



# The role of free software thick clients in SDI: Case of gvSIG

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#### Take-home messages

- Thick clients link GIS and SDI communities
- Development following free software methodology increases user community participation
- Experiment building SDI from user base, rather than top-down from data provider
- gvSIG version 1.0(alpha) available: try it!





#### Thin versus thick clients

#### THIN

+ Only web browser needed

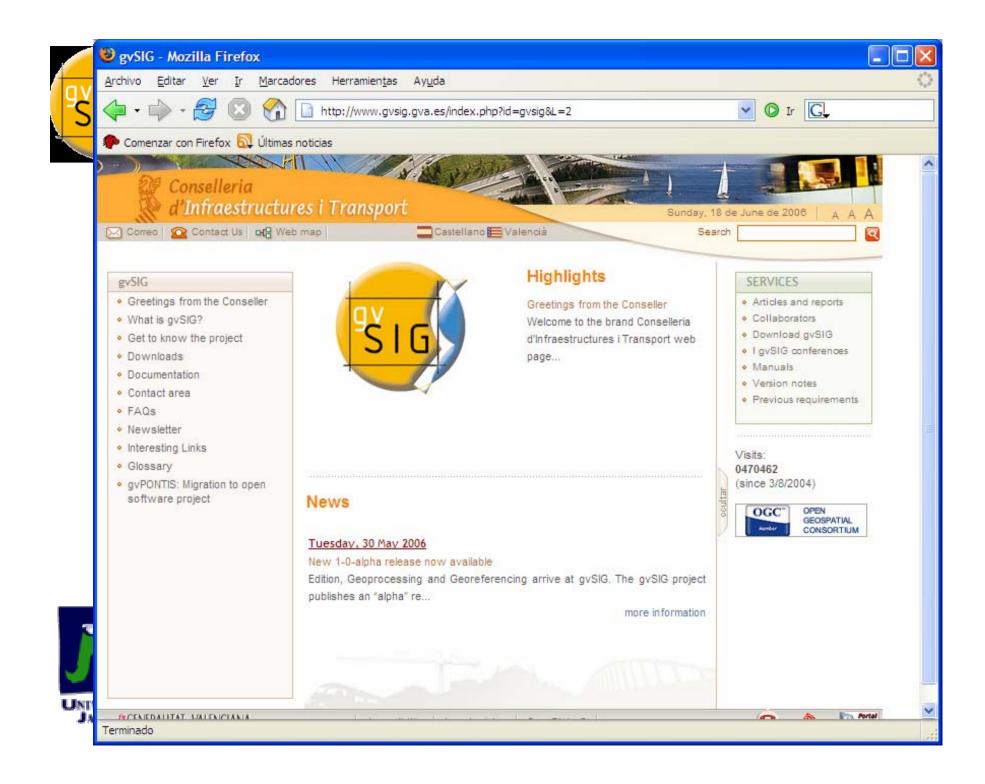
- Sometimes OS issues
- Limited functionality
- + Normally simple to use
- + Access to web services
- Dependence on web services (QoS)



THICK

- Need to download/install software
- + Greater functionality: GIS and SDI access (local+remote data)
- Learning curve
- + Access to, but less dependence on services
- + Community has wider interest in development

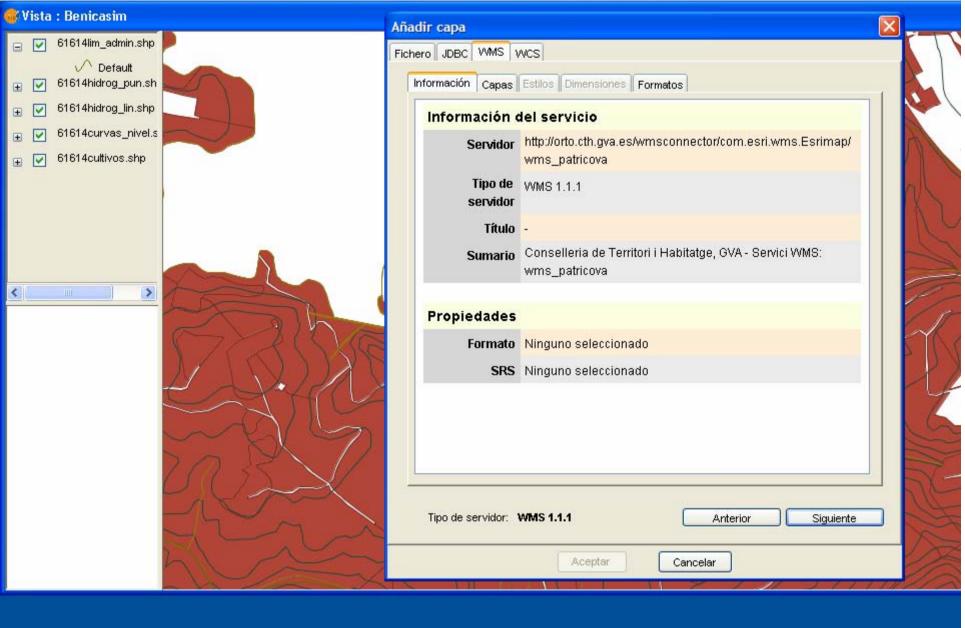
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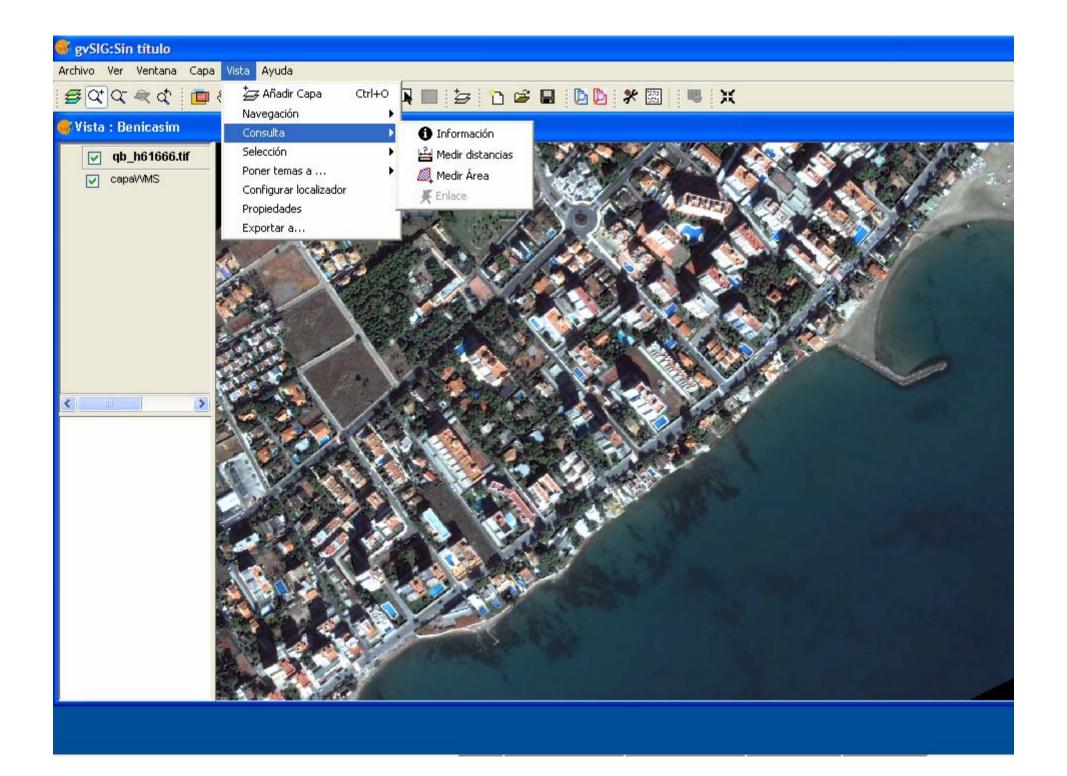
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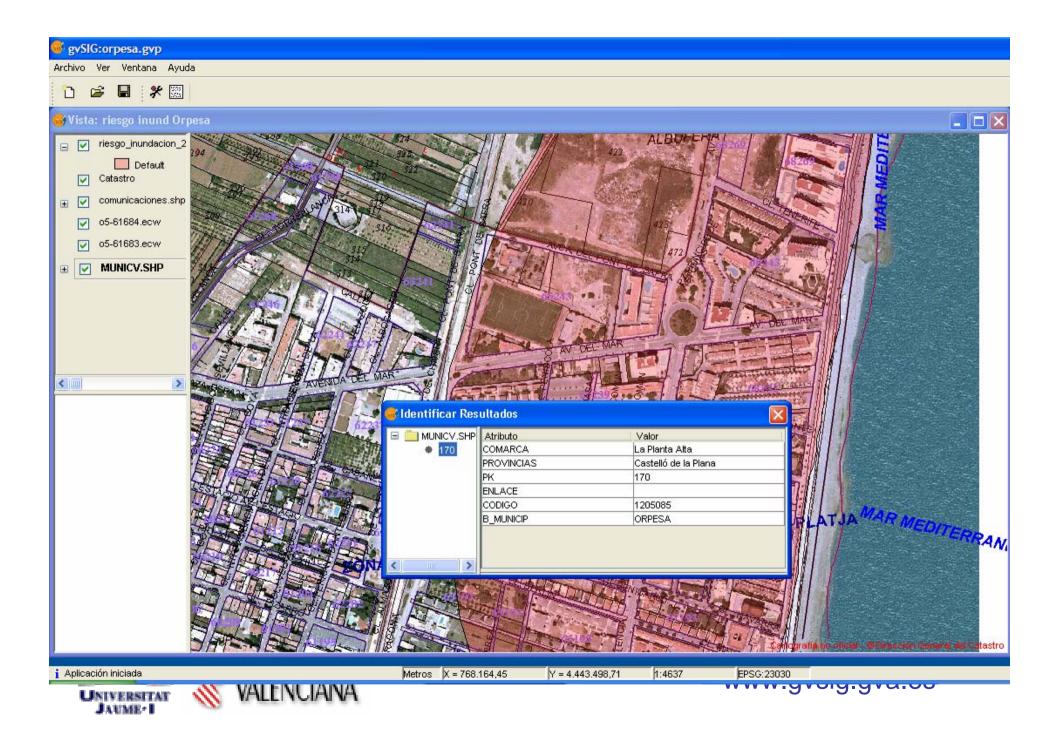
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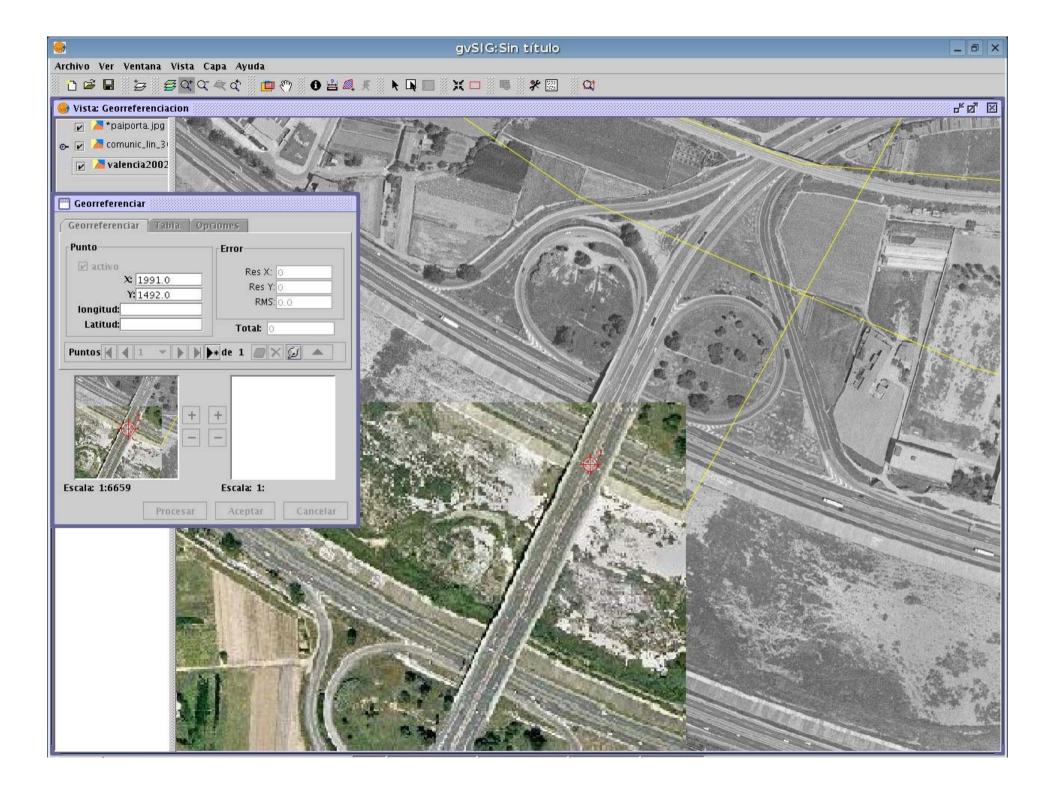


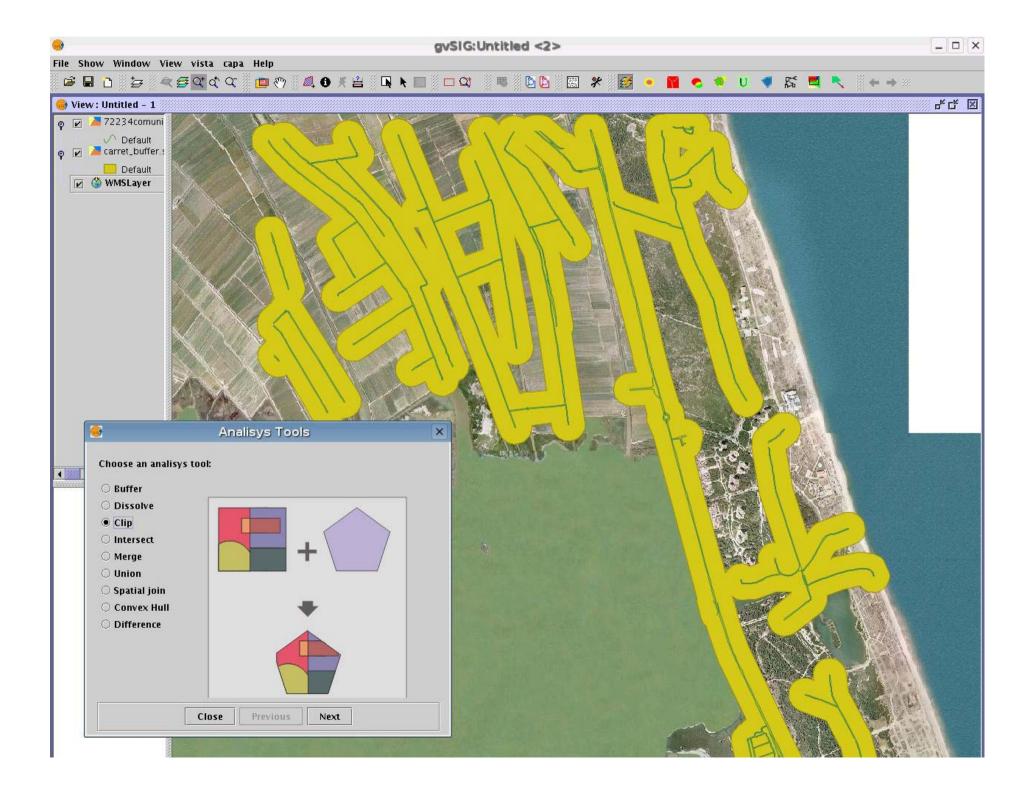


#### New functionality, ver 1.0 alpha

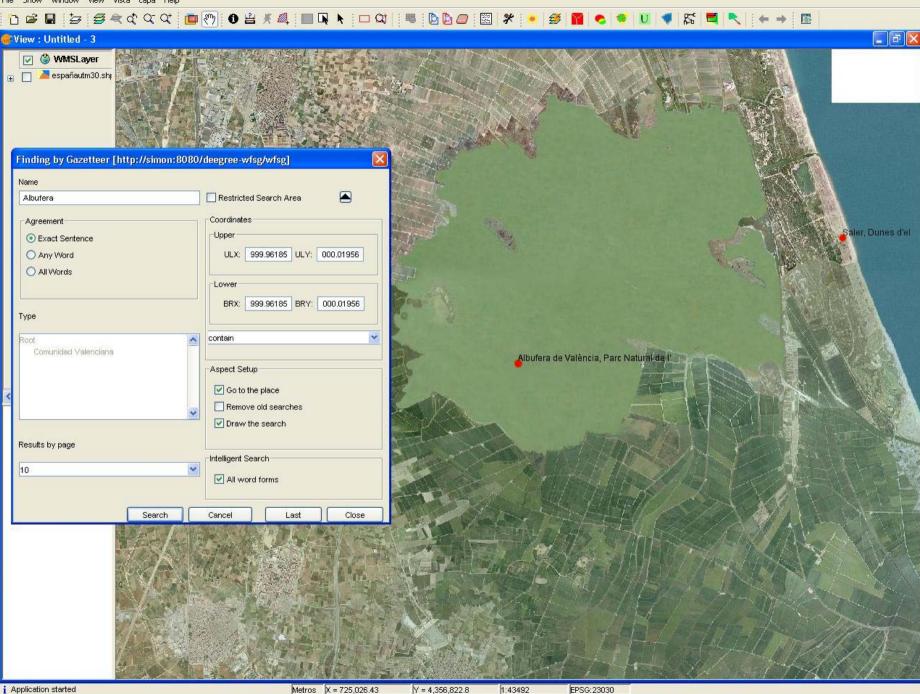
- CAD (editing) functionality; create shp, postgis, DXF layers
- Geoprocessing: dissolve, join, merge, clip,...
- Imagery: georeferencing, transparency,...
- WMS Context file support
- WFS access added!
- Improved catalogue and gazetteer access







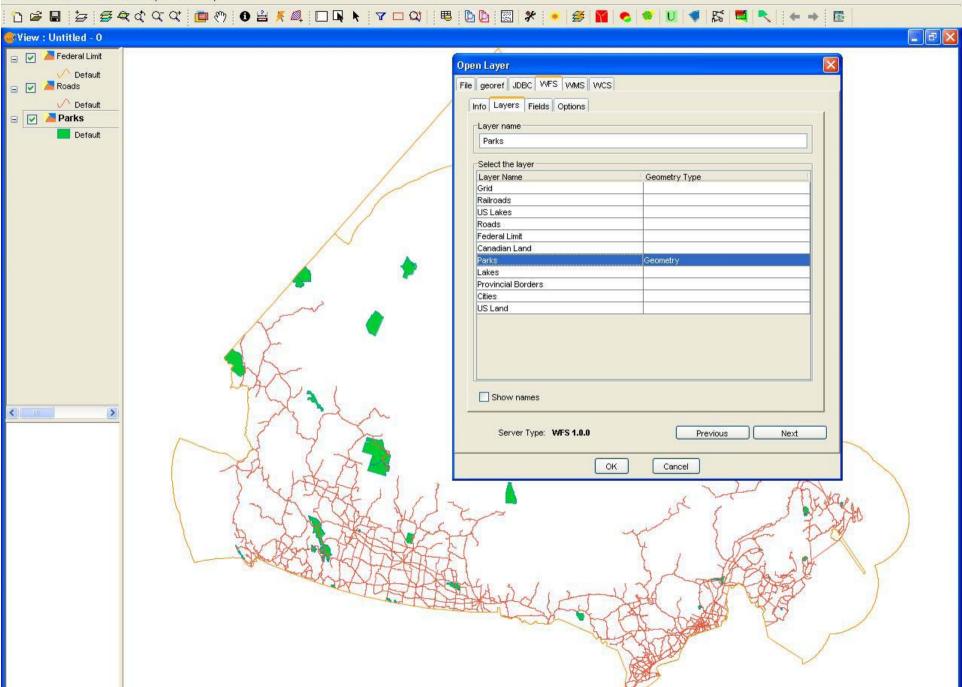
#### gvSIG:Proyecto1.gvp



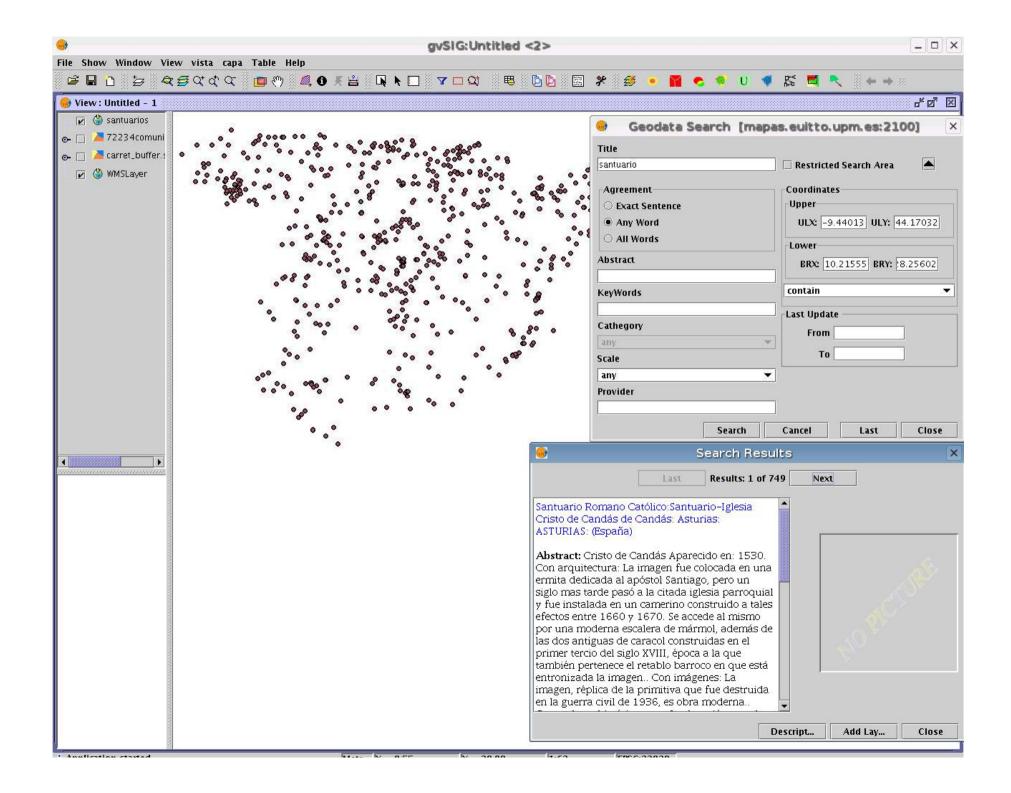
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#### 😼 gvSIG:Untitled

File Show Window View vista capa Table Help



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### Multilingual

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con Firefox 🔂 Últimas noticias			
DOWLOADING	THE PROGRAM		
	Executable file	s	
Update	Binaries	Note	
0.6. (16-05-2006		Requires gvSIG 0.6 already installed in the system	
	Binaries	Manual	
Stable version			
0.6	ZIP (28.8 MB)	PDF (2.2 MB)	
(29-03-2006	A TAR.GZ (28.2 MB)	PDF (2.1MB)	
	Binaries	New feature's guide	
Unstables versions			
0.6 rc2	ZIP (32 MB)		
(28-02-2006	A TAR.GZ (31.5 MB)	PDF (2.2 MB)	
0.6 rc1	ZIP (32.5 MB)		
(14-02-2006)	A TAR.GZ (32 MB)	· · · · · · · · · · · · · · · · · · ·	
	Source		
Version	Code	Doc. of the development	
	gvSIG-0_6-src.zip (32.2 MB)		
(29-03-2006	gvSIG-0_6-jni-src.zip (13.1 MB)		
Unstables versions	Code	Doc. of the development	
0.6 rc2 (28-02-2006	gvSIG-0_6-rc2-src.zip (37 MB)		
0.6 rc1 (14-02-2006	gvSIG-0_6-rc1-src.zip		



#### User needs

- Infrastructure and Transport agency conducted study of 200+ users
- Most needed about 20% of current proprietary GIS/CAD functionality
  - At same time, huge annual licensing costs, little control over software releases and functionality
  - Experiment: move to user-defined FOSS solutions







### Migration to FOSS

- Part of wider migration project, including operating systems, office automation, databases, GIS+CAD
- 2004: 100 users of proprietary GIS+CAD
- 2006: 200 users gvSIG
  - Phase 1: basic GIS functionality
  - Phase 2: basic CAD
  - Unexpected benefit: GIS→SDI client
    - SDI unknown concept initially!





### gvSIG project

- 2004 public tender (working prototypes C++ and Java!) International standards-based.
- Local SME (Iver) won contract, for main development
- Contracting agency (CIT), Univ Jaume I, participants in design and execution
- Since then many other contributors, contracted and voluntary (including 5+ countries outside Spain)







## gvSIG project (2)

- gvSIG community created
- Bottom-up participation of users, asking for improvements and also making improvements themselves
- On-line forums, lists (Spanish and international)
- 1st user's meeting: 250+ attendees
- 2nd (Nov 2006): 500 expected





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#### About FOSS

- Not a magic bullet!
- Free <> without cost
- Very interesting economic implications
  - Local developers (recycling investment)
  - Global contributors (onion layers model)
  - Small businesses involved
  - Learn by doing: more and more developers, not only users





### FOSS process→SDI

- SDI = sharing, collaborating
- FOSS process = sharing, collaborating
- SDI = local to global
- FOSS process = local to global
- Users involved in planning and developing their own solutions
- Bottom-up SDI





## SDI: highways and cars

- gvSIG an interesting "car" design project
  - Users directly involved
  - Thick client provides best of both worlds: local processing and access to (web) services
- Growing presence of cars and drivers, stimulates sharing of more and more reference geodata





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#### THANK YOU FOR YOUR ATTENTION

- Try gvSIG: <u>www.gvsig.gva.es</u>
- Personal contacts:
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  - M Gould, Univ Jaume I (uncle) gould@uji.es

