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# QGIS Update

5. Juni 2022

Marco Bernasocchi - OPENGIS.ch



# Marco Bernasocchi

A black and white photograph of a man's face, partially obscured by a white ski helmet and goggles. The goggles have a dark tint and reflect some surroundings. A black strap with a white 'S' logo goes across his forehead. The helmet has a small vent and a brand logo. The man has a beard and mustache.

**OPENGIS.ch CEO**  
**QGIS.org Chair**  
**OSGeo.org Board of directors**

# OPENGIS.ch

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**Open source Geo-spatial Experts at your doorsteps in  
your language**

## What do we do?

- **QGIS** → **Core developers, PSC Chair**
- **QGIS Plugins** → **Core developers and maintainers of various large plugins**
- **QField (Android QGIS)** → **Creators**
- **PostGIS** → **Experts**
- **GeoData Infrastructure** → **Planning and deployment experts**
- **Interlis** → **contributors**



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**@QFieldForQGIS**

**[opengis.ch/blog](http://opengis.ch/blog)**

**#QgisOnTheRoad**



So what makes QGIS a success?

It's the people!

It's you as a user and  
you as a contributor!

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# 20 Years and counting!

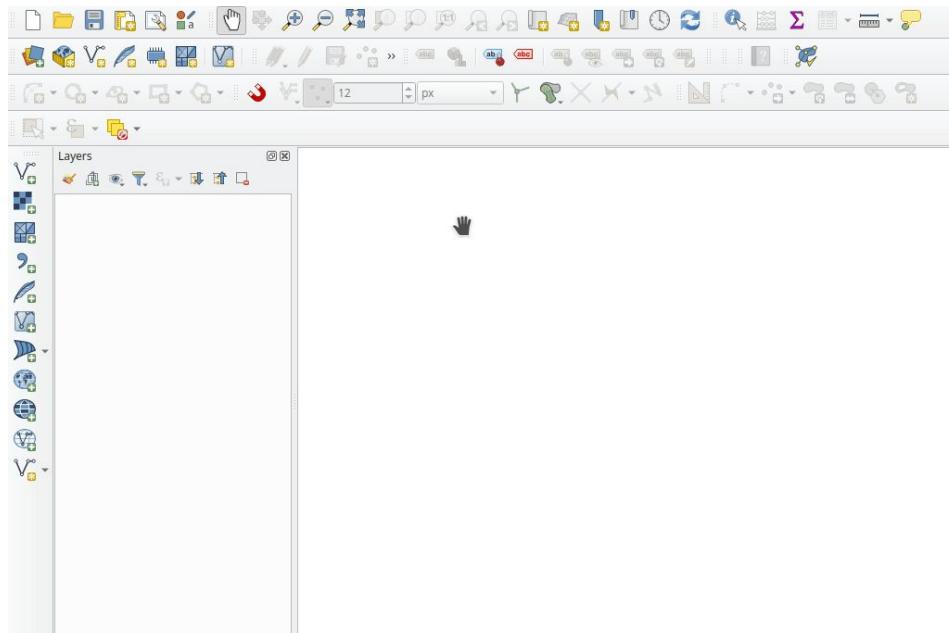
<https://tinyurl.com/qgis-history>



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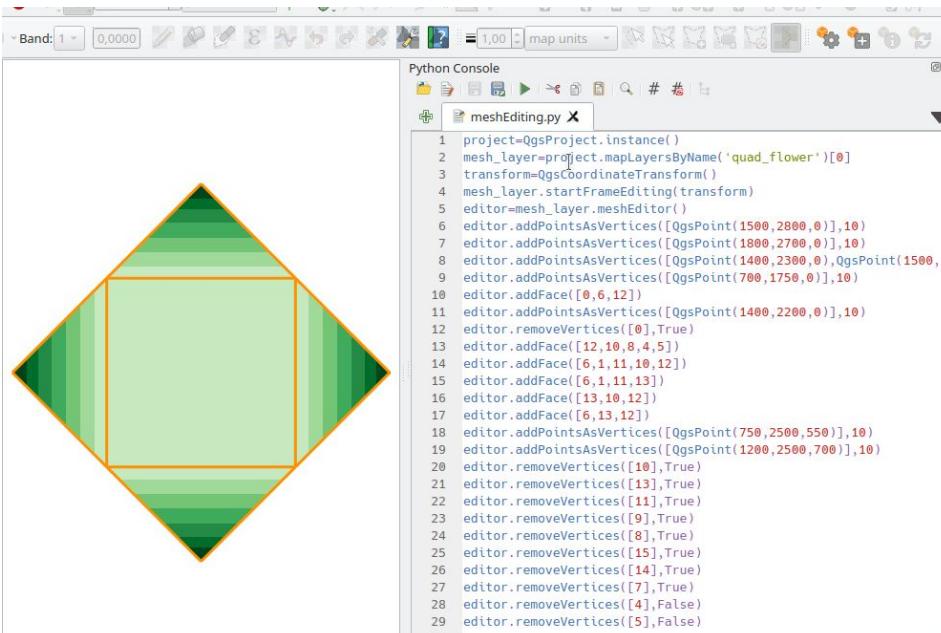
## 3.22

# Create new mesh layer



<https://changelog.qgis.org/en/qgis/version/3.22/#create-new-mesh-layer>

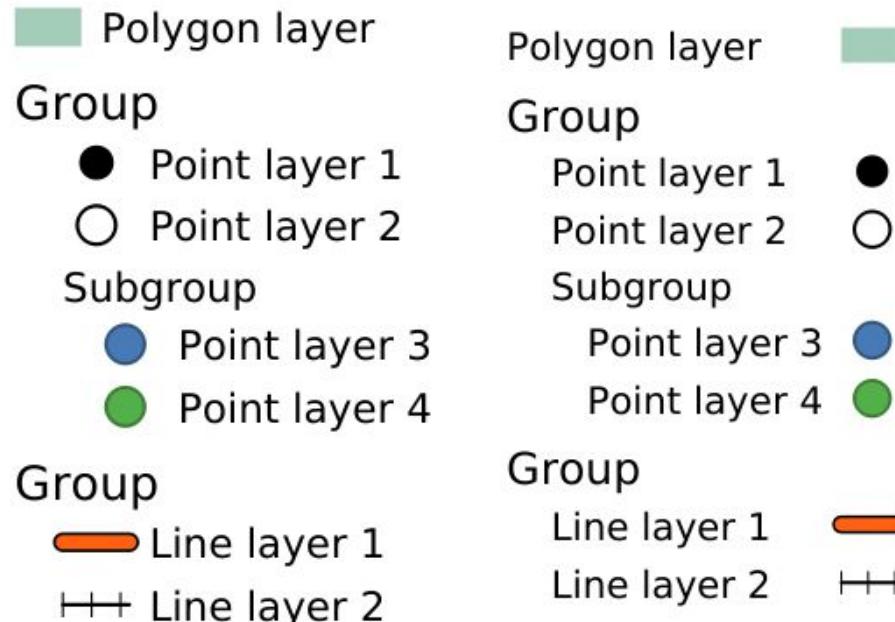
# Mesh frame editing



[https://changelog.qgis.org/en/qgis/version/3.22/#mesh-mesh-frame-editing-part-1-qgis\\_core](https://changelog.qgis.org/en/qgis/version/3.22/#mesh-mesh-frame-editing-part-1-qgis_core)

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# Indentation of legend groups and subgroups



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# Convert to curve with vertex tool



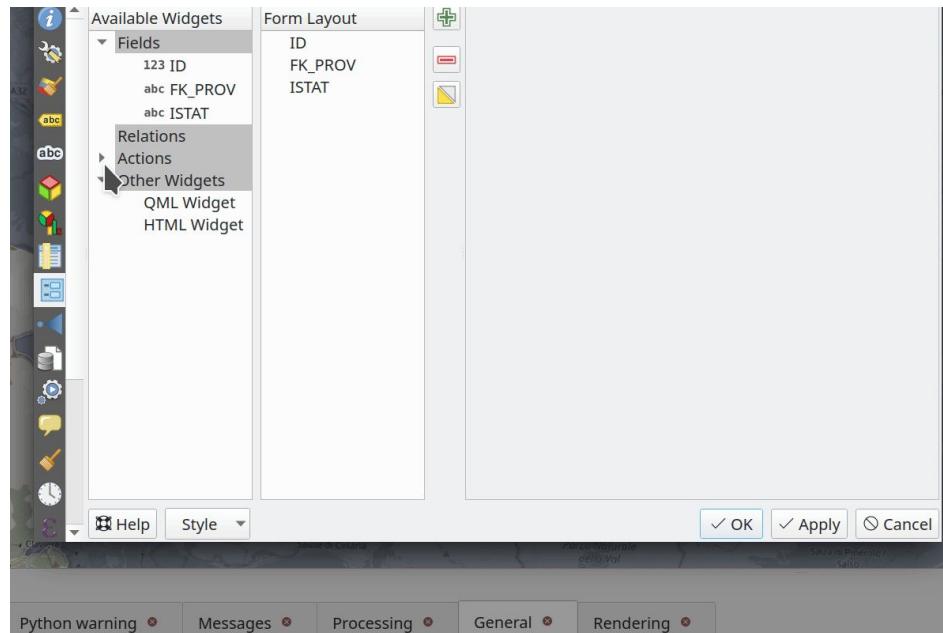
<https://changelog.qgis.org/en/qgis/version/3.22/#vertex-tool-convert-curve>

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# Rename files in QGIS Browser

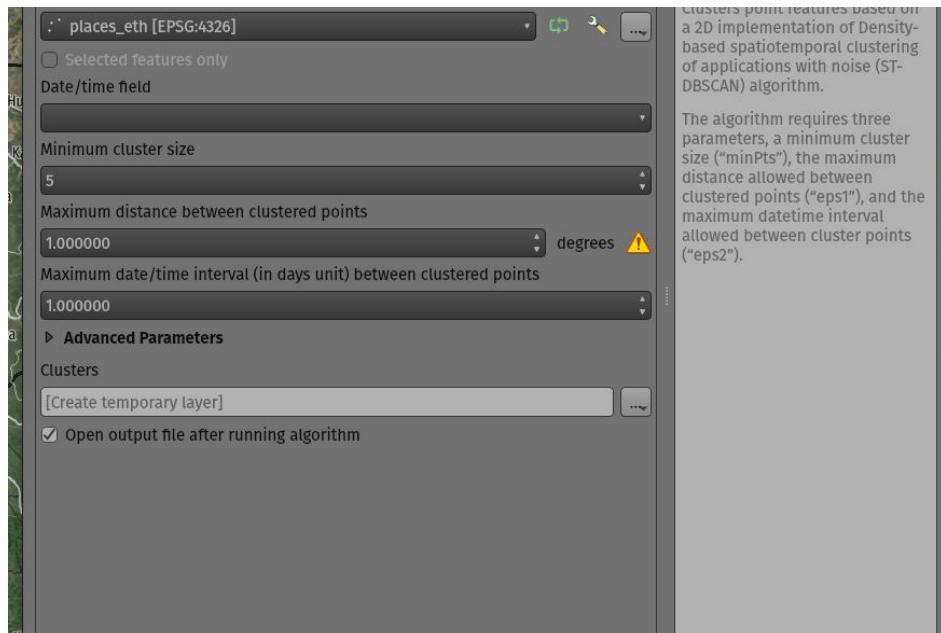
<https://changelog.qgis.org/en/qgis/version/3.22/#add-rename-action-under-manage-submenu-for-files-b>

# Drag & Drop designer form actions



<https://changelog.qgis.org/en/qgis/version/3.22/#feature-drag-drop-designer-form-actions>

# Spatiotemporal ST-DBSCAN clustering algorithm



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# Move non-native processing providers into independent plugins

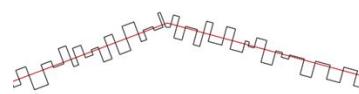
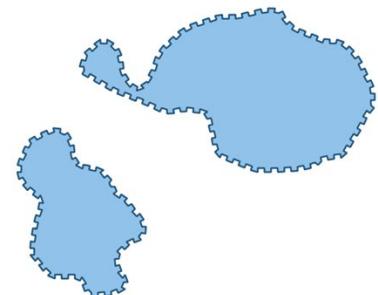
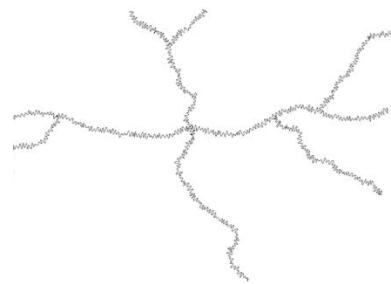
- SAGA
- GRASS
- OTB

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## 3.24

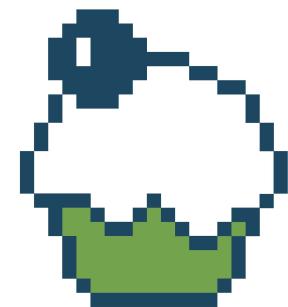
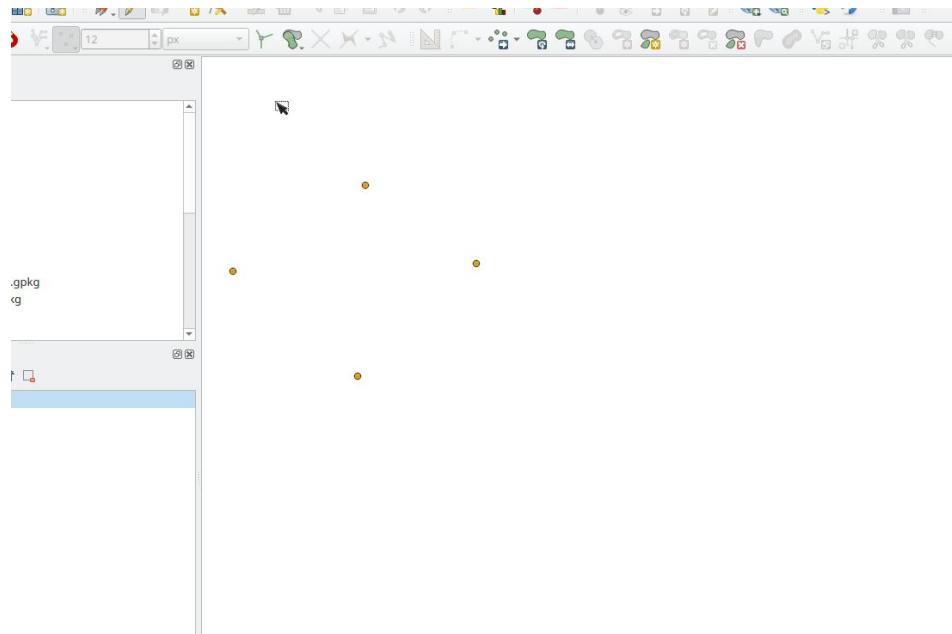
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# Wavy lines with expressions



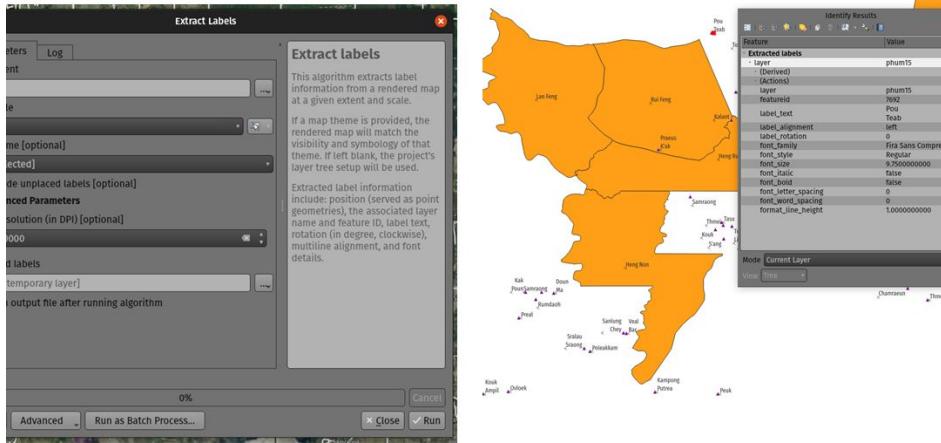
<https://changelog.qgis.org/en/qgis/version/3.24/#add-expressions-for-creating-triangularsquarecurve>

# Multiedit support for relation editor



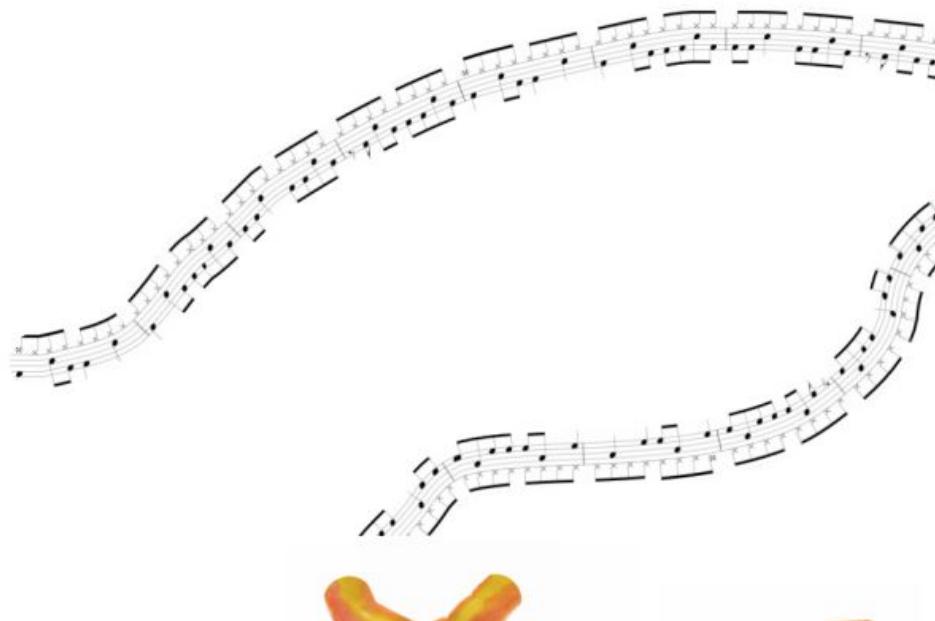
<https://changelog.qgis.org/en/qgis/version/3.24/#multiedit-support-for-relation-editor>

# Extract labels algorithm



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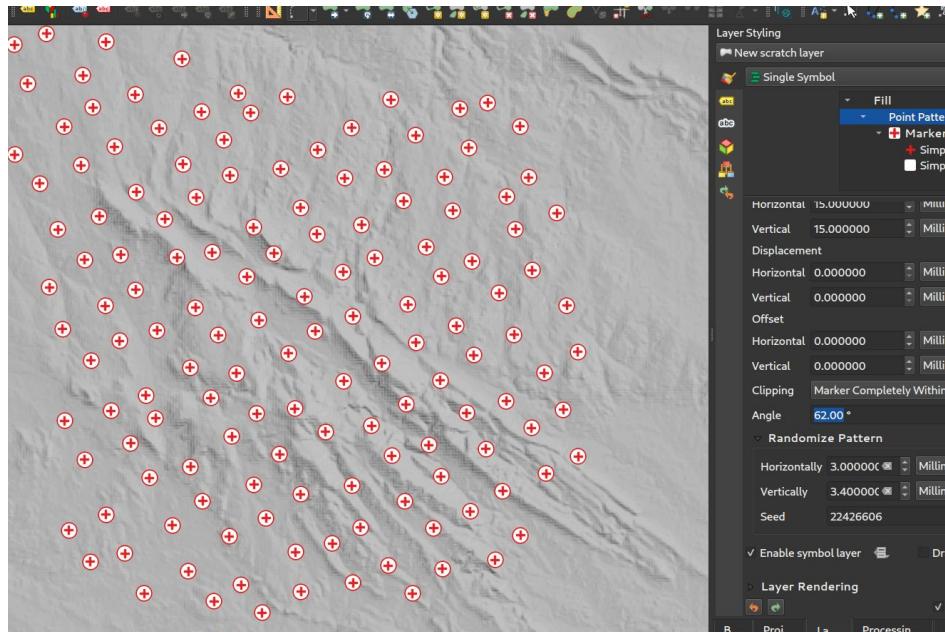
## Cartographic improvements like "Raster Line"



<https://changelog.qgis.org/en/qgis/version/3.24/#new-raster-line-symbol-layer-type>

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# More cartography improvements in point patterns

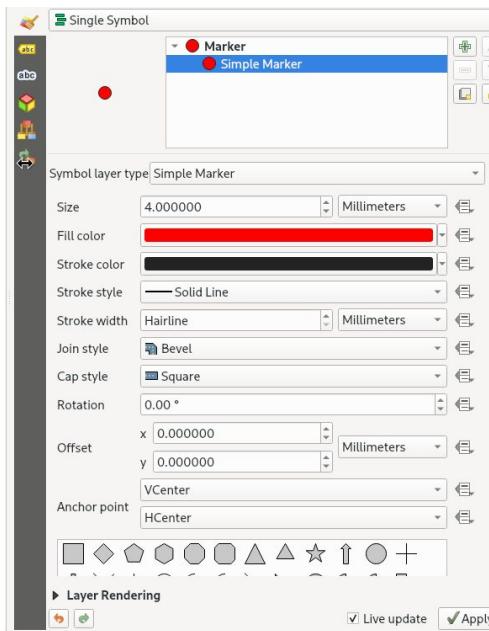


<https://changelog.qgis.org/en/qgis/version/3.24/#add-optional-rotation-angle-for-point-pattern-fill>

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## 3.26

# "Animated Marker" symbol type



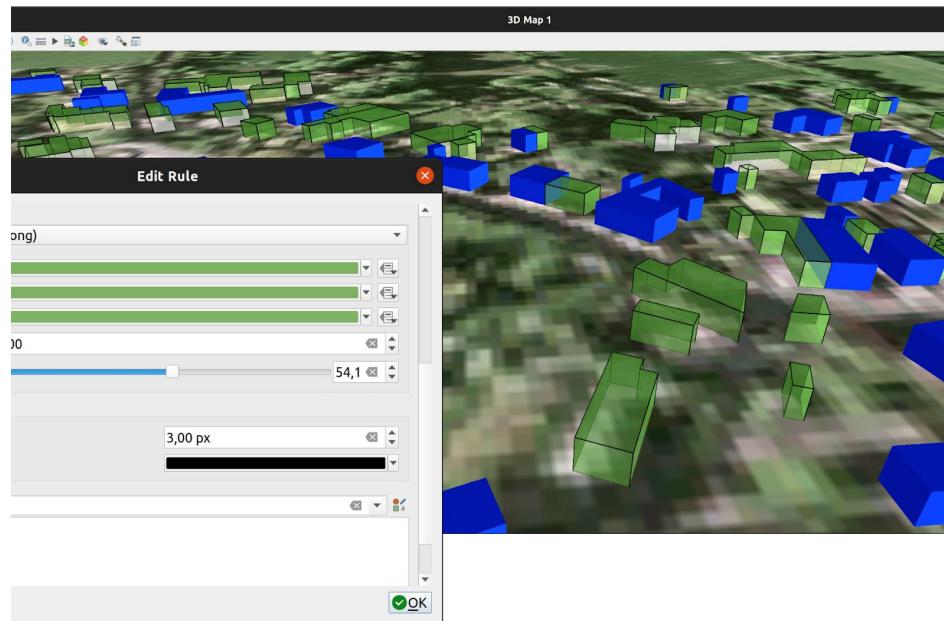
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## Selective masking vectorization



<https://changelog.qgis.org/en/qgis/version/3.26/#selective-masking-vectorization>

# Transparency support for 3D Phong material

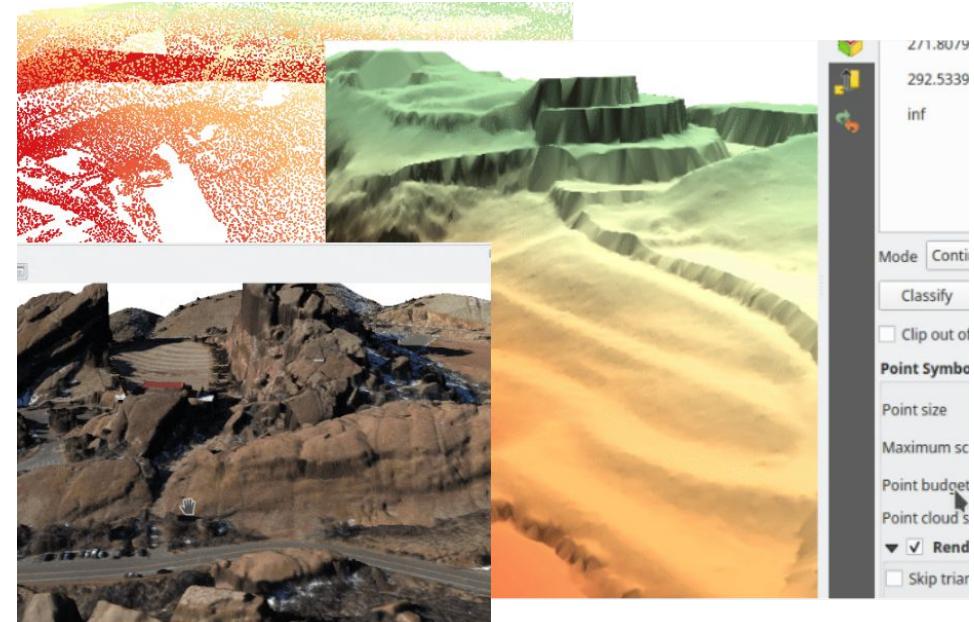


<https://changelog.qgis.org/en/qgis/version/3.26/#add-transparency-support-for-3d-phong-material>

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# Point Cloud Improvements

- Pointcloud triangulation in 3D views
- Cloud Optimized Point Clouds (COPC) support
- Pointcloud filtering



<https://changelog.qgis.org/en/qgis/version/3.26/#point-cloud-triangulation-3d-view>

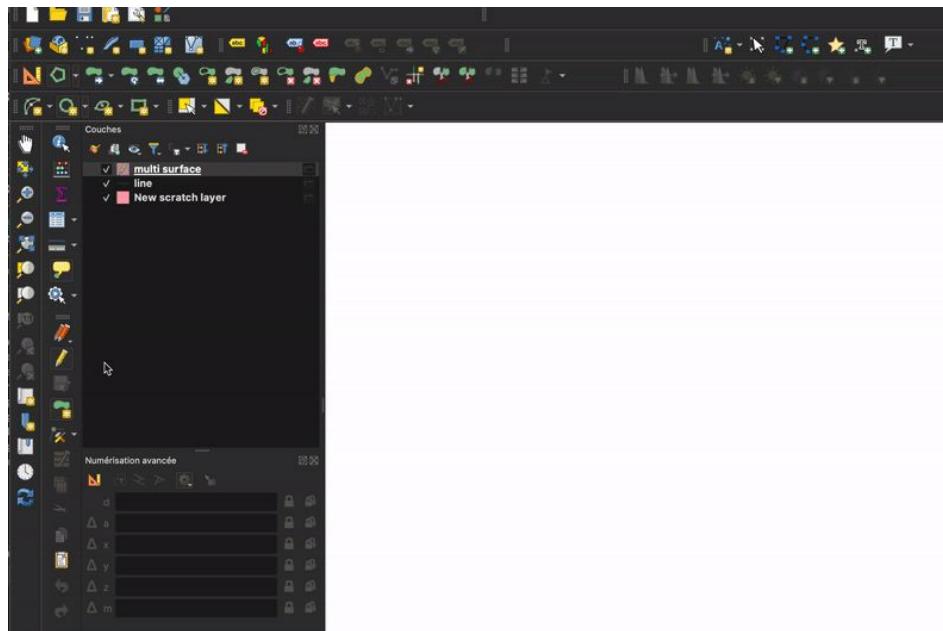
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# Expressions

- Performance improvements for aggregate expressions using @parent
- Support for BETWEEN and NOT BETWEEN

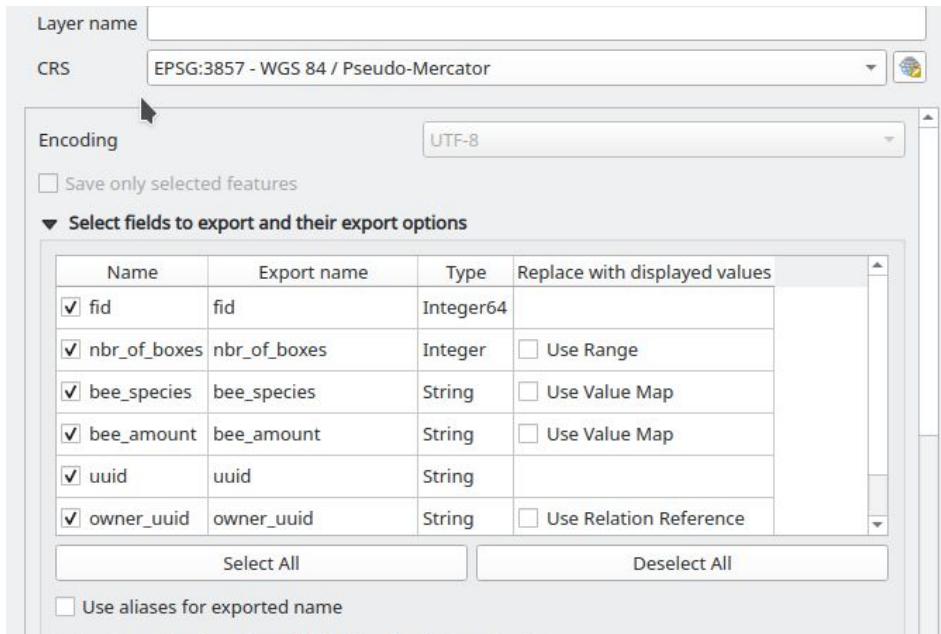
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# Integrate shape map tools in feature digitizing



<https://changelog.qgis.org/en/qgis/version/3.26/#refactoring-of-qgsmaptoolcapture-integrate-shape-m>

# User defined field names in export



The screenshot shows the 'Export' dialog in QGIS. At the top, there are fields for 'Layer name' (empty) and 'CRS' (set to 'EPSG:3857 - WGS 84 / Pseudo-Mercator'). Below these are sections for 'Encoding' (set to 'UTF-8') and 'Save only selected features' (unchecked). The main section is titled 'Select fields to export and their export options'. It contains a table with six rows, each representing a field and its export configuration. The fields listed are 'fid', 'nbr\_of\_boxes', 'bee\_species', 'bee\_amount', 'uuid', and 'owner\_uuid'. The 'Replace with displayed values' column contains checkboxes for 'Use Range', 'Use Value Map', and 'Use Relation Reference', all of which are unchecked.

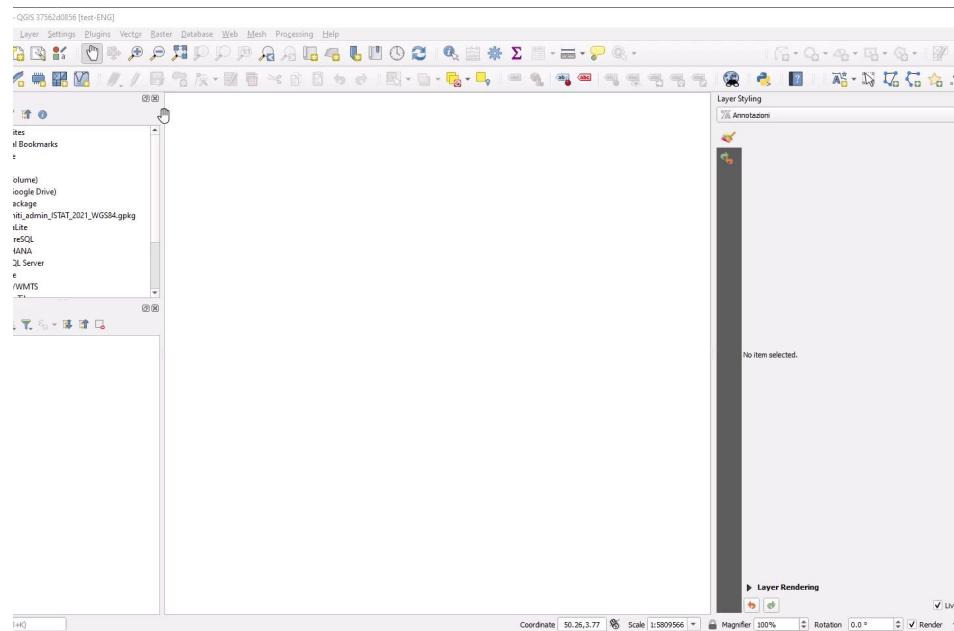
Name	Export name	Type	Replace with displayed values
<input checked="" type="checkbox"/> fid	fid	Integer64	<input type="checkbox"/> Use Range
<input checked="" type="checkbox"/> nbr_of_boxes	nbr_of_boxes	Integer	<input type="checkbox"/> Use Value Map
<input checked="" type="checkbox"/> bee_species	bee_species	String	<input type="checkbox"/> Use Value Map
<input checked="" type="checkbox"/> bee_amount	bee_amount	String	<input type="checkbox"/> Use Relation Reference
<input checked="" type="checkbox"/> uuid	uuid	String	
<input checked="" type="checkbox"/> owner_uuid	owner_uuid	String	

At the bottom of the dialog, there are buttons for 'Select All' and 'Deselect All', and a checkbox for 'Use aliases for exported name' (unchecked).



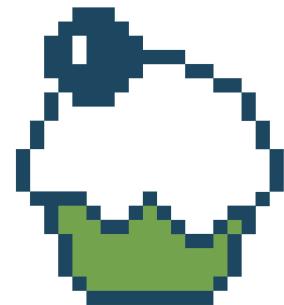
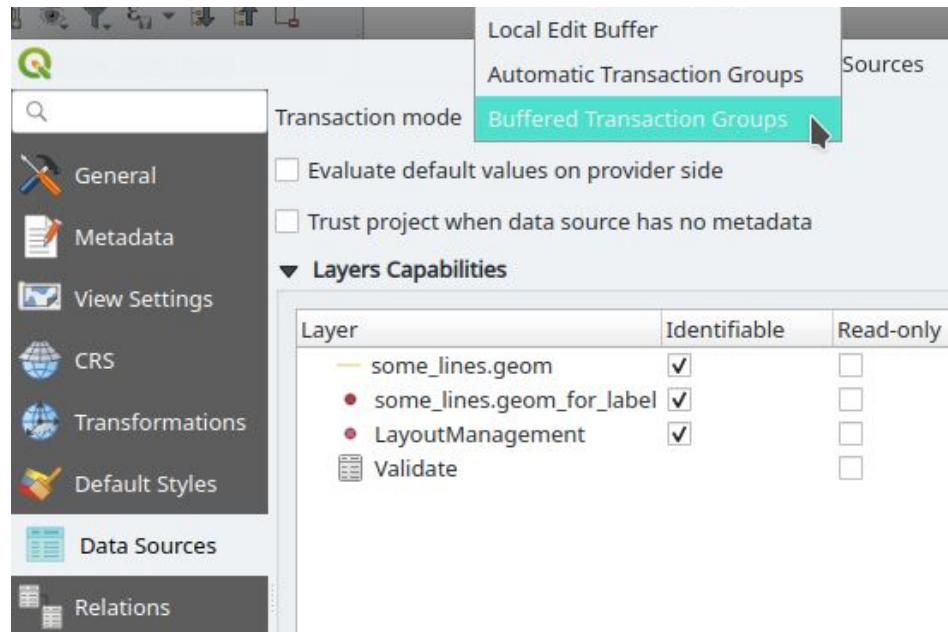
<https://changelog.qgis.org/en/qgis/version/3.26/#user-defined-field-names-export>

# Georeferencing vector layers in georeferencer



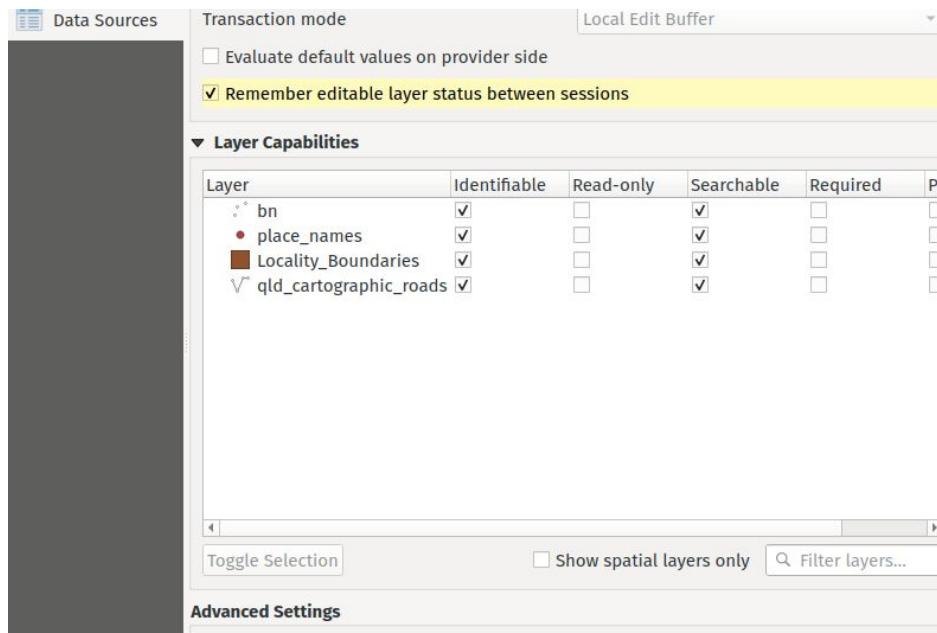
<https://changelog.qgis.org/en/qgis/version/3.26/#add-support-for-georeferencing-vector-layers-geore>

# Buffered Transactional Editing



<https://changelog.qgis.org/en/qgis/version/3.26/#buffered-transactional-editing>

# Store layer edit state in projects



<https://changelog.qgis.org/en/qgis/version/3.26/#add-opt-in-setting-project-properties-for-remember>

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# Temporal properties support for WMS Server

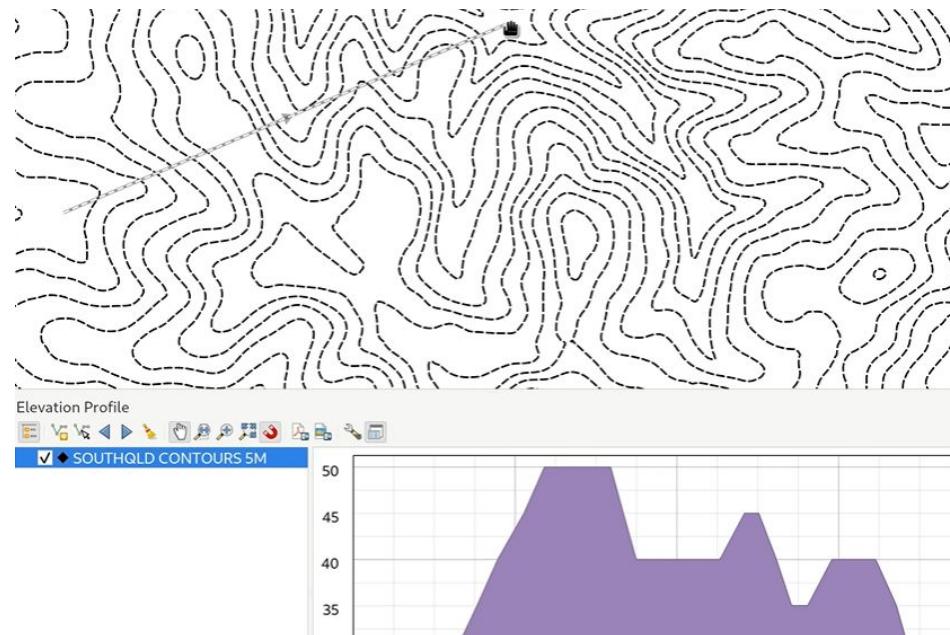
<https://changelog.qgis.org/en/qgis/version/3.26/#server-wms-temporal-properties-support>

# SQL Logging in the Development panel

```
▶ 29 SELECT typtype FROM pg_type WHERE typname='int8'
▶ 30 SELECT domain_name, domain_schema FROM information_schem...
▶ 31 SELECT typtype FROM pg_type WHERE typname='numeric'
▶ 32 SELECT domain_name, domain_schema FROM information_schem...
▶ 33 SELECT typtype FROM pg_type WHERE typname='varchar'
▶ 34 SELECT domain_name, domain_schema FROM information_schem...
▶ 35 SELECT typtype FROM pg_type WHERE typname='varchar'
▶ 36 SELECT domain_name, domain_schema FROM information_schem...
▶ 37 SELECT postgis_version()
▶ 38 SELECT postgis_geos_version(), postgis_proj_version()
▶ 39 SELECT has_schema_privilege(n.oid, 'usage') AND has_table...
▶ 40 SELECT has_table_privilege(c.oid, 'select') AND has_table...
▶ 41 SELECT has_table_privilege(c.oid, 'select') FROM pg_clas...
▶ 42 SET application_name='QGIS'
▶ 43 SET extra_float_digits=3
▶ 44 BEGIN READ ONLY;DECLARE qgis_1 BINARY CURSOR FOR SELECT ...
▼ 45 FETCH FORWARD 2000 FROM qgis_1
      Provider : postgres
      URL
```

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# Profile Plots -> Presentation later



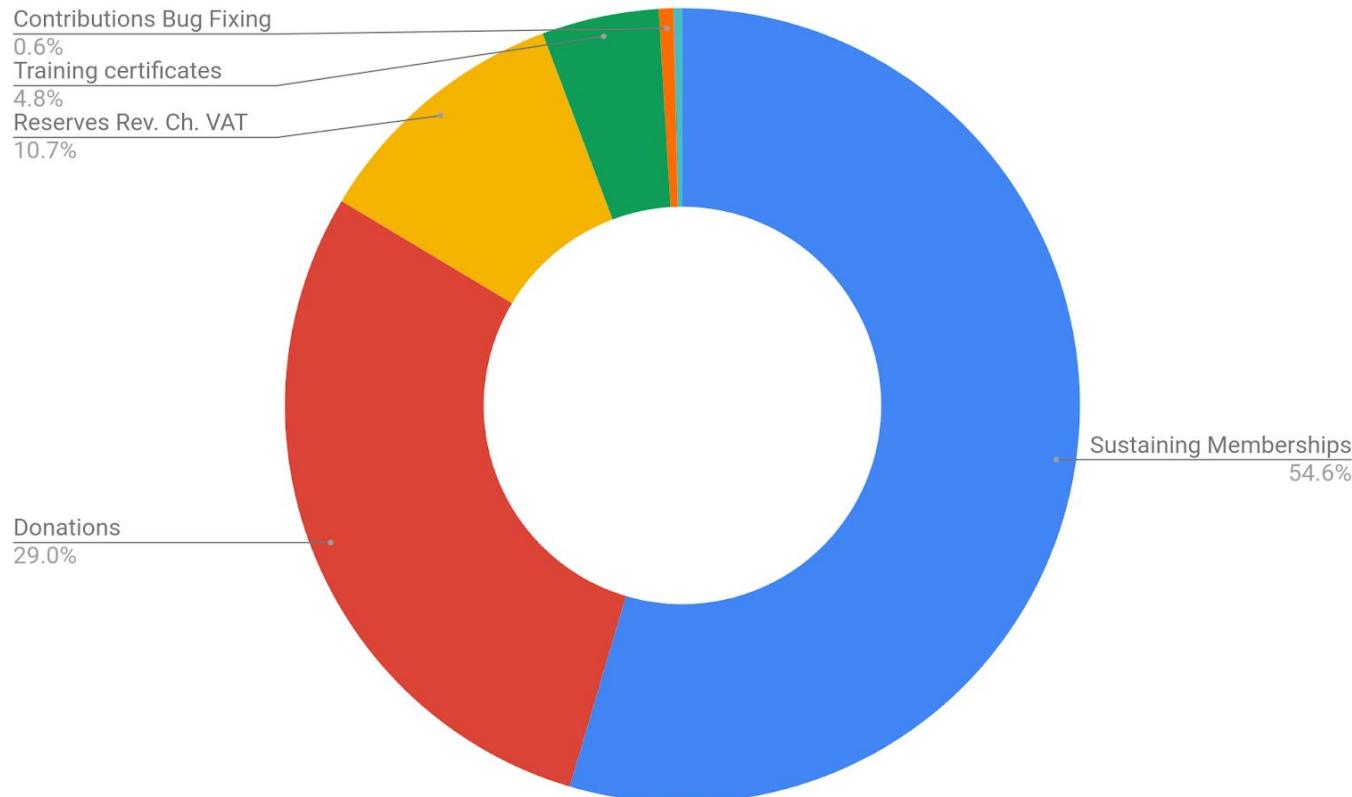
<https://changelog.qgis.org/en/qgis/version/3.26/#elevation-profile-plot>

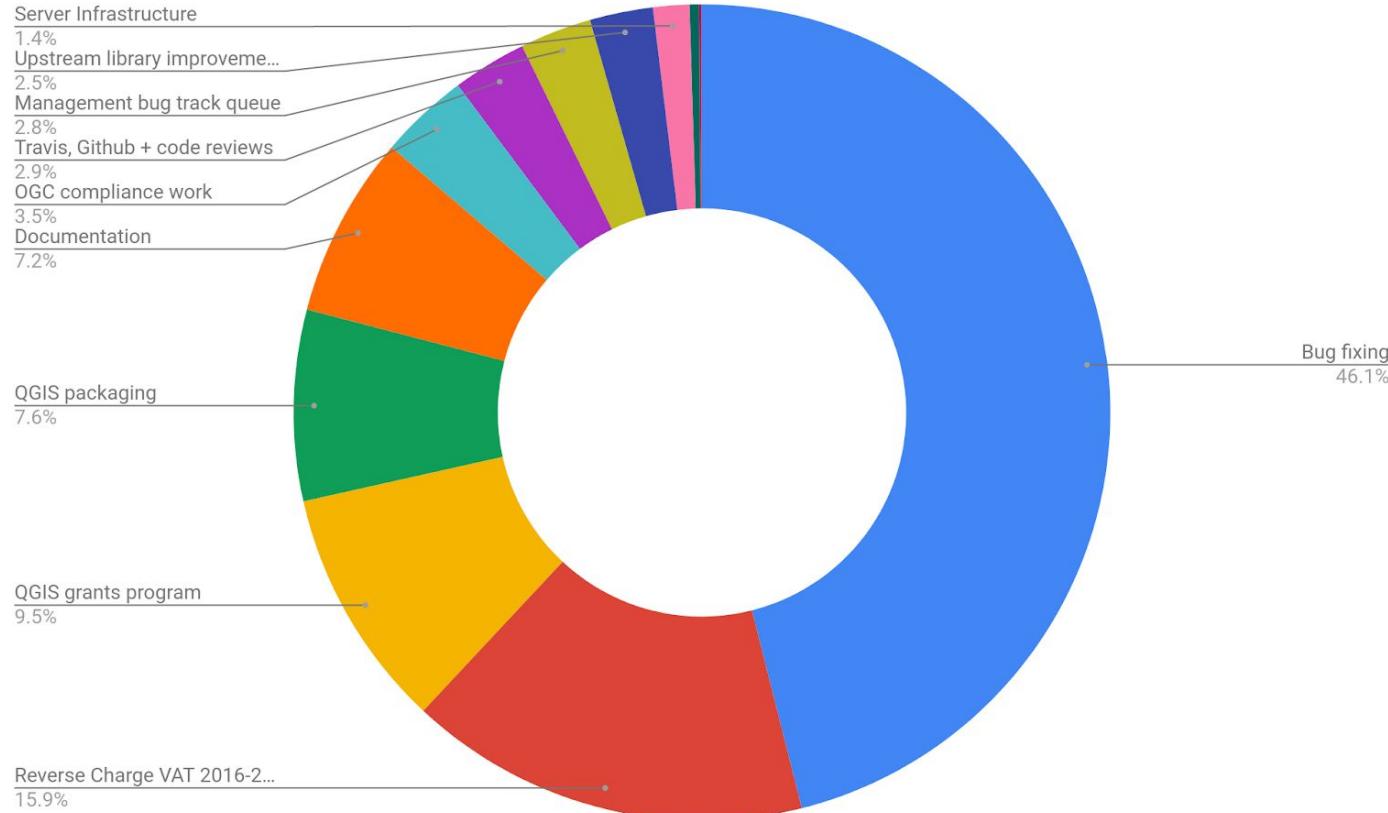
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# Want to contribute?

- translating QGIS, docs & website
- documenting, creating training material
- testing & submitting bug reports
- developing new features
- fixing bugs & issues
- maintaining the QGIS IT infrastructure
- maintaining Github PR
- maintaining CI (continuous integration)
- maintaining issues (bugs & feature requests)
- releasing QGIS & packaging
- teaching QGIS, creating courses
- reviewing training material and certificates
- writing plugins
- managing plugin submissions
- donating & sponsoring
- accounting, sponsor mgmt
- running user groups
- organizing local events &
- organizing dev meetings
- helping users on stackexchange & mail
- social media & PR
- tutoring new contributors

200'800 €  
Income 2021





**211'600 €**  
**Expenses 2021**

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# Sustain us

## Sustaining membership

- 27,000+ € / Year Flagship Member
  - e.g. for companies larger than 100 employees, federal governmental organizations
- 9,000+ € / Year Large Member
  - e.g. for larger cities, provinces or companies up to 100 employees
- 3,000+ € / Year Medium Member
  - e.g. for universities, medium size cities or companies up to 50 employees
- 500+ € / Year Small Member
  - e.g. for smaller cities or companies up to 10 employees

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# Sustain us

## Donations

- Any amounts
- Tax-deductible in some countries

## Workforce

- Commit employees work-time for maintenance (PR, Bug fixes, documentation, translation, ...)
- Body lease a developer to the project

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## Follow QGIS

- On Twitter: <https://twitter.com/QGIS>
- On Github: <https://github.com/qgis>

→ or better be a part of QGIS!

What will you contribute?



# Grazie mille!

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@mbernasocchi



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