Panda Grid Status

Radoslaw Karabowicz, GSI

on behalf of

PANDA GRID Group

Central services, LDAP, DB and ML transfers

- Phone meeting on 1st Feb 2012

- Till end of February GRID management center has to be moved out of Glasgow, including:

    - Lightweight Directory Access Protocol (LDAP)   -> GSI

    - MySQL DataBases (DB)   -> GSI, Torino

    - Alien2 Central Services (CS)   -> GSI

    - PANDA GRID MonaLisa (ML)   -> Jülich

Who is who?

- Dan Protopopescu, Glasgow - 'retiring' GRID Project Coordinator

- Rene Dosdall, Jülich FZ - GRID Admin

- Radosław Karabowicz, GSI - Deputy GRID Admin

- Paul Buehler, SMI Vienna - Production Manager

- Stefano Spataro, INFN - Exploitation Manager

- Kilian Schwarz, GSI - GRID/AliEn/ALICE contact person

- Almudena Montiel, GSI - GRID GSI expert

- Florian Uhlig, GSI - CBM GRID Admin

- Małgorzata Sudol, GSI/Orsay - unofficial tester

Panda GRID CS @ GSI

- lxpandagrid03 machine bought (last year), delivered (January), installed in GSI (mid February) with 16 CPUs, 24 GB RAM, 1 TB HDD

- CS installation status:

    - Lightweight Directory Access Protocol (LDAP) ✓ GSI

    - MySQL DataBases (DB) ⚙ GSI, Torino

    - AliEn2 Central Services (CS) ✗ GSI
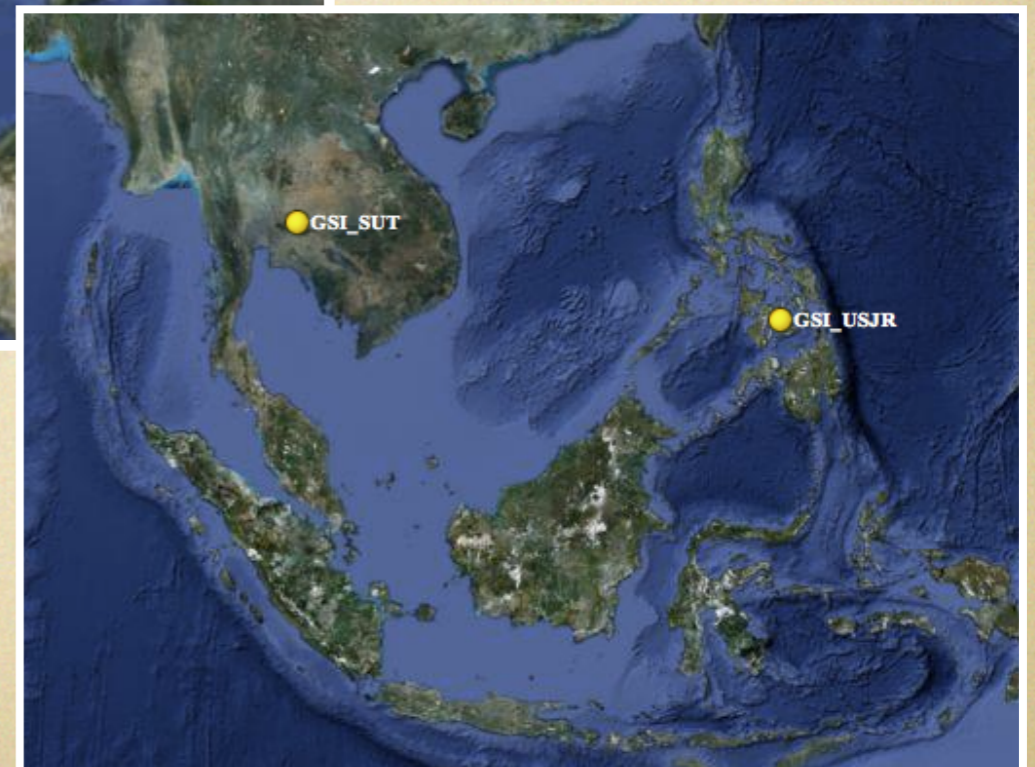
    - PANDA GRID MonaLisa (ML) ✗ Jülich

Panda GRID Map

~15 sites
~1400 CPUs

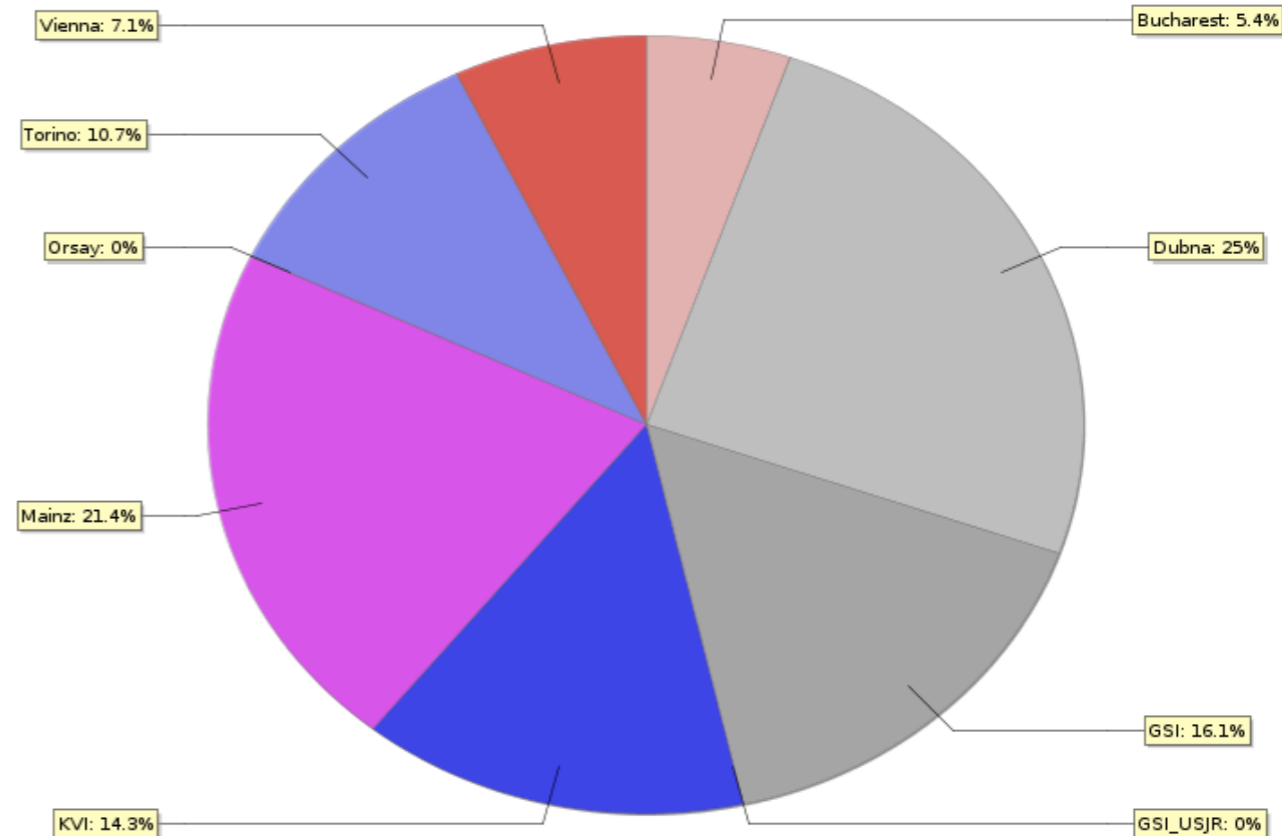Changes:

Mainz with 500+ CPUs

SC, LDAP, DB in GSI

Panda GRID Sites

PANDA Grid Machines

		VOBox		AliEn services					Proxy
Site	Machine	AliEn version	ML	CE	PackMan	CM	CMreport		timeleft
1. Bucharest	panda01.nipne.ro	v2-20.10							3d 11:48
2. Dubna	lxpanda.jinr.ru	v2-20.10							6:49
3. Glasgow_CE1	ce1.physics.gla.ac.uk	v2-20.10							3d 13:54
4. Glasgow_CE2	ce2.physics.gla.ac.uk	v2-20.10			-				3d 13:58
5. Glasgow_SE1	se1.physics.gla.ac.uk	v2-17.61		-	-	-	-		15:53
6. GridServer	panda.gla.ac.uk		-	-	-	-	-		-
7. GSI	lxgrid8.gsi.de	v2-20.15							0min
8. GSI_SUT	203.158.7.193	v2-20.14	Time...	-	-	Warn...	Warn...		0min
9. GSI_USJR	61.9.87.219	v2-20.8		Mar ...	Mar ...	Mar ...	-		0min
10. Juelich	ikp642.ikp.kfa-juelich.de	v2-20.10							2d 10:52
11. KVI	kvit14.kvi.nl	v2-20.10							3d 12:47
12. KVI-2G	panda.grid.rug.nl		-						-
13. Mainz	himster.him.uni-mainz.de	v2-20.21							0min
14. Orsay-2G	ipnvobox-panda.in2p3.fr	v2-20.10							0min
15. Torino	pandafarm01.to.infn.it	v2-20.11							3:15
16. Torino-2G	pandabox.to.infn.it		-						-
17. Vienna	smigrid02.smi.oeaw.ac.at	v2-20.10							:0:39

Sites job share in the last 3 months:

Vienna: 7.1% — Bucharest: 5.4% — Torino: 10.7% — Dubna: 25% — Orsay: 0% — Mainz: 21.4% — GSI: 16.1% — KVI: 14.3% — GSI_USJR: 0%

PandaRoot @ GRID

Installed:
panda_extern: apr08, jul08, jul09, may11, jan12
pandaroot: may11, july11, august11 nov11, stable, trunk (updated every Tuesday with results published in pandaroot cdash)

GRID Disk Usage

							Storage elements	
Properties				**Xrootd info**				
SE Name	**AliEn Name**	**Type**	**No. of files**	**Size**	**Used**	**Free**	**add**	
1. Bucharest - SE2	PANDA::Bucharest::SE2		-	1.789 TB	1.763 TB	26.63 GB	-	
2. Dubna - SE2	PANDA::Dubna::SE2		-	6.821 TB	3.285 TB	3.536 TB	-	
3. Glasgow - RAID0	PANDA::Glasgow::RAID0		-	-	-	-	-	
4. Glasgow - SE1	PANDA::Glasgow::SE1		-	0	0	0	-	
5. GSI - FILE	PANDA::GSI::FILE		-	-	-	-	-	
6. GSI - VIRTUAL2	PANDA::GSI::VIRTUAL2		-	2.149 PB	1.667 PB	494.1 TB	-	
7. GSI_SUT - FILE	PANDA::GSI_SUT::FILE		-	-	-	-	-	
8. Juelich - SE2	PANDA::Juelich::SE2		-	687.5 GB	447.8 GB	239.7 GB	-	
9. KVI - FILE	PANDA::KVI::FILE		-	11.25 TB	8.191 TB	3.059 TB	-	
10. Mainz - SE	PANDA::Mainz::SE		-	192.8 TB	80.37 TB	112.4 TB	-	
11. Orsay - FILE	PANDA::Orsay::FILE		-	-	-	-	-	
12. Torino - FILE	PANDA::Torino::FILE		-	8.954 TB	1.326 TB	7.627 TB	-	
13. Torino - SE2	PANDA::Torino::SE2		-	-	-	-	-	
14. UIBK - SE2	PANDA::UIBK::SE2		-	-	-	-	-	
15. Vienna - SE2	PANDA::Vienna::SE2		-	5.28 TB	2.635 TB	2.646 TB	-	
Total			**0**	**2.372 PB**	**1.763 PB**	**623.6 TB**		

Panda GRID Load

Jobs status

Panda XXXIX Collaboration Meeting 12-16Dec

Xmass & New Year

Dec 2011 — Jan — 2012 — Feb — Mar

Jobs [Number]

Running — Saving — Started — Zombie

User experience

- obtaining certificate (5 minutes) from:

  https://gridka-ca.kit.edu/

- activation via admins of Panda GRID (1 day)

- going through tutorials (2-3 hours):

  http://panda-wiki.gsi.de/cgi-bin/view/Computing/
  PandaGrid#Tutorials

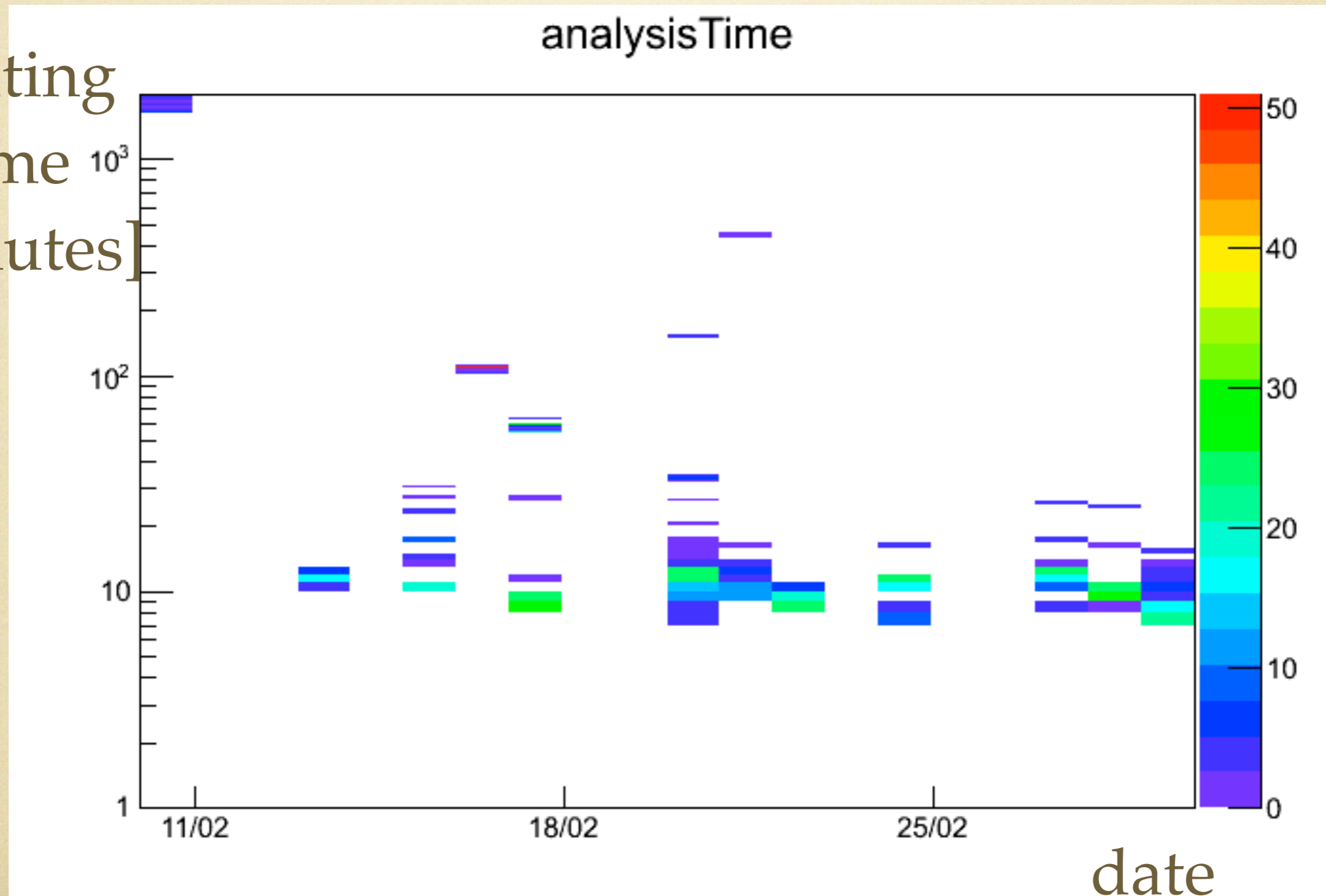- creating, uploading, running and bug fixing
  my own simple jobs (1 day)

- enjoy!

Job execution - sites
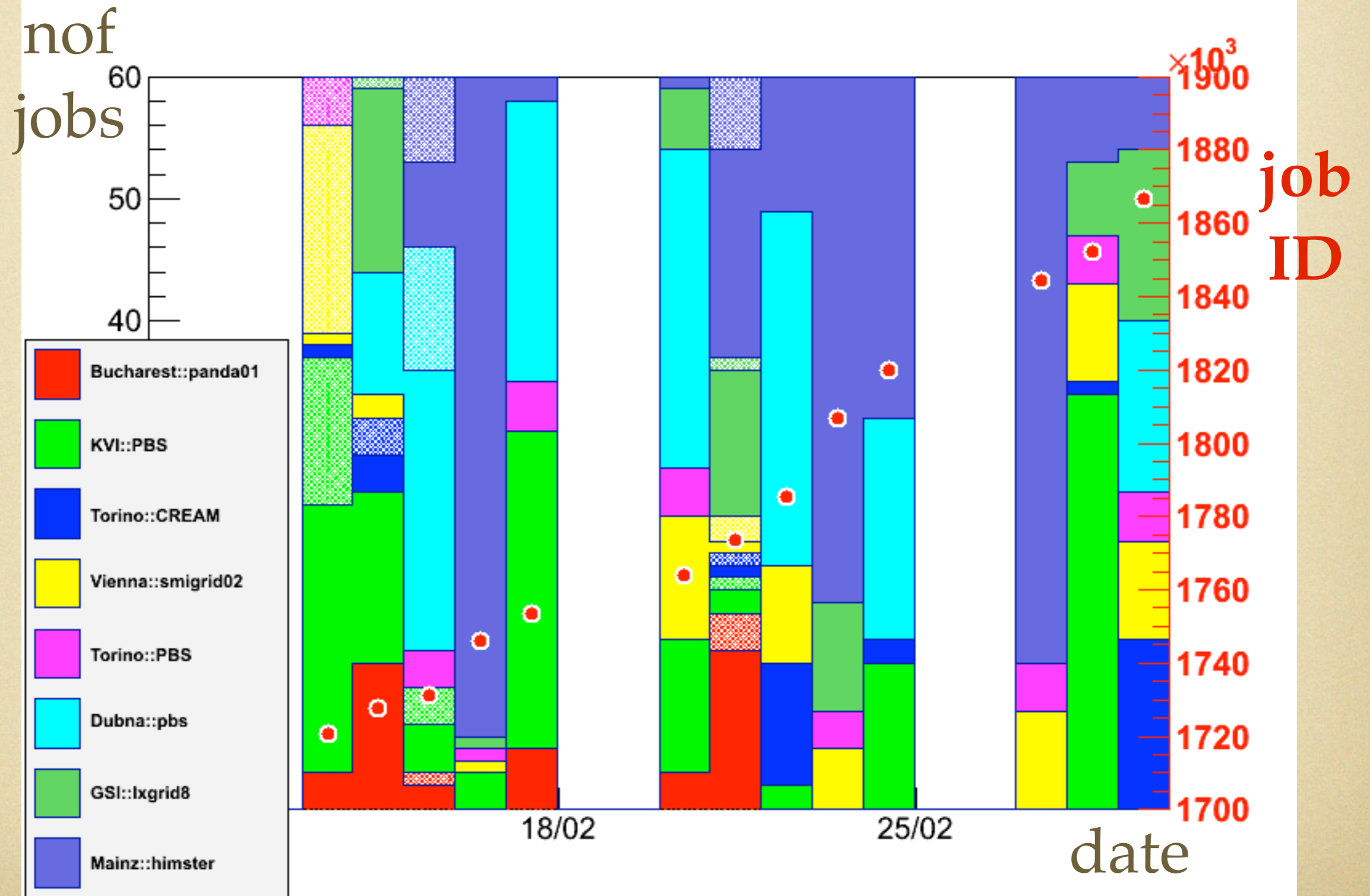
Job execution - time

waiting time [minutes]

analysisTime

date

needed

- more GRID users

  - http://panda-wiki.gsi.de/cgi-bin/view/Computing/PandaGridAliEn2ClientInstall

- more sites

  - http://panda-wiki.gsi.de/cgi-bin/view/Computing/PandaGridAliEn2SiteInstall

- GRID developers

ALICE & PANDA

- The PANDA-ALICE relationship:

  - **we use middleware written by ALICE**

  - **we have our own requirements and requests**

  - **we are supposed to give back:**

    - allocate dedicated manpower for middleware development and user support

    - develop in-house expertise with this middleware, and not only as users

    - debug and develop AliEn: Oracle Interface, Slurm Interface, PoD interface

Issues

- Moving of the LDAP+DB+CS to GSI

- Moving of the ML to Juelich

- Job managers, brokers, optimizers

- Deletion of files

- ROOT API

Panda GRID Workshop

| Intro | Description | Registration | Programme | Travel Info | Accommodation | Participants | Status |

13th PANDA Grid Workshop and 3nd AliEn Developers Week, Suranaree University of Technology, Nakhon Ratchasima, Thailand, May 7 - 11, 2012

organised by

Suranaree University of Technology

The aim of the workshop is to bring together grid administrators and software developers in an informal setting, involving open discussions. The focus will include grid maintenance and monitoring and data production with PandaRoot.

Organising committee:

Chinorat Kobdaj (SUT),
Kilian Schwarz (GSI),
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Special Thanks

- Kilian Schwarz

- Rene Dosdall

- Almudena Montiel

- Dan Protopopescu