



Enabling Grids for E-science

EGEE Training Report German / Swiss Federation

*Dr. Rüdiger Berlich
Forschungszentrum Karlsruhe
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www.eu-egee.org



Forschungszentrum Karlsruhe



Institute for Scientific Computing (IWR)

- **Part of the „Helmholtz Gemeinschaft“**
- **One of the largest independent German research institutions**
- **Many different research areas ranging from environmental studies over nano technology to Grid Computing**

- Forschungszentrum Karlsruhe is responsible for organising and/or running of Grid Training activities for the **German / Swiss federation**
- So far **20 trainings** held in or by DECH federation since April 2004
- Some **380 people trained**
- Cooperations with NeSC, D-Grid, APAC, Universities/RC
- Course types: LCG-2 and gLite installation courses, application developers course, usage courses, induction courses, Webservices course, support tutorial
- Local developments: Grid-in-a-box – create a Grid in a small local cluster, e.g. to make installation courses easier to manage

- FZK is a Tier-1 centre in LHC, Tier-A centre for BaBar
 - consequently: **large portion of particle physicists**
 - initially higher demand than resources
- “New” audiences, e.g.
 - **BioMed** (Course given ny NeSC in Jülich)
 - **SME** training given in cooperation with Fraunhofer SCAI and the NA4 group
 - Astronomy (MAGIC)
- **Internal audiences** (e.g. NA2 group / course at TERENA; GGUS)

- In EGEE-1: 2 FTEs (1 funded) for „User Training and Induction“ (NA3) and „Dissemination and Outreach“ (NA2) in DECH federation
- Limited resources means:
 - Fulfill the demand first, then search for new clientele
 - Leverage additional man-power (e.g. by cooperating with Universities)
- Cooperate with other partners (e.g. Webservices course by NeSC) to supply a wider variety of course types
- Trainings outside DECH where possible without larger overhead (e.g. in conjunction paper presentations)
- **Open interface through open events**

- Major annual training event is GridKa School.
- This year:
 - 17 talks, 4 (== 6) courses
- In 2004 and 2005: 70% EGEE-based
- Open event
- Mixture of lectures and hands-on sessions
- Industry participation

- In the queue:
 - likely: courses in conjunction with AusGrid '06
 - CHEP School of Computing
 - Grid Track with possible trainings at Linux Tag, June 2006
 - Lecture at “Fachhochschule” (in cooperation with GSI)
 - In the past: several contacts to publishing houses. Book creation limited by resources. But still in the queue ...
 - Enhance and extend “Grid in a box”
 - GridKa School 2006 (cooperation with D-Grid ??)

Impressions GridKa School 2004



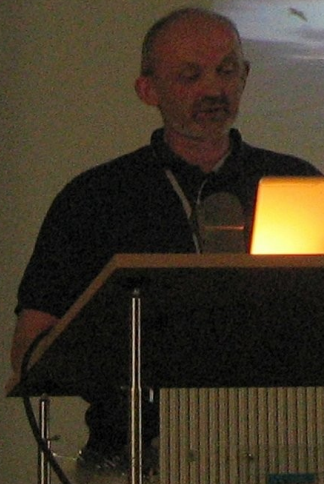
PROOF

- Make work working on
- Return to the PROOF
- The master objects co before se

September 22, 2004

Impressions – GridKa School 2005

Dr. Mike Mineter / NeSC



Impressions – GridKa School 2005

Jürgen Paasch, Oracle



Oracle Enterprise Grid

Features

- Resource virtualisation
- Resource provisioning
- Automated load balancing
- Scaling
- Optimisation
- Management

*Standardize,
Consolidate,
Automate*

ORACLE

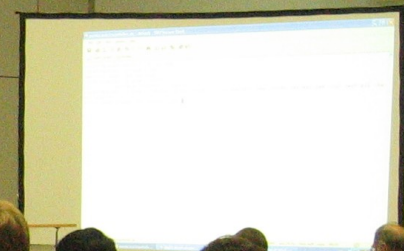


Impressions – GridKa School 2005 gLite Usage Course

egee Leading Grids for E-research **Certificates**

- User interfaces:
 - panda.scai.fhg.de
 - lcg-ui.fzk.de (Port 24)
 - glite-tutor.ct.infn.it
 - grid-tutor.ct.infn.it
- use ssh to connect
- Certificates:
 - Two files
 - usercert.pem (permission: 644)
 - userkey.pem (permission: 600)
 - Stored in \$HOME/.globus
- To participants of installation course: We will convert the certificate on the next slide. Please save that file for your course.

GridKa School 2005



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