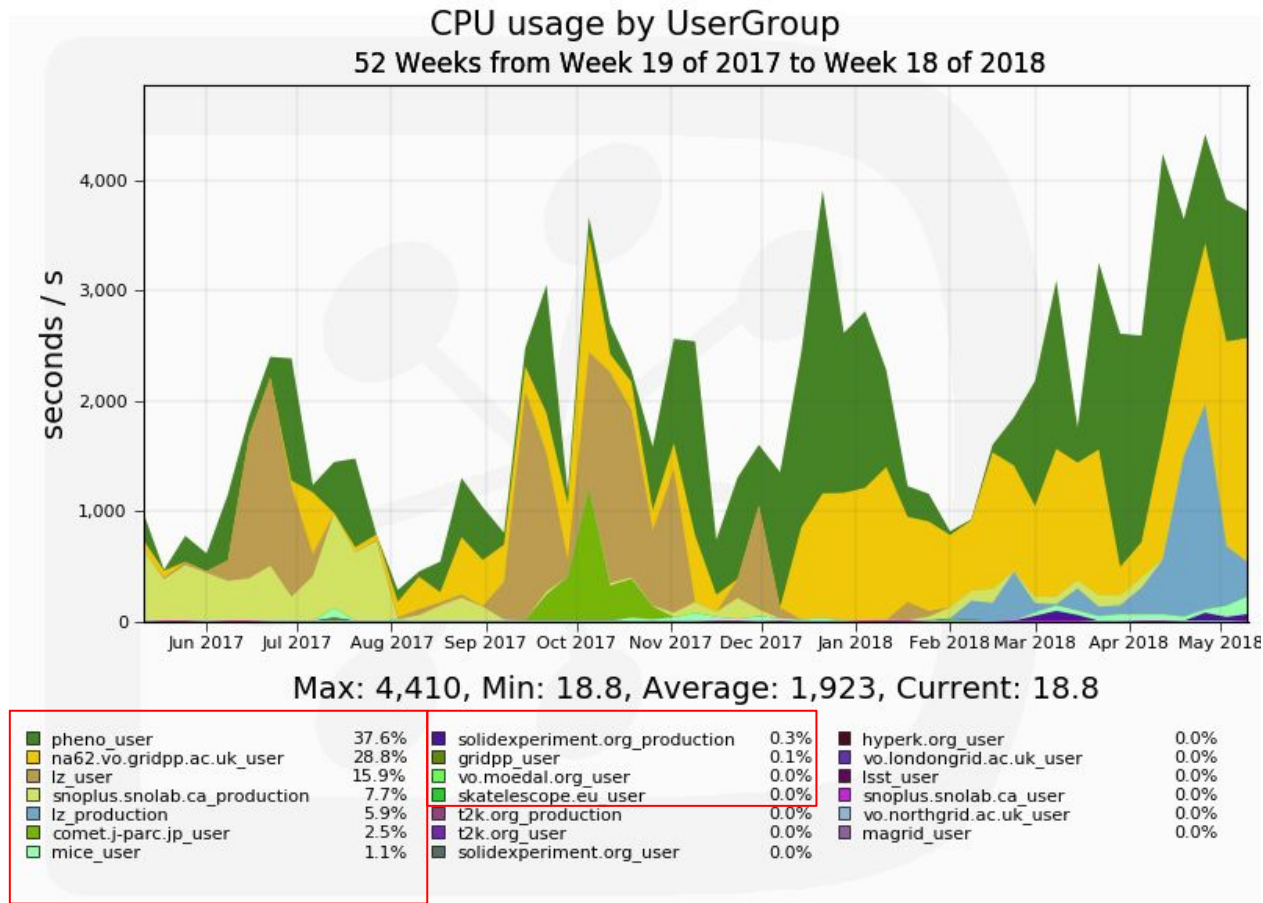


# GridPP DIRAC Status Report

Daniela Bauer & Simon Fayer

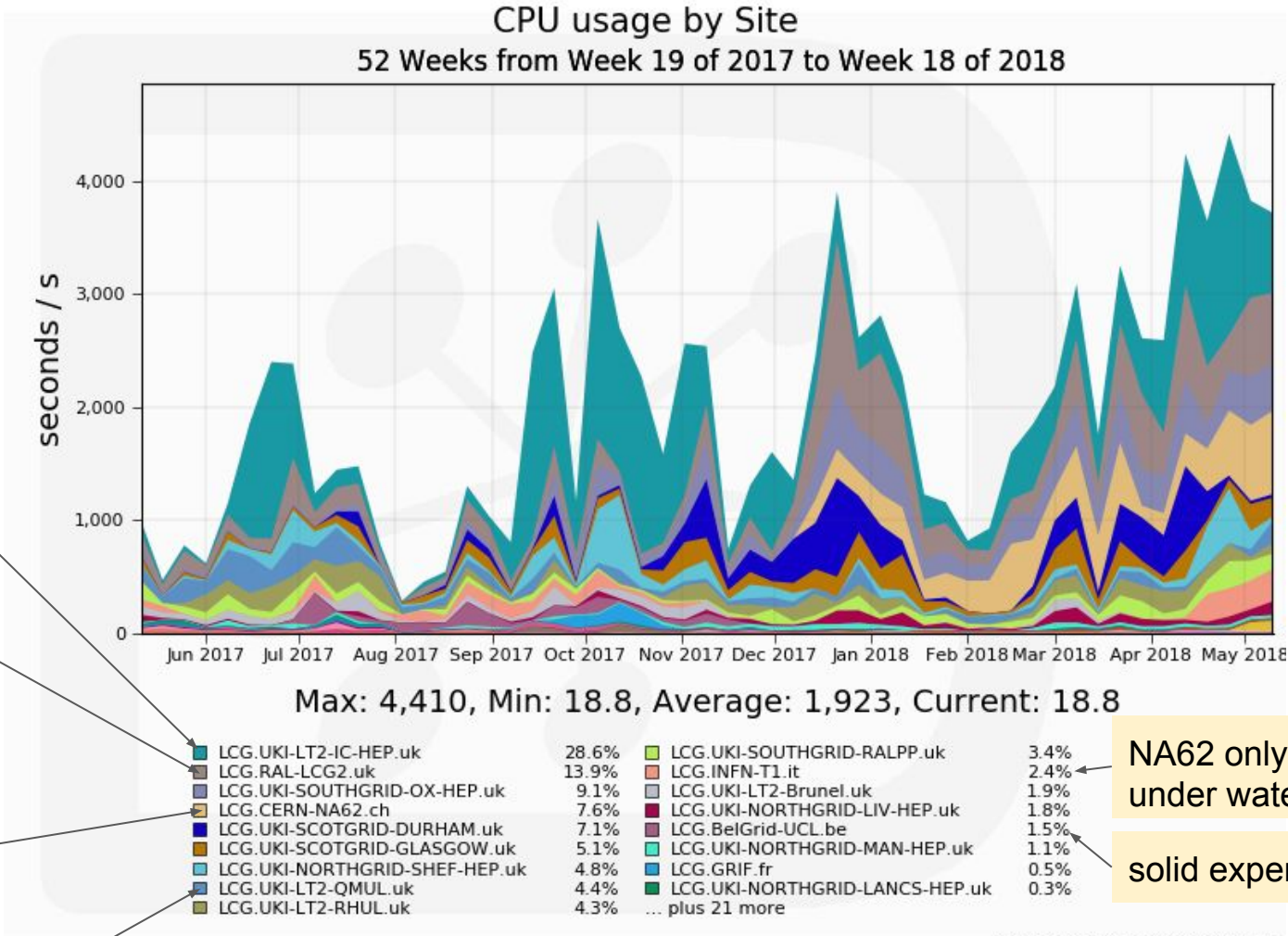
# No news is good news ?

Wrt to last year our user base is basically unchanged:



Generated on 2018-05-17 13:26:15 UTC

# Where do the jobs go ?



LZ Tier 1

pheno,  
NA62,  
snoplus

NA62 only,  
CondorCE  
non-UK

NA62 only, mostly  
under water

solid experiment

the first GPU on the grid  
in the UK

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# What did we do all year ? (1)

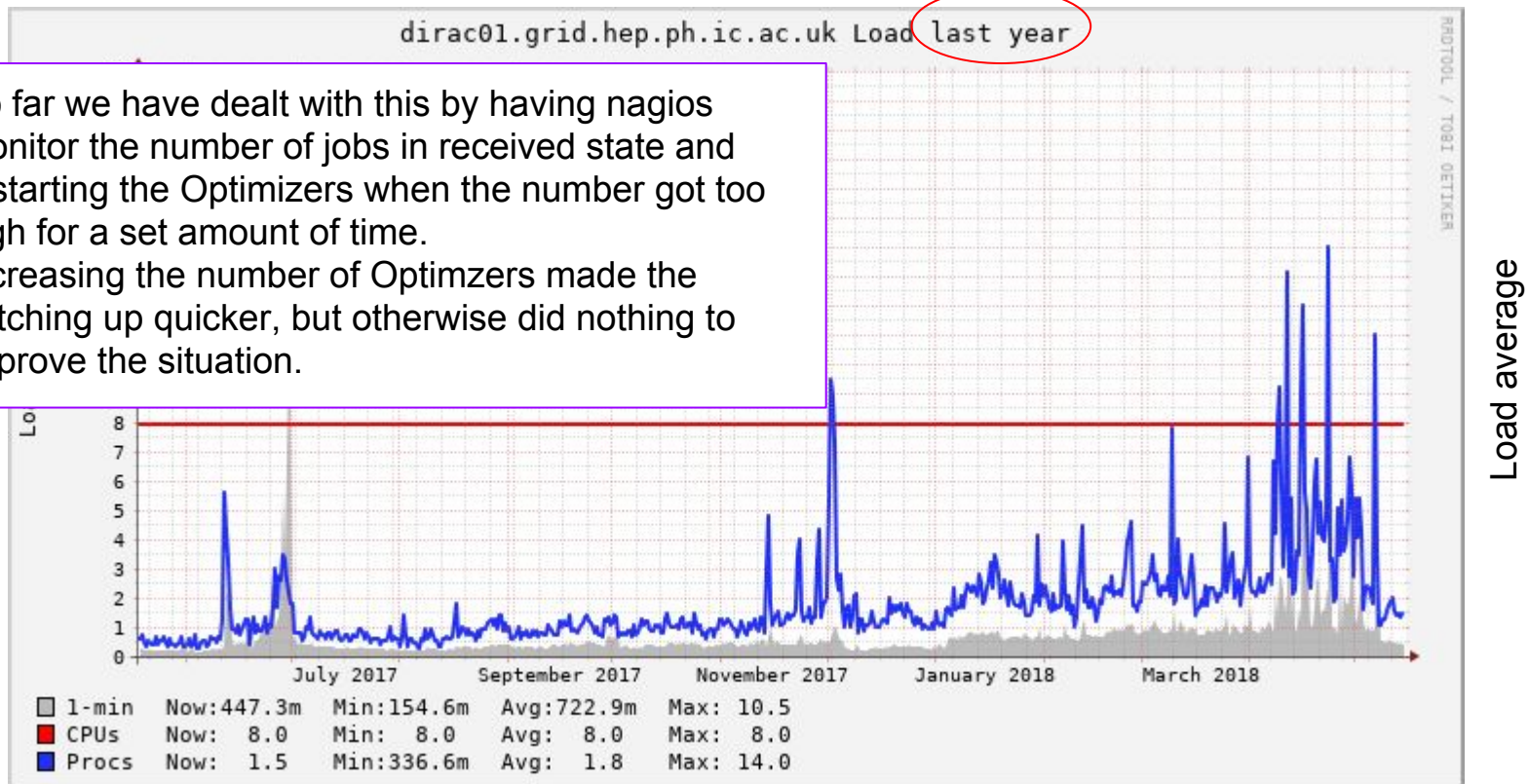
- As Federico said: “Administration is a daily work”
  - Especially if your Optimizers keep hanging
- (multiple) Tag(s):
  - Use cases:
    - Tag: “HighMem”: High memory queue for LZ at RALPP, passes XRSLEExtraString with 8GB memory requirement to ARCCE.
    - Tag: “gpu”: GPU at QMUL, passes ExtraJDLParameter GPUNumber = 1
  - Now works.
- **Multi-core:** (Just) one bug fix to ensure multicore jobs don’t accidentally end up in single core slots.
  - Doesn’t seem to spontaneously work in v6r20 :-)

# GridPP DIRAC: invalid action proposal

(for everyone who wasn't at the last BiLD meeting)

Increased usage of the GridPP DIRAC server caused (mainly) the Optimizers to hang: manifesting itself as a persistent **high load** on the monitoring and lots of jobs in the received state. (The load itself is not the problem.)

- So far we have dealt with this by having nagios monitor the number of jobs in received state and restarting the Optimizers when the number got too high for a set amount of time.
- Increasing the number of Optimizers made the catching up quicker, but otherwise did nothing to improve the situation.



# Emergency Fix: remove default group lookup

Test example: 50 threads looking at the SiteMask from the WMSAdministrator service (similar to what the Optimizer does):

Without fix: 12m37.166s

After modifying getBaseStub : 1m4.689s

This patch breaks the forwardDISET RMS Operation: used for fail-over in some cases.

But: Our DIRAC server has been running happily ever since for the first time since upgrading to v6r19.

**Fixing this properly is our highest priority right now.**

# What did we do all year ? (2)

- Condor CE:
  - First instance of a CondorCE in GridPP DIRAC (for NA62).
  - The DIRAC side of the deployment was fairly straight forward.
  - The same cannot be said about the CERN side.
  - No information about CE/queues available in either bdii or GOCDB:
    - “the bdii is going away”, so we are back to a grid black market ?

# VAC/Vcycle - Rogue pilots....

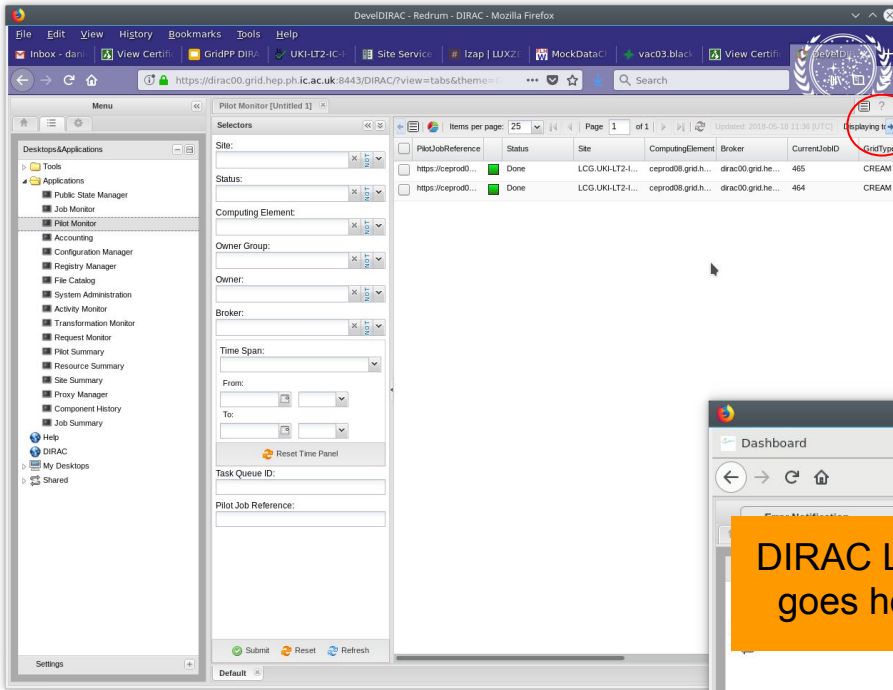
- We now have a module that can read VAC configurations from the GOCDDB.
- Our usage of VAC sites was a rather mixed experience.





# What do we want to learn from this workshop ?

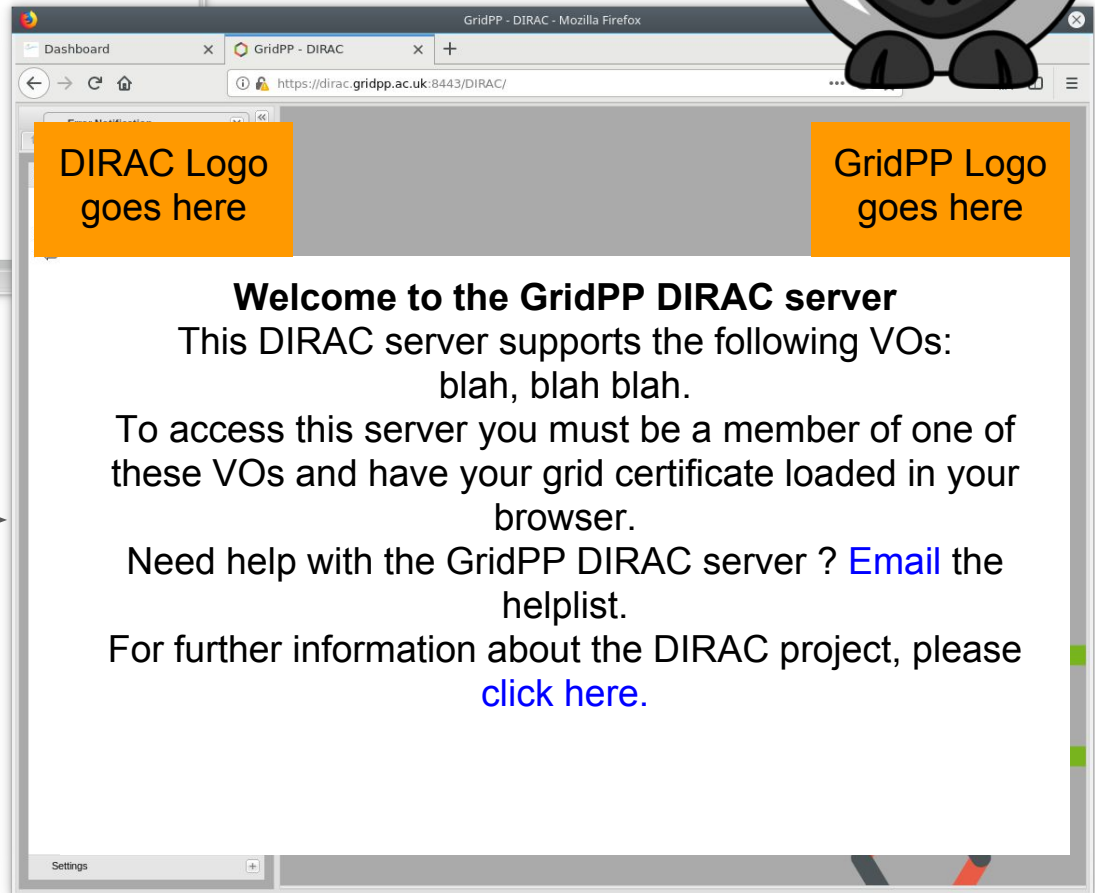
- (Hopefully by now we've achieved some of it :-)
- Transformation system:
  - We've been asked to look into it for SKA.
  - Just want to get started.
- RSS for multi VO DIRAC:
  - It would be nice to sort this once and for all.
  - User would like a way to discover sites/storage element that are enabled for their VO.
  - Apparently I'm not the only one who has this on her wishlist.
- Web improvements (sometimes it's the small things that matter)
  - I don't have a wide screen monitor, I need a scroll bar.
  - Present a helpful page to users accessing my DIRAC web interface without a certificate.



Now I can see how many jobs are matching my selection.



To cut down on the number of lost sheep....



I'd like to greet a visitor (either with no certificate or a certificate belonging to a VO I don't support) with something like this.

# Conclusions

- It's business as usual (and turtles all the way down ?)

