# How to break the OpenStreetMap

Ilya Zverev, MAPS.ME FOSDEM 2017

# OpenStreetMap

# No premoderation



#### Way History: 320874581

Cerne Abbas Giant - tag as path from selfintersecting driveway

Edited 3 months ago by mentor Version #1 · Changeset #27985967

#### Tags

FIXME	surface=chalk? access=no?
highway	path

#### Nodes

3268165964 (part of way --- 320874580) 3268164730 3268164731 3268164732 3268164733 3268164734

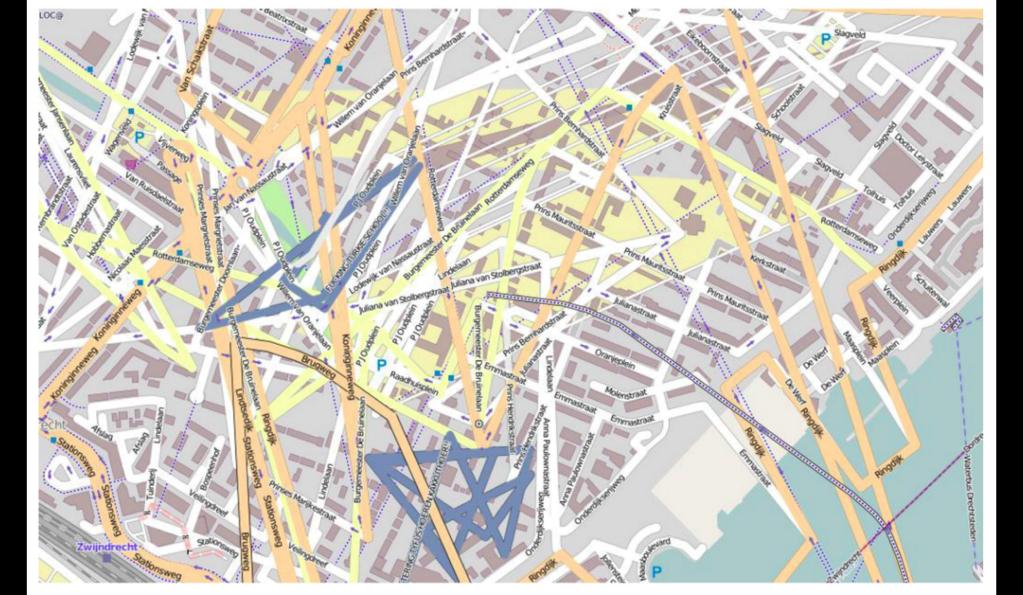
3268164736 3268164737

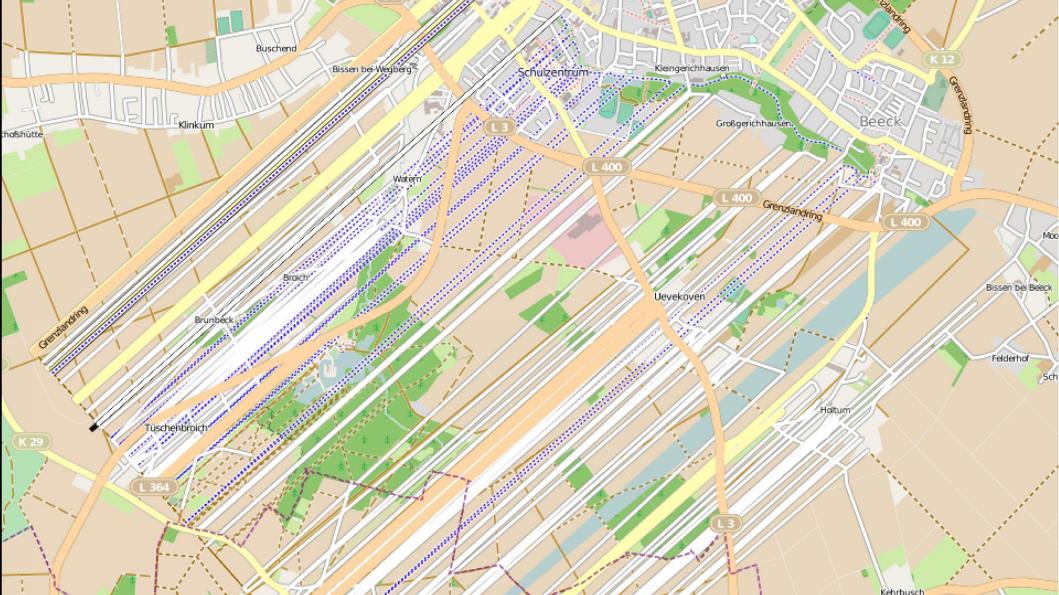
5 m

×



3268164735

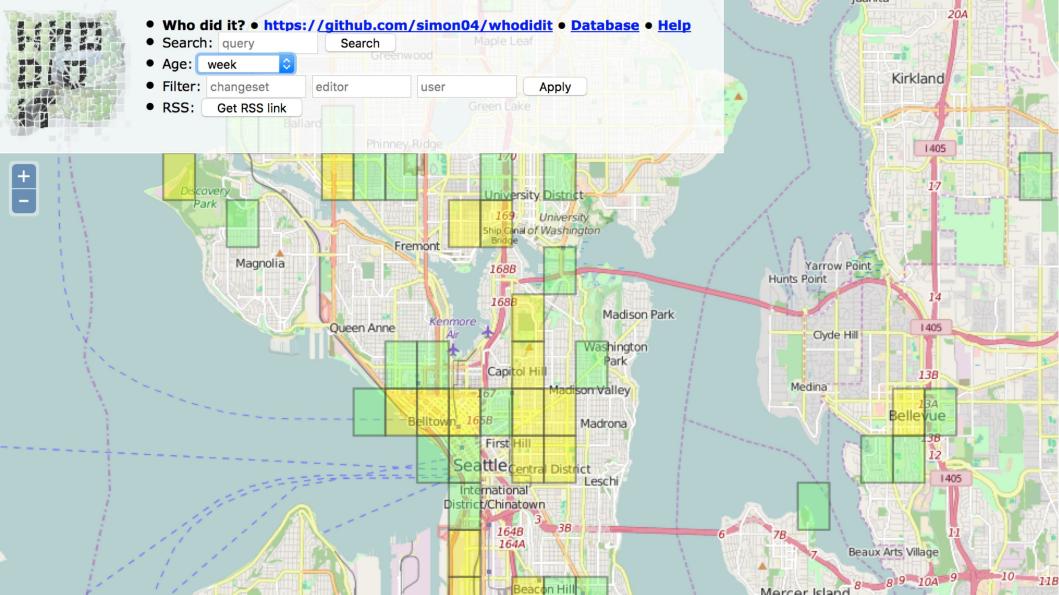






### The community watches closely





# Changeset 45814971 by sazrodrigo on Feb. 4, 2017, 8:50 p.m.

2 30

Mass deletion

Open in JOSM

1094

HDYC

Not Verified **▼** 

#### Source

Ortofotos 2011 Paranacidade

#### Comment

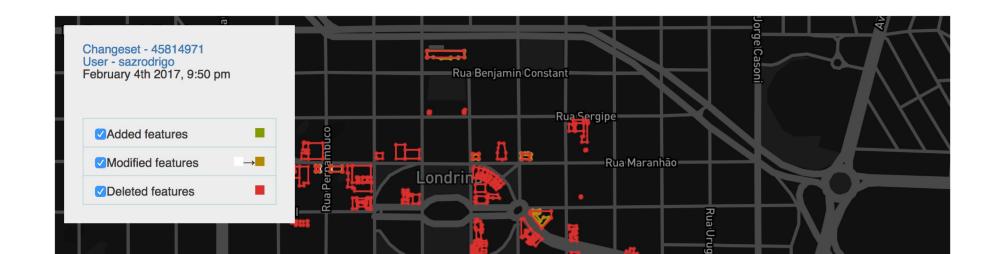
Correção de informações

#### Imagery used

Not reported

#### **Editor**

JOSM/1.5 (11529 pt\_BR)





#### Please list changeset ids to revert:

1234234234 382475628

123847521

Revert these		

Comment:

Queue

### This is the Revert UI

It is a simple reverter: you give it a list of changesets (whitespace-separated, you also can paste whole links), and it reverts these. It would be nice to explain what you are reverting in the comment field. Revert jobs are processed once a minute, so you will have some time to cancel yours if you make a mistake. If not, you can simply revert the reverting changeset.

There are limits: at most 20 changesets, 200 changed objects in total. That is because the reverter makes C+F\*2 API calls which can be quite high. The reason for that is, the reverter not just



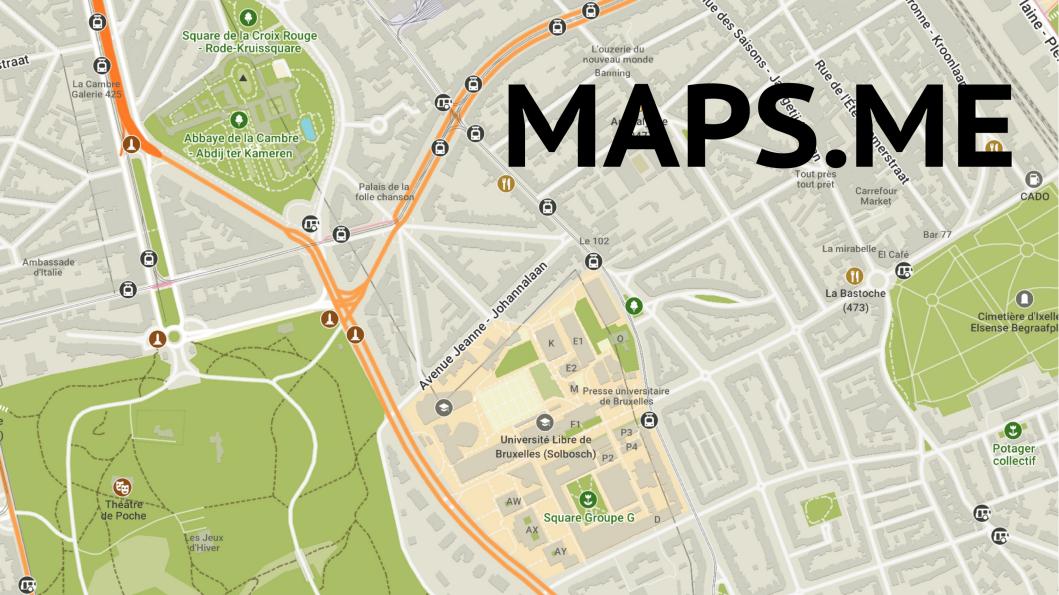
Are Node IDs 64-bit Yet?

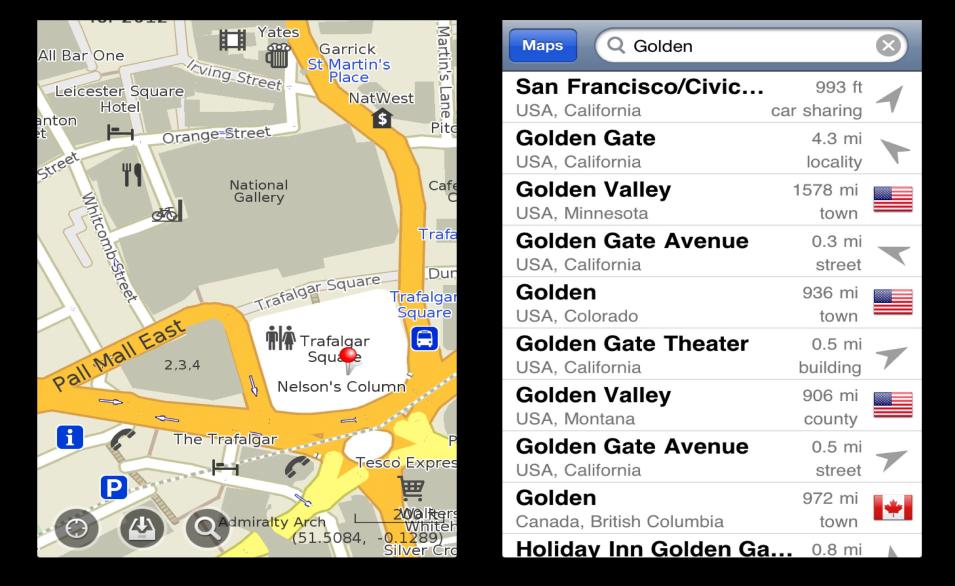
Last node id is 115AB 9978 or 2<sup>32</sup> + 363 567 480

<u>Update your software!</u>

### The key to breaking things is...









### **Apfel**

Restaurant • Vegetarian



11817 km

Rua Dom José de Barros, 111



Today 09:00-15:00

Sun-Fri

09:00-15:00



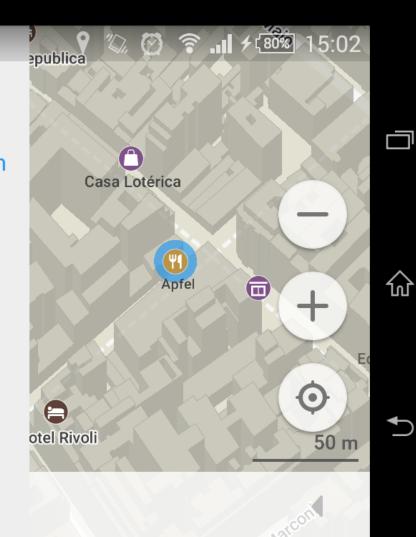
-23.544525, -46.640969



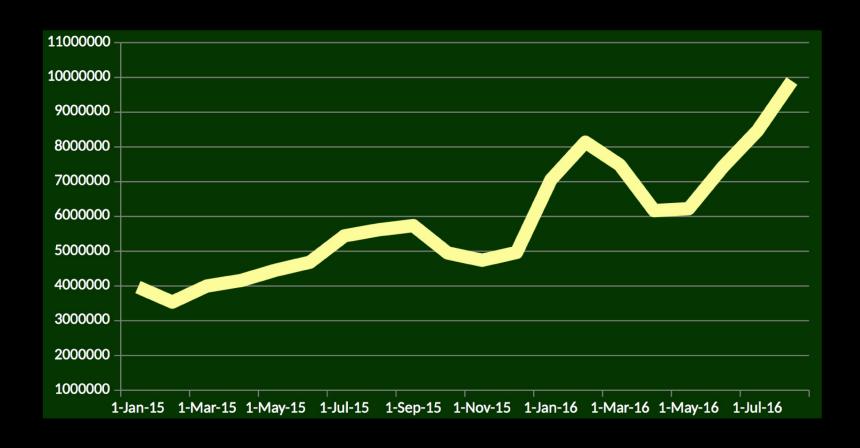




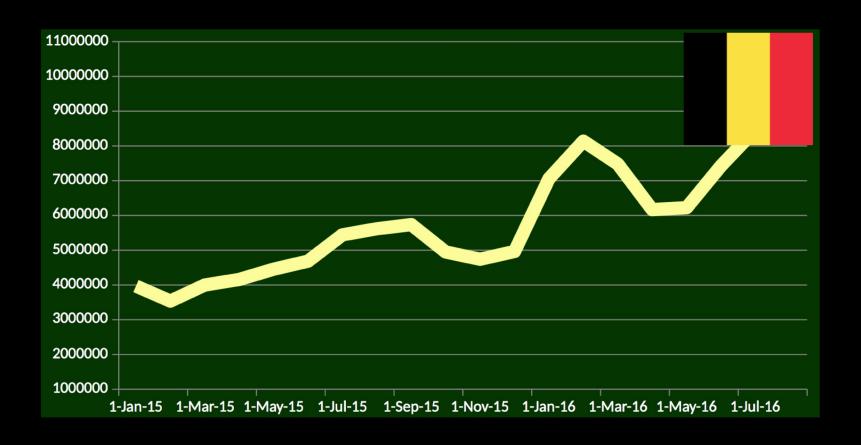
SHARE

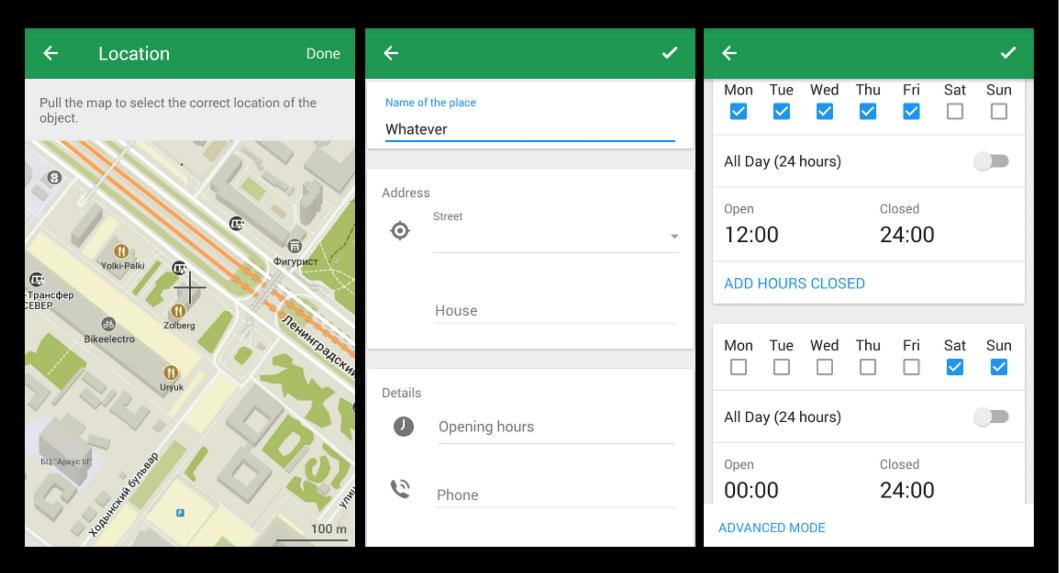


### 11 mln monthly active users

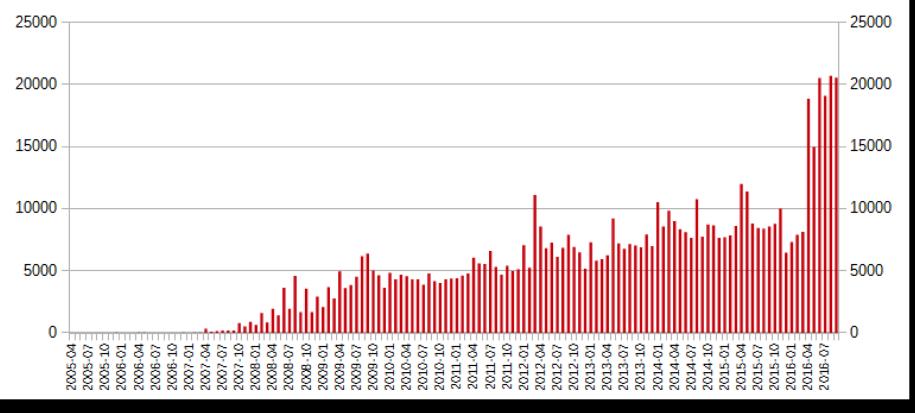


### 11 mln monthly active users





#### OpenStreetMap New Contributors per Month



#### **OSM Edits Made With MAPS.ME**

Top Users

<ul> <li>Total: 1057421</li> <li>Created: <u>567827</u></li> <li>Deleted: <u>6</u></li> <li>Modified: <u>347552</u></li> <li>Notes: <u>141830</u></li> <li>Anomalies: <u>206</u></li> <li>Nodes: 708708</li> <li>Ways: 206579</li> <li>Relations: 98</li> <li>Users: 117829</li> </ul>	1. <u>iWowik</u> (9593) 2. <u>Nesim</u> (8825) 3. <u>aquila2</u> (8177) 4. <u>Omnific</u> (6680) 5. <u>Paul Kalinin</u> (6393) 6. <u>SEVEN</u> (6304) 7. <u>Filutkie</u> (4993) 8. <u>Humus015</u> (4067) 9. <u>rdz3056</u> (3705) 10. <u>parukhin</u> (3433)	1. Russian Federation (135672) 2. Ukraine (63410) 3. Germany (47485) 4. Belarus (41888) 5. Philippine Continental Shelf (31008) 6. United States of America (30034) 7. Japan (26203) 8. India (23005) 9. Algeria (22743) 10. Iraq (20293)
• Users: 117829	Show all	10. <u>Iraq</u> (20293)

**Edited Countries** 

Top Main

 Nor 2. buil

3. am higl

 5. sho 6. am

7. sho 8. tou

9. tou

10. am

<u>Dung sau</u><sup>±</sup> at 04.02.2017 05:38 in <u>45796931</u><sup>±</sup>: created <u>tourism=alpine\_hut</u> <u>JOSM Level0</u>

name:vi Nhà của Ba

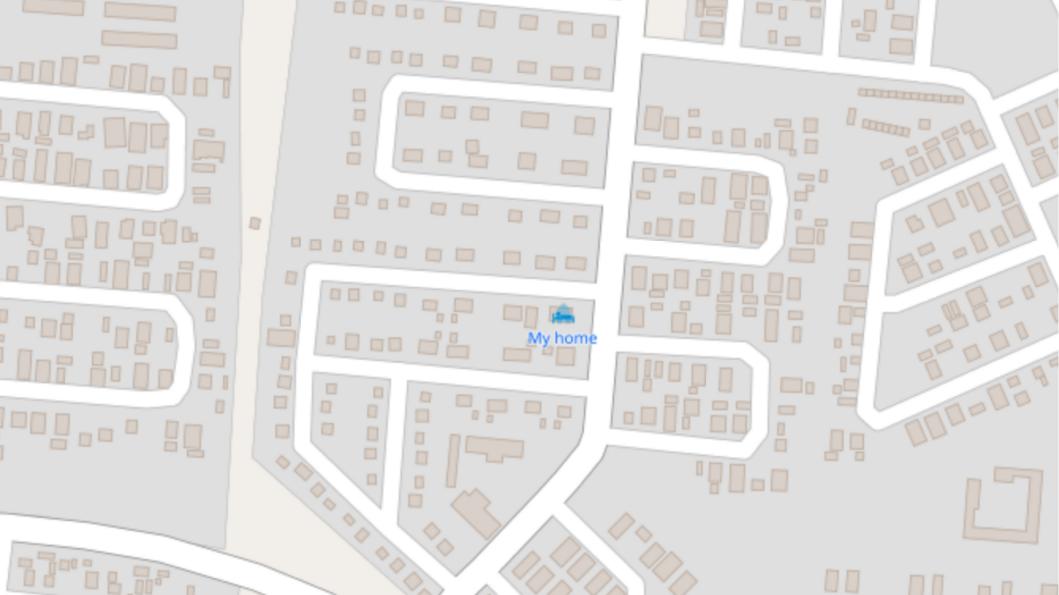
**Statistics** 

Changes

## The simplest editor

- No tags or presets
- No geometry or relations
- No changing types
- Works offline
- Uploads to OpenStreetMap



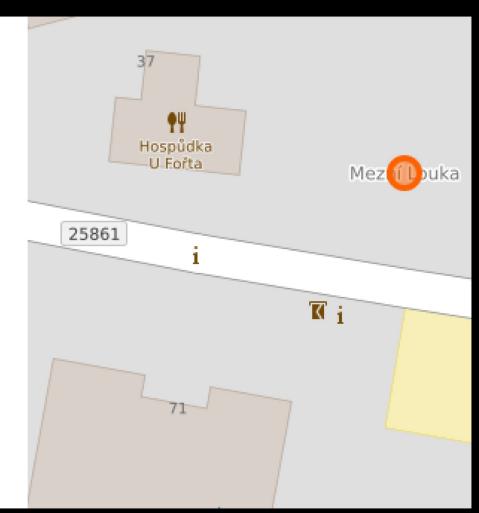


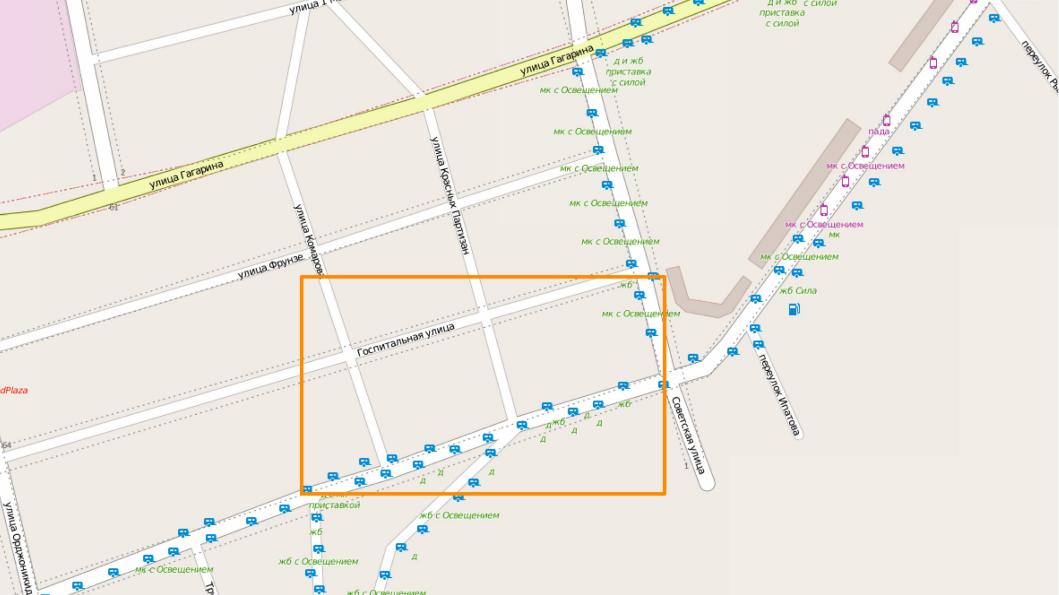
Edited 5 months ago by 李琪宏

Version #15 · Changeset #39664718 Location: 50.8737055, 14.317415

Tags

ele	279
name	U forta Mezní Louka:小 瑞士居住地
name:cs	Mezní Louka
name:de	Rainwiese
place	hamlet
population	Λ







### How we solved everything

- Notify users that their edit will be available for everyone
- Forbid editing default names
- Make a special name monitoring mode for MMWatch
- Fix accidental replacements



Kossan at 07.10.2016 12:26 in 42709667 : modified unknown | Level0 name:fr SITARAIL Plateau name

jorj87 at 07.10.2016 11:46 in 42708897 : modified amenity=cafe | JOSM | Level0

opening hours 24/7 amenity cafe У Егорки name

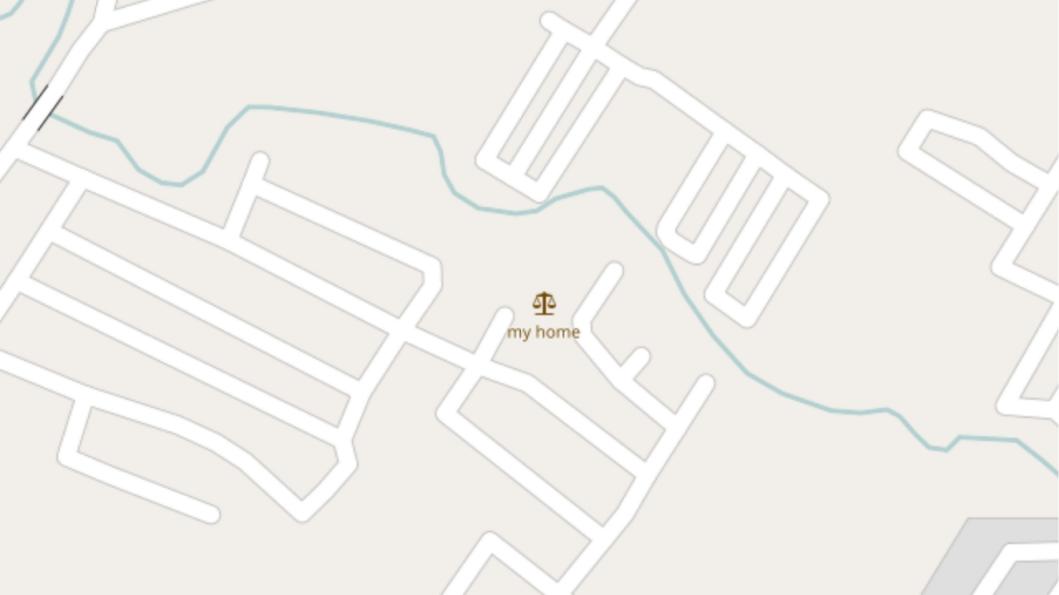
jorj87 at 07.10.2016 11:46 in 42708897 : modified amenity=restaurant | JOSM | Level0

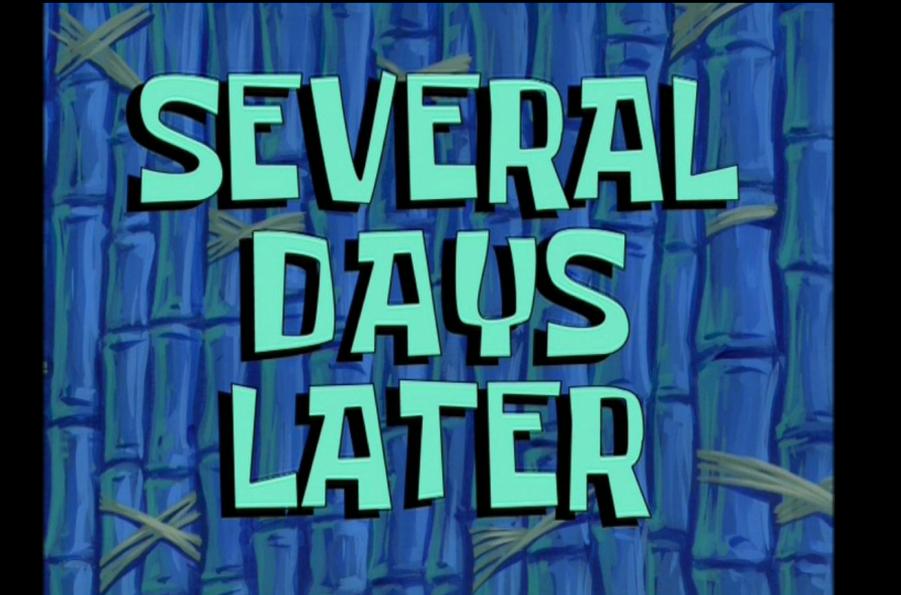
amenity

name

name:ru Black cup restaurant

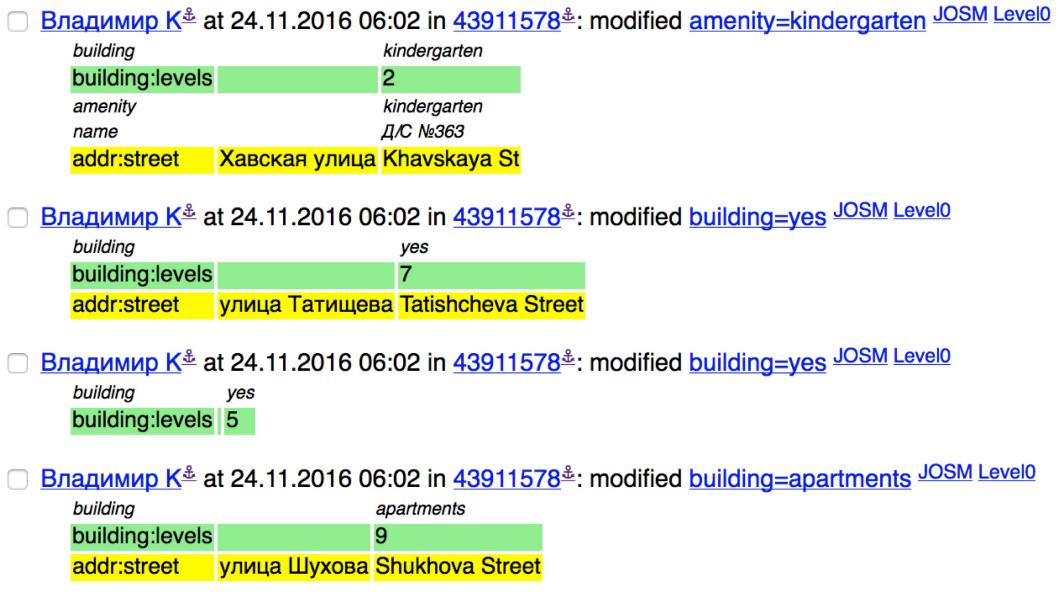
Марше

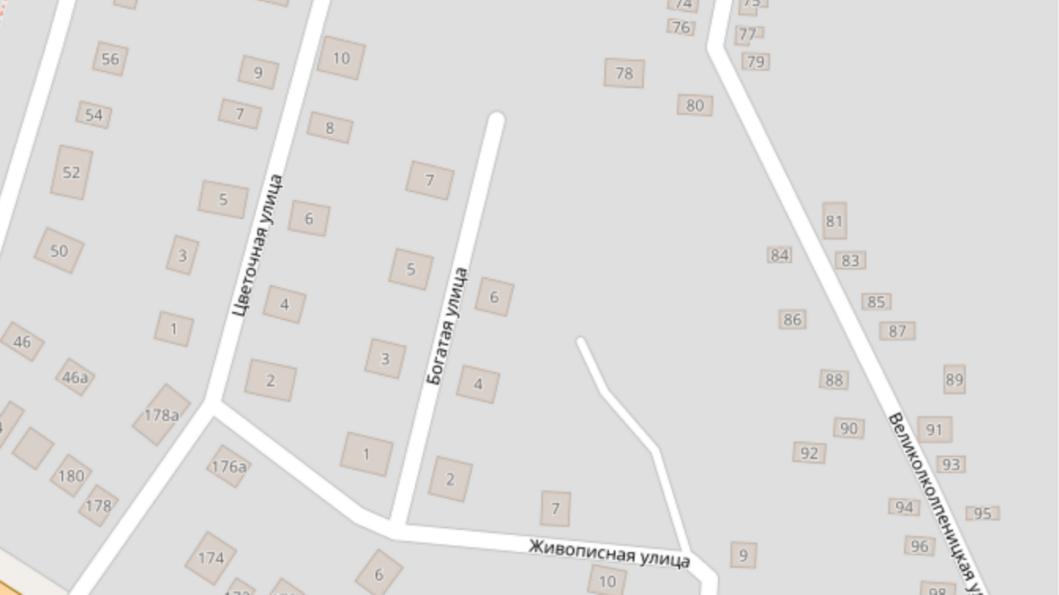




# banner\_url ref:sponsored

wtf







# MAPS.ME is awesome

# OSM is awesome

# Its data model is...



### To Do

- Thanks to Mapbox for the data team and OSMcha
- Monitoring of reverts and marking vandals
- Realtime change quality assessment
- Better editing UI

# OpenStreetMap has always wished for more editors



# Thanks!

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