## Quality Assurance methodology and infrastructure

Infrastructure/CI | QEP #180 | | 5000€

This QEP aims to create the necessary infrastructure and methodology to organize and encourage systematic testing before each QGIS release (testing management system, elaborate a methodology to execute testing,

Discussion has been raised on the maintenance effort of such infrastructure, concerns are addressed <u>here</u>

Authors: Alexandre Neto, Giovanni Manghi, Alexander Bruy

### Server, OGC tests and Continuous Integration

Infrastructure/CI | QEP #175 | 3500€

QGIS Server is certified for WMS 1.3.0 (hopefully for OGC API Features soon too) and OGC tests are performed every night on master to ensure that we're still compliant. This proposal will allow to run compliance tests both locally - in a simple and direct manner - as well as for each Pull Request, focusing on the WMS 1.3.0 testsuite for now.

#### Server and performance monitoring

Infrastructure/CI | QEP #185 | 2000€

This QEP proposes to allow performances monitoring for QGIS server by improving an existing tool called QGIS Server PerfSuite

Authors: Paul Blottière & Alessandro Pasotti

# Evaluate Qt for Python & Shiboken as a Python bindings solution

Building/Packaging | QEP #163 | 8000€

This proposal aims at testing Qt for Python and Shiboken to evaluate if it is technically possible to replace our current Qt bindings (PyQt5) and bindings generator (SIP),

list and evaluate the risks involved in this change and draw a road plan and a rough estimate of the work required.

Author: Denis Rouzaud (OPENGIS.ch)

### **MacOS Package Improvements**

Author: Paul Blottière

Building/Packaging | QEP #177 | 3000€

Within this QEP, we propose finalizing the prototype allowing MacOS builds in the QGIS CI infrastructure and using it for regular QGIS bundles. This would solve many packaging problems and automatically upgrade GDAL, PROJ, GRASS and others to more up-to-date versions, similarly to what is done for Windows with OSGeo4W.

Discussion has been raised about using CMake to perform the bundling, answered <u>here</u>.

Author: Peter Petrik (Lutra Consulting)

## Port DB Manager Table Management Functionalities to Browser (part 2)

*UX* | QEP #171 | 3500€

Thanks to growing set of data provider supporting the connections API, we can start the implementation in the browser of another group of functionalities that are currently available in DB-Manager: creation of new tables, creation and removal of existing fields

Authors: Alessandro Pasotti & Nyall Dawson

## Use of FileGeodatabase spatial index in OpenFileGDB driver

Core/API | QEP #172 | 2400€

This grant proposes to implement the decoding and use of ESRI's spatial index files in the OpenFileGDB driver to significantly speed up access to large layers.

Author: Even Rouault (Spatialys)

## Smarter Map Redraws + Tile Download Manager

Core/API | QEP #181 | 3000€

This proposal would like to address two separate issues with map rendering: smarter redrawing of map canvas to avoid flicker and download manager for tiled data sources.

Author: Martin Dobias (Lutra Consulting)

## Implementing a setting registry

Core/API | QEP #124 | 8000€

The setting registry will allow registering settings and thus offering a finer use of the setting like validity domain, comments, default values, etc. It will also provide automatic configuration of widgets according to the settings definition. This registry would also be used by plugins developers.

Author: Denis Rouzaud (OPENGIS.ch)

#### Vectorization of selective masking

Core/API | QEP #186 | 7000€

This QEP proposes to discuss alternatives to the current implementation of selective masking, so that rasterization is avoided as much as possible. This work is proposed as the polishing of an existing feature.

Discussion has been raised about the possibility of asking original funders to support the project. Some of them are actually sponsoring the feature.

Author: Hugo Mercier (Oslandia)