

gvSIG Mobile & gvSIG Mini

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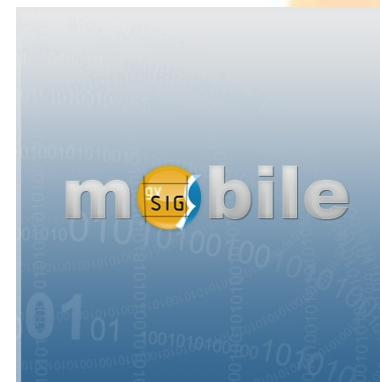
Agenda

- **gvSIG Mobile**
- Demo
- Future functions
- gvSIG Mini
- Demo
- Future functions



gvSIG Mobile

- Funded by the **CIT**: Regional Ministry of Infrastructures and Transport of Valencia (Spain)
- Framework of **gvSIG** project. **GNU/GPL**
- **Aimed at** technical GIS mobile users
- Developed in **JAVA ME (J2ME – CDC)**
- Developed by PRODEVELOP, S.L in collaboration with IVER and the Robotic Institute of UPV

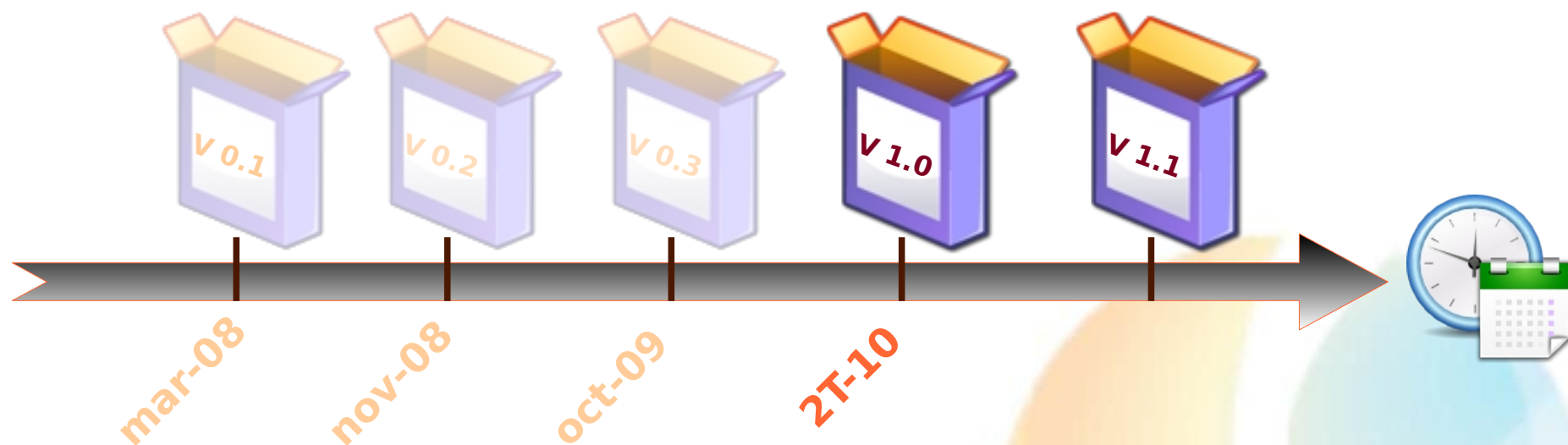


gvSIG Mobile

- Operative System: Windows Mobile (W.M 0.5 and 0.6)
- JVM: J9 IBM, PhoneMe Advanced
- Aimed at PDAs
- Tablet Pcs (XP) and smartphones (W. Mobile)
- Future: Cell phones

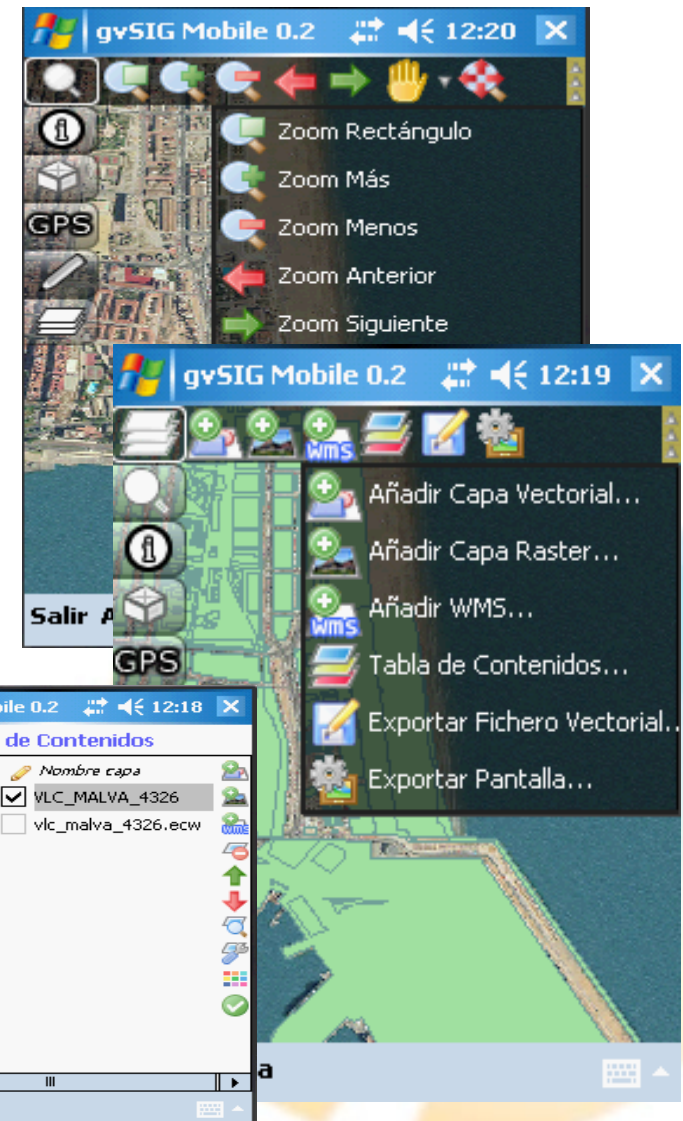


gvSIG Mobile



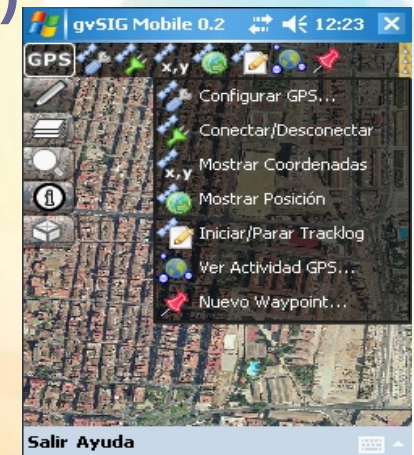
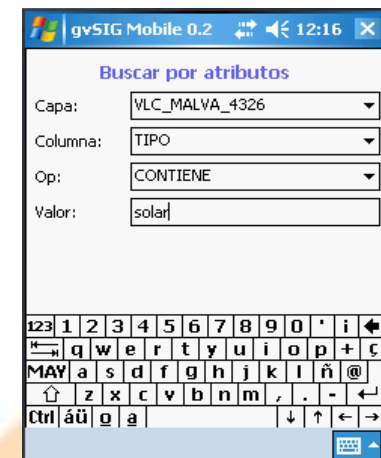
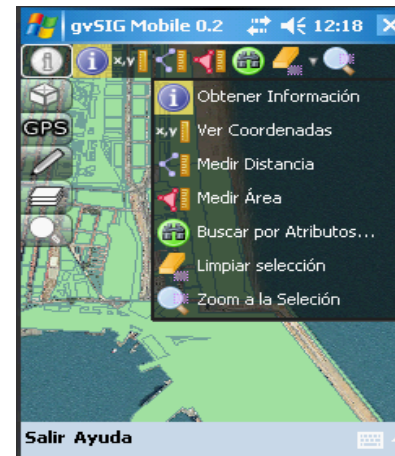
gvSIG Mobile: Functions

- Project management
- Navigation
- Add data
 - Shape files, ECW, JPEG, PNG
 - Client of SDI's : **WMS**
- Layer management (**TOC**)



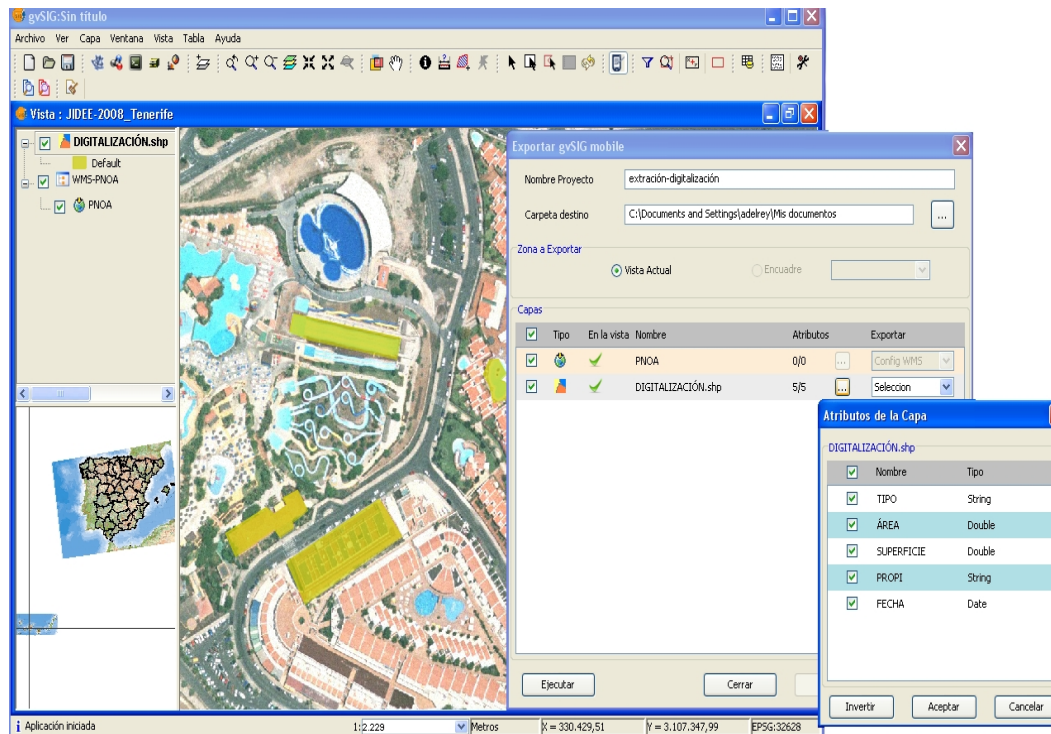
gvSIG Mobile: Functions

- **Query data:**
 - Selection by attribute
 - Object selection
 - Measures
- **GPS Support:**
 - EPSG:3003/4 (Monte Mario Gauss-Boaga SRS)
 - NMEA0183 Protocol
 - Waypoints and tracklogs (GPX,CSV)
 - GPS Simulation



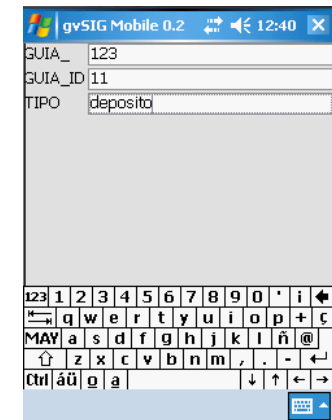
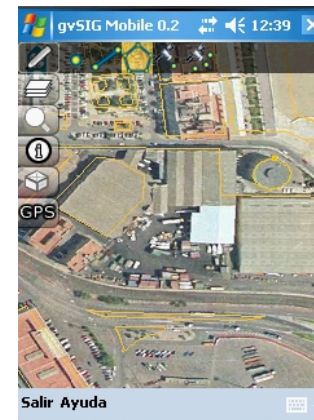
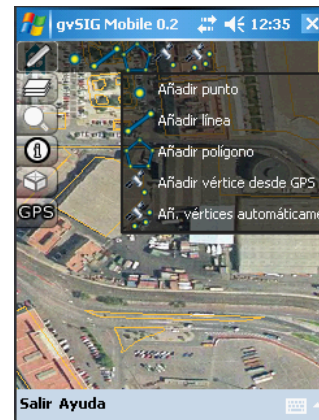
gvSIG Mobile: Functions

- **Data integration: gvSIG extension to export data to the PDA**

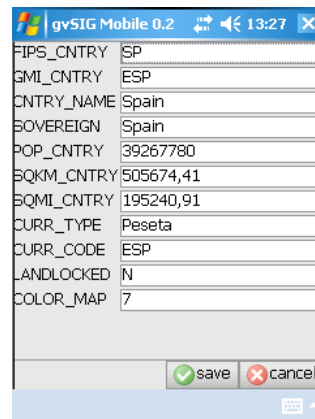


gvSIG Mobile: Functions

- Editing of data

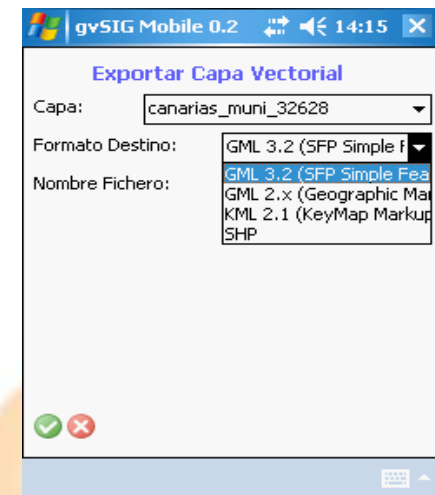


- Use of custom forms: **XML** files



gvSIG Mobile: Functions

- **GML, KML and GPX** formats support
- **Range value** thematics maps



- **Download:**

<http://www.gvsig.org/web/projects/gvsig-mobile/official/piloto-gvsig-mobile-0.3>

gvSIG Mobile: next V.1.0

- **OGC Services**

- Web Feature Service (WFS): 1.0.0 and 1.1.0



- **Thematic symbology**

- Range values
- Unique values



- **Labelling**



- **Advanced editing of vector data**

- **Alphanumeric Data**

- Table structure modifications



gvSIG Mobile: next V.1.0

- **Advanced GPS Location**

- New listeners
- TSIP and RawData support
- NTRIP differential correction



- **LandMarkStores Management**

- Personal Data Base of LMS
- Add POIs/routes
- Search of POIs/routes
- See POIs/routes on the map
- Editing of POIs/routes (including waypoints)



gvSIG Mobile: next V.1.0

- **New compatible architecture**
 - Re-written from scratch
 - Core compatible with gvSIG Desktop
- **OSGi extensibility**
 - Extensibility based on OSGi
 - Independent Bundles OSGi

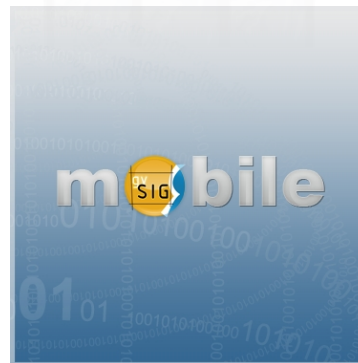


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- gvSIG Mini
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Demo gvSIG Mobile 1.0



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Future functions: gvSIG Mobile V.1.1

- **Tiles support**

- OpenStreetMap
- WMS-C
- Yahoo Maps...?



- **Geosynchronization**



- **Navigation**

- Through waypoints/routes of LMS

- **WFS-T (WFS-Transactional)**



Future functions: gvSIG Mobile V.1.1

- **Integration with OSM services** 

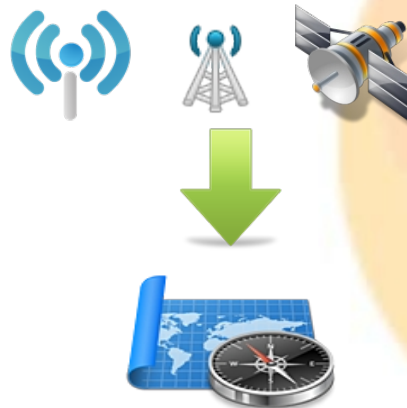
- NameFinder
- Routing Service

- **SWE (Sensor Web Enablement)** 

- SOS (Sensor Observation Service)
- SOS-T (SOS-Transactional)

- **Hybrid location**

- GPS+Wifi+CellId+.....



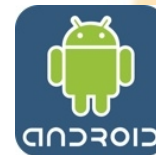
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gvSIG Mini

- Open Source Map viewer of free maps access based on tiles for mobile phones
- **GPS, YOURS** and **Name Finder** services support
- Intended for non professionals (**GNU/GPL**)
- Private initiative of  **proDEVELOP**
Integración de tecnologías
- Developed in **JAVA ME CLCD**
- Two versions: Java and Android



gvSIG Mini

- What does it look like?



gvSIG Mini

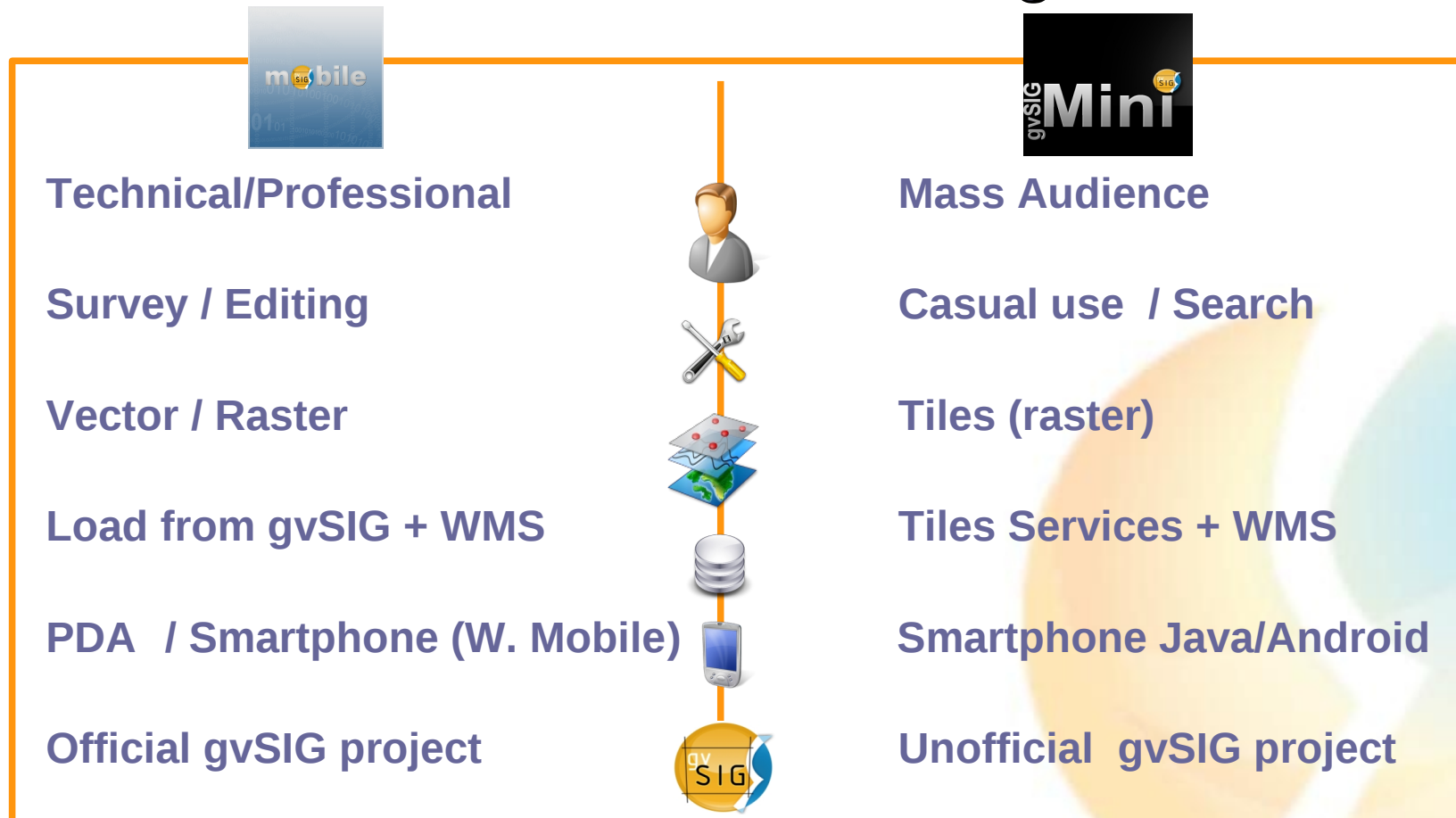
- **Who is working in?**

- Spanish company
- 16 years GIS experience
- 70 + employees
- Member of gvSIG Project/ Steering Committee
- High focus on FOSS4G: Victoria, Cape Town, Sydney
- Members of gvSIG Association
- Members of Sextante Geospatial Services

pro²DEVELOP
Integración de tecnologías

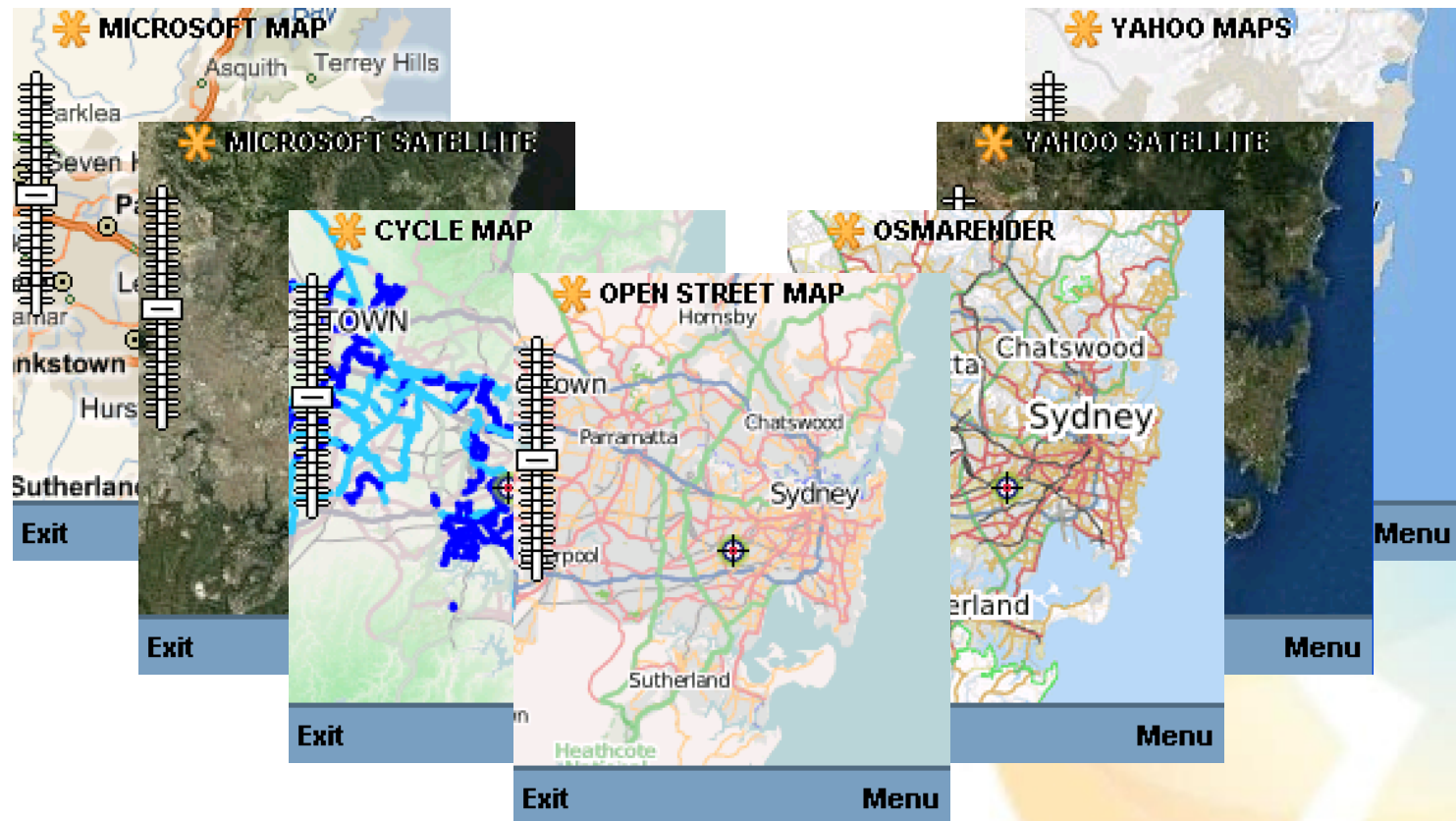
gvSIG Mini

- Which are the differences with gvSIG Mobile?



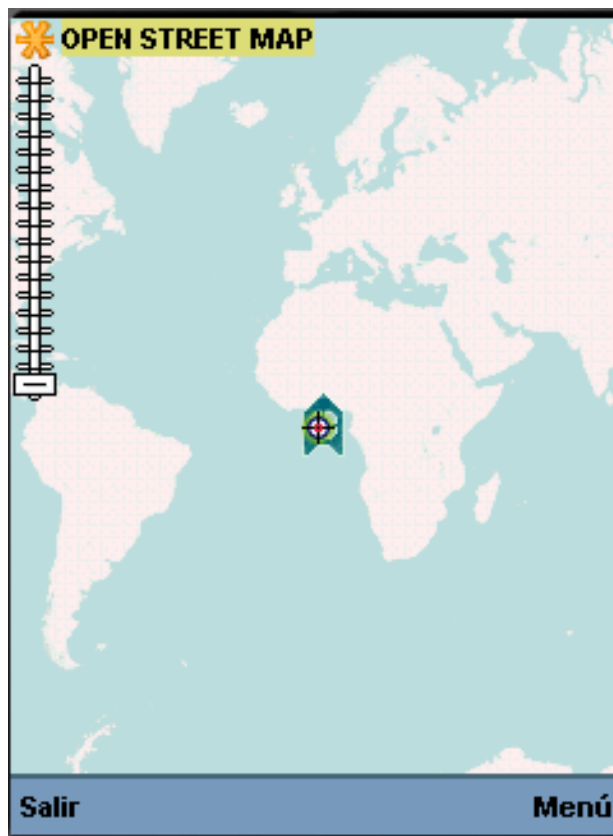
gvSIG Mini

- **Features: Map viewer**



gvSIG Mini

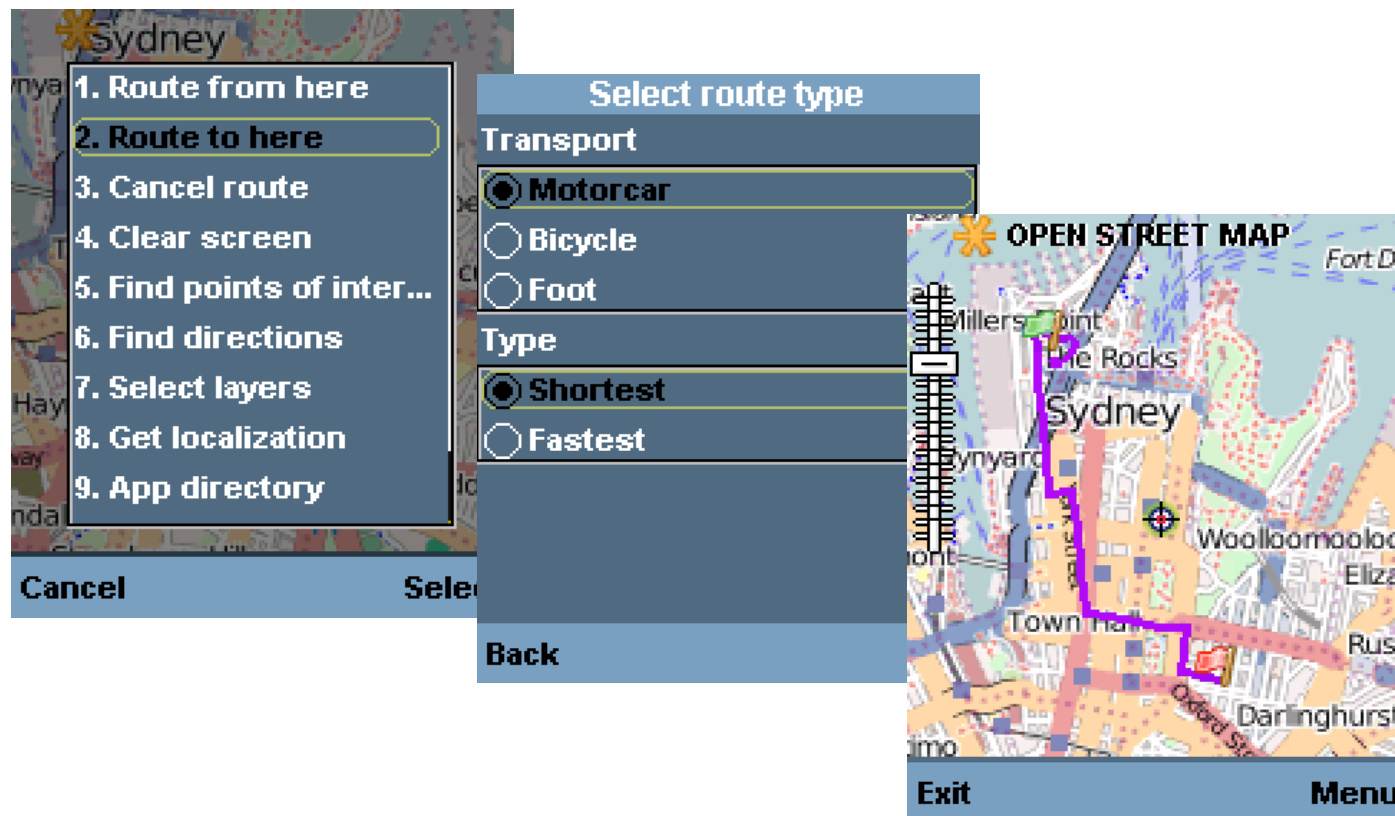
- **Features: GPS Positioning**



- See my location
- Search close POIs
- Use position for routes

gvSIG Mini

- **Features: Route finder YOURS**



The screenshot displays the gvSIG Mini route finder interface. On the left, a menu is open with the following options:

1. Route from here
2. Route to here
3. Cancel route
4. Clear screen
5. Find points of inter...
6. Find directions
7. Select layers
8. Get localization
9. App directory

Below the menu are 'Cancel' and 'Select' buttons. On the right, the 'Select route type' screen is shown with the following options:

Select route type

Transport

- Motorcar
- Bicycle
- Foot

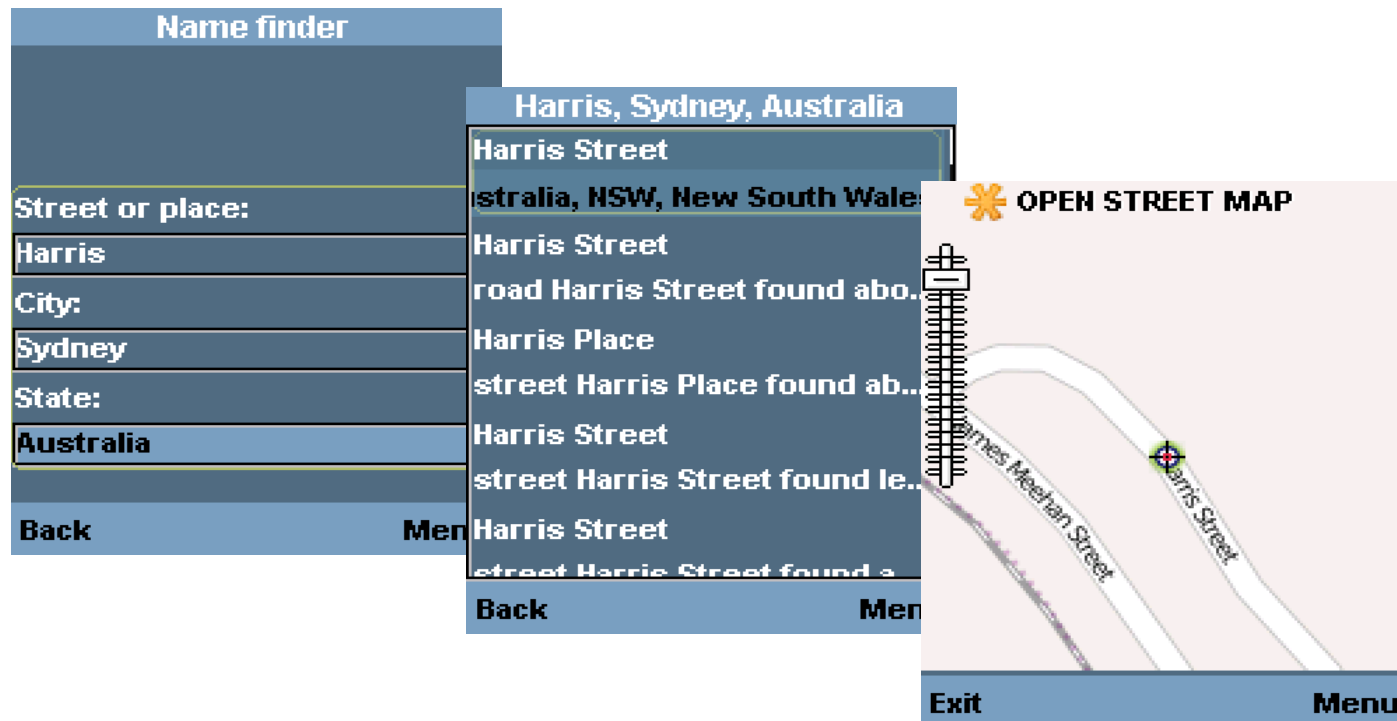
Type

- Shortest
- Fastest

Below these options are 'Back', 'Exit', and 'Menu' buttons. The background shows a map of Sydney with a purple route highlighted.

gvSIG Mini

- **Features: Address Search (Name Finder)**



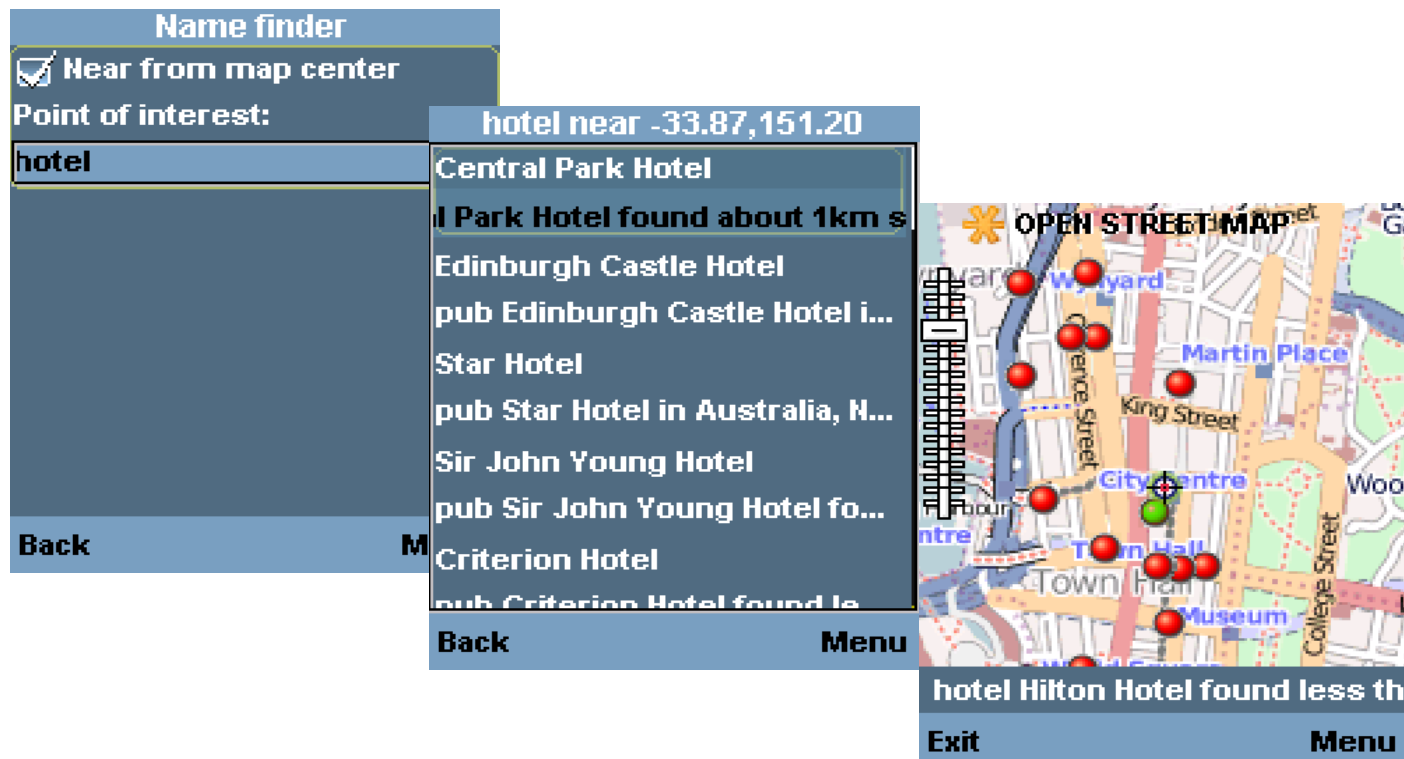
The screenshot displays the 'Name finder' interface. On the left, a form contains the following fields and values:

- Street or place: Harris
- City: Sydney
- State: Australia

Below the form are 'Back' and 'Menu' buttons. A search results list is shown to the right of the form, listing several entries for 'Harris Street' in Sydney, Australia, with truncated descriptions. At the bottom of this list are 'Back' and 'Menu' buttons. To the right of the list is a map view titled 'OPEN STREET MAP' with a star icon. The map shows a street network with 'Harris Street' highlighted in green and marked with a red location pin. Other visible streets include 'Harris Place' and 'Harris Street'. At the bottom of the map view are 'Exit' and 'Menu' buttons.

gvSIG Mini

- **Features: POI Search (Name Finder)**



The screenshot displays the 'Name finder' interface in gvSIG Mini. It shows a search for 'hotel' near a point of interest at coordinates -33.87, 151.20. The search results list several hotels, with 'Central Park Hotel' being the first result. A map in the background shows the location of the search results in a city center, with various streets and landmarks labeled. The interface includes a 'Near from map center' checkbox, a search input field, and a list of results with 'Back' and 'Menu' options for each entry.

Name finder

Near from map center

Point of interest:

hotel near -33.87,151.20

hotel

Central Park Hotel

Central Park Hotel found about 1km s...

Edinburgh Castle Hotel

pub Edinburgh Castle Hotel i...

Star Hotel

pub Star Hotel in Australia, N...

Sir John Young Hotel

pub Sir John Young Hotel fo...

Criterion Hotel

pub Criterion Hotel found le...

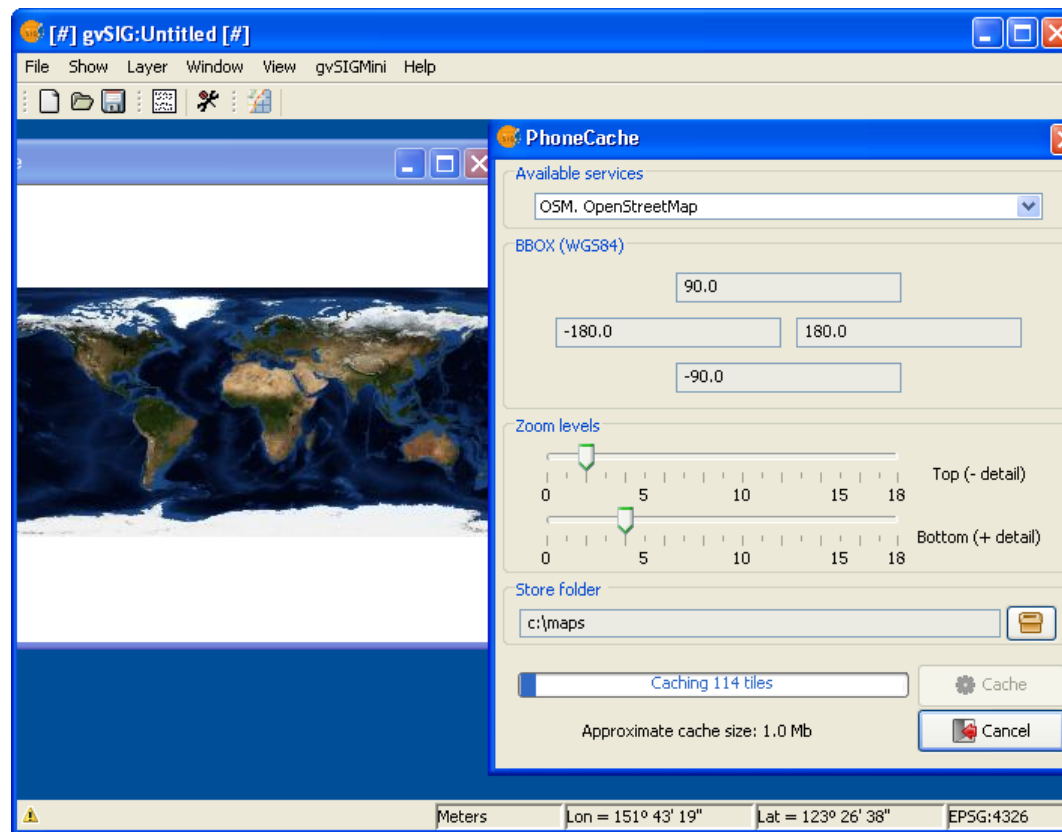
Back Menu

hotel Hilton Hotel found less th...

Exit Menu

gvSIG Mini

- **Features: Phone Cache (tiles downloader)**



gvSIG Mini

- **What are the requirements?**
 - **Standard phones (Java)**
 - Java CLDC 1.1/MIDP 2.0 enabled phone
 - (Optional) GPS and JSR 179
 - (Optional) Network connectivity
 - (Optional) JSR 75: Filesystem access
 - **Android**
 - (Optional) Network connectivity
 - (Optional) GPS



gvSIG Mini

- **How is it being done?**
 - Tiles + vector routes +POIs
 - LWUIT for user interface
 - Multithread architecture
 - Persistent cache
 - Based on OSM services
 - SRS supported: "EPSG:4*", "EPSG:230*", "EPSG:326*", "EPSG:327*", "EPSG:275*" and "EPSG:27700"

gvSIG Mini

- **Where can we get it?**
 - From PC: www.gvsigmini.org
 - From phone: m.gvsigmini.org
 - From gvSIG project:

[www.gvsig.org/web/plugins/downloads/
gvsig-mini](http://www.gvsig.org/web/plugins/downloads/gvsig-mini)

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gvSIG Mini

Demo



Agenda

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- gvSIG Mini
- Demo
- **Future functions**



gvSIG Mini

- **What is the next?**
 - Personal POIs storage
 - Tracklogs and waypoints storage
 - Disconnected address searching
 - Integration with social applications
 - Unify Android and Java CLCD code
 - **Collaborations are welcome!!!**

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Thank you for your attention !!!



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