

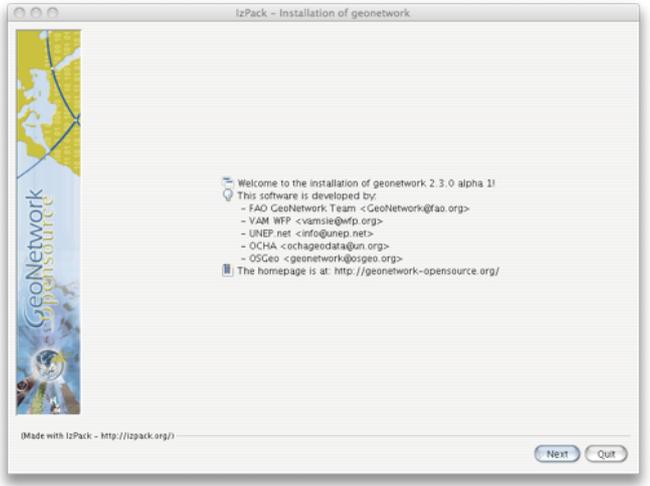
Instructions

Purpose

Guide you through the process of installing GeoNetwork opensource and familiarize yourself with configuring and using the software.

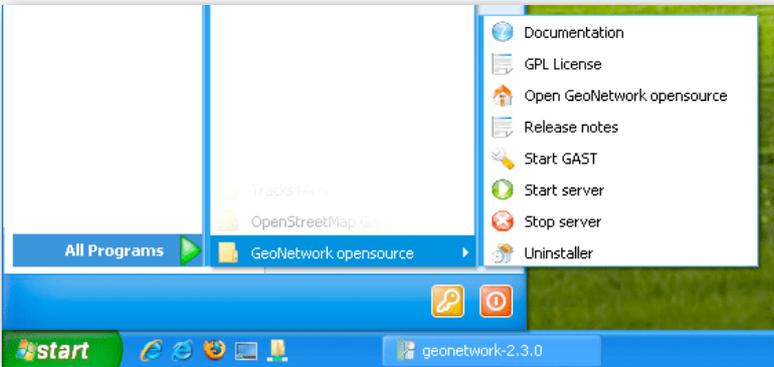
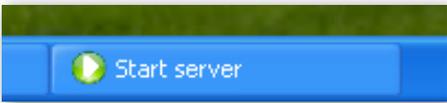
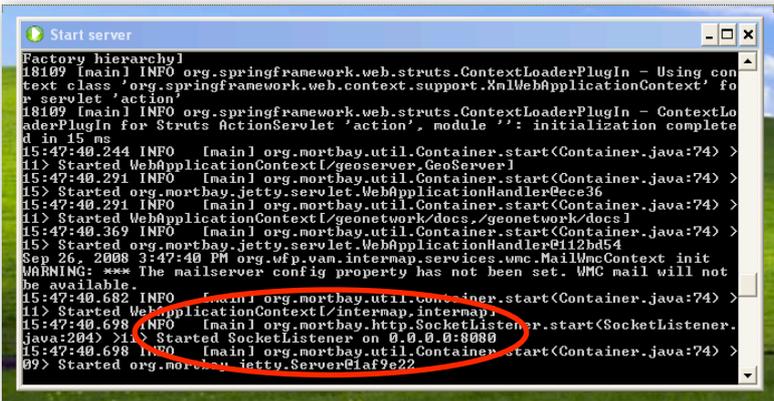
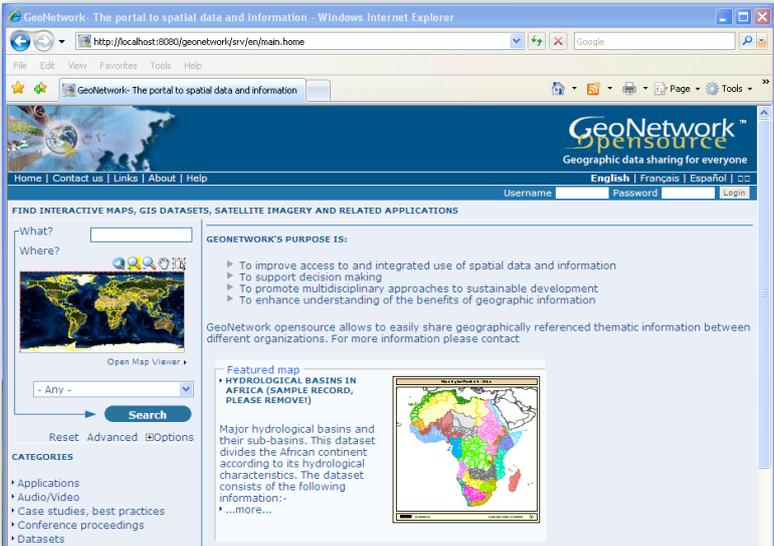
Focus will be on:

- * Introduction to GeoNetwork opensource
- * Installation & basic configuration
- * Create Users and User Groups
- * Configure GeoServer and create a Web Map Service
- * Harvest metadata from the Web Map Server
- * Extra time stuff

Installation	Screenshots
Double click on the installer to launch the installation process	
Installer name: geonetwork-install-2.3.0-alpha1.exe	
Follow the default installation process	
<p>Note: Make sure no other web server is running by trying to connect to http://localhost:8080 for example GeoServer.</p>	
	



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Starting the web server	Screenshots
<p>After the installer completed, you will find a group of GeoNetwork shortcuts in the Start Menu of Windows</p>	
<p>First select "Start Server". You should see a small application item appear in the toolbar.</p>	
<p>You can click on that application to see the status of the web server startup process.</p> <p>The server is ready once you see the "Started SocketListener" string.</p> <p>You can now launch the "Open GeoNetwork opensource" application in the Start menu.</p>	
<p>You should now see the GeoNetwork application in your browser.</p>	



Instructions

Configuration	Screenshots
<p>Now we'll open the Manual and work from there. To open the Manual, select the "Help" button in the GeoNetwork menu.</p> <p>You can use the manual in the browser, or open the PDF version. A link to the PDF document can be found at the bottom of the Help page.</p>	

We'll start with Chapter 2 - Getting started.

Read the introduction and section 2.1. Perform the basic search as suggested.

You can read more about the basic functionality of the catalog later. Let's first do some basic system configuration to make sure we can start creating useful new content.

Basic System configuration - Chapter 7

Read Chapter 8 and change the settings for your system where needed.

Create a new user group and a new user - Chapter 8

Read Chapter 7. Create a "FOSS4G" group and a new user with the Content Reviewer profile.

Configure GeoServer and setup a WMS layer

We'll now configure the GeoServer software that is part of the GeoNetwork installation.

Next we'll create an interactive map service for Capitals in Africa (OGC-WMS).

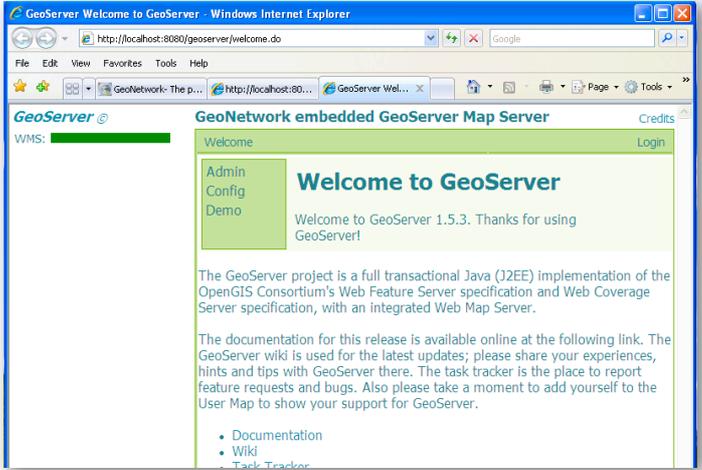
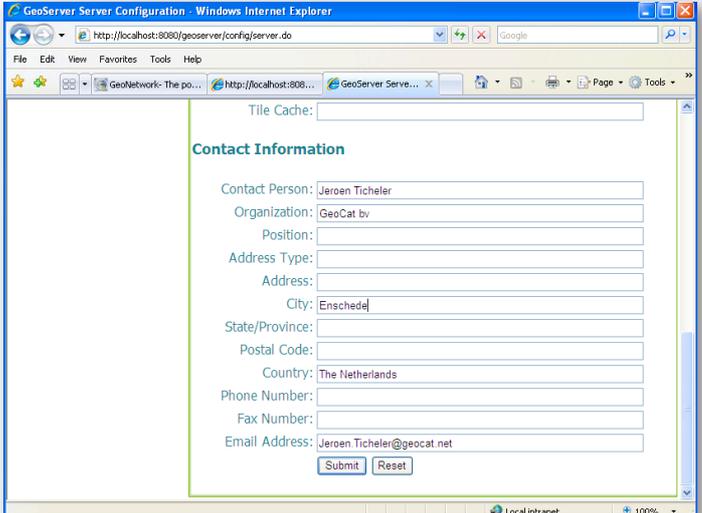
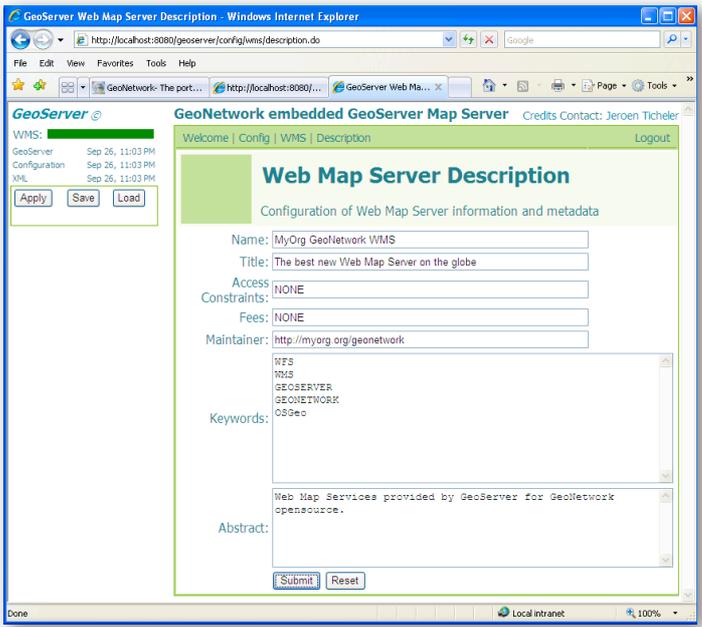
To prepare, copy the `capt1_pt.zip` file into

`c:\Program Files\geonetwork\web\geoserver\data\data\`

and unzip it. You should have a folder named `Capt1_pt` that contains the shape file.

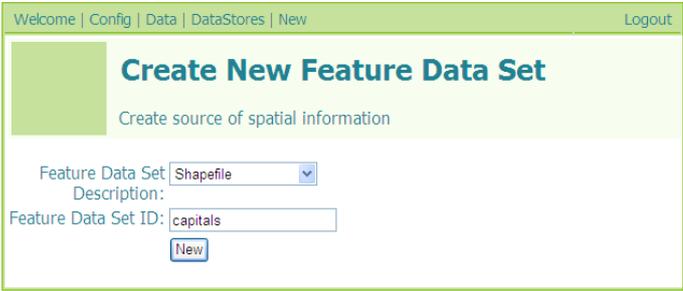
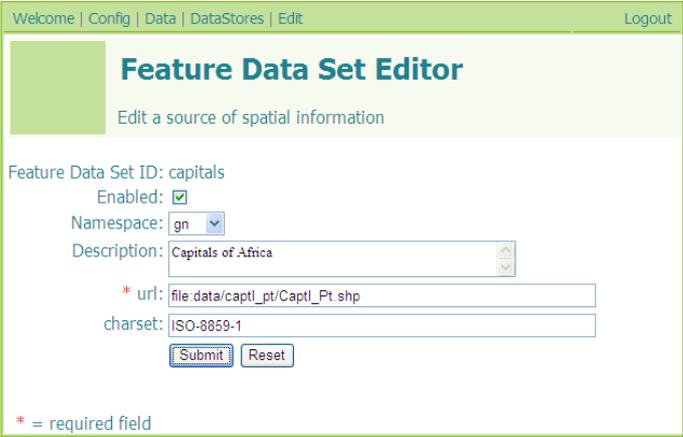
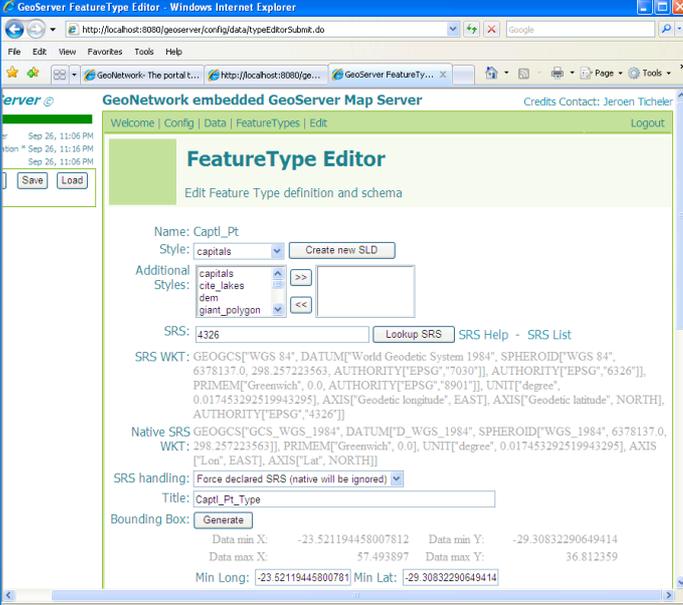


Instructions

Configuring GeoServer	Screenshots
<p>Open the GeoServer administration interface. In a new browser window go to http://localhost:8080/geoserver</p> <p>Login (top right) using admin/geoserver as the username and password.</p>	
<p>Select "Config" > "Server" and fill out your Contact Information. This will be used to display the default contact details of the map server to clients through the GetCapabilities document.</p> <p>Submit the form when finished.</p>	
<p>We will now configure some metadata related to the Web Map Server (WMS).</p> <p>Select "WMS" > "Description"</p> <p>These details will also become part of the GetCapabilities document.</p> <p>Submit the form when finished.</p> <p>Now hit Apply > Save > Load to store and load the changes on the server.</p> <p>Note: You can do the same for the Web Feature Service (WFS) and Web Coverage Service (WCS), but we'll concentrate on the WMS part for now.</p>	



Instructions

Setting up the new WMS layer	
<p>We'll now configure the WMS layer.</p> <p>Select "Data" > "DataStores" > "New"</p> <p>Select "Shapefile" and set the Feature ID to "capitals" (screenshot)</p>	
<p>Write a short description</p> <p>Set the path to the dataset file:data/captl_pt/Captl_pt.shp</p> <p>Select "Submit"</p>	
<p>Select the appropriate Style (capitals)</p> <p>Hit the "Lookup SRS" button. It should fill out the appropriate SRS (4326)</p> <p>Fill out the title</p> <p>Hit the Bounding box "Generate" button to extract the bounding box information from the dataset.</p>	

Metadata related to the Cities dataset

Title: "VMap0 Capital Cities"



Instructions

Abstract:

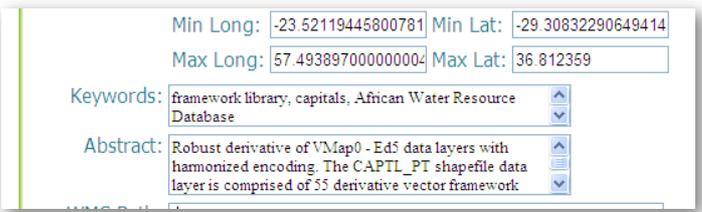
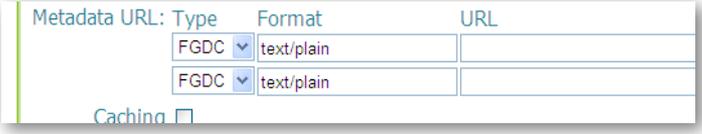
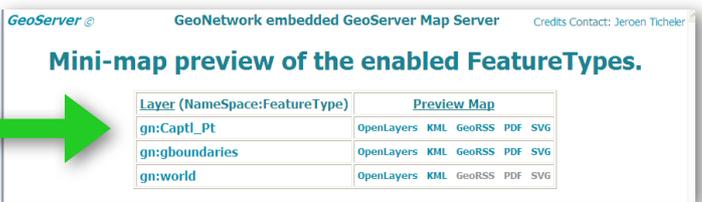
“Robust derivative of VMap0 - Ed5 data layers with harmonized encoding. The CAPTL_PT shapefile data layer is comprised of 55 derivative vector framework library features derived based on 1:1 000 000 data originally from VMap0, 5th Edition. The layer provides nominal analytical/mapping at 1:1 000 000. Data processing complete globally, this is an African subset. Acronyms and Abbreviations: VMap0 - Vector Map for Level 0.”

Keywords:

“framework library, cities, base map, VMap0, African Water Resource Database, AWRD, ancillary vector”

Metadata URL (not required, but nice if it exists):

<http://www.fao.org/geonetwork/srv/en/iso19139.xml?id=29057>

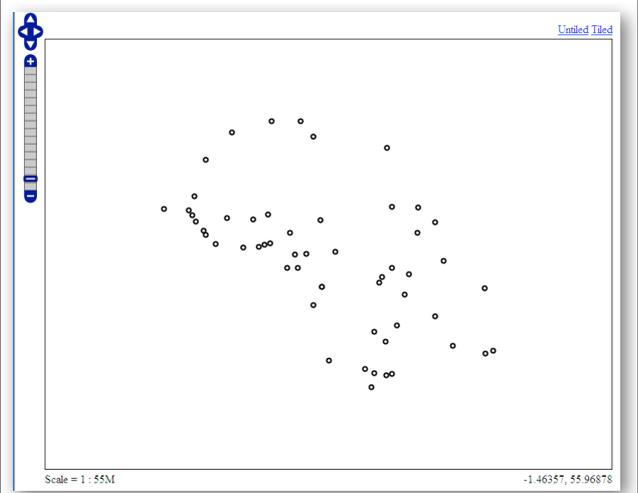
Setting up the new WMS layer									
<p>Fill out the abstract and keywords</p>									
<p>Fill out the first metadata URL</p> <p>Type: TC211</p> <p>Format: text/xml</p> <p>URL: See metadata</p>									
<p>Hit “Submit” when done, then “Apply”, “Save”, “Load”</p> <p>Now we can test our service. Go to the Welcome page > “Demo” > “Map Preview” > Select the OpenLayers gn:Captl_Pt preview. (screenshot)</p>	 <table border="1"> <thead> <tr> <th>Layer (Namespace:FeatureType)</th> <th>Preview Map</th> </tr> </thead> <tbody> <tr> <td>gn:Captl_PT</td> <td>OpenLayers KML GeoRSS PDF SVG</td> </tr> <tr> <td>gn:boundaries</td> <td>OpenLayers KML GeoRSS PDF SVG</td> </tr> <tr> <td>gn:world</td> <td>OpenLayers KML GeoRSS PDF SVG</td> </tr> </tbody> </table>	Layer (Namespace:FeatureType)	Preview Map	gn:Captl_PT	OpenLayers KML GeoRSS PDF SVG	gn:boundaries	OpenLayers KML GeoRSS PDF SVG	gn:world	OpenLayers KML GeoRSS PDF SVG
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Instructions

Setting up the new WMS layer

If you see the dotted map shown here, you succeeded! 😊

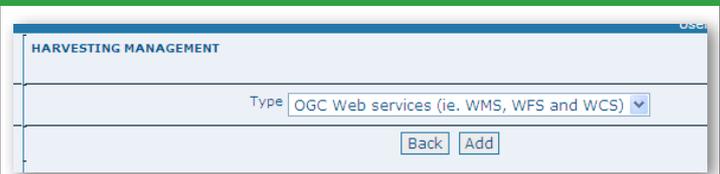


We'll now use this service in our GeoNetwork catalog to automatically generate new metadata records.

Switch back to the GeoNetwork window and open the "Administration" page.

Setting up harvesting of the WMS Service metadata

Select "Harvesting" and "Add" an OGC Web Services harvesting.



Fill out the form:

Name: Local GeoServer

Type: OGC Web Map Service 1.1.1

Service URL:

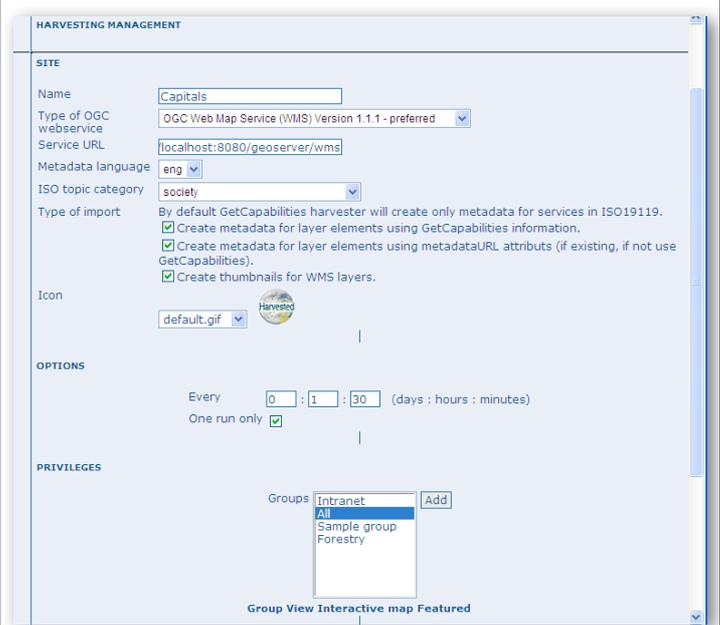
<http://localhost:8080/geoserver/wms>

Select all import options

Select to run only once

Add privileges for the "All" group.

When finished, Save the harvesting.

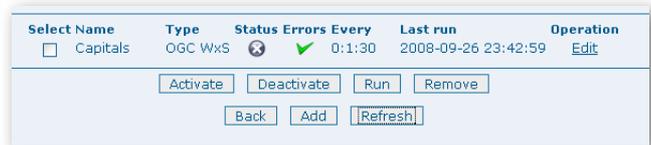


Instructions

Setting up harvesting of the WMS Service metadata

Once added, we now have to start the harvesting process.

Select the harvester we just added and hit "Run". After some time, hit "Refresh", until you see a time under "Last run".



Let's look at generated results in the catalog now, by doing a simple Search from the Homepage.

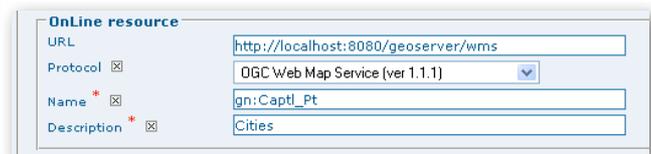
If all worked well, you should see the metadata for the three layers we now have running on the embedded GeoServer.



"Edit" the Cities metadata to include the link to the interactive map. Due to the use of the metadata URL we've been able to automatically generate the full metadata record. However, the local link to the WMS service was not created.

The screenshot shows you how to complete this linkage between service and metadata.

"Save and close" when done.



If there's time left, move on to create a new metadata record from scratch. In the Manual, start at Chapter 4 to understand how this is done.

Finally explore the functions the "Search" interface offers, including the use of Rating, Sorting results, bookmarking in social bookmarking sites like DiggIt and Delicious as well as sending references to a specific record by email.

