CartoDB

Description

CartoDB is an open source tool to visualize and analyze geospatial data **on the web**, developed by Vizzuality. It is excellent for tracking data (see these blog posts).

Cost

CartoDB is open source, so you can install the tool on your own server (instructions), but this is quite complex. You can also use one of the paid plans to run it in the cloud. There is a free academic plan which allows for 10 tables and 50Mb of data.

Input

CartoDB supports 2D point, line, and polygon data in the following formats: `csv`, `tab`, `shp`, `kml`, `kmz`, `xls`, `xlsx`, `geojson`, `gpx`, `osm`, `bz2`, `ods`, and `sql`.

Output

Visualizations

CartoDB offers a wide range of visualizations (2D only), which can be created with a very intuitive user interface and shared online (including embedding). These visualizations can be fine-tuned with CartoCSS.

- Points visualizations: simple, cluster, choropleth, category, bubble, intensity, density, and torque (animated visualizations)
- Lines and polygon visualizations: simple, choropleth, category, bubble

Extensive documentation and examples are available on the CartoDB website

and blog, but for visualizations specific to tracking data, see these LifeWatch INBO blog posts.

Geospatial analysis

As CartoDB runs on Postgresql, you use the **full Postgres + PostGIS SQL functionality** to analyze the data, including via an API. Data can be exported as `csv`, `shp`, `kml`, `svg`, and `geojson`.

Statistical analysis

Not supported.

Limitations

- Does not support raster data
- Does not support image exports
- No data limits encountered yet (Peter created visualizations on 450.000 records).