



The Free Wiki World Map

Frederik Ramm
ramm@geofabrik.de

24C3
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If you want

SEX

you're in the wrong room.

Sex is in room 1.

What is OpenStreetMap?

- Wiki-style world map of everything
- CC-BY-SA licensed
- Started in the UK, 3 years ago
- 20k registered users (10% active),
175m GPS points



Why do we do it?

- UK motif: Ordnance Survey lording it over
- General idea: cool things can be done with proper geodata
- Collecting data is fun
- Political aspect: maps == power





Political aspect: Maps == Power

- History is full of examples
- Mapping the planet is an area of natural monopoly and we don't want THEM to have it.
- Monopoly fears not far-fetched: Teleatlas and Navteq takeovers



The OpenStreetMap Spirit

- Very little rules – no project management
- “brutally pragmatic”
- broad community participation: “we have unlimited free labour”
- “GIS standardophobia”

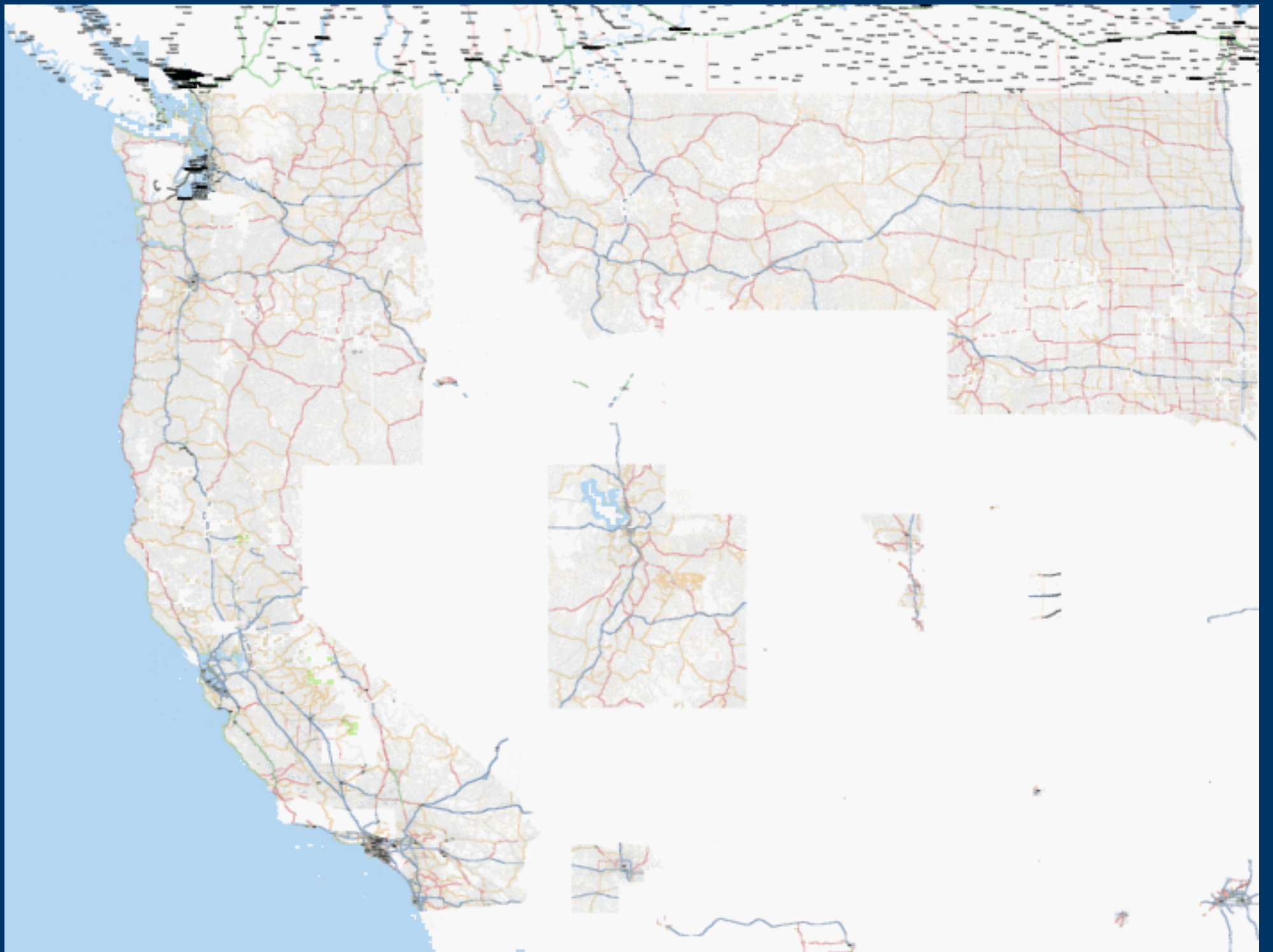


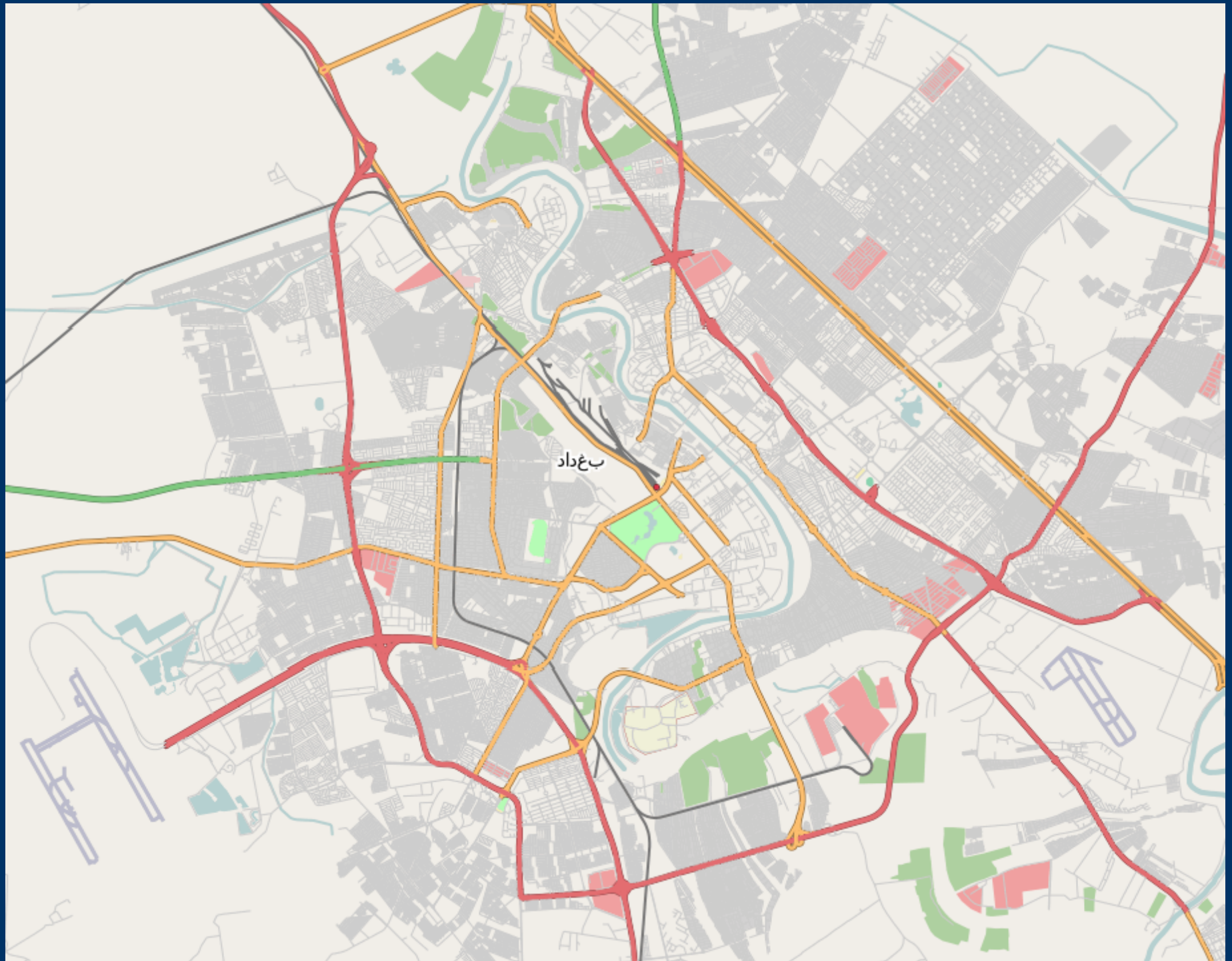
What have we got?





(934583.54593, 6286652.58688), 8.395506837127286, 49.069442674920076, 12





Isle of Man - Google Maps - Firefox

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Google Maps z. B. "10 market st, san francisco" oder "Hotels in der Nähe von LAX"

Isle of Man

Karte durchsuchen Branchen suchen Route berechnen

Suchergebnisse Meine Karten Drucken E-Mail URL zu dieser Seite

Karte Satellit Hybrid

Isle of Man

5 Meilen
10 km ©2007 Google - Kartendaten ©2007 TeleAtlas - Nutzungsbedingungen

Done Adblock

The Information Freeway - tiles@home/Osmarender - Firefox

File Edit View Go Bookmarks Tools Help

http: Go informationfreeway.org

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Register now for: **The State of the Map**

Peel Douglas Dechan Castletown

Permalink

Lat: 54.3292 Lon: -4.1556 Zoom: 10

SOME RIGHTS RESERVED [Render requests](#)

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How does it work?



How does it work?



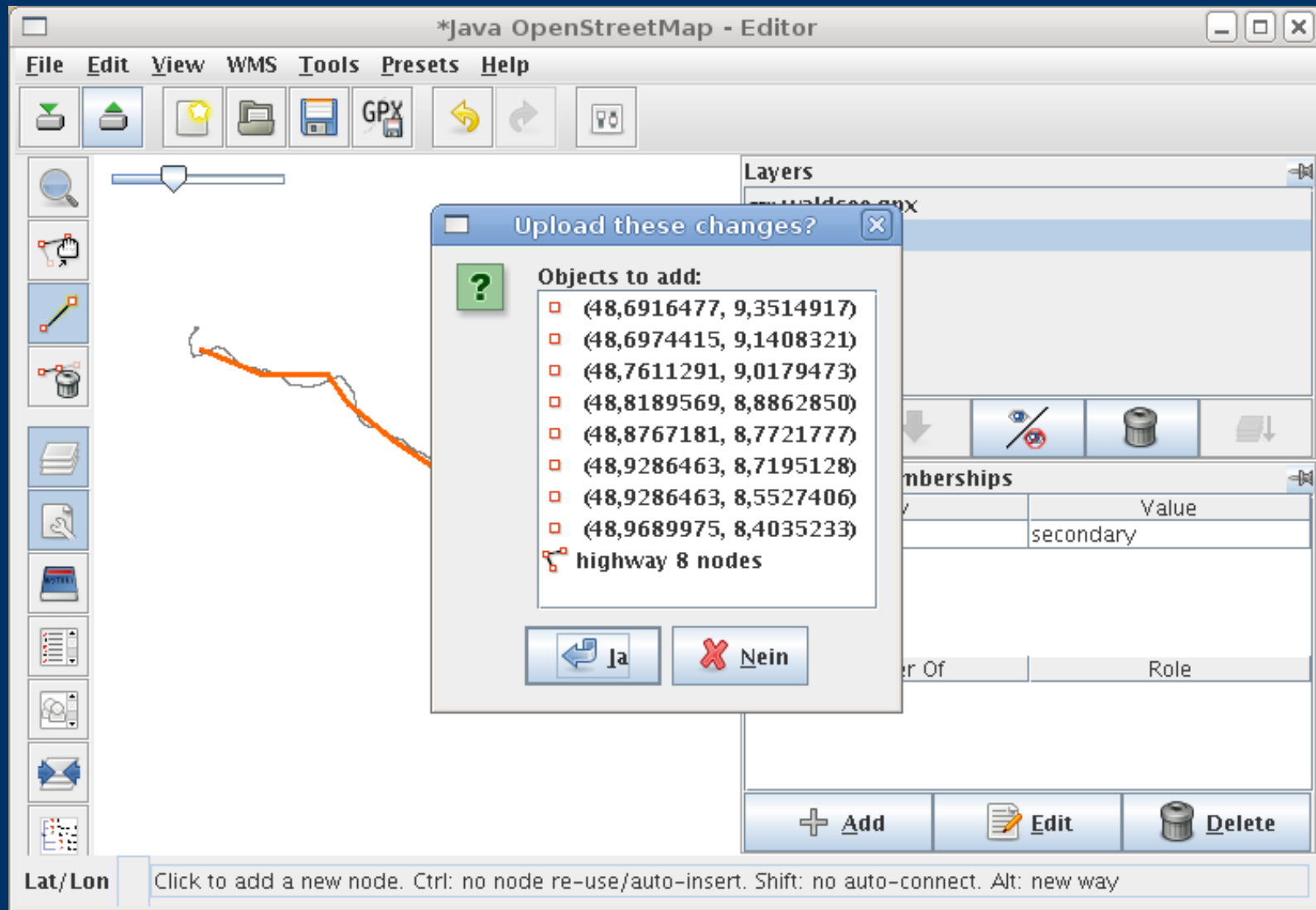
+



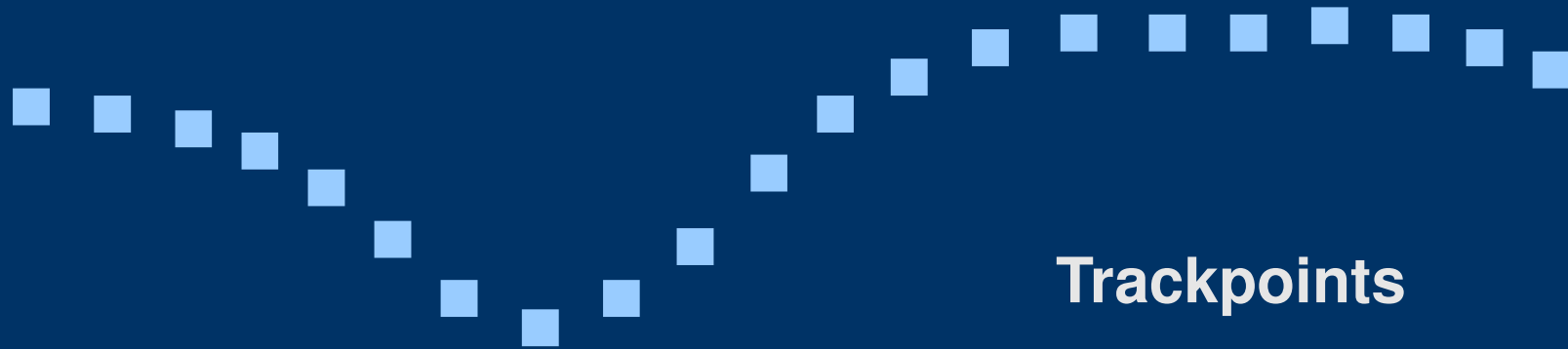
How does it work?



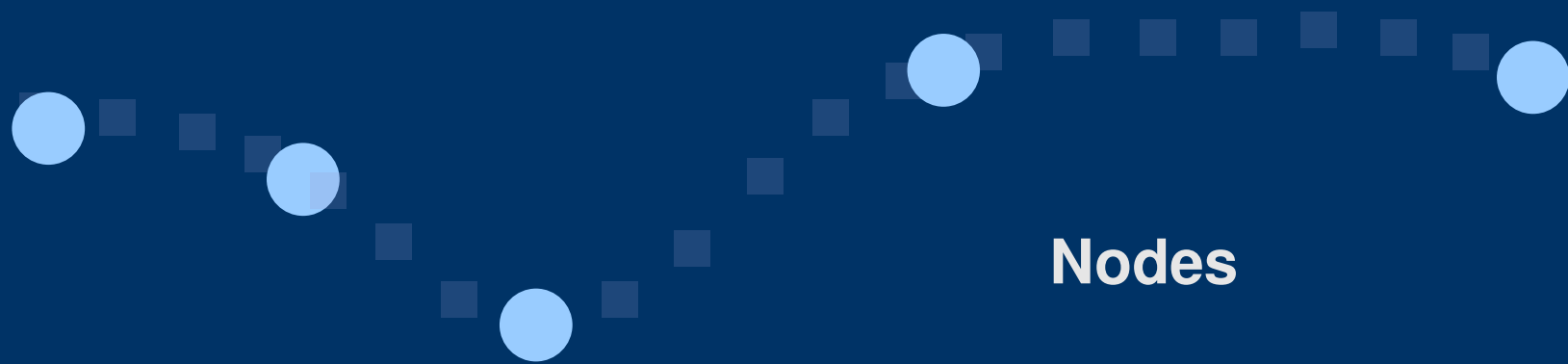
How does it work?



Data model

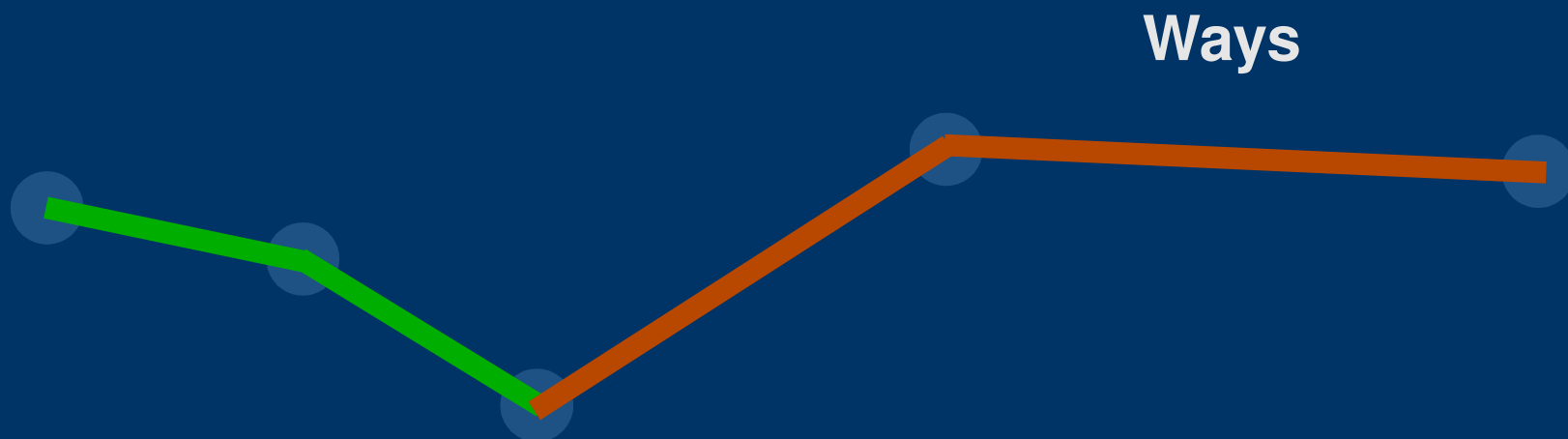


Data model



Nodes

Data model



highway = residential
name = Schillerstraße
oneway = true

highway = secondary
name = Kaiserallee

Tags



Maps == power revisited: abuse

- “Result-oriented vandalism”:

Don't like lorries in your backyard?

Classify the road as a gravel track
and they'll go away!



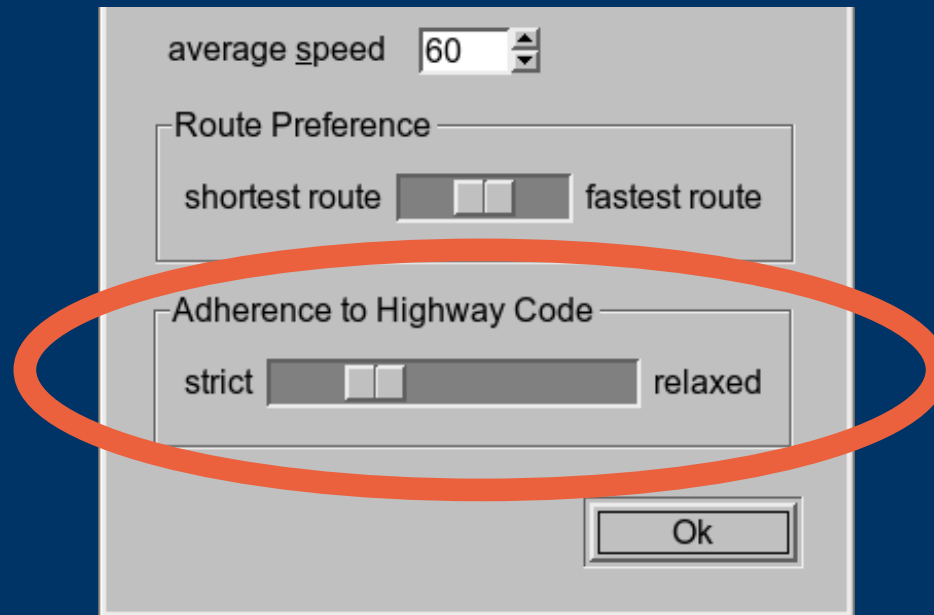
Power and abuse

- first edit wars (Cyprus)
- hard to deal with these and not be drawn into conflict – lessons might be learned from Wikipedia
- technical challenges (revision history – but everything is linked!)



Why is it cool?

- People can get the maps they want or need
- Custom routing:



Why is it cool?

- Mapping the planet means physical exercise for Hackers ;-)
- You get the source!







Heartbeat animation / idea and script by Barry Crabtree.



Nightfall animation / idea and script by Barry Crabtree.



xterm

%
%
%

% ./osmmush.pl -lat=52.5206 -lon=13.4164

You are in QuadTile BACCBCADBCAADCBC (52.5206,13.4164).

bcc - berliner congress center (node) is 22 feet to your east.

Alexanderstraße (way) is 125 feet to your southeast.

Jacobistraße (way) is 125 feet to your southeast.

Alexanderstraße (way) is 178 feet to your southwest.

Jacobistraße (way) is 213 feet to your northeast.

Alexanderstraße (way) is 224 feet to your southwest.

Jacobistraße (way) is 227 feet to your east.

Grunerstraße (way) is 238 feet to your west.

Alexanderplatz (way) is 253 feet to your northwest.

Alexanderplatz (way) is 334 feet to your west.

Grunerstraße (way) is 351 feet to your west.

Karl-Marx-Allee (way) is 420 feet to your northeast.

n,ne,e,se,s,sw,w,nw,[no]fly,[no]debug,more or:

pos 'lat,lon' or speed 'x'> █



Thanks! – Questions?

Frederik Ramm
ramm@geofabrik.de

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Buy our book (out February 2008)

Frederik Ramm, Jochen Topf:

OpenStreetMap

Lehmanns Verlag, Hamburg

The following two slides are not a planned part of the presentation but may be used if the topics come up.

License Issues

- CC-BY-SA unsuitable for geodata
- OSM not licensor – cannot give authoritative answers on license questions
- remixing with stuff from other free sources difficult



The OSM Toolchain

