

FoNS: Faculty Research Computing Committee

March 17th 2021

Refresh/Expansion 20-21

- April 2020
 - Increased from 51K cores to 69K cores
 - GPU provision (0.5 Rack of P1000)
 - Storage expansion from 8PB to 11PB
- 2021:
 - Increase from 69K cores to 87K cores
 - Replace 13.3K CPUs with 30.7K cores
 - 210 x 512GB, AMD 64 core nodes, (8GB/core vs 2GB/core on Archer2)
 - Replace AX4 with 12 x 4TB/node core large memory nodes
 - 104 out of 59M jobs required greater than 4TB
 - Increase GPU capability by adding 80 x RTX6000,
 - Refresh (new chassis, AMD CPU) for existing 80 x RTX6000
 - Storage expansion from 11PB to 13PB

Service downtime on April 6th/7th.

- Whole system, *including the RDS*, will be offline for at least one of those two days
- Address the storage issues users have experienced:
 - **Jobs** – Some jobs may experience transient slowness in I/O. Long running jobs may fail with "Stale file handle" errors.
 - **Jupyter** and **Rstudio** services – These might become unresponsive for short periods of time
 - **Login-nodes** – You may experience some slowness at times.
 - **Globus** – Directory listing time-outs.
- Improve the system responsiveness and throughput
- Preparatory work for the storage backbone for the exciting expansion of the service in Q2

Academic Leadership Team

- Need to continue development and broaden the service
- Requirement to set the direction of travel to ensure a broad buy in from the academic community which fully reflects its membership/academic priorities.
- It is therefore timely to consider how to develop the academic leadership team which represent the VPR office:
 - Director
 - Director of Data Strategy
 - Director of User Engagement
 - RSE College Coordinator
- Supported by FTE or Honorarium

Head of Research Computing Service

- At shortlisting stage
- Have had “fire side” chats with Director and CIO
- Interview on 22nd/23rd March
- Also planning on having chats with some teams members

Research Software Engineers

- Advertising for
 - Level 5 RSE lead
 - Lever 4 RSE
 - Will then have 5 permanent RSEs
- Agreed a web interface submission system co-funded with Chemistry

Two additional technical support positions (Level 3B, 4) have been agreed.

Other items

- Decision making on commercial software
- Ongoing project on secure data processing