

# UK Cloud Report

Alastair Dewhurst, on behalf of the UK Cloud  
Squad



Alastair Dewhurst, 5<sup>th</sup> March 2018



# Overview

- T1 status
  - T1 Storage migration
- T2 status
  - Storage evolution
  - Unified Panda Queues and Centos?
- Networking



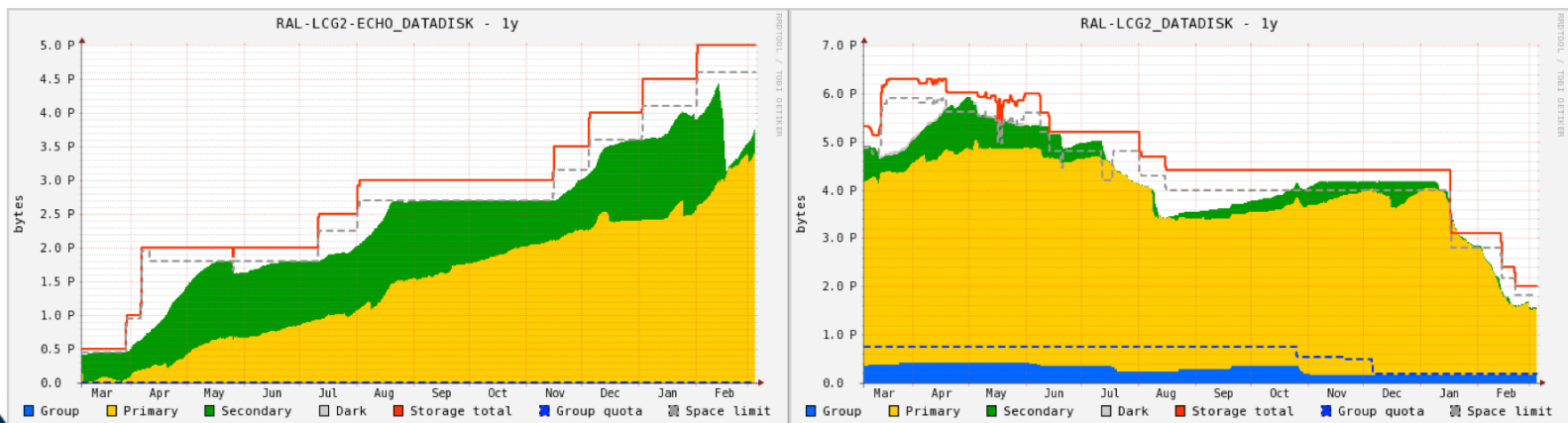
# Tier-1 Status

- New Tier-1 manager: Alastair Dewhurst
  - Will be advertising for new site contact shortly.
- Consolidated all VOs to a single FTS instance.
  - Significant loss of expertise has meant debugging problems have taken significantly longer.
- Starting to evaluate future tape solutions.
  - Castor is moving to CTA, do we switch too?
  - Oracle announcement has caused uncertainty.



# Tier I - Storage

- Echo is replacing Castor for disk storage.
- Castor will remain for Tape endpoints.
- Castor (disk) to be decommissioned by July 2018.
- Echo is a Ceph based Object Store.
- We have built GridFTP / XRootD plugins for it.



# Tier-2 status

- QMUL is the largest UK Tier-2 in terms of storage 4.4PB.
  - It uses Lustre to provide POSIX like access to data.
  - ATLAS have caused numerous problems with missing pilot code, changing AGIS settings etc.
- Glasgow + Manchester have been working on Containers
- ECDF, RAL, Glasgow have been looking at Xcache.



# Storage evolution

- GridPP is funding storage at fewer UK sites
  - Some universities are providing storage regardless.
- Main theme is consolidation / simplification
  - Decommissioning IC and Sussex storage
  - Get rid of unused LocalGroupDisk
- We have been looking at using Xcache to utilize storage for shrinking sites.
- BHAM is likely to switch to EOS
  - Primarily an ALICE site.
- ECDF has second Storage Element
  - Will be configured very similarly to RAL.



# Panda Queues

- ECDF, Liverpool, Manchester, Lancaster and Imperial provide SL7 queues.
- SL7 queues will be providing singularity.
- Currently have UCORE queue at RAL
  - Allows jobs to access both Castor and Echo.
  - Will setup UCORE queue at ECDF next.
  - Aim to transition sites to UCORE when they switch to SL7.
- Alessandra F will comment on container progress in her talk on Wednesday.

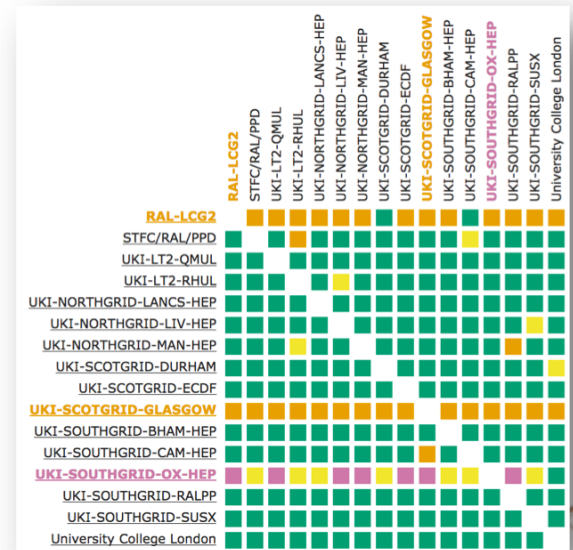


# Networking

- RAL is looking at joining LHCCONE
- IPv6:
  - Imperial, QMUL, Brunel, have been completely dual stack for years.
  - Lancaster storage was made dual stack at the end of last year.
  - RAL storage (Echo) was made dual stack Feb 27<sup>th</sup> 2018.

All sites provide a perfSonar instance.

Good contacts with our network provider JISC (Janet).





# Questions?

