Preface

We are very pleased to introduce *Open Source Development, Communities and Quality.* The *International Conference on Open Source Systems* has come to its fourth edition – OSS 2008. Now, Free, Libre, and Open Source software is by all means now one of the most relevant subjects of study in several disciplines, ranging from information technology to social sciences and including also law, business, and political sciences. There are several conference tracks devoted to open source software with several publications appearing in high quality journals and magazines.

OSS 2008 has been organized with the purpose of being **the** reference venue for those working in this area, being the most prominent conference in this area. For this reason OSS 2008 has been located within the frameworks of the 20th World Computer Congress, WCC 2008, in Milan, the largest event of IFIP in 2008.

We believe that this conference series, and the IFIP working group it represents, can play an important role in meeting these challenges, and hope that this book will become a valuable contribution to the open source body of research.

The response of the research community has exceeded our expectations. A significant number of high-quality submission from all parts of the world were carefully peer-reviewed; in the end, 19 papers are published here as full papers (Part II) and 20 published in a condensed form as short papers (Part II). Additionally, 3 submissions presented their work in posters and demonstrations form for discussion at the conference (Part IV). Complementing the paper program, we are pleased to include the description of a panel (Part III) as an engaging and important part of the conference event. In addition to this there are three outstanding keynotes tackling three orthogonal perspectives: the use of Open Source to build a successful business; its adoption in public administration to promote savings, transparency and inclusion; the research done in this area by large public-private consortiums.

Altogether, we believe that this work is an essential milestone in the understanding of OSS and we are confident that the readers of this volume will find it useful and also enjoyable.

About IFIP WG 2.13

The OSS2008 Conference is the fourth conference in this very successful series of conferences on the open source topic. The IFIP Working Group 2.13 on Open Source Software was founded to further consolidate the discipline and to ensure a continuing and professional conference series with an established publisher, and to establish a conference series that would move around the world over time. Proposals for a number of conferences for the next few years have already been received, and anyone who would like to propose a conference theme and venue should come to the next conference and present a formal proposal.

The Working Group has 27 founding members from Europe, North America, Middle East, Asia /Pacific and Africa. The main objective of the Working Group is to enable the diverse community of free, libre and open source software (OSS) researchers and practitioners to rigorously investigate the technology, work practices, development processes, community dynamics within OSS systems, complementing appropriately other IFIP Working Groups where OSS is increasingly relevant. The scope of the Working Group is detailed on the website¹ which is being maintained by Kevin Crowston. Last, becoming a member of the Working Group is open to anyone attending at least two IFIP WG 2.13 meetings. We hope you will join us.

Since the group has been founded, the have been several exciting developments in which group members have been centrally involved. Ongoing projects in which the Working Group's members are central include the following:

- *COSI*² focusing on transferring the lessons of open source and agile methods to traditional in-house development;
- FOSSRRI³ designing a global research infrastructure for FLOSS researchers and developers for access to data, artifacts, analyses, and published studies drawn from multi-project FLOSS repositories such as FLOSSmole⁴, the SourceForge Research Data Archive at Notre Dame⁵, and Google Code⁶;
- OPAALS (www.opaals.org) seeking to build a sustainable interdisciplinary research community in the area of digital ecosystems;
- QualiPSo⁷ studying the quality and trust aspects of Open Source Software and
 its adoption in the main stream industrial process in the framework of
 QualiPSo several competence centers on Open Source are being created around
 the world;
- Open Code, Content and Commerce (O3C) Business models, a three-year investigation of open innovation and value-creation strategies

¹ http://www.ifipwg213.org

² www.itea-cosi.org

³ fossrri.rotterdam.ics.uci.edu

⁴ ossmole.sourceforge.net

⁵ zerlot.cse.nd.edu

⁶ google.com/code

⁷ www.qualipso.org

Preface xv

IFIP WG 2.13 OFFICERS

General Chair: Brian Fitzgerald, Lero, University of Limerick, Ireland Vice-Chair: Walt Scacchi, University of California atIrvine, US Vice-Chair: Giancarlo Succi, Free University of Bolzano-Bozen, Italy

Secretary: Ernesto Damiani, University of Milan, Italy

Acknowledgements

We gratefully acknowledge the contributions made by the other OSS 2008 Conference officials: Stefano De Panfilis (Workshop Chair), Alberto Colombo (Workshop Co-Chair and Web Master), and Fulvio Frati (Workshop Co-Chair and Web Master). Special thanks go to Arie Gurfinkel as LaTeX wizard for his aid in preparing this volume. We would like to thank the OSS 2008 international program committee and all the local volunteer organizers and supporters, without whom this conference could not take place. Finally, we thank all the authors, panelists, and workshop organizers who provided this years conference with such an excellent program.

Barbara Russo (Track Chair)⁸ Ernesto Damiani (General Co-Chair)⁹ Scott Hissam (Track Chair)¹⁰ Björn Lundell (Track-Chair)¹¹ Giancarlo Succi (General Co-Chair)¹²

> Milan, Italy September 2008

⁸ Free University of Bolzano-Bozen, Italy

⁹ University of Milan, Italy

¹⁰ Carnegie Mellon Software Engineering Institute, Pittsburgh, USA

¹¹ University of Skövde, Sweden

¹² Free University of Bolzano-Bozen, Italy