Welcome to the MARKOS Newsletter

The MARKOS project is aimed at realising the prototype of a service and an interactive application providing an integrated view on the Open Source projects available on the web, focusing on functional, structural and licenses' aspects of software codes.

At the end of its journey, MARKOS will provide user friendly querying and browsing web tools to inspect the structure of the software code, showing the defined software entities (components, classes, interfaces, libraries, etc.), their dependencies across different projects and possible legal issues related to licenses' infringements.

For Whom ?

Are you an **OSS developer** team looking for and analyzing OSS assets to integrate? Lost in finding the right forge to search for the OSS component needed? Or difficult to in find correlations among different OSS ?

Are you **a public body or a private large firm or small enterprise** facing with all issues related to the necessity to check all licences types underlying an OSS, since improperly managed OS code could result in copyright infringement?

Or maybe, you are an **OSS individual User** tired by long time needed to understand the OSS project structure in order to further use a component for a new OSS?

In a nutshell, MARKOS will make your workflows more consolidated, and successful !!

How ?

The initial benchmarking of similar platforms, software and services oriented towards OSS adoption has reinforced the importance of MARKOS's features.

In fact, first research findings of MARKOS on the market show that some of the current shortcomings of OSS adoption, such as difficulties in search and better automated analysis, are only partially addressed by a handful of recent commercial tools: on one hand, searching services are showing limits in their ways to filter and analyse, along with further dependence on direct input and intervention of an author or user to complete its metadata-based repository; on the other hand, analysis services are mostly limited to compliance and update monitoring.

MARKOS Features: a step ahead

Searching across different software forges using expressive queries describing the desired code on the base of basic attributes like the entities types (class, interface, library...), names, licenses, keywords or complex queries involving relationship among different entities (inheritance relationships, dependencies, containments..).

Advanced Browsing using a logical representation of the source code, independent from the programming language. There is no need to know the programming language of the browsed software. Beside this, the software is represented "globally", so that, for instance, when a project uses a library defined in another project you can easily browse the contents of both the projects following the relationships between their entities (like inheritance, containment and invocation/use). The value of this design analysis surpasses the "encyclopedia" nature of current commercial and public offerings oriented towards OSS projects and code search and analysis, allowing development teams a more dynamic, global view and tailor-made experience that will further facilitate development and integration efficiency.

License Software Analyser: to find out possible license violations on a published software, explaining their possible sources and suggesting open source licenses to apply to a software.

MARKOS itself will be released as open source offering all the functionalities for free.

Year 1 Technical Achievements:

One year of research leaded MARKOS to get relevant technical results, such as:

- An *innovative Architecture*, whose components work independently from each other, being able to perform their tasks even if other components are temporarily unavailable. Each component defines its interfaces according to a common or standard paradigm, i.e. REST (for remote interfaces) or Java (for local interfaces);

- The *Crawler*, aimed at retrieving available information about as much OSS projects as possible. So far MARKOS has been using either FLOSSMOLE data as well as data retrieved from other forges and meta-forges to populate its database of projects. The Crawler actually does not only crawl: it downloads database dumps, it reads and parses DOAP files, it uses APIs to access projects info available on public forges and more. In fact MARKOS has adopted the DOAP format and also the data structures used to exchange information between MARKOS components.

Meet MARKOS at the ICT 2013 CONFERENCE
Vilnius, 6-8 November 2013

Join our team at:

Networking Booth: on the 7 November, 2 p.m. (Booth n. 2) to discuss on *"Future services to facilitate FLOSS development and adoption by EU research and business communities"*

Exhibition Desk (Stand n. 4A10), to showcase first MARKOS's prototype capabilities

More info at: www.markosproject.eu

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