



Open Source Rich SDI client

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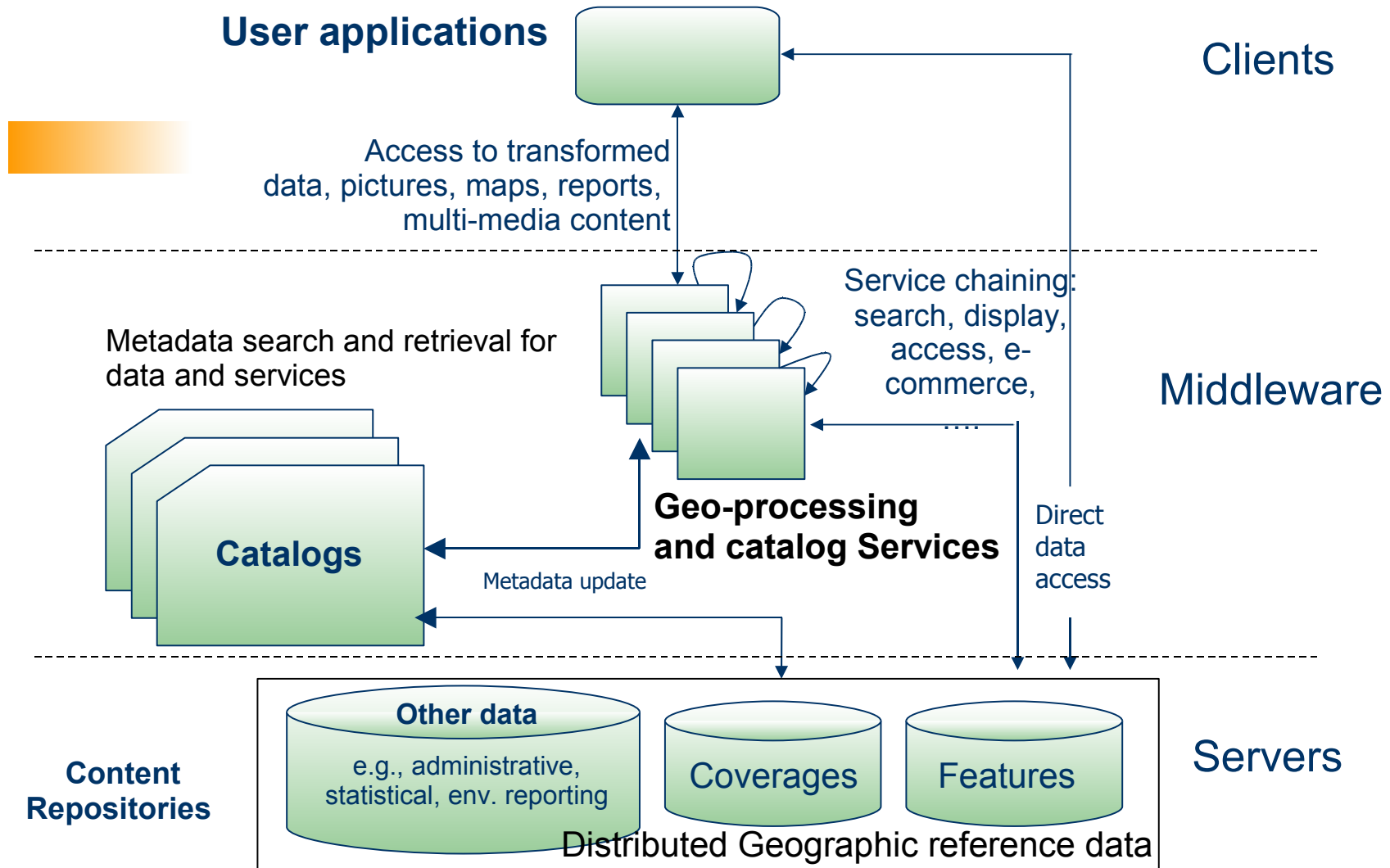
IVER. Spain

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gvSIG Background

- Funded by Ministry of Infrastructure and Transport (CIT) of Valencia, Spain
- Full migration to Open Source
- OS, office tools, database, CAD and GIS
- gvSIG = CAD + GIS
- In second phase, gvSIG becomes rich client interoperable with standard SDI services
- In a third step, it'll also become an SDI authoring/publishing tool

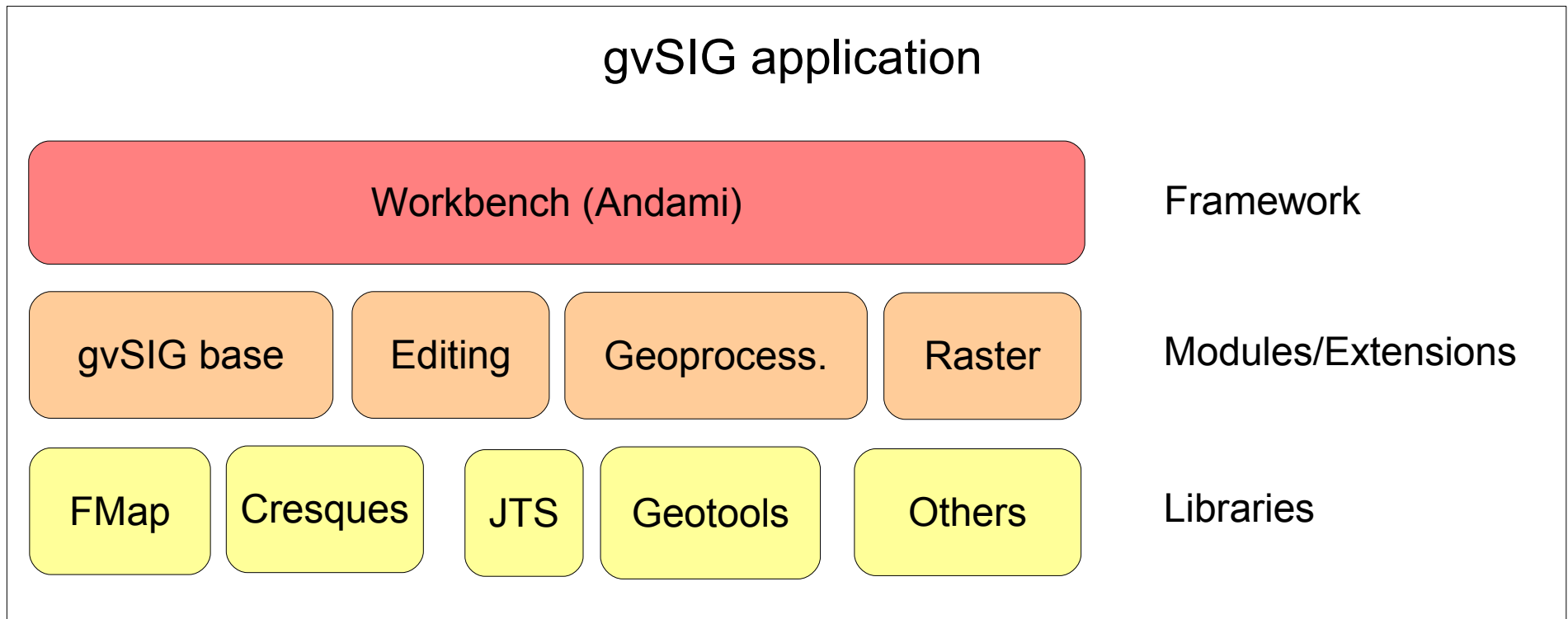


gvSIG Background

- Developed with companies (IVER) and universities (UJI)
- GPL License
- Java. Multiplatform (Windows, Linux, Mac -at 1.0-)
- Multilingual, easy internationalization
- Version 1.0 RC2 available now at www.gvsig.gva.es and in distributions like [GeoNetwork](#) Open Source DVD

gvSIG Background: Architecture

- Modular, efficient and easily extensible



gvSIG Background: Functionality

- Visualización, query, map composition

The screenshot displays the gvSIG software interface with several panels open:

- Gestor de proyectos:** Shows document types (Vistas, Tablas, Mapas) and existing documents (Vista 1, Vista 2).
- Visla : Vista 1:** Displays a map with layers 'Termmun.shp', 'vas.shp', and 'aster H0722-IV-LT'.
- Identificar Resultados:** Shows a table of results for a selected feature.
- Visla : Vista 2:** Displays a topographic map with a legend for 'dxf e61443.dxf' (Textos, Puntos, Lineas, Poligonos) and 'dgn 11.DGN' (Textos, Puntos, Lineas).
- Tabla: Termmun.shp:** Shows a table of data for the 'Termmun.shp' layer.
- Mapa:** Displays a map composition titled 'Topográfico + Ortofoto'.

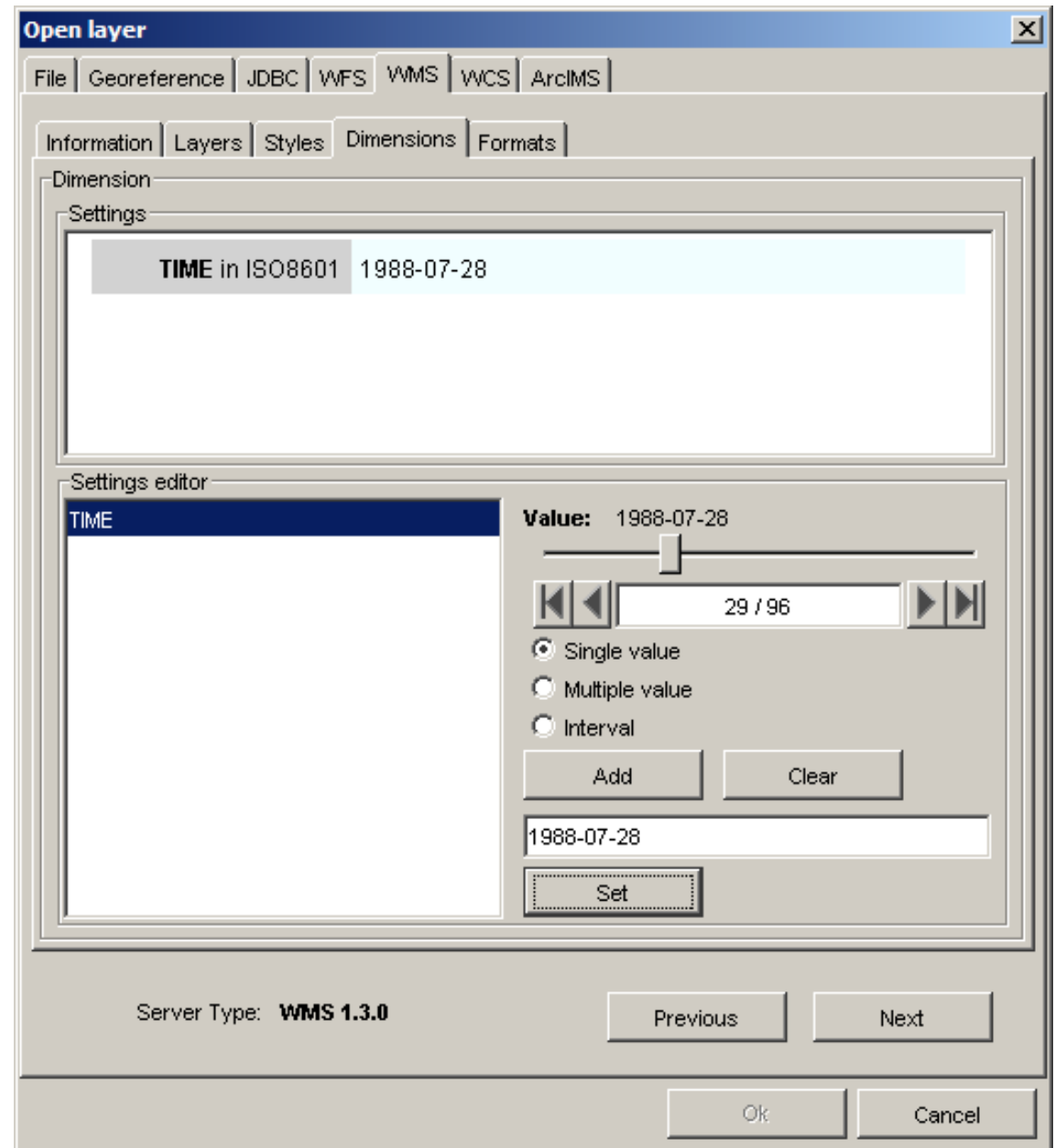
Campos	Valor
AREA	2.7450632'...
PERIMETER	27167.80181
TERMMUNC...	46204
NOMBRE	FLUG
ESTADO	ESPAÑA
TERMMUN_	11128.0
TERMMUND	11128.0
COD_PROV	46

AREA	PERIMETER	TERMMUNCOD	NOMBRE	ESTADO
20.252.100,0...	19.000,201		AÇORES3	PORTUGAL
175.795.238,...	53.045,46		AÇORES	PORTUGAL
76.645.697,2...	33.895,549		AÇORES	PORTUGAL
405.901.403,...	09.145,72		AÇORES3	PORTUGAL
285.829.545,...	120.890,487		AÇORES	PORTUGAL
201.401.540,...	62.157,754		AÇORES	PORTUGAL
525.643.640,...	115.000,87		AÇORES	PORTUGAL

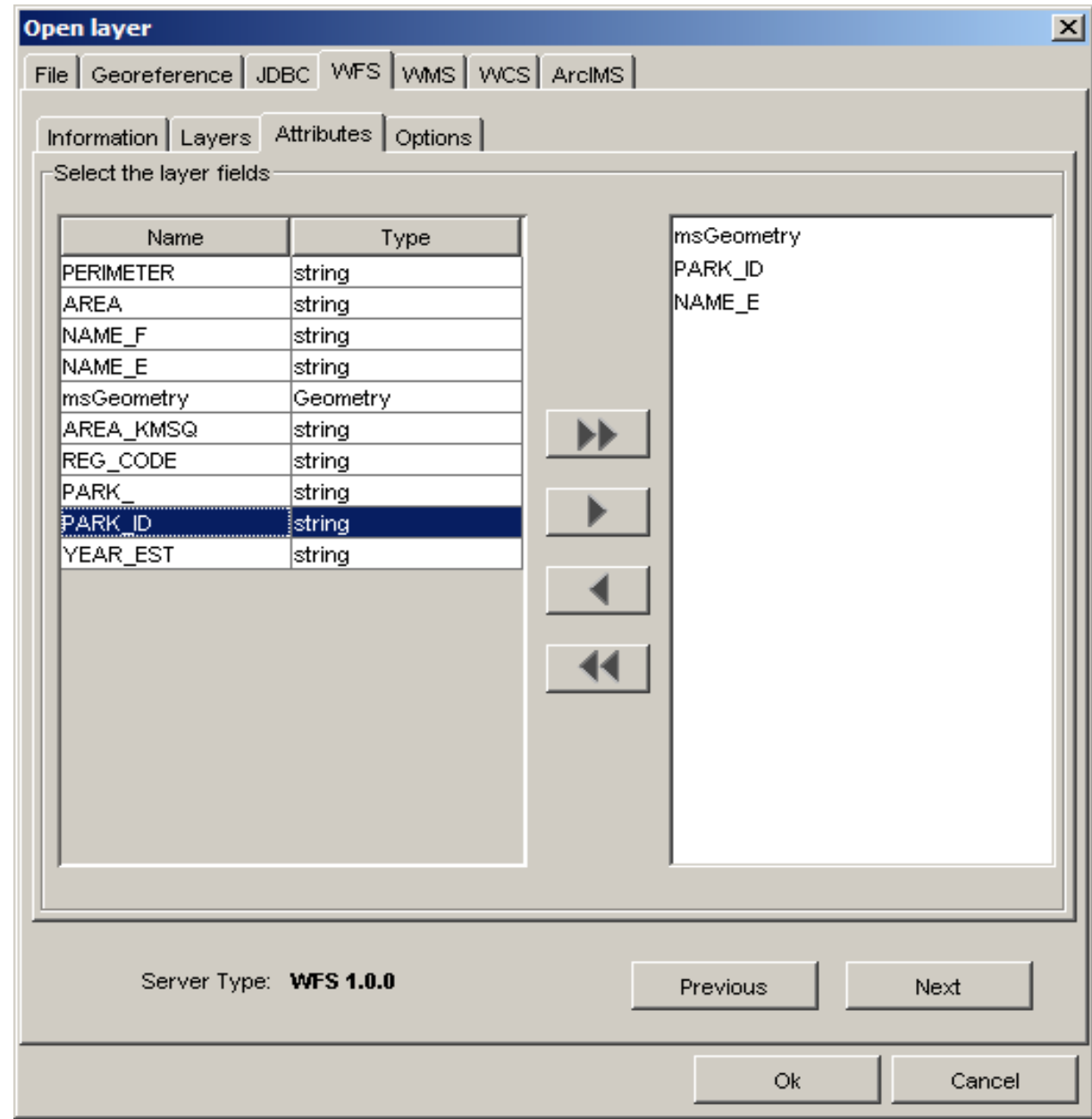
gvSIG as SDI Client

- Rich support of OGC remote services:
 - WMS (1.1.0 - 1.3.0)
 - WFS (1.0.0) + GML import/export (2.1.2) at 1.0
 - WCS (1.0.0)
 - Catalog search tool (OGC CSW 2.0, IDEC)
 - Gazetteer search tool (WFS 1.0.0, WFS-G 0.9, ADL)
- Supports ArcIMS Map and Feature services, too

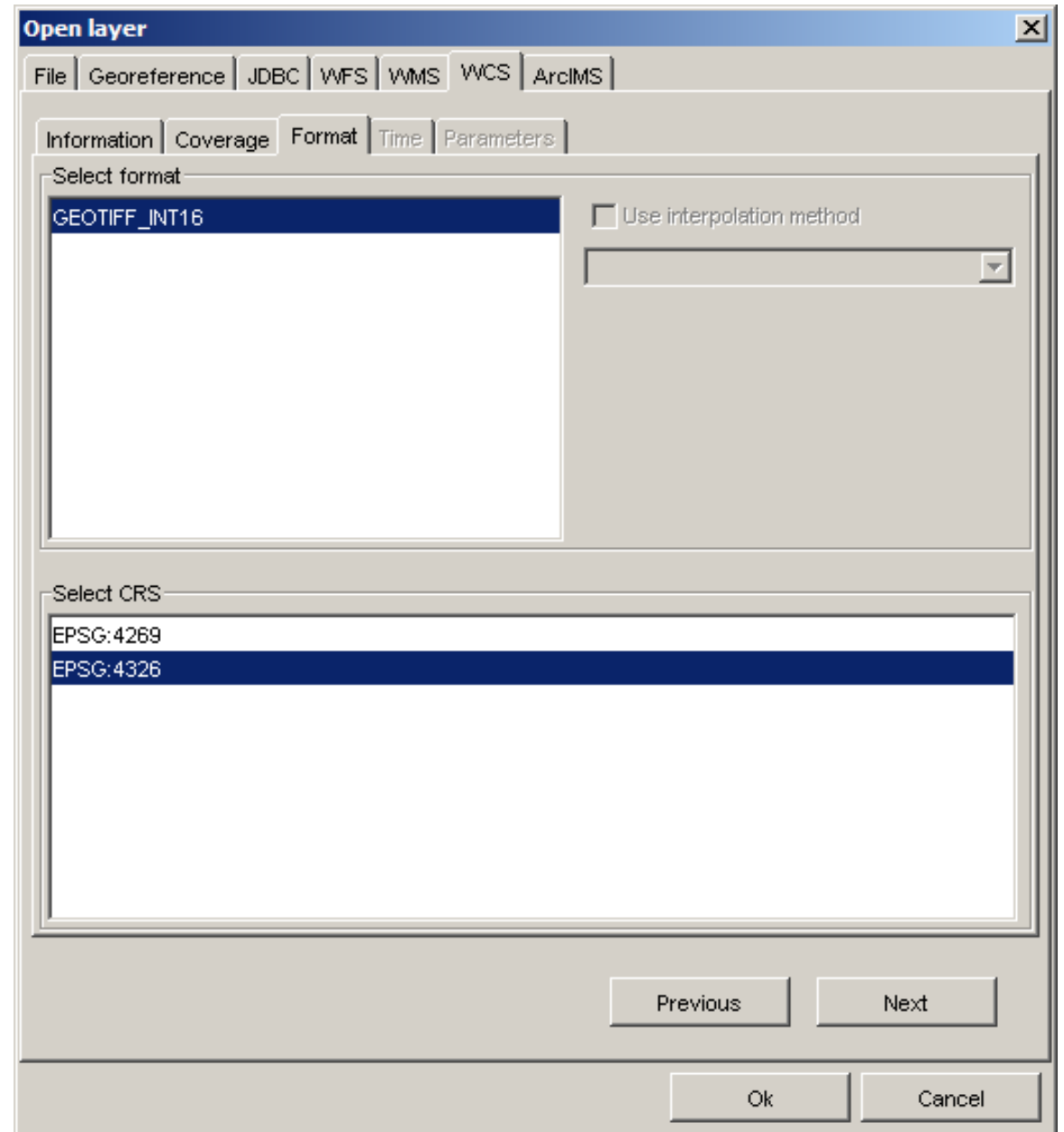
Example: GUI for WMS access



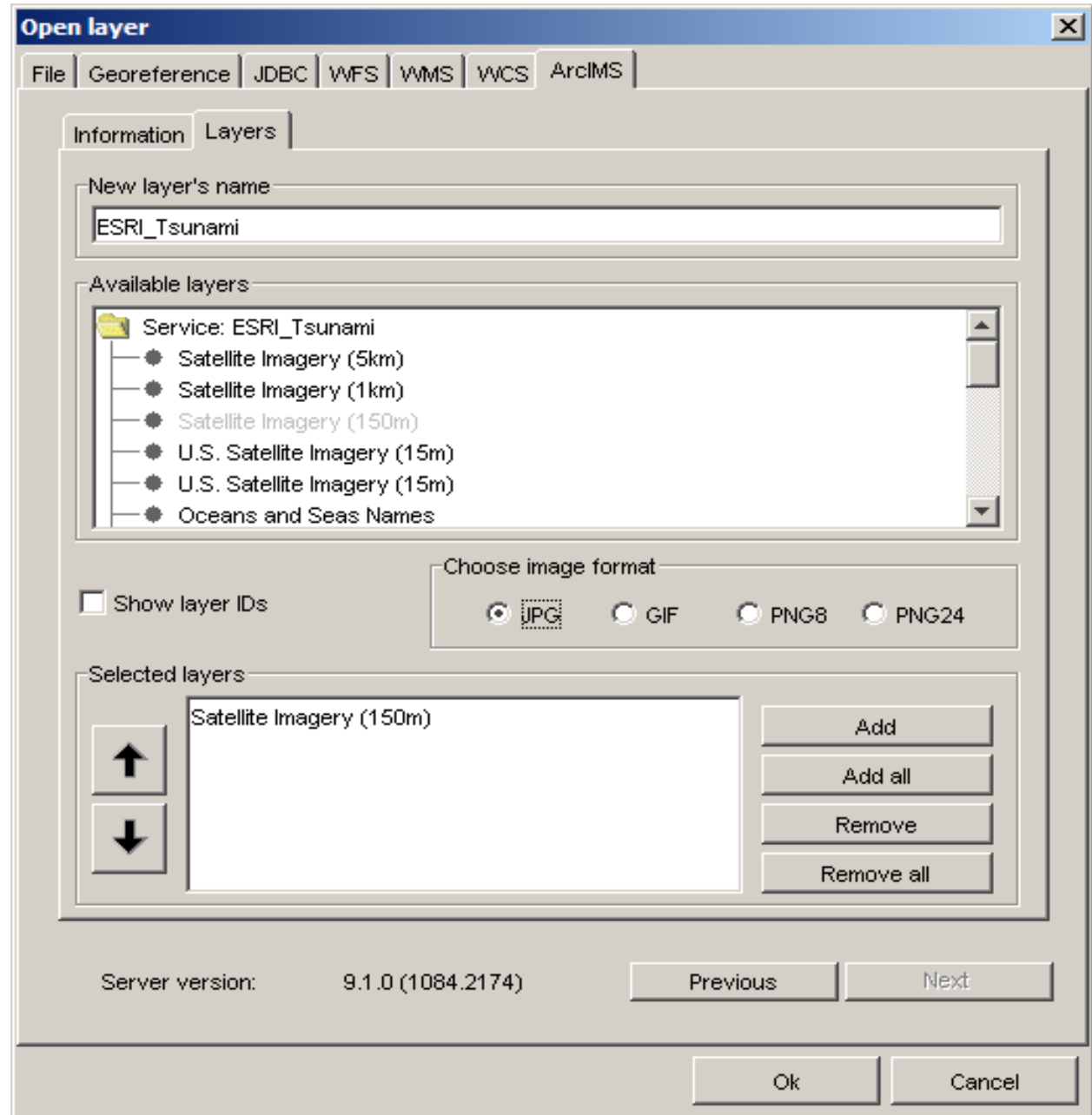
Example: GUI for WFS access



Example: GUI for WCS access



Example: ArcIMS access



Examples: Integration of remote WMS, WFS,
WCS services from different servers/catalogs
and local sources

gvSIG:Project1.gvp

File Show Layer Window View Table Help

Project manager

Document types

Views Tables

Views

Global WMS
Aral Sea Deseccation
Canada WFS Resources

View : Global WMS

Population 1990
 Blue Marble

Vista: Canada WFS Resources

WFS Parks
Default
 WFS Provinces

Vista: Aral Sea Deseccation

Aral Sea 1
 Aral Sea 2

Table : Table of attributes: WFS Parks

PARK_	PARK_ID	NAME_E	NAME
2	40	Ellesmere Island National Park Reserve	R?serv
3	40	Aulavik National park	Parc na
4	40	Ivvavik (Northern Yukon) National Park	Parc na
5	40	Yuntut National Park	Parc na
6	40	Tuktut Nogait National Park	Parc na
7	40	Auyuittuq National Park Reserve	R?serv
8	40	Ulukuk National Park Reserve	R?serv

0 / 38 Total of selected records.

Application started

Metros X = -26.71 Y = 86.71 EPSG:23030



- Catastro
 - Catastro
 - IDE:La Rioja
 - Ortofoto_2004
 - IDENA - IDE de Navarra
 - Ortofoto Color 1/1.000
 - Red de carreteras
 - Zonificacion Navarra 200
- IDEE-Base
 - Todas las capas



Example: Gazetteer Search

gvSIG:Proyecto1.gvp
File Show Window View vista capa Help

View : Untitled - 3

Finding by Gazetteer [http://middleware.alexandria.ucsb.edu:8080/gaz/adlgaz/dispat...]

Name: Restrict search area

Agreement:
 Exact sentence
 Any word
 Every word

Type:
hydrographic features
- aquifers
+ bays
- channels
- deltas
- drainage basins
- estuaries

Coordinates:
Upper: ULX: ULY:
Lower: BRX: BRY:

contain

Aspect setup:
 Go to the place
 Remove old searches
 Draw result

Intelligent search:
 All word forms

Results per page:

Search Cancel Last Close



Example:
 Catalog
 Search

Geodata search [193.43.36.137:2100]

Title
 Restrict search area

Search results

Last Results: 1 of 317 Next

[Inland water bodies in Africa](#)

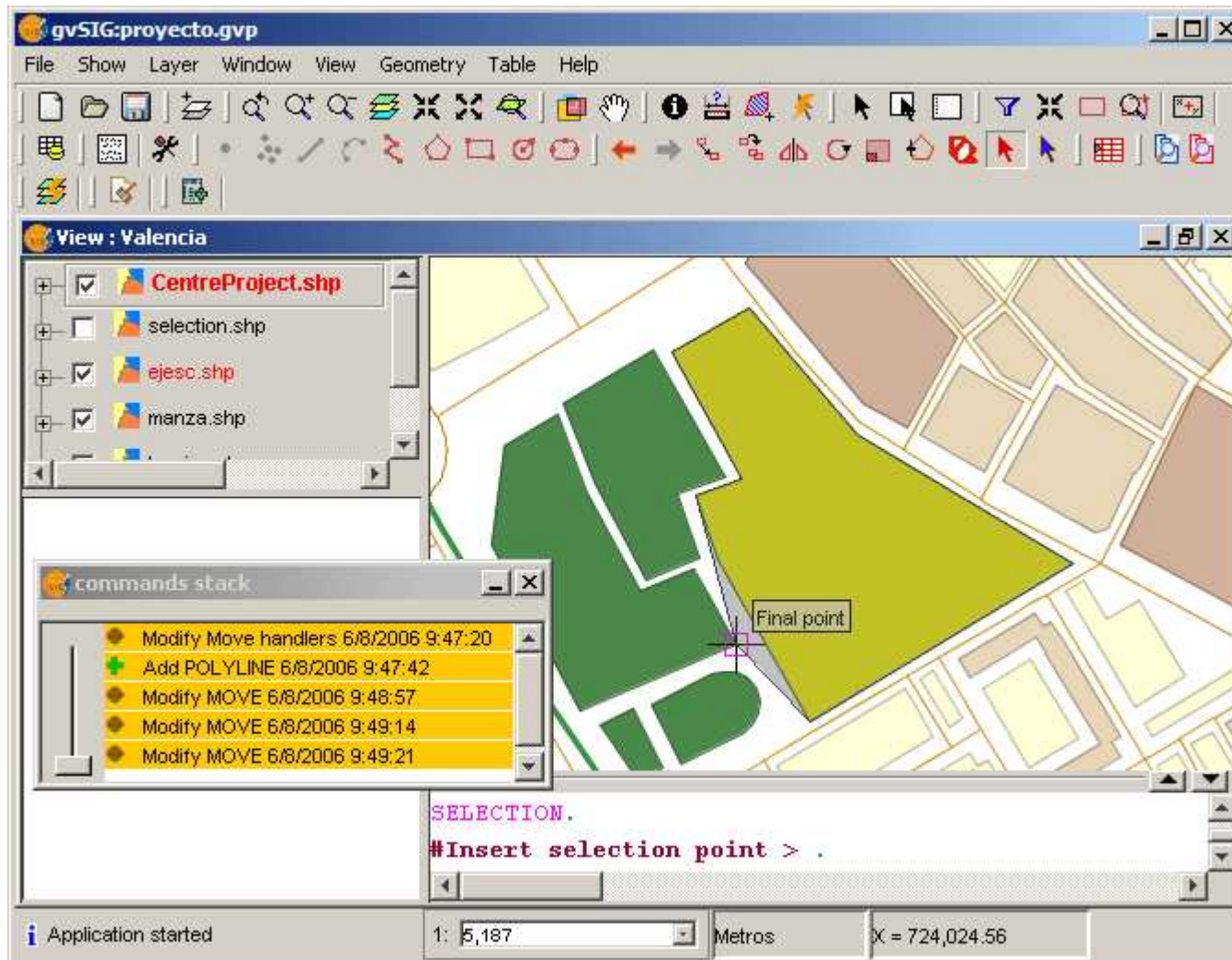
Abstract: Shapefile of inland water bodies in Africa. This dataset originates from the Digital Chart of the World 1:1000000, 1998. The waterbodies for Africa have been characterized (as lake, lagoon, reservoir etc.) and named

Available Resources

Type	Link	Show
WWW:LINK-1.0-http--link	http://www.fao.org/ag/AGL/aglw/aq...	Web Site
WWW:LINK-1.0-http--link	http://www.fao.org/geonetwork	Web Site
WWW:DOWNLOAD-1.0-http--downl...	http://www.fao.org:80/geonetwork/...	Download
OGC:WMS-1.1.1-http-get-map	http://193.43.36.137/ows/281	Map

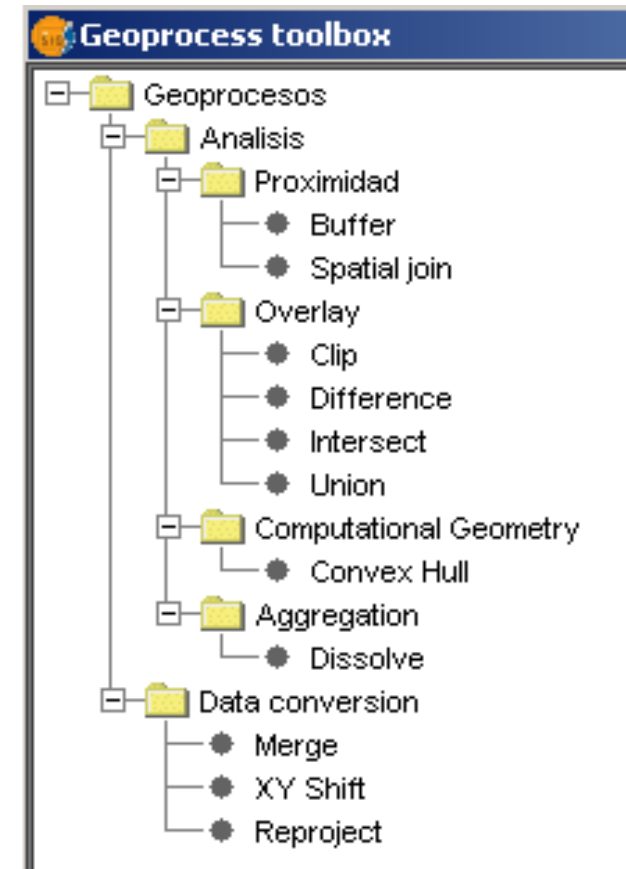
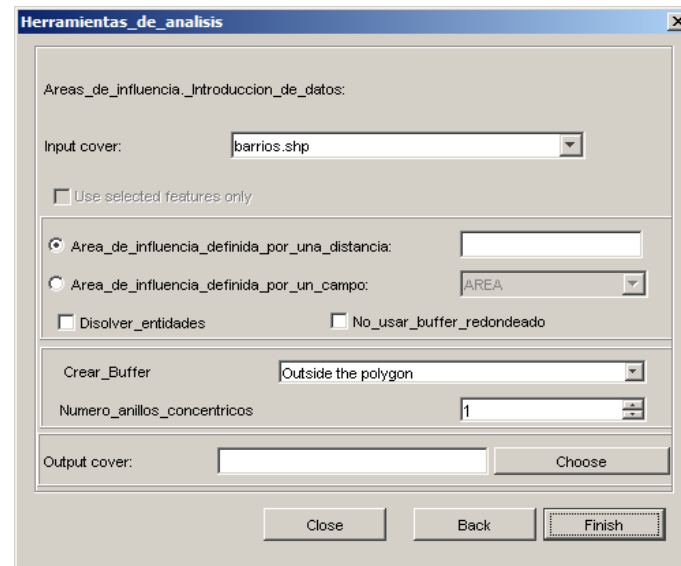
Description Add Layer Close

gvSIG 1.0: Editing

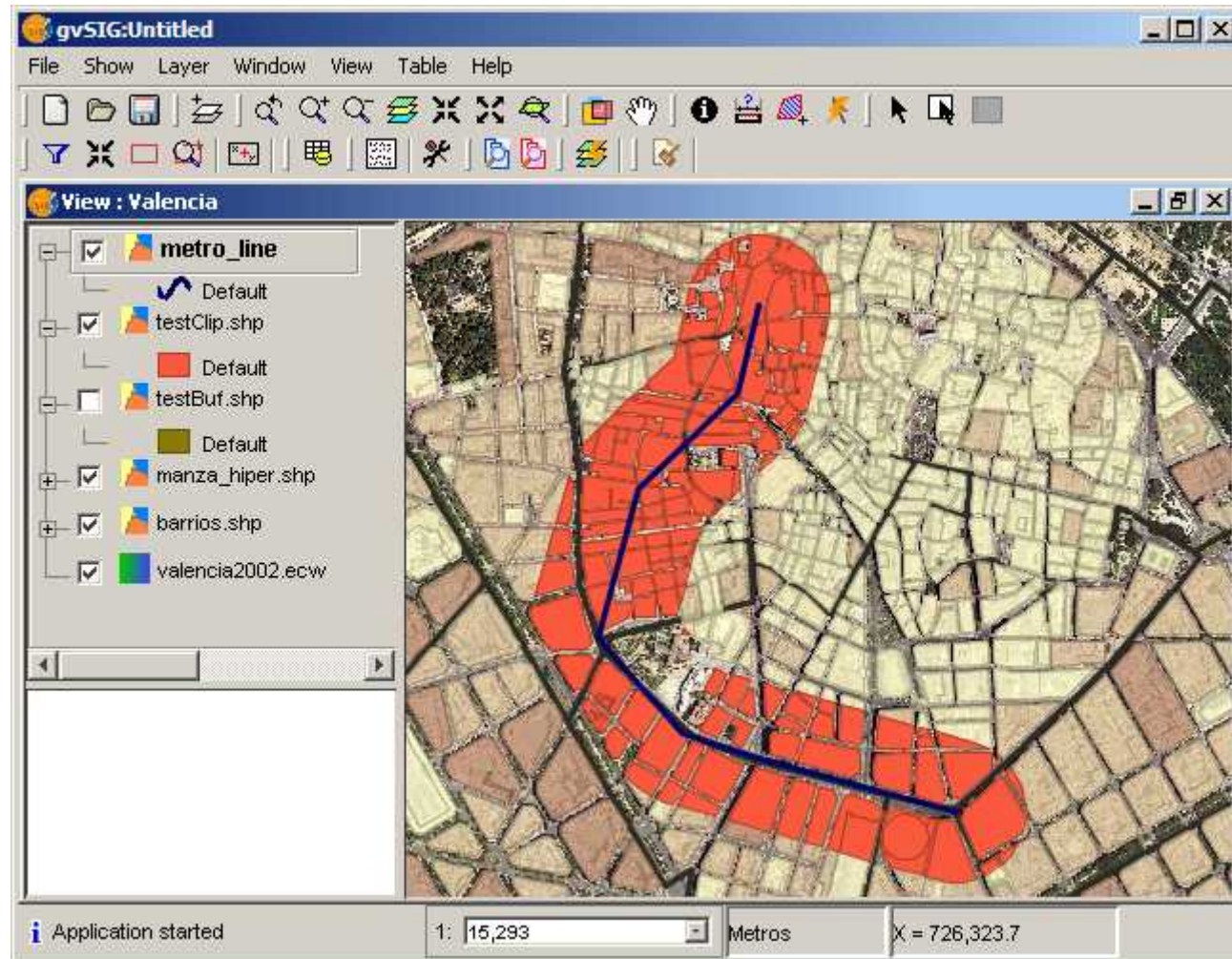


gvSIG 1.0

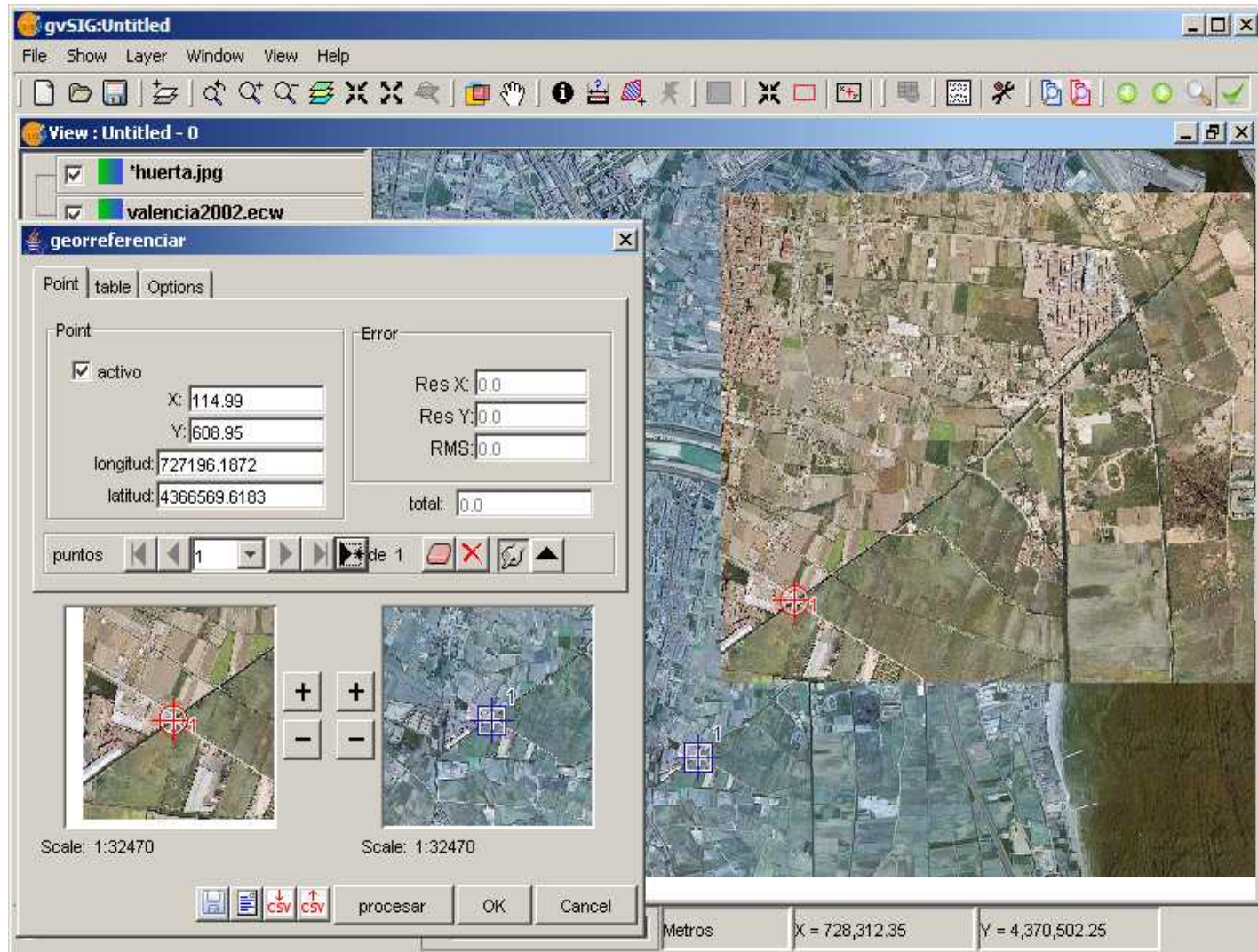
- Geoprocessing
 - Extensible framework
 - Vector processing operators



gvSIG 1.0: Geoprocessing



gvSIG 1.0: Image georeferencing

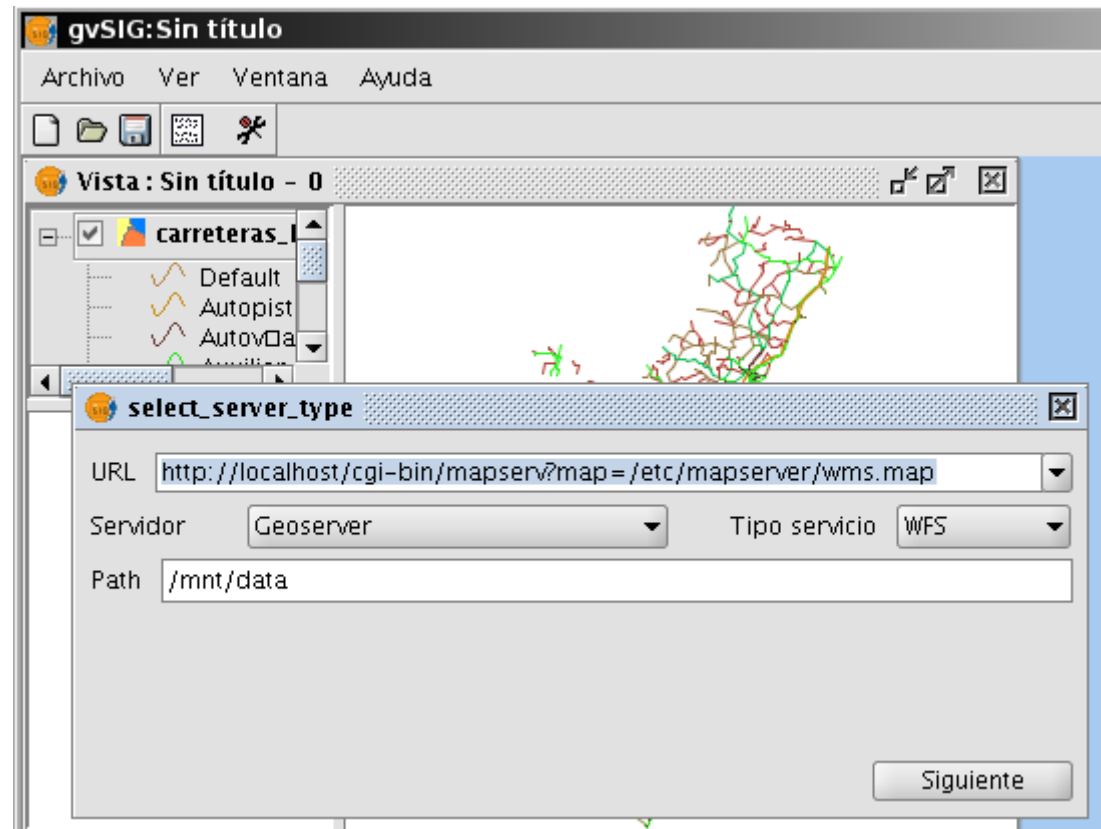


After 1.0: Development roadmap

- Most basic functions covered with 1.0
- gvSIG becoming platform for specialized users:
 - Core enhancements: symbology, labeling
 - Network and topology analysis
 - Raster analysis
 - 3D and temporal GIS
 - **SDI authoring: OGC service publishing**

After 1.0: SDI authoring

- Export of gvSIG Views to WMS services
- Export gvSIG layers to WFS, WCS
- Support for multiple FOSS Servers
- Integrated metadata discovery and editing tools



gvSIG Community

- **Main users:**
 - **Government agencies:** Instituto Geográfico Nacional, Ministerio de Fomento, Instituto de Estadística de Valencia
 - **Companies:** Hidroven (Water company of Venezuela)
 - **International agencies:** UN, FAO, UNSDI
 - **Regional Governments:** Valencia, Castilla-La Mancha, Extremadura, País Vasco
 - **Cities:** Valencia, Teruel, Ronda, Getafe...
 - **Universities:** Politécnica de Madrid, Patagonia, Castilla la Mancha, Jaime I de Castellón...



Thanks

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www.gvsig.gva.es

www.gvsig.com