

Real-time OSM

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openrouteservice (ors)

- around since ~ '08 and now part of the Heidelberg Institute for Geoinformation Technology
- free API for Routing (+Matrix) | Geocoding | Isochrones
- fully based on open data → OSM!
- FOSS!









new requirements





openroute for disaster management









new requirements

need:

up-to-date database + routing graphs









OpenRouteService: slow update of the database/routing graphs











Solution

one ORS instance per region

speeds up graph generation

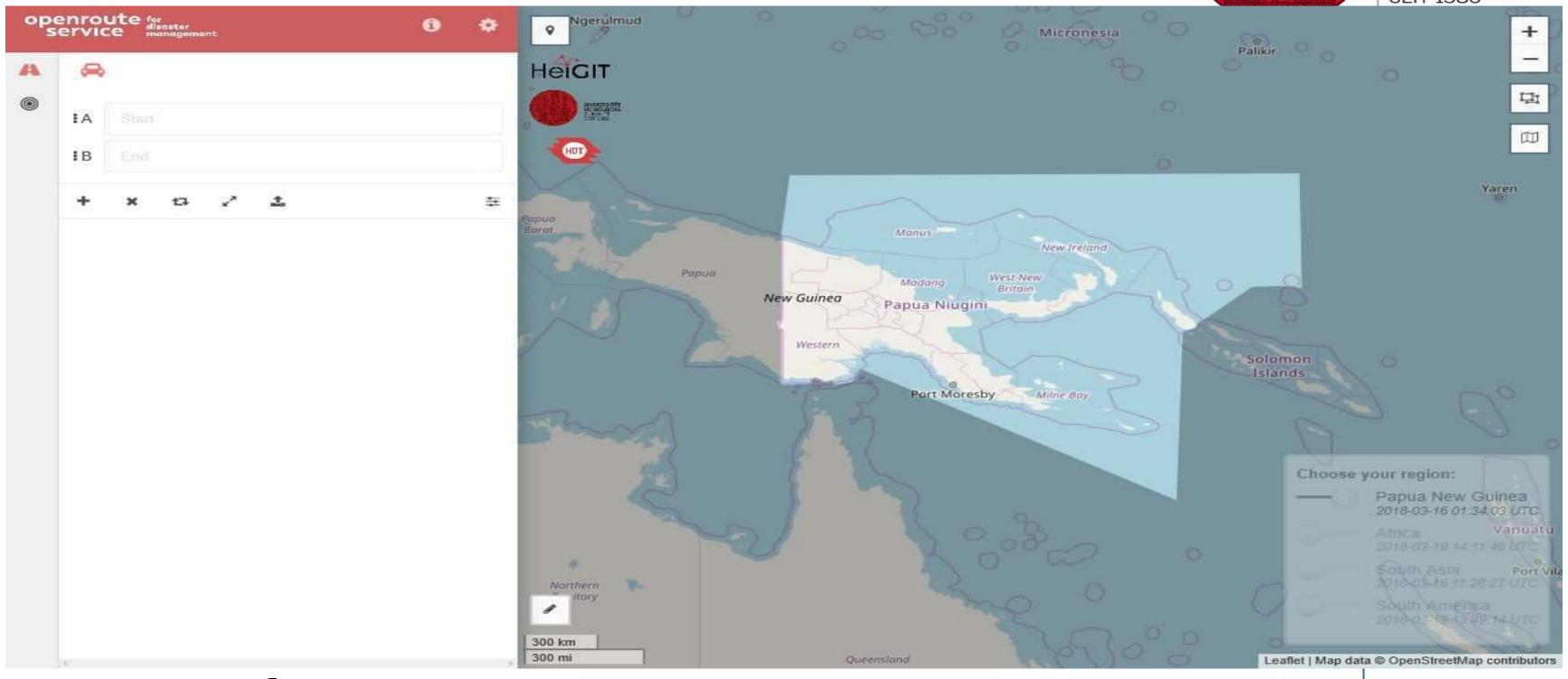






real-time OSM





openroute service



Klaus Tschira Stiftung gemeinnützige GmbH





up-to-date data?

real-time OSM

- provides custom OSM extracts
- keeps them up-to-date in near real-time







real-time OSM



Real-time OSM task manager

2/3				[s]	updated \$	runtime [s]
	ata _haiti.osm.pbf) 1 1	2018-01-11T09:50	10	2018-01-11T09:55:17	30.8
nonal	ata D_nepal.osm.pbf		2018-01-11T09:50	10	2018-01-11T09:54:58	57.1
	ata L_milano.osm.pbf	2018-01-13T00:00:00	2018-01-11T09:52	60	2018-01-11T09:55:32	27



Get data Get all tasks as JSON











Technical details

- Node.js server
- manages update-tasks in sqlite3 data base
- keeps data up-to-date
- provides an API
- provides a web frontend for simple administration









Update strategy

- find and download smallest Geofabrik extract for area of interest. crop accordingly.
- if this fails, rely on planet file
- continuous updates with osmupdate









Access to our service?

http://realtimeosm.openrouteservice.org

info@heigit.org









Grazie!

https://github.com/GIScience/OSM-realtime-update

http://realtimeosm.openrouteservice.org

http://giscienceblog.uni-hd.de

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