egee

Enabling Grids for E-sciencE

NA3

David Fergusson

Training Manager,

NeSC UK & EGEE

egee

4th EGEE Conference
Pisa - Italy

CSCS
Swiss National Supercomputing Centre

www.eu-egee.org

Information Society

- **CSCS is the Swiss National Supercomputing Centre. Its main role is to provide, develop and promote technical and scientific services for the Swiss research community on the fields of high-performance and high-throughput computing.**

- **CSCS is located in Manno (Canton Ticino), in the southern part of Switzerland.**

- **CSCS is an associated partner of EGEE.**

- **It is currently involved in the support and operation of a Grid infrastructure in Switzerland. It also starting the support for integration of new Virtual Organizations and offers a user helpdesk front-end.**

- **CSCS has started the negotiation process to become a full partner of EGEE-II**

- **CSCS will contribute to the project with participation in the following activities:**
  - Resource management and operation
  - User support
  - User training
  - Identification and support of new applications, with strong emphasis in biology

- **The EGEE activities of KU is coordinated by the Niels Bohr Institute in close collaboration with:**
  - The NBI High Energy Physics Group
  - The Danish Center for Grid Computing
  - The Danish Center for Scientific Computing
  - UNI-C
  - NorduGrid

- **The KU EGEE-II activities covers SA1, SA3 and NA3**
  - The SA1 effort will e.g. focus on a Nordic Resource Broker also supporting local Nordic VOs to smoothen the NG-EGEE transition/interoperation
  - The SA3 effort will focus on interoperability with NorduGrid
  - The NA3 effort will continue the training activities from EGEE-I

KU NA3 activities

- **Conducting and Coordinating courses and tutorials**
- **An advanced 12-day course (1-2/year with 30+ part.) covering:**
  - Advanced Grid Security
  - OpenSSL and Globus
  - Job description and submission
  - Replica Management
  - Interactive jobs
  - MPI jobs and MPI coding
  - Other middlewares
- **A two day introduction course (1/year with 10+ part.) covering:**
  - Security
  - Certificates and VOs
  - Job description and submission
- **Customized ½-day tutorials (2-4/year with 15+ part.) e.g. covering:**
  - Grid introduction
  - Job description and submission

ICM, Warsaw University, Poland

Na3 – contact person: Dorota Stojda,
E-mail: dorotas@icm.edu.pl

www.eu-egee.org

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ICM: Interdisciplinary Centre for Mathematical and Computational Modelling of Warsaw University, Poland; Central Europe Federation, partner 11

In the EGEE I

- **2.5-day induction course: „Introduction to GRID Technologies", given 4th – 6th November 2004**

- **the website (English/Polish) http://spin.fuw.edu.pl setup and maintained, being updated on regular basis**

- **4-day application developer course, 30th November – 3rd December 2005 (underway), completes our obligations according to the Workplan**

- **training materials for our courses, both original and adopted**

- **Industrial induction: presentation of EGEE on the 15th of April 2005 at Opening of Advanced Micro Devices Inc. Polish Office in Warsaw**

In the EGEE-II

- We will give 1 or 2 induction courses (highly demanded by end users).

- Related to SA1, we are going to setup and maintain a separate small cluster, with full functionality in separate VLAN and its own training CA, for NA3 purposes only, and keep it available for permanent training, not only during courses.

- We are considering giving a longer course on distributed and Grid computing (application developers, advanced, regular academic classes, to be discussed).

- We will participate in preparation of training material for end users, esp. for HEP applications.

- **IPB - Institute of Physics in Belgrade, http://www.phy.bg.ac.yu/ Leading scientific institution in Serbia**
  - ~10% of the scientific output of the country
  - 4 FP6 CoE grants under negotiation (out of 10 awarded to Western Balkan region)
- **IPB's Scientific Computing Laboratory, http://scl.phy.bg.ac.yu/**
  - New partner in EGEE-II (SEE federation)
  - Leading partner in Academic and Educational Grid Initiative of Serbia – AEGIS, http://aegis.phy.bg.ac.yu/
  - Host of central grid site in Serbia: AEGIS01-PHY-SCL
  - FP6 CoE for Simulation of Complex Systems (best ranked proposal in the call)
- **Areas of expertise:**
  - Cluster integration
  - MC simulations (classical & quantum many body, materials)
  - Engineering simulations (FEM)

EGEE

Enabling Grids for E-sciencE

EGEE-II involvement of IPB in NA3

- **General goals:**
  - Be the local operation and support centre for Serbia
  - Carry out training and dissemination activities.

- **NA3 specific goals:**
  - Provide training sessions in Serbia covering the AEGIS partners and wider scientific community within Serbia
  - Interact with the other training teams for feedback

- **Responsible person: Aleksandar Belic**

- **Looking forward to the opportunity to learn from more experienced teams!**

INFSO-RI-508833

Ladislav Hluchý
Institute of Informatics
Slovak Academy of Sciences
Slovakia

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- **Institute of Informatics (www.ui.sav.sk) is one of more than 50 scientific and research institutes of the Slovak Academy of Sciences, Bratislava, Slovakia, with about 100 employees and 10 departments.**

Current related projects:

- **K-Wf Grid: Knowledge-based Workflow System for Grid Applications (2004-2006) FP6-511385. www.kfgrid.net**

- **MEDIGRID: Mediterranean Grid of Multi-Risk Data and Models (2004-2006) FP6-004044. Grid-based framework for multi-risk assessment of natural disasters.**

- **http://www.eu-medin.org/projectPage.php?acronym=MEDIGRID**

- **IISAS has prepared course materials (in English and in Slovak languages) and gave 7 courses in Slovakia (more than 180 participant-days):**
  - **Information Technology for Risk Assessment in Water Management (14 April 2004)**
  - **Enabling Grids for e-Science in Slovakia (EGESK) (26 May 2004)**
  - **Úvod do pocítania v Gride (Introduction to Grid computing) (30-31 August 2004)**
  - **Úvod do gridového pocítania (Introduction to Grid computing) (30 November – 1 December 2004)**
  - **Úvod do gridového počítania (Introduction to grid computing) (VRVS lecture, 9 March 2005)**
  - **Application development course (10-11 March 2005)**
  - **Úvod do gridového počítania (Introduction to Grid computing) (4 April 2005)**
- **IISAS is organizing workshop for grid application users, enhanced by induction and application-developers course 29 November-1 December 2005 in Bratislava http://agenda.cern.ch/fullAgenda.php?ida=a055706**

IISAS is going to continue its NA3 efforts from EGEE-I. That is:

- **Courses: four one-day tutorials (induction and developer) plus 2-3 courses for application developers with 10-30 participants**
- **t-Infrastructure: development and maintenance of II-SAS site in GILDA training testbed**
- **Talks about Grid and EGEE at Academic Days in Slovakia**

For EGEE II, we can extend our activities in NA3 for followings

- **training materials for application developers, with focus on earth science applications (data managements, grid services) and portals**
- **demo grid portal with OGCE technologies and flood applications**

IISAS manpower - 12 PMs:

- **TNA3.1 (3) Course content creation and delivery**
- **TNA3.2 (1) Training course scheduling**
- **TNA3.4 (1) Translation of training material**
- **TNA3.5 (3) Training event organisation**
- **TNA3.7 (1) Quality assurance**
- **TNA3.8 (2) t-Infrastructure development and maintainance**

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CESNET NA3 Contacts

Jan Kmuníček

Information Society

- **Ludek Matyska (ludek@ics.muni.cz)**

    – Current position

        ▪ leader of Czech national Grid project METACentrum

        ▪ head of CESNET (Czech Education and Scientific Network) participation in international Grid projects (EGEE, DataGrid)

        ▪ assoc. prof. at Faculty of Informatics, vice-director of Institute of Computer Science (Masaryk University in Brno), head of MU participation in EU project (GridLab, CoreGRID)

    – EGEE position

        ▪ leader of CESNET participation in EGEE/EGEE-II projects

    – Special expertise

        ▪ Distributed systems and computer networks, Grid infrastructure monitoring (L&B, CGMA), Grid scheduling, e-learning related activities

Enabling Grids for E-sciencE

- **Jan Kmunicek (kmunicek@ics.muni.cz)**

  – Current position
    - user support manager for high-performance/throughput computing and grids related local/international projects, CESNET and Institute of Computer Science, MU

  – EGEE position
    - leader of the CESNET NA3/NA4 activities, CESNET coordinator of user support related tasks in EGEE/EGEE-II projects

  – Special expertise
    - involvement in user support organization within Central European region, computational chemistry background

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- **Personal location**

  – Current address

    ▪ Institute for Computer science (ICS)

      Supercomputing centre
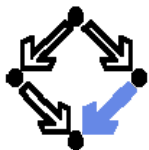
      Botanicka 68a

      602 00 Brno, Czech Republic

GUP + RISC == JKU

- **NEW**

- Institute of Graphics and Parallel Processing..

    - *Major Austrian academic HPC and networking centre*
    - *Main AustrianGrid Computing and Support Centre*
    - *Main EGEE operator for the eastern part of Austria*
    - *AFC representative for Central Europe*
    - *Leader and coordinator of the Austrian Grid*
    - *strong expertise in grid computing,*

- Research Institute for Symbolic Computing..

    - *Excellence in doing symbolic computation, parallel and distributed algorithms and software systems*
    - *Development of a grid variant of a medical software system for virtual eye surgery in cooperation with a medical partner.*

    ..of the Johannes Kepler University, Linz (Austria)

    - *Expertise in academic teaching*
    - *Outreach to the right clientele*

Joh. Kepler University

RISC Hagenberg

- **New partner name**
  - same people (GUP)
  - additional people (RISC)
- **Continuation of EGEE-I Training Efforts for Austria**
  - Dissemination
  - Inductory Courses
  - Application Developer Courses
- **New target audience and training expertise of *"Biomed-Community" through RISC***
- **Close cooperation with AustrianGrid Partner UIBK**
- **Planned JRU**

Linz

Come see us!!
http://www.austriangrid.at/symposium/

Austria -Salzkammergut

National Institute for R&D in Informatics - ICI Bucharest

Partner no 53

www.eu-egee.org

Information Society

- Leading R&D unit in IT field since 1970

- Coordinated by the Ministry of Communication and Information Technology

- Ranked first among R&D Romanian organizations, in the EC survey "*Impact of the enlargement of the European Union towards the associated central and eastern European countries on RTD - innovation and structural policies*" (p.194, Office of official publications of the EC, 1999)

- Operator of the Romanian R&D Network (RNC)

- Member of Romanian Association of Electronic and Software Industry - ARIES

- Coordinator of the *RoGrid Initiative*

- Certified ISO 9001:2000

- Editor of the quarterly *Romanian Journal of Information Technology and Automatic Control*

– Mission:

To actively participate in science and technology as the leading Romanian research-development and innovation centre in IT&C

– Main fields of expertise:

knowledge engineering, database systems, networking, grid computing, software engineering, quality assurance in IT, business process re-engineering, decision support systems, computer interfaces, computer integrated manufacturing, mathematical modeling, simulation and optimization, multimedia, web technologies.

– Provided IT services:

advanced and applied research; feasibility and modernization studies; analysis, design, programming and implementation of information systems for business and public administration; development of general-purpose software tools; consultancy in IT, control and management; training and specialization in IT; software assessment, testing, certification.

- **Professional staff:**
  - 48 researchers, 80 analysts & programmers;
  - 1 member of Romanian Academy, 20 Ph.D. holders and 13 Ph.D. candidates
  - 9 Romanian Academy Awards since 1982
  - about 50 memberships in international scientific bodies and associations
- **Gender action results:**
  - personnel distribution by gender: 47 % women, 53 % men
  - researchers: 43 % women, 57 % men
  - university degree (professional staff): 55 % women, 45 % men

ICI in International Cooperation

- Participation in 38 FP4 / FP5 projects since 1993
- Participation in 6 FP6 projects after first two IST Calls:
  - *1 Integrated Project:*
    - **EGEE** – Enabling Grids for E-sciencE
  - *2 Network of Excellence:*
    - **SIMILAR** - The European taskforce creating human-machine interfaces similar to human-human communication
    - **REVERSE** – Reasoning on the Web with Rules and Semantics
  - *3 Specific Support Actions:*
    - **SEE-GRID** – South Eastern European Grid-enabled eInfrastructure Development
    - **Idealist34** – Partner Search Support for participants in IST Priority by European network of NCP for IST under FP6
    - **IST World** – Knowledge Base for RTD competencies in IST
- National contact point for the " European IST Prize"
- Nominated for two eEurope 2003 awards for innovation in eGovernment and eHealth
- Editor of the international journal *Studies in Informatics and Control* (in English)

ICI in EGEE

Enabling Grids for E-sciencE

- **Participation in SA1 and NA3 activities**
- **Member of the distributed ROC-SEE**
- **In charge with Hepldesk solution at the SEE Federation level and interface with GGUS**
- **Hosting and administrating the RO-01-ICI production site**
- **Courses provided for site administrators at the RoGrid consortium level**
- **Coordination of JRU including 4 RoGrid third parties:**
  - University "Politehnica" of Bucharest
  - University of Bucharest
  - National Institute for Physics and Nuclear Engineering
  - National Institute for Aerospace Research

ICI potential for NA3 activities

Enabling Grids for E-sciencE

- **Training expertise:**
  - Site installation and administration
  - User support and Helpdesk solution
  - Induction
  - Using Gilda / Genius platform
- **Training facilities:**
  - Training hall (40 places, wireless Internet)
  - Training room with 10 computers
  - Gilda site (hosted by the training room)
  - Visits at the EGEE Production site RO-01-ICI

- **Distributed and Parallel System Group (DPS), Leopold Franzens University, Innsbruck (Austria)**
  - *Strong expertise in Grid computing (ASKALON, toolset for Cluster and Grid)*
  - *Major Austrian academic HPC*
  - *Partner of the Austrian Grid*
  - *Austrian Grid Computing and Support Centre*
  - *Main EGEE operator for the western part of Austria*
  - *Partners of other EU Grid projects:*
    - *Adaptive Services Grid IP*
    - *K-Wf Grid STREP*

UIBK – Austria – CE Federation

EGEE — Enabling Grids for E-sciencE

- **New name, same people**
- **Continuation of EGEE-I Training Efforts for Austria**
  - Running volunteer courses about Grid computing
  - Induction/application developer training
  - User group training
- **New target audience "High Energy Physics" through HEP**
- **Close cooperation with AustrianGrid Partner JKU**
- **Involved also in SA1**

http://dps.uibk.ac.at

Visit us!!

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TAU – Tel Aviv University representing
IAG- Israel Academic Grid

We are partner in phase 1 of EGEE, participating in SA1 and NA3, belonging to SEE (south east Europe)

Israel Academic Grid

http://iag.iucc.ac.il

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www.eu-egee.org

- **Grid Induction workshop Dec 22-23, 2004.**

General introduction and hands-on experience with Gilda and Condor.

60 participants from academia and industry.

- **2nd grid induction workshop Sep 28-29, 2005.**

Practical experience in grid technology, installation of grid sites.

40 participants.

- **Course development for targeted communities: CS students, biomedical users.**

For details see http://iag.iucc.ac.il

Within EGEE II we propose to extend our course development effort. We believe that preparing courses that can be incorporated in CS curricula is an important activity that will bring grid-awareness to the relevant public, thus increasing the utility of the EGEE grid infrastructure.

PI: Prof. David Horn, Tel Aviv University. http://horn.tau.ac.il

NA3 team is led by Eddie Aronovich eddiea@cs.tau.ac.il

EGEE Training Report
- German / Swiss Federation -

Dr. Rüdiger Berlich / Forschungszentrum Karlsruhe

Pisa / 27.10.05

www.eu-egee.org

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- Forschungszentrum Karlsruhe is responsible for organising
  and/or running of Grid Training activities for the
  German /Swiss federation
- So far 19 trainings held in or by DECH federation since April 2004
- Approximately 370 people trained
- Course at TERENA in cooperation with NeSC
- Major annual event is GridKa School
  - 17 talks
  - 6 courses
- Upcoming courses:
  - GGUS Training for Supporters (November 2005)
  - likely: course for D-Grid members
  - likely: Courses in conjunction with AusGrid '06
  - Grid Track with possible trainings at Linux Tag, June

Impressions GridKa School 2004

Impressions – GridKa School 2005
Jürgen Paasch, Oracle

Impressions – GridKa School 2005
gLite Usage Course

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MTA SZTAKI in NA3

NA3 Activities
(until October 2005)

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Enabling Grids for E-sciencE

- **Full day training courses**
  - University of Szeged, Dec. 2004
  - SEE-GRID course in Istambul, Dec. 2004
  - University of Veszprém, Apr. 2005
  - University of Kaposvár, May 2005
- **Half-day training courses**
  - University of Debrecen, Aug 2005
- **Tutorials at conferences**
  - Induction to grid computing at EuroPVM/MPI and DAPSYS conference, Budapest, Sept., 2004
  - Short tutorial on the usage of HunGrid VO at Networkshop, Szeged, March 2005

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Enabling Grids for E-sciencE

- **Regional EGEE Summer School in Budapest, 11-16 July**
  - http://www.egee.hu/grid05
  - Induction Course mainly, but includes an Application Developer Training Course, and Advanced Course on gLite
    - EGEE Security, VOs, job management, data management, information system, applications, large scale simulations
    - Portals: P-GRADE Portal on HunGrid, Genius on Gilda
    - Practice of parallel program development, workflow development
  - target audience:
    - Researchers mostly from CE and SE partner countries, SEE-GRID project members but also from anywhere.
    - Scientific researchers from Chemistry, Biology, Physics and others.
  - trainers: MTA SZTAKI, CESNET, CERN, INFN

Enabling Grids for E-sciencE

- **"Grid Computing" classes**
  - University of Miskolc
  - Eötvös Loránd University of Budapest

  - Grid concepts and „first solutions": Condor, Globus
  - LCG-2 architecture
  - P-GRADE portal for development of parallel applications and workflows for LCG-2.
  - Infrastructures for training: HunGrid VO

- **Austria, Chech Republic, Hungary, Poland, Slovakia**
- **9 organisations (GUP, UNIINNSBRUCK, CESNET, BUTE, ELUB, MTA SZTAKI, ICM, PSNC and II-SAS)**

- **http://www.egee.hu/ce**
- **email list: egee.na3.ce@lpds.sztaki.hu**

- **Goals:**
  - include Grid technology in academic lectures and MSc/PhD theses at the technical universities of Cracow, Brno, Budapest, Innsbruck, Linz, Poznan and others;
  - organise dedicated Grid seminars for researchers at every participating institution;
  - prepare tutorials on layered software oriented towards interactive applications and organise dedicated training workshops for students and potential users;
  - develop one or more dedicated training centre(s) in one or two partner countries, serving the whole community;
  - prepare dissemination brochures on applications which are relevant to the Federation (e.g. "Grids for flood crisis response");
  - organise in every country of the Federation "Grid open days" (including demonstrations), oriented to attract and induct new users;
  - develop and support dedicated web pages.

- **Goals:**
  - To promote information on Grid technology in Hungarian language
  - organise Grid tutorial days in Hungary
  - develop and support dedicated web pages for the Hungarian research community.
- **Web page**
  - http://www.egee.hu/hun

Enabling Grids for E-sciencE

NA3 activity in Russia during EGEE project

Elena Slabospitskaya

NA3 Manager for Russia

Pisa, October,

www.eu-egee.org

The Russian partners in NA3 are collectively known as RDIG :
Russian Data Intensive GRID – Russian Federation in EGEE.

RDIG comprises:

           IHEP (Protvino) {41},
           IMPB RAS(Puschino){42},
           ITEP(Moscow) {43},
           JINR(Dubna) {44},
           PNPI(Gatchina) {46},
           RRC KI (Moscow) {47}

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44 JINR Nikolaj Zaikin
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46 PNPI Eugeny Novodvorsky
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47 RRC KI Evgeni Riabinkine
rea@rea.mbslab.kiae.ru

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Event Type: Introduction and Induction Course

Red- quantity of realized courses, Black – planning courses

Partner	Y1/Q1	Y1/Q2	Y1/Q3	Y1/Q4	Y2/Q1	Y2/Q2	Y2/Q3	Y2/Q4
			5[1]					
41 + 42 +43 + 44+ 46 + 47	**1** [1] IHEP+ JIINR	**2**[1] PNPI,, IMPB RAS	IHEP, IMPB RAS, ITEP, PNPI-2	**1**[1] IHEP+ RRC KI +JINR	1 [1] IMPB RAS+ JIINR	[1] IMPB RAS	[1] ITEP	*[1] ITEP*

Dubna , 28.06.2004

Quarter	Y1/Q1		Y1/Q2		Y1/Q3		Y1/Q4	
Type of Courses	People	Participant days	People	Participant days	People	Participant days	People	Participant days
Introduction and induction (10 courses)	78	78	47	47	72	72	48	48
Application Developer (2 courses)					8	16	15	30
Technical Retreats (2 courses)					5	10	21	42
Total participants	294							
Total participants days	343							

Partner	Y1/Q1	Y1/Q2	Y1/Q3	Y1/Q4	Y2/Q1	Y2/Q2	Y2/Q3	Y2/Q4
41 + 42 +43 + 44+ 46 + 47			**1** [1] IHEP + JINR	**1** [1] PNPI	[1] IHEP	[1] JINR	[1] PNPI	[1] IHEP

RDIG Input: Event Type: Application Developer Training Course
Red- quantity of realized courses, Black – planning courses

- December 23-24 2004,
- "Introduction to Web Services" IHEP and JINR

Event Type: Technical Activity Retreats Courses

Red- quantity of realized courses, Black – planning courses

Partner	Y1/Q1	Y1/Q2	Y1/Q3	Y1/Q4	Y2/Q1	Y2/Q2	Y2/Q3	Y2/Q4
41 + 42 +43 + 44+ 46 + 47			**1**[1] IHEP	**1**[1] 1-JINR+ IHEP	[1] PNPI	[1] RRC KI	[1] JINR	[1] RRC KI

LCG-2 installation courses
(14-15.10.2004)

Courses for grid administrators
Protvino, 17.01.05

Introduction

The European DataGrid project, the forerunner to the Enabling Grids for E-science in Europe (EGEE) project, highlighted the importance of up-to-date accessible training by an experienced team who were willing to travel and to modify training material to suit local needs.

Led by the UK National e-Science Centre based in Edinburgh, no fewer than 22 of the 70 partners taking part in the EGEE project are directly involved in EGEE User Training and Induction. The User Training and Induction team aims to provide a full programme of accurate tutorials with real world examples which is vital to spreading the word about the importance of Grid technology to Research and Industry throughout Europe.

One of the biggest challenges for the User Training and Induction team will be to keep the training programme up-to-date as the project infrastructure develops. Another challenge is to present the material in such a way that it meets the needs of a diverse community - from new staff on the project, to academics well versed in Grid technology, to subject specialists wishing to understand how EGEE can help them pursue their research, to people in industry keen to exploit the new Grid computing for commercial reasons.

User Training

29.03.2005

NA3. LCG2 Administrator`s Course

29.03.2005

NA3. "Running Athena application using Ganga interface"

21.03.2005

NA3. "What is a GRID? What is a EGEE project"

17.01.2005

NA3. RDIG Workshop Induction Courses for grid administrators

23.12.2004

NA3. EGEE Application Developers Courses

22.12.2004

PNPI - Start the jobs in GRID

20.12.2004

ITEP GRID Introduction Courses

20.12.2004

PNPI Introduction Courses

02.12.2004

IMPB Introduction Courses for biomedical users

22.10.2004

IHEP Introduction Courses for Atlas users

1. **Prepare and maintenance the training infrastructure – specialised grid clusters for tutorials** *(IHEP, JINR,ITEP IMPB RAS, PNPI, RRC KI)*

1. **Organization of core trainers team for Russian Federation has finished. The team consists of representatives from some Russian institutes**

1. **Produce initial training and course materials for the EGEE-RDIG Courses in Russian and English-** *IHEP, JINR, PNPI, ITEP,IMPB RAS, RRC KI*

1. **Prepare and maintain the NA3 web pages within the RDIG web portal** http://egee-rdig.ru *JINR with the participation of other institutes*

1. **Prepare user's rooms for courses** *IIHEP JINR*

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20,22 December,2004   Introduction and Induction Courses in Gatchina

PNPI has installed gLite User Interface and provided gLite practical

- **http://agenda.cern.ch/fullAgenda.php?ida=a045210**

17 January 2005 **Courses for grid administrators (RDIG Protvino Workshop)**

- **IHEP produced the review about comparing of LCG-2 and gLite**

- **http://agenda.cern.ch/fullAgenda.php?ida=a045649**

29 March 2005 Application Developer Courses in Gatchina

PNPI the cooperation NA3 andNA4 prepared " Running Anthena application using GANGA interface (ATLAS)"

25 April 2005 Training the trainers in Protvino

IHEP and JINR have produced practical about creation of virtual machines using free User-mode Linux Kernel

http://agenda.cern.ch/fullAgenda.php?ida=a052296

26 April 2005 Introduction and Induction Courses in Protvino

JINR and IHEP will be teatch a practical using of last gLite version (gLite Candidate Relize)

http://agenda.cern.ch/fullAgenda.php?ida=a052295

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LCG Induction Courses for CMS Users - JINR, Sept.6,2005

http://agenda.cern.ch/fullAgenda.php?ida=a055009

Application Developers Courses. Atlas distributed analysis
PNPI ,Sept,12 2005

http://agenda.cern.ch/fullAgenda.php?ida=a055814

Advanced Course (in Russian) .gLite installation and configuration
http://agenda.cern.ch/fullAgenda.php?ida=a055815

1. The main accent of events has to direct to Technical Retreats and Application Development Courses
2. We are looking for the new materials and new trainers for our courses. Many useful for these purposes are our cooperation with Grid Deployment Group IT (CERN) . Developers from IHEP, JINR and ITEP are participating in LCG-2 and gLite testing.

Many thanks to Malcolm Atkinson and David Fergusson (both NeSC, Edinburg) for collaborative work