PRIN PROJECT: URBAN GEOmatics for Bulk Information Generation, Data Assessment and Technology Awareness

CNR-IREA

istituto per il rilevamento elettromagnetico dell’ambiente
What we have done in this 7 months

We have evaluated the best possible solution to implement a geocatalog.
Possible solution:

**OPEN SOURCE GEOCATALOGUES**
- GeoNode
- GeoNetwork

**CUSTOM SOLUTION**
- Mixed Solution
- Complete Custom Solution

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- Open Source Geocatalogues
- Custom Solution
- Mixed Solution
- Complete Custom Solution
Custom solution?

It could have been an interesting solution.
We could have integrated other previously developed projects.
This is an example:

- Export RNDT metadata
- LIFTBOY Converts RNDT metadata in EDML
- EDI SERVER
  - EDML (JSON) STORAGE
  - To others CSW compliant geocatalogues
- EDI-CLIENT Generates RNDT and EDML
- CUSTOM GECOCATALOG
  - URBAN-GEO BIG DATA
- SEARCH PLATFORM
  - node
  - ionic
- To others CSW compliant geocatalogues

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Why an OPEN SOURCE solution?

The custom solution has a problem: it is custom.
This is not a private project, this is a research project.
We need a community support.
That's the reason why we decided to adopt an open source solution with a big community.
Why Geonetwork?

It is an open Source GeoCatalog with a good community on GitHub. It has been written using Java for the core, Apache Lucene as search engine, but sadly Angular 1 for the web user interface.

In this period we have tried to configure it.
Those are some example of metadata imported RNDT XML
Those are some example of metadata imported:
Imported from a CSW service.

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Those are some example of metadata imported:
Created and imported from Edi-Client (originally html)
### Imported Metadata

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<thead>
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<th>ISTITUTO</th>
<th>Esito</th>
<th>NOTE</th>
</tr>
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<tbody>
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<tr>
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<tr>
<td>consumo_di_suolo</td>
<td></td>
<td></td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>ISTITUTO</th>
<th>Esito</th>
<th>NOTE</th>
</tr>
</thead>
<tbody>
<tr>
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<td></td>
<td></td>
</tr>
<tr>
<td>DB Geotopografico - lotto Padova - sist rif. ETRF2000</td>
<td></td>
<td>EPSG6706 -&gt; WSG84</td>
</tr>
</tbody>
</table>
We have tried to support you

**PROXY FOR THE CROSS-ORIGIN RESOURCE SHARING**

Cross-Origin Resource Sharing (CORS) is a mechanism that uses additional HTTP headers to tell a browser to let a web application running at one origin (domain) have permission to access selected resources from a server at a different origin.

**GeoServer**

ugbd.get-it.it

We have converted our GET-IT virtual Machine in different formats for
Problems we are trying to solve

- Chrome will soon mark all HTTP sites as ‘not secure’
- What is HTTPS-encryption?
  HTTPS encryption protects the channel between your browser and the website you’re visiting, ensuring no one in the middle can tamper with the traffic or spy on what you’re doing.
- We have decided to adopt HTTPS-encryption, but this was not a simple decision because there are a lot of problems related to this.
  i.e. We use in Get-It a lot of external services like some Sparql Database or javascript libraries that are not HTTPS-encrypted.
Problems we are trying to solve

- Open Source doesn’t mean easy stuff.

- We are trying to personalize GeoNetwork core to add more specific requests to query the metadata. The core is a very complex group of interdependent Java projects. Sometimes a little error, or misunderstanding of the procedure can generate a domino effect.

- AngularJS 1, used for the ui, is javascript framework, but it is very different from the more recent versions 2,3,4,5 (that I know better) that are very similar to each other. It is still maintained and used, but it is not so easy to find an help online.