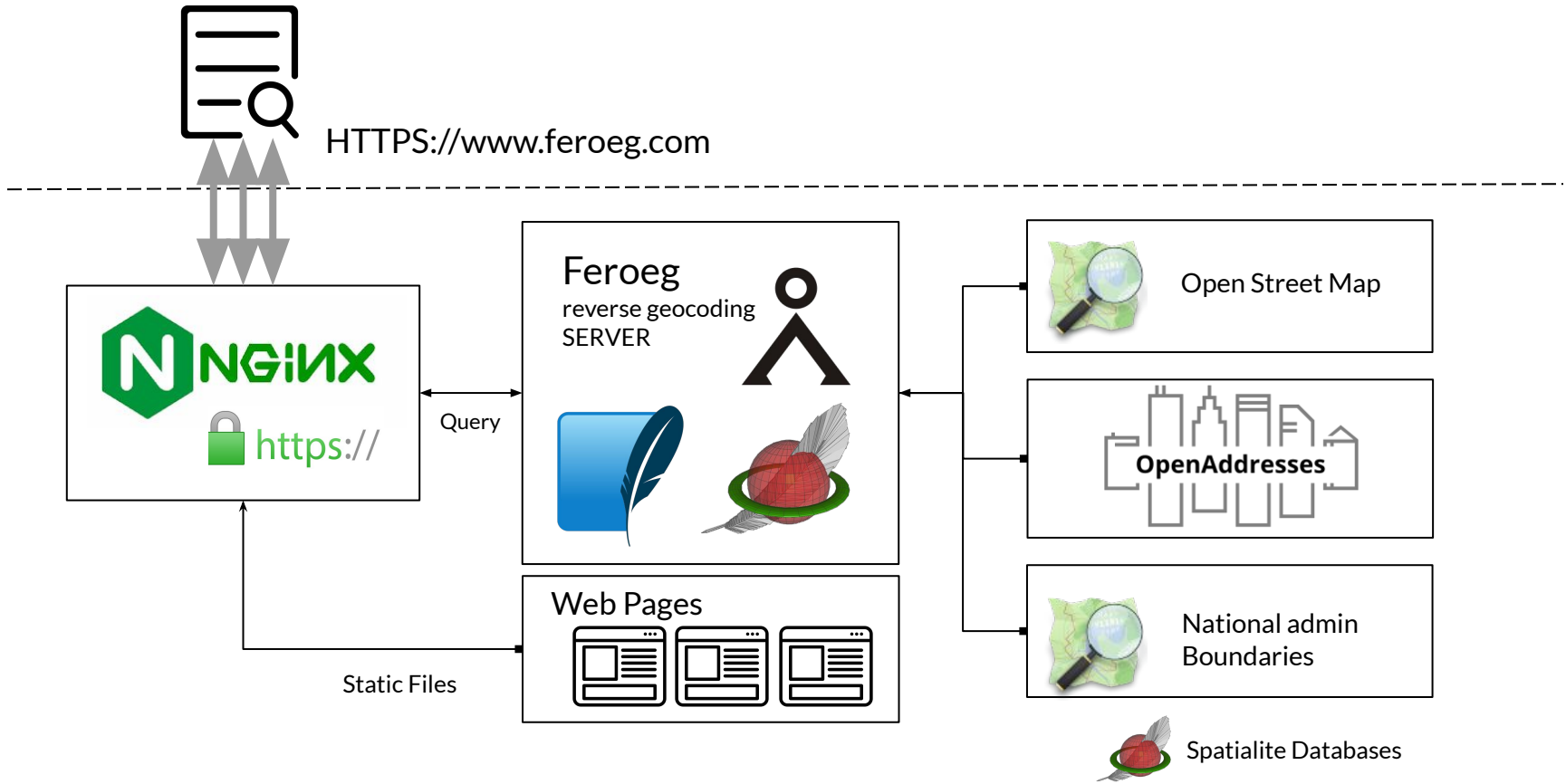


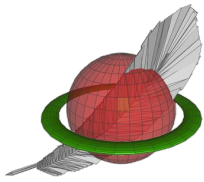


Feroeg - a service of reverse geocoding

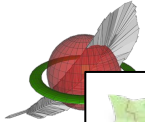
December 2021

Architecture scheme:

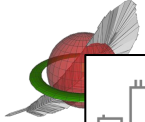




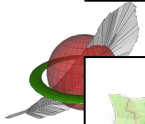
Spatialite datasets



Open Street Map
street names
street numbers
admin boundaries



OpenAddresses
street numbers



**National
Administrative
Boundaries**

The Feroeg reverse geocoding service uses data coming from two data sources: [OpenStreetMap](#) and [OpenAddresses](#).

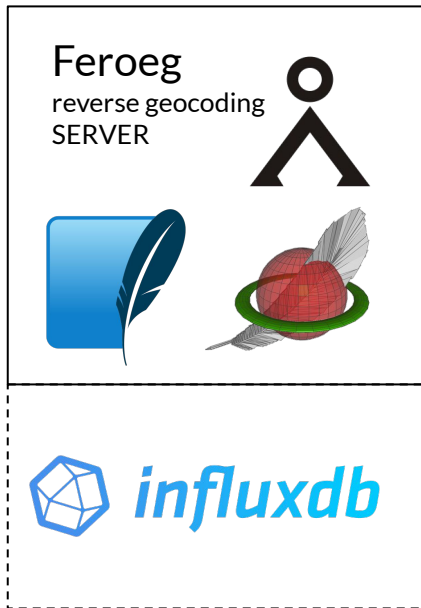
The reverse geocoding engine is based on spatialite databases, used to organize and query geodata efficiently.

One of the main benefit, compared to the conventional approach to store data in one monolithic database instance, is to have a modular structure.

Modular structure:

- 3 Spatialite dataset used to resolve an address
- Each kind of dataset is composed of one to many spatialite files
- Developed tools to convert OpenStreetMap and OpenAddresses data in Spatialite dataset (entire world in about one day)
- Easy upgradable (add / copy / spatialite files)

Reverse geocoding engine



Uses Spatialite: a Sqlite database module to add spatial capability.

Written in C / C++ for best performances.

This solution permits to have:

Thin hardware and memory footprint:

- 200 GB disk space required for all World Data
- 32<->512 MB RAM requirement each geocoder

Fast and scalable architecture:

- About 100ms to resolve an address for geocoder
- Multithread: one geocoder instance for core
- Scalable: uses NGINX for scalability and load balancing

Feroeg roadmap

Current status -December 2021 :

- The service is available for free, no quote limits are applied.
- There are some known defects to fix.
- Please see the [API documentation](#) for details.

Intermediate - First quarter 2022:

- Start soft advertisement campaign
- Service will be also available at [rapidapi.com](#) (free)
- Maybe quote limits will be applied - depends on server load
- Working for enhancements described in Feroeg [API documentation](#)

Final - Second quarter 2022-2024:

- Commercial service will be available.
- Service will remain free, quote limits will be applied
- Until 2024 the free service will be available.

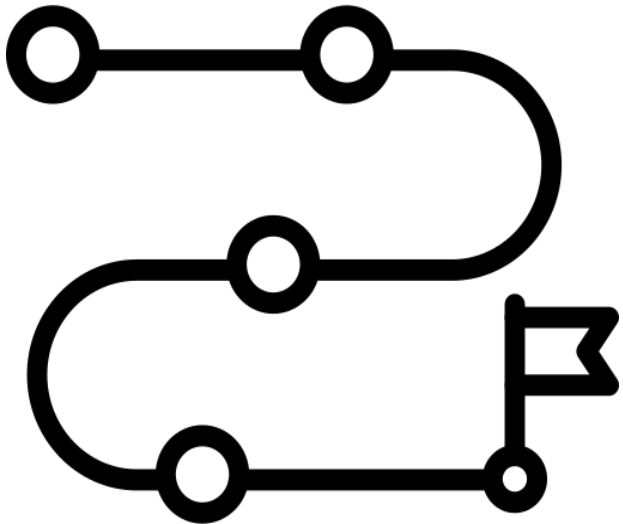


Image from: [Flaticon.com](#)



**Feroeg - a service of
reverse geocoding**

Thank you !