

07.02.2007, OpenOffice++, Press Release

MultiRacio Ltd and the Department of Software Engineering, University of Szeged, held a press conference on the results of the OpenOffice++ project.

OpenOffice++ is an R&D project partially financed by the First National Development Plan. Its aim was the quality assurance of OpenOffice.org, the well-known open source office application suite.

The press conference was held by Dr. Tibor Gyimóthy, head of department, dr. Miklós Banai director, Dr. Zsolt Bagoly programming manager and Dr. Rudolf Ferenc research manager.

The importance of the subject of the applied research and development.

OpenOffice.org (OO.o) is perhaps the most popular open source office application of the world. The official website has registered more than 50 million downloads since the beginning of the project.

According to a current research of EU (<http://ec.europa.eu/enterprise/ict/policy/doc/2006-11-20-flossimpact.pdf>) 90% of the governmental institutions in Brazil, and 70% in India are using OO.o as an office application. Market share of OO.o in Germany reached 8%. RedOffice, a commercial version of OO.o in China reaches 35% annual growth rate (http://oooconarnes.kiberpipa.org/media/OOo_RedOffice_in_China_Cai_Yong_Hu/slide.pdf), wins 30% of sourcing projects, and 5 million of the 18 million new PCs was equipped with RedOffice. The company developing and selling this product became the largest independent software company of China in the last 6 years.

OpenOffice 2.0 natively handles the OpenDocument file formats, approved by ISO in 2006 as an international standard. The Pan-European eGovernment Services Committee proposed the using of non-proprietary standard file formats for the public sector of European Union in a document issued on December 6, 2006 (<http://blade.eurodyn.com/idabc/servlets/Doc?id=26971>). Only such file formats should be used in the public sector of EU, which can be handled by more than one application. If the using of a proprietary file format is inevitable, an alternative standard file format should also be given.

All these facts show the *rapid* spreading of OO.o and its derivatives, and emphasize the importance of the quality assurance of OO.o source code.

Results of the applied research and development

The university participants of the project investigated the structure and quality of the huge (more than 5 million lines) OpenOffice.org open source code with techniques and tools developed for software quality measurements. The applied methods included automatic analysis of the source code, extracting information suitable for detecting problematic sections of code. The detection algorithm was also refined by a machine learning process.

Based on these results, the people at MultiRáció made 184 corrections of the code and sent the patches to the OpenOffice.org developer community. The project resulted in a **better quality, more robust and more easily extensible code**, and what is more, the **developed software tools offer a possibility to continuously monitor the quality of OpenOffice.org code**.

Background information

MultiRáció Ltd. (<http://www.multiracio.com>) has developed commercial versions of the open source OpenOffice.org office application suite: MagyarOffice (<http://www.magyaroffice.hu>) and EuroOffice (<http://www.eurooffice-officeeurope.com>), with more than 60.000 licences sold until now. During the 6 years of development the engineers of MultiRáció have gathered a good working knowledge of the OpenOffice.org code.

The Department of Software Engineering at the University of Szeged (<http://www.inf.u-szeged.hu/tanszekek/szoftverfejlesztes/>) has collected long term experience in two main areas of the project: monitoring code quality and open source software technology. The department houses the Open Source Laboratory (<http://www.inf.u-szeged.hu/osqm/>), which has the main goal of promoting the open source development methodology. The department has many publication on these subjects, including some US patents, and is an active member of the scientific organizations of this area.

Project data:

Project ID number: GVOP-3.1.1.-2004-05-0345/3.0

Project title: Systematic assessment and improvement of the OpenOffice.org source code to make the software more robust and reliable

Short title: OpenOffice++: Quality improvement of open source software

Project timeline: November 1, 2004 - December 31, 2006

Project cost: 135 million Ft (+VAT), 100 million of it financed by the EU.

Project results can be found on the website

<http://oopp.multiracio.com/>

Budapest, February 7, 2007

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