Introduction to *gvSIG*

as desktop GIS/SDI client

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iver TECNOLOGIAS

Agenda

I. Project **Origin**

II. About **gvSIG**

III. Spatial Data Infraestructures

IV. Main **functionalities**

V. Current and **future** developments

VI. Conclusions

VII. Practical workshop **exercises**

Company presentation

IVER TECNOLOGIAS

- **Spanish company (Valencia)**

- **17 years of experience in the GIS technology sector**

- **Co-author of open source "gvSIG" GIS tool, together with the Valencia Regional Ministry of Infraestructures and Transport.**

- **Technological developments subject to the Open Geospatial Consortium (OGC) standards for web-based spatial data consultation and exchange services**

- **Member of the Project Management and Technical Committee.**

- **90 employees**

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I+D+I

EUROPEAN UNION

INSPIRE - Infrastructure for Spatial Information in Europe

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Project origin

2003: **Regional Government of Infrastructures and Transport of Generalitat Valenciana** decides to **migrate** to *Free Software*.

Advantages:

- Technological **independence**

- **Quality** industrial structure

- **Freedom** to give solutions to our problems

- Capacity to develop **new functionalities** (required functionalities, users feedback)

- **No cost** for license

- **Unlimited** number of installations

- You pay for **service**

- Optimization of the **investment**

No free advanced GIS was **available** at that moment**.**

Let's invent it.

Fast evolution: from **LOCAL** -----> to **GLOBAL** project

About gvSIG

Main characteristics

- Development language: **Java** (Multiplatform).

- Adheres to the guidelines of the European Union - **Inspire**.

- Free license (**GNU/GPL**).

- **Modular**, scalable, powerful.

- Simple interface: **user friendly.**

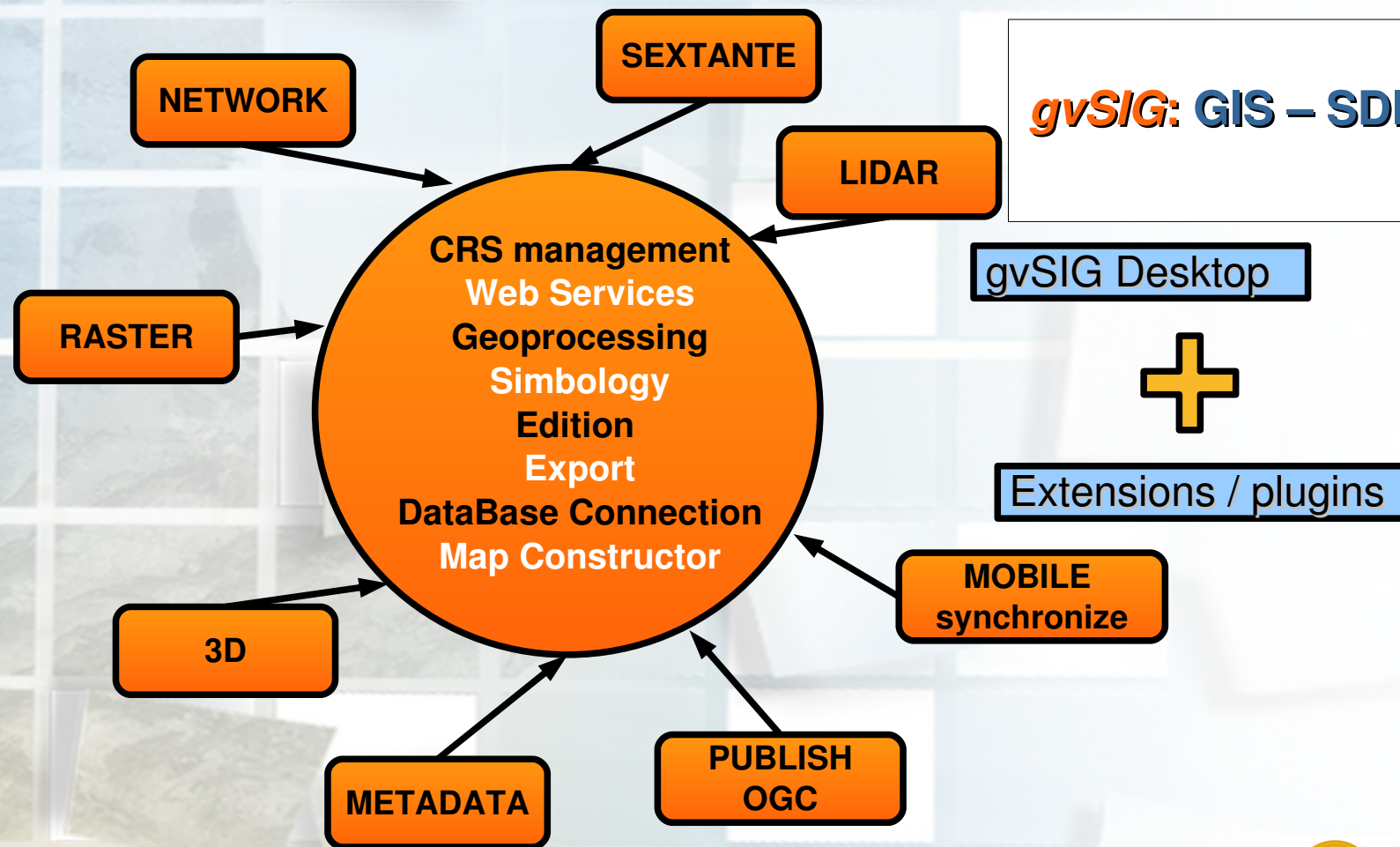- **International:** GUI in **19 languages**, documentation in 7.

Global aim →

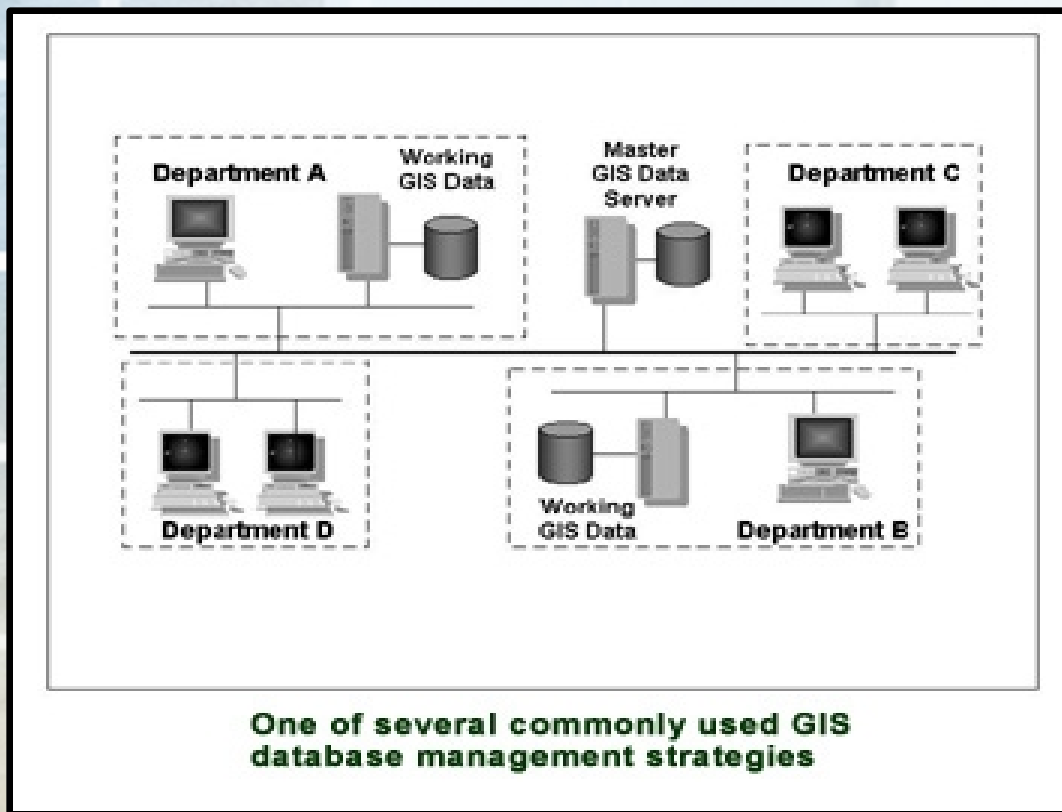> **Give solutions to all needs related to the G.I. management based on the integration of free technologies.**

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About gvSIG

SEXTANTE

NETWORK

LIDAR

CRS management
Web Services
Geoprocessing
Simbology
Edition
Export
DataBase Connection
Map Constructor

RASTER

3D

METADATA

PUBLISH OGC

MOBILE synchronize

gvSIG: GIS – SDI Client

gvSIG Desktop

Extensions / plugins

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Old model (corporate GIS)

One of several commonly used GIS
database management strategies

- A lot of map servers.
- Every server is optimized for "its users".
- Creation of multiuser GIS information islands.

New Model (SDI, distributed GIS):
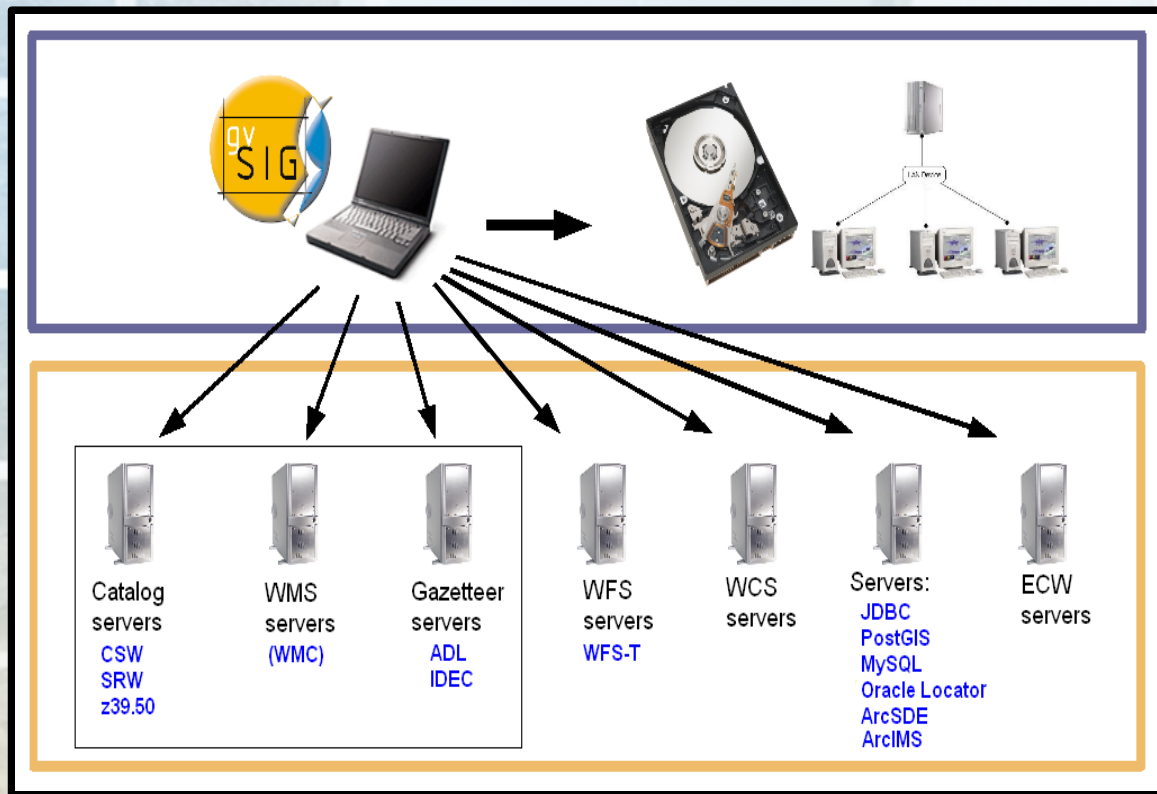
- **Objective: Making easy the access to the G. I.**
- **The system is the network (internet/intranet).**
- **Communication through standars (web services).**
- **Extended client-server model.**
- **Decentralized network of servers.**

gvSIG, Integrated managment: vector GIS

Tool to manage geographic information, mapping edition, geoprocessing, advanced symbology and labelling, network, topology...
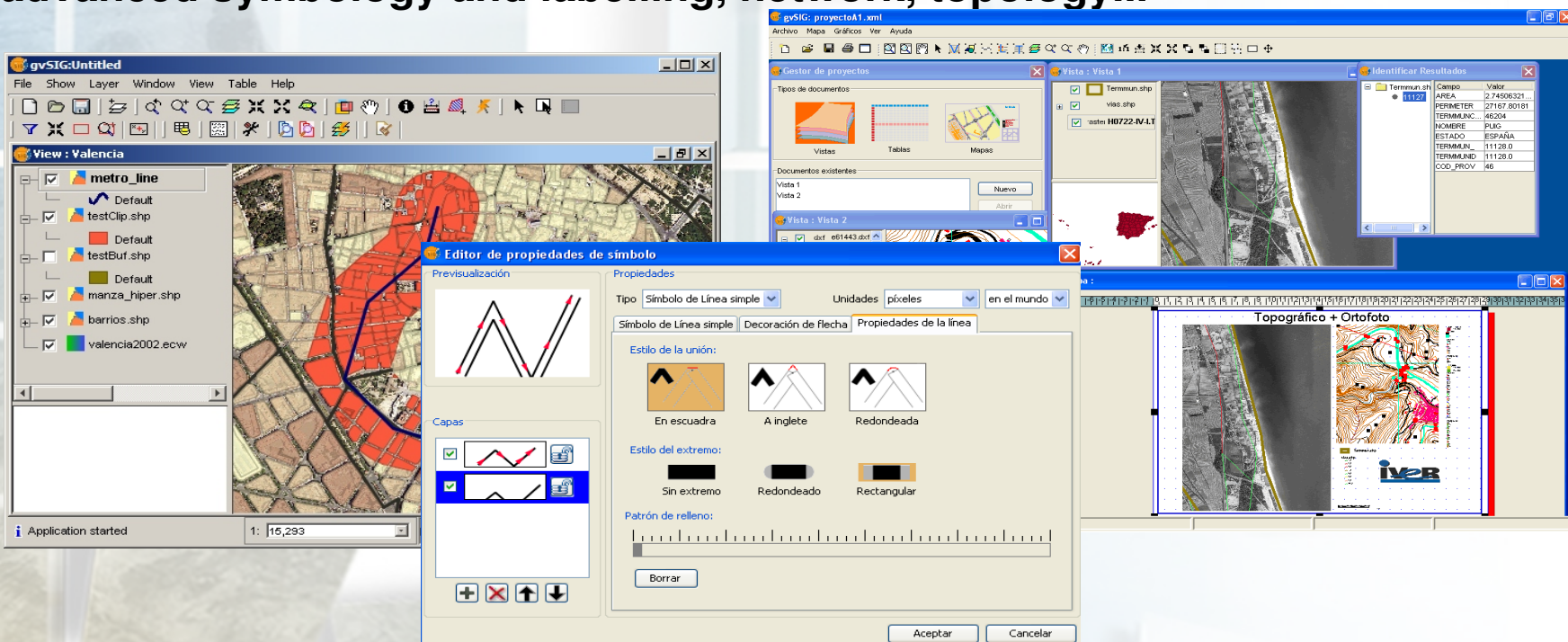
Main functionalities

gvSIG, Integrated managment: SDI Client

Display and query services (WMS, WCS, WFS, WMC, ArcIMS servers), searching services (Catalogue client) and location services (Gazetteer client). Publishing and Metadata extensions.
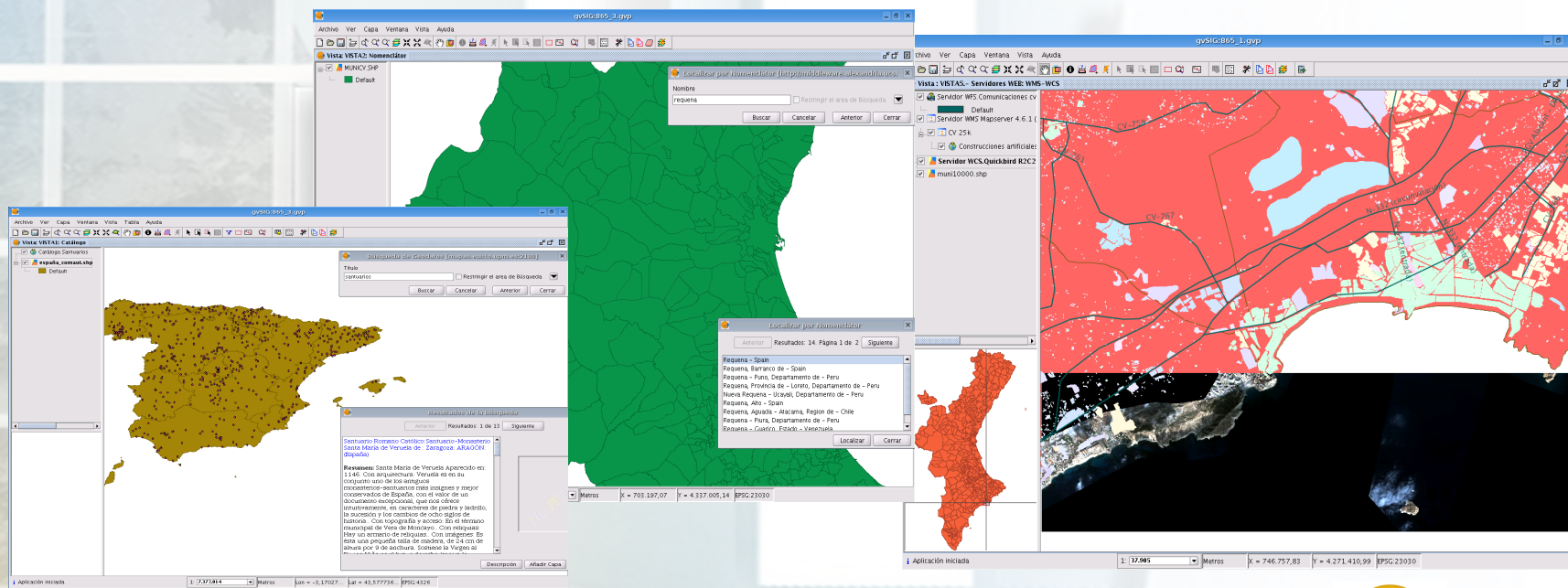
gvSIG, Integrated managment: CAD editing

Tool for advanced vector editing: drawing geometries, snapping, explode and join, editing vertex, ...

Main functionalities

gvSIG, Integrated managment: Raster analysis

Georeferencing, Histogram view, Remote sensing, ...

Collaboration with SEXTANTE project
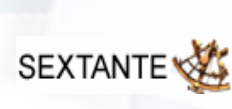
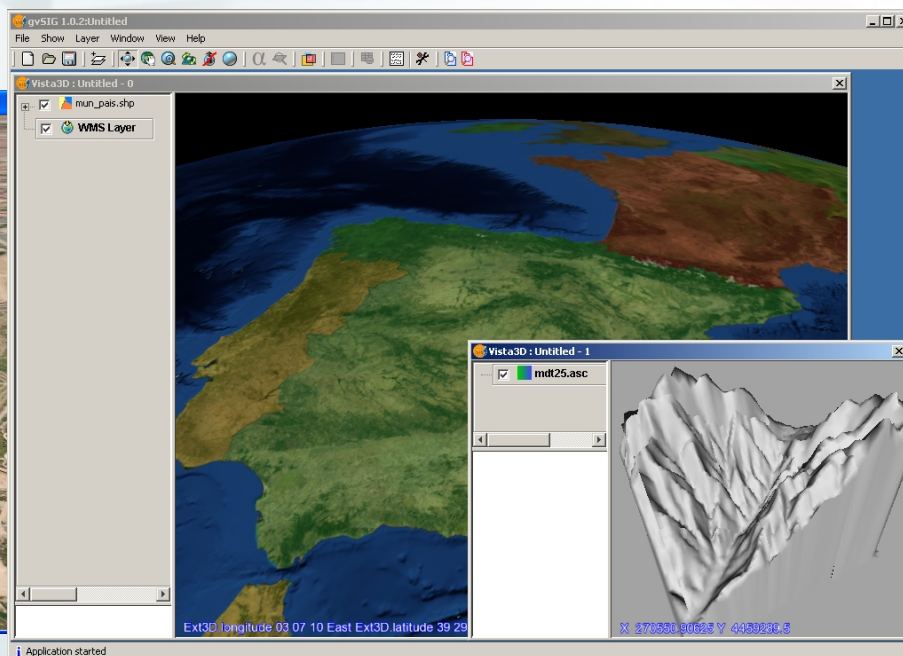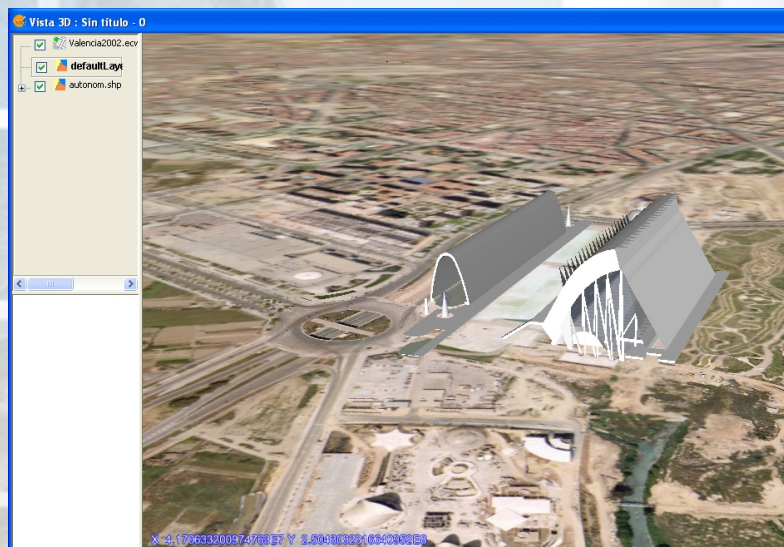# Main functionalities

gvSIG, Integrated managment: 3D
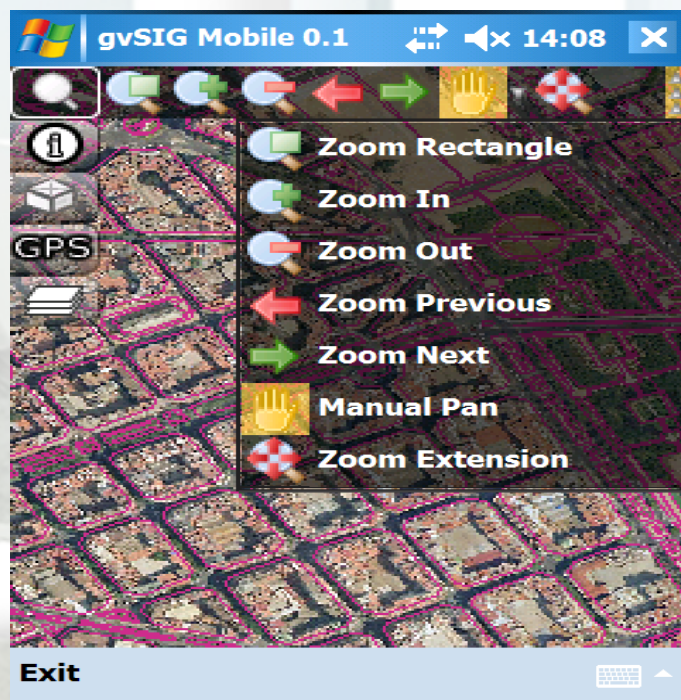**Access to 3D characteristics, animation (video), ...**

gvSIG, Integrated managment: Mobile devices

Integration of gvSIG into mobile devices: Cell phones, PDA,Tablet PC...

- **gvSIG 4D (temporal GIS)**

- **Connection with sensors**

- **Surveying**
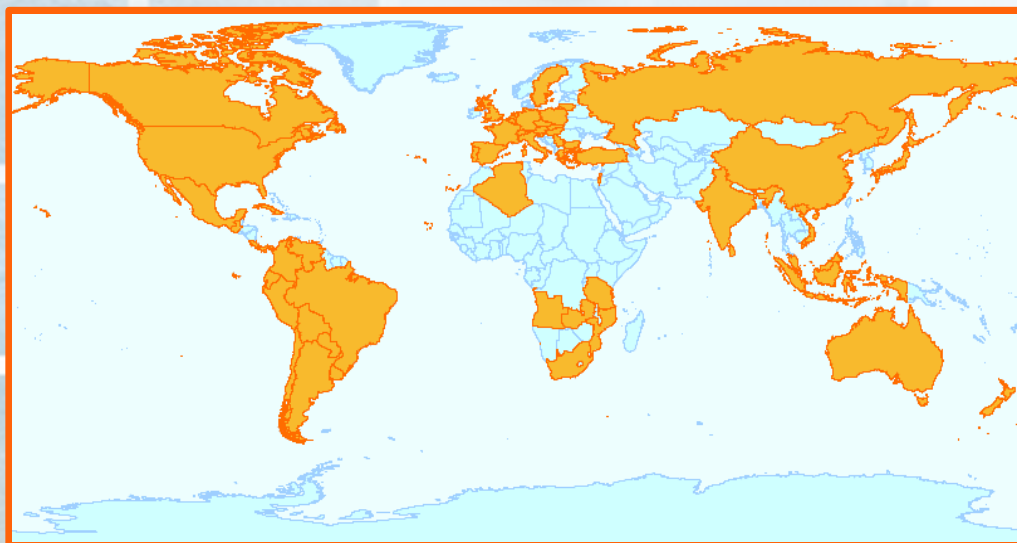
- **Stereo**

.....

- ***Community* contributions**

"***gvSIG* is a way that we can build together**"

Dimension of the project

Mailing lists:

- **Users list: 1374**
- **Developers list: 660**
- **International list: 584**
- **Italian list: 184**

Known countries with registered users: 44

Known countries where gvSIG has been downloaded: 61

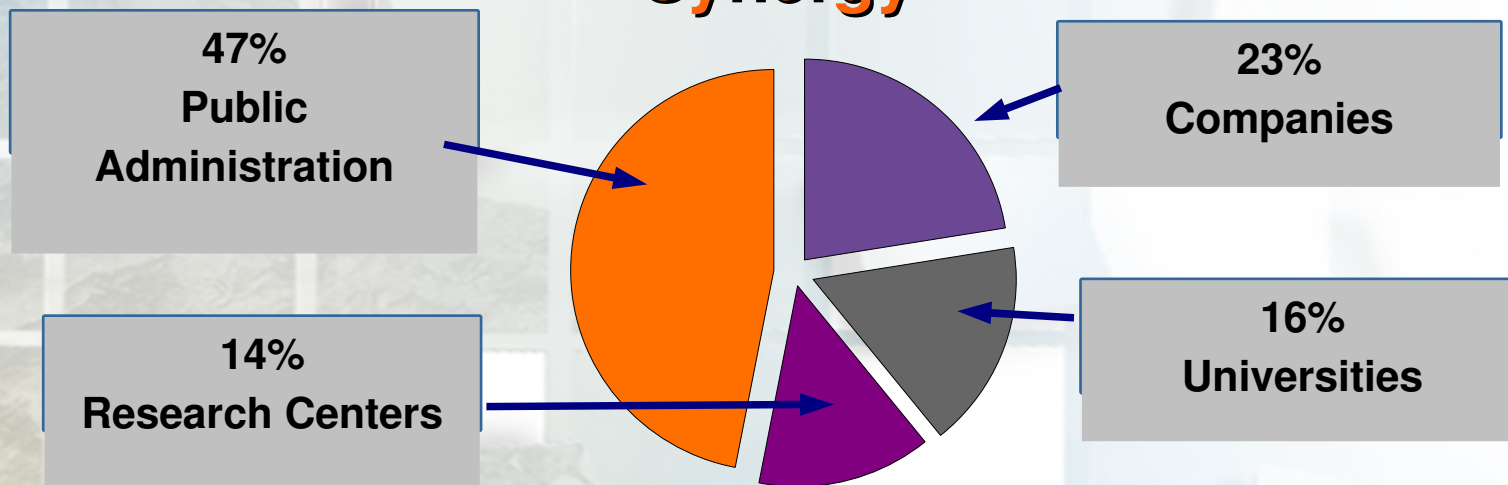## Collaborations:

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

Synergy

47%
Public
Administration

23%
Companies

16%
Universities

14%
Research Centers

www.gvsig.gva.es

- **Downloads of gvSIG Desktopand gvSIG Mobile**

- **Courses and tutorials**

- **Reports**

- **Lists of distribution**

- **Road map**

Put the project in the hands of the *community*:
www.gvsig.org
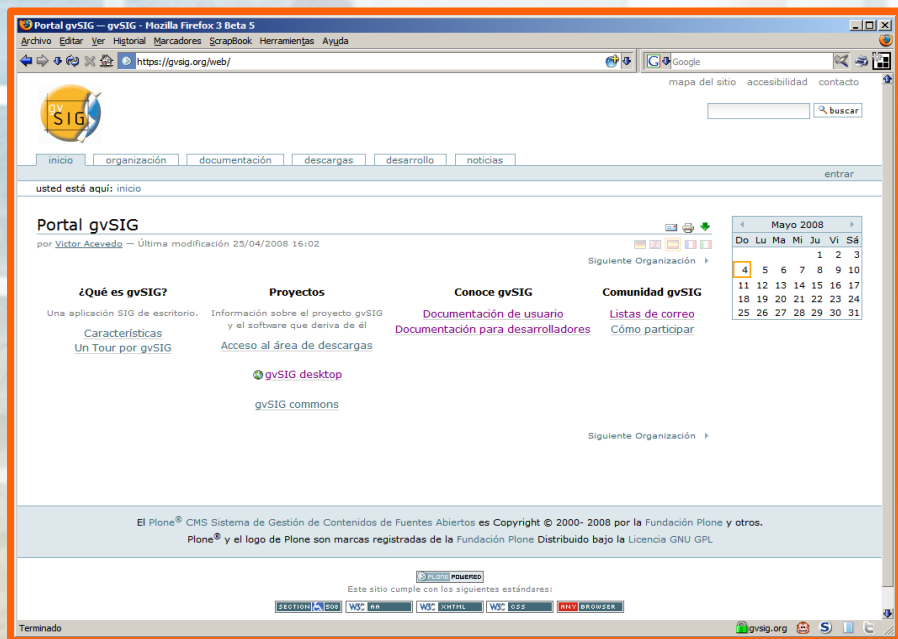
→ **User & technical documentation available**

→ **Plugin repository for the community**

→ **All the builds in development available**

→ **Mailing lists for the community**

→ **Collaborative testing**

→ **Open subversion repository:**

http://subversion.gvsig.org/gvSIG/

- Great power and versatility of the *OGC web services*.

- Great added value given by a *mature Desktop GIS/SDI* client like *gvSIG*.

- *Easy extension and improvement* of the application.

- The *community* is growing.

Thanks for your attention!!

More about gvSIG at: **www.gvsig.gva.es**
www.gvsig.org

Subscribe to **mailing lists** for info and support.

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