



FOSS4G 2008 – Cape Town (SouthAfrica)

gvSIG: Open Source for handling Geospatial Information

Status Report

Towards an Open Organization

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CTO PRODEVELOP



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Agenda

- Project Origin
- What gvSIG provides
- What we are working on
- Project dimension
- Towards an open organization



Agenda

- **Project Origin**
- What gvSIG provides
- What we are working on
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Project Origin

- **Part of a project:** “Full open systems migration of the Regional Government of Infrastructures and Transport of Generalitat Valenciana”.
- **Gap Analysis of suitable open source for systems.**
- **No advanced GIS client → Just do it**
- **C++ / Java Pilots**
- **Java, GNU/GPL, INSPIRE, Modular design**
- **Fast evolution**



Project Origin

EU R & D & I Project



EUROPEAN UNION
EUROPEAN REGIONAL
DEVELOPMENT FUND
"A way to build Europe"



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- Project Origin
- **What gvSIG provides**
- What we are working on
- Project dimension
- Towards an open organization



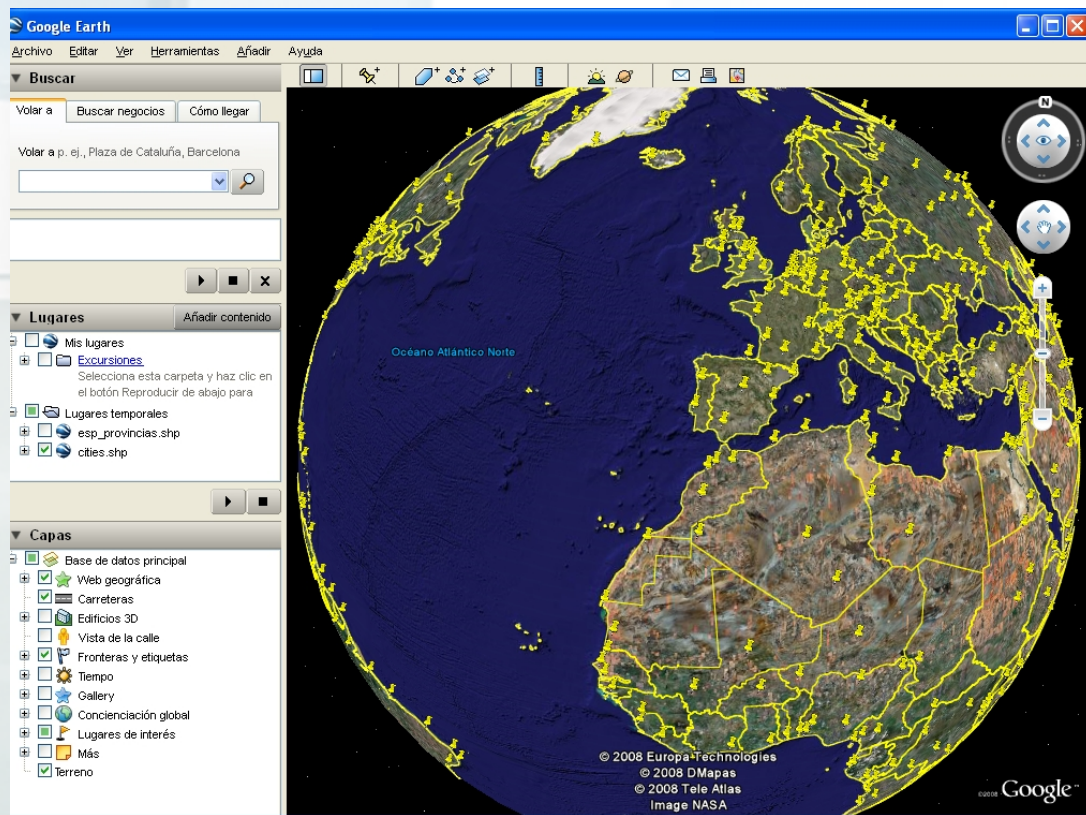
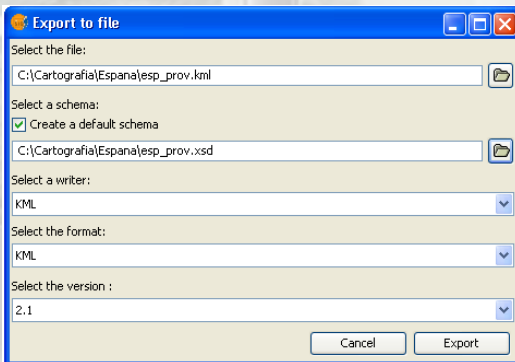
What gvSIG does (as of 1.1.2)

- **Vector Formats**
 - Read: SHP, GML, KML, DXF, DGN, DWG.
 - Write: SHP, GML, KML, DXF
- **Raster Formats (ECW, MrSID, GeoTIFF, others through GDAL)**
- **Geodatabases (PostGIS, Oracle, mySQL)**
- **SDI (WMS, WMC, WFS, WCS, CSW, ...)**
- **Reprojection framework**
- **Layouts**
- **Editing**
- **Geoprocessing**



What's new in gvSIG (as of 1.1.2)

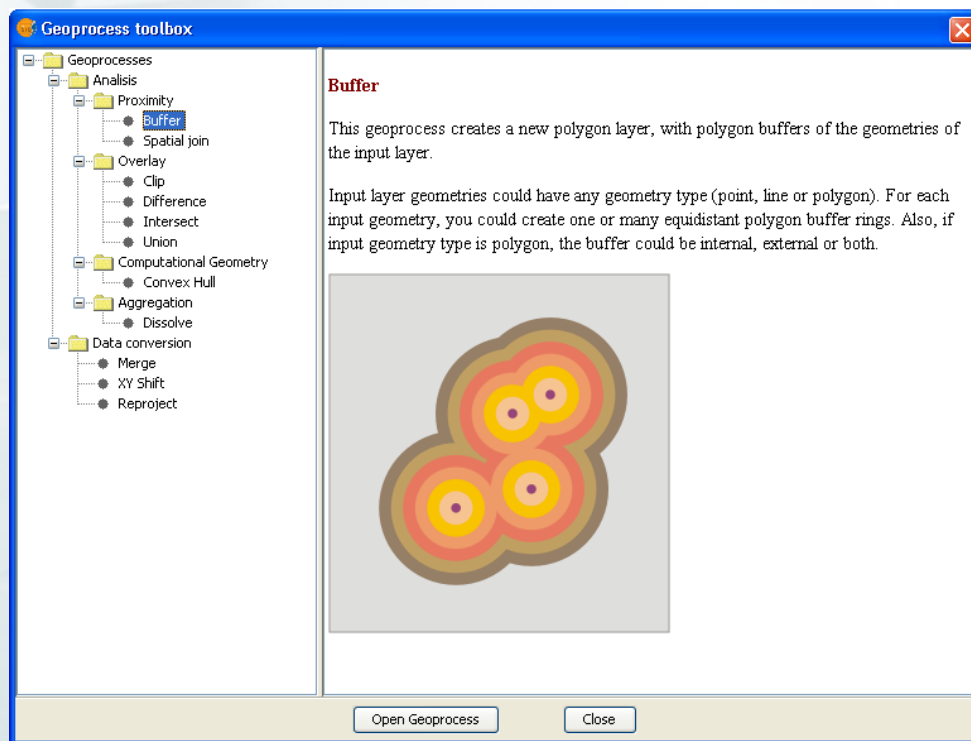
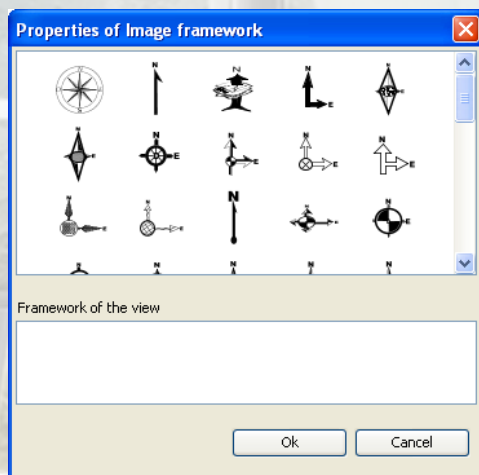
- **KML 2.1 support**





What's new in gvSIG (as of 1.1.2)

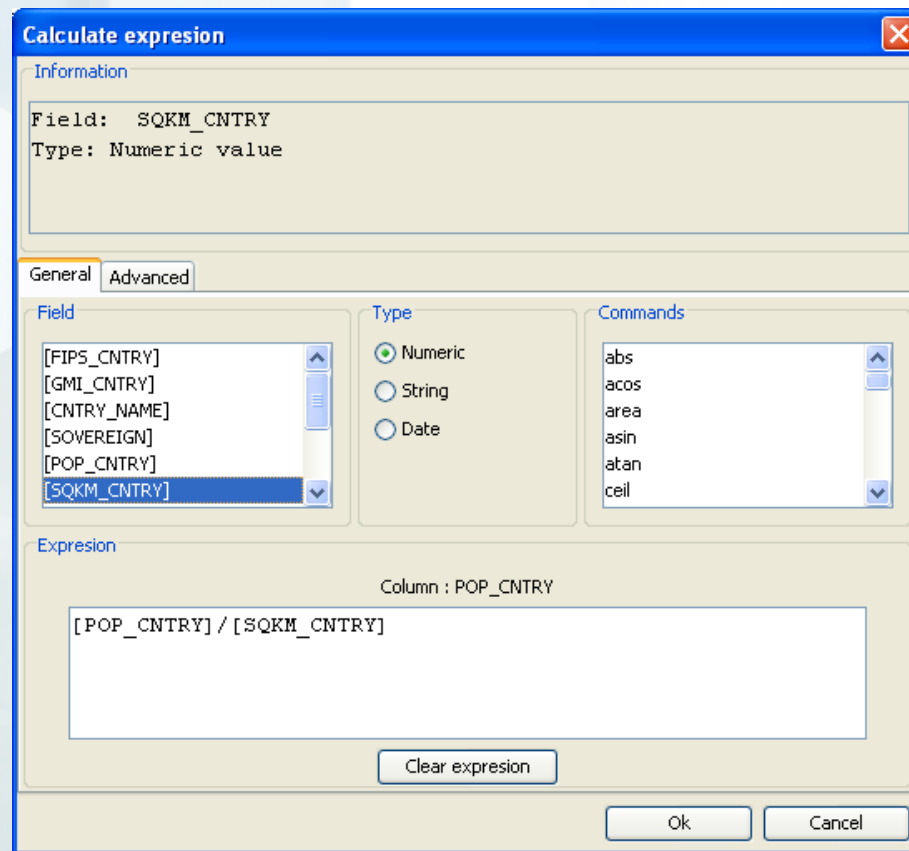
- GML 3.1.1
- WFS 1.1.0
- New north symbols
- New geoprocesses





What's new in gvSIG (as of 1.1.2)

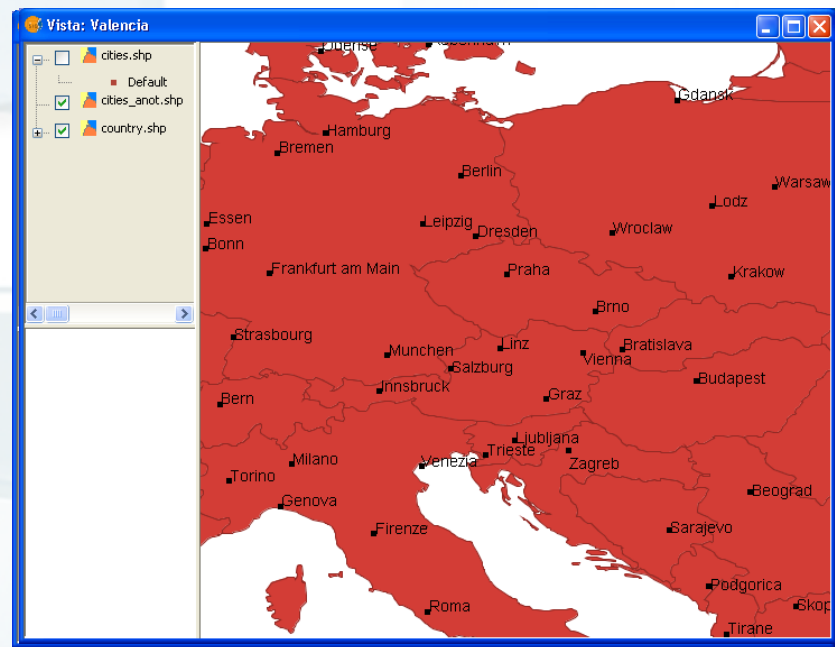
- Field calculator





What's new in gvSIG (as of 1.1.2)

- Export to Annotation
- Annotation Enhancements





What's new in gvSIG (as of 1.1.2)

• Network analysis

- Shortest path
- Stop points
- Route Information
- Topology generation

gvSIG:Untitled

File Show Layer Window View Table Help Network

View: Untitled - 0

ejesc.shp
Default
fondo.shp
Default
1.0
2.0
3.0
4.0
5.0
6.0

Informe de la ruta calculada

Salida desde: 01383
Llegada a: 03088
Longitud total del trayecto: 4,146.01

1. Salir de: 01383
[Ver sobre el mapa](#)

2. Continúe por 01383 durante 84.58 y gire a la izquierda por 00746
Distancia acumulada:84.58
[Ver sobre el mapa](#)

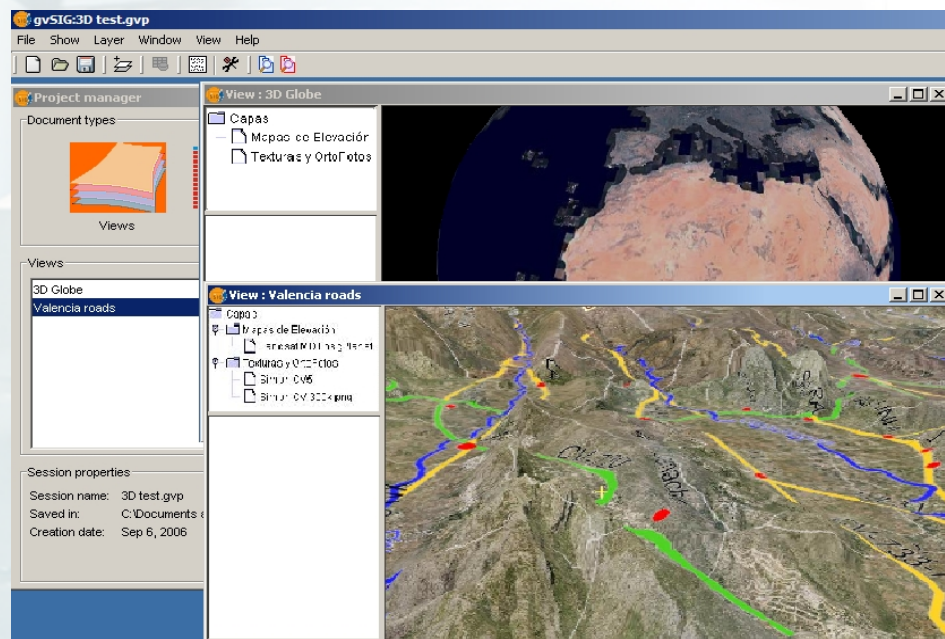
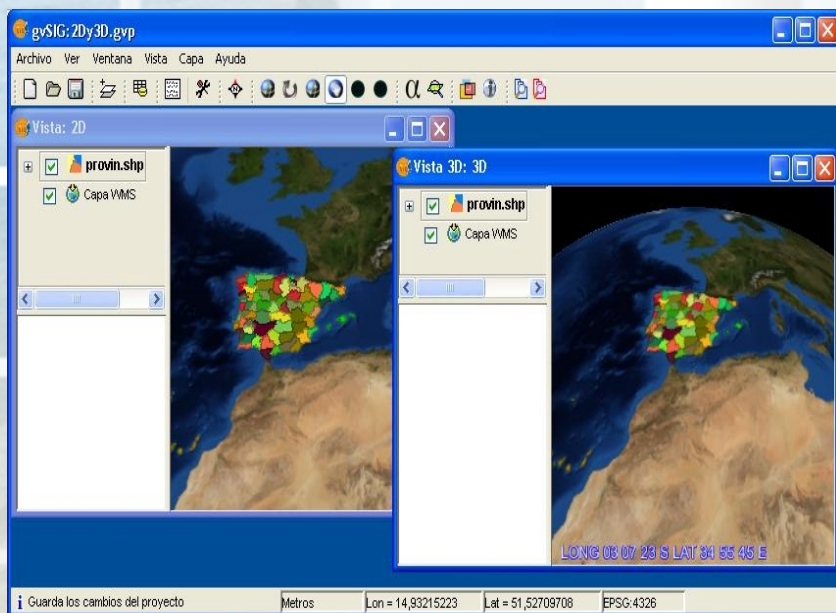
3. Continúe por 00746 durante 212.14 y gire a la izquierda por 00028
Distancia acumulada:296.72

i Application started 1:12,448 Meters X= 726,374.62 Y= 4,373,234.91 EPSG:23030



What's new in gvSIG (as of 1.1.2)

- 3D pilot



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What's new in gvSIG (as of 1.1.2)

- **gvSIG Mobile pilot**
 - SHP, ECW, WMS viewer
 - GPS support
 - Measurements, attributes info
 - Layer management
 - Data exportation from gvSIG





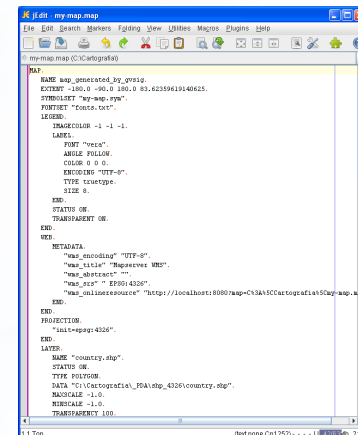
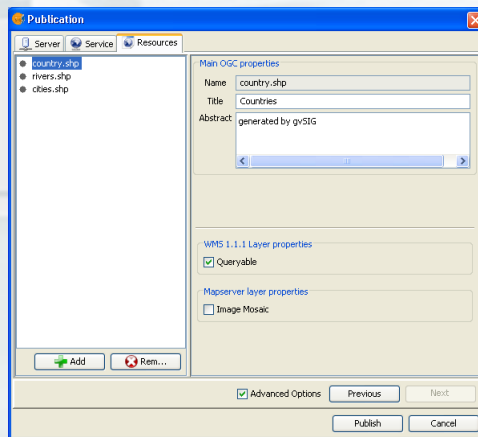
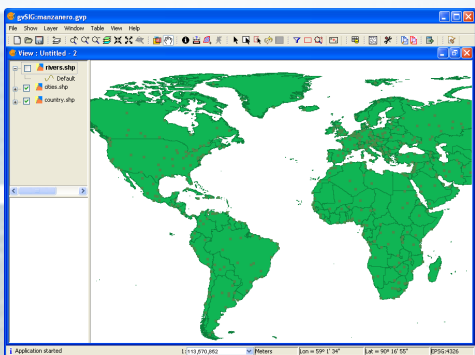
What's new in gvSIG (as of 1.1.2)

- Metadata prototype
 - SHP metadata extraction
 - ISO 19115 metadata editor
 - Publish to GeoNetwork OS



What's new in gvSIG (as of 1.1.2)

• Publishing Extension



- UMN MapServer 5.X : WMS 1.1.0, WFS 1.0.0, WCS 1.0.0
- GeoServer 1.5.4 : WFS 1.0.0



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What's going on?

OGC support improvement

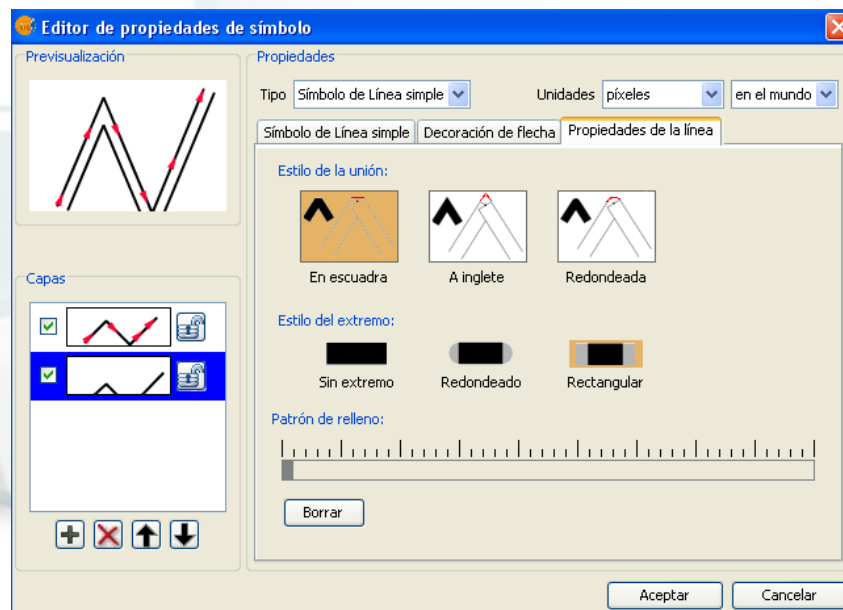
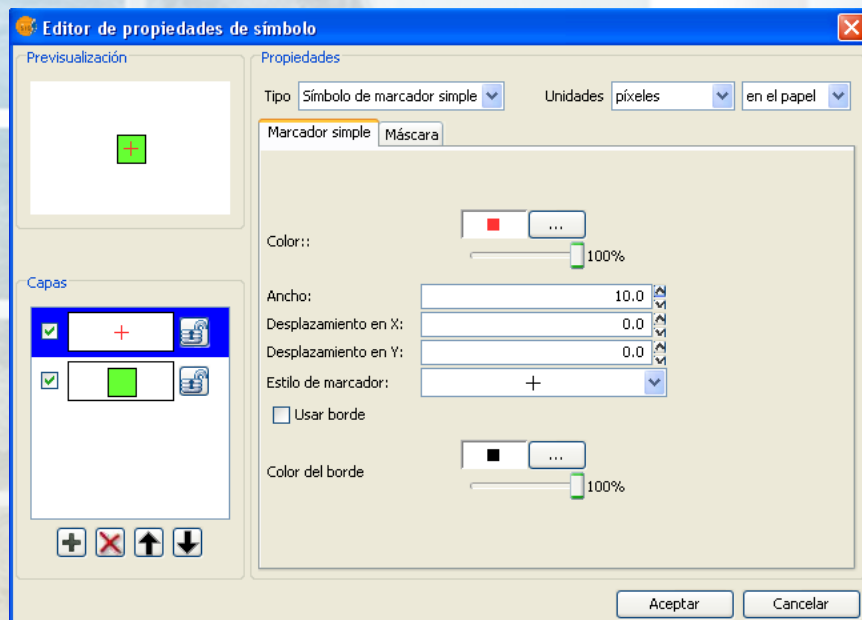
- **gvSIG supports now:**
 - Web Map Service (WMS)
 - Web Feature Service (WFS)
 - Web Coverage Service (WCS)
 - Web Map Context (WMC)
 - Gazetter- Service (ADL, WFS, WFS-G, IDEC)
 - Catalog- Service (Z3950, SRW, CSW/ISO 19115, CSW/ebRIM)
 - Geography Markup Language (GML 1.1.3)
 - Keyhole Markup Language (KML 2.1)
- **Under construction**
 - Web Feature Service Transactional (WFS-T)
 - Style Layer Descriptor (SLD)



What's going on?

Advanced Symbology (I)

- Symbol Editor





What's going on?

Advanced Symbology (II)

- Hierarchy

Niveles de simbología

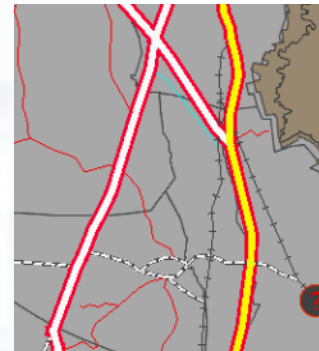
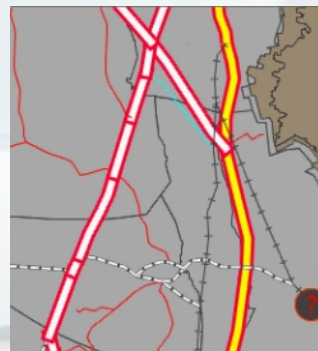
Dibujar símbolos usando el orden especificado

Símbolo	Descripción	1	2	3	4
	050			3	
	Default			4	
	000		1		
	200		2		

Vista normal

Aceptar Cancelar

- Conflict resolution

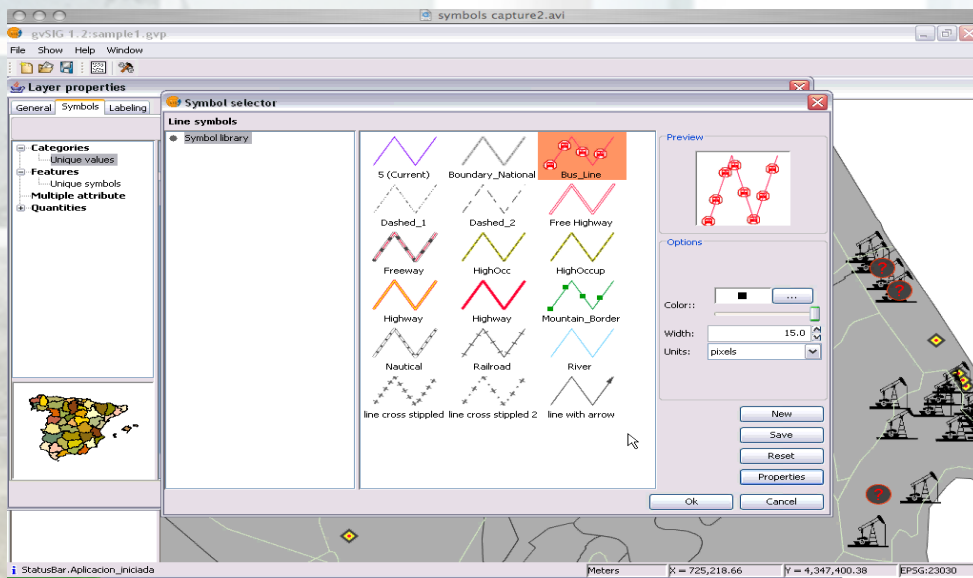




What's going on?

Advanced Symbology (III)

- Symbol Gallery



- Graphics
- Adv. Labelling



What's going on?

Raster + Remote Sensing

- Histograms
- Filters
- Clipping
- Classification
- Profiles
- Fusion
- ROI's
- Transformation functions
- Image enhancement
- Formats (Erdars, Ilwis, Envi, HDR, Raw, Idrisis,...)
- Band selection
- Save to Raster
- Geolocating
- ...



What's going on?

Network Analysis

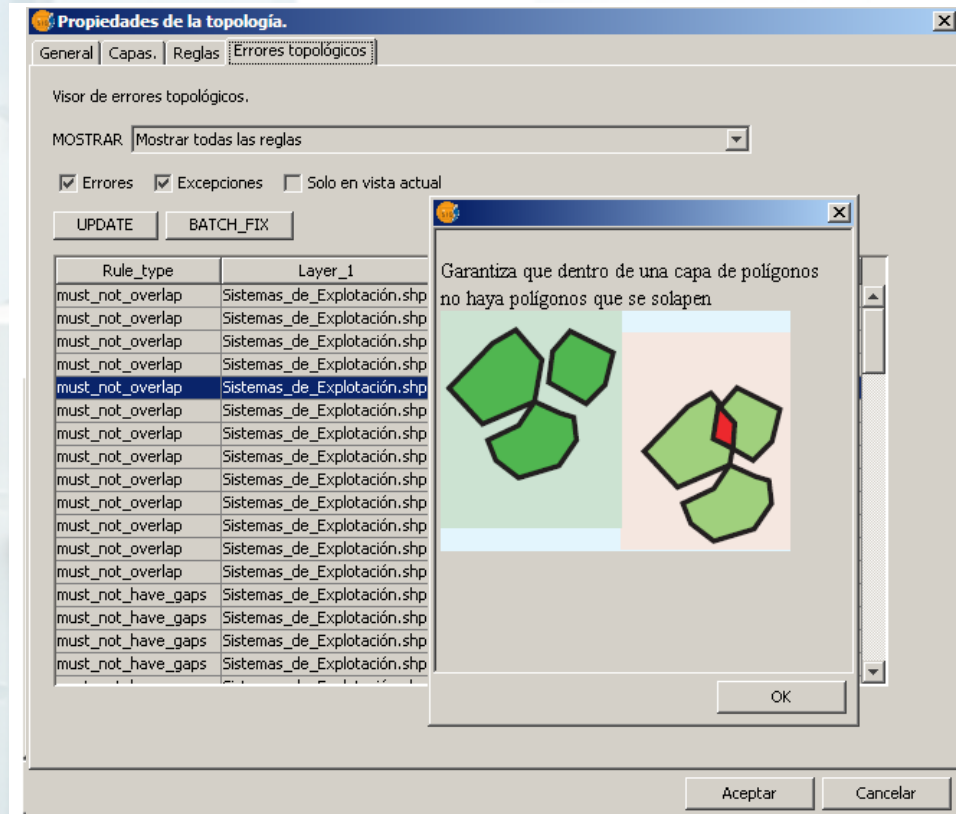
- Travelling Salesman Problem
- Service Area
- Minimum Spanning Tree
- Distance Matrix
- Closest Facility



What's going on?

Topology

- Topology definition, validation and fixing
- Topological editing tools
- Geoprocessing tools

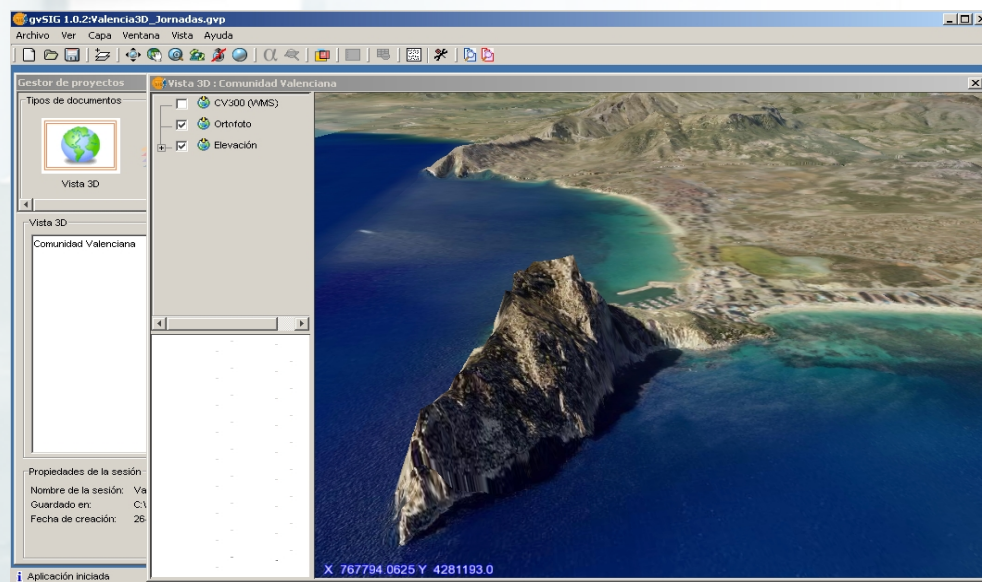




What's going on?

3D

- 2,5 D & 3D
- Animations
- Navigation
- Time-series on 2D & 3D
- TIN – raster integration
- Geoprocessing on 3D
- 3D on layouts
- ...





What's going on?

gvSIG Mobile

- Compatibilization of gvSIG core
- GPL Java ME VM support
- Editing
- Custom forms
- More formats (KML, GML, GPX,...)
- libLocation
- Geosynchronization
- More OGC support
- Porting to OpenMoko, Android,...





What's going on?

Topography Tools

- Field survey tools
- Topographic calculus
- DTM's
- Stations
- Corrections





What's going on?

SWE (Sensor Web Enablement)

- SensorML support
- SOS client
- Integration on desktop & mobile
- Animation rendering
- Graphics
- Sensor discovery





What's going on?

More modules

- LIDAR support
- SQL Server driver
- Roads access through WPS
- Codec BXML
- Normalization & Geocodification
- Reports & Graphics integration
- OSM



Agenda

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- **Project dimension**
- Towards an open organization



Project Dimension

Some figures

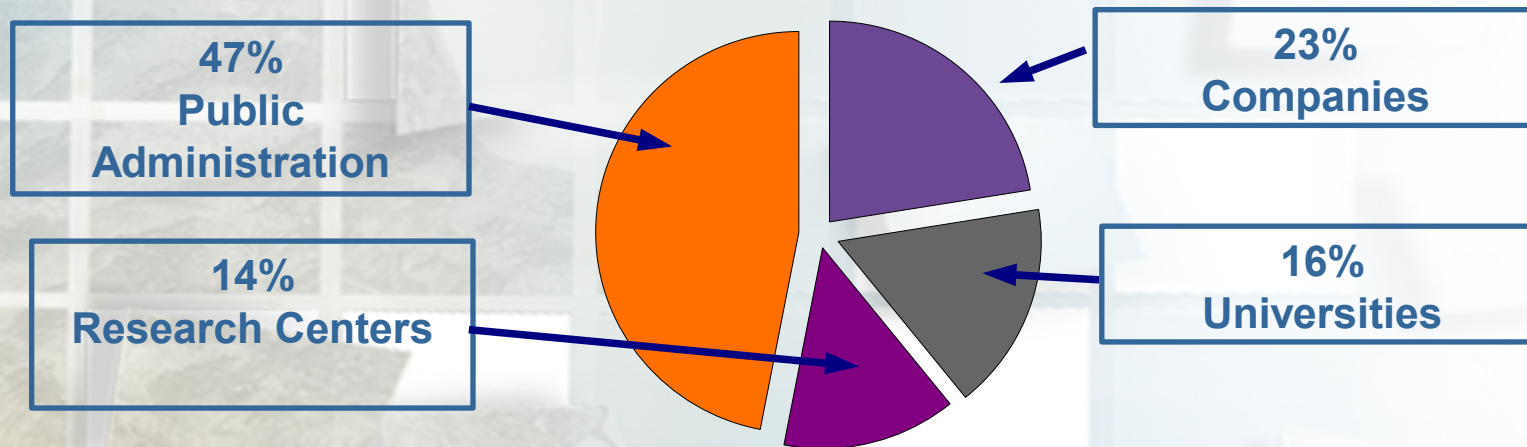
- First version: 0.2 (oct-2004)
- Countries with downloads: ~60
- Users in mailing lists: + 2.300
- Active developers: 30-40
- Contributors & Collaborators: ~200



Project Dimension

Collaborations

More than 100 public and private organizations, from Spain, Europe and LatinAmerica.



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Project Dimension

Collaborations

- **Companies**
 - Prodevelop (Spain)
 - Iver (Spain)
 - Software colaborativo (Spain)
 - DiSiD (Spain)
 - LogEX (Spain)
 - Dielmo (Spain)
 - Creativa (Venezuela)
 - Alkante (France)
 - Etc.



Project Dimension

Collaborations

- **Research Centers**
 - EU-Joint Research Center (Milan-Italy)
 - ITI (UPV-Spain)
 - LISSIT (UV-Spain)
 - IDR (Spain)
 - Ai2 (UPV-Spain)
 - ...
- **Participation in UNSDI (UN-SDI)**



Project Dimension

Collaborations

- Universities
 - U. Jaume I (Spain)
 - U. Polytechnic Valencia (Spain)
 - U. Valencia (Spain)
 - U. Lausanne (Switzerland)
 - U. Polytechnic Madrid (Spain)
 - U. California (Santa Barbara)
 - U. Oxford (UK)
 - U. Polytechnic Catalunya (Spain)
 - U. Alicante (Spain)
 - U. Rennes (France)
 - U. Extremadura (Spain)
 - U. Patagonia (Argentina)
 - Etc.



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Project Dimension

gvSIG conference evolution

600



<p>Patrocinan: Patrocinador de Honor</p> <p>Patrocinador ORO</p> <p>Patrocinador PLATA</p>	<p>Patrocinador BRONCE</p> <p>Colaboraciones</p> <p>Medios asociados:</p>
---------------------------------------------------------------------------------------------------------------------	------------------------------------------------------------------------------------------------



5:
zar"



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Project Dimension

4th gvSIG Conference

1-5 dec. 2008. Valencia
(Spain)

gvSIG Conference

+ OGC Technical Committee Meeting

+ Eclipse Day



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- Project Origin
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- Project Dimension
- **Towards an open organization**



Towards an open organization

- The project is growing. More and more different stakeholders
- The complexity grows
- We need to organize ourselves to enable development of our objectives, dimension and evolution.

How do we organize ourselves?



Towards an open organization

Open Organization

A project aimed at the creation of an infrastructure for easing the work in a collaborative way, open to any organization willing to collaborate with gvSIG and promote gvSIG.



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Towards an open organization

Put the project in the hands of the community

What tools and actions are we taking for ensuring project quality?



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Towards an open organization

- Collaborative Infrastructure
 - <http://gvsig.org>





Towards an open organization

Use

libCompatMobile User's Manual — gvSIG - Mozilla Firefox

Archivo Editar Ver Historial Marcadores Herramientas Ayuda

https://gvsig.org/web/docdev/docs/mobile/desarrollo/mobile/arquitectura/libreria-de-compatibilidad-libcompatmobile

gvSIG — gvSIG Working documents — gvSIG Architecture — gvSIG libCompatMobile User's Manual ...

Code Implementation with LibCompat

Next the following steps to develop J2ME compatible code using the library are explained.

Linking the JAR

- First of all, have to get the correct binary file, which is named `org.gvsig.compat-mobile.jar` if the J2ME code compatibility is preferred, or the binary called `org.gvsig.compat-desktop.jar` to get off the maximum performance to the J2SE virtual machine.
- Once have the right binary file to the compatibility needing what is project is developing, it has to be added to the project `CLASSPATH` as a one more dependency.

LibCompatMobile is an unique library but with two different implementations:

- `org.gvsig.compat-mobile.jar`: Is the optimized component for **gvSIG Mobile**, so that inside J2ME are non-existent methods founded or that they have to be optimized to run on it.
- `org.gvsig.compat-desktop.jar`: Is the optimized component to **gvSIG Desktop**, so that it's optimized using libraries that they're only into J2SE and they don't work correctly into J2ME but add performance to J2SE.

Instantiating the classes

To use the library, have to import it into the class which will use any method that the library adds. Both of compilations are instantiated likewise, as the classes and packets hierarchy is the same in both cases, only the implementation is different.

```
...
import org.gvsig.compatible.*;
...
```

Also is possible want import only a few classes instead of all the packet, to avoid memory leaks.

EXAMPLE: Only is needed uses utilities and methods related with the `java.lang.String` that isn't available into J2ME

```
...
import org.gvsig.compatible.StringUtil;
...
```

Callings to Available Methods -----

The library methods are static because of won't have to instantiate the class with objects and will be able to use it as a tools in a more efficient way. Next it's the library method list and an example of how to use them. The next table shows the equivalent method from **libCompatMobile** that substitute a J2SE one.

```
Terminado
form.wait()
form.hide()
if (form.isModified() & !form.isCancelled)
Terminado
```

data 2008-09-29
img 2008-09-29
LibDWG 2008-09-29
gvSIG metadata prototype is now available in gvSIG 1.1.x 2008-09-29
Workflow de testing de piloto 2008-09-29
All recent changes...

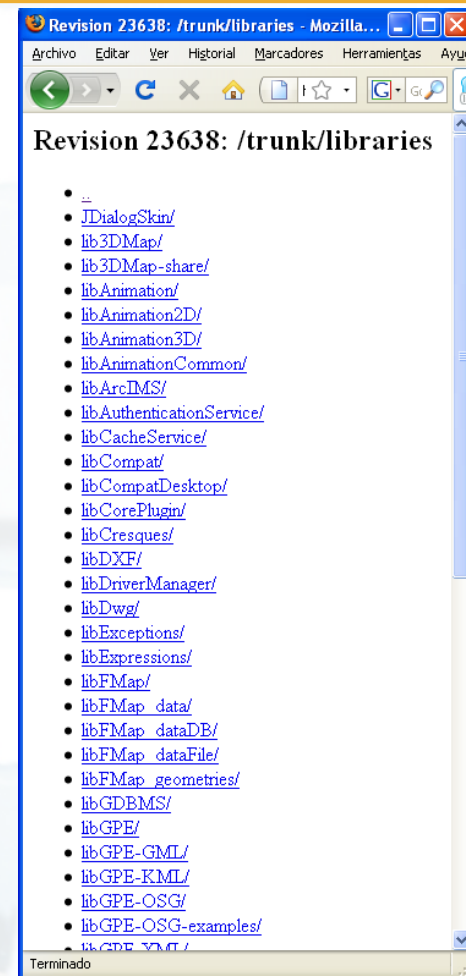
gvsig.org





Towards an open organization

- Open subversion repository
 - <http://subversion.gvsig.org/gvSIG/>



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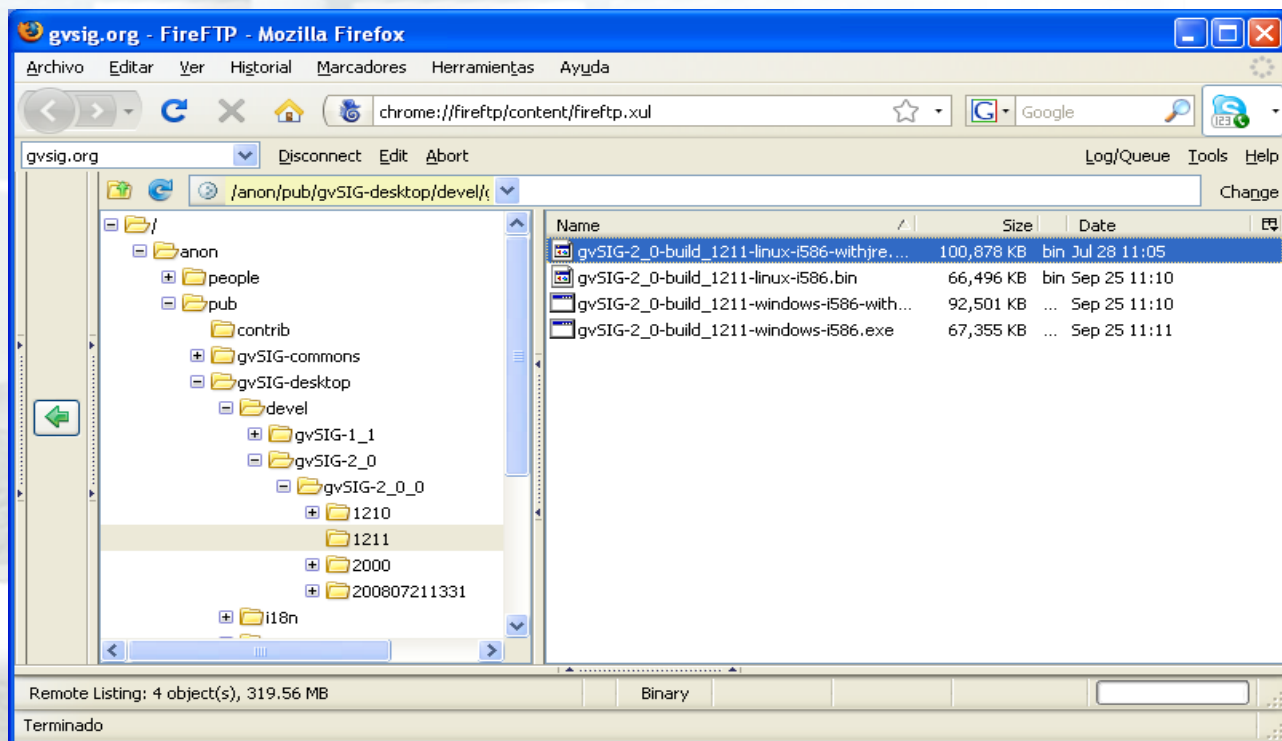
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Towards an open organization

- Open FTP repository for builds, and other stuff
 - <ftp://gvsig.org>





Towards an open organization

- Plugin repository for the community
- <https://gvSIG.org/web/plugins/downloads>

Downloads — Catalogo de productos de gvSIG - Mozilla Firefox

Archivo Editar Ver Historial Marcadores Herramientas Ayuda

https://gvSIG.org/web/plugins/downloads

site map accessibility contact

gvSIG

home organizacion documentacion downloads desarrollo noticias

log in

you are here: home → downloads

Downloads

log in to add software project

Go directly to project...

Currently listing 8 projects with 6 releases.

The latest releases in each category. To see all projects in a specific category, click "Show all".

Category	Project Name	Release Date
custom data access	geoRSS support 0.1 (Beta release)	2008-04-07
	Show all 1 projects in this category...	
gvSIG cds & dvds largo	No releases made in this category yet	
	Show all 0 projects in this category...	
gvSIG releases	gvSIG for Windows Vista 1.1.2	2008-08-08
	Show all 2 projects in this category...	
internationalization	extShalom 1.0	2008-06-09
	Show all 1 projects in this category...	
miscellaneous	No releases made in this category yet	
	Show all 1 projects in this category...	
simbology	No releases made in this category yet	
	Show all 1 projects in this category...	
courses	Course in gvSIG (1.0 and 1.1) in spanish by Fabian Rodrigo Camargo 1.0	2008-05-05
	Show all 1 projects in this category...	
only mac os	Hack for installing Mac OS X-non-supported gvSIG extensions 1.0	2008-07-29
	Show all 1 projects in this category...	

Terminado

gvSIG.org



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Towards an open organization

- On-line L10N tool: an open gate for new communities of users

The screenshot shows the gvSIG L10N tool interface. At the top right, there are links for "site map", "accessibility", "contact", and "site setup". Below these is a search bar. A navigation menu includes "home", "documentación", "descargas", "development", "noticias", and "producción". A user profile icon is followed by "my folder", "preferences", "undo", and "log out". The breadcrumb trail reads "you are here: home → members → introducción-en".

The main content area shows a document titled "introducción-en". A notification bar at the top left says "Document has been created." Below this, the "Edit Page" section shows the document was created by Manuel Madrid on 2008-02-29 15:01. The "Translating from" dropdown is set to "Español" and "to" is set to "English".

The document content is displayed in two columns. The left column contains the "Cuerpo del texto" (Body Text) in Spanish: "En la filosofía de creación de gvSIG se incluye la implementación de estándares abiertos para el acceso a datos espaciales. Por ello, gvSIG incluye un cliente de WMS que cumple el estándar actual de la OGC (Open Geospatial Consortium, <http://www.opengeospatial.org>).". The right column shows the "Title" field with "Introducción" and the "Description" field with "A short summary of the content".

At the top right of the editing area, there is a "translate into" dropdown menu with options for "deutsch" and "italiano", along with "manage translations..." and "language settings..." links. There are also "actions", "add to folder", and "state: draft" options.



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Towards an open organization

- Mailing lists for the community
- Provide infrastructure for new users communities
- Under gvSIG umbrella
- Self-moderated lists

Parent Categories/Forums: [gvSIG](#) [Edit this Forum](#)

Search:

This forum is an archive for the mailing list: gvsig_italian@lists.gvsig.org ([mailing list options](#)). Messages posted here will be sent to this mailing list.

 This mailing list is aimed to Italian language users of the gvSIG project.
Questa è la lista di distribuzione per gli utenti di lingua italiana

Child Forums (0): None

[Post New Message](#) :: [Alert me of new posts](#) :: Rating Filter: — Threads 6-40 —

Thread (113 Threads)	Rating	Replies	Last Message
db_gvsig by RbrrrbSk8 B	★★★★	4	Sep 16 by Antonio Falciano
Etichette by Luigino Ghedin	★★★★	2	Sep 15 by Luigino Ghedin
importazione/esportazione archivi di dati by RbrrrbSk8 B	★★★★	5	Sep 12 by Alberto Perli
[RE] difficoltà georeferenziazione by ernesto sferlazza	★★★★	0	Sep 12 by ernesto sferlazza
4giornate gvsig valencia by Sgambati Alessandro	★★★★	2	Sep 11 by Juan Lucas Dominguez...
Collaborazione nella internazionalizzazione di gvSig by comunicacion_gvsig	★★★★	0	Sep 10 by comunicacion_gvsig

Terminado



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Towards an open organization

- **We look forward an organization**
 - Gathering companies, universities & administrations
 - A **common space**: If everyone contributes, everyone wins
 - Build a **quality business model** that can be adopted by companies (spec. SME's)
 - Working for technology independence
 - **Light structure** easy to sustain
 - Looking for collaboration points with other organizations and projects, related to open-source and in the Geo world



Towards an open organization

- We'd like gvSIG to be seen as a project/organization that
 - Promotes a **framework for business agreements with mutual benefit.**
 - Provides quality seals to new developments.
 - Promotes collaboration & participation.
 - Everyone respecting its principles is wellcome
 - Keeps equal terms among participants



Towards an open organization

As a final thing

- In an open-source project come together:
 - Technical aspects → Science
 - Commercial aspects → Economics
 - Organizational aspects → Politics
- **A whole vision of all those aspects must exist, in order to be able to have a global view, and to be able in any moment to interpret, analyze and take decisions.**



FOSS4G 2008 – Cape Town (SouthAfrica)

gvSIG Status Report

Towards an Open Organization

*“Did I perform something useful for the community?
Hence, I got benefit from it”
Marco Aurelio, 180 AC*

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