

HPCx Quarterly Report

October - December 2004

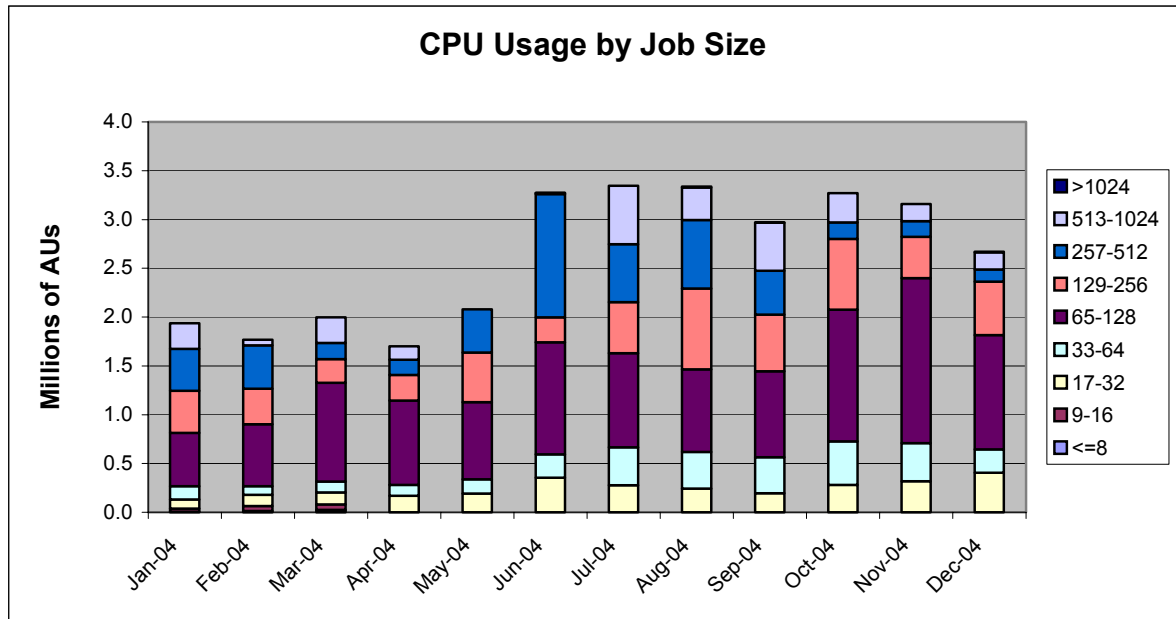
1 Executive Summary

- There were only 3 failures this quarter and none of these were directly related to failures of the hardware. Correspondingly, the serviceability and MTBF figures have been very good. The Phase 2 system has become stable much earlier than expected and has so far proven to be very reliable.
- The usage of the production region and the capability usage were disappointing during this quarter. A report on this, including strategies for improving capability utilisation, has been prepared for the forthcoming meeting of the Oversight Committee.
- HPCx have provided additional support for BBSRC consortia (through the Life Science Initiative) and NERC consortia (via a users' workshop); subsequently, usage from both BBSRC and NERC has been higher during the last few months of the year.
- The helpdesk again met all the targets for queries during this quarter.
- The target for training days was completed by running two courses remotely at the Rutherford Appleton Laboratory. These courses were on *Optimisation* and *Performance Scaling* and had good turnouts from HPCx users.
- The Terascaling team have reported good performance improvements for a variety of codes, including a 50% improvement for the CENTORI fusion code from Culham.
- NCAS (n02) use SRB (Storage Resource Broker) to manage their datasets; at their request, we have now installed the SRB client toolkit to allow users to access remote SRB data repositories from HPCx.
- HPCx was publicised at SC2004 by a display on the joint EPCC-Daresbury booth, a presentation at the IBM booth and a tutorial on *Improved Performance Scaling*.

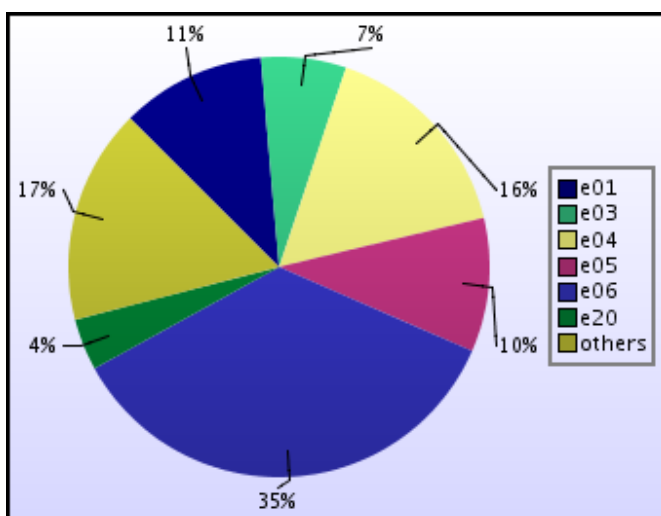
- We provided support for a number of bids to the Call for Proposals for joint experiments with TeraGrid to follow on from the success of TeraGyroid.

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>October</i>	<i>November</i>	<i>December</i>
Technology serviceability	80%	99.2%	100.0%	99.9%	100.0%
Technology MTBF (hours)	200	300	∞	1464	∞
Number of AV FTEs	7.5	10	14.0	14.2	10.3
Number of training days per month	22.5/12	30/12	28/10	30/11	30/12
Non in-depth queries resolved within 3 days	85%	97%	100.0%	98.6%	97.7%
Number of A&M FTEs	3.75	5.75	4.9	6.6	5.4
A&M serviceability	80%	99.6%	100.0%	99.9%	97.8%

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

Note 1: The number of training days is reported as a running total since the start of the year.

Note 2: The above table includes the revised FSL targets for *training days* and *A&M serviceability*, which have been provisionally agreed with EPSRC.