



Enabling Grids for E-science

NA3 activities in German/Swiss federation

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www.eu-egee.org
















- **Contributing to ISSGC07**
- **Main training strategy**
- **GridKa School (GKS)**
- **Schedule of GKS**
- **Basic preparations**
- **How to make the event known: experiences**
- **Students' rating**
- **Students: numbers and rating**
- **Conclusion and outlook**

- Peter Kunszt (CSCS) was an organizer/speaker for „Foundations of distributed data management“

• Thursday 12 July - Foundations of distributed data management

Organiser: Peter Kunszt

| Schedule: Foundations of distributed data management | | |
|--|---|---|
| ✓ 07:30 - 08:45 | Breakfast |  |
| ✓ 08:45 - 09:00 | <u>Context and linking</u> Speaker: Malcolm Atkinson and David Fergusson |  |
| ✓ 09:00 - 10:30 | Session 16 :: Principles and Architectures of Distributed Data Management Speaker: Peter Kunszt and Malcolm Atkinson |  |
| ✓ 10:30 - 11:00 | Coffee Break |  |
| ✓ 11:00 - 12:30 | Session 17 :: Distributed Data Management: Practical Issues and Example Systems Speaker: Peter Kunszt |  |
| ✓ 12:30 - 13:45 | Lunch |  |
| ✓ 13:45 - 15:15 | Session 18 :: Open Science Grid: Getting connected. Getting others connected. Speaker: Ben Clifford |  |
| ✓ 15:15 - 15:30 | Coffee Break |  |
| ✓ 15:45 - 17:15 | Session 19 :: EGEE: Deploying Global e-Infrastructure Speaker: Erwin Laure |  |
| ✓ 17:15 - 17:30 | Coffee Break |  |
| ✓ 17:30 - 19:00 | Session 20 :: Grid and Knowledge based Flood Forecasting System Speaker: Ladislav Hluchy |  |
| ✓ 19:00 - 20:30 | Dinner |  |
| ✓ 20:30 - 21:30 | Discussion :: Managing Grid-Databases with GRelC Speaker: Sandro Fiore & Alessandro Negro |  |

Strategy: One large training event; additional smaller, targeted ones in preparation

⇒ **Many trainings at GridKa School**

Reasons:

- **Offers bigger spectrum for students than at a single, one topic training event**
- **Collaboration with other grid projects**
- **A large event allows invitation of high profile speakers**
- **Interdisciplinary socializing widens horizon**
- **Established event offers high attractiveness**
- **Established date for school simplifies planning for students and tutors**
- **International visibility and outreach**

- Originally founded as a training event for users of German LCG Tier-1 center (GridKa) in 2003
- Became EGEE training event in 2004, in addition training event for German grid initiative D-Grid in 2006
- Uses infrastructure of FZK's training facility (FTU) and GridKa
- Close collaboration with German/Swiss ROC management
- Support from HEP department of University of Karlsruhe
- Recorded for SuGI (Sustainable Grid Infrastructure, part of D-Grid)
- Compact schedule (5 days)



The 5th international
GridKa School 2007
 Grid Computing and e-Science
www.fzk.de/gks07

Application Development
 Virtualization
 Industry
 D-Grid
 EGEE

Globus Toolkit
 ROOT/PROOF
 g-Eclipse
 Unicore
 dCache
 gLite

GridKa School

September 10 - 14

Applied Grid Computing

Forschungszentrum
 Karlsruhe

KIT
 Karlsruhe Institute of Technology

OpenGridForum
 OPEN FORUM | OPEN STANDARDS

dCache

egEE
 Enabling Grids
 for E-science

D-Grid

GridKa

g-Eclipse

EGEE

- **23 talks in auditorium**
- **3x3 tutorials in parallel sessions for different target groups:**
 - Introductory courses to middlewares: gLite, Unicore and Globus
 - Access to gLite via an integrated workbench framework (g-Eclipse)
 - Application development with SAGA
 - Parallel analysis tool for HEP: PROOF
 - Courses dedicated for grid administrators: Virtualization as a basis for “grid in a box”, gLite installation and dCache management
- **1 grid security workshop in collaboration with ISSeG**

- **Access technology:**
 - Notebooks (training notebooks have significant acquisition costs, are maintenance intensive and prone to obsolescence)
 - Thin clients (inexpensive, minimum maintenance, long endurance, energy-efficient, intrinsically secure)
- **Productive environment:**
 - Hardware support by GridKa (three racks taken out of production)
 - >50 virtual servers
 - Dedicated network
 - Specialized firewall
- **Organizational means:**
 - “dech” VO used for gLite courses (close collaboration with German CA, dech sites and dech ROC)

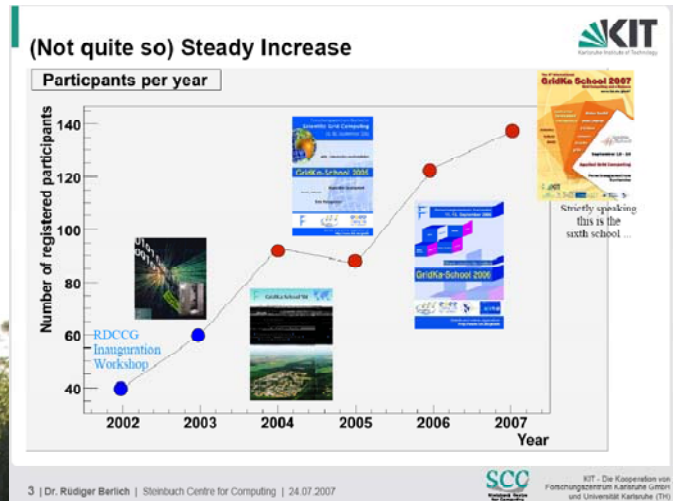
- **Means used to propagate GridKa School**
 - E-mail lists (EGEE, D-Grid, LCG-Rollout, dech, GKS 2006 participants)
 - Poster sent by mail to German and international institutions (incl. all Tier-1 centers)
 - Inclusion into several event calendars (EGEE, D-Grid, iSGTW, Grid Today, Helmholtz association)
 - Trying to spread to the word by personal contacts
 - Press releases
- **Results taken from the survey in the end of school (in descending order):**
 - Colleagues, e-mail, “my boss/supervisor”, “was a participant before”, GKS website, blog/event calendar and poster

More than 140 registered participants from 14 countries in Europe and Asia

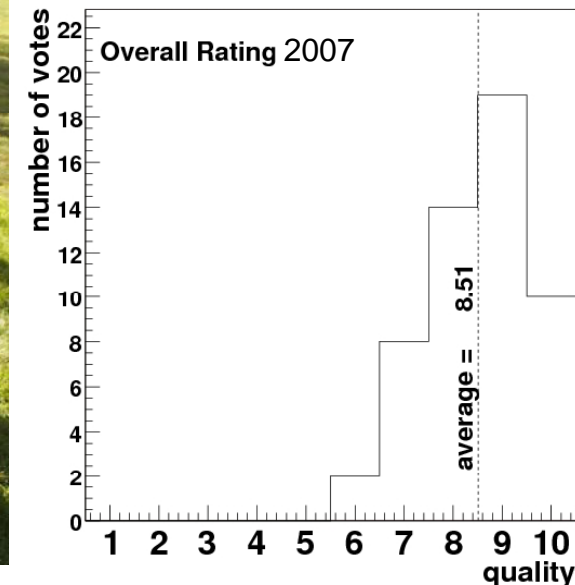
Overall Rating for GKS (on scale from 1 to 10): 8.51



School picture 2007



(courtesy of Ruediger Berlich)



- **First courses to be fully booked were those addressed to grid administrators; also huge interest in grid security workshop**
- **Students' requests for courses with more technical depth**
- **High regard for non-technical and technical matters**

- **Thin Clients proved their value**
- **Virtual servers are reliable and require low maintenance effort**
- **Dedicated network infrastructure facilitates duties of tutors and administrators**
- **Early planning is one of the keys to success**
- **Design of school proved once more its effectiveness**

- **Format of the school is the masterprint for next years' events**
- **Growing participation of specialists encourages special tracks**
- **High rating by students is a huge motivation for future**
- **Plans for next 6 months:**
 - Smaller training events at sites of specialized users with special focus
 - No participation of FZK in NA3 of EGEE-III planned because grid training in Germany is not specific to EGEE