Assessment of the Evolution of the RODIN Open Source platform

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Extended Abstract

The RODIN platform is an Open Source extensible Eclipse-based IDE for Event-B that provides effective support for refinement and mathematical proof. RODIN emerged out of the RODIN FP6 Project (2004-2007). It is still actively supported by the European Commission through the Deploy FP7 project (2008-2012) and the FP7 ADVANCED project (2011-2014). Over the years RODIN has known a growing success from a usage point of view, as show by its download statistics on figure 1. However in order to assess the long term sustainability of RODIN, it is important to pay a closer look at key Open Source characteristics of the project and of the community that formed around it.

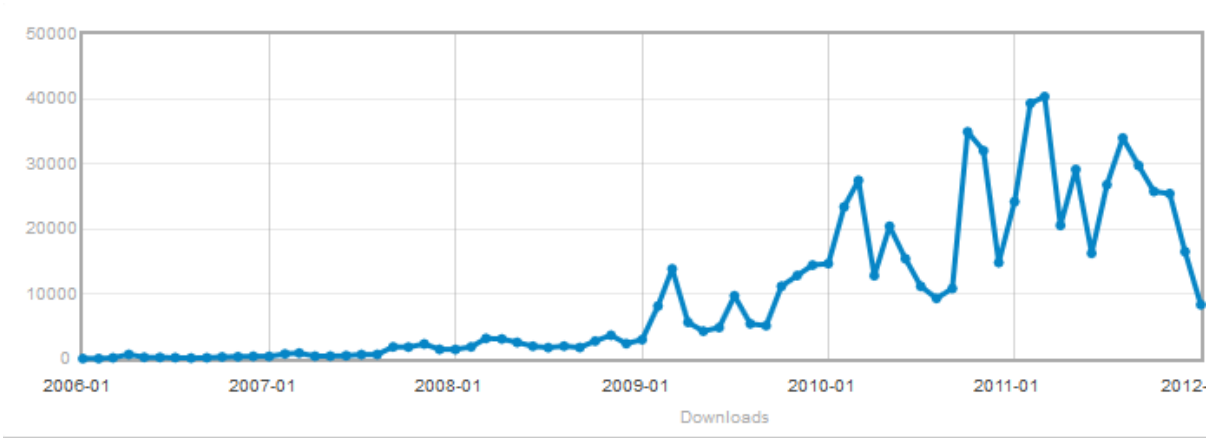

Figure 1. Evolution of the RODIN download statistics.

A number of assessment methods are available for this purpose include QSOS [1] and OpenBRR [2], sponsored by Atos Origin and Intel respectively[1][2]. However, they tend to be too light and do not really pay attention to the code. More elaborated methods were developed by the Qualipso [3] and QualOSS [4] projects. QualOSS will be considered here as it is oriented towards adoption. It is based on the notion of Free/Libre Open Source Software (FL/OSS) endeavour which is the undertaking of community members using tools and following software processes to produce work products related to one or more F/OSS components. More precisely the concern is about assessing the **robustness and evolvability**, based on a well-defined quality model.

In 2010, a first QualOSS assessment of the RODIN platform was produced [5]. It covered several dimensions such as maintainability, reliability, documentation, testability, community, change and release management. It globally revealed a good level of maturity but also pointed out a few risks in some areas like process management and community composition (see figure 2).

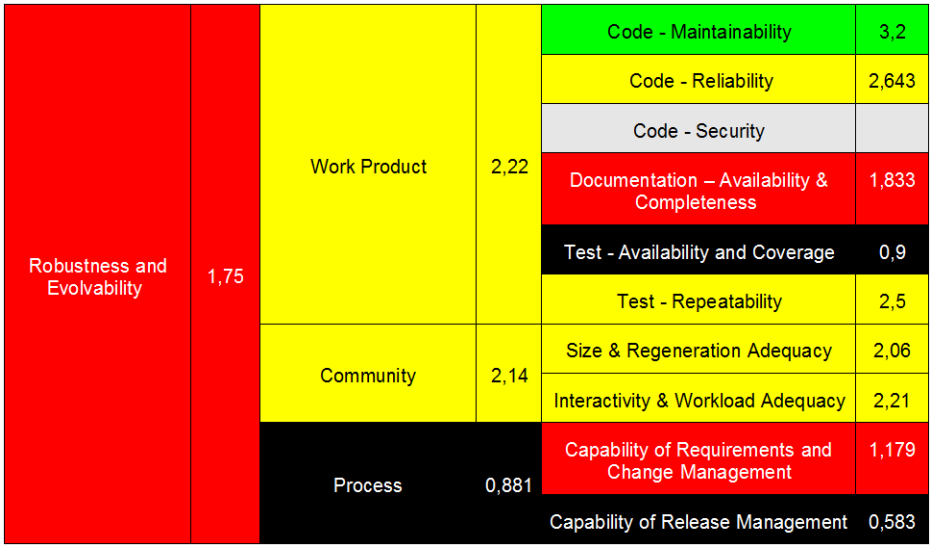

Figure 2. 2010 RODIN Maturity Assessment.

The objective of this talk is to present an updated assessment and show the evolution since the 2010 assessment, especially with respect to the previously identified risks. In addition to the core platform, the ecosystem of plug-ins that developed around the RODIN platform will also be investigated from that perspective. Finally as the workshop audience will gather key people with respect to the existing and future RODIN community, some concrete guidelines to start contributing or to improve the way of contributing to an Open Source project and more specifically to RODIN will be reminded.

References

[1] Method for Qualification and Selection of Open Source software (QSOS) version 1.6 © Atos Origin, April 2006 (http://qsos.org/).

[2] Business Readiness Rating for Open Source © OpenBRR.org, BRR 2005 – Request for Comment 1, 2005, (http://www.openbrr.org).

[3] Qualipso, Trust and Quality in Open Source Systems, http://www.qualipso.org

[4] Jean-Christophe Deprez, Kirsten Haaland, Flora Kamseu, The QualOSS Methodology, version 1, October 2008 - http://www.qualoss.org

[5] RODIN assessment on the Deploy Evidence FAQ, CETIC, 2010, https://forge.pallavi.be/projects/formalmethodevidence/wiki/TOOL-HM-1