

Open Source Software Research at ISR

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Overview

- ISR Research in OSS—a socio-technical perspective
- Research results—sample
- OSS research collaborators
- How ISR adds value to this research

ISR Research in OSS: 2000-2006

- NSF ITR: *Understanding Open Software Communities, Processes and Practices: A Socio-Technical Approach*
- NSF ITR: *Collaborative Research: Organizational Dynamics of Software Problems, Bugs, Failures, and Repairs*
 - ◆ ITR/MKIDS Supplemental: *Dynamic Process Enactment, Discovery, and Recovery*
- NSF ITR: *Collaborative Research: Research Directions for Continuous (Re)Design in Free/Open Source Software Systems*
- NSF ITR: *An Integrated Social and Technical Approach to Development of Distributed Inter-Organizational Applications*
- SUN and Butterfly.Net (pending): OSS for network game development

Research results—sample

- First identification of “software informalisms” used as artifacts and communication media to facilitate and coordinate F/OSS development projects
- First identification of socio-cultural dynamics that mobilize socio-technical resources, mitigate conflict, and facilitate cooperation in F/OSS development projects
- New model of “continuous design” in F/OSS

ISR Research in OSS

- <http://www.isr.uci.edu/research-open-source.html>
 - ◆ 20+ research papers
- Largest OSS research group in U.S.
- Emerging research collaborations
 - ◆ University of California Systemwide/UCOP
 - ◆ National Laboratories (LANL, Sandia, LLNL)
 - ◆ ISERC (Ireland)
 - ◆ SRA, Kyoto University (Japan)

ISR OSS Research—news coverage

- National: *CNet News.com*, *Slashdot.net*, *Science Daily*, *Electronic Design News*, National Center for Supercomputing Applications (NCSA) and San Diego Supercomputer Center (SDSC) reports, *Science.NewsFactor.com*, and *GrokLaw.net*
- International: *New Scientist* (to appear), *Pakistan Tribune*, *Innovations Reports* (Germany), and *SciGate* (India), *Scientific Electronic Library Online* (in Spanish) and *Weblog Context* (in Spanish, German, and Catalan).

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Open source under the microscope

Last modified: January 5, 2004, 9:00 AM PST
By Paul Festa
Staff Writer, CNET News.com


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Open-source developers have long done their work in the public eye. Now, they're doing it under an academic microscope.

Walt Scacchi, a senior research scientist at the University of California at Irvine's Institute for Software Research, has been looking at open-source projects from an analytical perspective, studying the open-source model in an ongoing, 10-year project that draws some comforting conclusions for open-source sponsors and developers.

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Security vendors go on offense

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CURRENT THREATS

- Virus Advisory W32/Bagle.j@MM is a Medium Risk worm.
- Virus Alert W32/Bagle.j@MM is a Medium Risk worm.
- Virus Advisory W32/Metelky.e@MM is a

OSS research collaborators

- Mark Ackerman, UMichigan Ann Arbor
- Les Gasser, Ullinois, Urbana-Champaign
- John Noll, Santa Clara University
- Richard Taylor, ISR
- Julia Watson, The Ohio State University
- Margaret Elliott, ISR
- Jason Robbins, ISR
- Chris Jensen and Justin Erenkrantz, ISR

How ISR adds value to this research

- Academic collaborations via ISR Faculty Associates
- Financial management
- Hosting multiple research workshops
- Proposal development support
- Research and Web support infrastructure
- Strong, predictable leadership