)

## Obligations per country

A remote web service from EEA

Reporting obligation	Legislative instrument	Report to	Next reporting	Deadline
<a href="#">Biennial general report, and report on the implementation of the Convention for the Protection of the Mediterranean Environment and the Coastal Region of the Mediterranean</a>	<a href="#">Convention for the Protection of the Marine Environment and the Coastal Region of the Mediterranean</a>	MAP	n/a	2011-12-31
<a href="#">National Report on the technical implementation of the Dumping Protocol: Report on the disposal of wastes or other matter in terms of Articles 4, 5, 6, 8 and 9.</a>	<a href="#">Convention for the Protection of the Marine Environment and the Coastal Region of the Mediterranean</a>	MAP	n/a	2011-12-31
<a href="#">National Report on the technical implementation of the Hazardous Wastes Protocol</a>	<a href="#">Convention for the Protection of the Marine Environment and the Coastal Region of the Mediterranean</a>	MAP	n/a	2011-12-31
<a href="#">National Report on the technical implementation of the Land-based Sources Protocol</a>	<a href="#">Convention for the Protection of the Marine Environment and the Coastal Region of the Mediterranean</a>	MAP	n/a	2011-12-31
<a href="#">National Report on the technical implementation of the Offshore Protocol</a>	<a href="#">Convention for the Protection of the Marine Environment and the Coastal Region of the Mediterranean</a>	MAP	n/a	2011-12-31
<a href="#">National Report on the technical implementation of the Prevention and Emergency Protocol.</a>	<a href="#">Convention for the Protection of the Marine Environment and the Coastal Region of the Mediterranean</a>	MAP	n/a	2011-12-31
<a href="#">National Report on the technical implementation of the SPA &amp; Biodiversity Protocol</a>	<a href="#">Convention for the Protection of the Marine Environment and the Coastal Region of the Mediterranean</a>	MAP	n/a	2011-12-31

**SEMIDE**  
**EMWIS**  
Euro-Mediterranean Information System on know-how in the Water sector

**WISE**  
Water Information System for Europe

European Commission



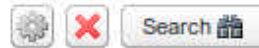
# Discovery and view

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



# 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



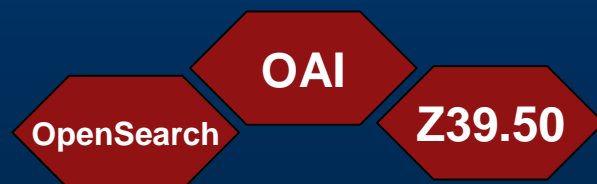


# Software package set-up

- **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)**

GeoNetwork  
OpenSource

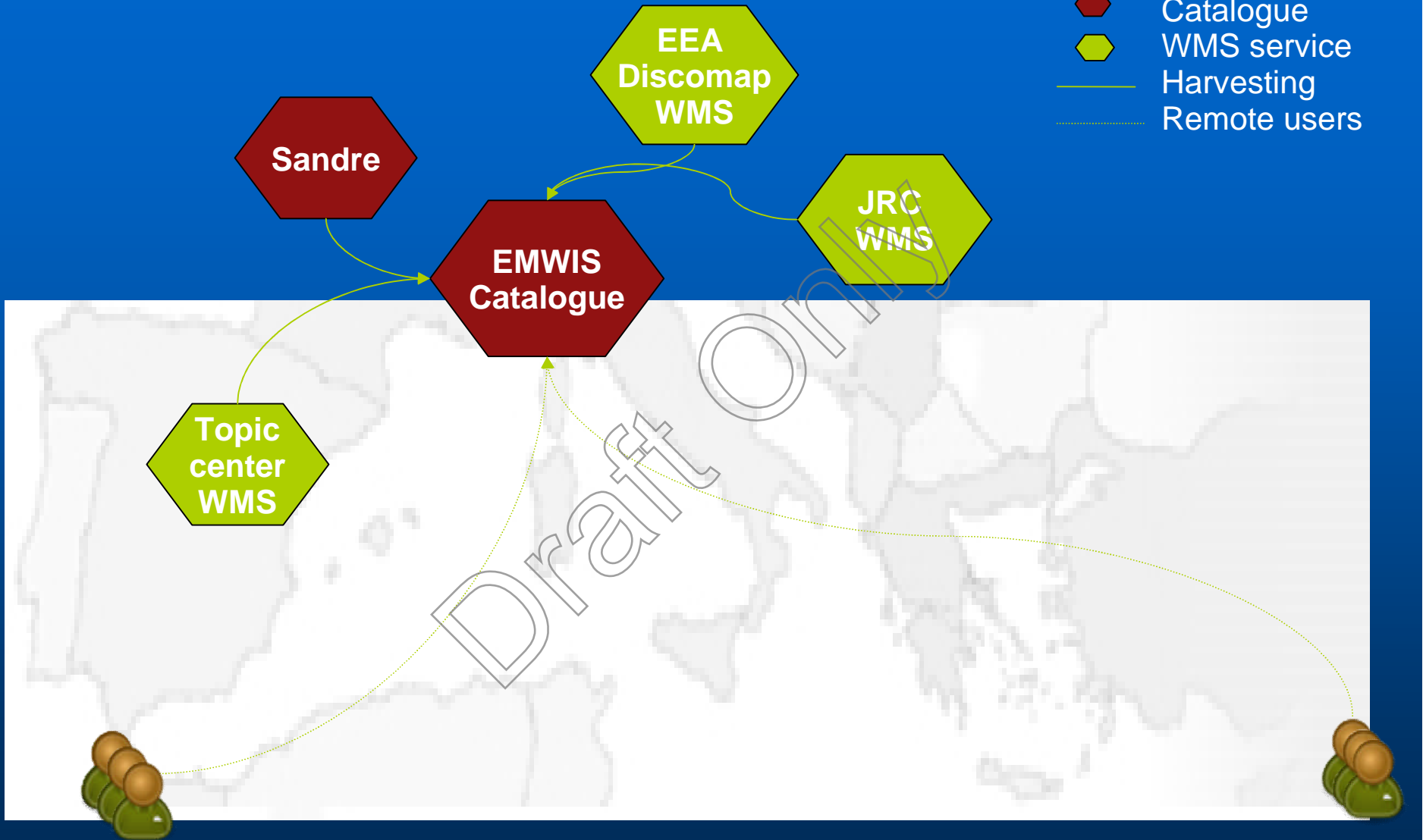
← GeoServer REST API  
for configuration →



# 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

Draft Only



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

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

Full text search:  Resource type:

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

Restrict search to map extent

Options

Medstat environmental data sets  
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  
Couverture forestière du bassin du Sebou MAROC

Springs in palestine  
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

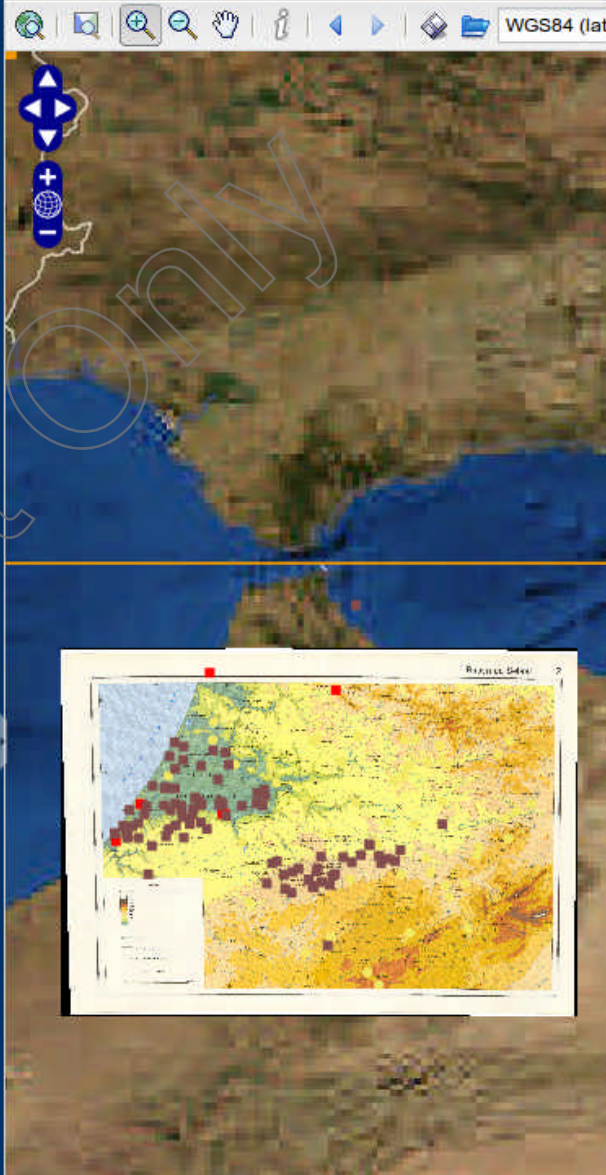
**Groundwater stations on Sebu river basin** ★★★★★

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



# View perspective

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

Sort by Relevance

**Springs in palestine** ★★★★★  
The ISO19115 metadata standard is the preferred metadata standard to use. If unsure what templates to start with, use this one. ...  
PALESTINE

**Satellite Image of Jordan** ★★★★★  
This file contains a satellite image of Jordan from the year 2000 and it is available in JTM and palestine coordinates ...  
ADMINISTRATIVE BOUNDARY, JORDAN

WGS84 (lat/lon)

100 mi

1 : 8719495



# Access remote services

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
  - EuroSION
  - 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... http192.70.34.1948081... 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

WGS84 (lat/lon)

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



1000 mi 1 : 69755965

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

Done

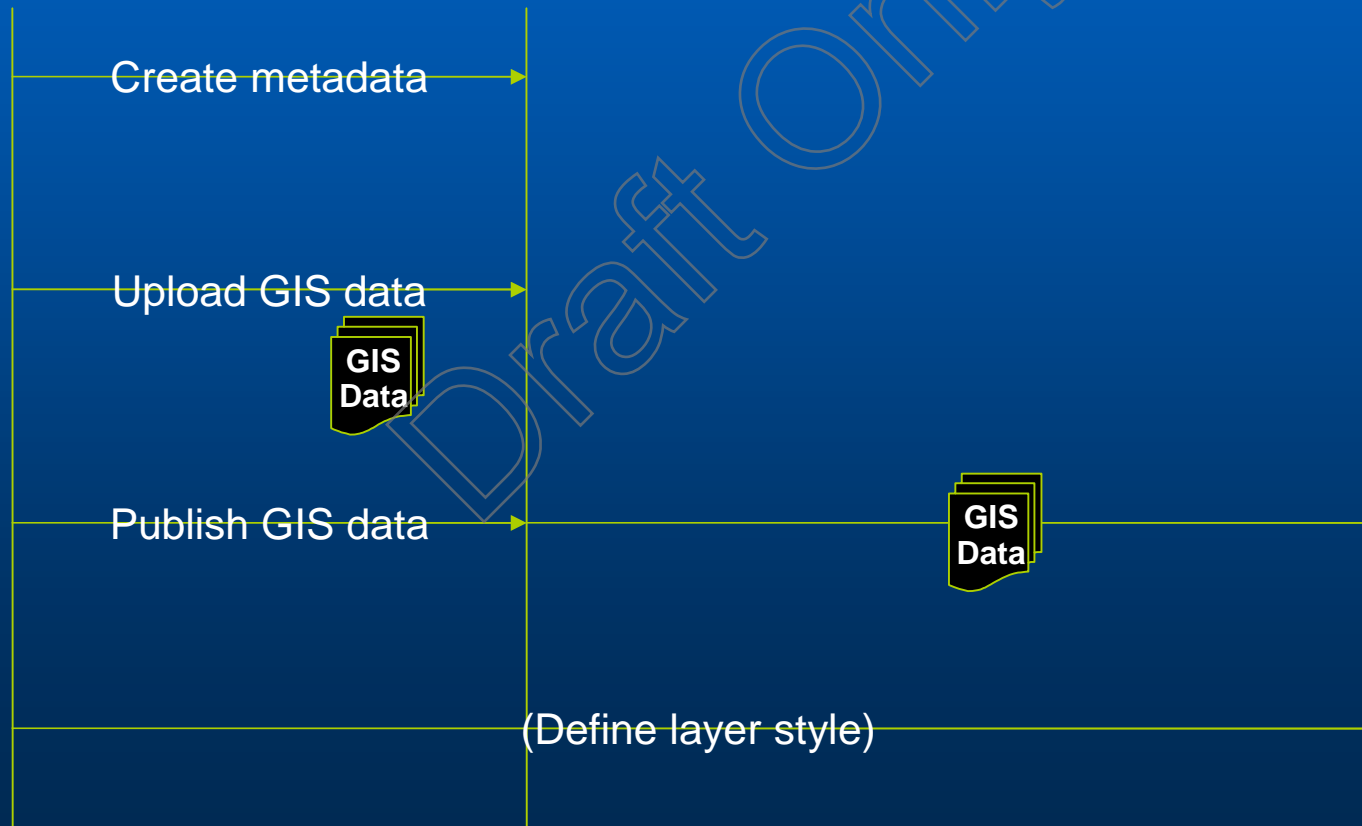


# Publish metadata and data



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 Sebu 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**  
Localisation de...  
MAROC  

**Climatolog**  
Localisation de...  
MAROC  

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

**Physiographie de la couverture forestiere du bassin de Ciber...**

**Context Menu:**

- 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 ... X GeoNetwork - The portal to spati... X

Mediterranean Water Information Datas

Full text search: sebou

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

The screenshot shows a web browser window with the URL <http://geo.semide.net/geonetwork/apps/search/>. The page title is "Mediterranean Water Information Datasource Catalogue". The search results are displayed in a list format, sorted by Relevance. The search criteria are "Full text search: jordan" and "Resource type:".

Search results:

- 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

Each result includes a star rating and a small thumbnail map showing the location of the data in Jordan.

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