

MapRoulette 2

Electric Bugalloo

emacsen

State of the Map EU 2014

- What is MapRoulette?
- What's changed in the last year?
- How can you get your challenges into MapRoulette?
- What's the future of MapRoulette?

What is MapRoulette?

“MapRoulette is a geographic quality assurance tool based on VGI (Volunteered Geographic Information) and the utilization of HIT (Human Intelligence Tasks) and gamification principles in order to find and correct anomalies in the OpenStreetMap dataset”

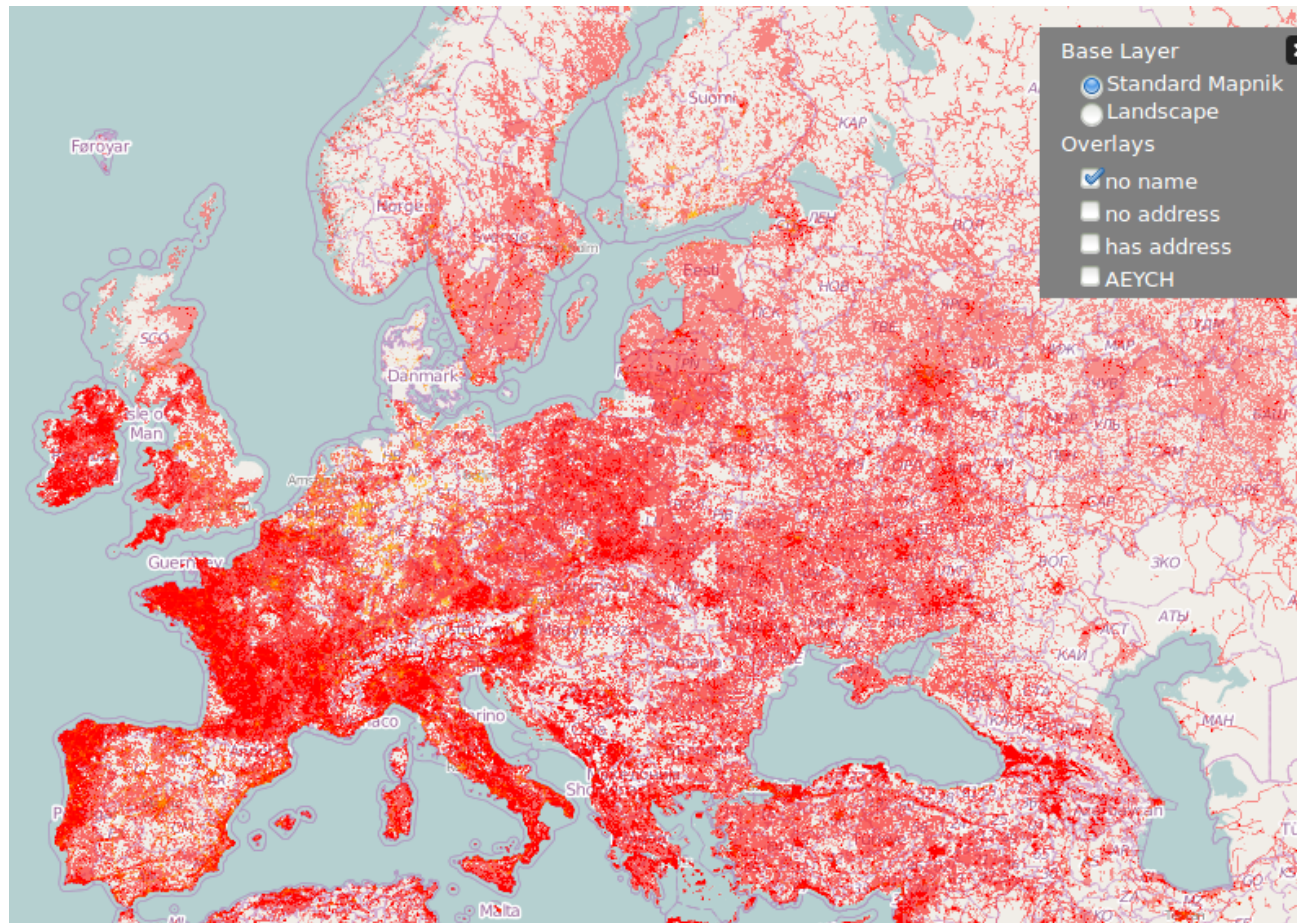
A sheep in wolf's clothing

**MapRoulette is a game
to make OSM better
while having fun**

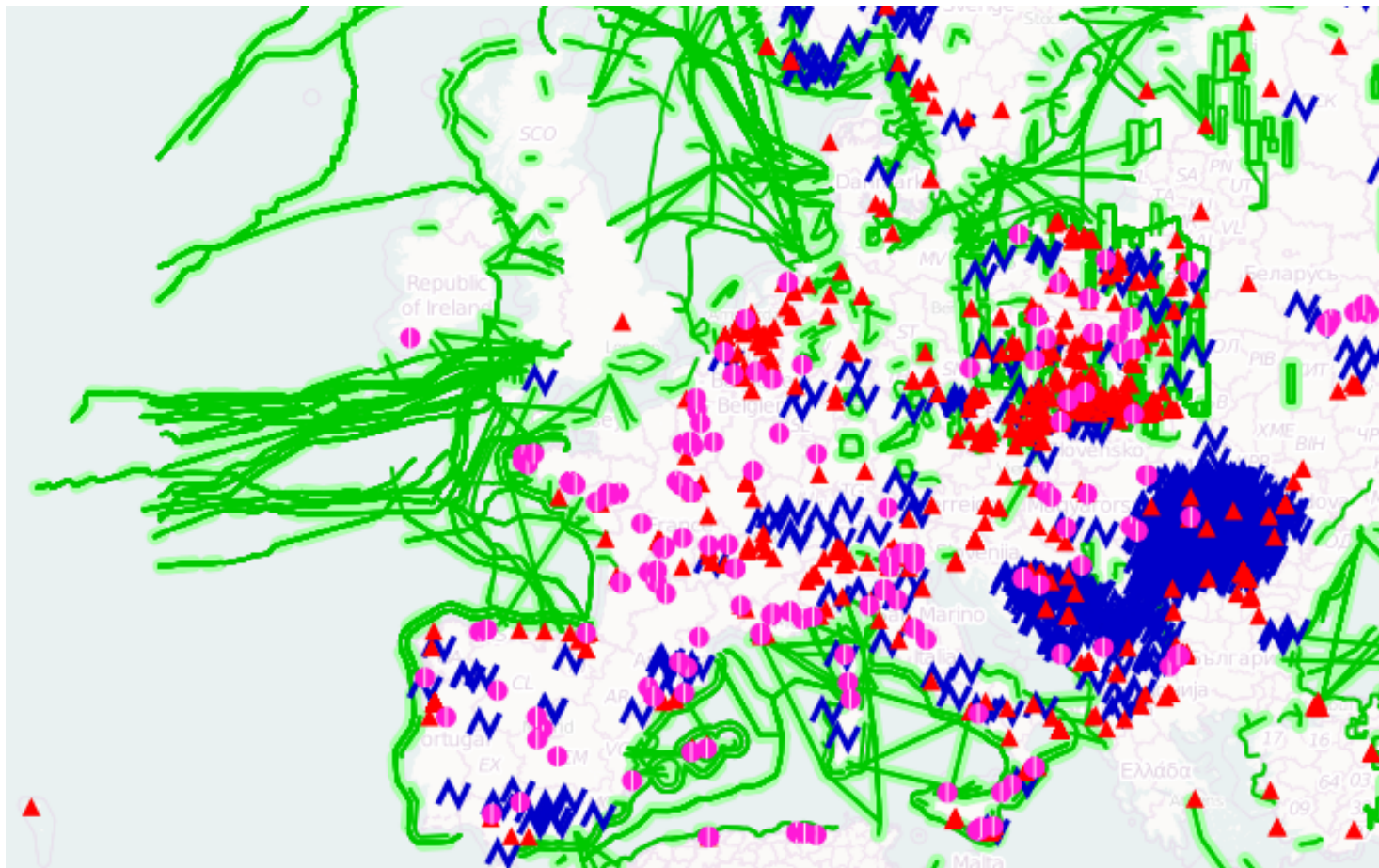


Correcting errors in OSM can be
overwhelming

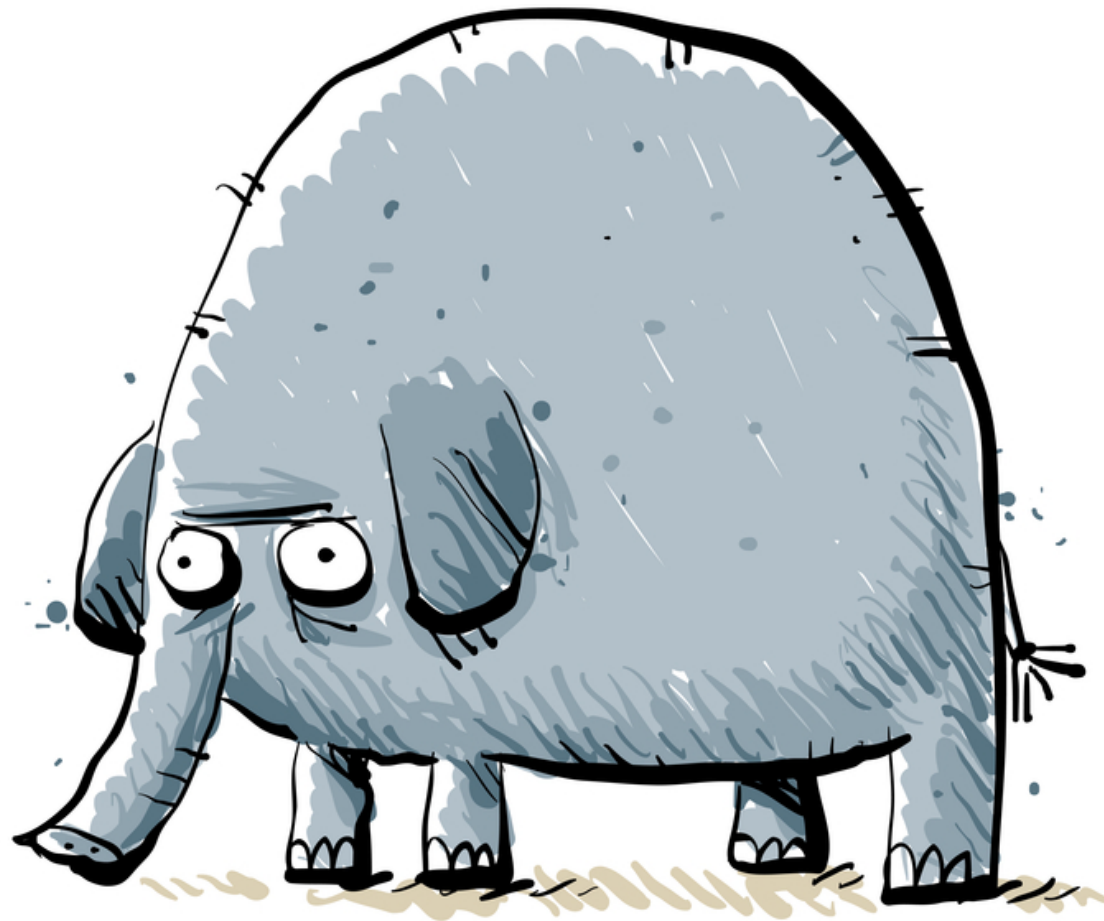
NoName



OSM Inspector



How Do You Eat An Elephant

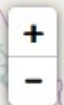




One Bite At A Time

How MapRoulette Works

- A program finds anomalies in the database
- Each anomaly is sent to MapRoulette as a task
- Users are presented with a task
 - They solve it
 - They don't solve it
- They get another task



Welcome to MapRoulette!

You will be working on this challenge:

Ways Needing Smoothing

Let's go!

More help

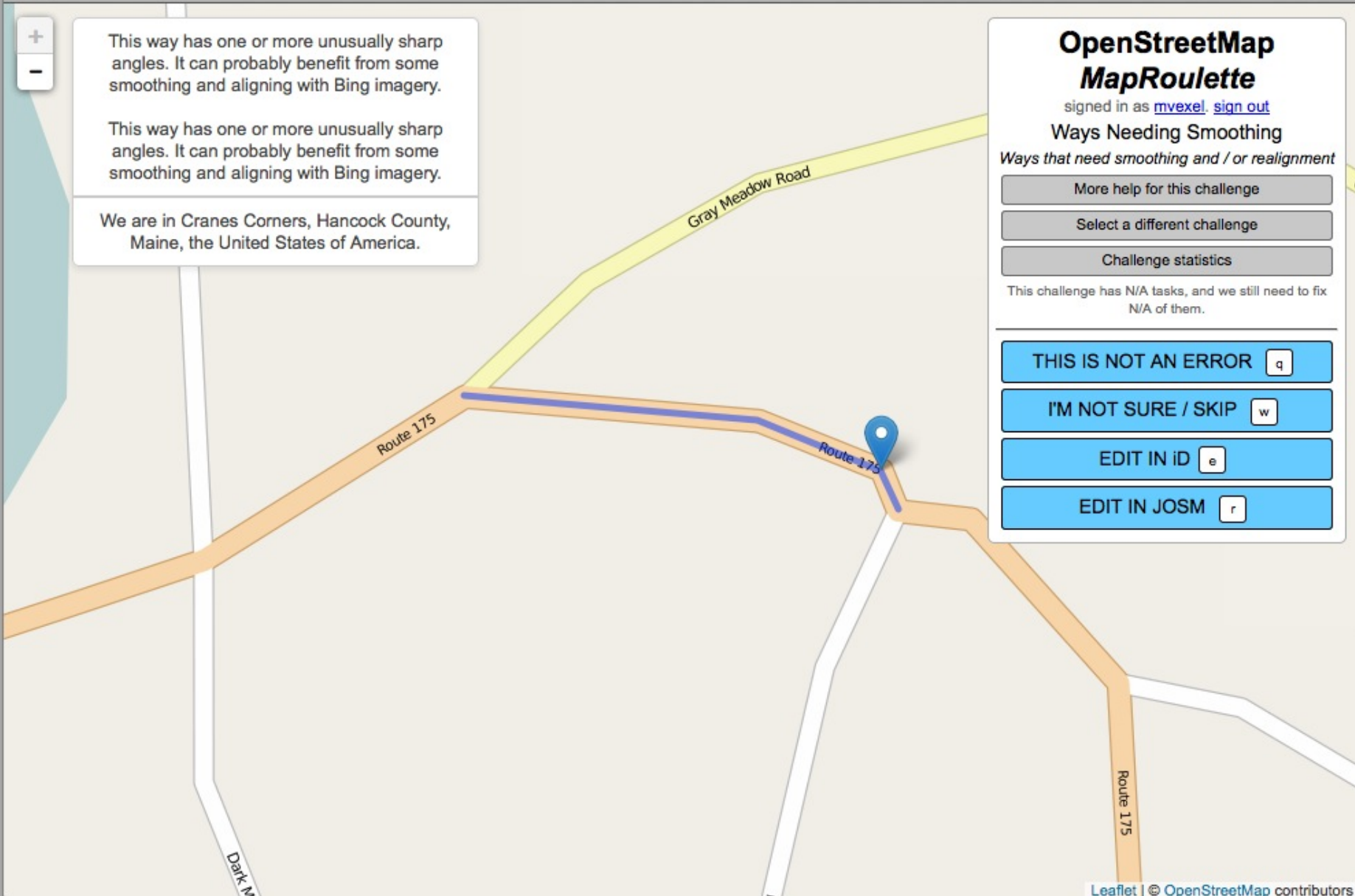
Pick another challenge



This way has one or more unusually sharp angles. It can probably benefit from some smoothing and aligning with Bing imagery.

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We are in Cranes Corners, Hancock County, Maine, the United States of America.



OpenStreetMap MapRoulette

signed in as [mvexel](#). [sign out](#)

Ways Needing Smoothing

Ways that need smoothing and / or realignment

- More help for this challenge
- Select a different challenge
- Challenge statistics

This challenge has N/A tasks, and we still need to fix N/A of them.

- THIS IS NOT AN ERROR
- I'M NOT SURE / SKIP
- EDIT IN iD
- EDIT IN JOSM

MapRoulette x iD x +

openstreetmap.us/iD/release/#background=Bing&id=w114436

Google

Edit feature

Point Line Area Save

Secondary Road i

Name

Route 175 +

One Way

Unknown

Speed Limit

40, 50, 60... mph

Structure

Bridge

Tunnel

Embankment

Cutting

Access

General Unknown

[View on openstreetmap.org](#)

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Edits by bot-mode, lewis_pusey, choess, and 5 others 1.3.1

MapRoulette x iD x +

'release/#background=Bing&id=w11440628&map=18.00/-68.: ☆ i ↻ Google

Edit feature

Point Line Area ↶ ↷ Save 6

 Residential Road i

Name i
Dark Mountain Road +

One Way i
Unknown

Speed Limit i
40, 50, 60... mph

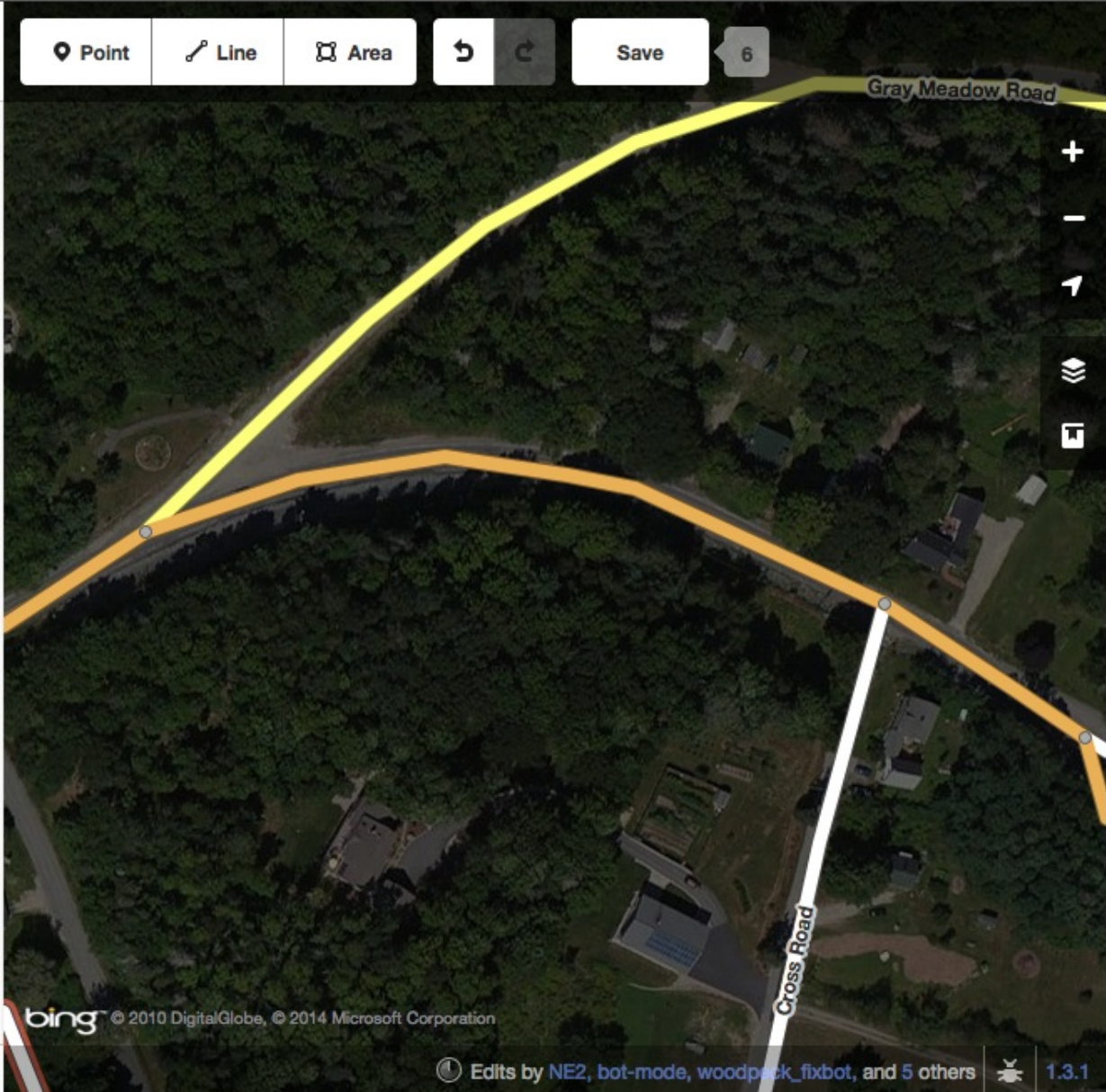
Structure i
 Bridge
 Tunnel
 Embankment
 Cutting

Access i
General Unknown

[View on openstreetmap.org](#)

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Edits by NE2, bot-mode, woodpeck_fixbot, and 5 others 1.3.1




MapRoulette x iD x +

'release/#background=Bing&map=18.00/-68.74081/44.57230 Google

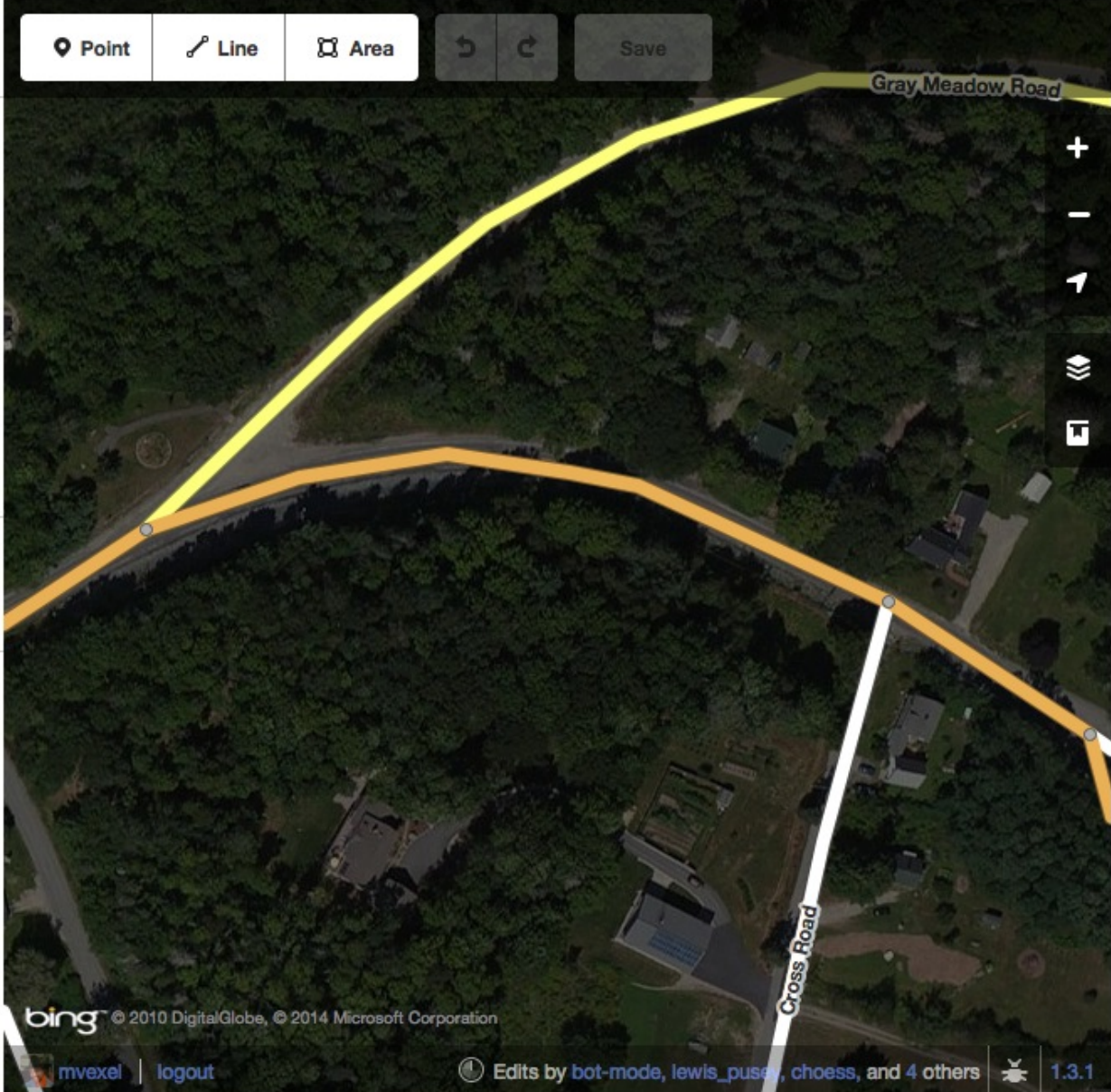



You just edited OpenStreetMap! X

Point Line Area Save

Your changes should appear in the "Standard" layer in a few minutes. Other layers, and certain features, may take longer ([details](#)).



[View on OSM](#)



Gray Meadow Road

Cross Road

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[mvexel](#) | [logout](#) | Edits by [bot-mode](#), [lewis_pusey](#), [choess](#), and 4 others | 1.3.1

www.openstreetmap.org/browse/changeset/21595870

Tasks

- Tasks are small
 - A single problem
- Tasks are short
 - No more than five minutes of work
- Tasks are the same
 - Within a single challenge, you only need to focus on a single attribute



The MapRoulette Relaunch

- MapRoulette originally written entirely by Martijn Van Excel
- At SOTM US 2012, I decided to help
- Together we rewrote the entire app from scratch
 - Rewrote the backend in Flask
 - Rewrote the frontend in React.js
 - Created a set of RESTful APIs, rewrote the frontend
 - Created an administrative GUI
 - Better foundation to build on



MapRoulette Victories

- Re-Map-A-Tron
- Zoro Ways
- Relaunch
- Daily Usage
 - ~10% of all OSM users are using MapRoulette!



Why MapRoulette Works

- Small Commitment
 - A task should not take more than 2 minutes
- Getting “in the zone”
 - Tasks are the same
- It's simple
 - The controls are simple and unintimidating
- It's fun

Getting Your Challenge Into MapRoulette

- MapRoulette has a simple RESTful API
- Uses a simple JSON format for challenges/tasks
- Has an administrative GUI
- **Come to Martijn's Workshop on Sunday!**

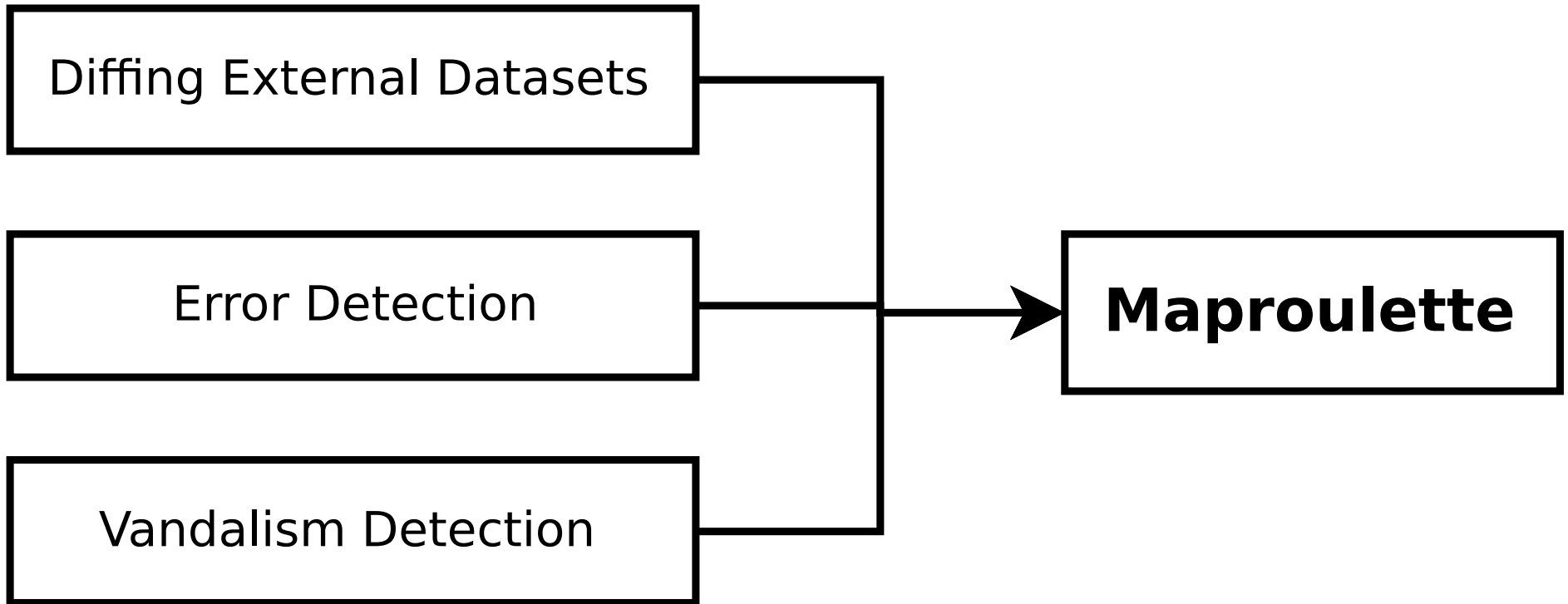
What Makes a Good Challenge

- Needs human intervention
- A “right answer”
- Easy to determine right answer from existing data/imagery
- Easy to fix

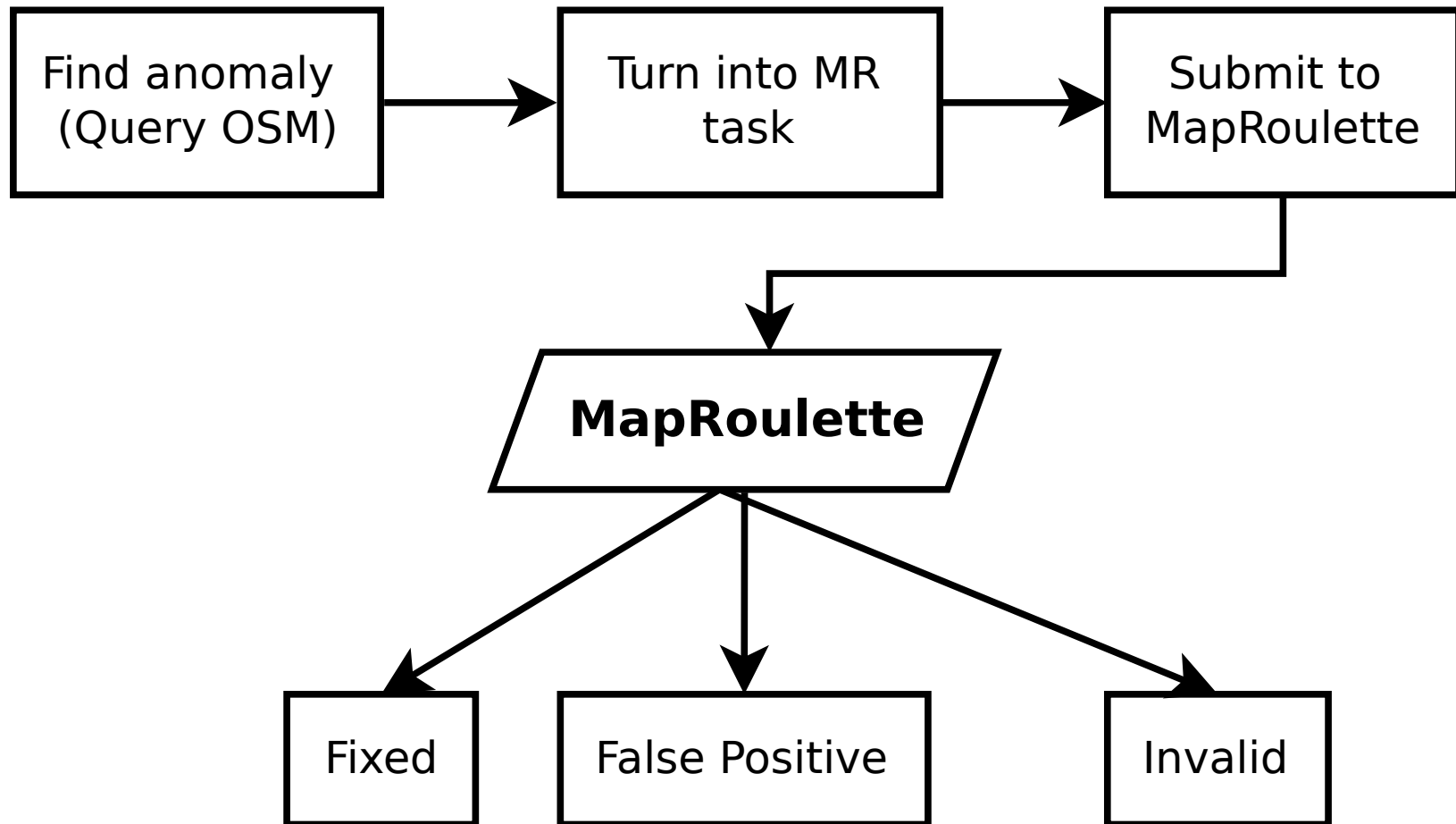
Connectivity Challenge (2012)



MapRoulette Data Sources



MapRoulette Challenge Lifecycle



Past and Current Challenges

- Zoro Ways
- Connectivity Challenge
- Ways that Need Smoothing
- Intersecting One Way Streets
- Overlapping Ways
- Italian Roundabouts
- Italian Waterways that Cross

Future of MapRoulette

- Next 3 months

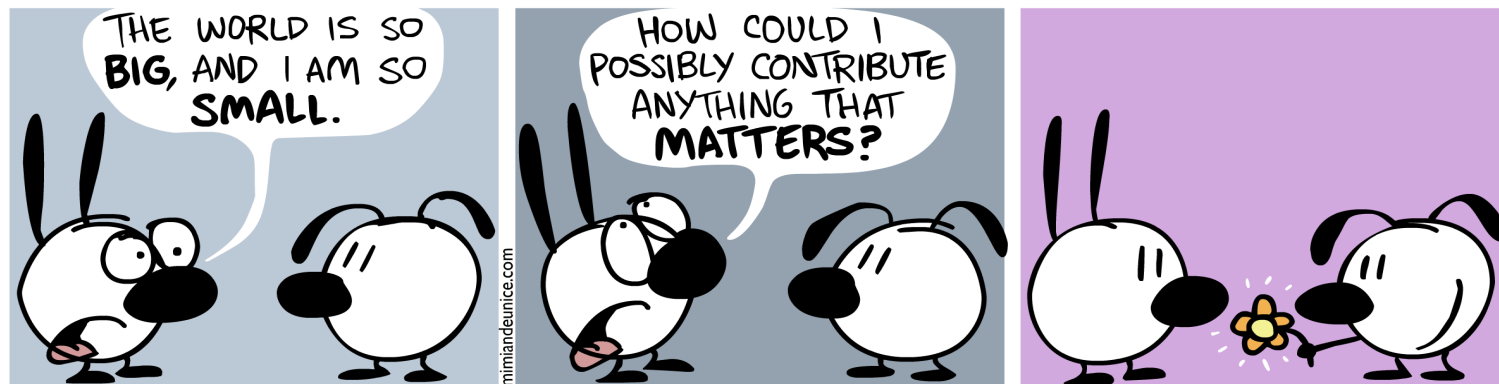
- More challenges
- Better statistics
- Easier challenge selection
- More internal architectural improvements

- Next 12 months

- Localized Task Selection
- Localization/Internationalization Support
- New types of challenges
- Tools to make challenge maintenance easier
- **Challenges w/o external editors**

Contribute!

- **Create a challenge**
 - (Come to Martijn's workshop!)
- **Help code!**
 - Python
 - Javascript
- **Help document**



Getting Your Challenge Into MapRoulette

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MapRoulette Technologies

- Python
 - Flask
 - GeoAlchemy
 - Celery
- PostGIS
- Redis
- Nginx
- Javascript
 - JQuery
 - React.js w/ JSX
 - Noty
 - Moment

Future of MapRoulette

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 - More challenges
 - Better statistics
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 - More internal architectural improvements
- Next 12 months
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 - **Challenges w/o external editors**

Thank you!

Questions?

<http://maproulette.org>
<http://github.com/osmlab/maproulette>

Me (Serge) - @emacsen
Martijn - @mvexel