

## CALIBRE at The Crest of European Open Source Software Wave

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CALIBRE (Co-ordination Action for *Libre* Software)<sup>1</sup>, a EUR 1.5 million EU-funded project which aims to revolutionise how European industry leverages software and services, was officially launched on Friday 10 September 2004 in Ireland. CALIBRE comprises an interdisciplinary consortium of 12 academic and industrial research teams from Ireland, France, Italy, the Netherlands, Poland, Spain, Sweden, the UK and China.



*Libre* software, more widely known as "open source software" (OSS), is seen as a significant challenge to the dominance of proprietary software vendors. The open source phenomenon, which has produced such headline products as the Linux operating system, involves the sharing of software source code with active encouragement to modify and redistribute the code. Open source has led to the emergence of innovative new business models for software and services, in which organisations have to compete on product and service attributes other than licensing prices. From a broader business perspective, several innovative business models and new business opportunities have emerged as a result of the OSS phenomenon, and many organisations have begun to capitalise on this. In terms of competitiveness, the OSS phenomenon has created a new service market for commercial enterprises to exploit and there are several examples whereby these companies have innovatively forged competitive advantage. Since purchase price and license fees are not a factor, OSS companies have to compete predominantly in terms of customer service. Since OSS counters the trend towards proprietary monopolies, the OSS model inherently promotes competitiveness and an open market. Also, by having access to source code, traditional barriers to entry which militate against new entrants are lowered. This provides a great opportunity for small and medium sized enterprises to collaborate and compete in segments traditionally dominated by multinationals.

Although much of the recent OSS debate has focused primarily on desktop applications (Open Office, Mozilla Firefox, etc.), the origins and strengths of OSS have been in the platform-enabling tools and infrastructure components that underpin the Internet and Web services; software like GNU/Linux, Apache, Bind, etc. This suggests that OSS may have a particularly important role to play in the secondary software sector; i.e. in domains where software is used as a component in other products, such as embedded software in the automotive sector, consumer electronics, mobile systems, telecommunications, and utilities (electricity, gas, oil, etc.). With a focus on the sec-

ondary software sector, different vertical issues, such as embedded software and safety critical applications, are brought to the fore. The differences in how horizontal issues play out across different vertical sectors can be dramatic. For example, the nuances of the software development context in the banking sector are very different from those which apply in the consumer electronics or telecommunications sectors. A vibrant European secondary software sector provides fertile research ground for studying the potential benefits of OSS from a commercial perspective.

Professor Brian Fitzgerald at the University of Limerick believes that "*there is enormous potential to provide increased productivity and competitiveness for European industry by challenging the proprietary models that dominate software development, acquisition and use*".

As part of the two-year CALIBRE project a European industry open source software research policy forum has been established. Known as CALIBRATION it comprises a number of influential organisations such as Philips Medical, Zope Europe, Connecta, Vodafone and others. The aim of this forum is to facilitate the adoption of next generation software engineering methods and tools by European industry, particularly in the 'secondary' software sector (e.g. automotive, telecommunications, consumer electronics, etc.) where Europe is acknowledged to have particular competitive strengths. The forum also plays a central role in the European Union policy process.

CALIBRE is focused on three scientific research pillars: open source software, agile methods and globally-distributed software development. The CALIBRE consortium comprises the leading researchers in each of these areas. The intention is to closely link these researchers with the key industrial partners through the CALIBRATION Industry Policy Forum and a series of dissemination events. Enabling the industrial partners to refine and reshape the CALIBRE research agenda. This will allow for rapid dissemination, and the proactive formulation of policy initiatives. Upcoming events organised or co-organised by CALIBRE include:

- 11<sup>th</sup> -15<sup>th</sup> July, OSS 2005, Genova, Italy.
- 9<sup>th</sup> September 2005, University of Limerick, Ireland, title of conference: "The Next Generation of Software Engineering: Integrating Open Source, Agile Methods and Global Software Development".
- CALIBRE Workshop on Quality and Security in OSS, 18 Oct 2005 at the 7th National Conference on Software Engineering, Krakow, 18-21 Oct 2005.

For further information please visit <<http://www.calibre.ie>> or contact: Andrea Deverell, CALIBRE Events and Industry Forum Co-ordinator, University of Limerick, Phone: +353 61 202737. Email: <[andrea.deverell@ul.ie](mailto:andrea.deverell@ul.ie)>

<sup>1</sup> CALIBRE has cooperated with UPGRADE and Novática for the production of this monograph.