

# *Serviços de Dados Geográficos*

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## Panorama sobre o Software Aberto para SIG



**open source**

# Panorama sobre o Software Aberto para SIG

- Na área dos **SIG** existem inúmeros projectos de *Software Free/Open Source*.
- Sourceforge: mais de 900 projectos.

The screenshot shows the SourceForge search results page for "GIS". The search bar at the top contains "GIS". On the left, there is a sidebar with filters for "Clear All Filters", "OS" (Windows 902, Linux 680, Grouping and Descriptive Categories 663), "Category" (listing various software types like Scientific/Engineering, Multimedia, Internet, etc.), "License" (OSI-Approved Open Source 795, Other License 18, Public Domain 14, Creative Commons Attribution License 4), "Translations" (English 379, French 68, German 65, Spanish 55), and "Programming Language" (Java 324, C++ 165). The main content area displays "902 programs for 'GIS'" with a "Widen Your Search" link. It features several project cards:

- FlokaL**: A no-code / low-code SaaS to define and automate business processes and workflows between people, involving electronic forms. It enhances the collaboration between people who perform different tasks in an organization or team. You have in just one place every form, document or file, search through them, manage pending tasks, define alerts, and integrate... [Expand](#) • [Free Trial](#)
- Nectar**: Maintain culture, boost morale and promote core values without the hassle of managing your own internal program. 360 recognition & rewards program to maintain culture in the modern workforce. Nectar is the most flexible and cost-effective way for modern workforces to foster appreciation and connection across all teams, anywhere. [Learn More](#)
- GeoServer**: An open source software server written in Java that allows users to share and edit geospatial data. Designed for Interoperability, it publishes data from any major spatial data source using open standards: WMS, WFS, WCS, WPS and REST. [See Project](#)
- GeographicLib**: Geographic library. GeographicLib is a small set of C++ classes for converting between geographic, UTM, UPS, MGRS, and geocentric coordinates, for gravity (e.g., EGM2008), geoid, and geomagnetic field (e.g., WMM2010) calculations, and for solving geodesic problems. For documentation, visit <https://geographiclib.sf.io>. [See Project](#)
- CatMDEdit - metadata editor**: CatMDEdit is a metadata editor tool for describing resources, mainly geographic information. Developed by IAAA (University of Zaragoza) and GeoSpatialLab S.L., sponsored by IGN Spain. Technical details: Java, XML, multiplatform, multilingual. [See Project](#)
- SAGA GIS**: SAGA - System for Automated Geoscientific Analyses - is a Geographic Information System (GIS) software with immense capabilities for geodata processing and analysis. SAGA is programmed in the object oriented C++ language and supports the implementation of new functions with a very effective Application Programming Interface (API). Functions are organised... [Expand](#) •

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- A OSGeo foi criada para fomentar e apoiar o desenvolvimento de aplicações em código aberto para SIG.

## **OSGeo Projects**

### **Content Management Systems**

GeoNode

### **Desktop Applications**

Marble  
gvSIG Desktop  
QGIS Desktop  
GRASS GIS

### **Geospatial Libraries**

PROJ  
GeoTools  
Orfeo ToolBox  
GDAL/OGR  
GEOS

### **Metadata Catalogs**

GeoNetwork  
pycsw

### **Other**

OSGeoLive

### **Spatial Databases**

PostGIS

### **Web Mapping**

MapServer  
deegree  
OpenLayers  
GeoMoose  
Mapbender  
PyWPS  
GeoServer

# *Panorama sobre o Software Aberto para SIG*

- O objetivo é contribuir para a difusão generalizada destas aplicações à comunidade.



- Instalador Windows



- Distribuição Linux (Lubuntu)

# **Panorama sobre o Software Aberto para SIG**

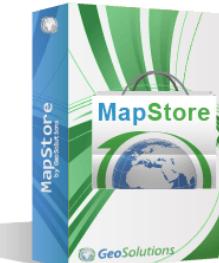
- Base de Dados
- Servidores de mapas
- Plataformas
- *Desktop*
- Clientes WEB
- Navegação
- Bibliotecas e ferramentas para manipulação de dados geográficos

# Ferramentas Open Source

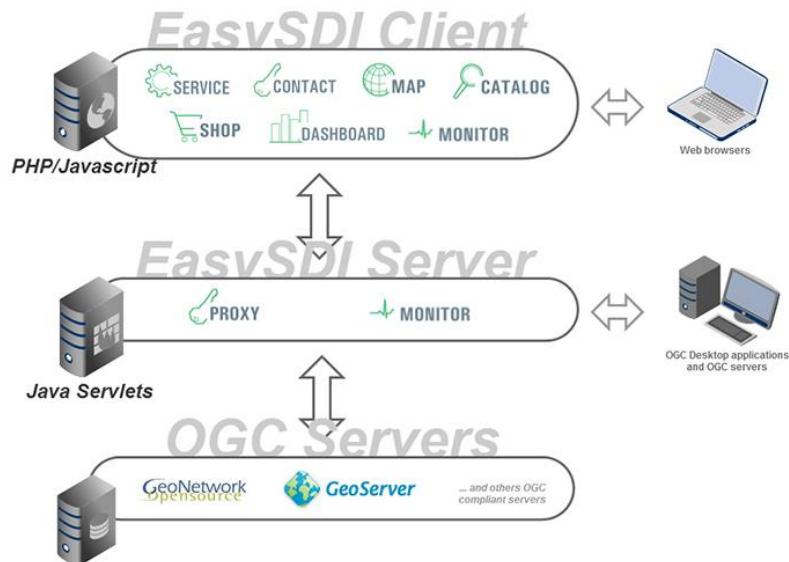
- Servidores - Criação e publicação de dados espaciais na WEB



# Ferramentas Open Source



MapStore



# MapStore

# Ferramentas Open Source

- Clientes - Desktop e WEB

QGIS



gvSIG



uDig



OpenLayers



GeoMOOSE

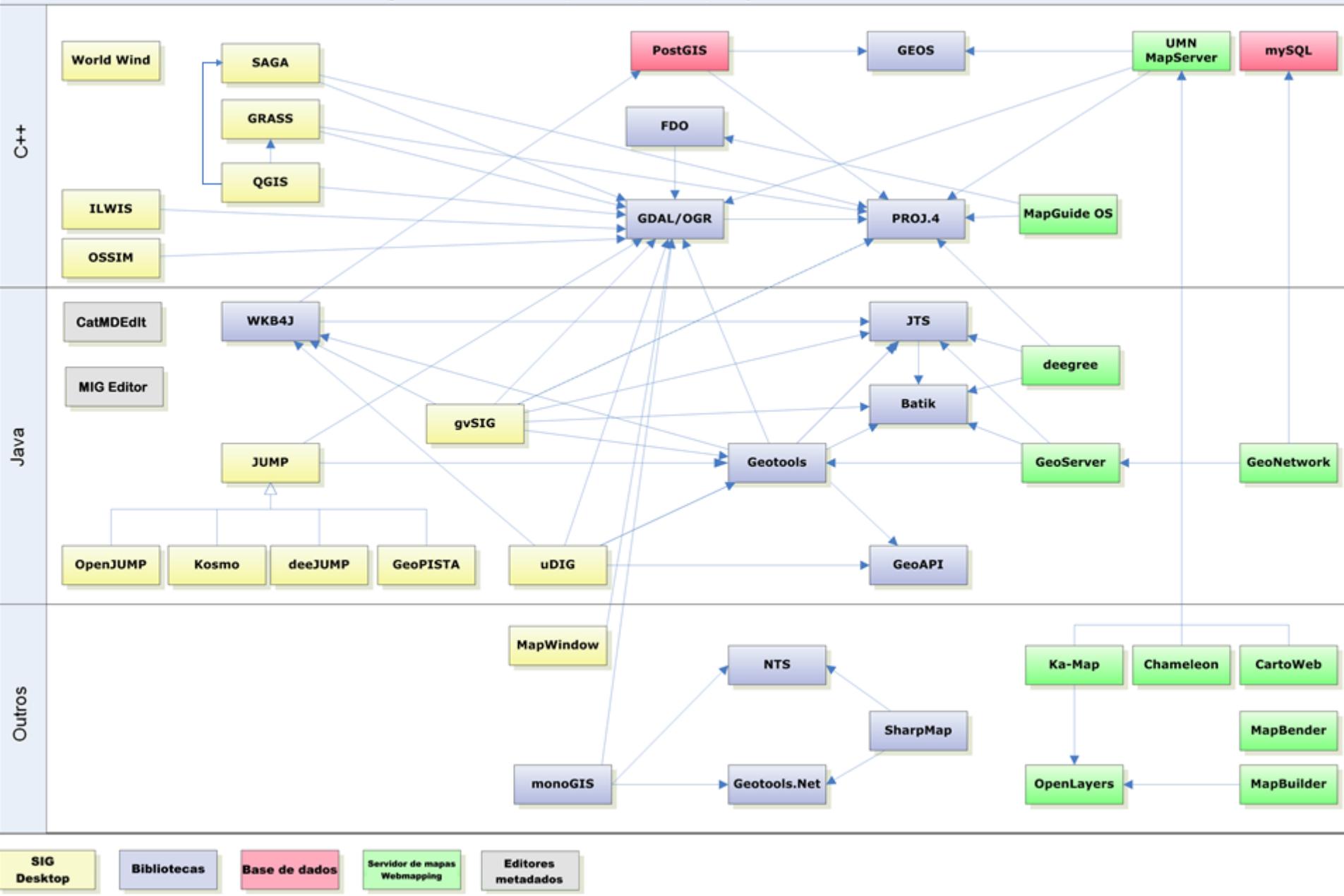


Mapbender



só WMS

# Relação entre os principais projectos GFOSS - SIG



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