

HPCx Quarterly Report

January-March 2004

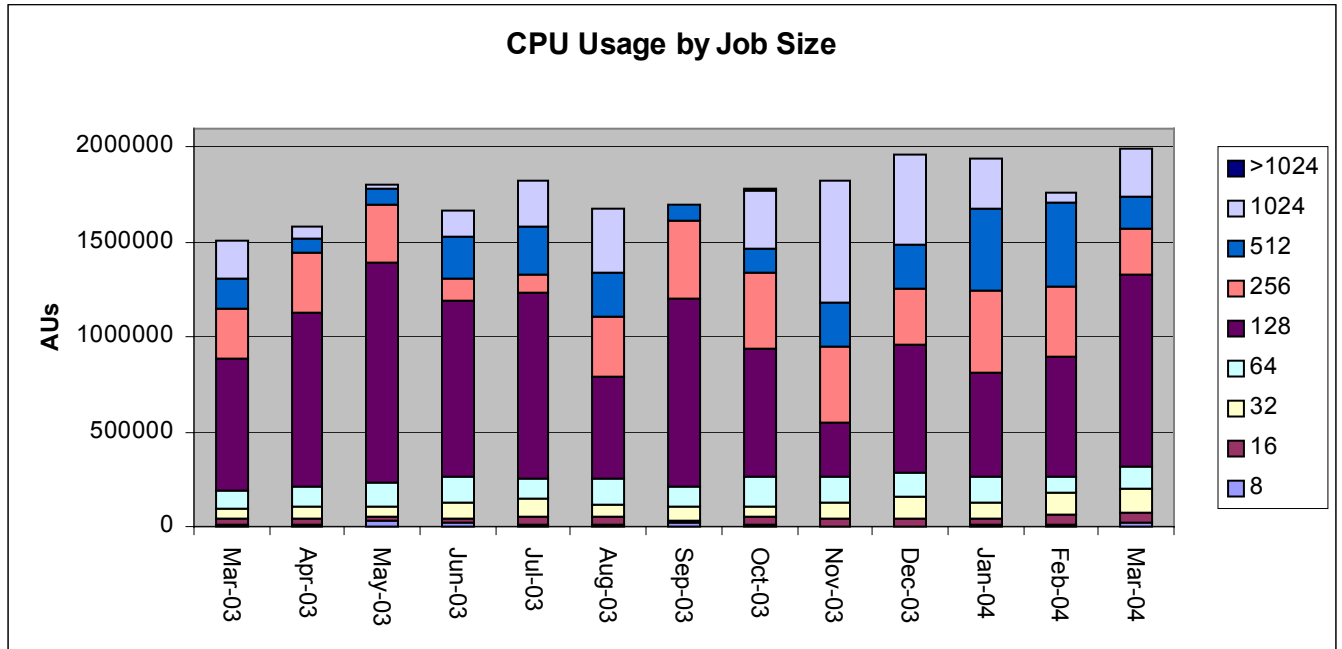
1 Executive Summary

- During this quarter, utilisation of the service has exceeded 80% for each month, with March being another new record month.
- The job size using the most time remains 128 CPUs although almost 30% of the time was used on capability jobs.
- We expect demand to remain high during the transition to Phase 2 and that the Phase 2 machine will fill up reasonably quickly.
- The number of active research groups is now at 30, which is the maximum agreed with EPSRC for 2004.
- Staffing effort levels for both the Science Support and Systems teams have been high during this quarter in preparation for moving the service onto the Phase 2 hardware.
- The initial Phase 2 system has now grown to 20 Regatta H+ compute frames connected with a pre-General Availability HPS (High Performance Switch). We were able to start running an early-user service on this at the end of March.
- We have now implemented access to the file archive system and a number of user groups have started to make use of this.
- Significant science support effort has been expended on ensuring the transition to the Phase 2 system will be as smooth as possible for users. For example, we:
 - ported a number of applications codes to Phase 2;
 - have installed key tools and libraries;
 - and have produced a document on the differences on Phase 2, which was available for the early users.
- The second HPCx Annual Seminar will be held in Edinburgh on 9 July and will be preceded by a new scaling course on 8 July.

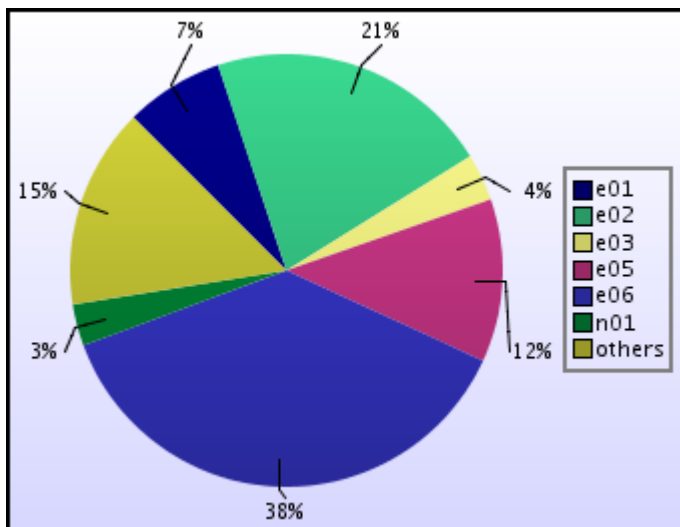
- There will also be a workshop in London on 26 May covering initial user experiences on Phase 2 and including a closed session with NERC users to better understand their needs.
- As part of our role in ATWG, significant effort has gone into characterising the performance of the benchmark codes on both Phase 1 and Phase 2.
- The Software Engineering team has been investigating the performance of the new switch and has been looking at ways to exploit the larger LPARs on Phase 2.
- Outreach has focussed on getting the Life Sciences programme up and running and on preparing for the Industry Day held at the beginning of April.

2 Utilisation

2.1 By Job Size



2.2 By Consortium



3 Summary of Performance Metrics

<i>Metric</i>	<i>TSL</i>	<i>FSL</i>	<i>January</i>	<i>February</i>	<i>March</i>
Technology serviceability	80%	99.2%	100.0%	99.8%	99.7%
Technology MTBF (hours)	200	300	∞	366	732
Number of AV FTEs	7.5	10	14.2	14.4	16.1
Number of training days per month	30/12	40/12	5/1	8/2	11/3
Non in-depth queries resolved within 3 days	85%	97%	100.0%	98.7%	100.0%
Number of A&M FTEs	3.75	5.75	5.9	5.8	6.6
A&M serviceability	80%	100%	100.0%	96.6%	99.3%

<i>Colour</i>	<i>Meaning</i>
	Exceeds FSL
	Between TSL and FSL
	Below TSL

Note: The number of training days is reported as a running total since the start of the year.