CERN openlab Communications 2007-2008

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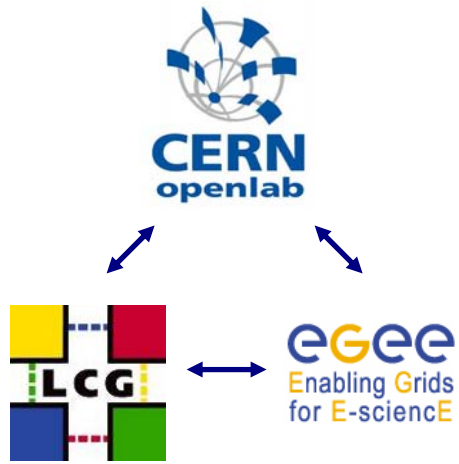
IT Communications Team

The CERN openlab message

CERN openlab is...

- …a framework for collaboration between multiple industrial partners…
- …in a pre-competitive spirit and based on open standards. ...
- ...to explore jointly the future of computing and Grid technology...
- ...motivated by CERN's extreme computing demands for HEP and the LHC.

The openlab team's motto: " you make it, we break it"



CERN openlab and CERN's Grid strategy

1) LHC Computing Grid (LCG)
   - provides Grid service to LHC experiments, HEP community
2) Enabling Grids for E-sciencE (EGEE)
   - multi-science Grid infrastructure co-funded by the EC, LCG is flagship application
3) CERN openlab
   - Future technology test and validation for LCG deployment (hardware & software)
   - "R&D lab" associated with EGEE industry activities (Grid middleware)

Dissemination highlights

Documents

- CERN openlab Annual Report 06-07
- Press release about EDS contributor status
- Articles in International Science Grid This Week, CNL, Cern Courier
- Support for various press articles, partner case studies (backgrounders, interviews etc.)

Multimedia

- Film by Intel for Oracle World (B-roll available)
- History of CERN Computer Centre (with Oracle sponsorship)

CERN openlab

www.cern.ch/openlab

PARTNERS

hp invent

intel

ORACLE

CONTRIBUTORS

EDS

F-SECURE

STONESOFT

Events and outreach highlights

CERN openlab events

- Sponsorship of EGEE Conference, Budapest, October
  - Oracle Gold, HP Silver
- Computing for Finance Event at CERN, November
  - Two CERN grid startups presented, (GridBiz competition postponed)
- Study tours to HP/Intel Grenoble, EPFL (Student Programme)

Partner-specific events

- Intel Customer Visit, 8 May
- HP Procurve Press Launch in Globe, 11 Sept
- EDS client visit , 6 November
- Oracle-CERN 25 year celebration, 18 December
- CERN presentations at partner events
  - Netevents, Oracle World, EDS workshop...

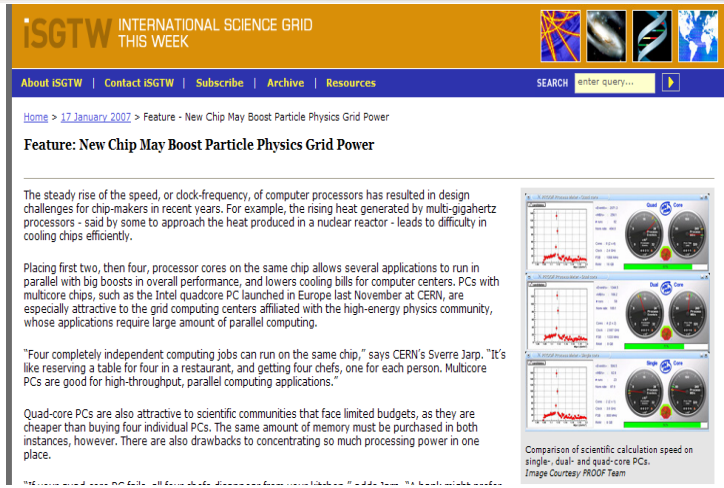
Plans for 2008

- Intense media coverage anticipated
  - Special ”start-up” day planned with BBC, others (June?)
  - Opportunity to bring groups of journalists
  - NB: experiments no longer visitable after ~April!
- LHC open days 5-6 April, VIP event 21 Oct
  - All major CERN suppliers will be approached
  - Special invitation for openlab partners
  - VIP event opportunity to meet Heads of State (tbc)
- Computing Expo in Computing Centre
  - All visitors, VIPs and press will see this, spend time there.
  - Themes are ”History of Computing at CERN”, ”From Web to Grid” ”Future of computing”, ”Grid Monitor”, ”CERN openlab”
  - Will feature original Next server on which web was developed.
  - Sponsorship opportunities include:
    - Equipment and/or neat demo material
    - Contributions for multimedia productions
- CERN openlab student programme
  - To continue under stewardship of Sverre Jarp
- CERN openlab communications officer
  - IT Comms team to stop in June – we are exploring options with partners for dedicated support of CERN openlab communications

Plans for 2008

Grid Events

- 3rd EGEE Users Forum, Clermont-Ferrand Feb 11-14
  - (Gold/Silver/Bronze 15/10/5 k€)
- LCG Collaboration Workshop, CERN, 21-25 April
  - Sponsor for reception, gadget
- EGEE'08 (Istanbul, Turkey) 22-26 Sept
  - (Gold/Silver/Bronze 15/10/5k€)
- CHEP'09 (Prague, Czech Rep) 21-27 March 09
- Computing Colloquia


iSGTW INTERNATIONAL SCIENCE GRID THIS WEEK

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Feature: New Chip May Boost Particle Physics Grid Power

The steady rise of the speed, or clock-frequency, of computer processors has resulted in design challenges for chip-makers in recent years. For example, the rising heat generated by multi-gigahertz processors - said by some to approach the heat produced in a nuclear reactor - leads to difficulty in cooling chips efficiently.

Placing first two, then four, processor cores on the same chip allows several applications to run in parallel with big boosts in overall performance, and lowers cooling bills for computer centers. PCs with multicore chips, such as the Intel quadcore PC launched in Europe last November at CERN, are especially attractive to the grid computing centers affiliated with the high-energy physics community, whose applications require large amount of parallel computing.

"Four completely independent computing jobs can run on the same chip," says CERN's Sverre Jarp. "It's like reserving a table for four in a restaurant, and getting four chefs, one for each person. Multicore PCs are good for high-throughput, parallel computing applications."

Quad-core PCs are also attractive to scientific communities that face limited budgets, as they are cheaper than buying four individual PCs. The same amount of memory must be purchased in both instances, however. There are also drawbacks to concentrating so much processing power in one place.

Comparison of scientific calculation speed on single-, dual- and quad-core PCs.
Image Courtesy PROOF Team

Press Releases & articles

- Release announcing new CERN openlab line-up (tbc)
- Releases highlighting key results of second year (partners)
- Continued support for backgrounders, interviews

Articles for HEP/Grid communities

- CNL, CERN Courier (features)
- International Science Grid This Week
  - iSGTW has 3500 subscribers
  - >60,000 hits/month (up 6x since last year)
- EU GridTalk project starts in May
  - iSGTW, GridCafe, Real-Time Monitor, Grid policy

CERN openlab student programme

CERN openlab student programme 2007

- 25 Students
  - from Europe, Canada, Brazil, Pakistan (BSc-MSc-PhD levels)
- Projects involving Grid technology, team-based
- Supervisors from five IT groups + openlab staff
- 2 months at CERN
- Study tours + Grid lecture series

Partner-sponsored students 2007

Platform virtualization for Grids – Irfan Habib, Uni W. of England
Provisioning Computing Resources – Serena Cameirano, Trinity College, Ireland
Power Measurements – Piotr Jurga, Tech. Uni. Bydgoszcz, Poland
Compiler Optimization – Gabriel Esteves, Waterloo Uni., Canada
Performance Monitoring – Jorge Diaz, Uni. De Las Palmas, Spain
Monitoring interface system – Manuel Entrena, Uni de Granada, Spain
Web statistics for J2EE users – Jim Levy, Uni Lyon 1, France
Tycoon, Xen and Glite – Andrea Sottoriva, Uni. Amsterdam, Netherlands
Oracle RAC Virtualisation – Maria Leitner, Uni Vienna, Austria
Database access management – Kryysztof Wyszynski, Uni Silesia, Poland

Timeline for 2008

- Student applications by March 31st
- Call for projects in IT by March 31st
- Students between June and September

Summary

Communications Menu for 2008

1) Computing Expo in CC
2) Presence at Grid events
3) Coverage in HEP/Grid and general press
4) CERN openlab student programme
5) CERN openlab communications officer

6) open day in April (CERN event)