



# QGIS PSC Meeting 7th May 2018

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## Present

- Anita
- Jürgen
- Paolo
- Tim (almost)
- Richard
- Marco

## Apologies

- Andreas

## Video / Audio Channel

<https://zoom.us/j/664335351>

## Previous meeting minutes

<https://docs.google.com/document/d/1YIQhHUKR0Bo9fzhJUFeHI7Prok5NiytRcFhxRaSgWS0/e/dit?usp=sharing>

## Next meetings

04 Jun 2018 - 20h00 Central Europe (Summer) Time  
02 Jul 2018 - 20h00 Central Europe (Summer) Time  
06 Aug 2018 - 20h00 Central Europe (Summer) Time  
TBD Sept meeting during Zanzibar dev meeting (22-26 Aug)?  
01 Oct 2018 - 20h00 Central Europe (Summer) Time  
05 Nov 2018 - 20h00 Central Europe (Summer) Time  
03 Dec 2018 - 20h00 Central Europe (Summer) Time

## New agenda items

### Status QGIS in domain name usage?

- Tim was planning to look into how other projects handle this
  - <https://www.docker.com/brand-guidelines>
  - <https://www.docker.com/trademark-guidelines>

Docker example policy.

#### “WEBSITES AND DOMAIN NAME USES

Proper use of our Marks on websites to name or accurately describe Docker’s products, services or technology is permitted. The use of our Marks should not be misleading or likely to cause confusion as to whether the website is sponsored by or affiliated with Docker or whether the products, services or technology are offered by Docker. Any principal or secondary level domain name should not be identical to or virtually identical to any of our Marks.

**The website owner should not register any domain name containing our Marks and should not claim any trademark or similar proprietary rights in the domain name. For example, “dockertech.com”, “Docker-group.com”, “Meetdocker.com” are not allowed. Any violation of this policy may result in legal action.**

The website should otherwise comply with domain name registry policies and applicable laws regarding trademark infringement and dilution.”

- [www.qgis.online](http://www.qgis.online) → now forwards to <https://giseros.com>

### Status updates to trademark guidelines?

- <https://www.qgis.org/en/site/getinvolved/governance/trademark/index.html>
- Marco started working on it
  - Meeting with Simone (lawyer) tomorrow
  - Draft guideline later this week
  - Accept prior art (pre trademark:  
<https://euipo.europa.eu/eSearch/#details/trademarks/012702643> )

### Status of Larry’s Mac installer?

- Tim was planning to contact Larry again, find out status, announce that the grant funding promise is running out
  - Silence again → time to stop following this approach
  - William’s installers (unsigned) are now on qgis.org

### **Blog post about Python API doc work**

- **Tim** asked Denis to make a blog article for <http://blog.qgis.org> to share the outcomes of his Python API doc
  - All notes (except Larry's) collected → **TODO Anita**: Write up the blog post
  - **TODO Richard**: do api redirects, use [qgis.org/pyqgis/3.0](http://qgis.org/pyqgis/3.0) and [qgis.org/pyqgis/master](http://qgis.org/pyqgis/master) (instead of [python.qgis.org](http://python.qgis.org))

### **Status Stripe/Paypal saga?**

- Stripe integration in progress? → no news, still **TODO Tim / Richard**

### **Oslandia, Regis Question to support Performance tests:**

- <https://lists.osgeo.org/pipermail/qgis-psc/2018-May/006165.html>
- Estimated server costs seem high compared to our existing Hetzner servers
- **TODO Paolo**: Propose to pay the server with QGIS.org funds, the rest to be done voluntarily

### **Status Oslandia, Certification OGC WMS?**

- Looks like an effort driven by Oslandia → wait and see

### **Anita: Update status call for grant proposals**

- <http://blog.qgis.org/2018/04/15/qgis-grants-3-call-for-grant-proposals-2018/>
- Status 2018-05-06 14:00: 4 proposals totaling ~ €13k
- Current situation:  
[https://docs.google.com/forms/u/1/d/17YQUt8eUSR3QIcFCH8UkKuahXqNCHIRYoG-9zgJDIdY/edit?usp=drive\\_web](https://docs.google.com/forms/u/1/d/17YQUt8eUSR3QIcFCH8UkKuahXqNCHIRYoG-9zgJDIdY/edit?usp=drive_web)
- Our total budget: 25k€
- Deadline: **Sunday, 13 May 2018**

### **Status 3.2 bug fixing budget?**

- Last month we agreed on increasing the budget
- Donations & sponsorship numbers are apparently picking up after Paolo's blog post

### **Visual Changelog -> website?**

- Richard: will do this week (waited for further input: just one item added ...)
- Done: <https://qgis.org/en/site/forusers/visualchangelog30/index.html>

### **Support for critical functions**

- Paolo's suggestion: "we should find a more general solution: for every critical function we should build a team, with one member from PSC and an assistant from outside it. This will make the system more robust, and will smooth out transitions when one member resigns. I suggest therefore either to start co-opting people, or put out announcements for candidatures."

- List of critical functions
  - Plugin management: Paolo
  - Accountancy (invoices, reminds of expired sponsorship): Andreas
  - Organizing AGM: Andreas?
  - ...
- Call for helpers → approach people directly

### Status QGIS.Pro?

- Andreas contacted them -> they asked for two weeks time to get back to the office and look into it and start fixing things

## Other old Todos

### Website

- **TODO: Richard** to follow up again with Régis and Test.qgis.org for OGC testing results (and/or other? Landing page to travis etc?) **(not yet done)**
- **TODO: Richard** to look at how to consume sponsor feed to put on the website **(not yet done)**
  - Tim and Richard and Anita Hapsari to get onto a call to discuss <https://github.com/kartoza/projecta/issues/662>

### Server migration

- **TODO Richard** : only procmail/MTA/Paypal -> qgis2 or wait for Stripe ... **(not yet done)**
- **TODO Richard + Tim** : need to review our backup strategy **(not yet done)**

### Certification

- **TODO Tim**: blog.qgis.org post about certification efforts progress **(not yet done)**

### Zanzibar Hackfest

- **TODO**: Tim to write up a sales pitch for Zanzibar and circulate with Lene **(not yet done)**  
<https://github.com/qgis/QGIS/wiki/DeveloperMeetingZanzibar2018>

## 2017 Grant Project Report Backs

### QGIS 3D - Martin Dobias

The work on 3D support in QGIS has been successfully finished and the results will be included in the QGIS 3.0 release. As proposed in the grant, a new 3D map view has been added together with GUI for easy configuration of 3D rendering. The 3D view displays terrain (either from a DEM raster layer or a simple flat area) with 2D map rendered on top of the terrain. In addition to that, vector layers can be rendered as true 3D entities: points may be visualized as simple geometric shapes or as 3D models (loaded from a file), polygons and linestrings are tessellated into 3D geometries. 2D polygons can be turned into 3D objects using extrusion, possibly with data-defined height - an easy way how to display buildings, for example. Data with 3D coordinates have the Z values in geometries respected. Although the 3D view is still in its early stages, it is already usable for many use cases. Hopefully this functionality will help to attract even more users to QGIS!

More details: <https://github.com/qgis/QGIS-Enhancement-Proposals/issues/105>

Screenshots:

<https://pbs.twimg.com/media/DGD0bkSXoAAtkhM.jpg:large>

<https://pbs.twimg.com/media/DL4iQqeW0AlsXit.jpg:large>

(+ there are various other beautiful screenshots / screencasts of 3D view from others on Twitter)

Many thanks again to [QGIS.org](http://qgis.org) for running the grant programme and to all sponsors/donors that have made the grant programme possible!

### Improvements to relations - Régis Haubourg

Various improvements for deep relations with PostgreSQL were successfully added in QGIS 3.0.

- **CTRL+Z is back in transaction group editing !** We restored the UNDO/REDO feature and all edits are temporarily saved inside PostgreSQL SAVEPOINTS. For more details, please jump here

<http://oslandia.com/en/2017/10/10/undo-redo-stack-is-back-qgis-transaction-groups/>

- **Transaction group allows now to play more easily with stored procedure calls.** It is now possible to use 'QgsTransaction.ExecuteSQL', dirty the edit buffer to let user be able to save changes, and give a name to that action so that the UNDO/ REDO actions are more explicit. See the Pull requests for more details:

- <https://github.com/qgis/QGIS/pull/5376>

- <https://github.com/qgis/QGIS/pull/5628>

- <https://github.com/qgis/QGIS/pull/5663> This last one is not merged yet and could be postponed to 3.2

- **Trigger QGIS actions or layer refresh from PostgreSQL.** Want to code a live dashboard and use QGIS to display messages, pictures, refresh map layers when PostgreSQL casts a NOTIFY signal ? please read more here

<http://oslandia.com/en/2017/10/07/refresh-your-maps-from-postgresql/>

Many thanks to [QGIS.org](http://qgis.org) for supporting those low level tasks !

## **ADD CONSISTENCY TO UI CONTROLS - North Road**

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As proposed, we've unified all the various opacity, rotation and scale controls to use the same terminology and numeric scales. We've also updated ALL methods for setting opacity, rotation and scale within the PyQGIS API to use consistent naming and arguments, making the API more predictable and easy to use. Lastly, we've also added a new reusable opacity widget (QgsOpacityWidget) to the GUI library so that future code can (and 3rd party scripts and plugins) can follow the new UI conventions for opacity handling.

## **EXTEND UNIT TEST COVERAGE FOR GEOMETRY CLASSES - North Road**

As proposed, we've extended the unit testing coverage for all the underlying geometry primitive classes (points, lines, polygons, curves, collections, etc) so that all these classes have as close to 100% unit test coverage as possible. In the process, we identified and fixed dozens of bugs in the geometry library, and naturally added additional unit tests to avoid regressions in future releases. As a result QGIS' core geometry engine is much more stable. Furthermore, we utilised the additional test coverage to allow us to safely refactor some of the slower geometry operations, meaning that many geometry heavy operations will perform much faster in QGIS 3.0.

## **PROCESSING ALGORITHM DOCUMENTATION - Matteo Ghetta and Alexander Bruy**

The new Help system is landed and already available: when opening a Processing algorithm and clicking on the Help button, the guide of the algorithm will be showed in the default browser.

Many of the QGIS Processing algorithm guides have been enhanced with pictures and new or enhanced descriptions. A consistency number of Pull Requests have been already merged [0] and many others are in review [1].

Just a few descriptions need to be still enhanced.

[0]

<https://github.com/qgis/QGIS-Documentation/pulls?q=is%3Apr+author%3Aghtmtt+label%3A%22Processing+help%22+is%3Aclosed>

[1]

<https://github.com/qgis/QGIS-Documentation/pulls?q=is%3Apr+author%3Aghtmtt+label%3A%22Processing+help%22+is%3Aopen>

Currently all the QGIS algorithms have been described and all the PR in the doc repository have been merged (kudos to Harrissou for all the reviews!).

Right now the Help button of each Processing dialog will open the related page of the algorithm, BUT:

\* if the name of the algorithm is made by only ONE word (e.g. clip, intersection...), the help button will open the browser to also the correct section (that is, the user will see directly the description of the related algorithm)

\* if the name of the algorithm has >1 words (e.g. split polygon with lines, lines to polygon, ecc.) the Help button will open the correct page (so the algorithm GROUP) but is not able to go to the correct algorithm anchor. This is because sphinx converts "split with lines" in "split-with-lines" while QGIS system will always cast the words "split-with-lines" in "splitwithlines". Not a big deal, but IMHO a pity. We are really too close to the solution.

So Processing Help system right now consists in:

- \* QGIS algs -> documented
- \* GDAL algs -> documented
- \* GRASS -> documented (own docs)
- \* Orfeo -> documented (own docs)
- \* SAGA -> nothing documented

Thanks to QGIS Grants to provide this chance to give a big improvement to the Processing framework even if not in a coding way.

**Not part of the grant programme but also funded:**

### **QGIS Python API Documentation report Summary - Denis Rouzaud**

Opengis.ch has been mandated by QGIS.org to realize a first generation of QGIS Python API Documentation. Here is a report of what has been done and what remains.

The accepted offer concerned following topics:

- Use Sphinx to build the QGIS python API doc
- Display full signature docstrings including all overloaded methods
- Support syntax in Doxygen for both C++ and Python code snippets and documentation
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- Rename remaining single char function parameters in API methods (since parameter names are now part of the stable API)
- 
- Documentation for sipify to help developers write good API documentation
- 
- If there is time left: integrate Doxygen diagrams in documentation
- Report
- **Sphinx documentation**
- QGIS Python API Documentation is created using Sphinx and this work is available on a github repo: <https://github.com/opengisch/QGISPythonAPIDocumentation> .
- The repo is a fork of QGIS' one , which can be easily merged later on.
- It uses a new theme ( *sphinx\_rtd\_theme* aka ReadTheDocs theme). It also produces the docs in a a dedicated branch ( *gh-pages* ) which can be viewed on github pages at the moment.
- Some improvements were brought in (not exhaustive):
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- QGIS theming with colors and icon
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- Foldable toctree
- 
- Summary of methods and attributes for classes
- 
- Module index (not available before)
- 
- Correct display of overloaded methods
- **Full Python signature in Docstring**
- In former SIP versions, it was not possible to use the auto generated signature if a Docstring already existed. This means any documented method could not have a signature created. Unfortunately for this project, the vast majority of methods in QGIS API are documented!
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The source code of SIP was modified and these changes got merged upstream. See rev 1788 to 1793 in SIP changelog . It will be released in upcoming 4.19.7 version. QGIS source code was modified accordingly to prepend auto generated Python signatures to existing Docstrings. Using a CMake configuration file for each module (core.sip.in, gui.sip.in, etc.) was required to avoid syntax errors when using former version of SIP (since bumping minimum version is not realistic).

### Sipify adjustments

Many things were fixed in sipify script :

- Creation of links to classes, methods
- 
- Handling/fixing of Doxygen annotations \see, \note, \param
- 
- Handling of code snippets: c++ vs Python. Only Python are shown.
- A reference to commits is appended in appendix 1 . **Unachieved**
- Building the documentation rapidly revealed many errors in the sipify script. Many of them were fixed and this was an important load on the available time. Since worked hours went beyond the original proposal, following tasks were not completed:



- 
- 
- 
- 
- *Documentation for sipify to help developers write good API documentation*
- 
- *If there is time left: integrate Doxygen diagrams in documentation*
- Documentation remains to be done while integration of Doxygen diagrams is more seen as a nice to have.
- Remaining issues
- **Sphinx issues:**
- 
- 
- Summary lists inherited members leading to an overwhelmed list
- 
- 
- Documentation of classes constructor is missing
- **Python vs C++ parameters list**
- Currently the list of parameters is taken as-is from the C++ list regardless of differences due to using /Out/ annotations.
- This leads to inappropriate parameters and returns lists in Python API Documentaiton. For instance, see QgsAbstractGeometry.closestSegment documentation.

#### Appendix 1: sipify related commits

880d853e9f detect SIP version to add DefaultDocstringSignature directive (#6030)
d87c60512c [sipify] fix bad handling of \see within sentences
9deef832c1 [sipify] fix SIP new restrictions on Docstrings
8a5d53325c [doxygen] add test to ensure code snippet use \code command
5dc9b5869a fix empty lines with spaces
bdfd345034 fix code descriptor
45315bbfd6 add cpp to code type
7b0ad1b6d5 fix code snippet and do not display cpp code in sip files
64c99e054c run sipify for code snippets
d042304cc3 [sipify] habndle python code snippets
36a05a3a0d do not create link for current class
db8a7c613b [sipify] also create links in docstrings
b630a407b5 missing SIP_OUT
281392b103 [doxygen] fix badly placed \returns

e6f657cf81 add a test to check that returns are placed before since and note in Doxygen
92751d47e2 make sipfiles test macos compatible
cb9bd6d3da fix missing new line before first param
8db419ca08 [sipify] avoid printing empty Docstrings
f811d8171b remove rtype from docstring
2009d4c916 remove extra spaces
199055edbe fix doxygen layout
bc51bba386 [sipify] transform \param xxx to :param xxx:
8fef9e9679 [sipify] place :rtype: at the correct place
906259b2f7 [doxygen] remove useless @brief
f29306d4af [doxygen] replace @param by \param
b72c569cf3 [doxygen] replace @see by \see
ed5076201a [doxygen] \see must be placed after params
53a86932d4 [sipify] creates links in seealso