prosPar

a Geographic UI for Prospect-to-Partner Relationships Management
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Electricité De France (EDF) is the historical french electricity utility.

EDF R&D is a mutualised entity for all the EDF Group.

ICAME (our department) deals with commercial entities of the EDF group.

A part of our work is to bring web mapping to projects, essentially with FOSS4G tools.
Camptocamp is a service-oriented editor and integrator of Open Source software applications for Geospatial Solutions, Business Solutions, and Infrastructure Solutions.

MapFish, originally from Camptocamp, is going to be pushed as an OSGeo project.
**prosPar : context**

- **prosPar** is a web2.0 application currently being developed at **Electricité De France R&D**, in partnership with **Camptocamp**.
- It aims at providing a geographic UI to represent and query relationships between our clients and craftsmen partners.
- Why does EDF have craftsmen partners?
White Certificates
White Certificates

- Documents certifying that a certain reduction of greenhouse gas emission has been attained.

- Following the Kyoto conference, energy companies have to produce a quota of white certificates.

- How a company which doesn't produce a lot of greenhouse effect gas can gather its share of white certificates?

- But white certificates can be obtained by different ways ...
The Process

1. We want to renovate our house
2. I introduce your references in the base
3. I pick a prospect client in the base
4. I send the final invoice to EDF

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A way for EDF to get white certificates is to connect its customers to companies or craftsmen whenever they call us when they intend to have some work reducing their energy consumption done in their house.

Here comes the process of allowing craftsmen to pick up clients, controlling their ongoing relationship and finally putting the white certificate in the validating process.
Databases

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clients works with partner craftsmen

produces

added to

white certificates

prospect partners

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spatial requests: what are the craftsmen available around an incoming customer?

a regional view: where do I need to enrol new craftsmen?

where are my potentials in terms of white certificates?

a new friendly way to explore databases.
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**GUI**

![Map Interface with ProsPar GUI](image)

**Couches d'informations**

- Partenaires
- Partenaires potentiels
- Projets
- Fiches de Fin de Travaux

**Rechercher des Partenaires**

Correspondre à toutes ces conditions:

- Nb clients > 0
- ECS = true
- Intersection avec

**Résultats de requête sur la couche Partenaires**

<table>
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<tr>
<th>Id</th>
<th>Nom</th>
<th>NAF</th>
<th>SIREN</th>
<th>SIRET</th>
<th>Adresse</th>
<th>Code postal</th>
<th>Commune</th>
<th>Nb clients</th>
<th>CUMAC</th>
<th>Nb de visites</th>
<th>Animateur</th>
<th>Entité</th>
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<td>453e</td>
<td>453 666 109</td>
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<td>rue helene...</td>
<td>29300</td>
<td>quimperle</td>
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<td>Alain GUI</td>
<td>DCPP Ouest</td>
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<td>Alain GUI</td>
<td>DCPP Ouest</td>
</tr>
</tbody>
</table>

13 résultats

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at the beginning it was decided that:

- data would be provided only by means of OGC webservice (WMS and WFS) with no server-side developments
- the presentation work would be done client-side only

the ideas behind this choice are:

- OGC webservice reuse (any compliant client)
- cartographic server agnostic application
- initial implementation focuses on simplicity
Components

- PostgreSQL/PostGIS  
  server side
- Geoserver as OWS provider

- Mapfish + OpenLayers + GeoExt  
  client side
prosPar provides:

- geographic layers with manager
- sophisticated filters
- linked layers
- grid presentation for data and csv export
Sophisticated Filters

http://projects.opengeo.org/styler
**Sophisticated Filters**

- Conjunction
- Or
- Disjunction

- Filter relaxing
- Condition removal

*ProsPar: a Geographic UI on Prospect-to-Partner Relationships*
Sophisticated Filters

spatial condition

group of conditions

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Linked layers address those sorts of questions:

*show me the white certificates associated with this craftsman*

or

*show me the clients this craftsman has contacted*

The answers are shown on 2 new layers.

The user is able to query further those layers using the standard GUI.
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prosPar: a Geographic UI on Prospect-to-Partner Relationships
prosPar : une UI Géographique sur les Relations Prospect-Partenaire
The client-side code is **generic**.

To achieve this, the application uses a XML configuration file which specifies:

- an access to the data
- which attributes are to be presented, used for filtering, come with a list of their occurrences
- which layers are linked and how
Thanks to the XML configuration file and a Python script we produce:

- a javascript configuration file
- a bunch of JSON files with unique values

The operation has to be repeated every time the data changes.
The XML Description

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The XML Description

```xml
<layer name="partenaire" displayIfNotLinked="true">
  <name>edfgeo:partenaire</name>
  <label>Partenaires</label>
  <table>prospar.partenaire</table>
  <geom>the_geom</geom>
  <atts>
    <att visi="true"/>
  </atts>
</layer>

<linked>
  <linkedName>default</linkedName>
  <toLayer>Partenaires</toLayer>
  <withId>siret</withId>
  <matchingField>code_siret</matchingField>
</linked>
</layer>
```

**prosPar**: a Geographic UI on Prospect-to-Partner Relationships
The XML Description

```
<send layerType="Partenaire">
  <labelAtt>nom</labelAtt>
  <link from="id_acteur" to="id"/>
  <link from="code_siret" to="siret"/>
</send>
```

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OWS lacks & workarounds

- OWS lacks some features, e.g.:
  - WFS: get distinct values?
  - WFS: describeFeatureType with pretty attribute name?
  - Feature joins between WFS layers?

- Workarounds:
  - a batch database extraction
  - generated javascript
  - pre-join via ETL and new layer
Alternate choices?

- Is "100% OWS" the right choice?
- What about an application developed on top of Mapfish server or GeoDjango?
Questions ?
Pictures :

http://www.flickr.com/photos/brianlewandowski/370350990/sizes/l/