Omniscale

Imposm

OpenStreetMap in PostGIS

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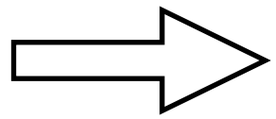
Imposm

.osm

.osm.bz2

.pbf



PostGIS

Ziele

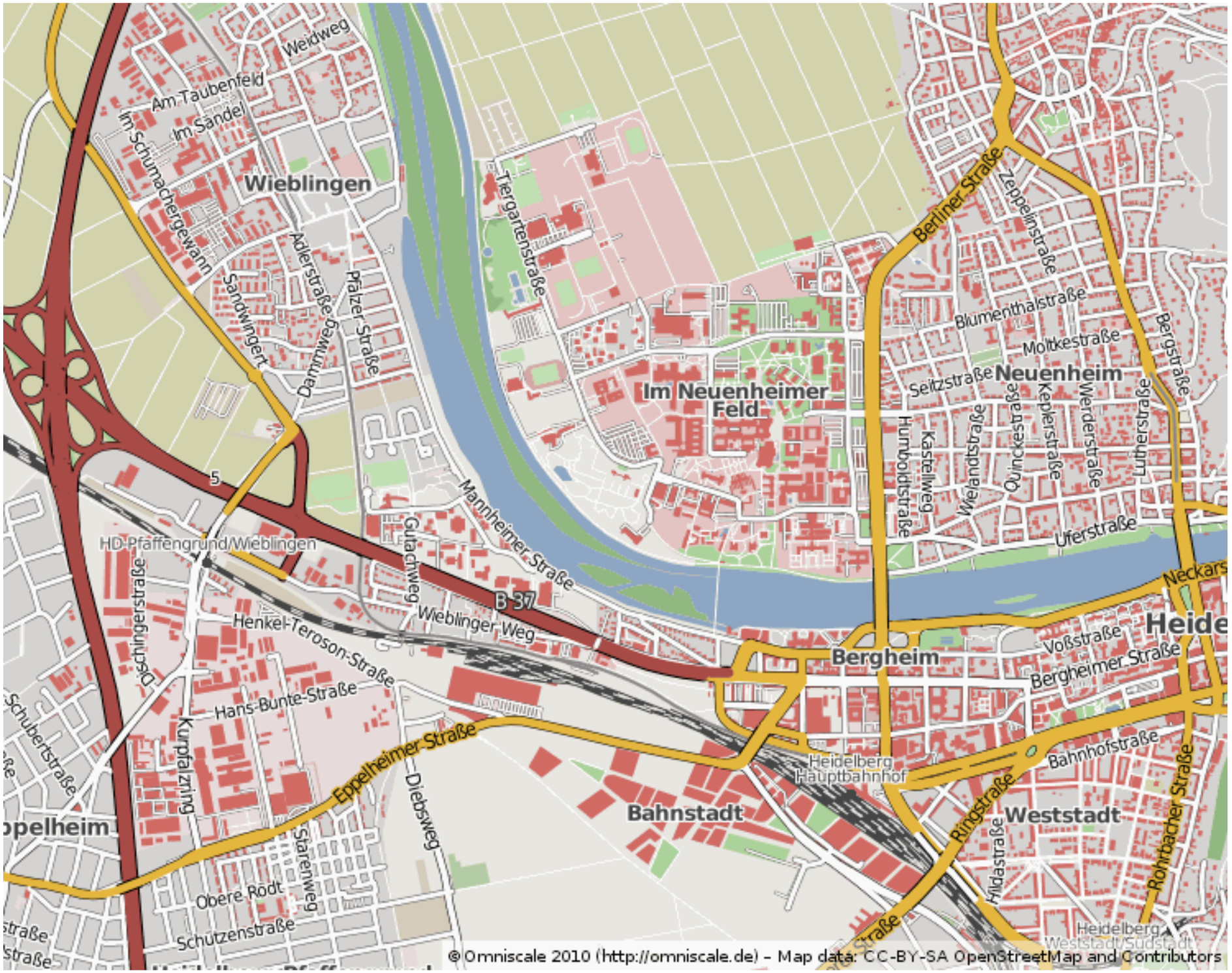
- Anpassbares DB Schema
- Schnelles Rendering
- Niedriger Speicherverbauch

Datenbank Schema

```
Points(
   name = 'towers',
   mapping = {
      'man_made': (
         'tower',
         'water_tower',
      )
   }
   fields = (
      ('height', Integer()),
   )
)
```

Standardmapping

places, admin, motorways, mainroads, buildings, minorroads, transport_points, railways, waterways, waterareas, aeroways, transport_areas, landusages, amenities


Weidweg
Am Taubenfeld
Im Sandel
Im Schumachergewann
Wieblingen
Tiergartenstraße
Adlerstraße
Sandwingert
Dammweg
Pfälzer Straße
Berliner Straße
Zeppelinstraße
Blumenthalstraße
Moltkestraße
Seitzstraße
Neuenheim
Im Neuenheimer Feld
Bergstraße
Kastelweg
Humboldtstraße
Werderstraße
Keplerstraße
Uferstraße
Mannheimer Straße
Gutachweg
B 37
HD-Pfaffengrund/Wieblingen
Dischingerstraße
Henkel-Terosson-Straße
Wieblinger Weg
Hans-Bunte-Straße
Kurpfalzring
Schubertstraße
Eppelheimer Straße
Diebsweg
Obere Rodt
Starenweg
Schützenstraße
Bergheim
Voßstraße
Bergheimer Straße
Neckarsu
Heide
Heidelberg Hauptbahnhof
Bahnhofstraße
Ringstraße
Weststadt
Hildastraße
Rohrbacher Straße
Heidelberg Weststadt/Südstadt
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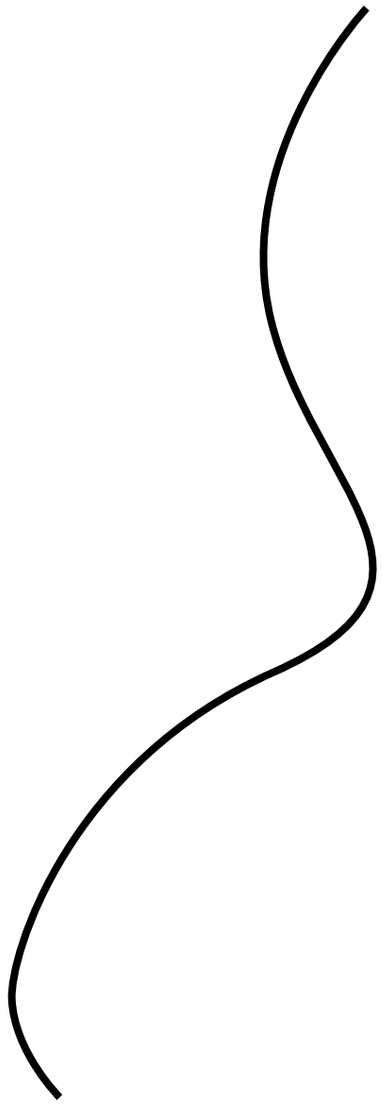
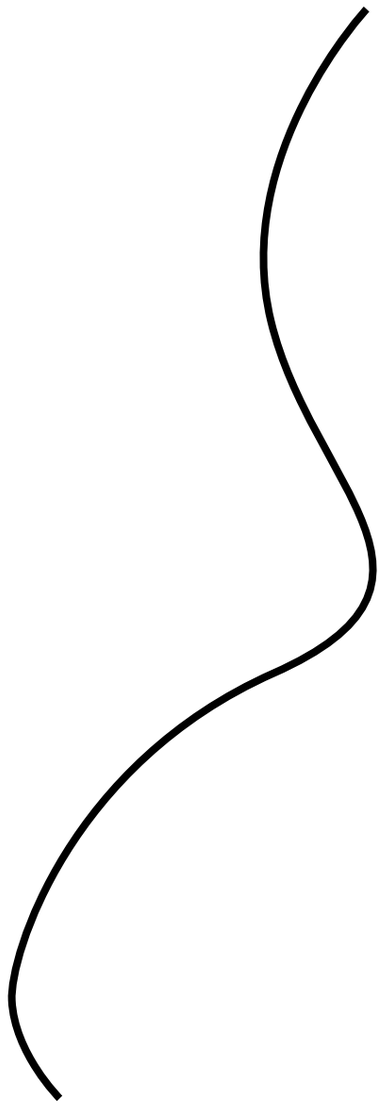
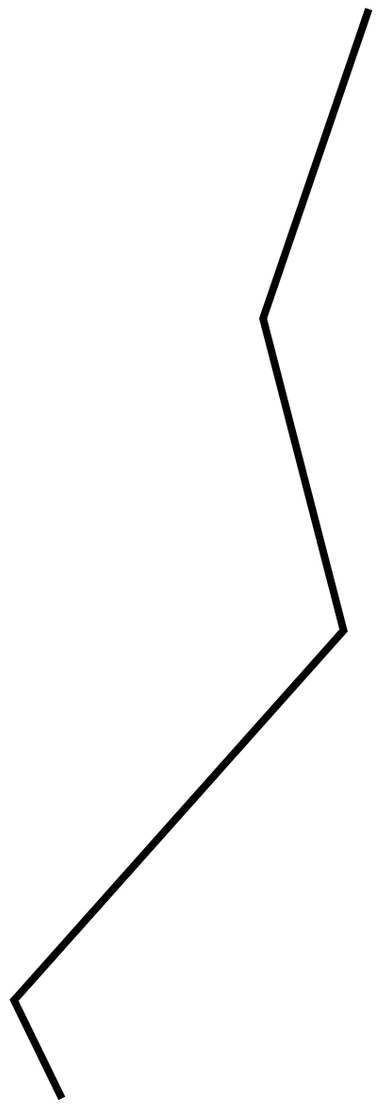


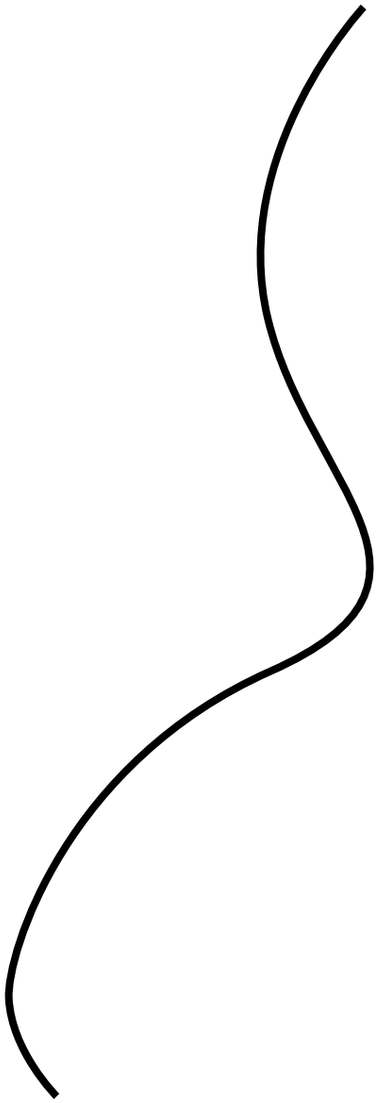
osm_roads



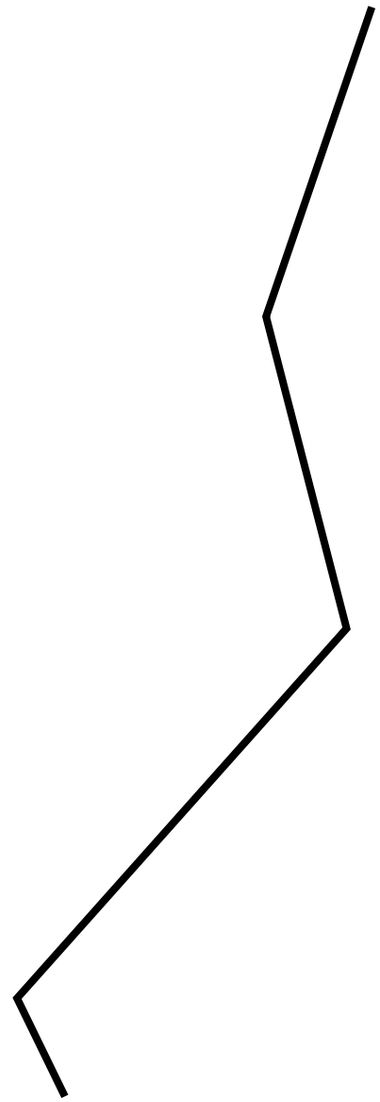
osm_roads



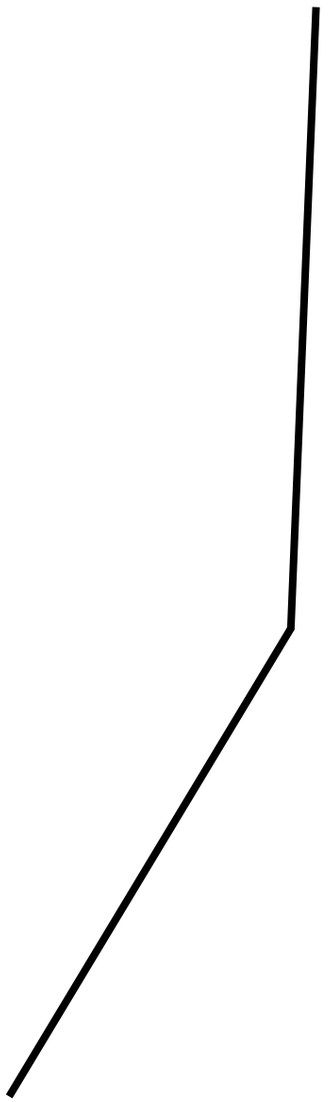
osm_roads_gen1



osm_roads



osm_roads_gen1



osm_roads_gen0


Lübeck
Schwerin
Bremerhaven
Hamburg
Bremen
Hannover
Osnabrück
Hildesheim
Magdeburg
Bielefeld
Paderborn
Dortmund
Kassel
Leipzig
Düsseldorf
Erfurt
Köln
Siegen
Gera
Aachen
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Importdauer

- Deutschland
  - 40 min (8GB)
  - 25 min (12GB + SSD)
- Europa
  - 4 Stunden (12GB + SSD)

Level 5

Level 14

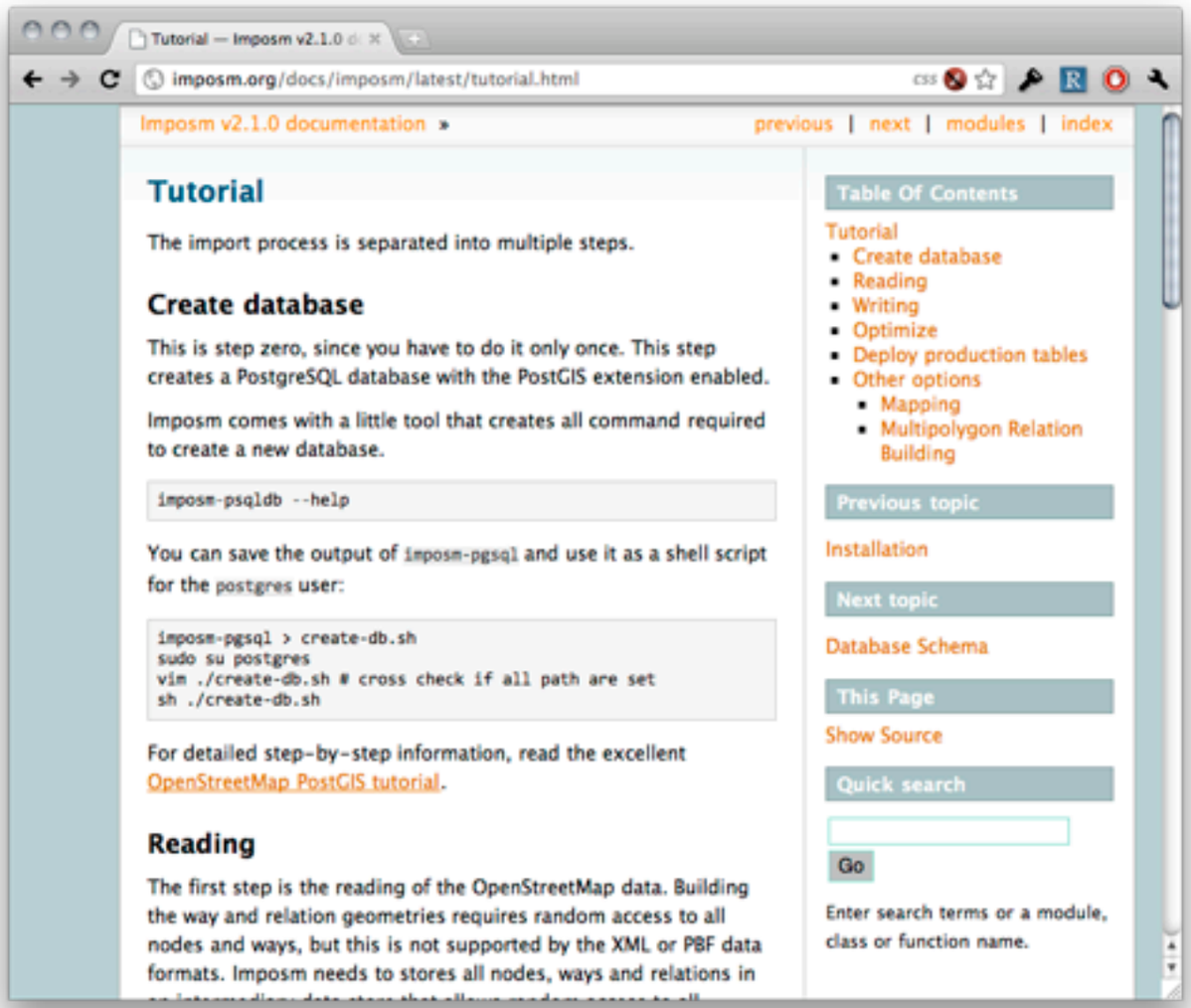
Seed bis Level 14 mit 150 tiles/s

Quad Core (i7@2.6GHz, SSD, 12GB RAM)

Bullet Points

- Unix (Linux, Max OS X, ...)
- OpenSource (Apache Software License)

imposm.org


Tutorial — Imposm v2.1.0
imposm.org/docs/imposm/latest/tutorial.html
Imposm v2.1.0 documentation »
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Tutorial
The import process is separated into multiple steps.
Create database
This is step zero, since you have to do it only once. This step creates a PostgreSQL database with the PostGIS extension enabled.
Imposm comes with a little tool that creates all command required to create a new database.
imposm-psqldb --help
You can save the output of imposm-pgsql and use it as a shell script for the postgres user:
imposm-pgsql > create-db.sh
sudo su postgres
vim ./create-db.sh # cross check if all path are set
sh ./create-db.sh
For detailed step-by-step information, read the excellent OpenStreetMap PostGIS tutorial.
Reading
The first step is the reading of the OpenStreetMap data. Building the way and relation geometries requires random access to all nodes and ways, but this is not supported by the XML or PBF data formats. Imposm needs to stores all nodes, ways and relations in
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Go
Enter search terms or a module, class or function name.

imposm.parser

- OSM XML/PBF Parser
- Unabhängige Bibliothek (Python)
- http://pypi.python.org/pypi/imposm.parser

Fragen?

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