



Enabling Grids for E-science

Life session summary and feedback

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www.eu-egee.org



- **33 out of the 151 abstracts received for UF3 in the field of life sciences**
 - 14 oral presentations
 - 7 demonstrations
 - 12 posters
- **The grid is used to produce scientific results**
 - 11 abstracts on scientific results
 - 18 abstracts on application porting and deployment
- **Three sessions**
 - Tuesday morning (11-12.30) : bioinformatics
 - Tuesday afternoon (14-15.30) : bioinformatics
 - Wednesday morning (11-12.30) : drug discovery and medical imaging

Speaker	Affiliation	Title
I. Blanquer	UPV	analysis of the metagenomes on the EGEE grid
C. Blanchet	CNRS	Grid solving a bioinformatics challenge: a first step to anchoring the nucleosome
Alexandru Monteanu	INSERM	Genome wide association studies of human complex diseases with EGEE
Andreas Gisel	CNR	GRID distribution supporting chaotic map clustering on large mixed microarray data sets

> 50 participants

Speaker	Affiliation	Title
A. Sharov	Technion	Distributed system for genetic linkage analysis using EGEE and BOINC
M. Reichstadt	Univ. B. Pascal	TriAnnot PipelineGRID, a tool for the automated annotation of wheat BAC sequences
Giulia De Sario	CNR-ITB	High Throughput GRID application for life sciences: the GENE analogous finder
Luciano Milanesi	CNR-ITB	BioinfoGRID: bioinformatics grid applications for life sciences

> 50 participants

Speaker	Affiliation	Title
L. Maigne	Univ. B. Pascal	Grid based telemedicine application for GATE Monte-Carlo dosimetric studies
A. Da Costa	CNRS-IN2P3	WISDOM grid enabled identification of active molecules against targets implicated in malaria
S. Ahn	KISTI	performance analysis and optimization of AMGA for the WISDOM environment
G. Degliesposti	Univ. Modena	molecular dynamics refinement and rescoring in WISDOM virtual screenings
S. Camarasu	CNRS	ThIS on the grid

~ 50 participants

- **Compute-intensive applications are routinely operated on the grid**
 - Typical size: a few to 10-20 CPU years
 - Typical crunching factor: a few hundreds
 - Use of non-standard approaches to reduce latency and improve efficiency
 - Pull model with agents (WISDOM)
 - BOINC on EGEE (Superlink)
- **Significant progress towards federation of databases**
 - Health-e-child demo
 - Several groups report use of AMGA (Health-e-child, HOPE, WISDOM)

EGEE Accounting Portal - Windows Internet Explorer

http://www3.egee.cesga.es/gridsite/accounting/CESGA/egee_view.html

EGEE ACCOUNTING PORTAL

GLOBAL View | VO MANAGER View | VO MEMBER View | SITE ADMIN View

Hierarchical Tree

- Tier1
- Tier2
- Countries
- EGEE
 - Production
 - AsiaPacific
 - CentralEurope
 - CERN
 - France
 - GermanySwitzerland
 - Italy
 - NorthernEurope
 - Russia
 - SouthEasternEurope
 - SouthWesternEurope
 - UKI
 - VIRTUAL-CORE-GRID

CPU Efficiency (%) by VO and DATE (Exc

VO	Mar 07	Apr 07	May 07	Jun 07	Jul 07	Aug 07	Sep
alice	69.4	70.4	36.6	71.6	62.5	56.8	70.9
atlas	63.6	75.0	67.1	65.3	75.2	72.5	66.0
babar	71.5	66.7	69.9	69.7	65.6	71.2	61.4
biomed	17.7	59.9	77.2	69.5	66.3	52.8	49.4
cdf	52.5	87.6	54.8	65.6	80.1	78.7	95.3
cms	67.8	69.1	48.5	50.7	66.3	65.6	78.6
dzero	65.3	64.0	63.4	76.9	71.3	74.0	73.3
hone	86.6	92.1	71.0	90.7	94.1	91.4	81.7
lhcb	86.9	87.9	75.4	86.1	87.1	77.8	55.1
see	95.0	92.7	90.9	94.4	90.5	95.1	95.8
Other VOs	78.8	88.8	81.1	89.8	97.2	89.0	92.1
Total	70.9	73.4	63.8	69.7	74.2	70.3	71.5

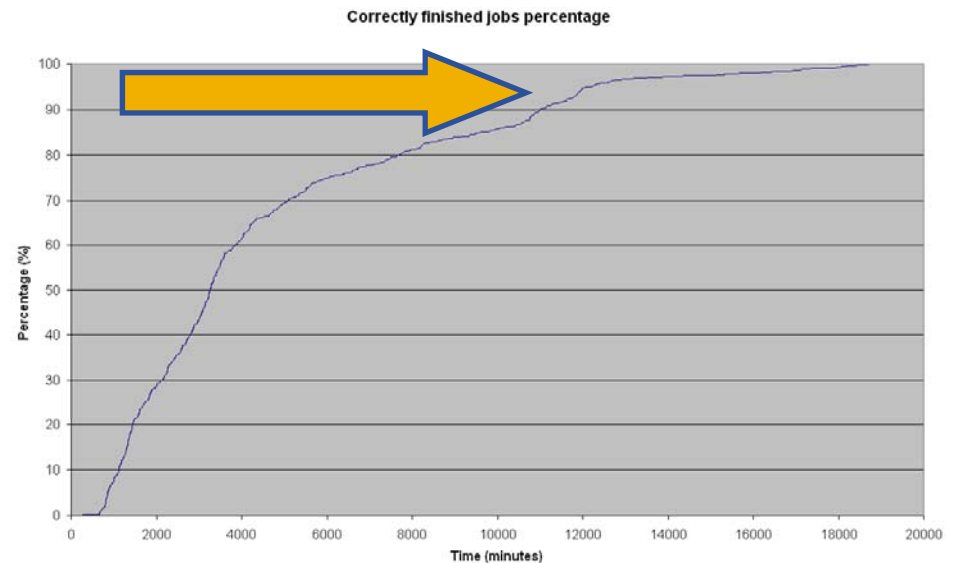
Click here for a csv dump of this table

Key: 0% <= eff < 50%; 50% <= eff < 60%; 60% <= eff < 75%; 75% <= eff < 90%; 90% <= eff < 100%; eff >= 100% (parallel jobs)

The information in the previous table is also shown in the following graph

Addressed in I. Blanquer talk

- **Crunching factor at 90% completion is typically a factor 2 to 3 better than at the end of a big production**
- **Limitations identified**
 - MPI deployment: 1000 out of 17000 CPUs on Biomed VO are running MPI
 - >1GB RAM needed for some applications
 - Data bandwidth
- **The future of AMGA and secured storage service in EGEE-III**
 - Who will maintain it ?
 - Who will evolve it ?
 - Biomed cluster (40%) and JRA1 (50%) severely cut



Interest to finish production at cluster level instead of using the grid ?

- **UF3: significant audience (>50 participants at each session)**
- **Future: EGEE-III involves a reduced number of partners**
 - 40% cut of the biomed cluster
 - One can anticipate a reduced audience
- **Suggestion: move away from EGEE User Forum to gLite User Forum**
 - Stronger involvement of NGIs and related projects
 - Prepare migration from EGEE-III to EGI

- **Big bullet**
 - Smaller Bullet
 - Even smaller
 - *Tiny weenie*
 - Micro bullet
 - Another Smaller Bullet
- **Big bullet with highlights (please use this dark yellow)**
 - Smaller bullet with hyperlink or http://egee