# Interview With Sylvain Lesage

In this volume of the journal we interview Sylvain Lesage. Sylvain is helping to support OSGeo activities in Bolivia and other parts of South America.

#### **OSGeo Journal:**

How did you get involved with GIS and with open source software?

#### Sylvain:

I have been using GNU/Linux as an operating system for ten years, when I started working at the INRIA research laboratory in Rennes, France. Since 2009, I've been living in La Paz, the seat of government of Bolivia, and there I met a group of "talibans" dedicating their lobbying struggle to the migration of the State administration to free software. Totally convinced by this struggle, I joined them and worked during four years in various government administrations, integrating open source software at various levels, from operating systems and servers to web applications. This movement is now shared by the Eva Morales' government and in August of 2011, the parliament adopted a new law on

telecommunications, including an article that states the State administration shall "promote and prioritize" free software and open standards. This was an important step for guaranteeing the state sovereignty on its software infrastructure.

I got involved with GIS in 2009, when I worked for the ABC, the public company in charge of Bolivian roads. There we maintained a map of the state of transit system, reporting floods, road construction work, or road blocks. The road map was updated on a daily basis. The system to manage the road map was based on Postgresql, MapServer and OpenLayers. Since 2011 I've been in charge of the technical team of the GeoBolivia project within the Vice Presidency of the state. This project to build a government SDI was officially launched on May, 29th, 2013. The software used for the SDI is totally open source. We used Postgresgl and PostGIS for the databases, MapServer, Mapnik and GeoServer for publishing web services, GeoNetwork for the catalog, geOrchestra as the overlay framework that includes a central authentication system, and a powerful GIS web client and extractor for region-specific data downloads. All of the project team is using free software in their desktop stations, including the geographers that manipulate the data and map styles

with gvSIG, QGIS or uDig.

#### **OSGeo Journal:**

How are you currently involved with GIS?

#### Sylvain:

I'm currently working in the Bolivian Mission in Geneva where I'm implementing an intranet system based on free software solutions. I'm still involved in the GeoBolivia Project and chat everyday with the team about technical options. I'm also member of the geOrchestra PSC and contribute to the code on my free time.

### **OSGeo Journal:**

How is open source GIS being used in Bolivia?

#### Sylvain:

In Bolivia, the geography students have always been taught proprietary desktop GIS tools, and the public GIS systems were generally realized without any open source components. In the past few years, as a side effect of the worldwide growth of open source software, some universities have been giving classes on QGIS, gvSIG and free GIS server software. Bolivian web agencies are now offering solutions upon GeoServer or OpenLayers, and various governmental SDI projects have used free solutions such as GeoNode or

the GeoBolivia project has played a leading role in the current migration of the state administration to open source GIS. This leadership role has included organizing public seminars and classes in universities and in the EGPP (national public school for senior civil servants), publishing an online training platform, and giving technical support to similar public projects.

geOrchestra. Using its central position,

# What is the history of the informal OSGeo local chapter in Bolivia?

#### Sylvain:

The initiation of the Bolivian local chapter was by the president of OSGeo, Arnulf Christl. In January of 2012, he was traveling in Bolivia and took advantage of the opportunity to give a fantastic public presentation in the Vice Presidency about open source GIS (see the GeoBolivia homonym blog: http://geobolivia.blogspot.fr/2012/01/og c-y-osgeo-en-bolivia.html). He used his talk to launch the idea of a local chapter to organize the growing Bolivian community of users.

It took nearly one year to effectively give birth to this group, and since the end of 2012 (http://wiki.osgeo.org/wiki/Bolivia) the local chapter is active, with "real-life" events on open data and the exchange of experiences about web cartography. The chapter members include students and professionals from civil society, but is mostly composed of public servants. Ironically, this unofficial organization allows technicians from politically opposite administrations to work together without the need to obtain an impossible agreement between their respective managers.

# **OSGeo Journal:**

What excites you the most about the future of open source geospatial technology?

# Sylvain:

I am mainly interested in the political challenges around free software, open standards, e-government and open data. I'm fascinated by the velocity of the technological developments in webs services and remote access to data. 3D rendering, routing, and by the new uses and behaviors they imply, such as aid to navigation or spatial social interactions using mobile devices. I think the hard task the OSGeo and OGC have moving forward is to develop standards that protect and guarantee the value of openness despite the rapid rate of change in technology. As for political issues, in my opinion, the

open source geospatial software and open data facilitate the citizens' access to information and analysis about their territory. This allows them to defend their rights in land management, urbanism or civil liberty.