OSMCha meets OSM Foundation

Wille Marcel
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Map Data Engineer @ Development Seed

- OpenStreetMap contributor since 2010
- Created OSMCha in 2015 and maintained it with support from Mapbox between 2017 and 2021
- Led the development of Tasking Manager 4, at HOT
- Since July, working at Development Seed

Development Seed works on a series of OSM related tools, like:

- OSM Teams
- Scoreboard
- osm-seed
- OpenHistoricalMap
- OpenAerialMap
The motivation behind OSMCha

Back in 2015...

- Some problematic changesets were hard to find
- Errors persisted in the map for a long time
- Feeling of lack of control
- Difficulties to identify the most relevant changesets to be reviewed
What does OSMCha provide?

Powerful changeset queries

We store all changeset metadata in the database, making it possible to query by a wide range of parameters.

Valuable flagging

Automated analysis helps the users to identify possible issues and prioritize the changesets to be reviewed.

Nice map visualization

A good way to visualize the changeset. It's also possible to visualize the changes in the relations.
What does OSMCha provide?

REST API

allows new tools to be developed like JOSM plugins, notification systems, etc.

Integration with MapRoulette

It's possible to push flagged features from OSMCha to MapRoulette challenges.

Open Source tooling

Part of our stack can be easily reused in other projects, for example the changeset-map library.
Hosted and maintained by Mapbox since 2015
Used by

OSM communities around the world

Companies
Mapbox, Apple, Facebook, Microsoft, Lyft...
The most convenient tool for the OSM communities to track changesets

- It provides resources that are not present in the osm.org website
- Makes it possible to check if the changeset was already reviewed and what the evaluation was
- The new OSM Welcome Tool developed by OSM Belgium uses the OSMCha API to discover new users editing the areas
- We could do much more to support community mappers
Companies use OSMCha in addition to their internal tools

- Opportunity to be a central repository of validated changesets
- Increase transparency and collaboration between companies and communities
- Training data to Machine Learning models
- Quality assurance is the cost we have to pay to use crowdsourced data
View for the future

Find organizations interested in funding development
Add more intelligence to error flagging and prioritization
Empower users to create their own flags

Improve queries and database performance
Solve tech debt and keep it updated
Data architecture

Replication files → Metadata analysis

real-changesets S3 Bucket

real-changesets processing

Overpass Adiff

OSMCha Changesets DB

Flagged feature?

YES

osm-compare functions
Thank you!

osmcha.org