



GENERALITAT VALENCIANA
CONSELLERIA D'INFRAESTRUCTURES I TRANSPORT

proDEVELOP
Integración de tecnologías

gvSIG 1.0.2

Extensión geoBD (BN 21)

Manual de usuario Versión 1





Realizado Por

Prodevelop Integración de tecnologías SL

C/ Conde Salvatierra de Álava, 34-10, 46004,

Valencia, España

Telf: 963 510 612 - Fax: 963 510 968

E-Mail gis@prodevelop.es

web <http://www.prodevelop.es>

Para

**Conselleria de Infraestructuras y
Transporte**

C/ Blasco Ibáñez Nº 50 , 46010

VALENCIA

E-Mail gvsig@gva.es

Web del proyecto: <http://www.gvsig.gva.es>

Todos los nombres propios de programas, sistemas operativos, equipo hardware etc..., que aparecen en este manual son marcas registradas de sus respectivas compañías u organizaciones.

© 2007 Consellería de Infraestructuras y Transporte
Este manual se distribuye con la licencia GNU GPL2.



Índice de contenido

1 Manual de usuario de la extensión geoBD.....	4
1.1 Introducción.....	4
1.2 Requisitos de funcionamiento.....	4
1.3 El gestor de conexiones de bases de datos espaciales.....	4
1.4 Añadir una capa geoBD a la vista.....	6
1.5 Volcar una capa de gvSIG a una base de datos espacial.....	8
2 Manual de usuario del driver Oracle Spatial.....	10
2.1 Metadatos.....	10
2.2 Tipos de datos.....	10
2.3 Sistemas de Coordenadas en Oracle.....	10
2.4 Notas sobre la lectura de geometrías.....	11
2.5 Volcado de una capa de gvSIG a Oracle.....	11
GNU GENERAL PUBLIC LICENSE.....	13



1 Manual de usuario de la extensión geoBD

1.1 Introducción

Esta extensión permite al usuario acceder a bases de datos geográficas de forma sencilla y unificada para distintos proveedores. En la actualidad gvSIG soporta los siguientes sistemas gestores de bases de datos:

- PostGIS
- MySQL
- HSQLDB
- Oracle Spatial (SDO Geometry)

gvSIG almacenará las diferentes conexiones que vayamos realizando en diferentes sesiones. De esta forma no debemos volver a introducir los parámetros de cada servidor al que nos conectemos. De igual modo, si abrimos un fichero de proyecto que tiene alguna conexión a bases de datos únicamente se nos pedirá la contraseña del usuario.

La extensión dispone de dos interfaces de usuario, una para gestionar los orígenes de datos y otra para añadir las capas a nuestra vista.

1.2 Requisitos de funcionamiento

Para el correcto funcionamiento de la extensión geoBD debe disponer del archivo **ojdbc14.jar** disponible desde el siguiente enlace:

http://www.oracle.com/technology/software/htdocs/distlic.html?url=http://www.oracle.com/technology/software/tech/java/sqlj_jdbc/htdocs/jdbc_10201.html

Para descargárselo acepte los términos de la licencia y a continuación en la página que se le muestra seleccione el archivo ***ojdbc14.jar***.

A continuación debe guardar este archivo en la carpeta GVSIG_HOME/bin/gvSIG/extensiones/com.iver.cit.gvsig/lib, donde GVSIG_HOME será el directorio donde tenga instalado gvSIG (por defecto en Windows estará en: "C:\archivos de programa\gvSIG_1.x.x, y en Linux estará en /home/{usuario}/gvSIG_1.x.x").

1.3 El gestor de conexiones de bases de datos espaciales

Elija el menú *Ver - Gestor de conexiones a BD espaciales* (fig. 1) para abrir el diálogo que

le permitirá añadir, quitar, conectar y desconectar las conexiones a los diferentes tipos de bases de datos con información geográfica. Si ya ha usado este gestor en alguna sesión anterior de gvSIG, aparecerán las conexiones que hubieran quedado (fig. 2). En caso contrario, aparecerá vacío.

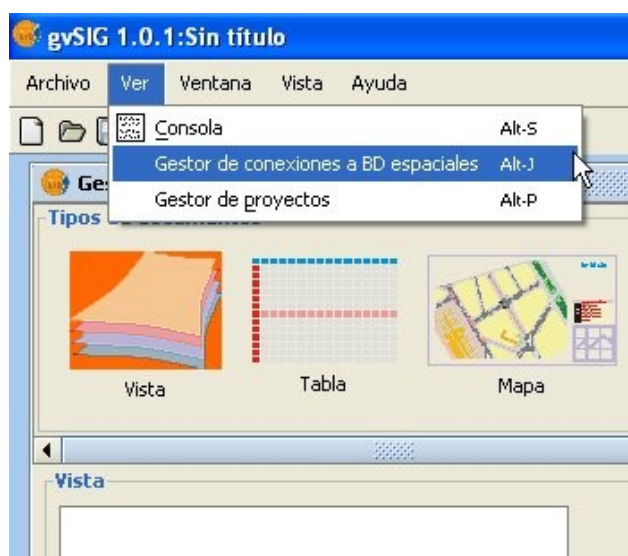


Figura 1. Acceso al gestor de orígenes geoBD

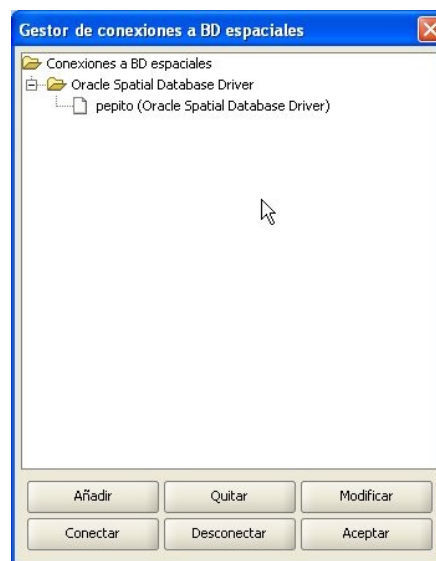


Figura 2. El gestor de orígenes

Pulse *Añadir* para introducir los parámetros de una nueva conexión (fig. 3). Puede opcionalmente abrir la conexión en ese momento o dejarla desconectada. Las conexiones abiertas aparecen con la cadena "[C]" delante de su nombre (fig. 4). Si quiere abrir una conexión, debe seleccionarla y pulsar *Conectar*. Se le pedirá la contraseña (fig 5) y la conexión pasará a estar abierta, es decir, conectada.



Figura 3. Añadir una nueva conexión

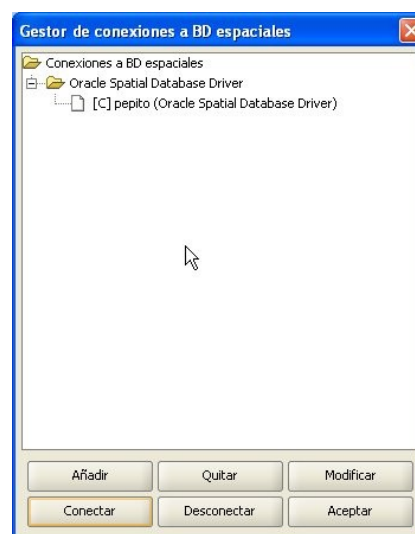


Figura 4. Se ha establecido la conexión



Figura 5. Solicitud de contraseña

1.4 Añadir una capa geoBD a la vista

En el *Gestor de Proyectos*, cree una nueva vista y ábrala con los botones *Nuevo* y *Abrir*. Utilice el icono *Añadir capa* para añadir una capa a la vista. Vaya a la pestaña *GeoBD* del diálogo para añadir una nueva capa de este tipo (fig 6).

Debe elegir una conexión (si elige una desconectada se le pedirá la contraseña en ese momento), elegir una o varias tablas, los atributos que desea descargar de cada capa y, opcionalmente, establecer una restricción alfanumérica y una zona de interés. Puede dar un nombre a cada capa distinto al de la tabla. Pulse *Aceptar* para visualizar las geometrías de la tabla en la vista.

Esta ventana también ofrece la posibilidad de definir una nueva conexión si la base de datos no se ha dado de alta en el catálogo de orígenes de datos.

La restricción alfanumérica deberá introducirse mediante una expresión SQL válida que se adjuntará como una cláusula WHERE a cada llamada a la base de datos.

Durante la carga de la tabla, dado que este proceso puede tardar unos segundos, aparecerá un pequeño icono junto al nombre de la tabla que indica que este proceso está en marcha. En el momento en que termine dicha inicialización, desaparecerá el pequeño icono azul y se refrescará automáticamente la vista de gvSIG para empezar a visualizar las geometrías.

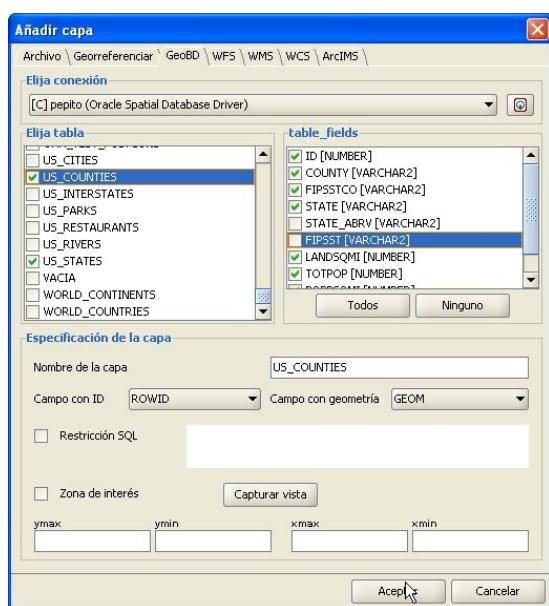


Figura 6. Añadir capa geoBD

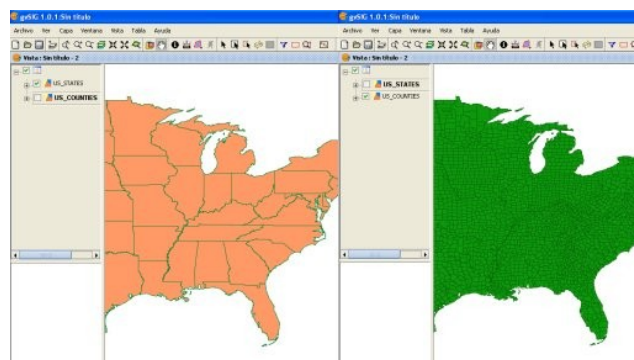


Figura 7. Vistas con geometrías de una base de datos geográfica

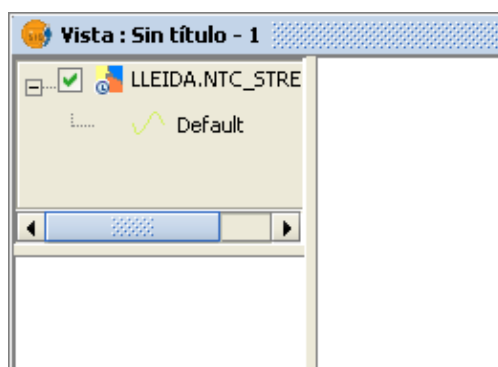


Figura 8. Mini-ícono de carga de capas

1.5 Volcar una capa de gvSIG a una base de datos espacial

Esta funcionalidad permite crear tablas nuevas en la base de datos espacial a partir de cualquier origen vectorial de gvSIG. Los pasos son los siguientes:

1. Cree una capa vectorial de cualquier tipo. Por ejemplo, abriendo un archivo SHP usando de nuevo el botón *Añadir capa* (fig. 9).
2. Seleccione la capa pulsando sobre su nombre en la parte izquierda de la pantalla (fig. 10).
3. En el menú *Capa - Exportar a...*, elija el tipo de base de datos a la que desea volcar la capa, en el ejemplo a una base de datos *Oracle* (fig. (11)).
4. A continuación se le preguntará, sucesivamente, el nombre de la tabla que se creará en la base de datos (Oracle) y si quiere incluir en la vista actual la capa recién creada.

Si todo ha ido bien, en la vista aparecerá la nueva capa vectorial geoBD, con la que podrá trabajar normalmente.

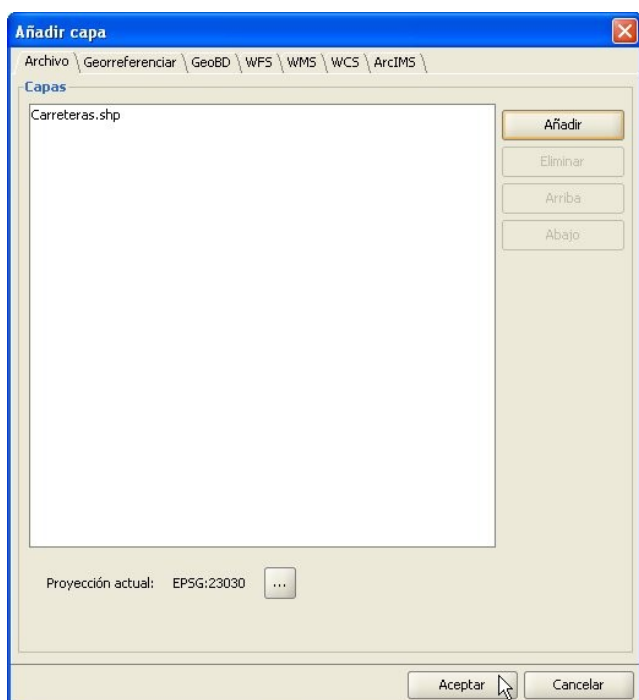


Figura 9. Añadir una capa vectorial

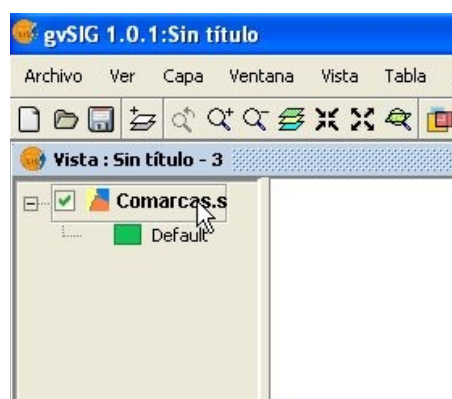


Figura 10. Selección de la capa a exportar



Figura 11. Exportar a Oracle Spatial

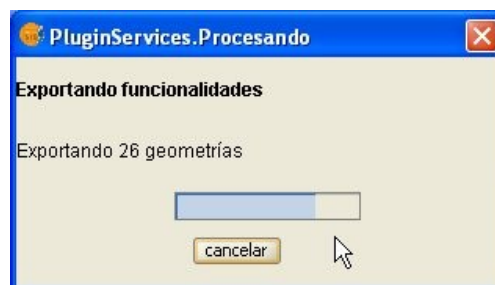


Figura 12. Barra de progreso de la exportación



2 Manual de usuario del driver Oracle Spatial

Estas notas completan el Manual de Usuario de la extensión geoBD en lo referente al driver para **Oracle Spatial**.

Este driver permite acceder a cualquier tabla tanto de una instalación de Oracle Spatial como Oracle Locator (ambas a partir de la versión 9i) que tenga una columna con geometrías almacenadas del tipo SDO GEOMETRY.

2.1 Metadatos

El driver sólo lista las tablas que tengan sus metadatos geográficos en la vista USER_SDO_GEOM_METADATA.

Dado que se dispone de los metadatos de cada tabla, el interfaz hace uso de ellos y ofrece de forma automática la(s) columna(s) de geometrías. De igual modo, como identificador de fila utiliza el ROWID que es un descriptor único para cada fila que usa internamente Oracle y que asegura una identificación correcta.

2.2 Tipos de datos

Se soportan datos en 2 y 3 dimensiones de los siguientes tipos:

- Punto y multipunto
- Línea y multilínea
- Polígono y multipolígono
- Colección

Por el momento no se soportan capas con formato LRS (Linear Referencing System).

2.3 Sistemas de Coordenadas en Oracle

Oracle dispone de un sistema propio de catalogación de sistemas de coordenadas y de referencia. La Universidad Politécnica de Madrid, a través de Migue Ángel Manso, ha proporcionado una relación de equivalencias entre el sistema de Oracle y el sistema EPSG que se incluye en el driver como un fichero DBF.

Las transformaciones entre sistemas de coordenadas son llevadas a cabo por gvSIG ya que se ha comprobado un mayor rendimiento en este proceso.

2.4 Notas sobre la lectura de geometrías

El driver ejecuta constantemente consultas geométricas (es decir, calcula en cada momento qué geometrías intersectan con la vista de gvSIG actual) para lo cual es imprescindible que exista en la base de datos un índice espacial asociado a la columna en cuestión. Si no existe tal índice, se muestra una ventana de error (fig. 1) y no se permite añadir dicha tabla o vista a la vista de gvSIG.

Por otro lado, el driver necesita establecer un identificador único para los registros de la tabla o vista, lo cual no es posible para cierto tipo de vistas. En case de existir este problema, el driver lo detectará y se mostrará también un mensaje de error (fig. 2) siendo imposible cargar dicha vista de la base de datos en gvSIG.

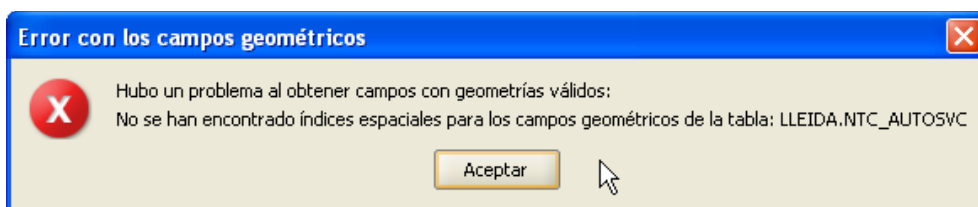


Figura 1. Aviso de falta de índice espacial

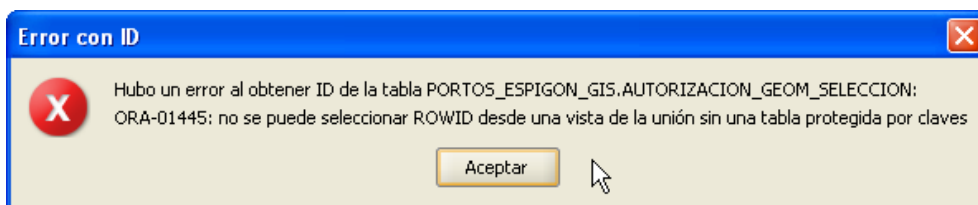


Figura 2. Aviso de imposibilidad de obtener un ROWID

2.5 Volcado de una capa de gvSIG a Oracle

Si desea exportar una capa a una base de datos Oracle, al final del proceso descrito en el manual se le preguntará también si quiere incluir en la tabla el sistema de coordenadas actual de la vista. Esto puede ser interesante en aquellos casos en que no deseemos que nuestra tabla disponga de esta información por compatibilidad con otras aplicaciones o sistemas de información.

Para operar con dos geometrías de Oracle (lo más habitual es la intersección), es necesario que las dos geometrías tengan el mismo sistema de coordenadas. Cada geometría tiene un campo SRID que puede ser NULL.



Por ejemplo, si se tiene una tabla con geometrías en EPSG:4326 (código Oracle 8307) y otra con geometrías en EPSG:4230 (código Oracle 8223), no será posible ejecutar instrucciones SQL para realizar cálculos directamente entre las geometrías de una y otra tabla. Sin embargo, si las geometrías de dichas tablas no tienen sistema de coordenadas (es decir, SRID es NULL) entonces se podrán realizar operaciones entre las geometrías de dichas tablas, aceptando el error que supone realizar intersecciones entre sistemas de coordenadas diferentes, claro está.

Si se lee una tabla cuyas geometrías tienen NULL como sistema de coordenadas, se entiende que es el usuario quien controla que dichas geometrías tienen sentido en la vista actual, puesto que no es posible realizar ninguna reproyección (esto puede cambiar con la nueva extensión de gvSIG para uso avanzado de sistemas de coordenadas.)

En pocas palabras: el no almacenar el sistema de coordenadas permite hacer un uso menos riguroso de las geometrías.



GNU GENERAL PUBLIC LICENSE

GNU GENERAL PUBLIC LICENSE
Version 2, June 1991

Copyright (C) 1989, 1991 Free Software Foundation, Inc.,
51 Franklin Street, Fifth Floor, Boston, MA 02110-1301 USA
Everyone is permitted to copy and distribute verbatim copies
of this license document, but changing it is not allowed.

Preamble

The licenses for most software are designed to take away your freedom to share and change it. By contrast, the GNU General Public License is intended to guarantee your freedom to share and change free software--to make sure the software is free for all its users. This General Public License applies to most of the Free Software Foundation's software and to any other program whose authors commit to using it. (Some other Free Software Foundation software is covered by the GNU Lesser General Public License instead.) You can apply it to your programs, too.

When we speak of free software, we are referring to freedom, not price. Our General Public Licenses are designed to make sure that you have the freedom to distribute copies of free software (and charge for this service if you wish), that you receive source code or can get it if you want it, that you can change the software or use pieces of it in new free programs; and that you know you can do these things.

To protect your rights, we need to make restrictions that forbid anyone to deny you these rights or to ask you to surrender the rights. These restrictions translate to certain responsibilities for you if you distribute copies of the software, or if you modify it.

For example, if you distribute copies of such a program, whether gratis or for a fee, you must give the recipients all the rights that you have. You must make sure that they, too, receive or can get the source code. And you must show them these terms so they know their rights.

We protect your rights with two steps: (1) copyright the software, and (2) offer you this license which gives you legal permission to copy, distribute and/or modify the software.

Also, for each author's protection and ours, we want to make certain that everyone understands that there is no warranty for this free software. If the software is modified by someone else and passed on, we want its recipients to know that what they have is not the original, so



that any problems introduced by others will not reflect on the original authors' reputations.

Finally, any free program is threatened constantly by software patents. We wish to avoid the danger that redistributors of a free program will individually obtain patent licenses, in effect making the program proprietary. To prevent this, we have made it clear that any patent must be licensed for everyone's free use or not licensed at all.

The precise terms and conditions for copying, distribution and modification follow.

GNU GENERAL PUBLIC LICENSE TERMS AND CONDITIONS FOR COPYING, DISTRIBUTION AND MODIFICATION

0. This License applies to any program or other work which contains a notice placed by the copyright holder saying it may be distributed under the terms of this General Public License. The "Program", below, refers to any such program or work, and a "work based on the Program" means either the Program or any derivative work under copyright law: that is to say, a work containing the Program or a portion of it, either verbatim or with modifications and/or translated into another language. (Hereinafter, translation is included without limitation in the term "modification".) Each licensee is addressed as "you".

Activities other than copying, distribution and modification are not covered by this License; they are outside its scope. The act of running the Program is not restricted, and the output from the Program is covered only if its contents constitute a work based on the Program (independent of having been made by running the Program). Whether that is true depends on what the Program does.

1. You may copy and distribute verbatim copies of the Program's source code as you receive it, in any medium, provided that you conspicuously and appropriately publish on each copy an appropriate copyright notice and disclaimer of warranty; keep intact all the notices that refer to this License and to the absence of any warranty; and give any other recipients of the Program a copy of this License along with the Program.

You may charge a fee for the physical act of transferring a copy, and you may at your option offer warranty protection in exchange for a fee.

2. You may modify your copy or copies of the Program or any portion of it, thus forming a work based on the Program, and copy and distribute such modifications or work under the terms of Section 1 above, provided that you also meet all of these conditions:

a) You must cause the modified files to carry prominent notices stating that you changed the files and the date of any change.

b) You must cause any work that you distribute or publish, that in whole or in part contains or is derived from the Program or any



part thereof, to be licensed as a whole at no charge to all third parties under the terms of this License.

c) If the modified program normally reads commands interactively when run, you must cause it, when started running for such interactive use in the most ordinary way, to print or display an announcement including an appropriate copyright notice and a notice that there is no warranty (or else, saying that you provide a warranty) and that users may redistribute the program under these conditions, and telling the user how to view a copy of this License. (Exception: if the Program itself is interactive but does not normally print such an announcement, your work based on the Program is not required to print an announcement.)

These requirements apply to the modified work as a whole. If identifiable sections of that work are not derived from the Program, and can be reasonably considered independent and separate works in themselves, then this License, and its terms, do not apply to those sections when you distribute them as separate works. But when you distribute the same sections as part of a whole which is a work based on the Program, the distribution of the whole must be on the terms of this License, whose permissions for other licensees extend to the entire whole, and thus to each and every part regardless of who wrote it.

Thus, it is not the intent of this section to claim rights or contest your rights to work written entirely by you; rather, the intent is to exercise the right to control the distribution of derivative or collective works based on the Program.

In addition, mere aggregation of another work not based on the Program with the Program (or with a work based on the Program) on a volume of a storage or distribution medium does not bring the other work under the scope of this License.

3. You may copy and distribute the Program (or a work based on it, under Section 2) in object code or executable form under the terms of Sections 1 and 2 above provided that you also do one of the following:

- a) Accompany it with the complete corresponding machine-readable source code, which must be distributed under the terms of Sections 1 and 2 above on a medium customarily used for software interchange; or,
- b) Accompany it with a written offer, valid for at least three years, to give any third party, for a charge no more than your cost of physically performing source distribution, a complete machine-readable copy of the corresponding source code, to be distributed under the terms of Sections 1 and 2 above on a medium customarily used for software interchange; or,
- c) Accompany it with the information you received as to the offer to distribute corresponding source code. (This alternative is allowed only for noncommercial distribution and only if you received the program in object code or executable form with such an offer, in accord with Subsection b above.)



The source code for a work means the preferred form of the work for making modifications to it. For an executable work, complete source code means all the source code for all modules it contains, plus any associated interface definition files, plus the scripts used to control compilation and installation of the executable. However, as a special exception, the source code distributed need not include anything that is normally distributed (in either source or binary form) with the major components (compiler, kernel, and so on) of the operating system on which the executable runs, unless that component itself accompanies the executable.

If distribution of executable or object code is made by offering access to copy from a designated place, then offering equivalent access to copy the source code from the same place counts as distribution of the source code, even though third parties are not compelled to copy the source along with the object code.

4. You may not copy, modify, sublicense, or distribute the Program except as expressly provided under this License. Any attempt otherwise to copy, modify, sublicense or distribute the Program is void, and will automatically terminate your rights under this License. However, parties who have received copies, or rights, from you under this License will not have their licenses terminated so long as such parties remain in full compliance.

5. You are not required to accept this License, since you have not signed it. However, nothing else grants you permission to modify or distribute the Program or its derivative works. These actions are prohibited by law if you do not accept this License. Therefore, by modifying or distributing the Program (or any work based on the Program), you indicate your acceptance of this License to do so, and all its terms and conditions for copying, distributing or modifying the Program or works based on it.

6. Each time you redistribute the Program (or any work based on the Program), the recipient automatically receives a license from the original licensor to copy, distribute or modify the Program subject to these terms and conditions. You may not impose any further restrictions on the recipients' exercise of the rights granted herein. You are not responsible for enforcing compliance by third parties to this License.

7. If, as a consequence of a court judgment or allegation of patent infringement or for any other reason (not limited to patent issues), conditions are imposed on you (whether by court order, agreement or otherwise) that contradict the conditions of this License, they do not excuse you from the conditions of this License. If you cannot distribute so as to satisfy simultaneously your obligations under this License and any other pertinent obligations, then as a consequence you may not distribute the Program at all. For example, if a patent license would not permit royalty-free redistribution of the Program by all those who receive copies directly or indirectly through you, then



gvSIG – Manual de usuario de la extensión geoBD

the only way you could satisfy both it and this License would be to refrain entirely from distribution of the Program.

If any portion of this section is held invalid or unenforceable under any particular circumstance, the balance of the section is intended to apply and the section as a whole is intended to apply in other circumstances.

It is not the purpose of this section to induce you to infringe any patents or other property right claims or to contest validity of any such claims; this section has the sole purpose of protecting the integrity of the free software distribution system, which is implemented by public license practices. Many people have made generous contributions to the wide range of software distributed through that system in reliance on consistent application of that system; it is up to the author/donor to decide if he or she is willing to distribute software through any other system and a licensee cannot impose that choice.

This section is intended to make thoroughly clear what is believed to be a consequence of the rest of this License.

8. If the distribution and/or use of the Program is restricted in certain countries either by patents or by copyrighted interfaces, the original copyright holder who places the Program under this License may add an explicit geographical distribution limitation excluding those countries, so that distribution is permitted only in or among countries not thus excluded. In such case, this License incorporates the limitation as if written in the body of this License.

9. The Free Software Foundation may publish revised and/or new versions of the General Public License from time to time. Such new versions will be similar in spirit to the present version, but may differ in detail to address new problems or concerns.

Each version is given a distinguishing version number. If the Program specifies a version number of this License which applies to it and "any later version", you have the option of following the terms and conditions either of that version or of any later version published by the Free Software Foundation. If the Program does not specify a version number of this License, you may choose any version ever published by the Free Software Foundation.

10. If you wish to incorporate parts of the Program into other free programs whose distribution conditions are different, write to the author to ask for permission. For software which is copyrighted by the Free Software Foundation, write to the Free Software Foundation; we sometimes make exceptions for this. Our decision will be guided by the two goals of preserving the free status of all derivatives of our free software and of promoting the sharing and reuse of software generally.

NO WARRANTY

11. BECAUSE THE PROGRAM IS LICENSED FREE OF CHARGE, THERE IS NO WARRANTY



FOR THE PROGRAM, TO THE EXTENT PERMITTED BY APPLICABLE LAW. EXCEPT WHEN OTHERWISE STATED IN WRITING THE COPYRIGHT HOLDERS AND/OR OTHER PARTIES PROVIDE THE PROGRAM "AS IS" WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESSED OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. THE ENTIRE RISK AS TO THE QUALITY AND PERFORMANCE OF THE PROGRAM IS WITH YOU. SHOULD THE PROGRAM PROVE DEFECTIVE, YOU ASSUME THE COST OF ALL NECESSARY SERVICING, REPAIR OR CORRECTION.

12. IN NO EVENT UNLESS REQUIRED BY APPLICABLE LAW OR AGREED TO IN WRITING WILL ANY COPYRIGHT HOLDER, OR ANY OTHER PARTY WHO MAY MODIFY AND/OR REDISTRIBUTE THE PROGRAM AS PERMITTED ABOVE, BE LIABLE TO YOU FOR DAMAGES, INCLUDING ANY GENERAL, SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES ARISING OUT OF THE USE OR INABILITY TO USE THE PROGRAM (INCLUDING BUT NOT LIMITED TO LOSS OF DATA OR DATA BEING RENDERED INACCURATE OR LOSSES SUSTAINED BY YOU OR THIRD PARTIES OR A FAILURE OF THE PROGRAM TO OPERATE WITH ANY OTHER PROGRAMS), EVEN IF SUCH HOLDER OR OTHER PARTY HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

END OF TERMS AND CONDITIONS

How to Apply These Terms to Your New Programs

If you develop a new program, and you want it to be of the greatest possible use to the public, the best way to achieve this is to make it free software which everyone can redistribute and change under these terms.

To do so, attach the following notices to the program. It is safest to attach them to the start of each source file to most effectively convey the exclusion of warranty; and each file should have at least the "copyright" line and a pointer to where the full notice is found.

```
<one line to give the program's name and a brief idea of what it does.>  
Copyright (C) <year> <name of author>
```

```
This program is free software; you can redistribute it and/or modify  
it under the terms of the GNU General Public License as published by  
the Free Software Foundation; either version 2 of the License, or  
(at your option) any later version.
```

```
This program is distributed in the hope that it will be useful,  
but WITHOUT ANY WARRANTY; without even the implied warranty of  
MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the  
GNU General Public License for more details.
```

```
You should have received a copy of the GNU General Public License along  
with this program; if not, write to the Free Software Foundation, Inc.,  
51 Franklin Street, Fifth Floor, Boston, MA 02110-1301 USA.
```

Also add information on how to contact you by electronic and paper mail.

If the program is interactive, make it output a short notice like this when it starts in an interactive mode:



gvSIG – Manual de usuario de la extensión geoBD

Gnomovision version 69, Copyright (C) year name of author
Gnomovision comes with ABSOLUTELY NO WARRANTY; for details type `show w'.
This is free software, and you are welcome to redistribute it
under certain conditions; type `show c' for details.

The hypothetical commands `show w' and `show c' should show the appropriate parts of the General Public License. Of course, the commands you use may be called something other than `show w' and `show c'; they could even be mouse-clicks or menu items--whatever suits your program.

You should also get your employer (if you work as a programmer) or your school, if any, to sign a "copyright disclaimer" for the program, if necessary. Here is a sample; alter the names:

```
Yoyodyne, Inc., hereby disclaims all copyright interest in the program
`Gnomovision' (which makes passes at compilers) written by James Hacker.
```

```
<signature of Ty Coon>, 1 April 1989
Ty Coon, President of Vice
```

This General Public License does not permit incorporating your program into proprietary programs. If your program is a subroutine library, you may consider it more useful to permit linking proprietary applications with the library. If this is what you want to do, use the GNU Lesser General Public License instead of this License.