



Science and
Technology
Facilities Council



iris

IRIS Resource Review

FY2020 Q4

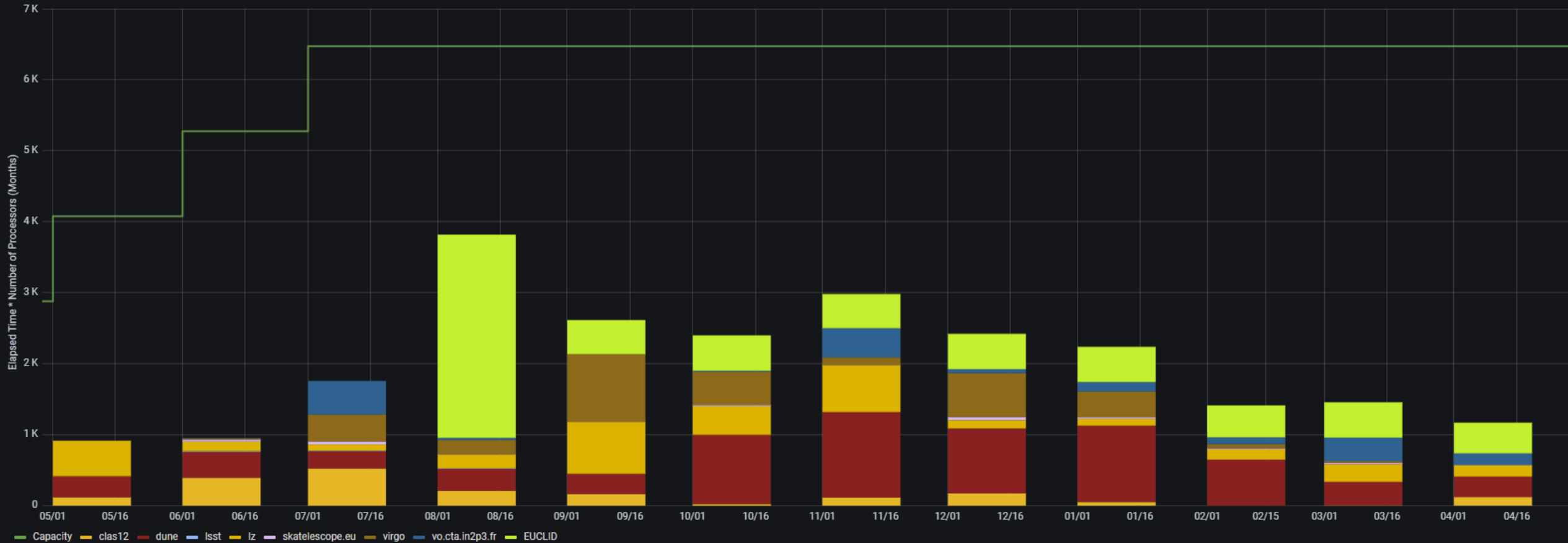
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Q4 FY2020/21 Usage (CPU)

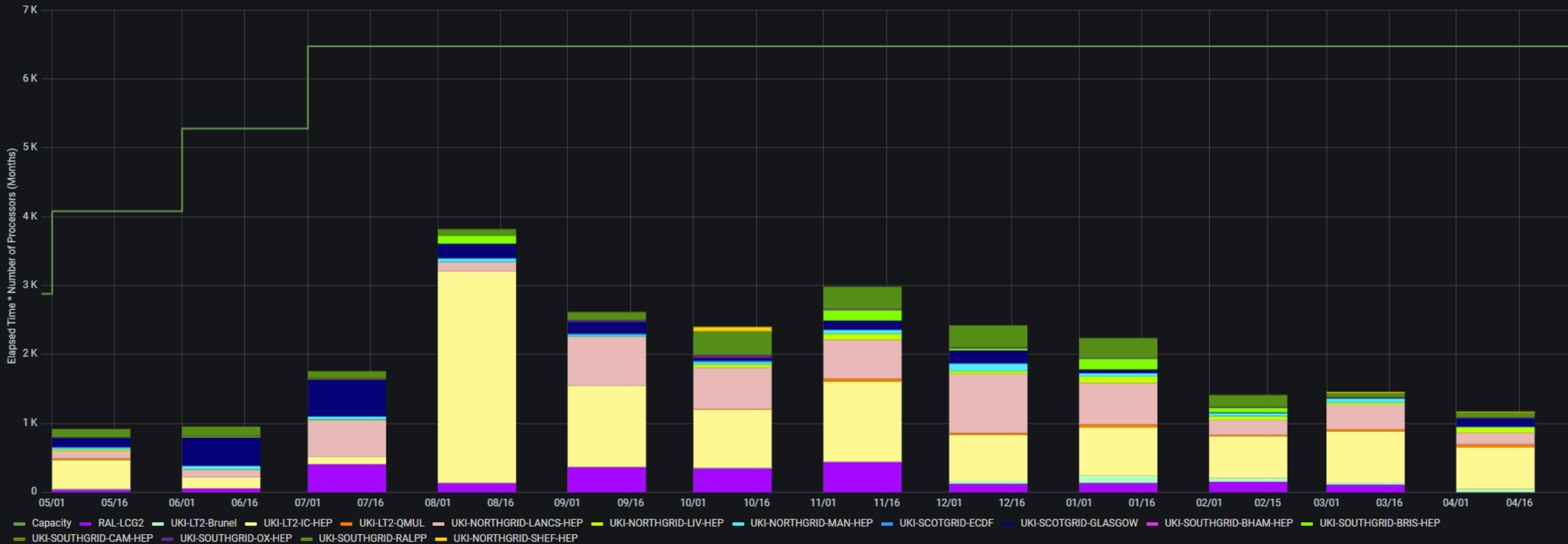
GridPP IRIS CPU – Activity Usage

Average Core Usage by Activity and Month



GridPP IRIS CPU – Site Delivery

Average Core Usage by Site and Month



Points of Note

- DUNE only major **disk** user as reported Tier 1 ~95% of 1PB allocation used.
- No significant tape usage
- Underuse is due to lower than anticipated demand on Grid compute resources from IRIS activities.
- Storage accounting is on APEL roadmap for IRIS.

Capacity & FY2021/22 Allocation

FY2021/22 Allocations - CPU

- Unit is 'physical cores'
- 10,163 allocatable physical cores in FY2021/22
- **TOTAL** **3,640**
 - DUNE 1,000
 - Euclid 1,500 (Imperial Cloud required)
 - CLAS12 840
 - LZ 300 (Imperial Cloud

FY2021/22 Allocations - Disk

- Capacity as 'GridPP' 8.62PB usable
- **TOTAL 4.76PB**
 - DUNE 4.00PB
 - Euclid 0.10PB
 - LZ 0.30PB
 - SOLID 0.36PB

FY2021/22 Allocations - Tape

- IRIS owns a ~12PB share in tape storage systems @ RAL.
- This is dealt with as Tier1 / SCD / RAL
- **TOTAL** **4.25PB**
 - CLF_OCTOPUS 1.00PB
 - DUNE 3.00PB
 - SOLID 0.25PB

Questions?

FY2021/22 Capacity - CPU

GridPP Compute Resources									
Hyperthreading factor of 1.6									
Allocatable at 90%									
	FY17	FY18	FY19	FY20	FY21	FY22	FY23	FY24	FY25
GRI17CPU (UKT0)		1,536	1,536	1,536	1,536				
GRI18CPU			1,664	1,664	1,664	1,664			
GRI19CPU				3,992	3,992	3,992	3,992		
GRI20CPU					1,600	1,600	1,600	1,600	
GRI20+CPU					2,500	2,500	2,500	2,500	
GRI21CPU						1,500	1,500	1,500	1,500
RAWCores	-	1,536	3,200	7,192	11,292	11,256	9,592	5,600	1,500
Allocatable Physical Co	-	1,382	2,880	6,473	10,163	10,130	8,633	5,040	1,350
Allocatable CPU hours	.0 m	19.4 m	40.4 m	90.7 m	142.4 m	142.0 m	121.0 m	70.6 m	18.9 m

FY2021/22 Capacity - Disk

GridPP Disk Resources									
Allocatable at 90%									
	FY17	FY18	FY19	FY20	FY21	FY22	FY23	FY24	FY25
GRI17DSK		1,000	1,000	1,000	1,000				
GRI18DSK			2,326	2,326	2,326	2,326			
GRI19DSK				2,250	2,250	2,250	2,250		
GRI20+DSK					4,000	4,000	4,000	4,000	
GRI21DSK						2,000	2,000	2,000	2,000
RAW Disk (TB)	-	1,000	3,326	5,576	9,576	10,576	8,250	6,000	2,000
Allocatable Disk (TB)	-	900	2,993	5,018	8,618	9,518	7,425	5,400	1,800

Does not include equipment bought as “RAL/SCD” in ECHO
(6.8PB usable)