

Possibility of Utilizing Participatory Spatial Data Sharing Platform for Hanoi Project



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Who am I ?

Research master degree in computer sciences (2004)

Founded GeoLabs company in 2006 (France)

Founded GMC-IC company in 2008 (Senegal)

Research Interests

OpenSource software

Complex GIS algorithms and models development

What kind of solutions we provide ?

- Professional Web content editing system and document management – **OOCMS**
- Geographic Data Infrastructure management – **MapJax**
- Complete GNU/Linux Distribution - **GeoLive**
- Developing complex GIS and 3D application developement (IGN 3D Geoportail)
- **ZOO Project**

What is OOCMS ?

OpenOffice Content Management System.

It is a powerful system which let you easily build your own document management system.

Document production is performed by an OpenOffice server which let the user define his own edition interfaces (forms) and complex document production processes.

XML > HTML

What is OOCMS ?

A brief overview of editing system

```

<!-- begin -->
<condition_schema next_step="auto">
  <step id="0" displayDoc="32" formDoc="5" next_step="auto"></step>
  <!-- E2000 -->
  <step id="1" displayDoc="32" formDoc="24" next_step="auto"></step>
  <!-- E2000 -->
  <step id="2" displayDoc="32" formDoc="44" next_step="auto"></step>
  <!-- E2000 -->
  <step id="3" displayDoc="32" formDoc="45" next_step="auto"></step>
  <!-- E2000 -->
  <step id="4" displayDoc="32" formDoc="25" next_step="auto"></step>
  <!-- E2000 -->
  <step id="5" displayDoc="32" formDoc="26" next_step="auto"></step>
  <!-- E2000 -->
  <group names="base">
    <child names="appartements" lib="Appartement" columns="bat_id" tables="appartements" type="link">
      </child>
    </group>
  </condition_schema>
  <step id="6" displayDoc="32" formDoc="46" next_step="auto" loop="true"></step>
  <step id="7" displayDoc="32" formDoc="46" next_step="auto"></step>
</condition_schema>
<!-- end -->
  
```

The workflow.xml file

OpenOffice template for step 1

OpenOffice template for step 6

...

The resulting edition HTML form produced by the OOCMS application

Example OOCMS applications

Regional Direction of Equipement,
managing car accidents and providing an overview report
of the regional localisation, recent numbers and kind of
accidents .

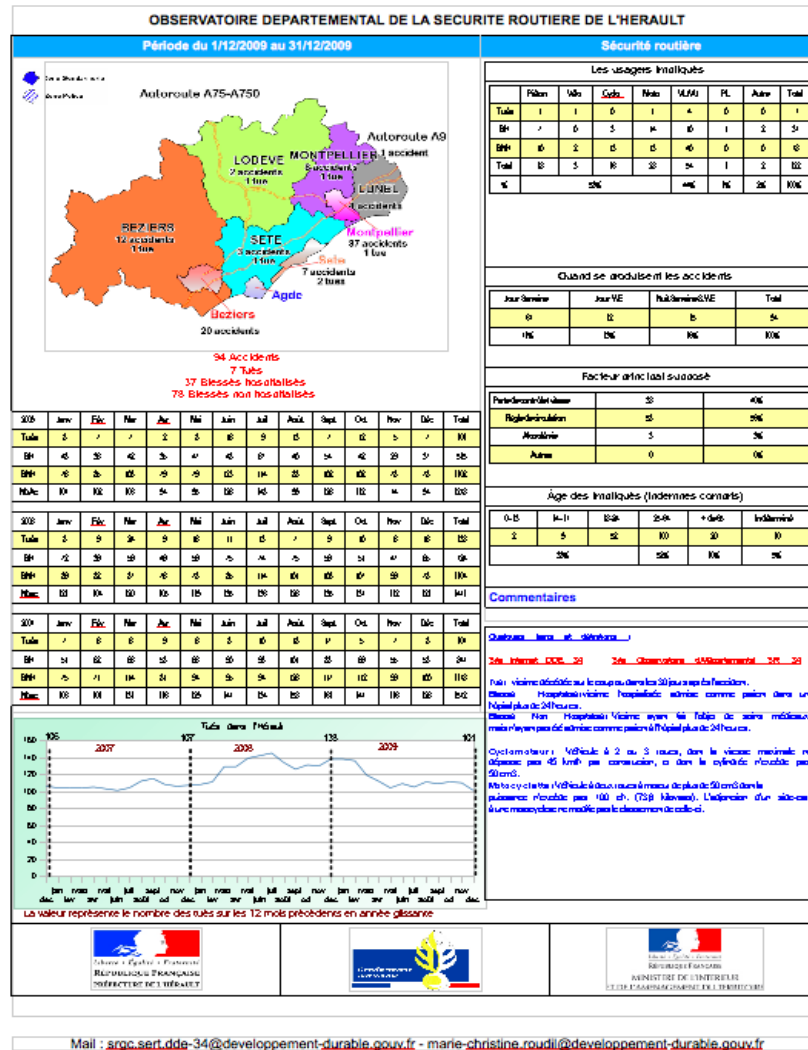
French local gouvernement,
Building facilities management system

National Senegalese Land Registry
PAMOCA Project

OSGeo
Marketing Document management system

Example OOCMS report

Sample overview including map, tables and graphs





What is MapJax ?

An easy to deploy Web-GIS solution.

It provides numerous functionalities, including :

- Data integration in PostGIS database,
- reprojection/format conversion (using GDAL/OGR)
- metadata edition
- On demand WMS/WFS webservices (using MapServer),
- create/edit/delete data layers,
- create different cache of tiles (using Tilecache),
- OpenOffice template to output map in PDF, DOC, XLS or any other supported formats by OpenOffice (stats, graph, curves...)

What is MapJax ?

A back office to configure and deploy Web Services

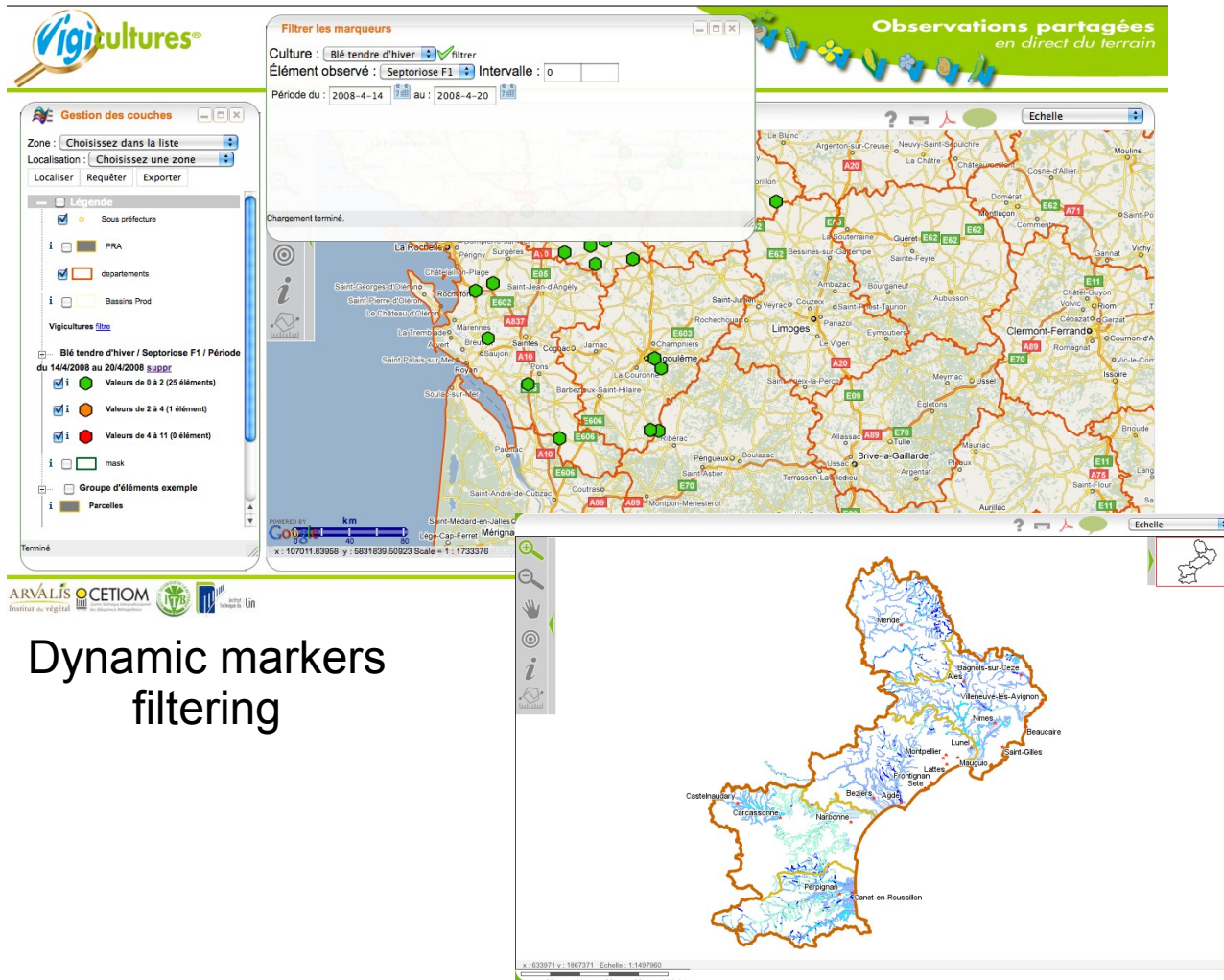
The collage displays four different views of the MapJax application:

- Top Left:** "Édition d'une couche" (Edit a layer) window. It shows a table with columns "Intitulé" and "Valeur". A "Gestion des couleurs" (Color management) dialog is open, showing a color palette. The background shows a list of layers with columns "Active" and "Source".
- Top Right:** "Édition d'une couche" (Edit a layer) window. It shows a form for configuring a layer, including fields for "Nom identifiant", "Libellé détaillé", "Type de données", "Legende", and "Sémiologie par défaut". A red box highlights the "WMS ?" and "WFS ?" options.
- Bottom Left:** "Gestion des symboles" (Symbol management) window. It shows a grid of various symbols and a "webdings" dropdown menu.
- Bottom Right:** "Gestion des symboles" (Symbol management) window. It shows a list of symbols with columns "Active" and "Source".

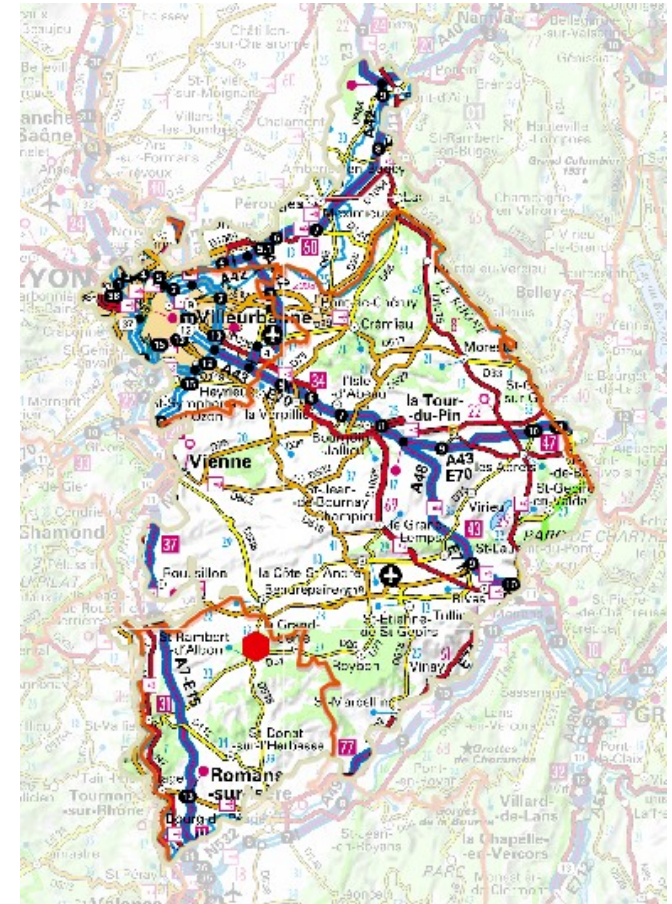
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What is MapJax ?

A front office to display and query data using
OGC Web Services



Standard OpenLayers Viewer
(YAC)



Spatial query and Buffer

Example MapJax applications

Regional Directions of the Languedoc-Roussillon (our regional location).

National Senegalese Land Registry

Arvalis French Vegetal Institute

What is GeoLive ?

A complete GNU/Linux distribution which include pre-built packages requested by the pre-installed OOCMS and MapJax applications.

Easier, more secure and sustainable deployment of our solutions

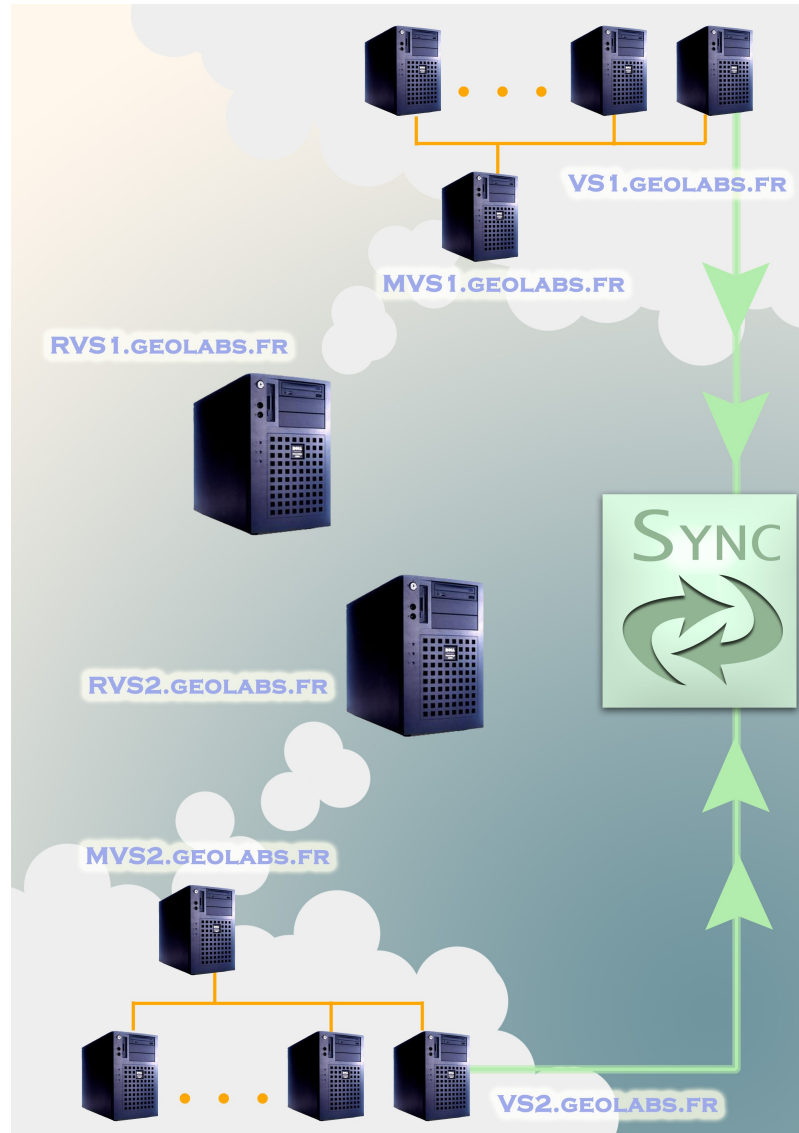
Ensuring easy maintenance of servers and applications.

Virtual Server support.

Synch capability.

What is GeoLive ?

Overview of sync capability



Example GeoLive application

In any GeoLabs/GMC-IC projects which runs on GNU/Linux server.

Massive use of Virtualization and Synchronization Capabilities.

Orchestration

GEO LIVE

+

OOCMS

+

MapJax

=

Full-featured web GIS application