

OpenStreetMap

What is that and how can I contribute?

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1 What is this?

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2 The data

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- free¹ project collecting **free accessible** geodata
- open database for geodata
- ODC-ODbL
 - ▶ OpenDataCommons Open Database License
 - ▶ Ersetzt CC BY-SA 2.0 (share alike & attribution)

¹free as in freedom

Motivation

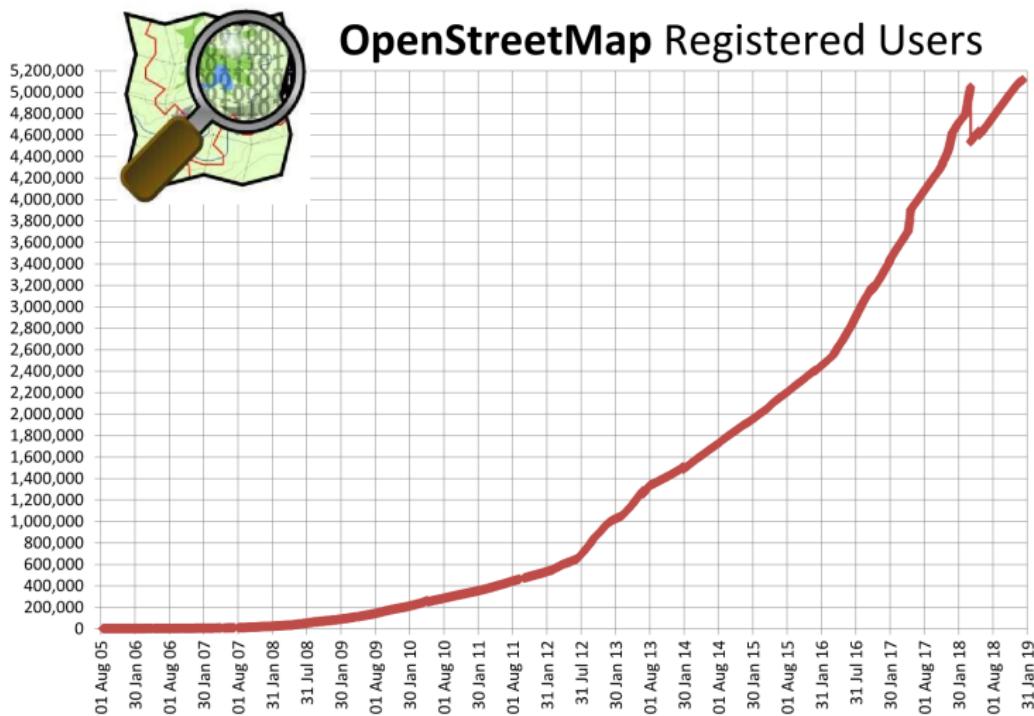
Why has OpenStreetMap been created?

- proprietary maps old and faulty
- focus on cars and traffic
- no access to raw data
 - ▶ error correction not possible
- Google Maps *not directly evil* – but **not free**
- license problems with (nearly) all map service providers

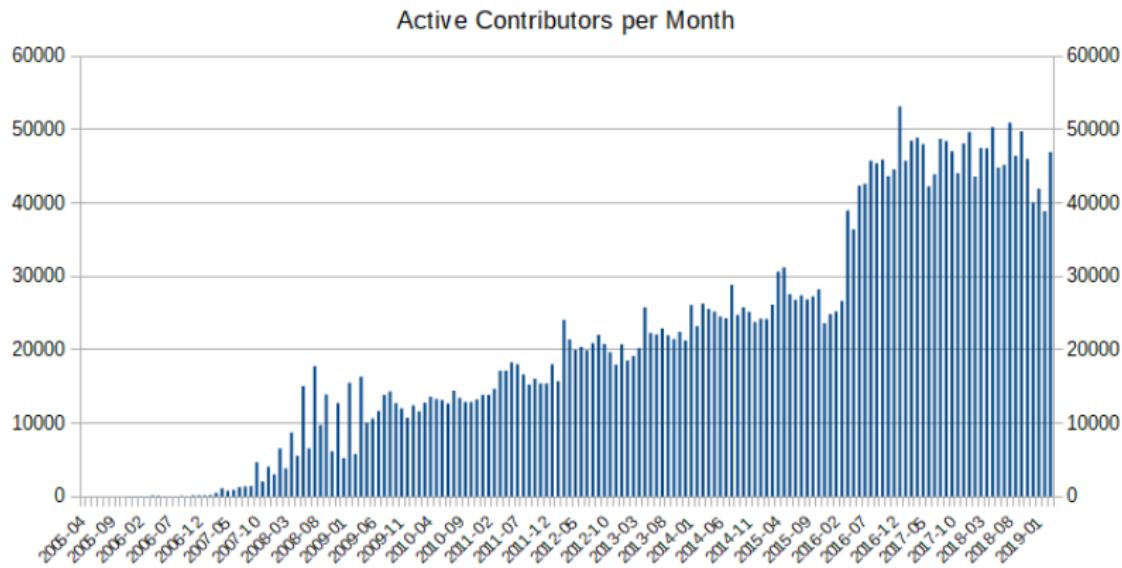
History

- 2004 – OSM founded
- 2006 – release JOSM-Editor
- 2006 – first map rendered with Mapnik
- 2007 – TIGER data import USA started
- 2008 – TIGER data import USA finished
- 2009 – API 0.6 (still latest version)
- 2009 – cooperation with Wikipedia
- 2010 – Bing Imagery allowed usage for OSM
- 2013 – 1 mio. registered users
- 2016 – Maps.me app enabled edits

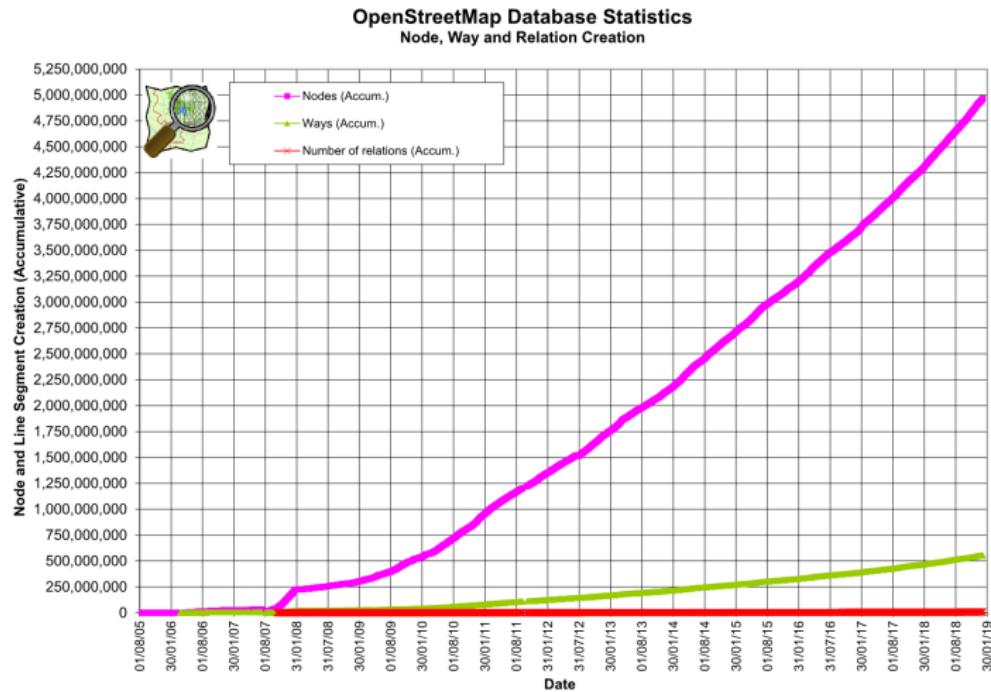
Statistics



Statistics

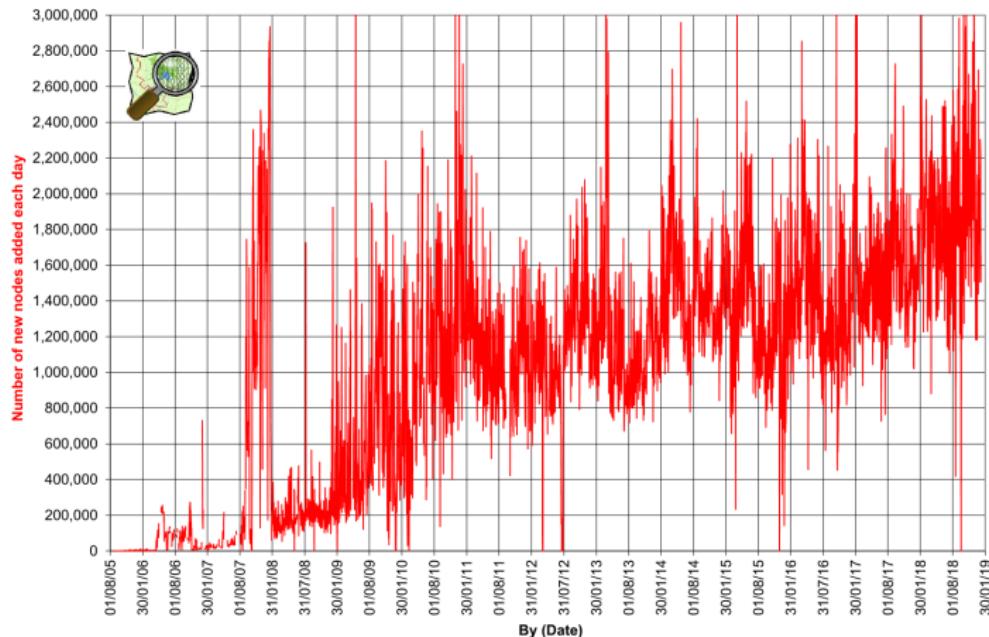


Statistics

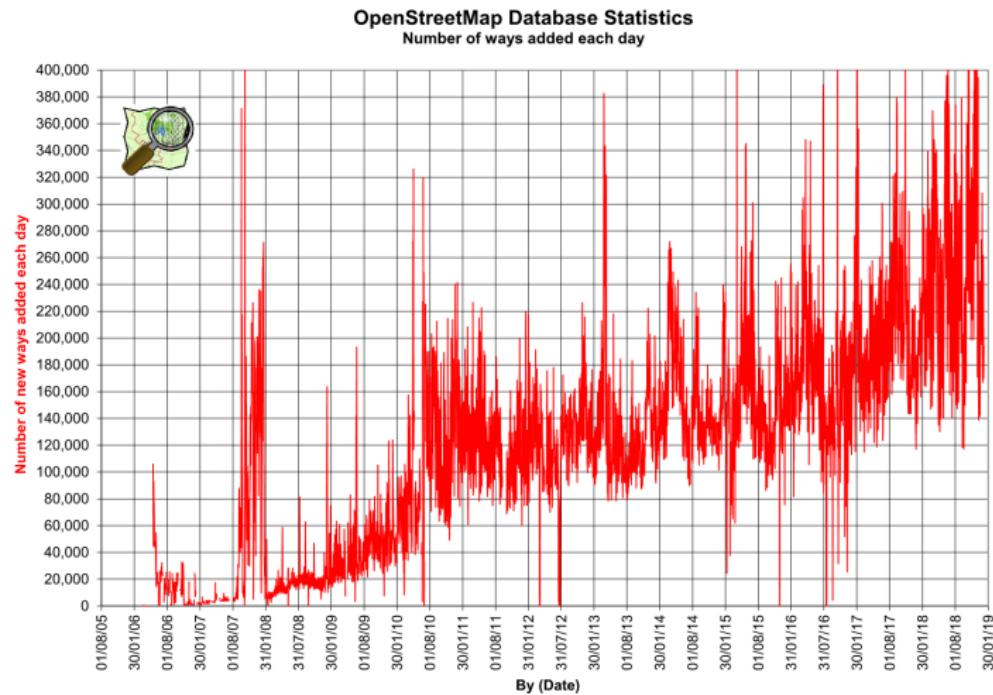


Statistics

OpenStreetMap Database Statistics
Number of nodes added each day



Statistics



Community

What is done?

- developing software and tools
- actual mapping
- creating and maintaining documentation
- doing public relations activities

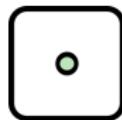
Community

How is it done?

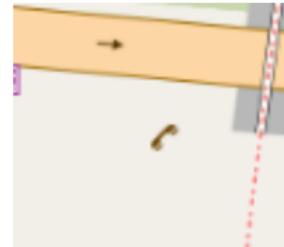
- going outside collecting information
- using imagery services
- meet other mappers
- participating in a mapathon

Node

- single location on map



amenity=telephone
covered=booth

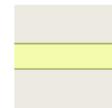


Way

- line on map
- 2-2000 points per way

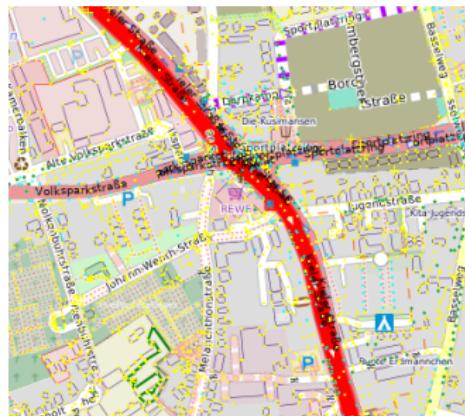


highway=secondary



Relation

- combination of ways (e.g. to a bus route)



`type=route
route=bus
name=MetroBus 4
ref=4
from=Wildacker
to=Brandstwiete`

Area

- basically a closed way

landuse=forest
leaf_type=broadleaved



Multipolygon

- basically a polygon with polygons inside
- role inner and outer



landuse=farmland

A screenshot of a GIS application interface. At the top, a table titled "Merkmale / Mitgliedschaften: 1" shows a single entry: "Geografie/Landnutzung/Ackerland ..." with "Schlüssel" set to "farmland". Below this, another table shows "Element von" as "multipolygon ('Staatsforst Rosen...'" and "Rolle" as "innerer". A "Position" column shows the value "14". At the bottom, there are buttons for "Hinzufügen", "Bearbeiten", and "Entfernen". The main area displays a 3D-style map with a pink-shaded multipolygon feature. The feature has a red outline for the outer boundary and a yellow dashed line for the inner boundary. A coordinate grid is visible in the background.