GoFundGeo - AGM 18th Nov 2024

OSGeo:UK are going to fund some Open Source Geo projects, with suggestions requested in time for the AGM. Details at https://uk.osgeo.org/gofundgeo.html.

OSGeo:UK has a budget of ~£6,000 to fund projects with.

As per the requirements, each project will need to provide a write-up after the work has been done detailing what has been accomplished.

Ideas received so far:

- pgRouting Gold Sponsorship Level, \$1200/£963 per year
 - We have sponsored pgRouting since 2023, Regina Obe before that since 2018.
 - pgRouting is a network extension to PostgreSQL and is the 2nd most popular PostgreSQL spatial extension second to PostGIS.
 - The funds will go toward bug fixes, development, and documentation for the pgRouting project as well as ancillary support for code sprints, FOSS4G travel, and mentorships.
 - USD\$1200/£963.50 would be Gold Level (\$600 is Silver)
- QGIS Sustaining Membership small level, €1,000/£840 per year
 - We were previously sponsoring at a medium level (€3000+ per year). In 2022 we supported at a small level (€500) and in 2023 also at a small level (€1000).
 - We can activate or deactivate our sustaining membership each year as needed.
- ggis2web: Supporting Andrea Ordonselli to take on and develop gis2web, £1000
 - We funded Andrea last year (2023, £1000) to take on and continue to develop qgis2web.
 - It has increase usage and the number of open tickets on GitHub has decreased.
- GeoServer, £1000
 - There was discussion about supporting GeoServer in 2023, but no concrete proposal was put forward. This appears to be a good and useful proposal.
- Terra Draw, James Milner, £1000
 - We funded Terra Draw, James Milner £1000 in 2023 and £800 in 2022.
 - The funding has been absolutely vital for helping sustain the project over the last 2+ years.
 - James has a range of specific goals for 2024 funding, see link for details.
- GISRUK & OSGeo: UK GoFundGeo Award, £200
 - Co-finding (£200) with GISRUK (£300) to award to a ECR (PhD / post doc researcher) who presents work at the GISRUK conference series.
 - Last year, it was awarded to Céline Van Migerode for Flexurba: An Open-Source R Package To Flexibly Reconstruct The Degree Of Urbanisation Classification.
- OSGeo Sponsorship, £0

 We gain recognition with OSGeo for sponsorship of OSGeo projects (QGIS, pgRouting, GeoServer, qgis2web). See details below.

There is some historical information available in 2020 software sponsorship and 2022 software sponsorship. What we awarded in 2022 and 2023 is listed online at https://uk.osqeo.org/gofundgeo.html:

2023 (total £5,633)

- pgRouting Gold Sponsorship, \$1200/£963 per year
- QGIS Sustaining Membership small level, €1,000/£870 per year
- James Milner, development of Terra Draw, up to £1,000
- North Road/Nyall Dawson: QGIS layout background formatting, £1,000
- GISRUK GoFundGeo: Flexurba £200
- Dorset Code Sprint: £600
- qgis2web: Supporting Andrea Ordonselli to take on and develop gis2web, £1,000
- As a result of sponsoring OSGeo Projects with a total of £1,833 / \$2,317, we are now an OSGeo Silver Sponsor.

2022: (total £4,623.16):

- Regina Obe, pgRouting maintenance and development (\$720/£587.16 per year)
- QGIS Sustaining Membership, €500 / ~£436 (per year)
- Lutra Consulting, TBC, ~£1000
- North Road / Nyall Dawson, QGIS Layout Updates, £1000
- James Milner, Terra Draw development, £800
- GISRUK GoFundGeo Award, develop research into software, £200
- <u>Dorset Council</u>, <u>Paul Wittle</u>, code sprint day, £600

Detailed Proposals

GeoServer, £1000

GeoServer have put out the call for funding essential developments for v3. This is a critical and fundamental upgrade, to update many core dependencies, including migration to Java 17 and to a more modern image processing library.

https://geoserver.org/behind%20the%20scenes/2024/09/10/gs3.html

Without this work, GeoServer will start to become either unsupported, or could fail future audits, being built on libraries which will be out of support at some point in the future.

The target is ambitious at €550k, but they are already over 40% of the way there. It would be great for OSGeo:UK to put some money their way, if others agree.

(Would count towards OSGeo total)

Qgis2web, £1000

What is being funded:

The QGIS plugin named qgis2web, published on GitHub at https://github.com/qgis2web/qgis2web/, and as a QGIS plugin at https://plugins.qgis.org/plugins/qgis2web/

Why it is useful:

It is a QGIS plugin widely used throughout the world that allows you to transform local QGIS data into a self-hosted web map

Who will do it: Andrea Ordonselli

How much is requested: £1000

Projects must be available under an open-source license: The project is already available under the GPL-2.0 license.

Projects seeking funding from OSGeo:UK should join OSGeo and work to be accepted as a community project or as a complete OSGeo project: Accepted. The OSGeo:UK logo has been present on the Github home for more than 1 year.

Explain briefly why you believe your project is suitable for funding:

In the last year qgis2web has received many updates that have solved many issues and bugs, and has improved a lot in the support documentation. This work took the plugin from 850.000 downloads to 1.138.000 and the open issues in Github went from 185 to 47. The funding is requested to support the development of the plugin even better, as it deserves:

Funding Open Source geospatial software that will have an impact in the United Kingdom: qgis2web has an impact on the entire world. In the last week it has been used approximately 3300 times.

Who I am:

I am Italian, a freelance computer professional with a VAT number. In my profession, I conduct software demonstrations for local IT companies and provide subsequent after-sales support. As a passion, I'm a maintainer of qgis2web.

Thanks and greetings
Andrea Ordonselli

Terra Draw, James Milner, £1000

Hello!

My name is James, some of you may know me already, but for those who don't, have a little introduction, I am a software developer with a passion for open source geospatial, currently based in East London. I am currently the lead maintainer of the open source JavaScript project Terra Draw. I would like to propose Terra Draw again for the OSGeo:UK GoFundGeo.

For those unfamiliar, Terra Draw has been a previous recipient for the GoFundGeo initiative for the last two years. The funding has been absolutely vital for helping sustain the project over the last 2+ years, at a zoomed out level helping us:

- Grow from 0 to 489 stars at time of writing on GitHub
- Have 57 forks
- Gain contributions from 20 external contributors
- Speak about the project at FOSS4G UK 2022, FOSS4G 2023, FOSS4G EU 2024
- Grow the number of end users to include organisations such as Oracle

And specifically since the last GeoGoFund call:

- Perform 29 releases, with many bug fixes, features and improvements along the way (see the CHANGELOG for more detail)
- Improve the unit testing coverage to 80%+
- Get Terra Draw signed up as a OSGeo Community Project
- Provide the capacity to have Terra Draw participate in the OSGeo UK Code by the Coast code sprint event in Portland in late July
- A new logo design

Relating to the specific goals of the 2023 funding, here is an update:

- Improving the getting started documentation to include all map providers guides now has a complete list for all adapters
- Add documentation around Terra Draws event system to allow users to leverage it better - there is now documentation for the event system
- Improving mode support for mobile devices, such as Circle and Rectangle there is now basic support for Circle and Rectangle (still some scope for improvement in the UX!) and the touch support for modes is now documented.
- Investigate if there are performance improvements that can be made to the MapLibre and MapboxGL Adapters - I performed some investigation into this at the beginning of this year and mostly concluded there are some limitations from the Mapbox side to do with the performance of setData. I do think there may be some improvements that could be made here based on some research by Jamie (Orange Mug). For this specific point I felt there was some diminishing returns in value and so decided to prioritise other bug fix and features instead. Hope this is understandable for this instance!

- Look to publish a stable version 1 candidate we now have a stable release candidate for version 1, looking to release version 1 towards the end of the year.
- Support external users to integrate Terra Draw into their open source projects to help grow adoption - we have been supporting Jin Igarashi on the issue tracker with his MapLibre plugin <u>maplibre-gl-terradraw</u>, working with Brandon Liu and Peter Johnson on the <u>demo of s2js</u>, (s2js JavaScript port of the s2 spherical geometry library). Terra Draw is now also used as a package in 33 open source projects on GitHub

For this year I would like to request the amount of £1000 again. The work package for this year, in approximate order:

- Fixing a important build issue for TypeScript users (GitHub Issue: <u>Library not usable</u> <u>without skipLibCheck true</u>)
- Ensure that custom adapters can use the right types, reducing friction and allowing users to create their own custom adapters: (GitHub Issue: <u>Terra Draw does not</u> <u>expose enough types to create custom Adapter)</u>
- Upgrading to TypeScript 5.6, to keep us up to date and avoid larger migration jumps in the future (GitHub Issue: <u>Upgrade to TypeScript 5.6</u>)
- Providing the tooling for, and actually releasing Terra Draw version 1.0. We will also be looking to spend time promoting this major release across available channels (GitHub Issue: Road to v1)
- Investigate improvements to snapping whilst drawing, seeing ways that the snapping can be improved for end users (relating GitHub issues <u>1</u> and <u>2</u>). My current stance is that snapping behaviours are particularly complex and require some deep work to get right.
- Continue to support adoption of Terra Draw for users in their Open Source projects

 alongside Jin Igarashi's project, we specifically would like to reach out regarding
 the new HOTOSM E2E mapping project and continue to work with Brandon Liu to
 help support the SliceOSM frontend, both of which have Terra Draw listed as a
 dependency.
- Contingent on MapLibre supporting dashed lines before the end of next year, dash line support for all adapters (GitHub Issue: <u>Dash line support</u>)
- Continuous monitoring of the issue tracker for high priority bugs that require resolution, along with testing to help prevent regressions where feasible
- Formalise a sponsor's page to firstly say thank you and promote those who kindly support Terra Draw (i.e. OSGeo:UK!) and to also provide guidance on how companies/organisations can get involved in supporting Terra Draw in the future (GitHub issue: Setup a sponsorship page)

Similar to last year, there are also <u>many other open issues</u> on the tracker that we could potentially get to with the funding, but would avoid wanting to commit to them up front due

to the necessity to analyse them in more detail and understand the effort required to resolve. We also would like to figure out a way to present at FOSS4G EU next year, if feasible.

If there are any comments or questions before the AGM on the 18th of November, I welcome feedback.

All the best,

James

GISRUK & OSGeo: UK GoFundGeo Award

Last year (2023) we created the GISRUK & OSGeo:UK GoFundGeo Award. This is £500 that will be offered to one <u>GISRUK</u> presenter who presents a tool or technique that has potential for wide uptake in the open source geospatial (OSGeo) community. The purpose of the grant is to help the recipient to make their approach easily adoptable through the provision of open source code repository and/or tool (e.g. a QGIS plugin). This grant is open to all, but with a focus on ECRs (Early Career Researchers).

In 2023 this was won by Céline Van Migerode for <u>Flexurba: An Open-Source R Package To Flexibly Reconstruct The Degree Of Urbanisation Classification.</u>

We are proposing to fund this award again, with GISRUK funding £300 and OSGeo:UK funding £200, making a total of £500.

Proposed wording for GISRUK site:

"GISRUK and OSGeo:UK are co-funding a GoFundGeo award. This has a value of £500 and is for a GISRUK presenter who wants to take part of the research they presented at GISRUK (paper or poster) and create a piece of software from it, that will allow others to make use of the tool / technique. We are imagining that you will present some analytical code, and we will fund you to develop this in to a piece of software or library (e.g. Python or R) or plugin (e.g. QGIS) or similar.

If you apply, we will expect you to apply to be a OSGeo Community project (https://www.osgeo.org/about/committees/incubation/) and we will support you with this process. If you wish to progress to a full OSGeo Project and undertake the incubation process you can, but this is not required. We will also expect an update of some description (approx 1 year after the funding) to document your progress / outputs.

To apply, please check the appropriate check box when submitting your GISRUK extended abstract."

pgRouting

We would love to get pgRouting \$720/yr or more for continual maintenance of the pgRouting Project. This will replace the \$720/yr funding that was given to Regina Obe directly.

pgRouting is a network extension to PostgreSQL and is the 2nd most popular PostgreSQL spatial extension second to PostGIS. It is popularly used with OpenStreetMap data and QGIS. It also has an extension for QGIS interoperability and for loading data from OpenStreetMap.

The funds will go toward bug fixes, development, and documentation for the pgRouting project as well as ancillary support for code sprints, FOSS4G travel, and mentorships.

In more detail:

- fund developers to work on specific aspects of pgRouting including implementing new features and fixing bugs
- improvement of documentation, workshop materials and tutorials
- scholarship for students, who applied for Google Summer of Code with a great pgRouting proposal, but were unable to receive one of the limited Google stipends
- implementation of a particular feature (if sponsorship is sufficient)

Generally 70% goes toward development and maintenance and 30% will go toward documentation and any travel to FOSS4G etc.

Sponsorship levels are listed on this page https://pgrouting.org/donate.html#sponsors

OSGeo Sponsorship

It's worth noting that we are an OSGeo Sponsor. They count sponsorship of any OSGeo projects (currently QGIS, pgRouting, GeoServer, Terra Draw, a total of £3,803).

We are currently at Silver level which is USD\$2,250 (£1771). Gold level is quite a step up at USD\$10,000 (£7,875). We will stay at Silver level this year.

See https://www.osgeo.org/about/how-to-become-a-sponsor/ for details.