Tier-2 Site @ Glasgow



Who We Are

UKI-SCOTGRID-GLASGOW, Tier-2 site providing:

- Computing (16k Cores)
- Storage (7 PB online)
- Nascent (single node!) "GPU analysis facility"

Hardware We Have

UKI-SCOTGRID-GLASGOW

Year	System	CPU	Total Threads	RAM / Thread	Notes
2022	Dell PowerEdge C6525	2 × AMD EPYC 7452	4,608	4 GB	
2021	Dell PowerEdge C6525	2 × AMD EPYC 7452	4,096	2 GB	
2020	Dell PowerEdge C6525	2 × AMD EPYC 7513	5,120	2 GB / 4 GB	
2017	HPE ProLiant DL60 Gen 9	2 × Intel Xeon E5-2630 v4	960	2 GB	
2016	HPE ProLiant DL60 Gen 9	2 × Intel Xeon E5-2630 v3	768	2 GB	
2015	SuperMicro 6028TR-HTR	2 × Intel Xeon E5-2640 v3	2,048	2 GB	
2022	Dell PowerEdge R7525	2 × AMD EPYC 7443	96	2.67 GB	2 × NVIDIA A100 80 GB
2022	Gigabyte R152-Z31-00	1 × AMD EPYC 7643	96	2.67 GB	AMD benchmarking unit
2022	Gigabyte R152-P31-00	1 × Ampere Altra Q80-30	80	3.2 GB	ARM benchmarking unit

What We Are Looking For and how much we might spend

We'd like to build an ARM cluster, that experiments could target to submit ARM jobs (and, later on, a GPU cluster)

ARM cluster: we want 1000+ ARM v8.2 cores (or higher)

- Benchmarked with Ampere Altra Q80-30 CPUs...
 - ...but open question as to whether Ampere Altra Max 128 would be better (superior cost / power / density, but would smaller system-level cache affect our workloads?)
- ~3 GB RAM per thread
- 30+ GB storage per thread
- 25 GbE networking (future-proofing)
- Mini-comp under SSSNA is imminent!

GPU cluster: we may want more GPUs at some point

Budget: ...





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Vendor Day @ GridPP49

28 March 2023