“Different types of OS GIS mobile applications: gvSIG Mobile & gvSIG Mini”

Amelia del Rey
adelrey@gvsig.com

Alberto Romeu
aromeu@prodevelop.es

Javier Carrasco
jcarrasco@prodevelop.es

Juan Lucas Dominguez
jldominguez@prodevelop.es
Contents

1. Mobile applications in gvSIG Project

2. gvSIG Mobile

3. gvSIG Mini

4. Differences between applications

5. Videos

6. Useful links
1. Mobile applications in gvSIG

- **2006**: gvSIG Mobile (gvSIG Project)
  - gvSIG Project
  - JAVA ME (J2ME – CDC)
  - GNU/GPL

- **2009**: gvSIG Mini (R&D Initiative)
  - R&D Initiative
  - JAVA ME (J2ME – CLDC)
  - Android
  - GNU/GPL
Contents

1. Mobile applications in gvSIG Project

2. gvSIG Mobile

3. gvSIG Mini

4. Differences between applications

5. Videos

6. Useful links
2. gvSIG Mobile

- Intended for GIS Professionals
- GNU/GPL license
- Aimed at PDAs
  - Windows Mobile (2003, 5,6,6.1 and 6.5)
  - JVM: J9 IBM, PhoneMe Advanced
- Tablet Pcs (XP) and smartphones (W.Mobile)
- Future: Cell phones
2. gvSIG Mobile 0.3 *(latest final version)*

- Project management
- Navigation
- Data support:
  - shp, KML, GML, GPX
  - ECW, JPEG, PNG
- Client of SDI's: WMS
- Layer management (TOC)
2. gvSIG Mobile 0.3 (latest final version)

- **Query data:**
  - Selection by attribute
  - Object selection
  - Measures

- **GPS Support:**
  - NMEA0183 Protocol
  - Waypoints and tracklogs (GPX, CSV)
  - GPS Simulation
2. gvSIG Mobile 0.3 *(latest final version)*

- gvSIG extension to export data to the PDA
2. gvSIG Mobile 0.3 (latest final version)

- Editing of data
- Use of custom forms: XML files
- Range value thematics maps
- Download
2. gvSIG Mobile for Leica Zeno

- gvSIG Mobile 0.3 has been adapted for Leica Zeno
- Windows CE 6.0
- Higher capacity of data storage
- Supports: SBAS as WASS/EGNOS, etc. and DGPS
2. gvSIG Mobile 1.0 *(under development)*

- New **compatible architecture**
  - Re-written from scratch
  - Core compatible with *gvSIG Desktop 2.0*
- New GUI based on LW VCL
- OSGi extensibility
- New SRS support: *Java Map Library*
2. gvSIG Mobile 1.0 *(under development)*

- Access to WFS 1.0.0 and 1.1.0 *(only read)*
- Thematic maps by unique values
- Labelling
- Vector Data: Advanced editing
- Alphanumeric Data: Modify Tables
2. gvSIG Mobile 1.0 *(under development)*

- Advanced **GPS Location**
  - New devices collection
  - TSIP and RawData support
  - NTRIP differential correction
- **LandMarkStores Management** *(Local)*
  - Personal Data Base of LMS
  - Add/Search/view of POIs/routes
  - Editing of POIs/routes (including waypoints)
2. gvSIG Mobile 1.0

Work in progress:

- Tiles support
- Geosynchronization via WFS-T
- New navigation through waypoints of LMS
- Integration with OpenStreetMap
- Sensor features through the Sensor Observation Service (SWE)
- Hybrid location
- etc.
Contents

1. Mobile applications in gvSIG Project
2. gvSIG Mobile
3. gvSIG Mini
4. Differences between applications
5. Videos
6. Useful links
3. gvSIG Mini

- Open Source **Map viewer** of free internet **tiled maps** and **WMS/-C** and **TMS** for mobile phones
- Intended for **mass audience**
- **GPS, YOURS** and **Name Finder** support
- **GNU/GPL**
- Developed in **JAVA ME CLDC** and **Android**
3. gvSIG Mini

What does it look like?
3. gvSIG Mini

Main Menu

- GPS Location
- Route Calculations: *(OSM YOURS)*
- Address Search: *(OSM Name Finder *)
- POI Search: *(OSM Name Finder)*
- ...
3. gvSIG Mini

- Share location: Twitter/Facebook, SMS, e-mail....

- Tiles downloader:
  - Phone Cache (gvSIG's extension)
  - gvSIG Mini's Menu
3. gvSIG Mini

Preset Layers

- OpenStreetMap
- Yahoo
- Microsoft Bing
- Google Maps
- PNOA (ES)
- Ordnance Survey (UK)
- Yandex (RU), etc.
3. gvSIG Mini

Add Layers/ Custom layers

- WMS
- WMS-C
- TMS (*.gvtiles file)

```python
w0.2.1
1|ICC.ORTO;3,http://sagitar1.icc.cat/tilecache/tilecache.py/1.0.0/orco/
...-
--|--
_\_ layers_
```
3. gvSIG Mini

Contextual Menu

- Search/ Delete POI
- Delete/Start Route
- POI List
- Street View
- Weather
- etc....
3. gvSIG Mini

Latest features:

- Map download directly from the mobile phone, for off-line usage.
- Off-line mode for viewing maps with no data connection
- Multi touch support
- New map rendering system, much more agile
- Standard Android search button support
- New layers available by default
- New cache options
- Android 2.2 support (now from 1.5 to 2.2)
- UK Ordnance Survey true maps (rendered by OS)
3. gvSIG Mini

Work in progress

- WFS client (near future)
- **Google Summer of Code 2011:**
  - “Tiled vector support of non-standard services data: Panoramio, Flickr, Foursquare, Wikipedia, Buzz, Youtube, etc
  - Vector support for gvSIG Mini: GPX, KML, GML
3. gvSIG Mini

Where can we get it?

- From PC:  www.gvsigmini.org
- From phone:  m.gvsigmini.org
- From gvSIG project
- From SVN
- From Android market
3. gvSIG Mini

Who is working on?

Applications based on gvSIG Mini:

- onSTic
- NOMADA Maps

Athens NOMADA Maps
With Athens NOMADA Maps you can view maps and points of interest of Athens...

Beijing NOMADA Maps
With Beijing NOMADA Maps you can view maps and points of interest of Beijing...

San Francisco NOMADA Maps
With San Francisco NOMADA Maps you can view maps and points of interest of...
Contents

1. Mobile applications in gvSIG Project
2. gvSIG Mobile
3. gvSIG Mini
4. Differences between applications
5. Videos
6. Useful links
## 4. Applications' comparison (1/3)

<table>
<thead>
<tr>
<th></th>
<th>gvSIG Mobile</th>
<th>gvSIG Mini</th>
</tr>
</thead>
</table>
| **Users/Use**       | - Professional GIS users  
- GIS Survey tasks                    | - Mass audience  
- Get/search information                                                      |
| **Devices**         | - PDA's                        
- Tablet PC's                  
- Smartphones               | - Smartphones:  
- Blackberry: YES  
- iPhone: NO                  |
| **Operative System**| **Windows Mobile 5, 6**         | Java, Android                                                              |
| **Type of data support** | Vector and Raster Data               | Raster Data                                                                |
4. Applications' comparison (2/3)

<table>
<thead>
<tr>
<th></th>
<th>gvSIG Mobile</th>
<th>gvSIG Mini</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Load data</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>- gvSIG Projects</td>
<td>- WMS, WMS-C</td>
</tr>
<tr>
<td></td>
<td>- shapes, GML 2.x, KML 2.1</td>
<td>- TMS, OS OpenData</td>
</tr>
<tr>
<td></td>
<td>- ECW, JPG, GIF</td>
<td>- OSM</td>
</tr>
<tr>
<td></td>
<td>- WMS, WFS</td>
<td>- Yahoo Maps</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Bing Maps</td>
</tr>
<tr>
<td><strong>Data export</strong></td>
<td>Shapes, GML 2.x, KML 2.1, GPX</td>
<td>NO</td>
</tr>
<tr>
<td><strong>Vector Data editing</strong></td>
<td>YES</td>
<td>NO</td>
</tr>
<tr>
<td><strong>Alphanumeric Data</strong></td>
<td>YES</td>
<td>NO</td>
</tr>
</tbody>
</table>
## 4. Applications' comparison (3/3)

<table>
<thead>
<tr>
<th>Feature</th>
<th>gvSIG Mobile</th>
<th>gvSIG Mini</th>
</tr>
</thead>
<tbody>
<tr>
<td>Remote Search of POIs /Addresses</td>
<td>NO</td>
<td>YES (OSM Name Finder)</td>
</tr>
<tr>
<td>Official Project of gvSIG</td>
<td>YES</td>
<td>NOT YET</td>
</tr>
</tbody>
</table>
Contents

1. Mobile applications in gvSIG Project
2. gvSIG Mobile
3. gvSIG Mini
4. Differences between applications
5. Videos
6. Useful links
5. Videos
6. Useful links

- gvSIG Mobile and Mini tutorial at FOSS4G 2010 BCN
- gvSIG Mobile workshop at FOSS4G 2010 BCN
- Tutorial of gvSIG Mini 1.0 for Android
- Some new gvSIG Mobile and Mini videos
- gvSIG Mobile for Leica Zeno:
  - Open Mobile IS synchronization with PostGIS table & cached WMS tiles
  - Editing a shapefile with GPS
  - ECW image + manual SHP editing
Thank you very much!!!

“Different types of OS GIS mobile applications: gvSIG Mobile & gvSIG Mini”

Amelia del Rey
adelrey@gvsig.com

Javier Carrasco
jcarrasco@prodevelop.es

Alberto Romeu
aromeu@prodevelop.es

Juan Lucas Dominguez
jldominguez@prodevelop.es
You are free:

- to Share — to copy, distribute and transmit the work
- to Remix — to adapt the work

Under the following conditions:

- Attribution — You must attribute the work in the manner specified by the author or licensor (but not in any way that suggests that they endorse you or your use of the work).
- Share Alike — If you alter, transform, or build upon this work, you may distribute the resulting work only under the same, similar or a compatible license.

With the understanding that:

- Waiver — Any of the above conditions can be waived if you get permission from the copyright holder.
- Public Domain — Where the work or any of its elements is in the public domain under applicable law, that status is in no way affected by the license.
- Other Rights — In no way are any of the following rights affected by the license:
  - Your fair dealing or other statutory rights, or other applicable copyright exceptions and limitations;
  - The author’s moral rights;
  - Rights other persons may have either in the work itself or in how the work is used, such as publicity or privacy rights.
- Notice — For any reuse or distribution, you must make clear to others the license terms of this work. The best way to do this is with a link to this web page.

This is a human-readable summary of the Legal Code the full license.