Service Optimisation

Doing more with Alces
Managed Service





Hello!

Dan Shaw

Head of Engineering dan.shaw@alces-flight.com



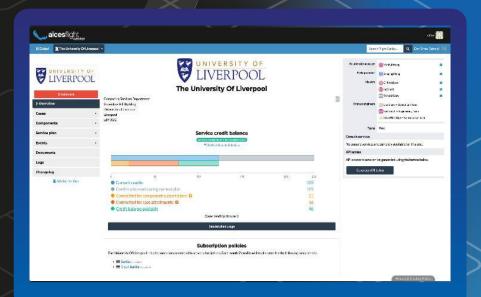
What is a Managed Service?

- Types of Managed HPC Services
 - Onsite Engineers
 - Remote Consultancy
 - Product backed subscription service



Alces Flight Center

Product backed managed service





Alces Managed Service Components



Applications Team

L2 Team providing application support for over 700+ HPC applications/libraries



Engineering Team

L2 Team providing 'off the shelf' solutions to common HPC tasks (e.g. Security + Backups)



Operations Team

L1 Process Driven Team providing hardware break-fix, proactive support



Proactive Monitoring + Routine Reporting

Daily + Monthly
Reports providing
further insight into
how you use your
solution (and how you
could improve!)



Flight Tool Suite

Access to all of our Flight Tools - easing use of HPC systems



400,000+ Managed Compute Cores

Active HPC Users

Managed Sites

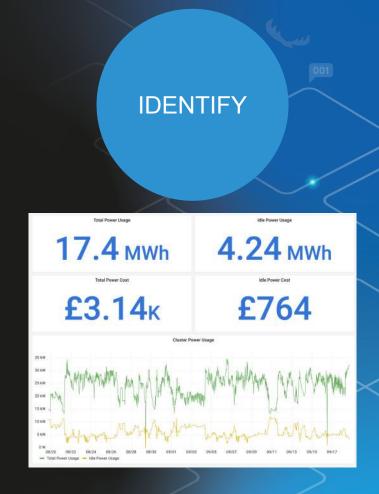




Sustainability in HPC Customer Success Story **IDENTIFY INVESTIGATE ITERATE IMPROVE INFORM** alcesflight © 2023 Alces Flight Limited

Analyse Power Usage

- Standardised power metrics are gathered across each managed site
- Engineering Team were able to analyse job workload efficiency
- How can we reduce wasted resources?



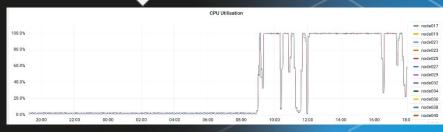


Create Action Plan

- Identify potential areas of improvement in workflows
- Create prioritised action plan
 - Identify stakeholders
 - Pilot optimisations
 - Measure improvements









Short Term Results

Applications Team advised customer on how we could split out workflows into multiple sections:

- Improved resource selection
- Minimise idle compute
- Optimised data workflow





Long Term Efficiency Results

 Consultancy Team advised on the most appropriate options when it came to hardware refresh

- Establishing Customer Metrics:
 - Power Usage
 - Carbon Illustration
 - Cost (CapEx / OpEx)

IMPROVE





Conclusion

- Just get started; incremental change is better than no change at all
- Alces managed services help free up your time to focus on improving your HPC service

