



Piloto gvSIG Mobile

Manual de Instalación. Versión 2





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Documentación instalación gvSIG Mobile

1.1 Introducción

El prototipo **gvSIG Mobile** es un software desarrollado en Java para la visualización y gestión de Información Geográfica en dispositivos móviles (en adelante PDA). Este documento presenta el proceso de instalación de gvSIG Mobile en la PDA, así como el exportador de proyectos, de forma automática, de gvSIG Desktop a gvSIG Mobile.

Para diferenciar el prototipo (gvSIG Mobile) de la aplicación gvSIG, se ha renombrado esta última en todo el documento como gvSIG Desktop.

1.2 Descarga de la aplicación

Para descargar el instalador de gvSIG Mobile hay que acceder a la página de **gvSIG**. <http://www.gvsig.gva.es/index.php>



The screenshot shows the website for gvSIG - Conselleria de Infraestructuras y Transporte. The page features a navigation menu on the left with links such as 'Saludo del conseller', '¿Qué es gvSIG?', 'Conoce el proyecto', 'gvSIG Desktop', 'gvSIG Mobile', 'Descargas', 'Documentación', 'Espacio de comunicación', 'FAQ's - Preguntas más frecuentes', 'Boletín de noticias', 'Enlaces de interés', 'Glosario', and 'gvPONTIS: Proyecto de Migración a Software Abierto'. The main content area includes a 'Destacado' section with a link to 'Píloto gvSIG Mobile' circled in red, and a 'Noticias' section with two news items from 2008. A sidebar on the right contains 'SERVICIOS' (Ponencias, Colaboraciones, Descarga de gvSIG, gvSIG Mobile, Manuales, Notas de versión, Cursos y tutoriales, Hoja de ruta), the European Union logo, and contact information. The footer of the page includes logos for gvPONTIS, Conselleria de Infraestructuras y Transporte, 4th International SIG Days, and OSGeo.

Página web dedicada a gvSIG.

A continuación hay que acceder a la sección de **gvSIG Mobile** y descargar el instalador .cab más conveniente (ver punto siguiente).

The screenshot shows the website interface for gvSIG Mobile. The main content area is titled 'gvSIG Mobile' and contains several sections:

- Información general:** Descripción, Créditos.
- Última versión estable:** Piloto gvSIG Mobile (BN44).
- Todas las versiones:** Notas de versión, **Descarga** (circled in red).
- Piloto gvSIG (BN44):** Notas de versión, Instrucciones de instalación / desinstalación, Requerimientos del sistema, Requisitos previos, **Descarga** (circled in red).
- DESCARGA:** A table with columns for 'Ejecutables' and 'Manual'. Under 'Ejecutables', there is a row for 'gvSIG Mobile BN44' with a link to 'gvSIG_Mobile-BN44-Arm.CAB' (circled in red). Under 'Manual', there are links for 'Manual usuario' (PDF 1.33 MB), 'Manual instal.' (PDF 0.7 MB), and another 'Manual instal.' (PDF 0.7 MB) and a PDF (0.9 MB) (all circled in red).

Descarga de instalador y manuales de aplicación.

Se recomienda también la descarga de los manuales de la aplicación (*Incluyendo el presente manual*), cuyos enlaces de descarga se encuentran en la misma página.

1.2.1 Elección del instalador

En la página de descarga podrá encontrar varios instaladores, de entre los que debe elegir el más apropiado a su dispositivo.

Los instaladores están nombrados de la siguiente forma:

gvSIGMobile-0.2b-build_213-WM2003-Arm-withPhoneMe.CAB donde:

- *0.2a* indica la versión
- *build 213* indica el número de compilación asociado
- *WM2003-Arm* indica el sistema operativo donde se instalará la aplicación
- *withPhoneMe* indica que el instalador incluye la máquina virtual phoneME

gvSIG Mobile funciona con máquinas virtuales Java J2ME CDC Personal Profile. Ha sido probado utilizando IBM WEME (J9) y PhoneME Advanced.

Nota:

PhoneME Advanced está en desarrollo por lo que tiene problemas de estabilidad y su uso no se recomienda en sistemas en producción.

Nota:

IBM WEME (J9) es una máquina virtual propietaria de la empresa IBM, si usted está interesado en utilizarla deberá ponerse en contacto con IBM.

Los instaladores disponibles para la versión 0.2 alpha (piloto 2) son:

- gvSIGMobile-0.2a-build_261-WM2003-Arm-withPhoneMe.CAB
- gvSIGMobile-0.2a-build_261-WM5-Arm-withPhoneMe.CAB
- gvSIGMobile-0.2a-build_261-WMX-forJ9.CAB
- gvSIGMobile-0.2a-build_261.zip

A continuación se explica el contenido de cada uno de ellos, si después de leerlo tiene dudas sobre cual utilizar, por favor instale gvSIGMobile-0.2a-build_261-WM2003-Arm-withPhoneMe.CAB.

1.2.1.1 gvSIGMobile-0.2a-build_261-WM2003-Arm-withPhoneMe.CAB

Instala gvSIG Mobile y la máquina virtual PhoneME Advanced en dispositivos Windows Mobile 2003. Al incluir la máquina virtual, usted no necesita ningún otro software para utilizar gvSIG Mobile.

1.2.1.2 gvSIGMobile-0.2a-build_261-WM5-Arm-withPhoneMe.CAB

Instala gvSIG Mobile y la máquina virtual PhoneME Advanced en dispositivos Windows Mobile 5 y Windows Mobile 6. Al incluir la máquina virtual, usted no necesita ningún otro software para utilizar gvSIG Mobile.

1.2.1.3 gvSIGMobile-0.2a-build_261-WMX-forPhoneMe.CAB

Instala gvSIG Mobile en dispositivos Windows Mobile. Este archivo incluye un ejecutable que busca la máquina virtual PhoneME en la raíz de la PDA y en la raíz de su tarjeta de memoria para facilitar el lanzamiento de la aplicación. Para utilizar este instalador usted debe tener instalada PhoneME Advanced en su dispositivo previamente.

1.2.1.4 gvSIGMobile-0.2a-build_261-WMX-forJ9.CAB

Instala gvSIG Mobile en dispositivos Windows Mobile 5 y Windows Mobile 2003. Este archivo incluye un ejecutable que busca la máquina virtual J9 en la raíz de la PDA y en la raíz de su tarjeta de memoria para facilitar el lanzamiento de la aplicación. Para utilizar este instalador usted debe tener instalada J9 en su dispositivo previamente.

1.2.1.5 gvSIGMobile-0.2a-build_261.zip

Incluye solo los archivos de gvSIG Mobile sin instalador. Esta es la versión para utilizar en otros sistemas operativos o con otras máquinas virtuales. Para iniciar la aplicación deberá ser capaz de llamar a su máquina virtual pasando los parámetros adecuados por lo que se recomienda solo para usuarios avanzados.

1.3 Instalación Rápida de gvSIG Mobile en la PDA

En este apartado se explica como instalar gvSIG Mobile.

gvSIG Mobile requiere una máquina virtual java (en adelante MV) para funcionar. gvSIG Mobile ha sido probado sobre las máquinas virtuales J9 de IBM y PhoneME Advanced de SUN.

Existen tres instaladores distintos:

- gvSIG Mobile con PhoneMe. Incluye gvSIG Mobile y la máquina virtual (MV). Es la opción más fácil y rápida.
- gvSIG Mobile para J9. Versión de gvSIG Mobile para J9 (no incluye MV).
- gvSIG Mobile para PhoneMe. Versión de gvSIG Mobile para phoneME (no incluye MV).

En caso de elegir un instalador sin MV, J9 o phoneME tendrán que ser instaladas por separado.

NOTA:

- Si se instala una MV no correspondiente al instalador de gvSIG Mobile pueden suceder comportamientos no esperados.

1.3.1 Instalación Rápida gvSIG Mobile con Máquina virtual de SUN PhoneMe incluida

Primer Paso: Copiar el instalador en la PDA

Se copia a continuación el instalable recién descargado a la memoria de la

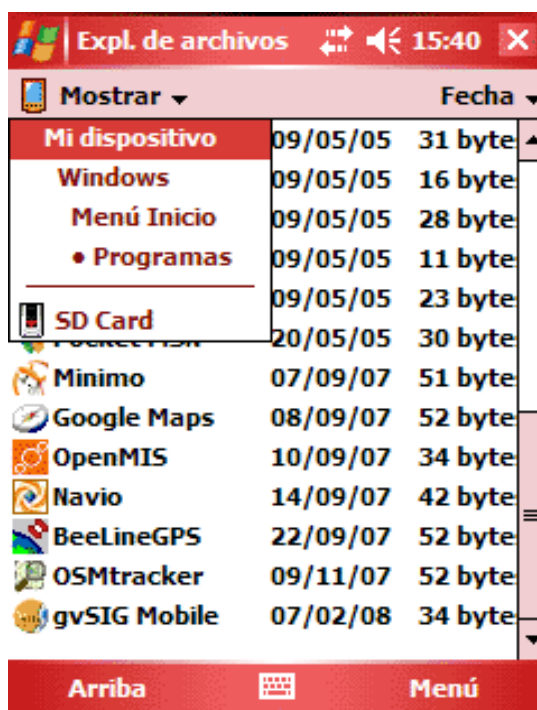
PDA. La forma de transferir los ficheros desde el PC hasta la PDA dependerá del sistema operativo utilizado. En las siguientes figuras se presenta la instalación desde un equipo con *Windows XP con ActiveSync 4.5* y *WM 5*

Segundo Paso: Instalar gvSIG Mobile en la PDA

Para comenzar la instalación, buscar en el Explorador de Ficheros de la PDA, el lugar donde se ha copiado el instalable **gvSIG_Mobile_with_PhoneMe.BNxx.Arm.CAB**, y ejecutarlo.

En caso de tener disponible algún módulo externo de memoria (Tarjeta SD, etc..), la instalación pregunta si se desea instalar la aplicación en el dispositivo principal o en algún dispositivo secundario. Puede seleccionar cualquier opción aunque se recomienda instalar todo en la raíz.

gvSIG Mobile y PhoneME serán instalados en el dispositivo y se creará un nuevo acceso directo con el icono de *gvSIG* en el menú programas.



Acceso directo de gvSIG Mobile en el menú de inicio.

Una vez instalados los ficheros, basta ejecutar **gvSIG Mobile.exe** para arrancar la aplicación.



Inicio de gvSIG Mobile.

En el caso de que suceda algún problema en el proceso de ejecución de gvSIG Mobile, hay un archivo *log* que registra el proceso de lanzamiento y te muestra los posibles errores. Este archivo se encuentra en la carpeta de instalación y tiene el nombre de **gvsig_mobile_launch.log**. Por favor envíelo a la lista de usuarios de gvSIG.

La máquina virtual J9



Actualmente, gvSIG Mobile funciona correctamente con la **máquina virtual J9** desarrollada por IBM. En la versión anterior del piloto que funcionaba en exclusiva con esta máquina virtual era posible descargarla desde la web de IBM. Lamentablemente, ya no está disponible el enlace de descarga, aunque se mantiene la compatibilidad con la JVM de IBM, no es posible mostrar en este manual un proceso de instalación a seguir. Si se dispone de esta JVM ya

instalada, no necesita descargar otra, o por el contrario piensa obtener esta JVM, gvSIG Mobile es compatible.

Una vez instalada JVM IBM J9 en el dispositivo, realizamos los siguientes pasos para instalar la versión de gvSIG Mobile compatible con J9.

Descargar de la página web de gvSIG, si no se hizo ya en el paso anterior, el instalable de gvSIG compatible con IBM J9

- *gvSIG_Mobile_to_J9.BNxx.Arm.CAB* **Descargar para un correcto funcionamiento en J9**

Para concluir la instalación de gvSIG Mobile, seguir los pasos **Segundo** y **Tercero** del apartado anterior.

1.4 La máquina virtual PhoneMe



Actualmente el proyecto **PhoneMe Advanced** es la nueva JVM de **Sun** en desarrollo para dispositivos móviles. Se encargan de su desarrollo *Hinkmond Wong* y *Davy Preuveneers*. En el caso de gvSIG Mobile se ha trabajado en contacto más cercano con *Davy Preuveneers* que está activamente relacionado con el desarrollo de la JVM CDC con Personal Profile.

A diferencia de **J9**, la JVM de **IBM**, **PhoneMe** tiene licencia GPL y es de libre distribución. Esta JVM de reciente creación, es posible instalarla por separado de *gvSIG Mobile*, aunque también se distribuye un instalador de *gvSIG Mobile* con la máquina virtual **PhoneMe** incluida.

La opción de instalación por separado, permite actualizar la JVM a medida que se saquen nuevas versiones de ellas, sin necesidad de desinstalar *gvSIG Mobile*.

Por otro lado, la opción de instalación de *gvSIG Mobile* con la máquina virtual **PhoneMe** incluida, asegura la instalación de la versión de la JVM con el funcionamiento probado por los desarrolladores con la aplicación.

La aplicación *gvSIG Mobile* utiliza *PhoneMe CDC con Personal Profile*, esta JVM es posible utilizarla en PDA's y SmartPhones con Sistema Operativo (en adelante SO) *Windows Mobile*.

NOTA:

- La compatibilidad de *gvSIG Mobile* con las distintas versiones de *Windows Mobile* (en adelante *WM*) empieza a partir de *WM 5*.
- Para versiones de *WM 6* o superior el correcto funcionamiento depende en gran medida del desarrollo de la JVM para el SO.
- Las versiones del SO *WM CE* y *WM 2003* ya más antiguas y limitadas, tienen algunas capacidades del programa no disponibles o puede que no presenten 100% de comportamiento correcto, no se asegura, por tanto, la compatibilidad para estos SO.
- Se irá añadiendo compatibilidad con otros SO, como por ejemplo *Adroid* de **Google**, y versiones más limitadas para *CLDC* en dispositivos móviles comunes.

Instalación de la máquina virtual PhoneMe

Si se toma la decisión de instalar la JVM de **PhoneMe** por separado de la aplicación *gvSIG Mobile*, a continuación se detalla los pasos para descargar e instalar en el dispositivo.

Primer Paso: Descargar la JVM

PhoneMe dispone de una página para descargar los instalables ficheros **CAB** para *Windows Mobile*, da soporte para varias versiones de este SO. Hay que seleccionar la adecuada al SO del dispositivo al que se va a instalar la aplicación. Para *gvSIG Mobile* son válidas las JVM a partir de la preparada para *WM2003*

Además también se diferencia entre varias JVM, en función del dispositivo y la capacidad de la JVM. Para poder ejecutar *gvSIG Mobile* es necesaria la JVM *PhoneMe para CDC con Personal Profile*, una de las más completas para dispositivos móviles.

Seleccionar la JVM correcta y descargarla.

Acceder para ello a la página de Davy:

<http://www.cs.kuleuven.be/~davy/phoneme/downloads.htm>

Se verá de forma similar a la pantalla que se muestra a continuación.

phoneME for Windows CE, PocketPC and Windows Mobile

The open source Java ME application platform for your windows mobile phone

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For those of you who do not feel like compiling the software yourself, I have provided development builds of the different profiles for Windows Mobile and Windows CE. Note that a typical Windows CE image is customized by the hardware manufactures to only include the software components they need. It is possible that the builds below do not work if the DLL requirements cannot be fulfilled. These builds typically need at least `AYGSHHELL.DLL` and `EX.DLL`.

Other issues are described at the following wiki page: <http://wiki.java.net/bin/view/Mobileandembedded/PhoneMEAdvancedWindowsMobile>

Windows Mobile 6 and higher

For now, use the Windows Mobile 5 builds.

Windows Mobile 5

- phoneME Feature - CLDC rev14328 (zip) (cab)
- phoneME Feature - MIDP rev14328 (zip) (cab)
- phoneME Advanced - CDC b91 (zip) (cab)
- phoneME Advanced - Foundation b91 (zip) (cab)
- phoneME Advanced - Personal Profile b91 (zip) (cab) ← **Download!!!**
- phoneME Advanced Dual Stack - Foundation b91 (with MIDP support) (zip) (cab)

Note that for the pMEA PP build, the AWT will not work reliably whenever one of the unimplemented stubs is used.

Windows Mobile 2003

Página de descarga de PhoneMe.

Segundo Paso: Sincronizar con el Dispositivo PDA

Se copia a continuación el instalable recién descargado a la memoria de la PDA. La forma de transferir los ficheros desde el PC hasta la PDA dependerá del sistema operativo utilizado. En las figuras que se presentan la instalación se realiza desde un equipo con *Windows XP con ActiveSync 4.5* y *WM 5*

Tercer Paso: Instalar la JVM en la PDA

Para comenzar la instalación, buscar en el Explorador de Ficheros de la PDA, el lugar donde se ha copiado el instalable **CAB**, y ejecutarlo.

En caso de tener disponible dispositivo externo de memoria (Tarjeta SD, etc.), la instalación pregunta si se desea instalar en el dispositivo principal o en el secundario, para ahorrar la memoria principal del dispositivo. Automáticamente se instala en el dispositivo, crea una nueva carpeta *phoneme* y ya permite el uso de la máquina virtual.

Una vez instalada JVM SUN PhonMe en el dispositivo, realizamos los siguientes pasos para instalar la versión de gvSIG Mobile compatible con PhoneMe.

Descargar de la página web de gvSIG, si no se hizo ya en el paso anterior, el instalable de gvSIG compatible con SUN PhoneMe

- *gvSIG_Mobile_to_PhoneMe.BNxx.Arm.CAB* **Descargar para un correcto funcionamiento en PhoneMe**

Para concluir la instalación de gvSIG Mobile, seguir los pasos **Segundo** y **Tercero** del apartado **Instalación Rápida de gvSIG Mobile**.

1.5 Instalación de la extensión de exportación en gvSIG desktop

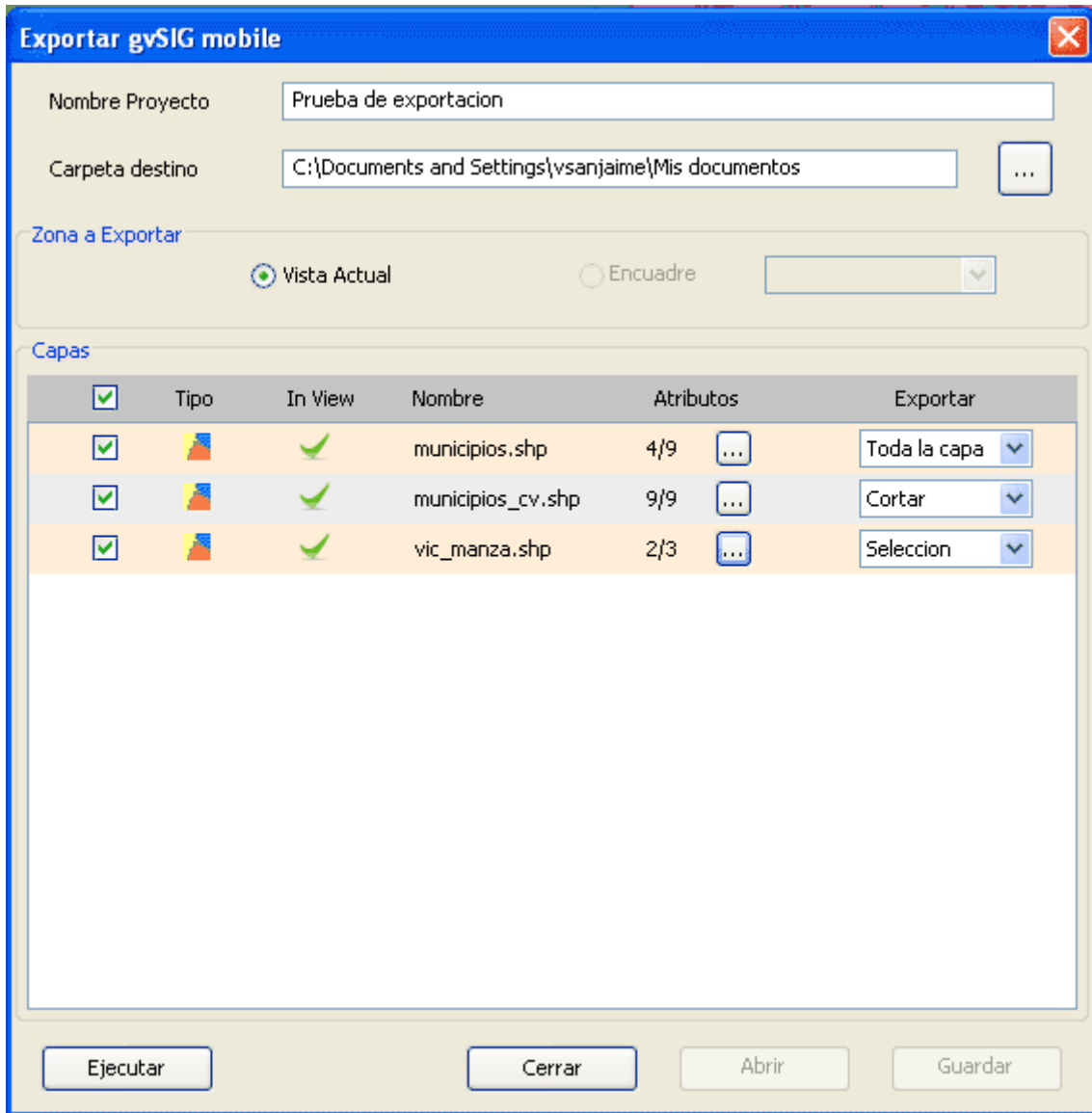
El prototipo se completa con una extensión para gvSIG Desktop que permite a partir de una vista con diferentes capas tanto vectoriales como raster, generar una carpeta de exportación con la información geográfica seleccionada, así como el fichero de proyecto de gvSIG Mobile, listo para ser enviado a la PDA.



Instalador de la extensión.

El proceso de instalación de esta extensión es similar al de cualquier otra extensión de gvSIG Desktop. Es decir, mediante un sencillo instalador multiplataforma se coloca la extensión sobre una instalación previa de gvSIG Desktop.

La extensión es compatible con gvSIG Desktop **1.1** y siguientes.



Ventana principal del exportador.



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```
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