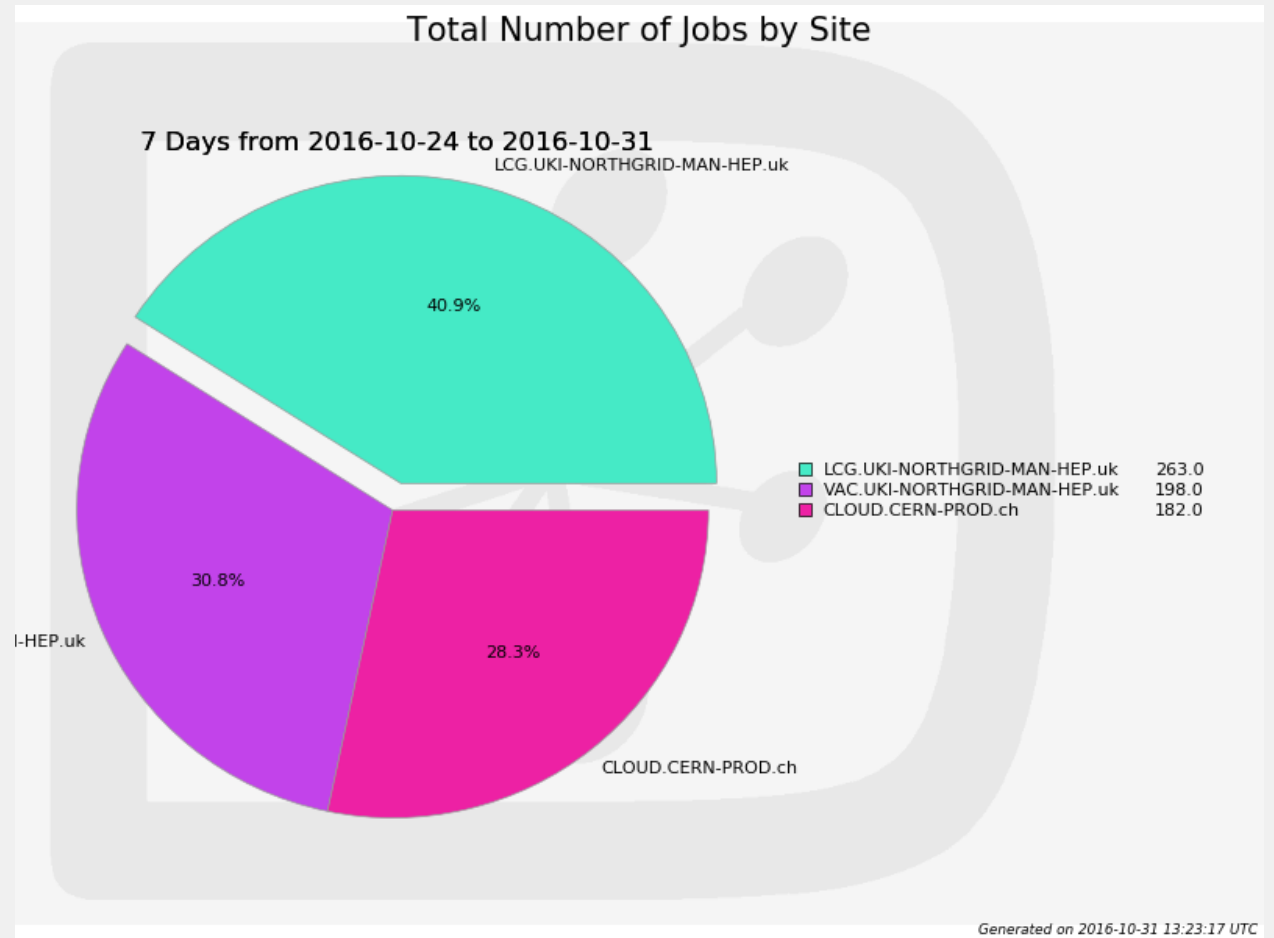# SKA Telescope Virtual Organisation on GridPP/EGI

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GridPP and LHCb

Yesterday's slide

- HelloWorld jobs run via GridPP DIRAC in skatelescope.eu VO

  - (Details tomorrow)

- All the jobs submitted to DIRAC are the same

- Same VM running on Vac at Manchester and Vcycle/OpenStack at CERN

- Transparent to the user, whether jobs run on "LCG" (=Torque/CREAM) or the two VM sites

Total Number of Jobs by Site

7 Days from 2016-10-24 to 2016-10-31

LCG.UKI-NORTHGRID-MAN-HEP.uk

40.9%

30.8%

28.3%

CLOUD.CERN-PROD.ch

LCG.UKI-NORTHGRID-MAN-HEP.uk	263.0
VAC.UKI-NORTHGRID-MAN-HEP.uk	198.0
CLOUD.CERN-PROD.ch	182.0

Generated on 2016-10-31 13:23:17 UTC

Grid Virtual Organisations (VOs)

- To use the EGI/WLCG grid and systems built on it (eg DIRAC)
  - individuals need X.509 digital certificates from a recognised grid certification authority
  - projects need a Virtual Organisation Membership Service (VOMS) which issues X.509 attribute certificates
  - the virtual organisation needs to be registered with EGI
- To use the GridPP DIRAC service
  - projects need to be registered
  - individuals added automatically from project VOMS
  - sites need to add project's VO to their configuration for running jobs and/or accessing storage

skatelescope.eu Virtual Organisation

- skatelescope.eu has been set up as a VO for European regional data centre tests of the infrastructure

- UK e-Science CA certificates available for individuals

- VOMS service for the VO hosted by GridPP

- VO registered with EGI

  - Can easily request a GGUS area for SKA tickets?

- VO added to GridPP DIRAC service

  - Including DIRAC File Catalog hierarchy for SKA

  - Joining the VOMS service adds individuals automatically

- Hello World jobs run at Manchester (Batch + Vac VMs) and in space at CERN lent by LHCb (Vcycle/OpenStack VMs)

- Storage (few TB) for testing made available at Manchester and visible to GridPP DIRAC jobs and file catalog

VO next steps

- So all this is ready for testing with suitable jobs
  - Using CPU, creating and registering files, running jobs where the data is, accessing data remotely
  - See Tom's talk on Wednesday for DIRAC user guide
- Easy for more SKA people or GridPP collaborators to join
  - Just get a UK e-Science cert and join VOMS
- Easy for more GridPP sites to add SKA to run jobs and/or provide storage
- We could also run GridPP DIRAC VMs on SKA managed OpenStack capacity?

Links

- UK e-Science CA
  - https://portal.ca.grid-support.ac.uk/caportal/
- skatelescope.eu VOMS
  - https://voms.gridpp.ac.uk/voms/skatelescope.eu/
- GridPP (DIRAC) userguide
  - https://www.gridpp.ac.uk/userguide/
- EGI skatelescope.eu VO ID card
  - https://operations-portal.egi.eu/vo/view/voname/skatelescope.eu
- GridPP DIRAC portal
  - https://dirac.gridpp.ac.uk/DIRAC/