

IRIS Operations Status

Snapshot as of the IRIS operations Meeting of: Tuesday 23rd July 2019.

Actions

MM.YY.##	Who	What
07.19.01	AS	Chase up at RAL end why LIGO file transfer-in is an issue
07.19.02	SdW	To talk to SCD about making use of their resources. <i>23/7/19 - AS spoke to SdW - as of last Fri all is in AL's hands - all is fine - Action Closed</i>
07.19.03	AS	To chase up DLS concerns regarding having difficulties using the RAL Echo service <i>23/7/19 - CR now has access to Echo at RAL, but no further progress to report, but it appears usable so some testing will be done in the next week or so - Action Closed</i>
07.19.04	AC	To report back to IRIS-TWG Operations on feasibility of providing APEL accounting data in time for October (24th/25th) Science Board. <i>[note subsequent to meeting need for accounting in good time for EB on 12th September]</i> <i>Done: Action Closed</i>
07.19.05	AS/AC	Andrew and Adrian to discuss update frequency of APEL stats
07.19.06	AC/JK/AS	Get access to DiRAC accounting data
07.19.07	AS	Investigate getting seedcorn access for GPU work (c.f. KNL issues at Cam)
07.19.08	AS/AMcN	identify any resource constraints on DUNE maximising usage on GridPP.

Activity Status

Activity	Status (dd/mm/yy [reported by] text)
EUCLID	<p>25/06/19 [Mark] SLURM as a service Up and running at Cambridge and RAL.</p> <p>9/07/19 (Mark) Now expanding at RAL. Agreed most details of how to create vacuum-style VMs to run at Manchester. Next step is to connect to VPNs and then start submitting slurm jobs.</p> <p>22/07/19 (Mark) – The Saas cluster is up and running at Cambridge at capacity. We hit issues trying to deploy at scale at RAL, and hence are not operational there while we</p>

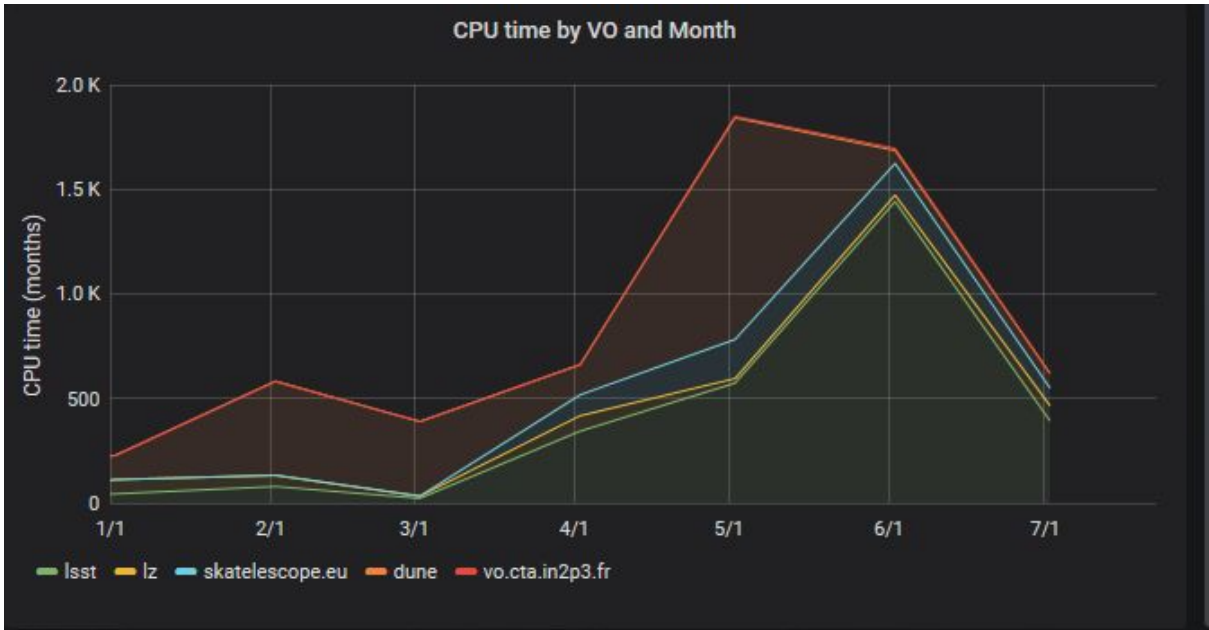
	<p>await a fix (there is an odd issue with disk image generation that causes failures when trying to spin up more than a couple VMs at a time). Troubleshooting that problem and then me being on holiday meant we didn't get any progress on a Manchester partition. <i>Something else via George - AS has notes (relates to SAFE and usage)</i></p>
Gaia	<p>25/06/19 Cambridge talking to Gaia – a development activity to investigate Spark workload</p> <p>9/07/19 [AS] JY organised a meeting last Fri with Leicester, Edinburgh and Cambridge; there were discussions about how this development will be handled. This is expected to be reviewed in a couple of weeks time.</p> <p>22/07/19 Now have access to OpenStack at Cambridge</p>
LSST	<p>25/06/19 Three distinct activities underway. Production work running on GridPP resources is going well (2000 processor months in May and June). LSST also working with Cambridge to deploy SLURM as a service. Jupyter notebook activity at RAL also underway.</p> <p>9/07/19 Verbal update ...</p> <p>22/07/19 Grid use currently paused - a discrepancy (3%) noticed compared to NERSC Cori (running Knights Landing), which is being investigated. Cambridge stuff seems to be going OK, but status under SAFE not visible. Further, Richard McM has requested a small amount of GPU time, which is still to be confirmed. On RAL OpenStack, encountered issue, due to Mellanox drivers. This issue rectified with a driver, so Jupyter notebook work back on track.</p>
e-MERLIN	<p>22/07/19 No update</p>
SKA	<p>25/06/19 No update but modest usage in May and June on GridPP resources</p> <p>9/07/19 No update</p> <p>22/07/19 No update, but AS re-establishing link with SKA as Rahini has moved on within SKA. AMcN: there is now a PhD student who is doing lots of stuff now.</p>
ALMA	<p>9/07/19 (<i>Anthony Holloway</i>) The ATOMIUM project processing is underway and is now getting the larger data sets delivered from the ALMA telescope in Chile.</p> <p>22/07/19 No update</p>
LZ	<p>25/06/19 No update – GridPP workflow</p> <p>9/07/19 [DB] Still stuck getting their s/w for their latest MC data challenge. They have IRIS allowance for when DIRAC is working with the cloud again and their s/w is finished.</p> <p>22/07/19 No update</p>
CTA	<p>25/06/19 No update</p> <p>9/07/19 [Yates] Julian Osborne has the token to get further help when he is ready to run stuff.</p> <p>22/07/19 No update</p>
aLIGO	<p>25/06/19 Working with Catalin Condurache to recommission Grid for LIGO</p> <p>9/07/19 Trying getting it running at RAL, although works elsewhere - jobs go to RAL but then file copy in fails.</p> <p>22/07/19 No update</p>
DUNE	<p>9/07/19 [<i>Peter Clarke</i>] Running well. About to begin a second reprocessing which will hopefully saturate available resources.</p> <p>23/07/19 [<i>Andrew McNab</i>] Starting reprocessing campaign and using (all?) available CPU resources. Would sites please let us know if you believe you should be running more, and we can look for bottlenecks.</p>
DLS	<p>25/06/19 Contractor actively working for Frank von Delft to build SLURM clusters in OpenStack at RAL (and cambridge?). Also trying to make use of object store.</p> <p>9/07/19 SLURM work ongoing; having issues with data xfer from a data centre in Iceland Echo storage hasn't progressed. Has tooling for synching object-stores, to be determined whether this can be used with Echo storage.</p> <p>23/07/19 CR+RS: Things have moved along a bit, workaround found for Ansible, but with</p>

	STFC to sort out why stuff isn't being spun up. Also discussions around use of S3 at RAL - not going to use Dynafed - instead building on top of native S3
PANOSC	25/06/19 No update 9/07/19 No update 23/07/19 AS: PANOSC now has a storage allocation, pending an STFC recruitment
ISIS	25/06/19 iDaaS is in production for ISIS and busy now during data taking run. Using RAL OpenStack 9/07/19 Appears to be working fine 23/07/19 AS: RAL on top of this, beam run finished last week, onboarding more activities for the next run which is planned for early September.
CLF	25/06/19 Talks at fairly early stage 9/07/19 Nothing to add 23/07/19 Fraser B has been speaking to CLF regularly this week, looking at IdAAS for them
CCFE	9/07/19 [JY] On Cambridge things are running fine and they are ready for access to their GridPP and SCD allocations. RAL is probably the next one to go for. SdW will talk to SCD and then afterwards to JY and DB about using the other resources. 23/07/19 AL: CCFE have been happily using DIRAC resources but nothing showing in SAFE. Don't need SCD resources yet.
JINTRAC	9/07/19 JY to talk to Florian 23/07/19 [AL] For the past few weeks have been working on updating JAMS (Jet Application Management System) to make use of PROMINENCE and hence use any IRIS resources (both cloud and DiRAC). Initial version almost complete and are running real test jobs on the SCD cloud and will start using the IC cloud and Cambridge DiRAC soon. Echo is being used for transient storage of input and output data and container images.

Usage

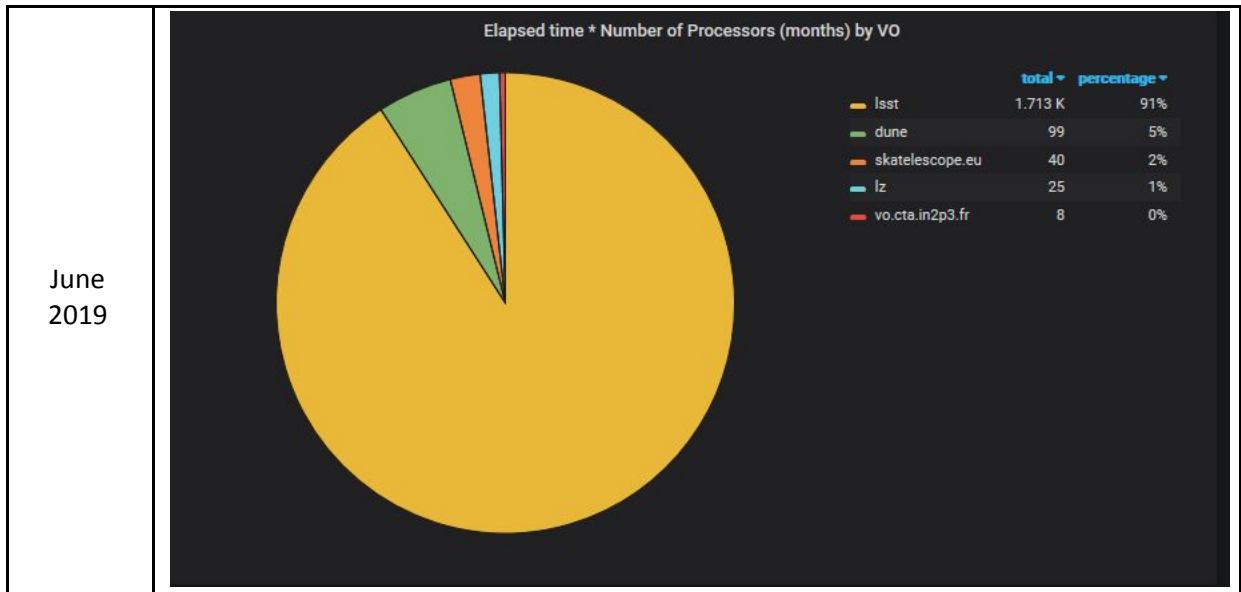
Accounting data still being manually updated monthly at present. Last run for this month was on 19th July, so July data does not yet represent the full monthly total. Intention is to automate and also provide SCD cloud accounting data by the end of July.

Year to date (stacked graph)

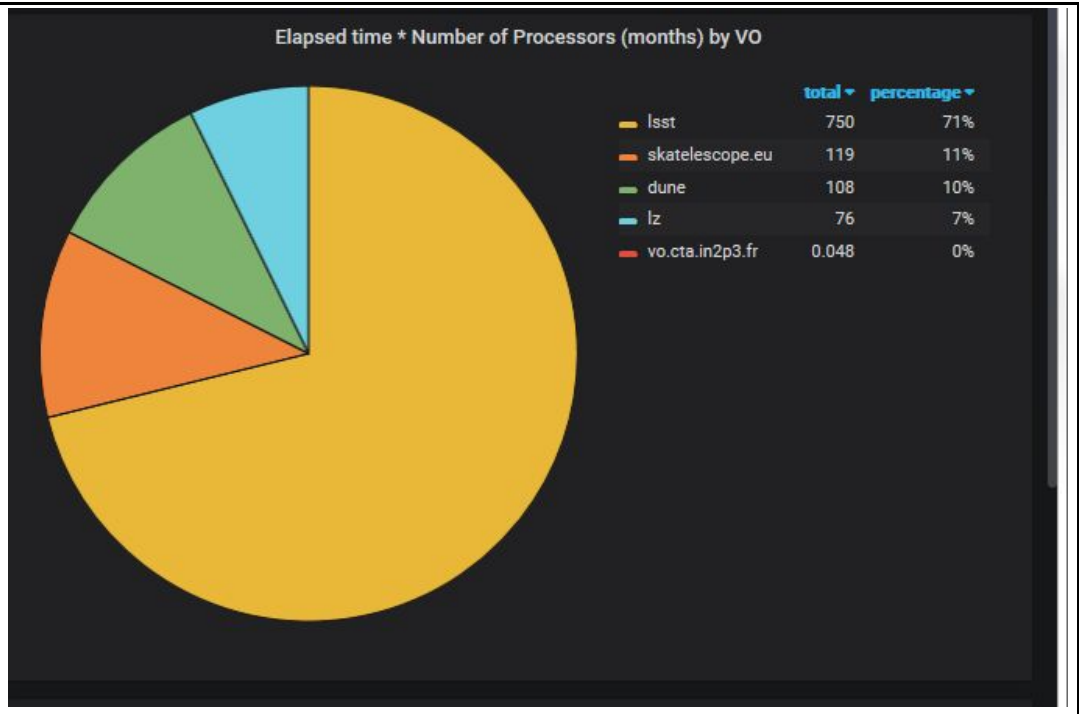


Monthly data breakdown.

Grid only accounting at present



JULY
2019



Infrastructure Status

Andrew McNab described current setup of ticket triage system.

We should also pick up here any operational issues with major IRIS components

RUCIO	
DIRAC	
Vcycle	[23/7/19] Andrew McNab: Deployed version with improved scalability (multiple co-operating Vcycle instances.) Deployed multiprocessor DIRAC VMs for LSST (x4) and SKA (x8). Testing CernVM4 images (~CentOS7) for SKA etc. Next: restart EUCLID VM work, and get mixed VM tenancies at Cambridge and RAL working (currently using donated OpenStack capacity at CERN for testing.)
APEL	

Open Tickets

Latest on tickets

[GGUS Link for iris.ac.uk VO](#)