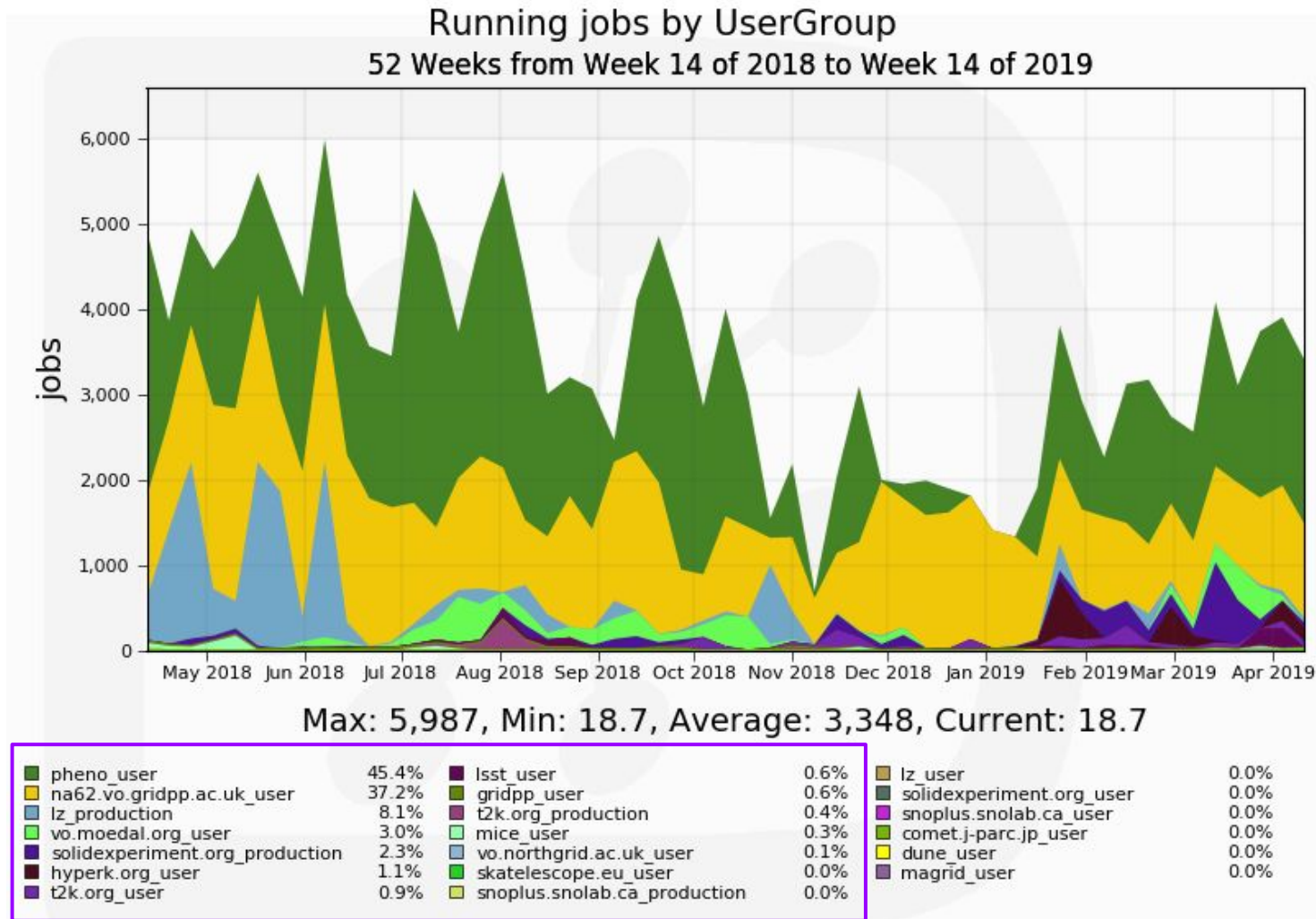


GridPP Status

Daniela Bauer & Simon Fayer

Business as usual - just more of it (Success!)



Generated on 2019-04-23 17:17:02 UTC

Emphasis is shifting from HEP to Astro(particle)

SKA:

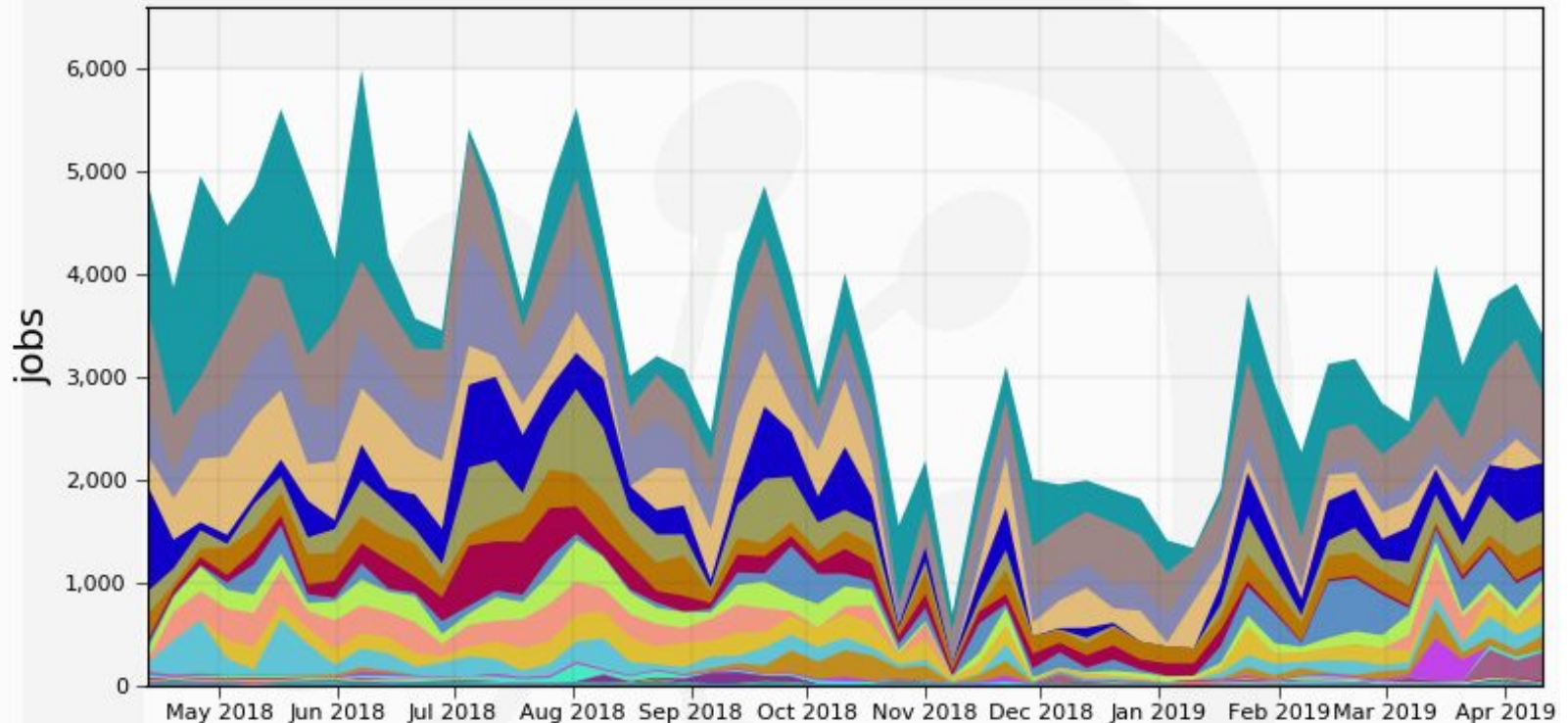
Zero Usage at the moment, but lots of feature requests ;-)

Drives development, probably a good thing

LSST (slides provided by Rob Currie): [Small detour](#)

Where do the jobs go ?

Running jobs by Site
52 Weeks from Week 14 of 2018 to Week 14 of 2019



Max: 5,987, Min: 18.7, Average: 3,348, Current: 18.7

LCG.UKI-LT2-IC-HEP.uk	17.2%	LCG.UKI-SOUTHGRID-RALPP.uk	4.0%
LCG.RAL-LCG2.uk	13.9%	LCG.INFN-T1.it	4.0%
LCG.UKI-SOUTHGRID-OX-HEP.uk	10.3%	VAC.UKI-SCOTGRID-GLASGOW.uk	3.9%
LCG.CERN-NA62.ch	9.5%	LCG.UKI-NORTHGRID-SHEF-HEP.uk	3.6%
LCG.UKI-SCOTGRID-DURHAM.uk	8.4%	VAC.UKI-SOUTHGRID-BHAM-HEP.uk	1.5%
LCG.UKI-LT2-RHUL.uk	6.6%	VAC.UKI-NORTHGRID-MAN-HEP.uk	0.7%
LCG.UKI-SCOTGRID-GLASGOW.uk	5.7%	LCG.UKI-NORTHGRID-MAN-HEP.uk	0.7%
LCG.UKI-NORTHGRID-LIV-HEP.uk	4.1%	LCG.BelGrid-UCL.be	0.5%
LCG.UKI-LT2-QMUL.uk	4.0%	... plus 22 more	

What did we do all year ?

- Politics
- Administration is daily work.
 - Upgrades
 - Site changes (SL6 vs SL7, HTCondor, GPU)
- We have end users: “Why does my job not run ?”
 - User issue
 - Target site issue
 - DIRAC issue
 - All of the above (→feature requests, no enough hours in a day)
 - The tutorial was much appreciated
- Debugging/making stuff work takes time:
 - Limited information from the Grid frontends
 - DIRAC only releases limited information to users (access to pilot logs ?)
 - Sites configure new VOs blindly (no local users):
 - But: Most VOs don't know how to debug a site.
 - As most of this information is not accessible to everyone due to security reasons we rely on the cooperation of all parties concerned.

From the “that turned out to be more complicated than anticipated department”: LFC to DFC

- RAL is retiring their LFC (“logical file catalogue”) instance
- T2K: 8 million files registered (~4.7 on RAL TAPE) on 10 sites
- Migration to DFC looked fairly straight forward
 - most data needed moving due to different handling of LFNs by LFC and DFC
 - Mostly done by sites
- 5 months later we have seen:
 - dark data
 - data without checksums
 - file replicas with different checksums
 - lost data
- We are nearly there.... (and only two more VOs to go!)

Politics: IRIS

- IRIS: A common e-Infrastructure for STFC science
 - STFC: Science and Technology Facilities Council
 - <https://www.iris.ac.uk/>
 - <https://stfc.ukri.org/>
- A new funding/science initiative supported by the UK government
- GridPP is a “provider” under the terms of the IRIS collaboration:
 - Hardware
 - No explicit ‘people’ money, but “Digital Assets”
- **Limited choice in who/what/how to support communities** (e.g. no money for operations)

IRIS Digital Asset: Making DIRAC better

- Use IRIS digital asset grant to implement features needed by IRIS supported communities (SKA, LSST, LZ)
- DIRAC and Rucio
 - Not just a UK issue, e.g. work done by Belle.
 - In the UK mainly driven by SKA.
- DIRAC multi-VO Workflow management system:
 - Originally requested by SKA.
 - Hopefully to finalize it during the DIRAC workshop.
- DIRAC Resource Status system:
 - Automatically ban sites on a VO by VO basis:
 - Take workload off DIRAC central and VOs
- DIRAC and clouds (again 🙄): VAC and VM DIRAC

Summary

- The main UK funding ‘channels’ for Particle and Astrophysics are committed to DIRAC for the foreseeable future.
 - We joined the DIRAC consortium.
- Some money available for DIRAC development work, but we cannot always prioritize projects as we see fit.
- Some communities are given no choice in using DIRAC, we need to take this into account in user support.
- Hopefully next year we can present some technical news.
 - After I write funding request a for an ElasticSearch cluster :-D