Open Source Geospatial Libraries and Tools

Sean Myers, Co-Founder
Computer software that may be used, modified, or distributed to others without violation of the original developer's license or patent.
I often compare open source to science. To where science took this whole notion of developing ideas in the open and improving on other peoples' ideas and making it into what science is today and the incredible advances that we have had. And I compare that to witchcraft and alchemy, where openness was something you didn't do.

-Linus Torvalds
As of May 2015:

96.55% of web servers run Linux
1.73% run Windows, and
1.72% run FreeBSD.
Javier de la Torre is CEO of CARTO. One of the pioneers of location intelligence, Javier founded the company in 2008 with a vision to democratize data analysis and visualization. Under his leadership, CARTO has grown from a groundbreaking idea into one of the fastest growing geospatial companies in the world.

He started his career as a conservation scientist, applying data sharing technologies to analyze and visualize endangered species. In 2007, he founded Vizzuality, a renowned geospatial company dedicated to bridging the gap between science and policy making by the better use of data.
As CEO of Mapbox, Eric coordinates product and business development. Eric has been with the team since the start and splits his time working on projects in San Francisco and Washington DC.

Eric got his start in the mapping and open data space at Development Seed, building open source tools for international development agencies. He holds a master’s degree in international development from American University in Washington, D.C., and has dual bachelor’s degrees in economics.
As a part of the engineering team, Vladimir is helping us build the future of interactive maps. He’s the creator of Leaflet, the most widely used open source map library, and has been involved in many open source and open data projects, using his sharp JavaScript skills, mathematical background and love for simplicity to tackle challenges.

Vladimir is also an avid musician and the frontman of the rock band Obymy Douchu. He loves singing, writing songs, playing an acoustic guitar and the piano, likes board games.
Why is Open Source Important?

1. security, reliability, and low cost

2. the ability to build something from disparate sets of building blocks (code)

3. freedom from vendor lock-in

4. creates a community-based approach to software development and re-use
QGIS

A Free and Open Source Geographic Information System

QGIS 2.18 Las Palmas has been released

QGIS 2.18 Released
Get it ... download QGIS 2.18 Las Palmas or read what is new in the: Visual Changelog

Create, edit, visualise, analyse and publish geospatial information on Windows, Mac, Linux, BSD (Android coming soon)

For your desktop, server, in your web browser and as developer libraries

Download Now  
Support QGIS

Version 2.18.1
LTR Version 2.14.9

Donate now!
https://github.com/qgis/QGIS
Select a Boundary to Begin Data Extraction

Colombia GADM 2.8 gadm.adm0.Colombia.Country

Select a Subboundary

- Colombia ADM0 Boundary - GADM 2.8
- Colombia ADM1 Boundary - GADM 2.8
- Colombia ADM2 Boundary - GADM 2.8

« BACK  SEARCH DATASETS »
https://github.com/mapserver/mapserver
OPEN SOURCE SOFTWARE
Leaflet.Dialog

A dialog modal window that is resizable and positionable on the map.

Check out the Demo Here

Installation:

```javascript
// Bower install Leaflet.Dialog
```

Adding a dialog box:

```javascript
var dialog = L.dialog().setContent("<p>Hello! Welcome to your new dialog box!</p>").open(map);
```

Working with the dialog box:

Close the window:

```javascript
dialog.close();
```
**[SingularData / SingularData.net](http://singulardata.net)**

[WIP] open data discovery platform  

<table>
<thead>
<tr>
<th>Tag</th>
<th>Description</th>
<th>Last Update</th>
</tr>
</thead>
<tbody>
<tr>
<td>open-data</td>
<td></td>
<td></td>
</tr>
<tr>
<td>search-engine</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- **105** commits
- **1** branch
- **0** releases
- **1** contributor

Branch: master

<table>
<thead>
<tr>
<th>Commit</th>
<th>Description</th>
<th>Author</th>
<th>Date</th>
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<tbody>
<tr>
<td>config</td>
<td>fix several potential issues at APIs</td>
<td>haoliangyu</td>
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<tr>
<td>nginx</td>
<td>minor fix</td>
<td></td>
<td></td>
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<td>src</td>
<td>update for new materialized views</td>
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<td>a month ago</td>
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<td>test/util</td>
<td>minor fix</td>
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<tr>
<td>webpack</td>
<td>fix style issue</td>
<td></td>
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<tr>
<td>.dockerignore</td>
<td>add utility scripts</td>
<td></td>
<td>5 months ago</td>
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<tr>
<td>.gitignore</td>
<td>use angular-aot for production build</td>
<td></td>
<td>3 months ago</td>
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<tr>
<td>Dockerfile</td>
<td>complete dockerization</td>
<td></td>
<td>5 months ago</td>
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<tr>
<td>README.md</td>
<td>better README</td>
<td></td>
<td>4 months ago</td>
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<td>docker-compose.yml</td>
<td>minor update</td>
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<td>gulpfile.js</td>
<td>use ElasticSearch as search engine</td>
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<td>6 months ago</td>
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<td>package-lock.json</td>
<td>furthur update API and frontend for DCAT</td>
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https://github.com/SingularData/SingularData.net

https://github.com/NBTSolutions/Leaflet.Dialog
Technology (what we can do)

**Open Source**
- DBs: MySQL
- Map Servers: Map Server, GeoServer
- App Frameworks/Langs: openlayers, Ext, Geo Ext, PHP, Java, JS, Android, Flash, .NET
  - Other: Apache, Tomcat, Linux

**DBBI**
- MapXtreme (Spatial Server)
- Envisasa (Spectrum SaaS)
- Map Workspace
- Map Marker (Geocoding)

**Technology**
- SaaS, REST Services

**SaaS**
- Google Maps API, Fusion Tables, App Engine
- Bing Maps API
- PCIe
### Search

**Define a Search Area**

- **Radius**

#### Enter Lat/Lng

- **Define a Search Area**
- **Reset Search Area**

### Map

- **Search**
- **Define a Search Area**
- **Enter Lat/Lng**

### Results

- **260 Assets Found**

<table>
<thead>
<tr>
<th>Select</th>
<th>Asset ID</th>
<th>Name</th>
<th>Site Type</th>
<th>Site Subtype</th>
<th>Site Status</th>
<th>Base Ground Elevation (FT)</th>
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<tbody>
<tr>
<td></td>
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<td>Police Safety Building</td>
<td>Buildings</td>
<td>Lit Building</td>
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<td>Lincoln Theatre</td>
<td>Buildings</td>
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<tr>
<td></td>
<td>CNX-COLOH0000074LB</td>
<td>City Parking Garage</td>
<td>Buildings</td>
<td>Lit Building</td>
<td></td>
<td>741.46984</td>
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</tbody>
</table>
Mapping the future of FTTx

“From Strategy to Splice”
Large parts of the US lack advanced broadband
The ISPs Problem -
Inefficiencies in Design, Construction, Provisioning, and Inventory
The ISPs Problem -
Fragmented Tools

Google Earth for Mapping

Spreadsheets for Circuits and Fibers

Spreadsheets for Costing

Salesforce for Provisioning
Powerful Tool Helping ISPs and Co-ops

Plan & Design
Powerful Tool Helping ISPs and Co-ops

Inventory, Operate & Manage

VETRO FiberMap™
Demand Gen - Lead Capture
ENTERING

Startup
Launch NY

Startup Weekend Buffalo
Friday, September 29 - October 1, 2017

1. Overview
2. Schedule
3. Sponsors
4. Organizing Team

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Friday, September 29 - October 1, 2017

Buffalo Startup Weekend #7
Buy a ticket today to participate, create your team, and bring your idea to fruition! Tickets sell out as space is limited, so reserve your ticket early. Proceeds go towards providing

43North
Buffalo's Global Business Plan Competition

dig Buffalo
640 Ellicott Street
Buffalo, NY 14203

Buy Tickets
Wait a minute...
Are you saying that I should pivot to open source?
You Can Build Great Things
"Make sure you're identifying a big problem that needs to be solved or an opportunity that needs to be seized--and go for it"

- Steve Case, Founder AOL