

iris



Science and
Technology
Facilities Council

Scientific Computing

IRIS capacity management

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IRIS Collaboration meeting

04 December 2023



iris | Overview

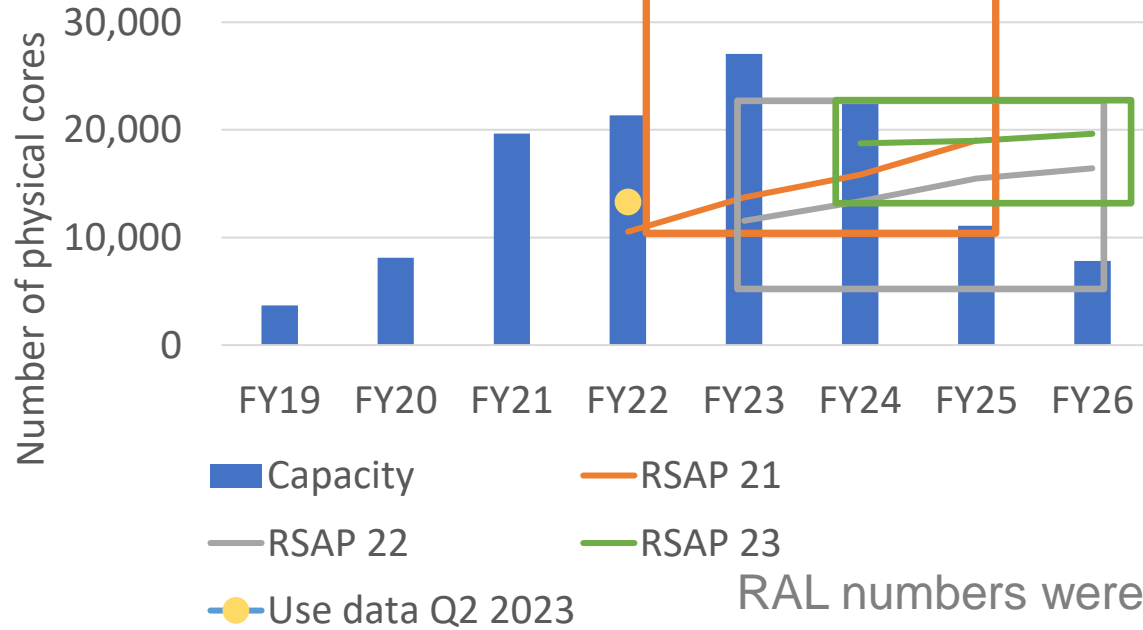
- CPU
- GPU
- Disk
- Summary



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vCPU/physical cores misunderstanding?

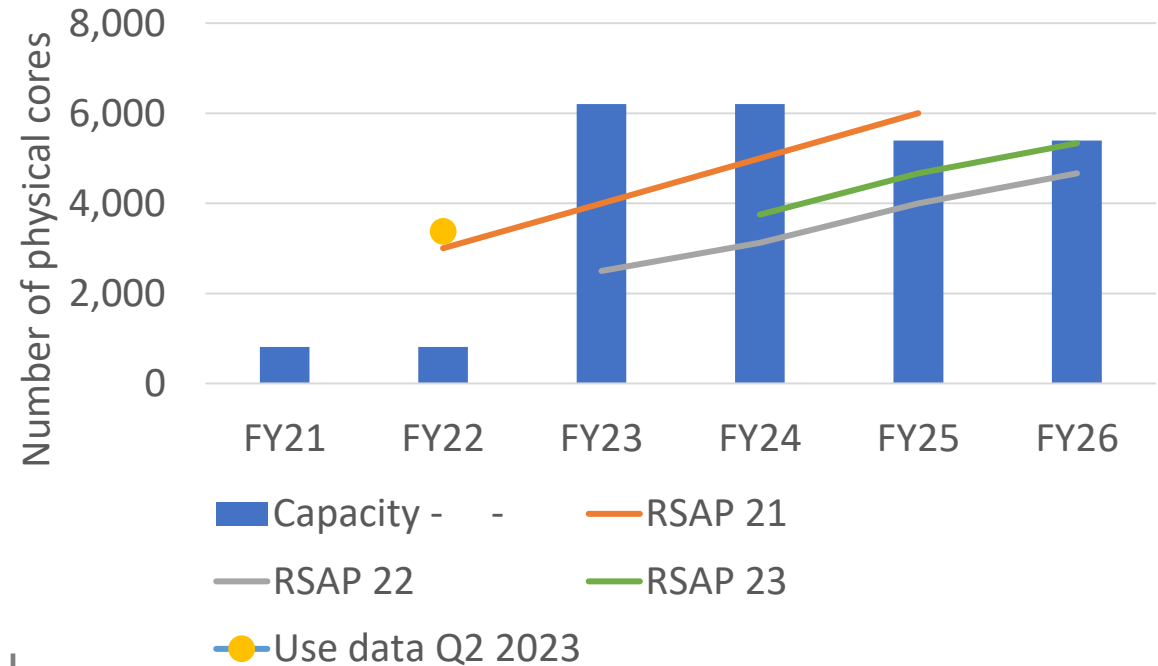
Physical cores at RAL Cloud



RAL numbers were recalculated to vCPU

Activities learned about RAL capacity? Projects growth influence

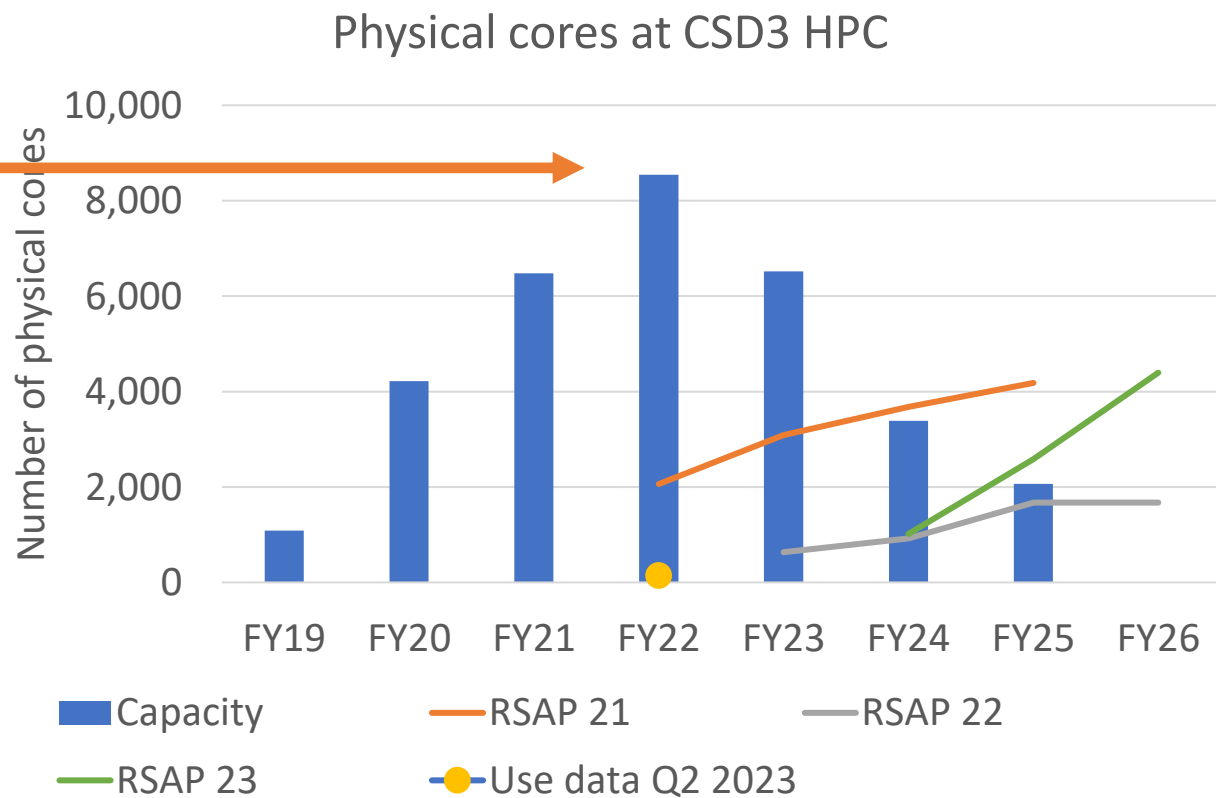
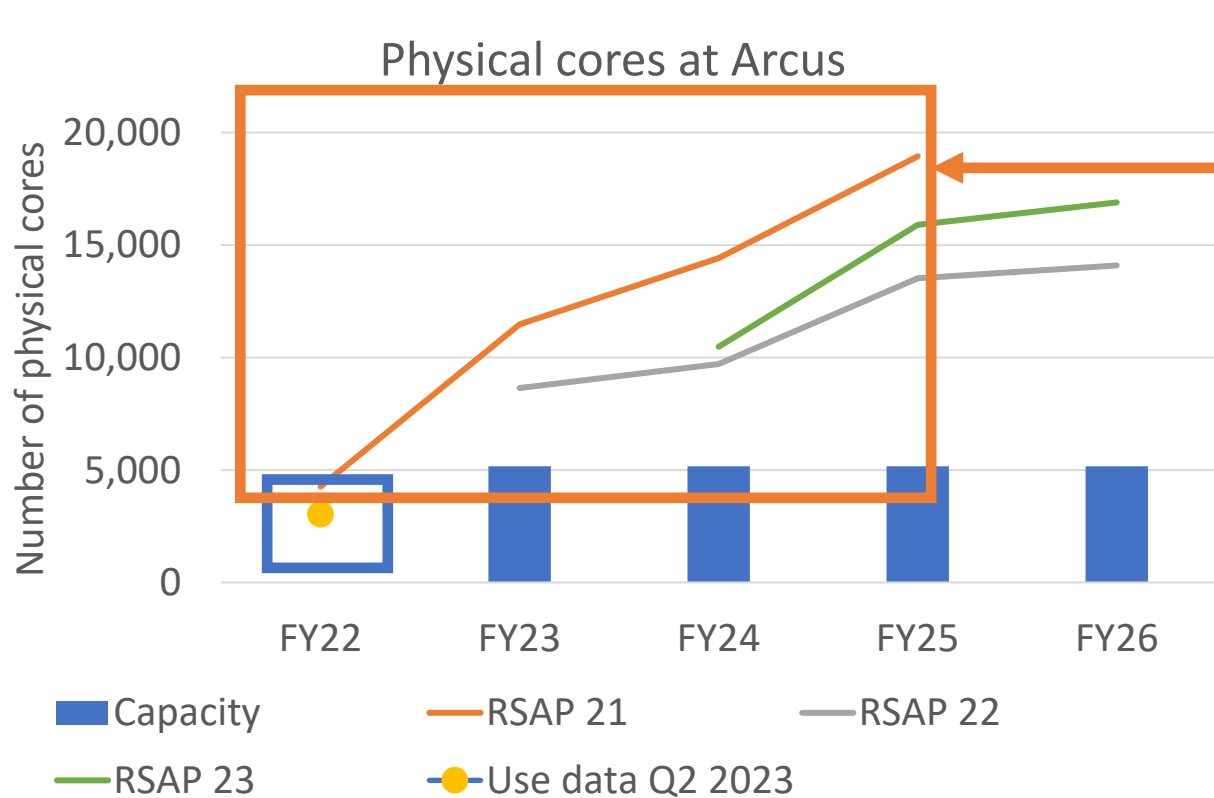
Physical cores at Scarf



A single user is **slightly** easier to plan for!

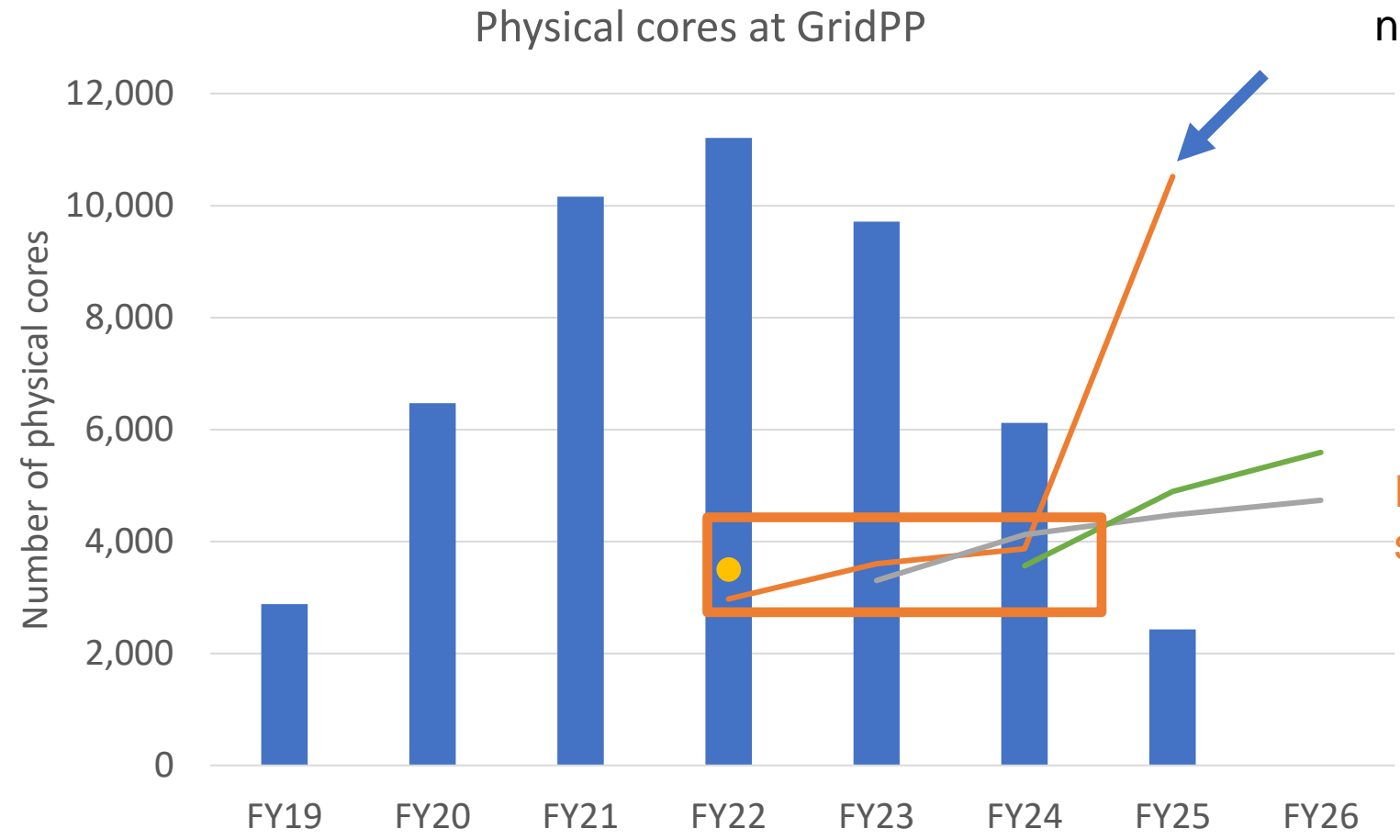


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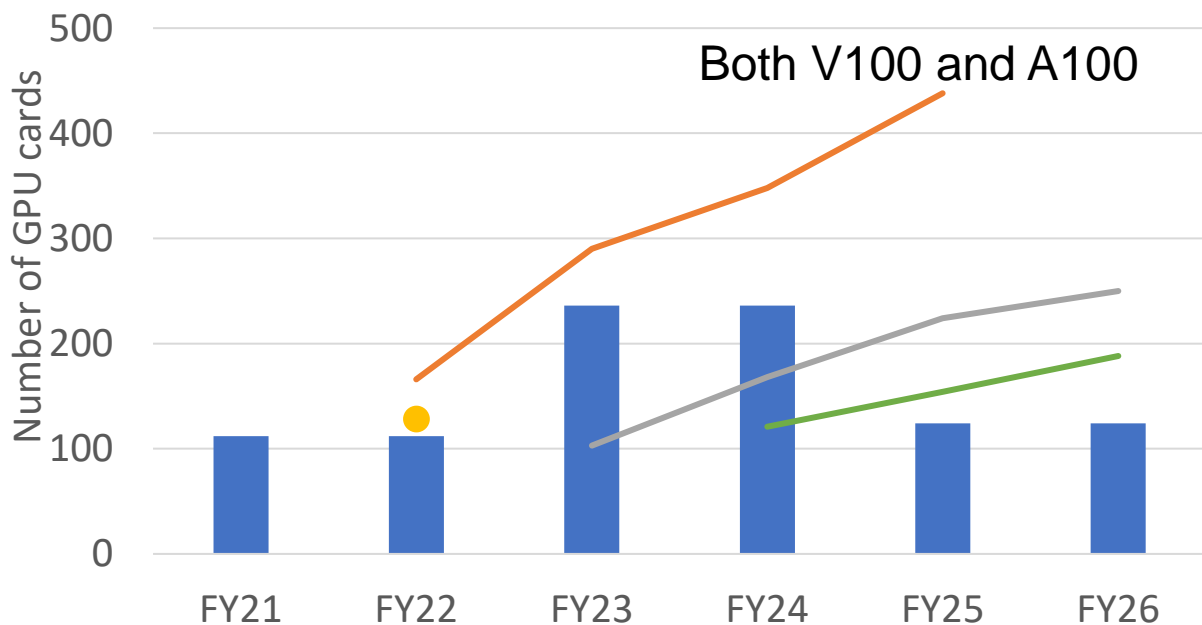
This activity did not resubmit

Predictions are quite similar

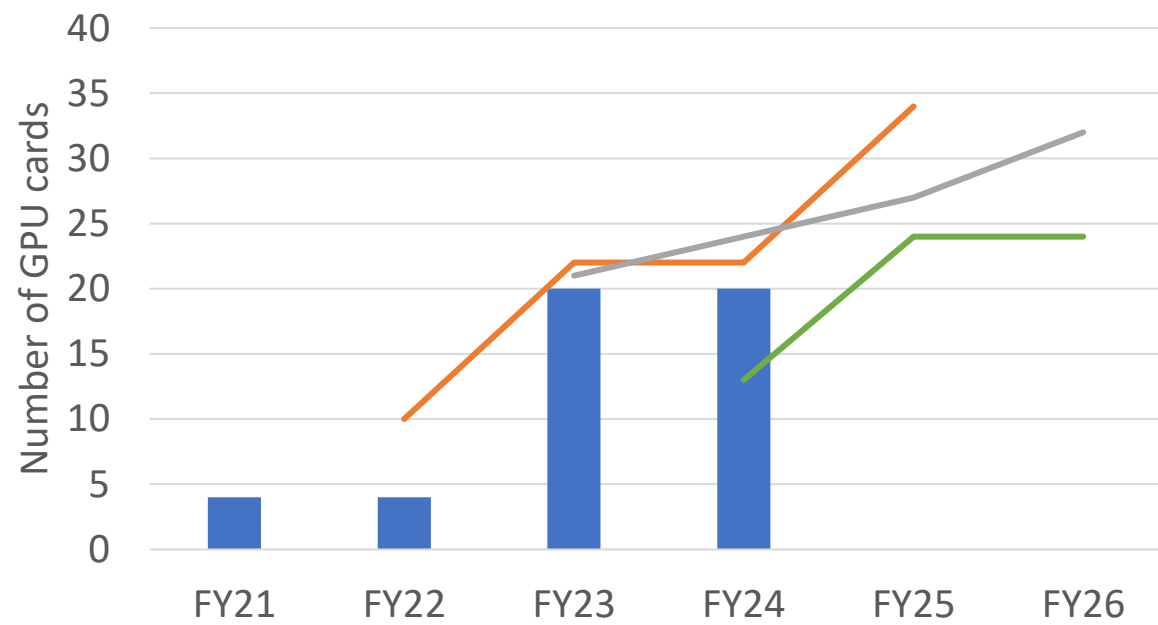


iris | GPU at RAL Cloud and Cambridge DiRAC

Compute GPU at RAL cloud



Compute GPU at Arcus cloud



Capacity

RSAP 21

RSAP 22

Capacity

RSAP 21

RSAP 22

RSAP 23

RSAP 23

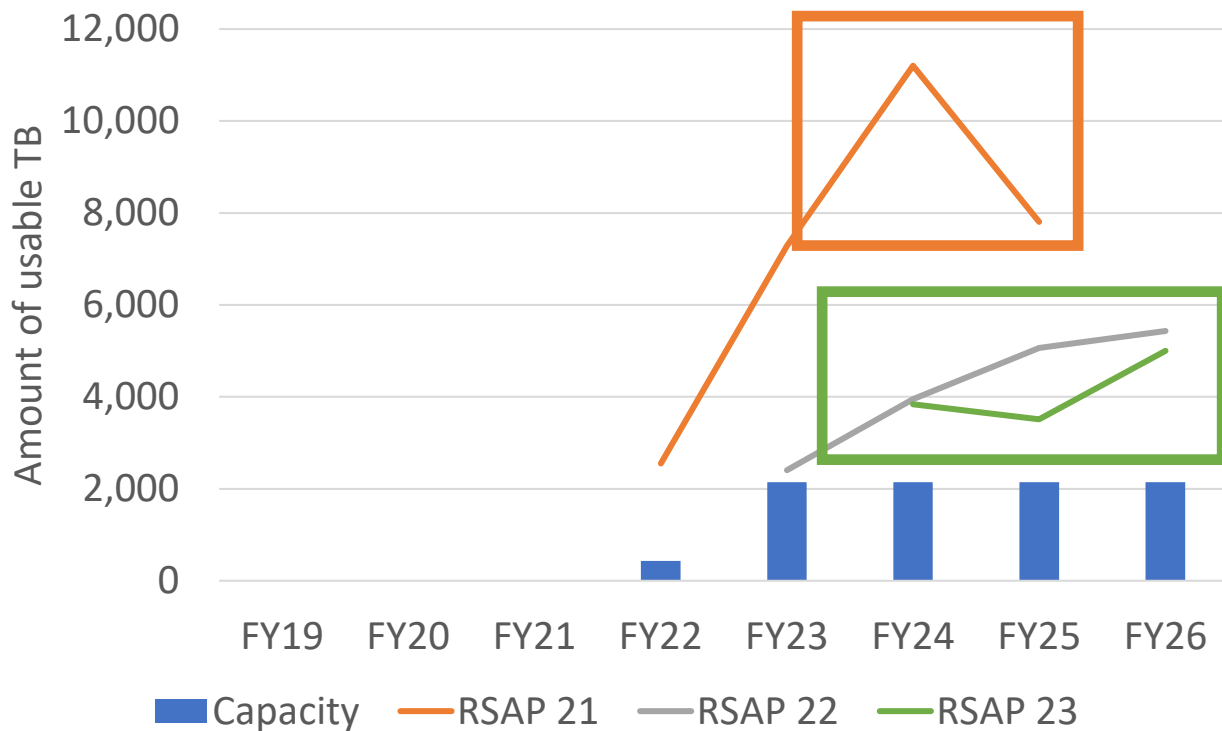
Use data Q2 2023

Requests for GPU in RSAP21 were much higher than in the RSAP23.

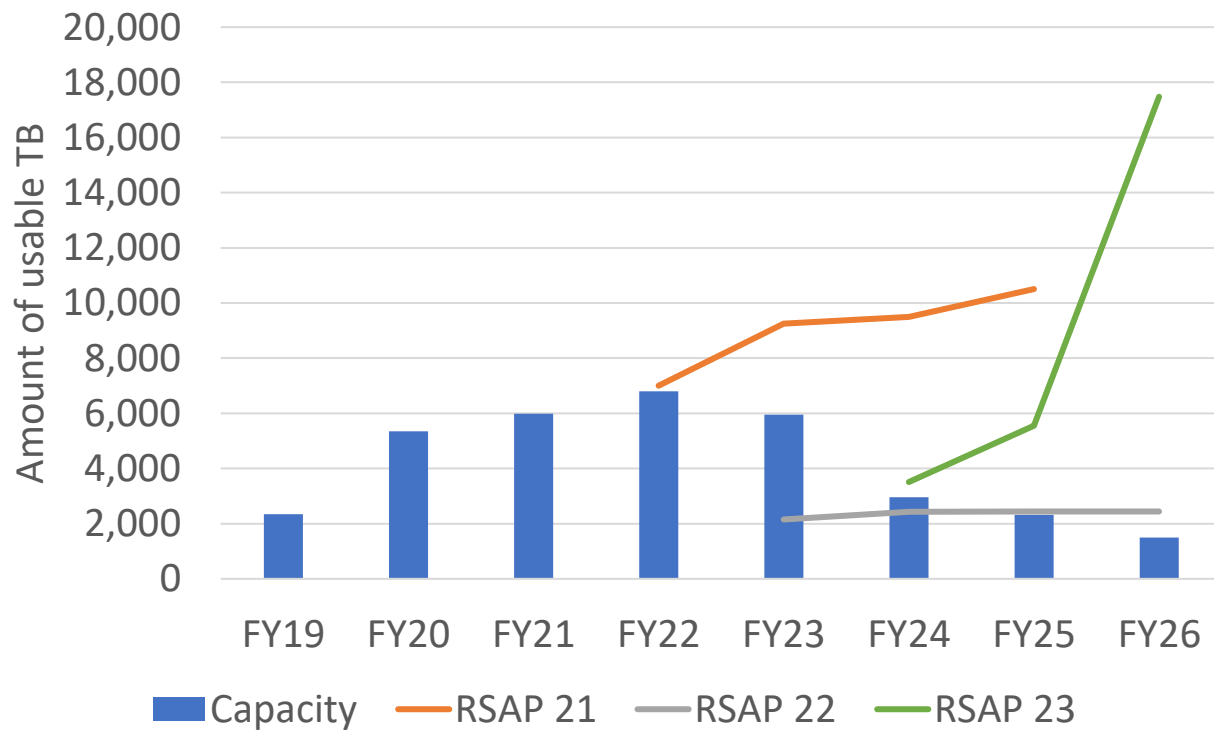


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Disk (block+FS) at RAL Cloud



Disk (Echo/Tier1) at RAL



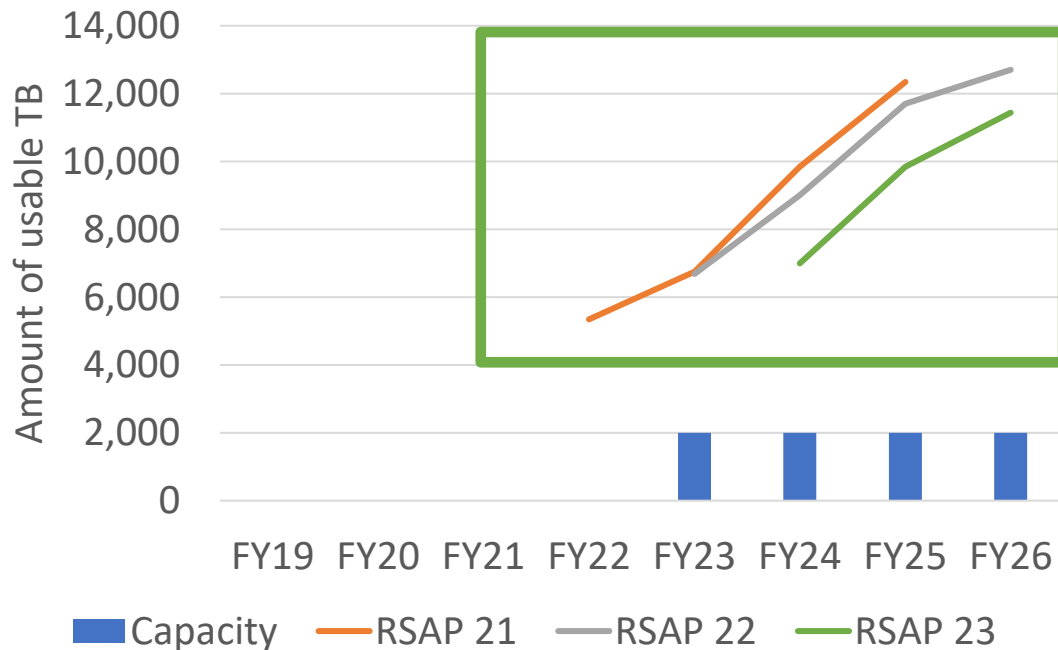
Expected optimisation of use
and data move to Tape
Each year predictions
become more refined

Prediction can drastically change every
year and this makes buying in advance
challenging

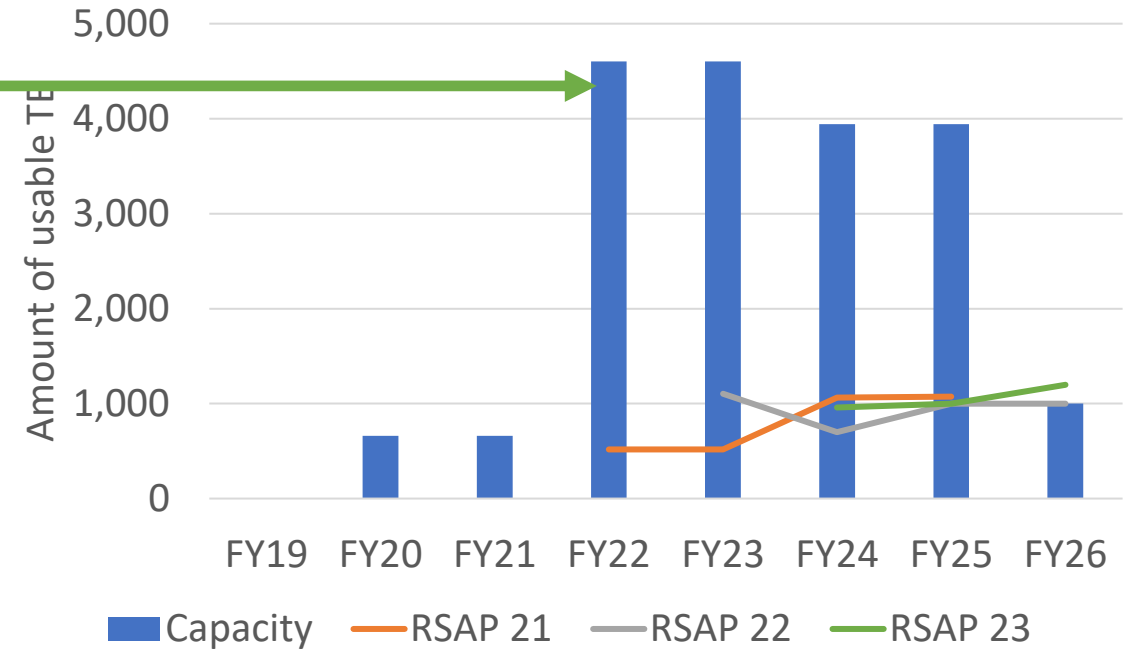


iris | Disk at Cambridge DiRAC

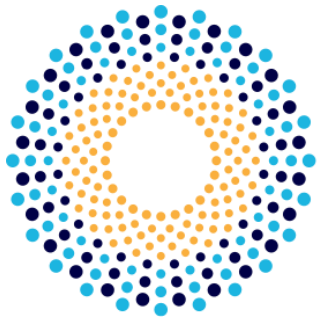
Disk (block and FS) at Arcus Cloud



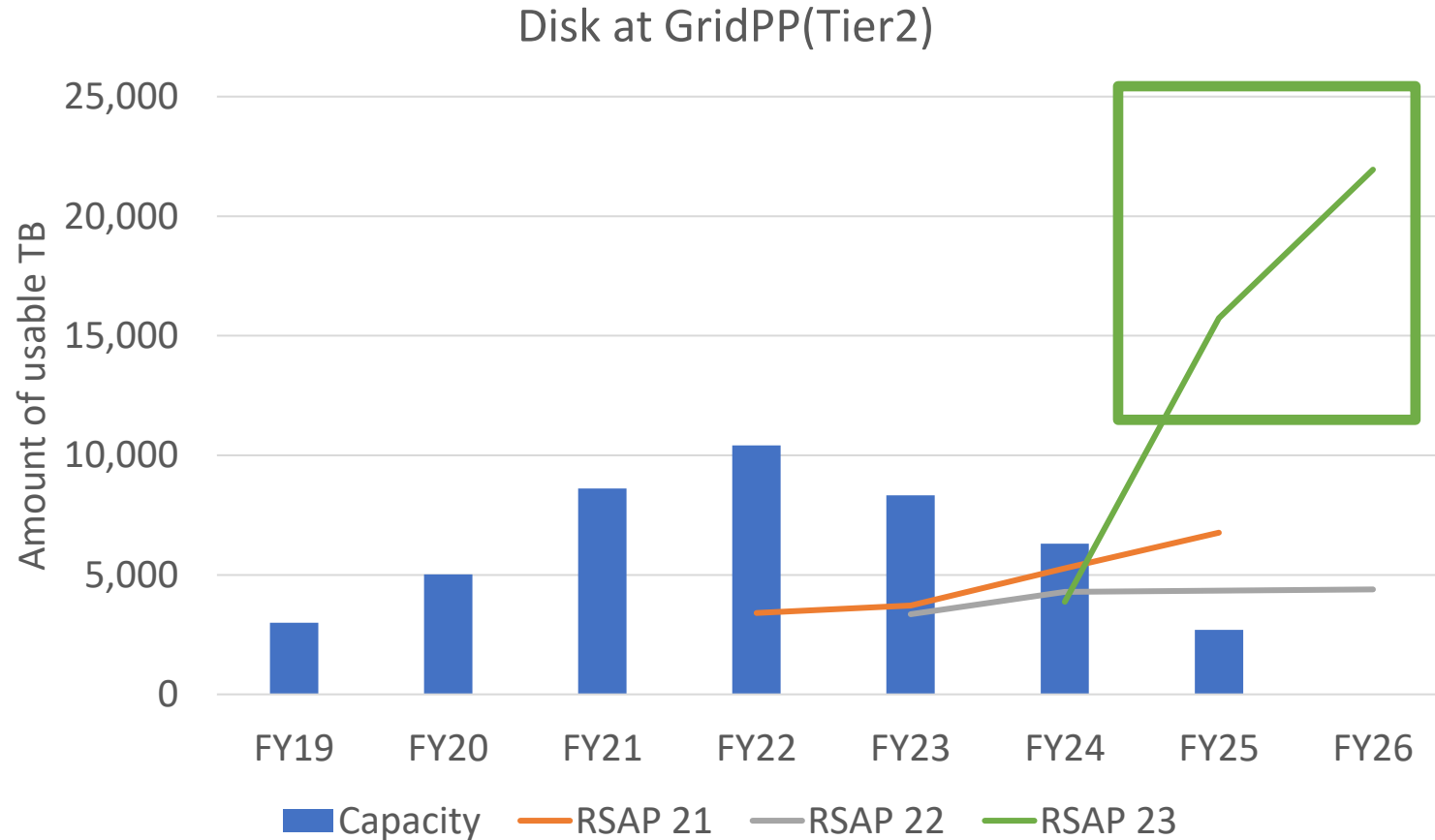
Disk at CSD3



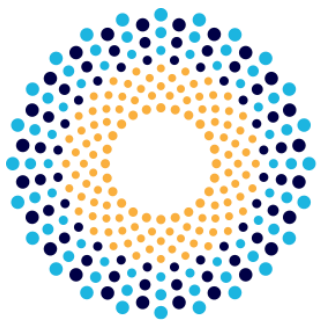
High demand according to all RSAP requests
CSD3 disk is not interchangeable with the cloud



iris | Disk at GridPP

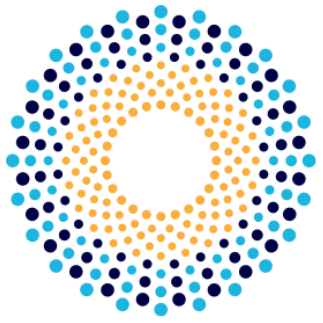


Still a high uncertainty whether this will be non-IRIS or IRIS



iris | Summary

- Each year, RSAP requests for long-term are different from different years' requests or actual use.
- Growing capacity is a risky and sometimes ungrateful business (not for the other users of the provider)
- Established communication flow leads to improved planning.



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Thank you!