

CSAR Service - Management Report

November 2001

This report documents the quality of the CSAR service during the month of November 2001.

A more comprehensive report is provided quarterly, which additionally covers wider aspects of the Service such as information on Training, Application Support and Value-Added services.

This and other such reports are made available through the Web to staff within EPSRC and the other Research Councils, to CfS staff and CSAR Service users. The reports are indexed in a similar way to that which other useful information and news are listed for selection.

1. Introduction

This document gives information on Service Quality and on actual usage of the CSAR Service during the reporting period of November 2001. The information, in particular, covers the availability and usage of the following three main CSAR Service High Performance Computing (HPC) systems:

- Cray T3E-1200E/776 (Turing)
- SGI Origin2000/128 (Fermat)
- SGI Origin3000/512 (Green)

The information is provided in both textual and graphical form, so that it is easier to see trends and variances.

November has seen the workload of the three primary systems remaining high.

The percentage of Turing CPU capacity used by jobs larger than 64 PEs was 65%.

November also saw the utilisation on the Origin 3000 (Green) climbing, and the percentage of Green CPU capacity used by jobs larger than 64 PEs was 71%.

2. Service Quality

This section covers overall Customer Performance Assessment Ratings (CPARS), HPC System availability and usage, Service Quality Tokens and other information concerning issues, progress and plans for the CSAR Service.

2.1 CPARS

Table 1 gives the measure by which the quality of the CSAR Service is judged. It identifies the metrics and performance targets, with colour coding so that different levels of achievement against targets can be readily identified. Unsatisfactory actual performance will trigger corrective action.

CSAR Service - Service Quality Report - Performance Targets

Service Quality Measure	Performance Targets					
	White	Blue	Green	Yellow	Orange	Red
HPC Services Availability						
Availability in Core Time (% of time)	> 99.9%	> 99.5%	> 99.2%	> 98.5%	> 95%	95% or less
Availability out of Core Time (% of time)	> 99.8%	> 99.5%	> 99.2%	> 98.5%	> 95%	95% or less
Number of Failures in month	0	1	2 to 3	4	5	> 5
Mean Time between failures in 52 week rolling period (hours)	>750	>500	>300	>200	>150	otherwise
Fujitsu Service Availability						
Availability in Core Time (% of time)	> 99.9%	> 99.5%	> 99.2%	> 98.5%	> 95%	95% or less
Availability out of Core Time (% of time)	> 99.8%	> 99.5%	> 99.2%	> 98.5%	> 95%	95% or less
Help Desk						
Non In-depth Queries - Max Time to resolve 50% of all queries	< 1/4	< 1/2	< 1	< 2	< 4	4 or more
Non In-depth Queries - Max Time to resolve 95% of all queries	< 1/2	< 1	< 2	< 3	< 5	5 or more
Administrative Queries - Max Time to resolve 95% of all queries	< 1/2	< 1	< 2	< 3	< 5	5 or more
Help Desk Telephone - % of calls answered within 2 minutes	>98%	> 95%	> 90%	> 85%	> 80%	80% or less
Others						
Normal Media Exchange Requests - average response time	< 1/2	< 1	< 2	< 3	< 5	5 or more
New User Registration Time (working days)	< 1/2	< 1	< 2	< 3	< 4	otherwise
Management Report Delivery Times (working days)	< 1	< 5	< 10	< 12	< 15	otherwise
System Maintenance - no. of sessions taken per system in the month	0	1	2	3	4	otherwise

Table 1

Table 2 gives actual performance information for the period of November 1st to 30th inclusive. Overall, the CPARS Performance Achievement in November was satisfactory (see Table 3); i.e. Green measured against the CPARS performance targets. The Fujitsu availability figures are included in Table 2, but not Table 3 as they have zero weighting in CPARS terms.

CSAR Service - Service Quality Report - Actual Performance Achievement

Service Quality Measure	2000/1											
	Dec	Jan	Feb	March	April	May	June	July	Aug	Sept	Oct	Nov
HPC Services Availability												
Availability in Core Time (% of time)	94.90%	99.70%	99.70%	100%	100%	99.70%	99.70%	98.49%	98.49%	98.49%	98.60%	98.60%
Availability out of Core Time (% of time)	98.49%	99.50%	99.40%	99.40%	99.40%	99.40%	99.40%	98.49%	100%	99.40%	99.50%	99.50%
Number of Failures in month	4	1	1	1	1	3	3	4	2	2	2	2
Mean Time between failures in 52 week rolling period (hours)	584	584	626	674	674	584	584	438	398	365	365	365
Fujitsu Service Availability												
Availability in Core Time (% of time)	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Availability out of Core Time (% of time)	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Help Desk												
Non In-depth Queries - Max Time to resolve 50% of all queries	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25
Non In-depth Queries - Max Time to resolve 95% of all queries	<3	<5	<5	<3	<5	<2	<2	<1	<1	<1	<1	<1
Administrative Queries - Max Time to resolve 95% of all queries	<5	<2	<2	<3	<0.5	<0.5	<0.5	<1	<2	<1	<1	<0.5
Help Desk Telephone - % of calls answered within 2 minutes	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Others												
Normal Media Exchange Requests - average response time	<0.5	<0.5	<0.5	0	0	<0.5	<0.5	<0.5	0	<0.5	<0.5	<0.5
New User Registration Time (working days)	0	0	0	0	0	0	0	0	0	0	0	0
Management Report Delivery Times (working days)	10	10	10	10	12	10	10	10	10	10	10	10
System Maintenance - no. of sessions taken per system in the month	1	0	2	1	1	0	0	1	2	2	2	2

Table 2

Notes:

- HPC Services Availability has been calculated using the following formulae, based on the relative NPB performance of Turing and Fermat at installation:

$$[\text{Turing availability} \times 122 / (122 + 3.5)] + [\text{Fermat availability} \times 3.5 / (122 + 3.5) \times 1.556]$$
- Mean Time between failures for Service Credits is formally calculated based on a rolling 12 month period.

Table 3 gives Service Credit values for the month of November. These will be accounted on a quarterly basis, formally from the Go-Live Date. The values are calculated according to agreed Service Credit Ratings and Weightings.

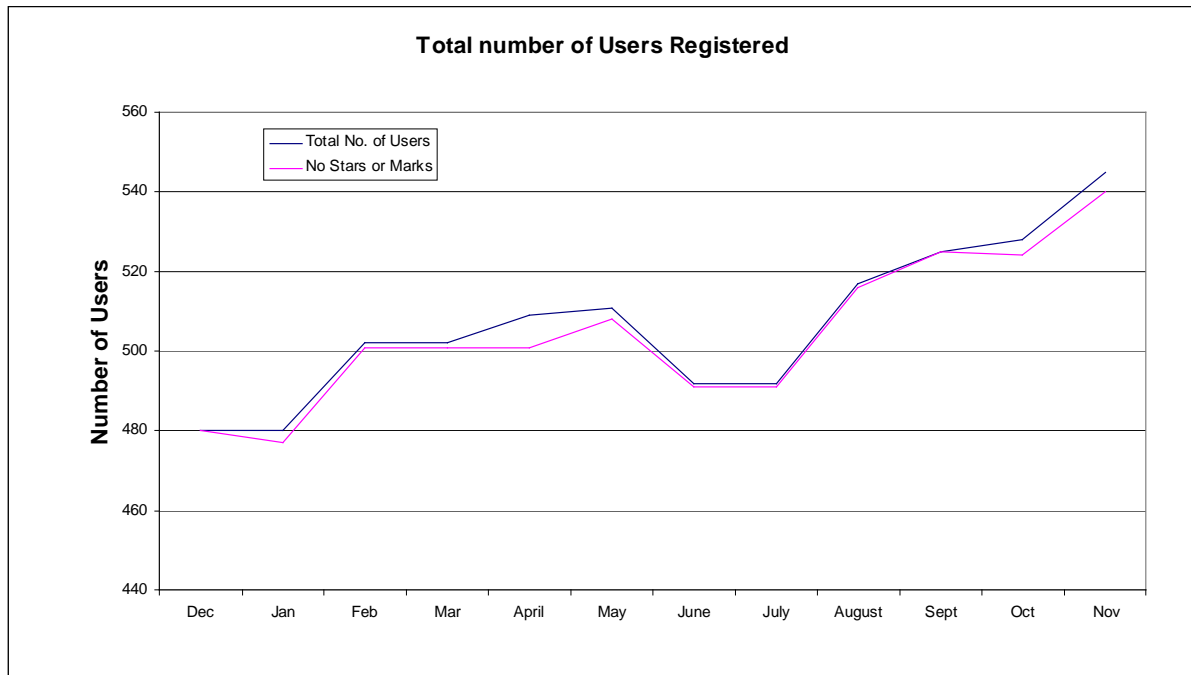
CSAR Service - Service Quality Report - Service Credit Ratings

Service Quality Measure	2000/1											
	Dec	Jan	Feb	March	April	May	June	July	Aug	Sept	Oct	Nov
HPC Services Availability												
Availability in Core Time (% of time)	0.418	-0.083	-0.083	-0.125	-0.125	-0.083	-0.083	0.083	0.083	0.083	0.083	0.083
Availability out of Core Time (% of time)	0.083	-0.083	0	0	0	0	0	0.083	-0.1	0	-0.083	-0.083
Number of Failures in month	0.083	-0.083	-0.083	-0.083	-0.083	0	0	0.083	0	0	0	0
Mean Time between failures in 52 week rolling period (hours)	-0.083	-0.083	-0.083	-0.083	-0.083	-0.083	-0.083	0	0	0	0	0
Help Desk												
Non In-depth Queries - Max Time to resolve 50% of all queries	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
Non In-depth Queries - Max Time to resolve 95% of all queries	0.083	0.167	0.167	0.083	0.167	0	0	-0.083	-0.083	-0.083	-0.083	-0.083
Administrative Queries - Max Time to resolve 95% of all queries	0.247	0	0	0.083	-0.1	-0.1	-0.1	-0.083	0	-0.083	-0.083	-0.1
Help Desk Telephone - % of calls answered within 2 minutes	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
Others												
Normal Media Exchange Requests - average response time	-0.1	-0.1	-0.1	0	0	-0.1	-0.1	-0.1	0	-0.1	-0.1	-0.1
New User Registration Time (working days)	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
Management Report Delivery Times (working days)	0	0	0	0	0.083	0	0	0	0	0	0	0
System Maintenance - no. of sessions taken per system in the month	-0.083	-0.1	0	-0.083	-0.083	-0.1	-0.1	-0.083	0	0	0	0

Table 3

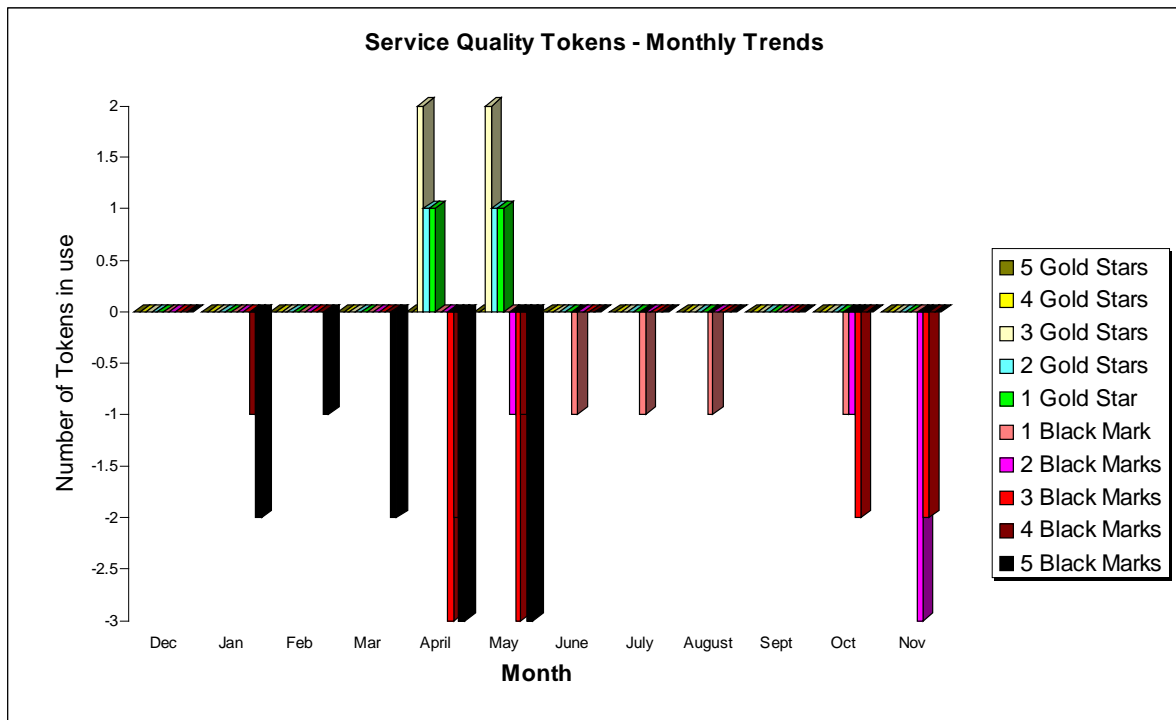
2.2 Service Quality Tokens

The position at the end of November 2001 is that two of the 528 registered users of the CSAR Service had registered against the service, one had registered two black marks, and two had registered three black marks.



The graph above shows the total number of registered users on the CSAR Service and the number of users holding a neutral view of the service.

The graph below illustrates the monthly usage trend of quality tokens:



The current status of the Stendahl tokens is that 5 users had allocated black marks against the system for the problems shown in the table below.

SUMMARY OF SERVICE QUALITY TOKEN USAGE			
No of Stars or Marks	Consortia	Date Allocated	Reason Given
3 Black Marks	csn001	17/10/01	Problems with /hold
3 Black Marks	cse085	12/10/01	CPU time for a job not constant
2 Black Marks	cse085	22/11/01	Deterioration of interactive response on Fermat
2 Black Marks	cse085	09/11/01	Problems running jobs on Green
2 Black Marks	cse085	05/10/01	Green was unreliable recently

2.3 Throughput Target against Baseline

The Baseline Target for throughput was fully achieved this month due to plenty of work over the period. The actual usage figure was 155% of Baseline capacity.

Job Throughput Against Baseline CSAR Service Provision

Period: 1st to 30th November 2001

	Baseline Capacity for Period (T3E PE Hours)	Actual Usage in Period (T3E PE Hours)	Actual % Utilisation c/w Baseline during Period
1. Has CfS failed to deliver Baseline MPP Computing Capacity for EPSRC?	347,855	493,460	141.86%
2. Have Users submitted work demanding > 110% of the Baseline during period?	347,855	524,176	Yes
3. Are there User Jobs outstanding at the end of the period over 4 days old?		Number of Jobs at least 4 days old at end Period 4	Number of Jobs at least 4 days old at end Period is not zero (Yes/No)? Yes
4. Have Users submitted work demands above 90% of the Baseline during period?		Minimum Job Time Demands as % of Baseline during Period 76%	Minimum Job Time Demand above 90% of Baseline during Period (Yes/No)? Yes
5. Majority of Job Queues contained jobs from Users for more than 97% during period?	4	Average % of time each queue contained jobs in the Period 63.0%	Average % of time each queue contained jobs in the Period is > 97%? No

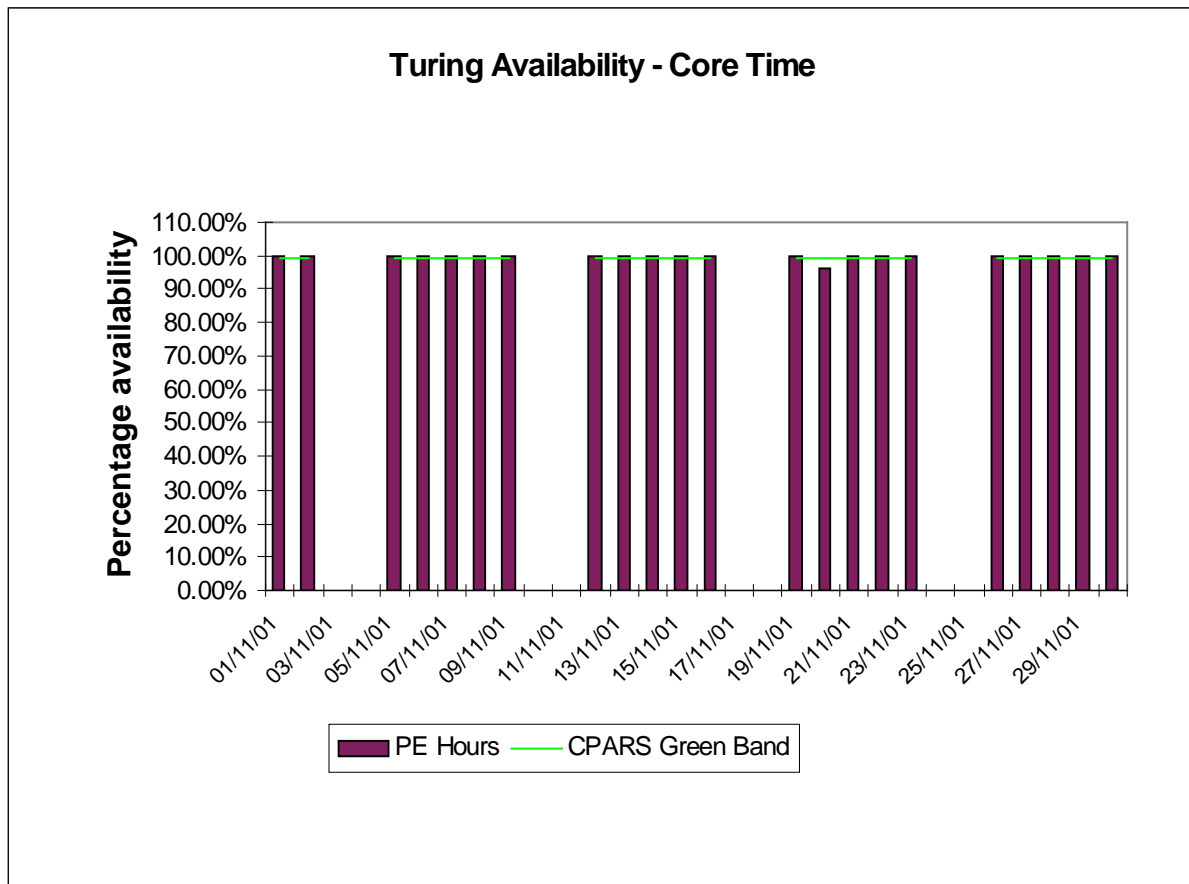
3. System Availability

Service availability each reporting period is calculated as a percentage of actual availability time over theoretical maximum time, after accounting for planned breaks in service for preventative maintenance.

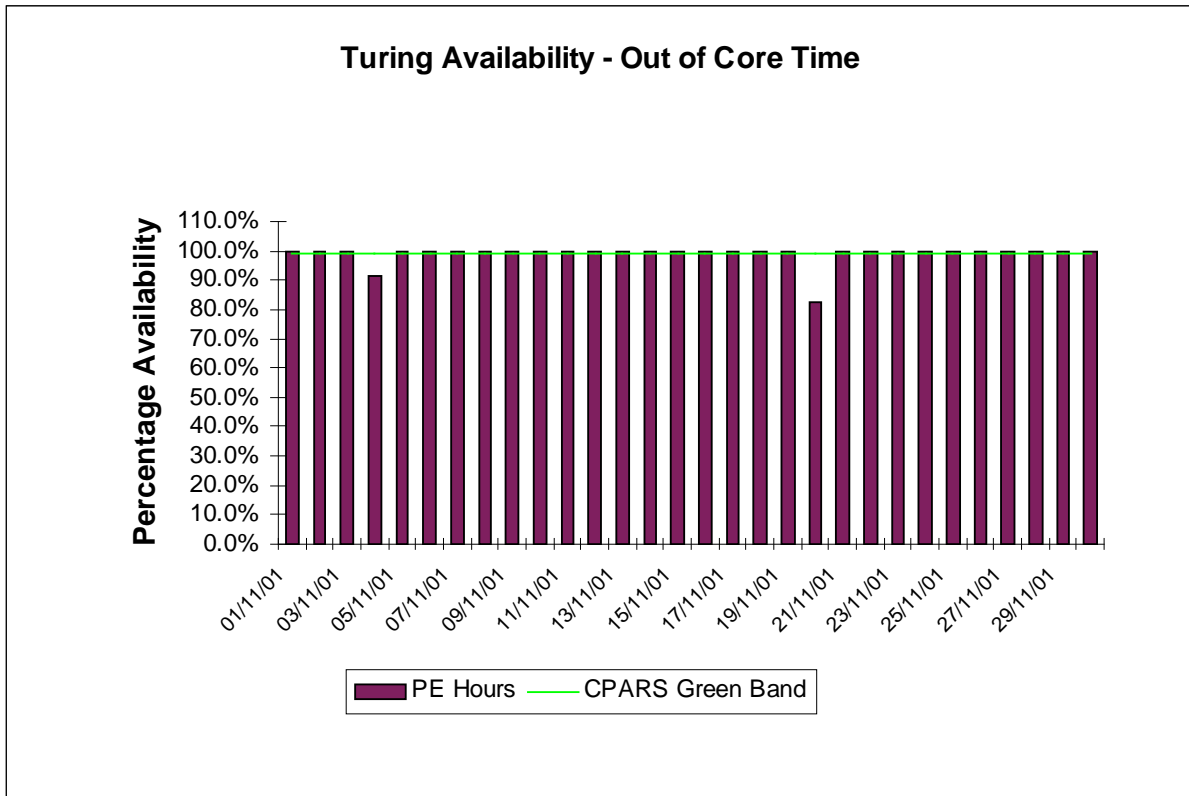
3.1 Cray T3E-1200E System (Turing)

The following graphs show the availability of Turing both in core time and out of core time respectively during the period of 1st to 30th November.

Turing availability for November:



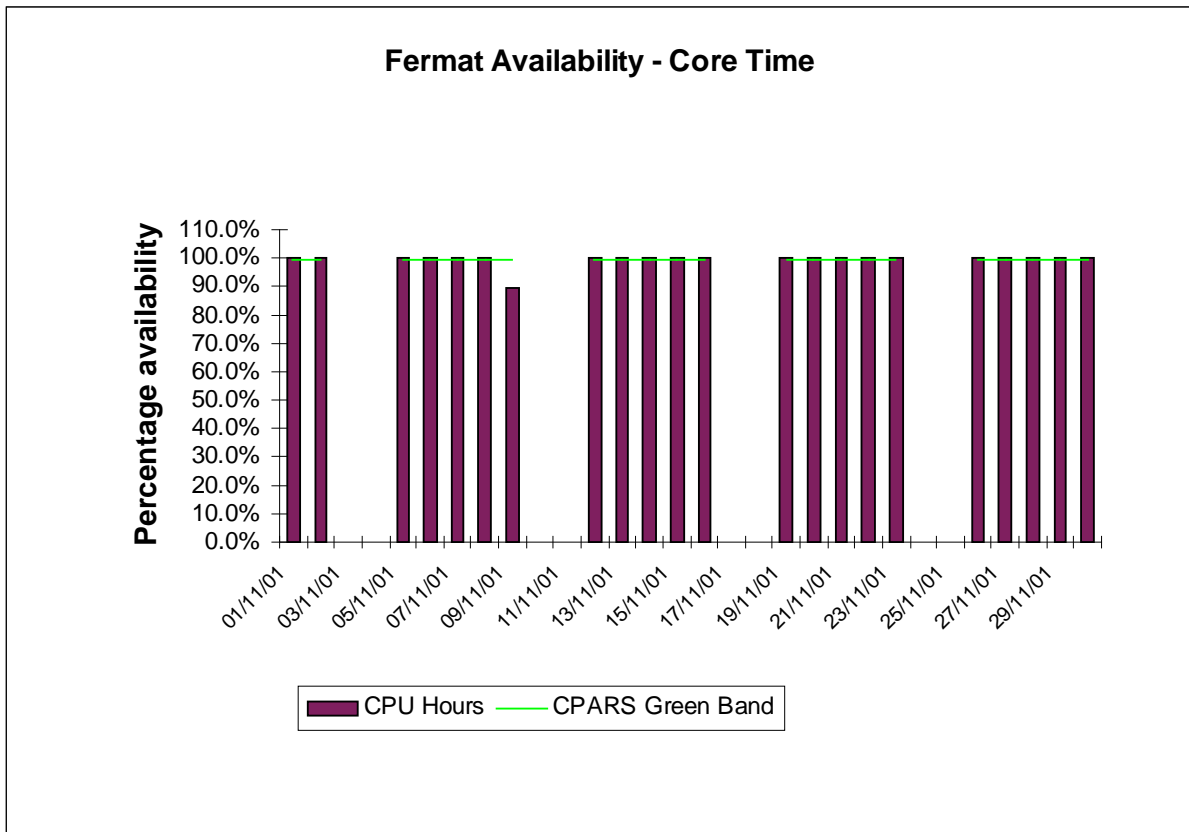
Availability of Turing in core time during November was good with the exception of an unscheduled break on the 20th of the month for a suspected MPI problem.



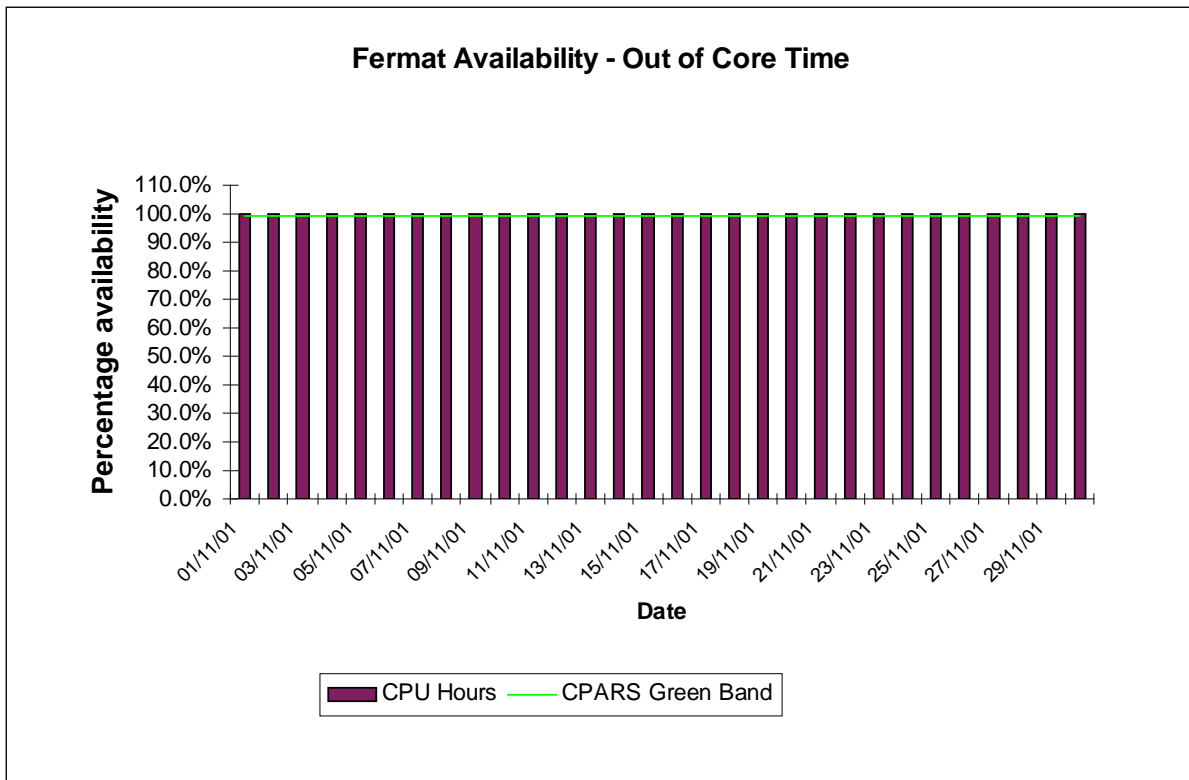
Availability of Turing out of core time during November was acceptable with the exception of two breaks, both due to software problems.

3.2 SGI Origin2000 System (Fermat)

The following graphs show the availability of Fermat both in core time and out of core time respectively.



Availability of Fermat in core time during November was good with the exception of one break on the 9th for an unscheduled reboot.



Availability of Fermat out of core time during November was excellent.

4. HPC Services Usage

Usage information is given in tabular form, in Appendices, and in graphical format. The system usage information for the period of November 1st to 30th, is provided by Project/User Group, totalled by Research Council and overall. This covers:

- CPU usage Turing: 493,460 PE Hours Fermat (Batch): 47,352 Hours
- Fermat (Interactive): 517 CPU Hours
- Green: 121,875 Hours
- Fujitsu CPU usage Fuji: 2,752 CPU Hours
- User Disk allocation Turing: 79.02 GB Years Fermat: 76.72 GB Years
- HSM/tape usage 1368.83 GB Years

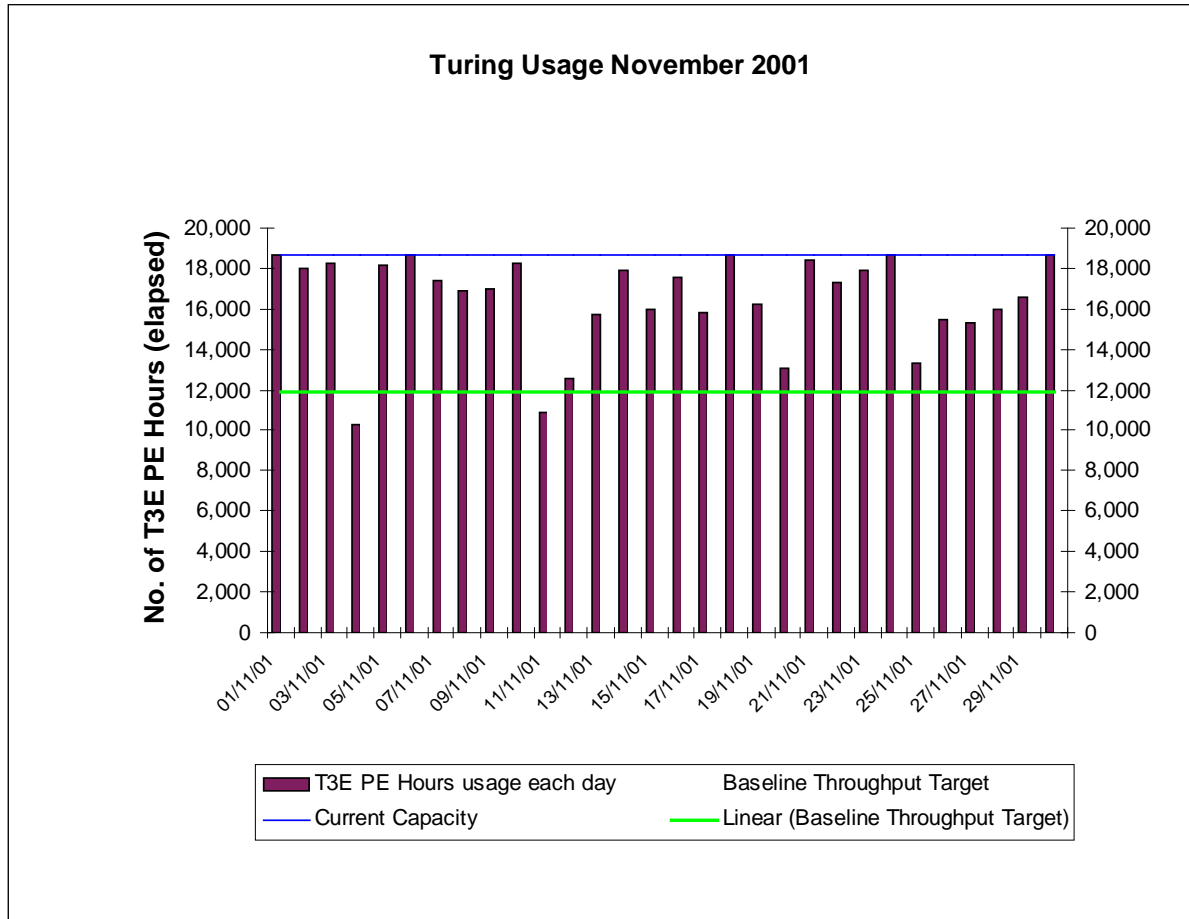
In addition, the following graphs are provided to illustrate usage per month, historically:

- a) MPP (T3E/Origin) Usage by month, showing usage each month of CPU (MFOP Years as per NPB), split by Research Council and by system. The Baseline and the overall Capacity are shown by overlaid horizontal lines.
- b) SMP (Origin) Usage by month, showing usage each month in CPU Hours, split by Research Council and giving the equivalent GFLOP-Years as per NPB. The Baseline Capacity is shown by an overlaid horizontal line.
- c) High Performance Disk (T3E) allocated for User Data by month, showing the allocated space each month in GBytes, split by Research Council. The Baseline Capacity (1 Terabyte) is shown by an overlaid horizontal line.
- d) Medium Performance Disk (Origin) allocated for User Data by month, showing the allocated space each month in GBytes, split by Research Council. The Baseline Capacity (1.5 Terabytes) is shown by an overlaid horizontal line.
- e) HSM/Tape Usage (T3E) by month, showing the volumes held each in GBytes, split by Research Council. The Baseline Capacity (16 Terabytes) available will be shown by an overlaid horizontal line.

4.1 Cray T3E-1200E System (Turing)

The following graph shows the usage of Turing during each day of November 2001. Note that there is some variance on a day-to-day basis as the accounts record job times, and thus CPU usage figures, at the time of job completion which could be the second actual day for large jobs. At present, there is a 24 hour limit on jobs so that they are check-pointed, and computational time lost due to any failure is well managed. Higher limits can be set for individual jobs on request.

Turing usage for November:



The above usage graph for the Turing system shows that the overall workload was variable.

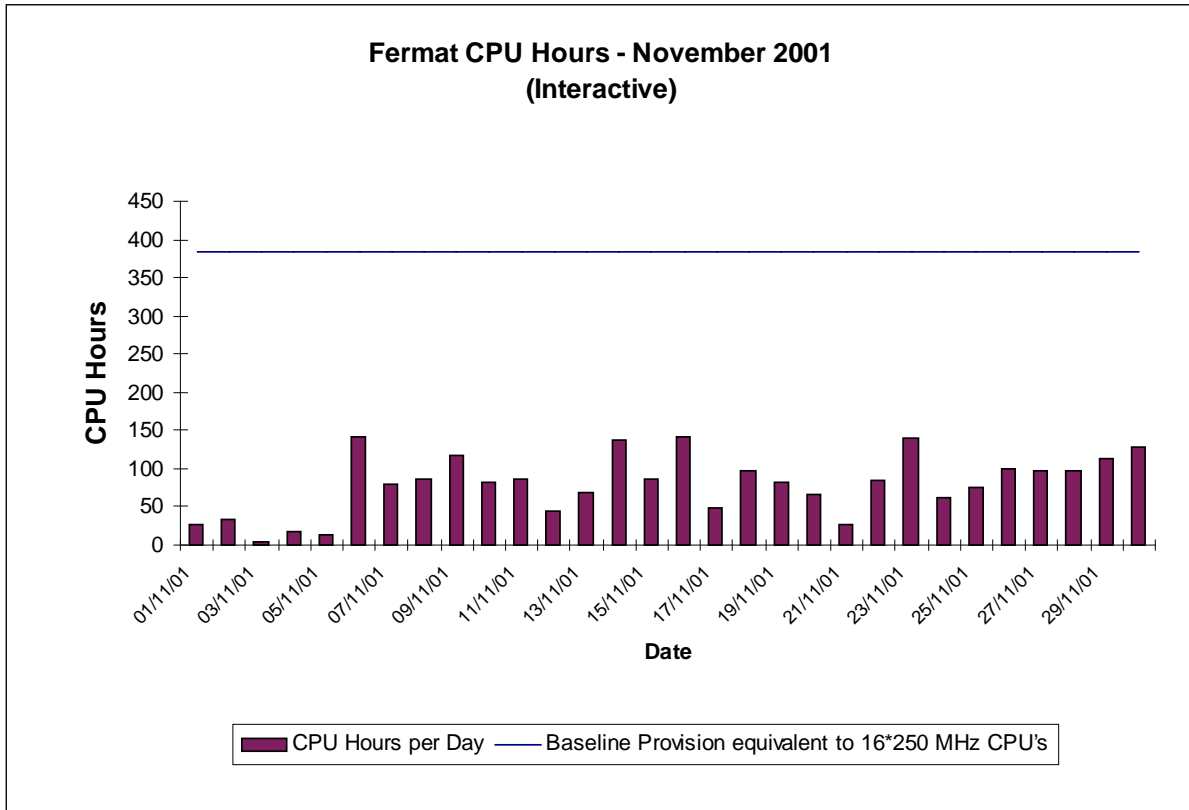
The graph also indicates the workload reached 100% of maximum theoretical capacity some parts of the month.

Fine tuning of the CfS scheduling system will continue to ensure minimal wasting of PE resource, in order to fit in a number of different sized jobs (e.g. 32, 64, 128, 256) thus facilitating maximised job throughput.

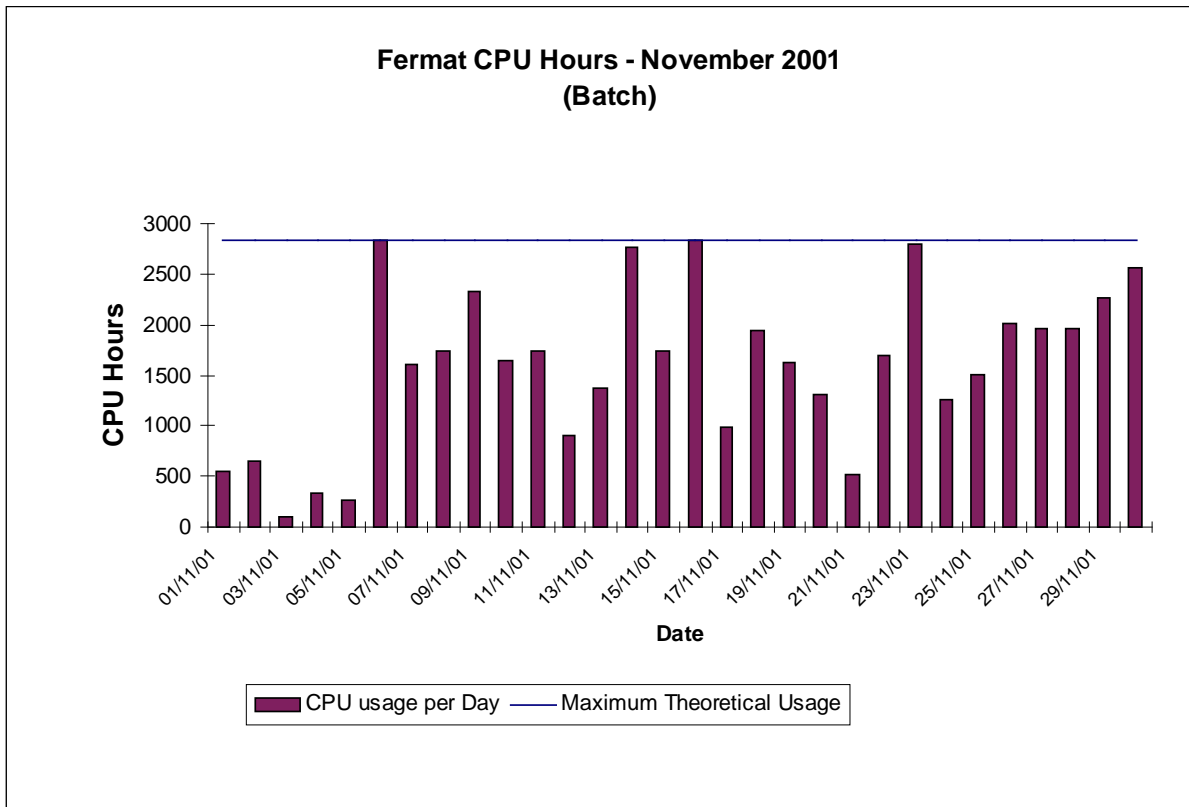
In particular, Turing will continue to start large jobs above 256 PEs, including 512 PEs, when they are queued subject to the overall workload.

4.2 SGI Origin2000 System (Fermat)

The usage of the Origin system was low. The groups most heavily using the Fermat system are CSE006 (Briddon), CSN006 (Price), CSN015 (Proctor) and HPCI Daresbury.

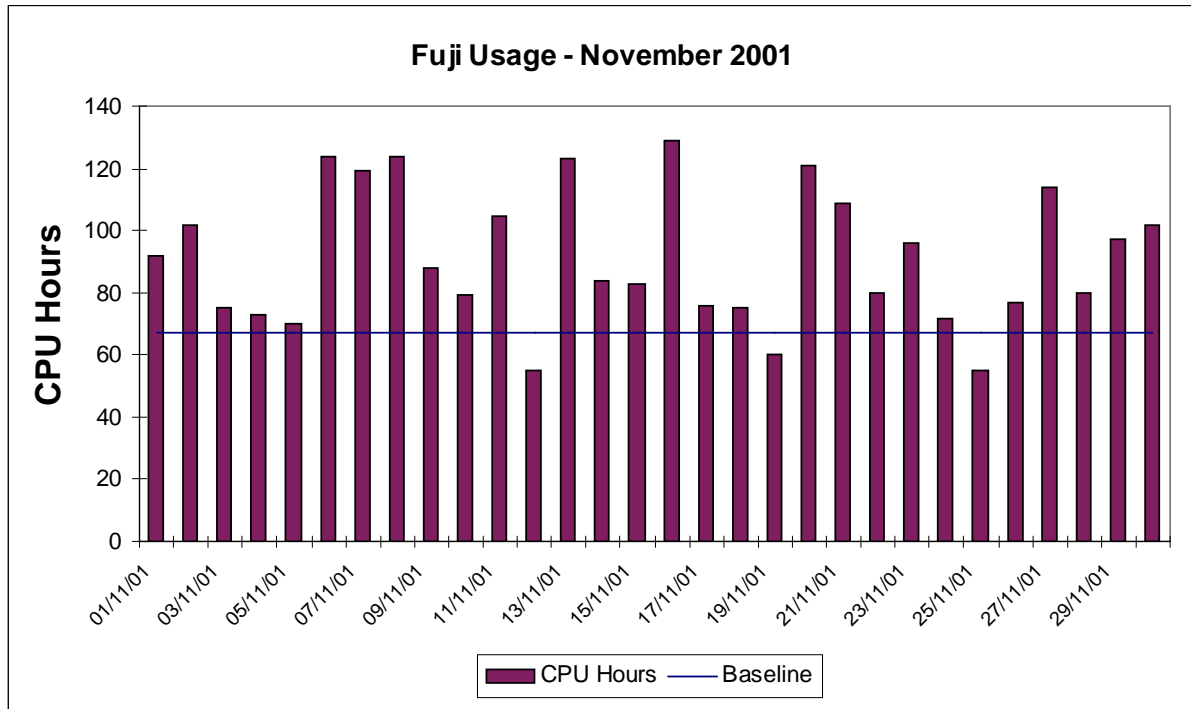


The graph above shows the interactive usage of the upgraded Origin 2000 (Fermat).



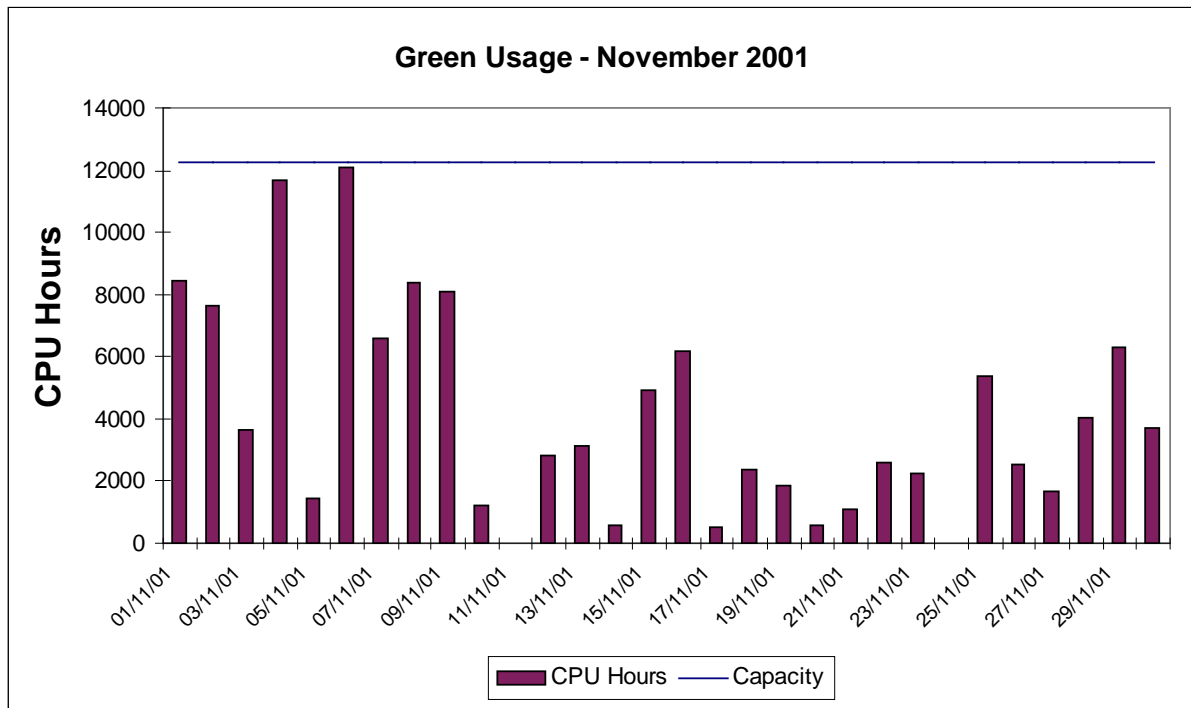
The above graph to a different scale shows the variable batch utilisation of the Origin 128.

4.3 Fujitsu VPP 300/8 System (Fuji)



Fuji utilisation was again variable over the month with the overall position resulting in usage above baseline.

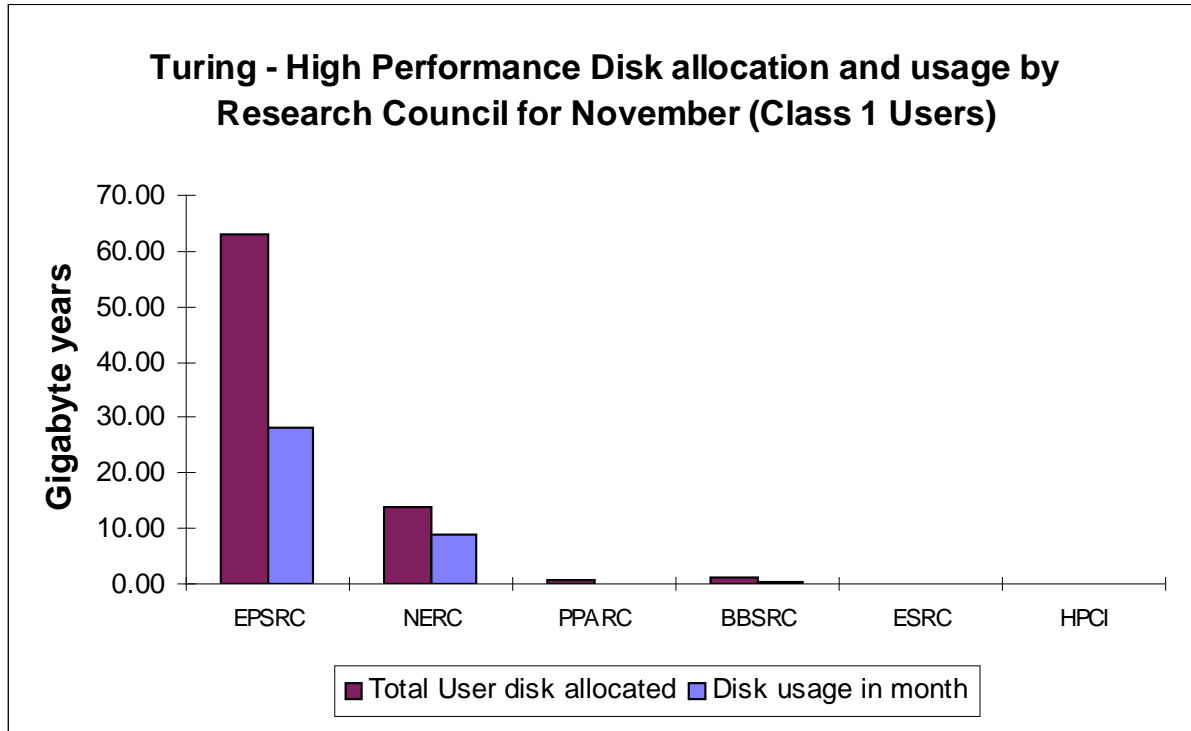
4.4 SGI Origin3000 System (Green)



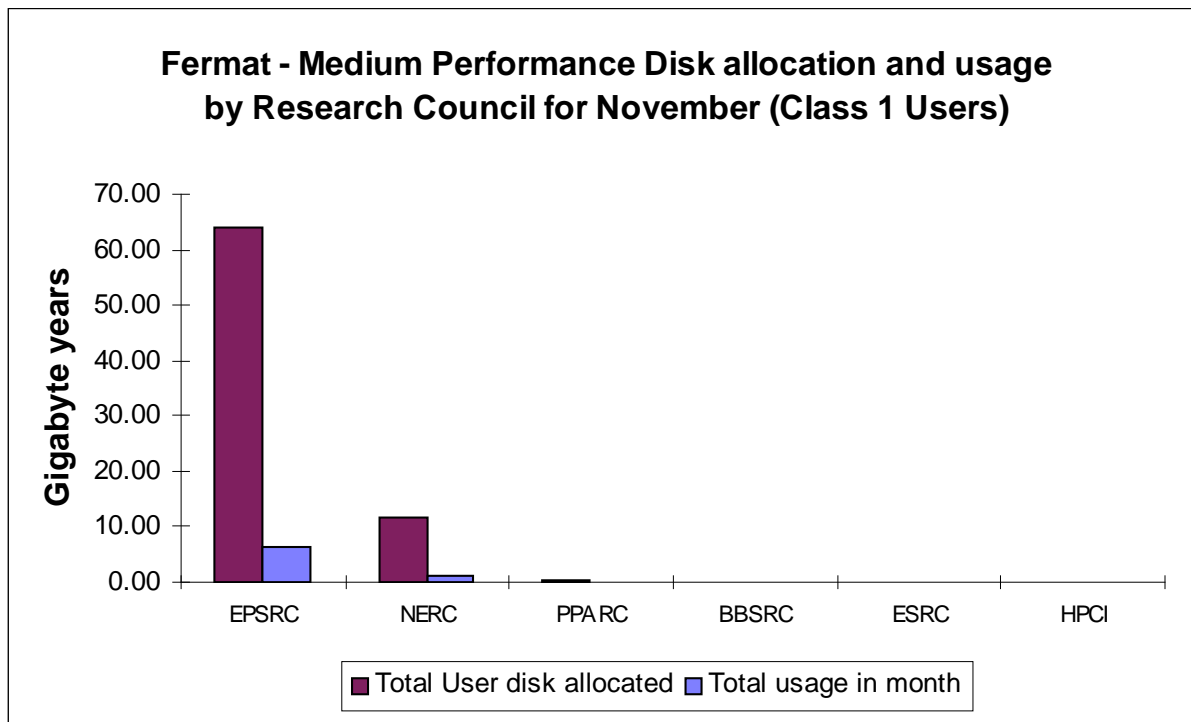
The above graph shows the utilisation of the now upgraded Green for the month of November, which saw the system running with a varied load as shown in the pie chart in section 4.6.

4.5 Disk/HSM Usage Charts

The graphs below show current disk and HSM allocations and usage.

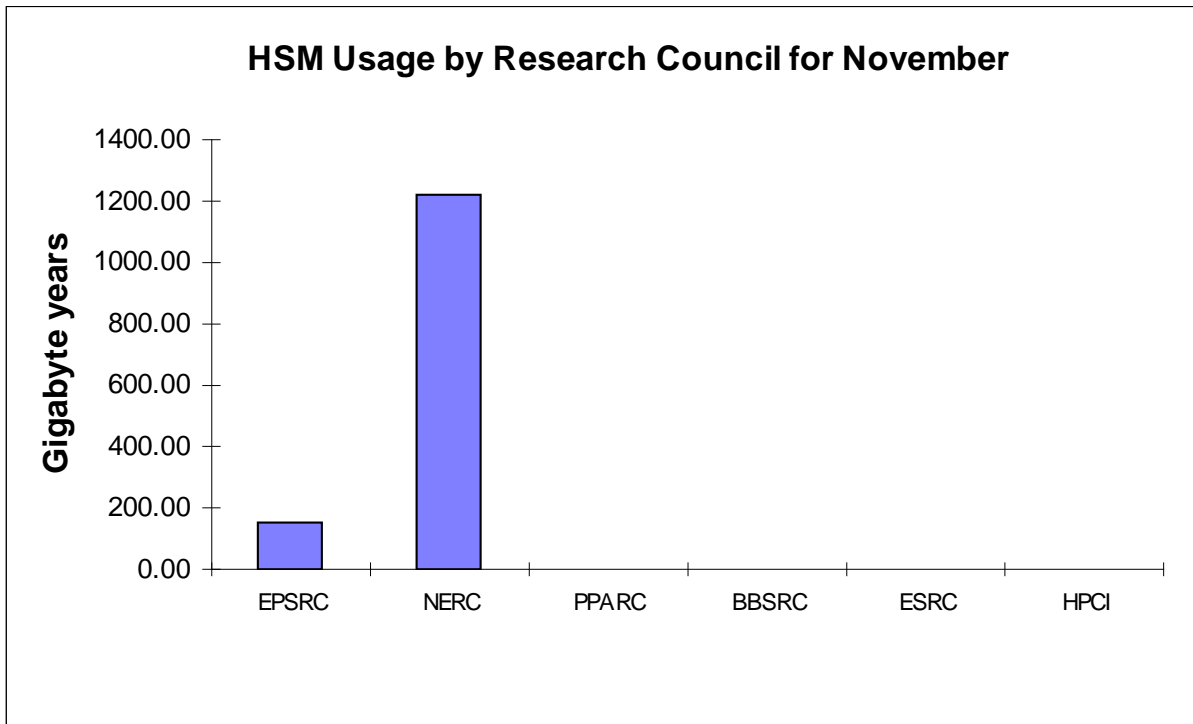


The preceding graph shows actual usage on average against the current allocation of disk on the Turing system.

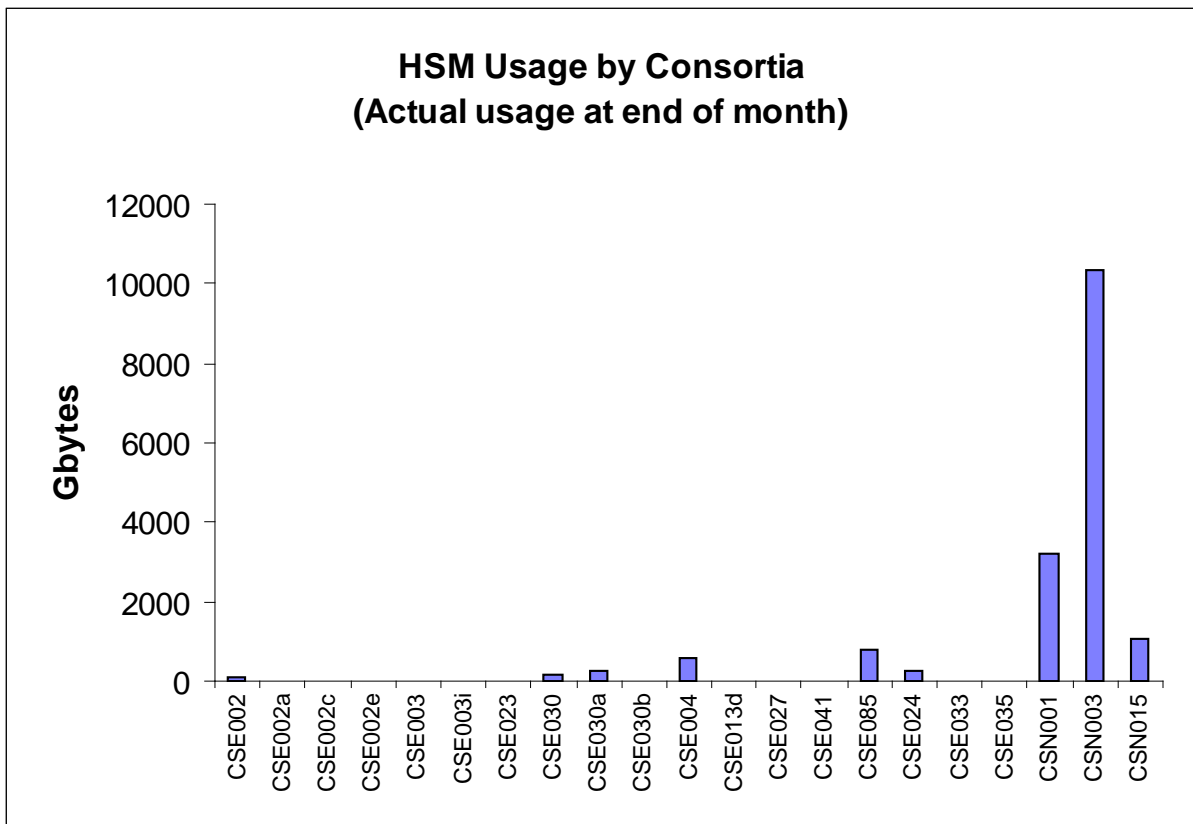


The above graph shows the disk allocations against usage on average of the disk on Fermat.

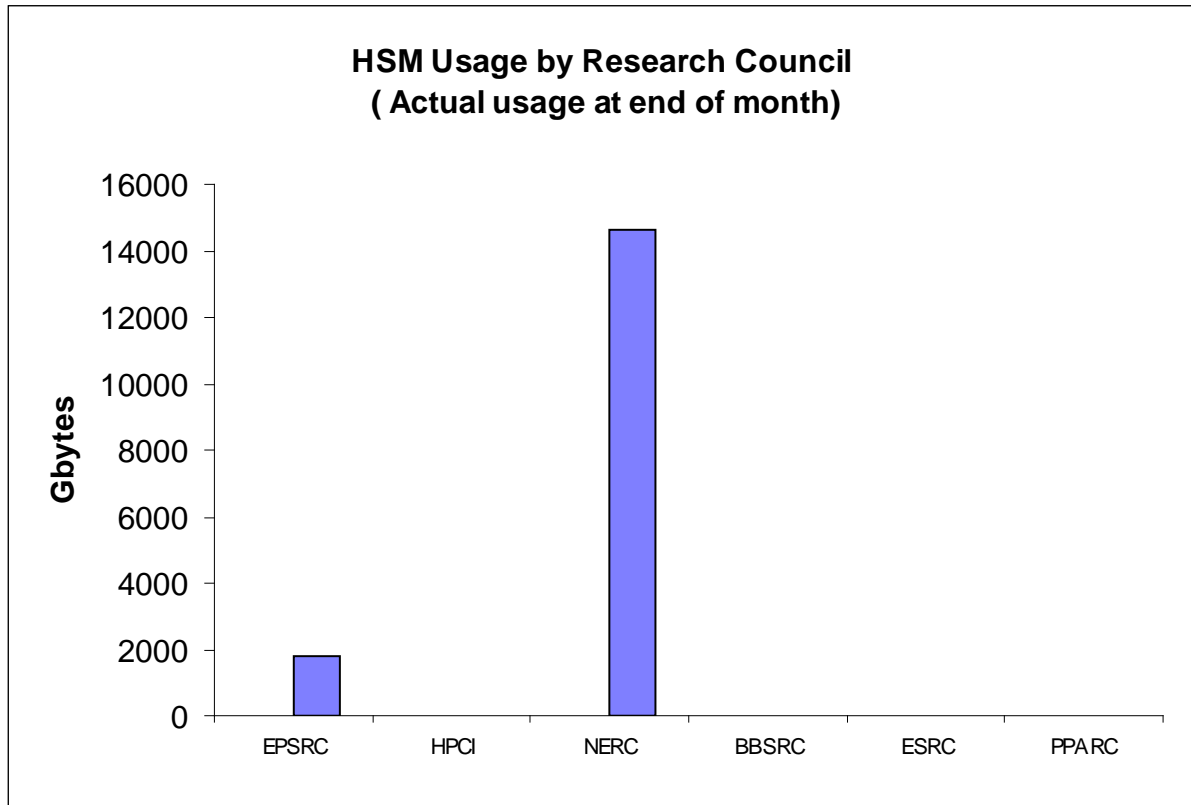
The above graph shows the total usage of the HSM facility by Research Council.



The next two graphs give actual usage of HSM by Consortia and by Research Council.

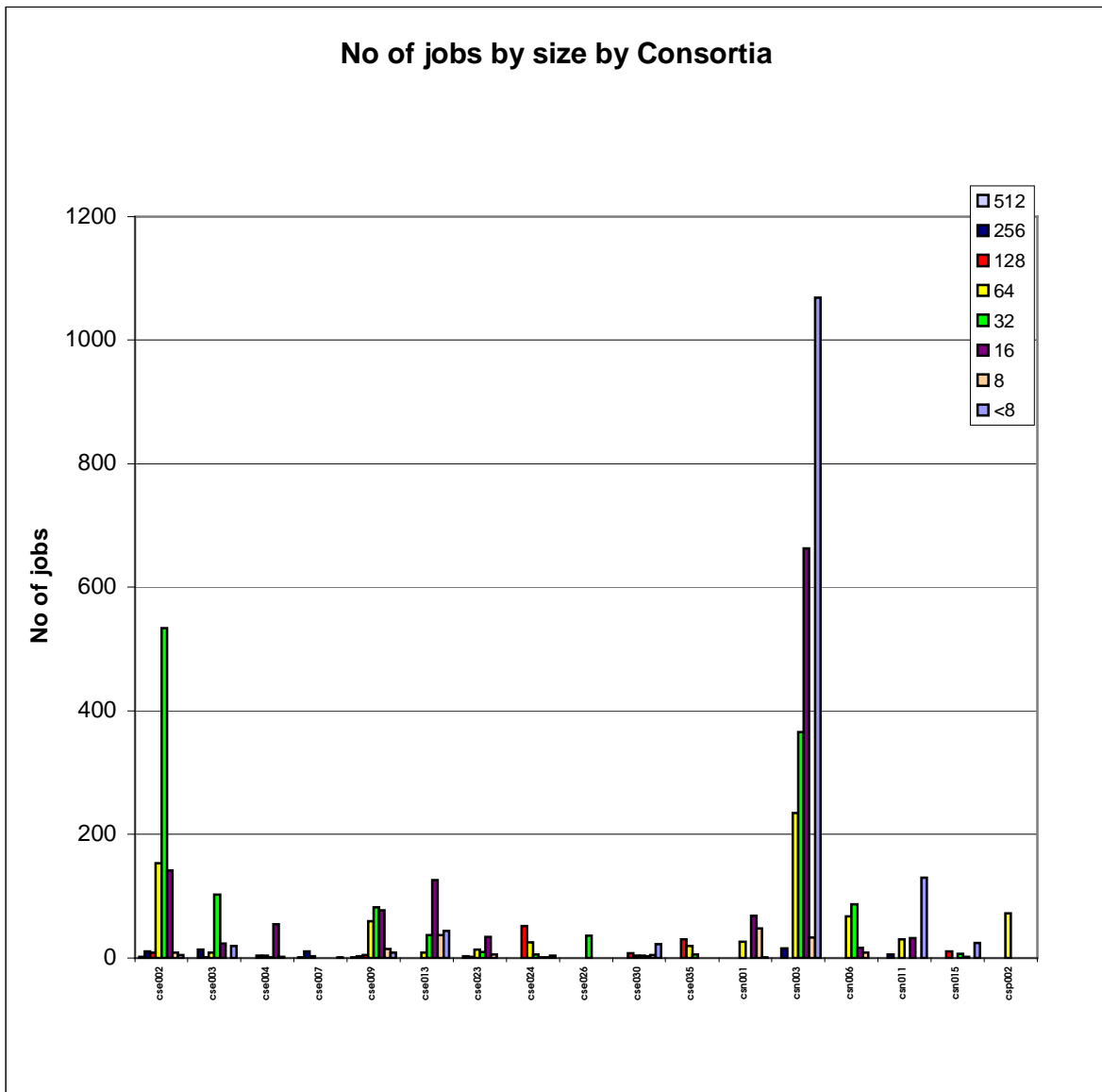


CSE002 (Gillan), CSE003 (Taylor) CSE004 (Sandham), CSE024 (Tennyson), CSN001 (Webb), CSN003 (O'Neill) & CSN015 (Proctor) were the major users of HSM resource.



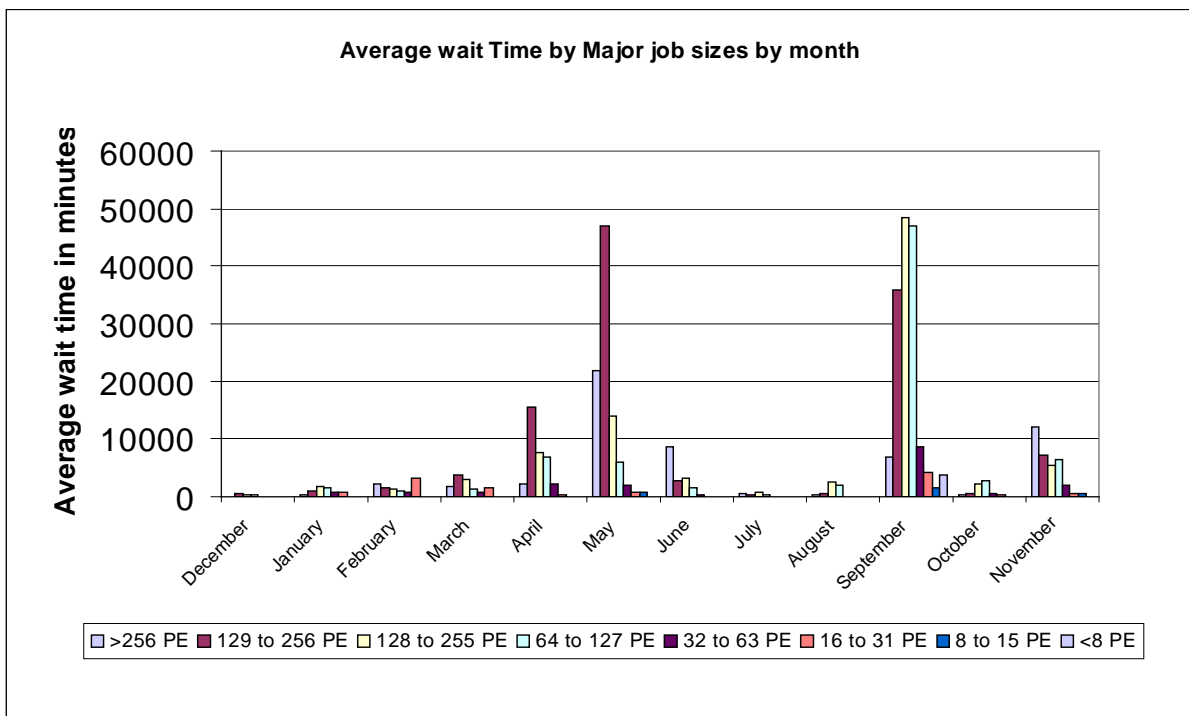
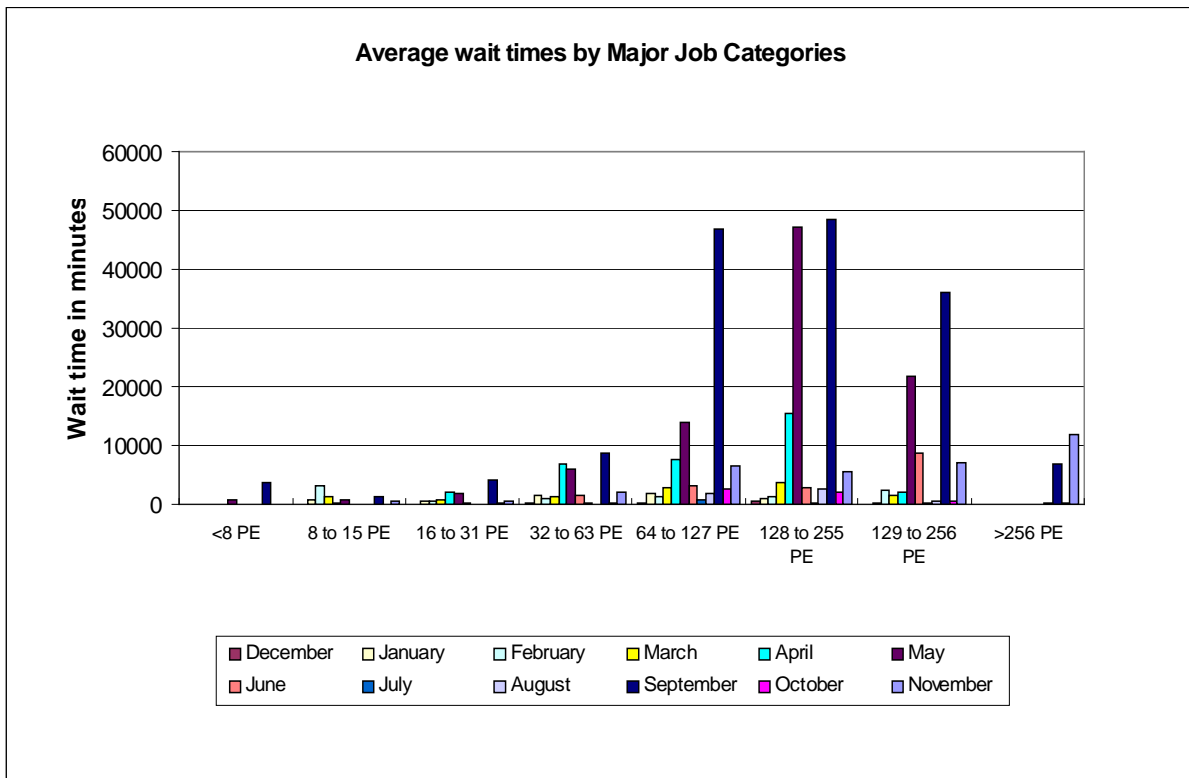
4.6 Processor Usage and Job Statistics Charts

Job statistics for Turing:

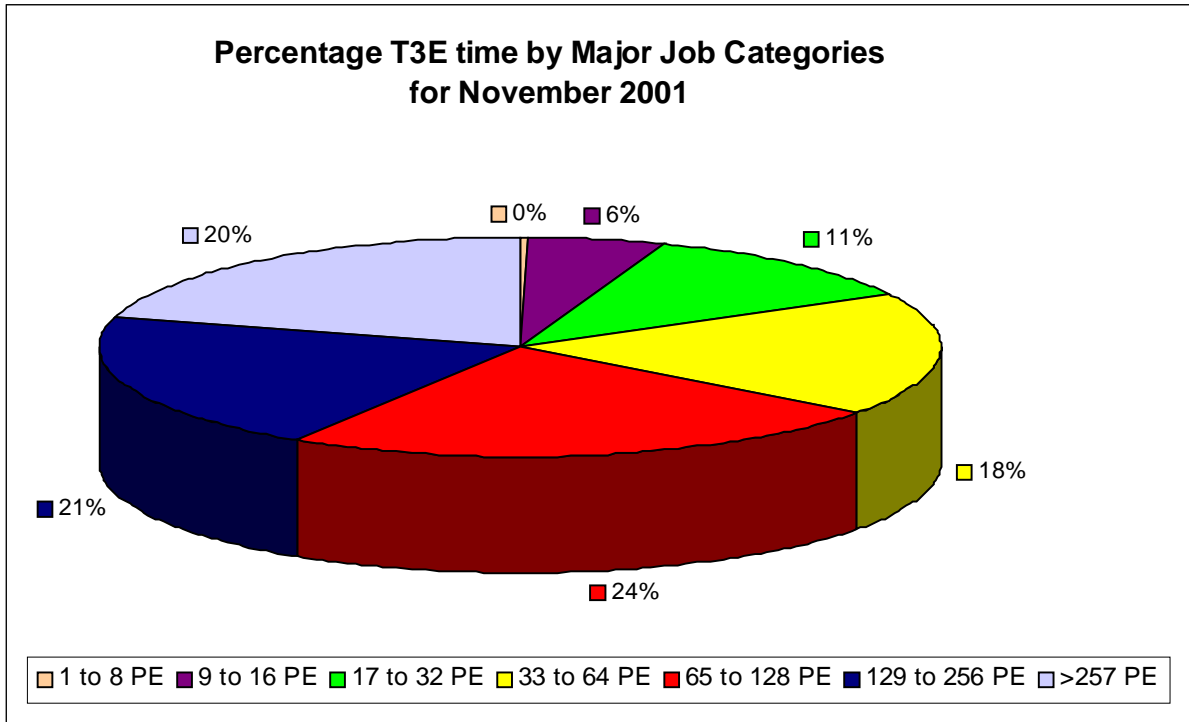


The above graph shows the number of jobs of the major sizes run in the period 1st to 30th November 2001.

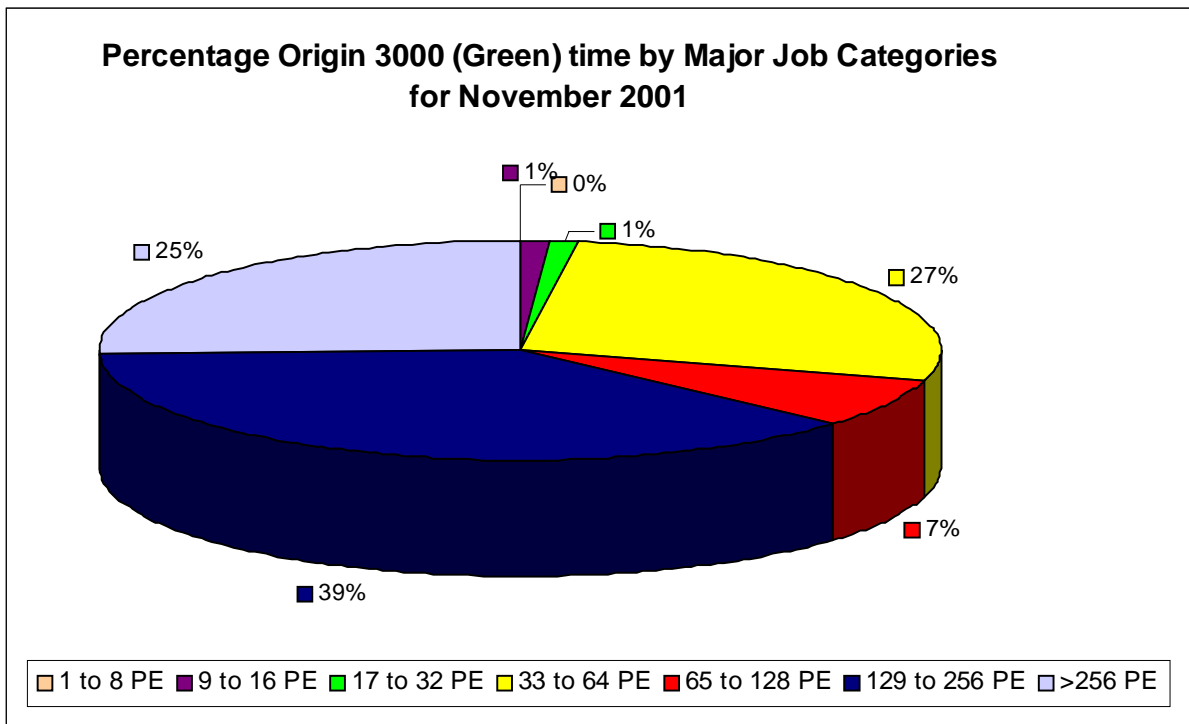
The next graph shows the wait times in minutes on Turing for the major categories of jobs.



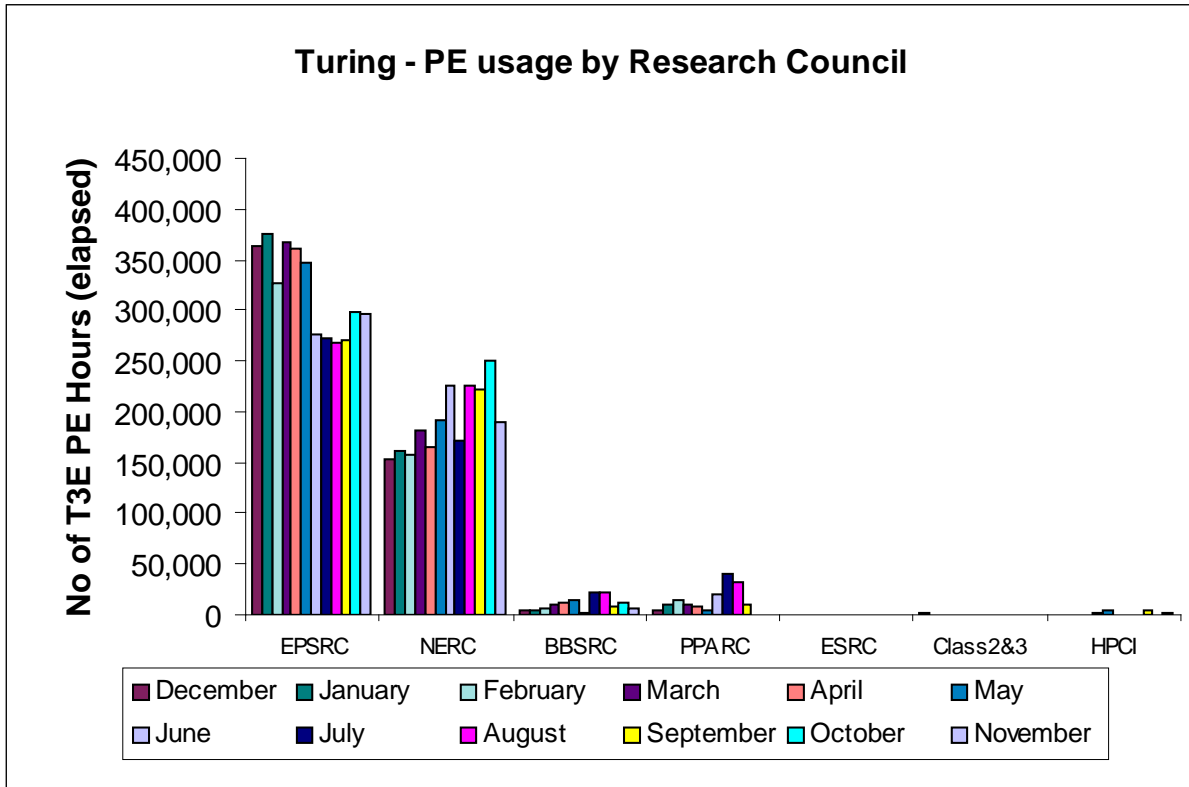
The chart above shows the average wait time trend on Turing over the last 12 months. Wait times for all jobs had fallen as Green is now in full production usage as a 512 PE machine. The trend now shows a slight rise in overall wait times.



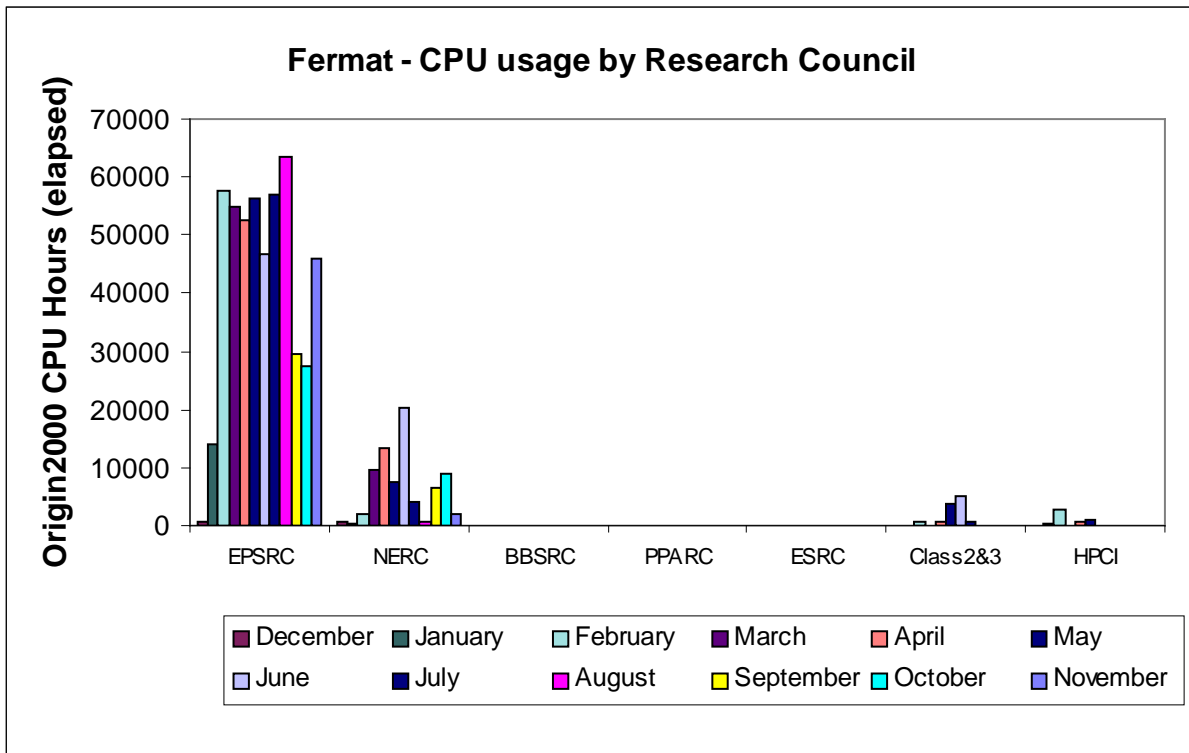
The largest proportion of the workload on Turing, 65%, was greater than 64 PEs in size.



The major allocation of the workload on Green, 71%, was greater than 64 PEs in size.



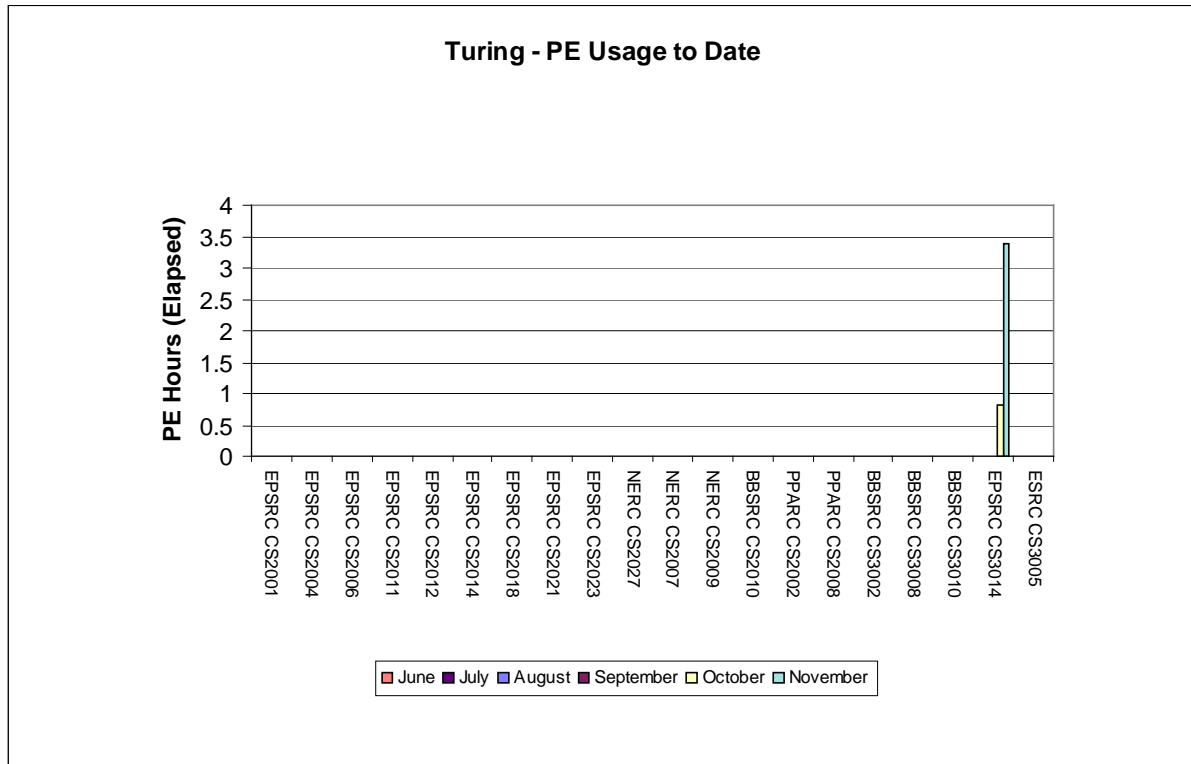
Turing PE usage is shown by Research Council during the past 12 months of service in the above chart.



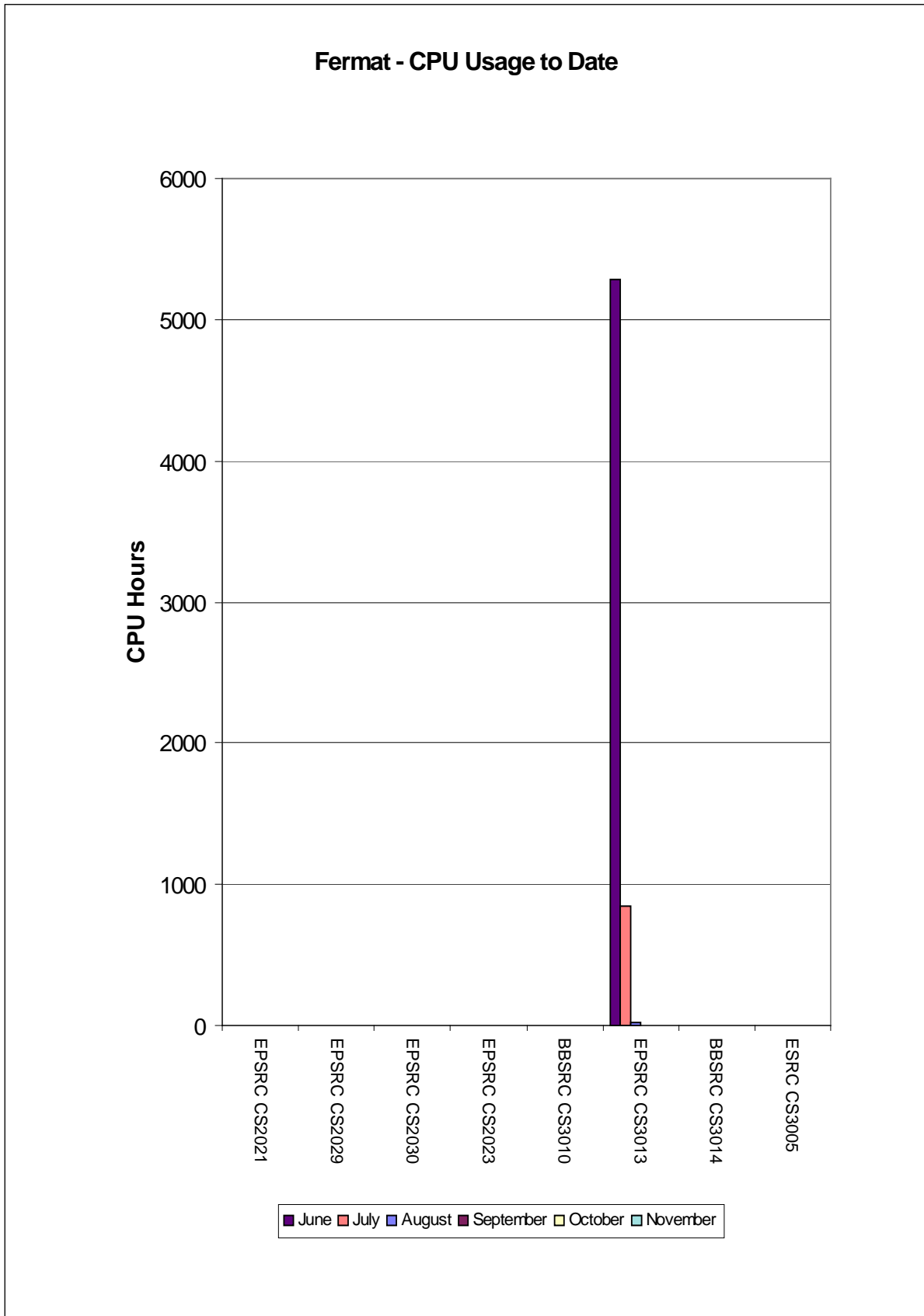
Origin 2000 CPU usage is shown by Research Council during the past 12 months of service in the above chart.

4.7 Class 2 & 3 Usage Charts

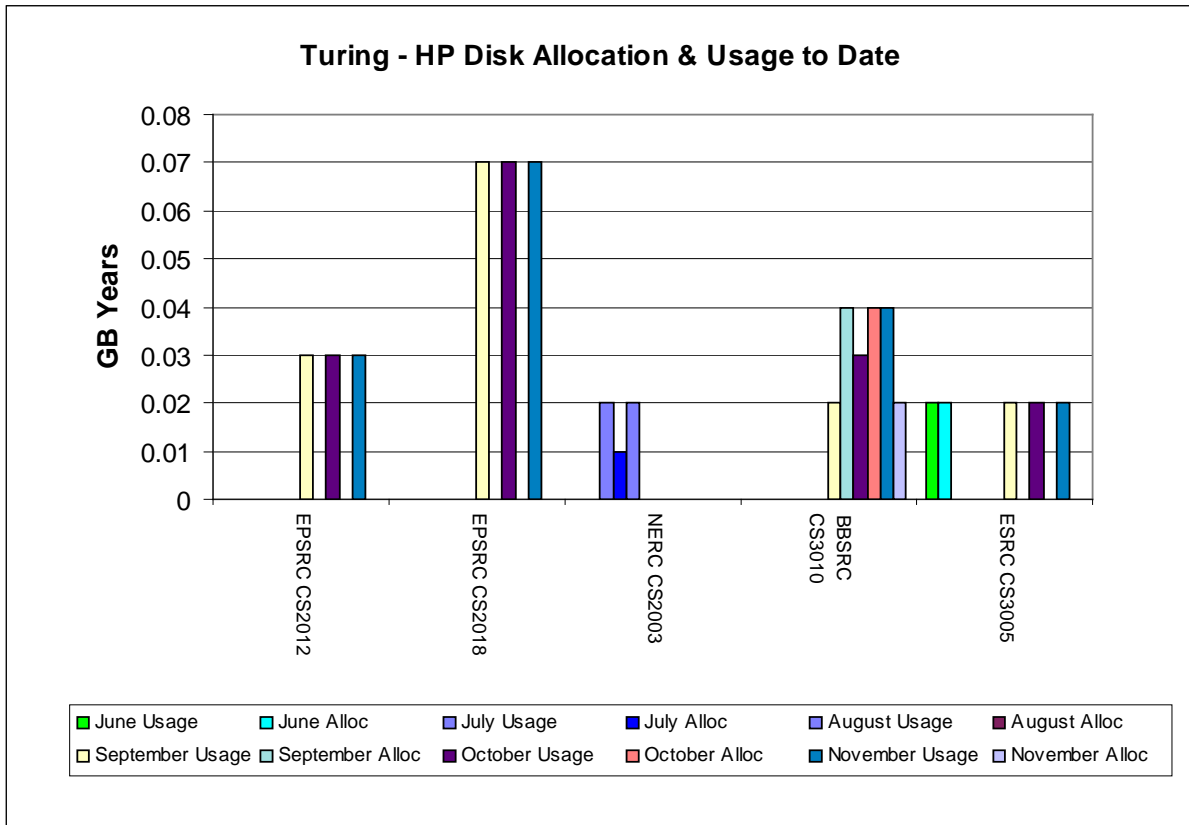
The next series of charts show the usage of the system by the class 2 & class 3 users. The usage is shown by project and identifies the Research Council of the individual projects.



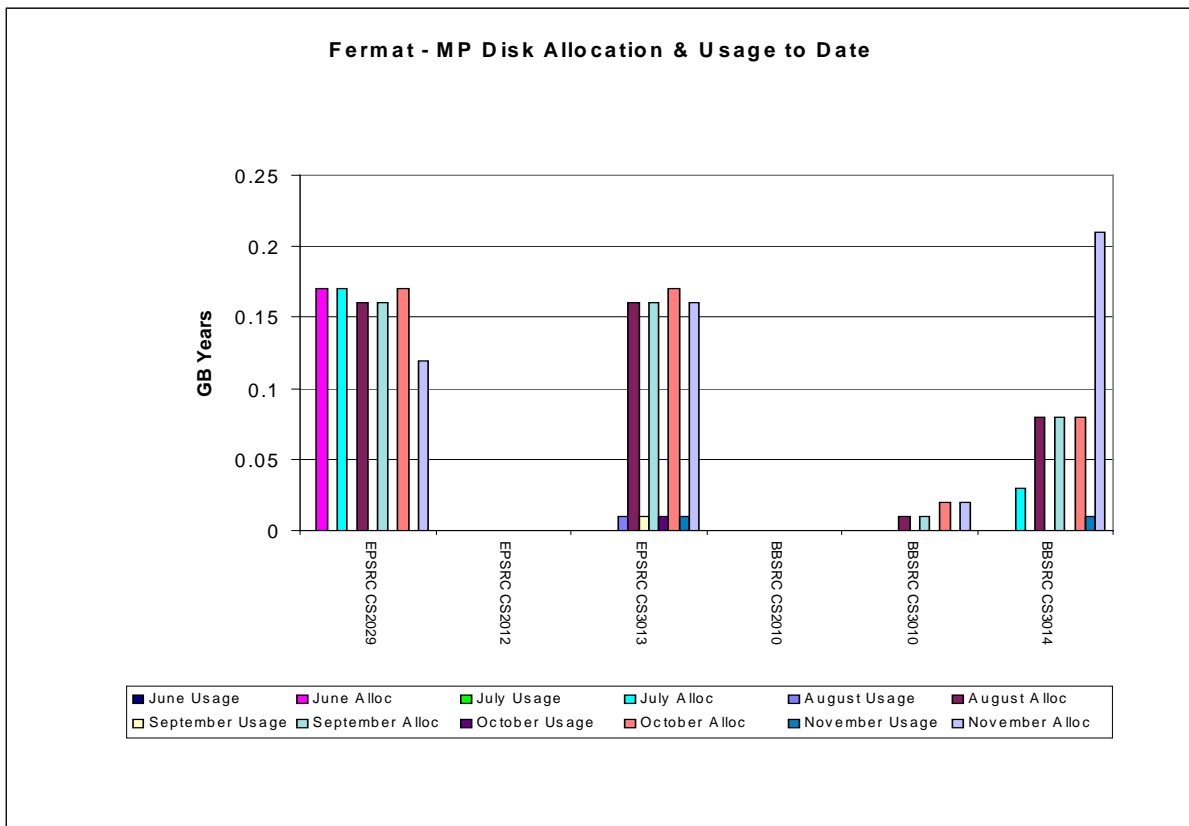
The above chart shows the most significant PE usage of the Turing system by class 2 and class 3 users.



The above chart shows the CPU usage of the Fermat system by class 2 and class 3 users.



The above chart shows the most significant disk allocations on the Turing system for class 2 and class 3 users.

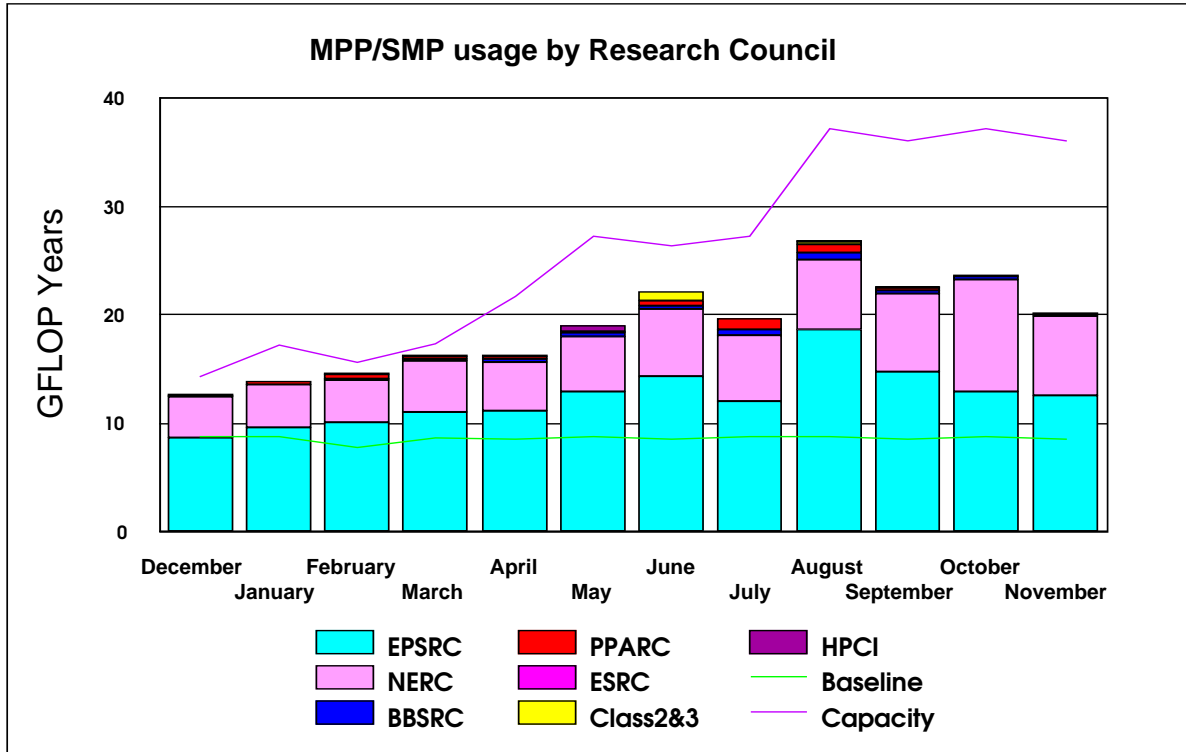


The above chart shows the most significant disk allocations on the Fermat system for class 2 and class 3 users. There is currently no HSM usage by class 2 and class 3 users.

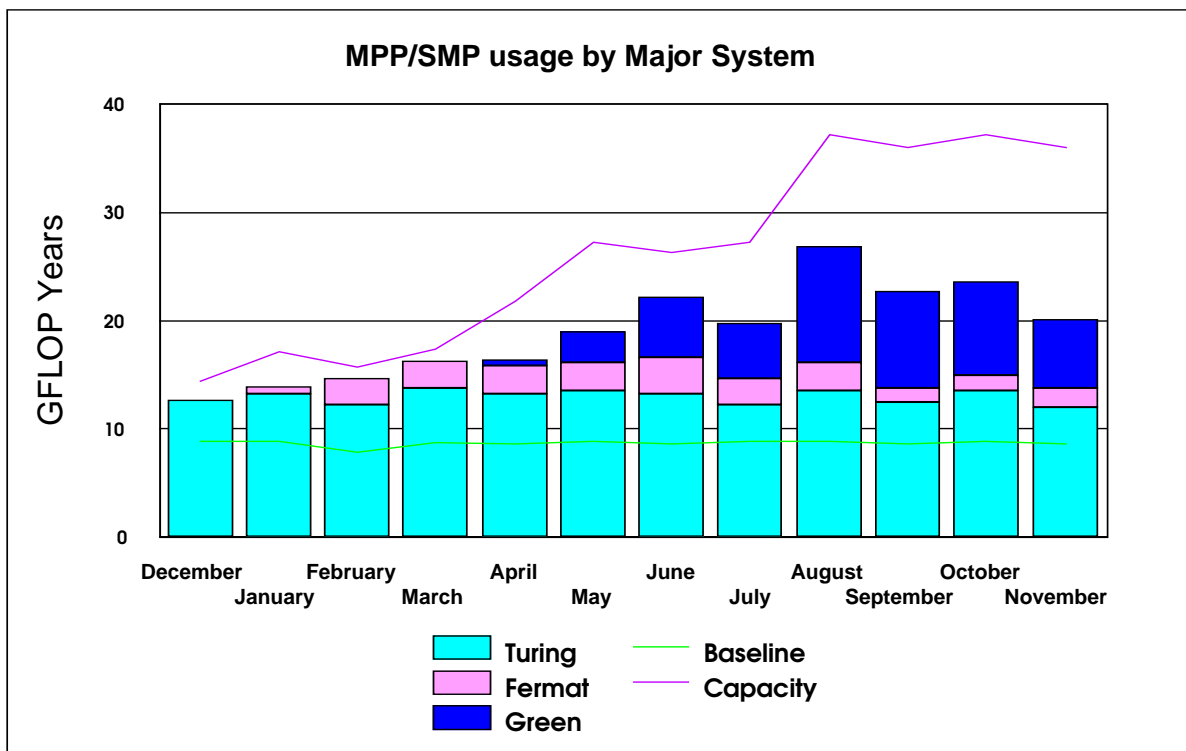
4.8 Charts of Historical Usage

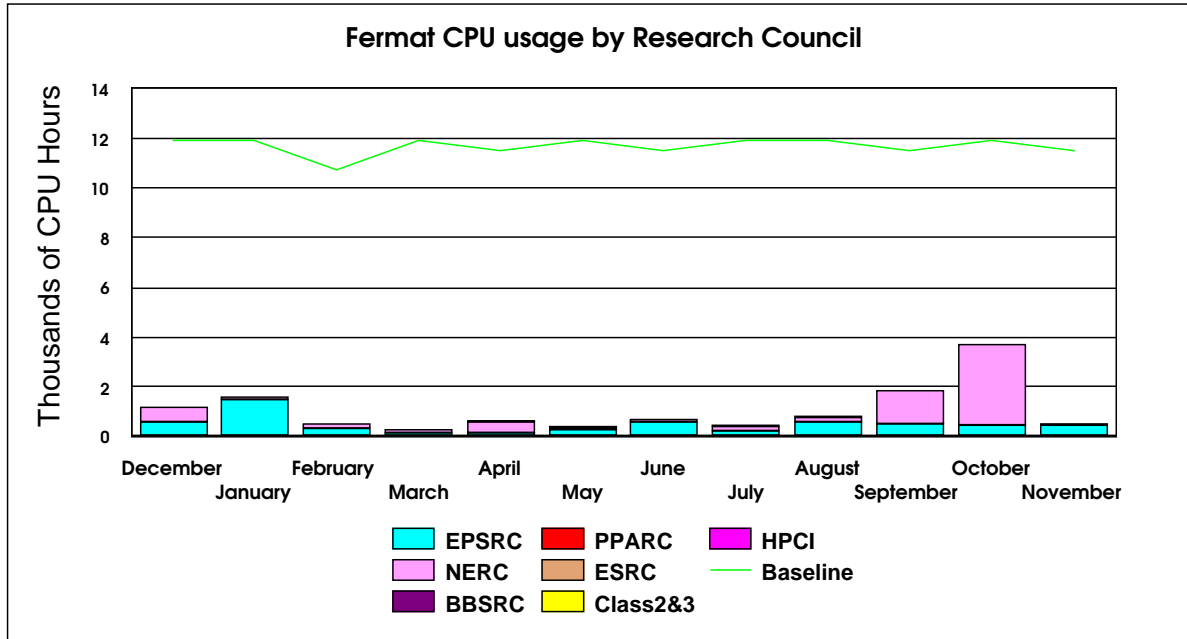
In all the Usage Charts, the baseline varies dependant on the number of days in each month, within a 365-day year.

The graph below shows the GFLOP Year utilisation on Turing and Fermat by Research Council for the previous 12 months; usage in July being reduced due to the outage for the major Green system upgrade.



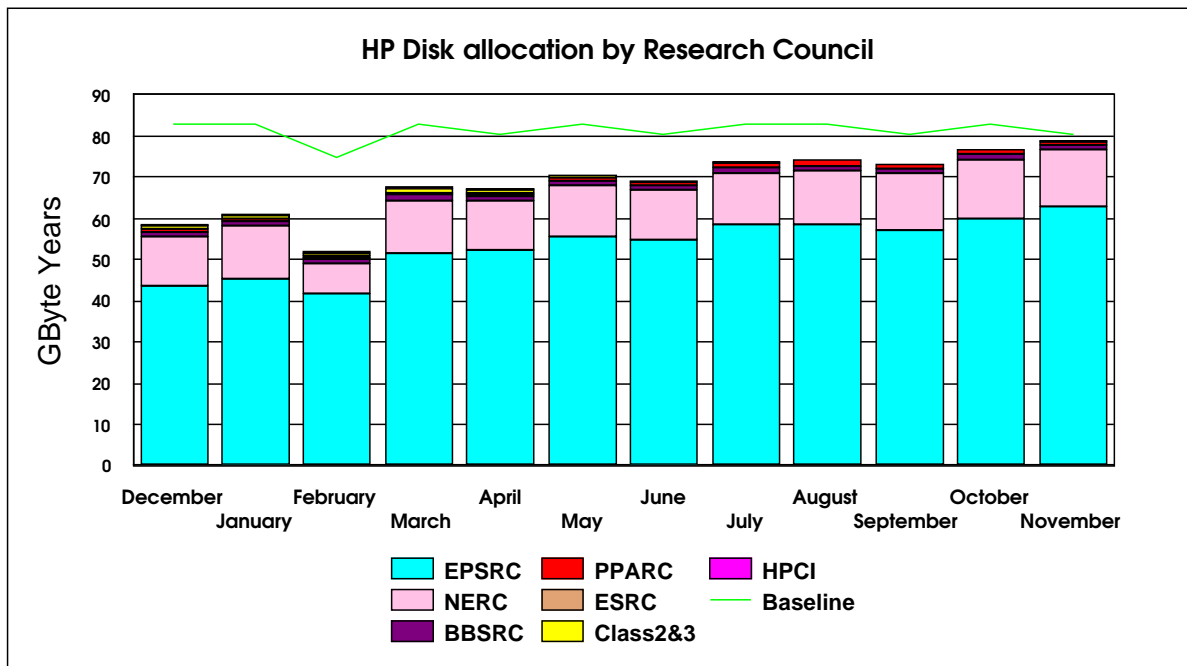
The graph below shows the historic SMP/MPP usage on the major systems, with the upgrades to Fermat showing in January 2001 and Green showing in April to November 2001.



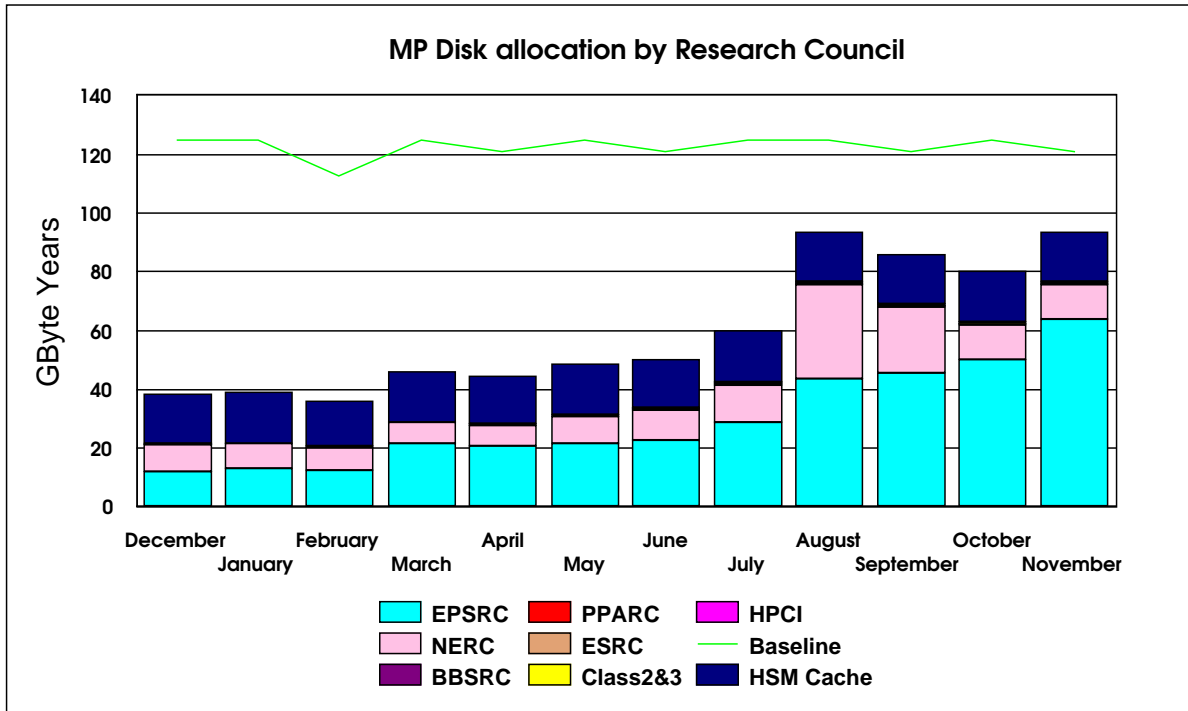


The above graph shows the historic interactive usage of the 'Baseline' Fermat system (equivalent to 16@250Mhz CPU's)

The next series of graphs illustrates the usage of the disk and HSM resources of the system.

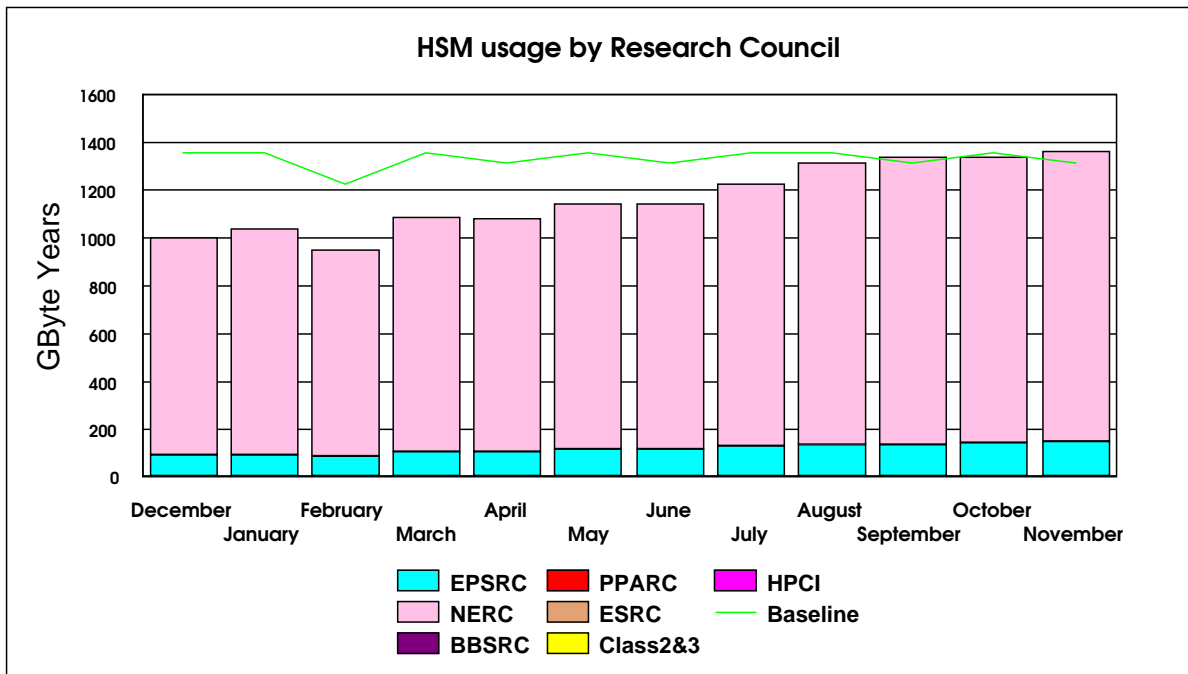


The preceding graph illustrates the historic allocation of the High Performance Disk on Turing, which is now approaching the Baseline level.

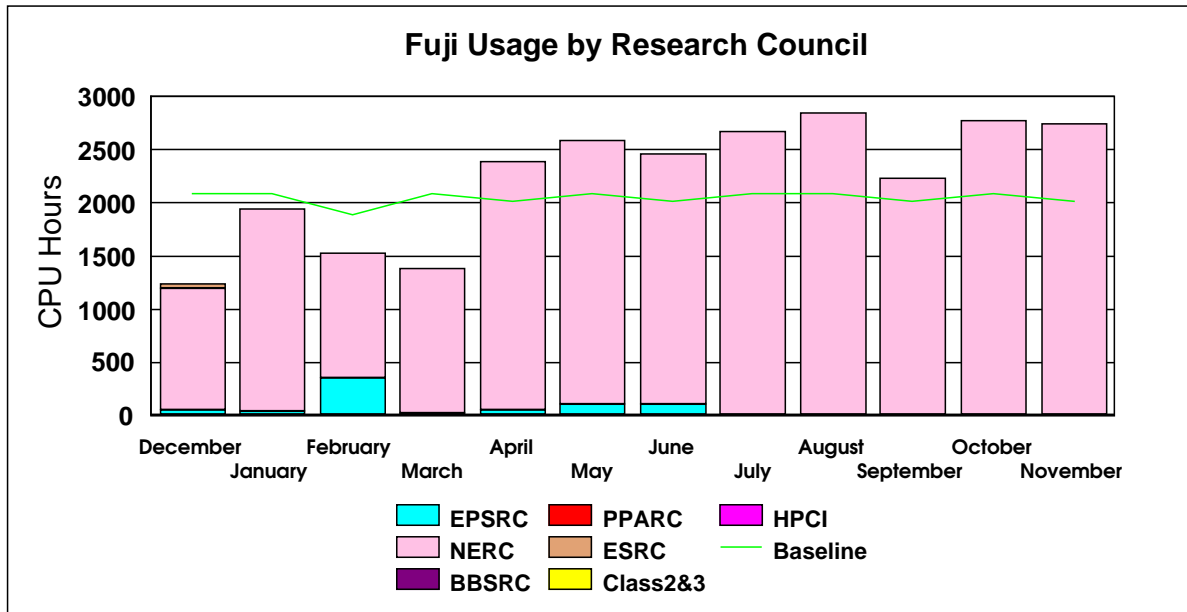


The graph above illustrates the historic allocation of the Medium Performance Disk on Fermat, which is now beginning to grow more rapidly with the growth in usage of both Fermat and Green.

The graph below shows the historic HSM usage by Research Council funded projects, now close to Baseline. The primary usage is for NERC.



The next chart shows the historic usage of the Fuji system.



The Fujitsu system usage was above baseline this month.

4.8 Guest System Usage Charts

There is currently no Guest System usage.

5. Service Status, Issues and Plans

5.1 Status

The service continues to run almost at full capacity.

During the month, 65% of the jobs run on Turing were larger than 64 PEs in size.

During the month, 71% of the jobs run on Green were larger than 64 PEs in size.

5.2 Issues

There have been issues with retrieval times from the HSM system, however plans are in place to address this.

The new drives are now undergoing a period of trial after which the migration from the redwood drives will commence.

5.3 Plans

The new tape drives which will become an integral part of the SAN infrastructure are scheduled to be in production use by the end of December.

6. Conclusion

November 2001 saw the overall CPARS rating at Green with the baseline being exceeded by 55%.

The largest proportion of the workload, on the major systems (Turing & Green), continues to be of the larger job sizes.

Continued management attention will be given to maximise the throughput of the Service, whilst balancing as fairly as practicable the shares between Projects and jobs of the varying sizes.

Appendix 1 contains the accounts for November 2001

Appendix 2 contains the Percentage shares by Consortium for November 2001

Appendix 3 contains the Percentage shares by Research Council for November 2001

Appendix 4 contains the Training, Applications and Optimisation support figures to the end of November 2001

Appendix 5 contains a breakdown of resource usage by Consortia to the end of November 2001.

Appendix 6 contains a reference table of the Consortia name, the subject area and the PI name.

Appendix 1

The summary accounts for the month of November 2001 can be found at the URL below

<http://www.csar.cfs.ac.uk/admin/accounts/summary.shtml>

Appendix 2

Percentage PE time per consortia for Turing in November 2001		Percentage CPU time per consortia for Fermat in November 2001	
Consortia	% Machine Time	Consortia	% Machine Time
CSE002	15.84	CSE002	2.03
CSE003	8.62	CSE003	0.04
CSE021	0.00	CSE021	0.00
CSE023	0.00	CSE023	0.00
CSE025	0.00	CSE025	0.00
CSE030	0.58	CSE030	1.26
CSE051	0.00	CSE051	0.00
CSE055	0.00	CSE055	0.00
CSE057	0.14	CSE057	0.00
CSE084	1.19	CSE084	0.00
CSE006	0.09	CSE006	89.26
CSE026	0.00	CSE026	0.00
CSE004	0.00	CSE004	0.05
CSE013	11.91	CSE013	2.17
CSE014	0.00	CSE014	0.00
CSE016	0.00	CSE016	0.00
CSE027	0.00	CSE027	0.00
CSE040	0.00	CSE040	0.00
CSE041	0.00	CSE041	0.00
CSE043	0.00	CSE043	0.00
CSE052	0.59	CSE052	0.00
CSE053	0.39	CSE053	0.08
CSE056	0.07	CSE056	0.00
CSE063	0.00	CSE063	0.00
CSE085	5.78	CSE085	0.82
CSE008	0.00	CSE008	0.00
CSE009	8.76	CSE009	0.01
CSE024	3.29	CSE024	0.02
CSE033	0.00	CSE033	3.92
CSE035	3.07	CSE035	0.00
CSE019	0.00	CSE019	0.00
CSE020	0.00	CSE020	0.00
CSE066	0.83	CSE066	0.00
CSE034	0.00	CSE034	0.00
CSE036	0.00	CSE036	0.01
HPCI Southampton	0.00	HPCI Southampton	0.00
HPCI Daresbury	0.18	HPCI Daresbury	0.00
HPCI Edinburgh	0.03	HPCI Edinburgh	0.00
CSN001	5.70	CSN001	0.14
CSN003	23.24	CSN003	1.56
CSN005	0.00	CSN005	0.00
CSN006	8.29	CSN006	2.54
CSN007	4.58	CSN007	0.00
CSN010	0.00	CSN010	0.00
CSN011	0.06	CSN011	0.00
CSN012	0.00	CSN012	0.00
CSN015	1.22	CSN015	0.03
CSN017	1.56	CSN017	0.00
CSN036	0.00	CSN036	0.00
CSB001	0.00	CSB001	0.00
CSB002	1.24	CSB002	0.00
CSP002	0.00	CSP002	0.00
CSP003	0.00	CSP003	0.00
CSP004	0.00	CSP004	0.01
CS2018	0.00	CS2018	0.00
CS2021	0.00	CS2021	0.00
CS2023	0.00	CS2023	0.00
CS2026	0.00	CS2024	0.00
CS2027	0.00	CS2027	0.00
CS2029	0.00	CS2029	0.00
CS3001	0.00	CS3001	0.00
CS3002	0.00	CS3002	0.00
CS3005	0.00	CS3005	0.00
CS3007	0.00	CS3007	0.00
CS3008	0.00	CS3008	0.00
CS3010	0.00	CS3010	0.00
CS3012	0.00	CS3012	0.00
CS3013	0.00	CS3013	0.00
CS3014	0.00	CS3014	0.01

Appendix 2

Percentage disc allocation by Consortia for Turing in November 2001		Percentage disc allocation by Consortia for Fermat in November 2001	
Consortia	%Allocation	Consortia	%Allocation
CSE002	23.77	CSE002	6.80
CSE003	8.33	CSE003	8.41
CSE021	0.00	CSE021	0.00
CSE023	0.20	CSE023	12.21
CSE025	0.00	CSE025	0.00
CSE030	19.97	CSE030	37.45
CSE051	0.08	CSE051	0.00
CSE055	0.10	CSE055	0.00
CSE057	0.04	CSE057	0.00
CSE084	1.25	CSE084	0.55
CSE006	0.84	CSE006	0.64
CSE026	0.00	CSE026	0.00
CSE004	0.00	CSE004	0.00
CSE013	1.04	CSE013	0.22
CSE014	0.00	CSE014	0.00
CSE016	0.13	CSE016	0.00
CSE027	0.03	CSE027	0.31
CSE040	0.00	CSE040	0.00
CSE041	0.05	CSE041	0.01
CSE043	0.04	CSE043	0.10
CSE052	0.32	CSE052	0.00
CSE053	0.10	CSE053	0.01
CSE056	0.00	CSE056	0.00
CSE063	0.34	CSE063	0.00
CSE085	15.60	CSE085	11.78
CSE008	0.00	CSE008	0.00
CSE009	5.20	CSE009	0.53
CSE024	0.37	CSE024	0.08
CSE033	0.05	CSE033	3.08
CSE035	0.73	CSE035	0.00
CSE019	0.00	CSE019	0.00
CSE020	0.00	CSE020	0.00
CSE066	1.14	CSE066	1.17
CSE034	0.00	CSE034	0.00
CSE036	0.03	CSE036	0.01
HPCI Southampton	0.00	HPCI Southampton	0.00
HPCI Daresbury	0.10	HPCI Daresbury	0.05
HPCI Edinburgh	0.10	HPCI Edinburgh	0.10
CSN001	10.40	CSN001	10.71
CSN003	2.19	CSN003	1.60
CSN005	0.00	CSN005	0.00
CSN006	4.16	CSN006	1.60
CSN007	0.00	CSN007	0.00
CSN010	0.00	CSN010	0.00
CSN011	0.62	CSN011	0.00
CSN012	0.00	CSN012	0.16
CSN015	0.13	CSN015	1.07
CSN017	0.01	CSN017	0.10
CSN036	0.05	CSN036	0.00
CSB001	0.05	CSB001	0.00
CSB002	1.35	CSB002	0.10
CSP002	0.13	CSP002	0.00
CSP003	0.03	CSP003	0.03
CSP004	0.73	CSP004	0.53
CS2018	0.00	CS2018	0.00
CS2026	0.00	CS2026	0.00
CS2029	0.00	CS2029	0.16
CS3001	0.00	CS3001	0.00
CS3002	0.00	CS3002	0.00
CS3005	0.00	CS3005	0.00
CS3010	0.05	CS3010	0.00
CS3012	0.00	CS3012	0.00
CS3013	0.00	CS3013	0.21
CS3014	0.22	CS3014	0.27

Percentage HSM usage by Research Council for November 2001	
<u>Research Council</u>	<u>% usage</u>
EPSRC	10.88
HPCI	0
NERC	88.99
BBSRC	0
ESRC	0
PPARC	0

Appendix 3

Percentage PE usage on Turing by Reserch Council for November 2001			Percentage CPU usage on Fermat by Reserch Council for November 2001		
Research Council	% Usage		Research Council	% Usage	
EPSRC	60.05		EPSRC	95.72	
HPCI	0.21		HPCI	0.00	
NERC	38.51		NERC	4.27	
BBSRC	1.24		BBSRC	0.01	
ESRC	0.00		ESRC	0.00	
PPARC	0.00		PPARC	0.01	

Percentage Disc allocated on Turing by Research Council for November 2001			Percentage Disc allocated on Fermat by Research Council for November 2001		
Research Council	% Allocated		Research Council	% Allocated	
EPSRC	79.68		EPSRC	83.79	
HPCI	0.20		HPCI	0.16	
NERC	17.57		NERC	15.11	
BBSRC	1.67		BBSRC	0.38	
ESRC	0.00		ESRC	0.00	
PPARC	0.89		PPARC	0.57	

Percentage usage of HSM by Consortium for November 2001	
Consortium	% Usage
CSE002	0.75
CSE003	0.12
CSE023	0.13
CSE030	2.73
CSE004	3.54
CSE013	0.06
CSE027	0.12
CSE041	0.07
CSE085	5.12
CSE024	1.79
CSE033	0.15
CSE035	0.06
CSN001	20.01
CSN003	64.05
CSN015	6.67

Appendix 4

The following tables show the training and support resource usage by the consortias in person days to the current month. Optimisation support for November totalled 0 man days.

Code	PI	Subject	Application Support for November 2001	Total Application Support from July 2000	Optimisation Support for November 2001	Total Optimisation Support from July 2000	Total Support Used	Training Used
Cse002	Dr Phil Lindan	Support for the UKCP		10.75			142.75	-
Cse003	Prof. Ken Taylor	HPC Consortiums 98- 2000		6		15.5	24.5	6
Cse004	Dr Neil Sandham	UK Turbulence						2
Cse006	Dr Patrick Briddon	Covalently Bonded Materials						
Cse007	Dr Matthew Foulkes	Quantum Many Body Theory					1	2
Cse008	Dr Mark Vincent (Hillier)	Model Chemical Reactivity						
Cse009	Dr Ben Slater (Catlow)	HPC in Materials Chemistry		6		3	9	
Cse010	Dr John Williams	Free Surface Flows					15.95	
Cse011	Dr John Williams	Open Channel Flood Plains					2.18	
Cse013	Prof Michael Leschziner	Complex Engineering Flows						3
Cse014	Dr Cassiano de Oliverira (Goddard)	Probs in Nuclear Safety						
Cse016	Dr Stewart Cant	Turbulent Combustion						
Cse017	Dr Kai Luo	Large Eddy Simulation and Modelling of Buoyant Plumes and Smoke Spread in Enclosures						
Cse018	Dr Stewart Cant	Turbulent Flames						
Cse019	Dr Jason Lander (Berzins)	ROPA						
Cse020	Dr Marek Szularz	Symmetric Eigenproblem						
Cse021	Dr Julie Staunton	Magentisim						1
Cse022	Mr Niall Branley (Jones)	Turbulent Flames						
Cse023	Allen	Liquid Crystalline Materials						

Cse024	Dr Robert Allan (Tennyson)	ChemReact 98-2000							-
Cse025	Dr Niels Rene Walet(Bishop)	Nuclear Theory Programme							1.5
Cse026	Dr Maureen Neal	Molecular Dynamics							
Cse027	Dr M Imregun	Excitation Mechanisms							
Cse028	Prof. P.W. Bearman	Bridge Design							
Cse029	Dr David Aspley (Leschziner)	Validation of Turbulence Models							
Cse030	Prof M Cates (VIPAR)	HPC for Complex Fluids		21		5	51		7
Cse033	Dr M Imregun	Tubomachinery core compressor							
Cse034	Dr Paul Durham	R&D of liner/non-linear systems							
Cse035	Dr Stephen Jenkins	Ab Initio Simulations							
Cse036	Prof Iain Duff	R&D of linear/non-linear systems							
Cse040	Dr Ken Badcock	-							
Cse041	Dr M Imregun	Flutter and Noise Generation							
Cse043	Dr J J R Williams	Numerical Simulation of flow over a rough bed							4
Cse051	Prof B L Gyorffy	Ab initio calculations of magnetic anisotropies in Fe							
Cse052	Miss Francesca Di Mare (Hayes)	Heat Transfer in Gas Turbine Combustors							
Cse053	Prof M A Leschziner	Coupling Rans Near-Wall Turbulence Models with Large Eddy Simulation Strategies							
Cse055	Dr Julia Staunton	Ab-initio theory of magnetic anisotropy in transition metal ferromagnets							
Cse056	Dr Mehmet Imregun	Aerothermoelasticity modelling of air riding seals for large gas turbines							
Cse066	Dr Keir Novik	Novel clay-polymer nanocomposites using diversity-discovery methods: synthesis, processing and testing							2

Csn001	Mrs Beverly de Cuevas (Webb)	HPCI Global Ocean Consortium		1			3	1
Csn002	Dr Mark Vincent (Hillier)	Pollutant Sorption on Mineral Surf						
Csn003	Dr Lois Steenman-Clark (O'Neill)	UGAMP						4
Csn005	Dr Huw Davies	Constraining Earth Mantle					27	6
Csn006	Dr John Brodholt (Price)	Density Functional Methods						
Csn007	Dr John Brodholt (Price)	Density Functional Methods						
Csn008	Hulton	Sub-Glacial Process						
Csn009	Dr Roger Proctor							
Csn010	Dr Jason Lander (Mobbs)	Flow over Complex terrain						
Csn011	Dr Ed Dicks (Thorpe)	Exchange of Polluted Air						
Csn012	Prof Tennyson	fuji user						
Csn013	Dr L Steenman-Clark (Voke)	Large-Eddy Simulation Extended by Extreme Value Theory for the Prediction of Dispersion, Concentration Threshold Boundaries and Field Connectivity						
Csn014	Prof Llewellyn-Jones	A new Data Assimilation Scheme to optimise the information on the surface-atmosphere interface from satellite observations of Top-of-the-Atmosphere Brightness Temperature						
Csn015	Dr Roger Proctor	Atlantic Margin Metocean Project		2			2	3
Csn017	Dr Antony Payne	Stability of the Antarctic Ice Sheet						2
Csn036	Prof Keith Haines	Assimilation of Altimeter, Radiometer and in situ data into the OCCAM Model. Analysis of water properties and transports.						
Csb001	Dr David Houldershaw (Goodfellow)	Macromolecular Interactions		1.5			3.5	2

Csb002	Dr Adrian Mulholland (Danson)	Stability of Enzymes at high temp						
Csb003	Dr John Carling (Williams)	Anguilliform Swimming						
Csp002	Dr Sandra Chapman	Nonlinear process in solar system and astrophysical plasmas						4
Csp003	Prof Andrew Lyne	Computing Resources for Precision timing of Millisecond Pulsars		1			2	4
Csp004	Prof K L Bell	A Programme for Atomic Physics for Astrophysics at Queen's University, Belfast (2001 – 2005)						
Css001	Dr I J Turton	Human Systems Modelling						
Css002	Dr Robert Crouchley	Dropout in panel surveys						2
Hpcid	Dr Robert Allan							1
Hpcie	Dr David Henty							
Hpcis	Dr Denis Nicole							
ukhec	Ms K Jaffri							2
Cs2001	Dr Sudhir Jain	3D Ising Spin Glass						
Cs2002	Dr Ingrid Stairs (Lyne)	Millisecond Pulsars					0.25	
Cs2004	Dr A. Paul Watkins	Internal Combustion Engine						
Cs2006	Prof. Walter Temmerman	Superconductivity & Magnetism						
Cs2007	Choularton	Precipitation in the Mountains						1
Cs2008	Dr Matthew Genge	Extraterrestrial Mineral Surfaces					7.91	
Cs2009	Dr Roger Proctor	Atlantic Margin Metocean Project						
Cs2010	Dr Christopher Dempsey	Helical membrane-lytic peptides						
Cs2011	Dr D Drikakis	Transition & Turbulence in Physiological Flows						
Cs2012	Prof Ning Qin	Monotone Integrated Large Eddy Simulation						1.5
Cs2014	Dr Vladimir Karlin	Dynamics of intrinsically unstable premixed flames						2

Cs2015	Mr Pablo Tejera-Cuesta	Nonlinear Methods in Aerodynamics							1.5
Cs2016	Dr Jim Miles	Investigation of Scaline Properties of Hierarchical Micromagnetic Models							
Cs2017	Mr Markus Eisenbach	Ab initio calculations of magnetic anisotropies in Fe inclusions in Cu							
Cs2018	Mr Maxim Chichkine	Study of defect clusters in silicon for sub-micron technologies							
Cs2019	Dr Guy H Grant	Theoretical studies of flavoproteins							
Cs2020	Prof John Barker	Predicting the applicability of Aquifer Storage Recovery (ASR) in the UK							
Cs2021	Dr A R Mount	A Computational Study of the Luminescence of Substituted Indoles							1
Cs2022	Dr Philippa Browning	Numerical simulation of forced magnetic reconnection							2
Cs2023	Prof W Ewen Smith	The use of DFT methods for the accurate prediction of the Ramen spectrum of large molecules							
Cs2024	Prof J G Doyle	Modelling of late-type stellar chromospheres							
Cs2026	Dr R J Greenall	Molecular dynamics simulations of AT-tract DNA							
Cs2027	Dr Anthony Kay	Mathematical Model of the Circulation of Lake Baikal							
Cs2028	Dr James F Annett	Numerical Tests of Disorder Effects in D-Wave Superconductors							
Cs2029	Prof B L Gyorffy	Ab-initio calculations of unconventional electronic, magnetic and lattice properties of magnitudes							
Cs2030	Prof G J Morgan	Spin Diffusion in Magnetic Multilayers							1
Cs3001	Mr John Andrew Staveley	Helical Coherent Structures					0		3
Cs3002	Dr Keir Novik	Simulations of DNA oligomers							2
Cs3003	Dr Eric Chambers	Band III peptide fragments							

Cs3004	Prof Nick Avis	Computational Steering and Interactive Virtual Environments						1
Cs3005	Mr Behrouz Zarei	Simulation of Queuing Networks						3
Cs3006	Mr F Li	Quantifying Room Acoustic Quality						1
Cs3007	Emma Finch	Development of a 3D Crustal Lattice Solid Model		7		5	12	-
Cs3008	Dr B J Alsberg	Development of a 3D QSAR method based on quantum topological descriptors						
Cs3009	Dr D Flower	Epitope Prediction Methods based on molecular dynamics simulation						
Cs3010	Dr K Kemsley	Investigation of electromyographic recordings of muscle activity during chewing, and of relationships with perceived flavour and texture, in model and real food systems					-	1
Cs3012	Prof Jim Austin	Evaluation of binary neural networks on a vector parallel processor				3	3	2
Cs3013	Prof Rasmita Raval	Structure and function of Chiral Bioarrays: A fundamental approach to proteomic devices						
CS014	Dr John Brooke	Enabling UK Academic Grid Application Development and Testing						

Appendix 5

The following tables show resource utilisation by Consortia to the end of November 2001.

<p>cs2030 Morgan - Last Trade: Wed Oct 17 09:28:43 2001 Start: 0 End 0 cs2030 used 0.1 of 6.7 Hour SMP CPU (0.0 of 0.3 G.S.T), 1.1% cs2030 used 0.0 of 2.5 GByteYear MP Disk (0.0 of 10.7 G.S.T), 0.0% cs2030 used 40.3 of 1400.7 Hour Green CPU (2.1 of 73.2 G.S.T), 2.9% cs2030 used 0.0 of 1.0 PersonDay Support (0.0 of 11.2 G.S.T), 0.0% cs2030 used 1.0 of 1.0 Day Training (4.6 of 4.6 G.S.T), 100.0% project cs2030 has used 6.7 of 100.0 Generic Service Tokens, 6.7%</p>
<p>cs2031 Ess - Last Trade: Fri Oct 5 15:41:11 2001 Start: 0 End 0 cs2031 used 0.0 of 2518.7 Hour SMP CPU (0.0 of 97.9 G.S.T), 0.0% cs2031 used 0.0 of 0.5 GByteYear MP Disk (0.0 of 2.1 G.S.T), 0.0% project cs2031 has used 0.0 of 100.0 Generic Service Tokens, 0.0%</p>
<p>cs2032 Vekstein - Last Trade: Mon Dec 3 10:33:06 2001 Start: 0 End 1022799600 cs2032 used 0.0 of 125.9 Hour VPP_CPU (0.0 of 59.2 G.S.T), 0.0% cs2032 used 0.0 of 5.0 GByteYear Fuji Disk (0.0 of 21.4 G.S.T), 0.0% cs2032 used 0.0 of 0.5 PersonDay Support (0.0 of 5.6 G.S.T), 0.0% cs2032 used 0.0 of 3.0 Day Training (0.0 of 13.8 G.S.T), 0.0% project cs2032 has used 0.0 of 100.0 Generic Service Tokens, 0.0%</p>
<p>cs2033 Kapoor - Last Trade: Mon Dec 3 16:10:52 2001 Start: 0 End 0 cs2033 used 0.0 of 237.3 Hour SMP CPU (0.0 of 9.2 G.S.T), 0.0% cs2033 used 0.0 of 0.1 GByteYear MP Disk (0.0 of 0.4 G.S.T), 0.0% cs2033 used 0.0 of 6.0 PersonDay Support (0.0 of 67.4 G.S.T), 0.0% cs2033 used 0.0 of 5.0 Day Training (0.0 of 22.9 G.S.T), 0.0% project cs2033 has used 0.0 of 100.0 Generic Service Tokens, 0.0%</p>
<p>cs3010 Kemsley - Last Trade: Wed Jan 24 13:42:56 2001 Start: 0 End 0 cs3010 used 2.6 of 2005.8 PEHour MPP PE CPU (0.1 of 48.5 G.S.T), 0.1% cs3010 used 0.8 of 12.0 GByteYear HP Disk (6.2 of 92.9 G.S.T), 6.7% cs3010 used 2.3 of 1244.7 Hour SMP CPU (0.1 of 48.4 G.S.T), 0.2% cs3010 used 0.0 of 10.0 GByteYear MP Disk (0.0 of 42.9 G.S.T), 0.0% cs3010 used 0.0 of 400.0 Hour VPP_CPU (0.0 of 188.1 G.S.T), 0.0% cs3010 used 0.1 of 12.0 GByteYear Fuji Disk (0.4 of 51.5 G.S.T), 0.8% cs3010 used 0.0 of 4.0 PersonDay Support (0.0 of 44.9 G.S.T), 0.0% cs3010 used 1.0 of 8.0 Day Training (4.6 of 36.7 G.S.T), 12.5% project cs3010 has used 11.4 of 553.8 Generic Service Tokens, 2.1%</p>
<p>cs3013 Raval - Last Trade: Fri Apr 6 14:25:12 2001 Start: 0 End 0 cs3013 used 10130.4 of 11959.9 Hour SMP CPU (393.6 of 464.7 G.S.T), 84.7% cs3013 used 1.3 of 4.0 GByteYear MP Disk (5.6 of 17.2 G.S.T), 32.8% cs3013 used 0.0 of 2.0 PersonDay Support (0.0 of 22.5 G.S.T), 0.0% project cs3013 has used 399.2 of 504.3 Generic Service Tokens, 79.2%</p>
<p>cs3014 Brooke - Last Trade: Fri Jun 1 11:04:43 2001 Start: 0 End 0 cs3014 used 4.2 of 1000.0 PEHour MPP PE CPU (0.1 of 24.2 G.S.T), 0.4% cs3014 used 0.3 of 20.0 GByteYear HP Disk (2.4 of 154.8 G.S.T), 1.6% cs3014 used 11.2 of 1000.0 Hour SMP CPU (0.4 of 38.9 G.S.T), 1.1% cs3014 used 0.6 of 15.0 GByteYear MP Disk (2.6 of 64.3 G.S.T), 4.1% cs3014 used 0.0 of 40.0 GByteYear HSM/Tape (0.0 of 10.7 G.S.T), 0.0% cs3014 used 7.5 of 1000.0 Hour Green CPU (0.4 of 52.3 G.S.T), 0.8% cs3014 used 0.0 of 210.1 Hour VPP_CPU (0.0 of 98.8 G.S.T), 0.0% cs3014 used 0.0 of 10.0 GByteYear Fuji Disk (0.0 of 42.9 G.S.T), 0.0% project cs3014 has used 6.0 of 486.8 Generic Service Tokens, 1.2%</p>

csb001 27/B13508 Goodfellow - Last Trade: re-enabled Start: 0 End 0
 csb001 used 148619.6 of 250989.4 PEHour MPP PE CPU (3593.4 of 6068.6 G.S.T), 59.2%
 csb001 used 7.5 of 48.1 GByteYear HP Disk (58.1 of 372.5 G.S.T), 15.6%
 csb001 used 0.3 of 1.2 Hour SMP CPU (0.0 of 0.0 G.S.T), 21.2%
 csb001 used 6.1 of 13.7 GByteYear MP Disk (26.3 of 58.9 G.S.T), 44.7%
 csb001 used 0.0 of 115.0 GByteYear HSM/Tape (0.0 of 30.7 G.S.T), 0.0%
 csb001 used 2454.8 of 12444.9 Hour Green CPU (128.3 of 650.3 G.S.T), 19.7%
 csb001 used 3.5 of 6.0 PersonDay Support (39.3 of 67.4 G.S.T), 58.3%
 csb001 used 2.0 of 4.0 Day Training (9.2 of 18.4 G.S.T), 49.8%
 project csb001 has used 3854.6 of 7266.8 Generic Service Tokens, 53.0%

csb002 86/B10059 Danson - Last Trade: Fri Nov 23 15:30:49 2001 Start: 0 End 0
 csb002 used 73795.4 of 84867.4 PEHour MPP PE CPU (1784.3 of 2052.0 G.S.T), 87.0%
 csb002 used 31.0 of 57.0 GByteYear HP Disk (240.2 of 441.3 G.S.T), 54.4%
 csb002 used 0.0 of 0.0 Hour SMP CPU (0.0 of 0.0 G.S.T)
 csb002 used 2.3 of 0.8 GByteYear MP Disk (10.0 of 3.6 G.S.T), 279.8%
 project csb002 has used 2034.4 of 2496.8 Generic Service Tokens, 81.5%

CSE001 - Admin users - Last Trade: Fri Oct 8 15:16:30 1999 Start: 0 End 0
 cse001 used 0.0 of 12.4 PEHour MPP PE CPU (0.0 of 0.3 G.S.T), 0.0%
 cse001 used 0.1 of 0.1 GByteYear HP Disk (0.5 of 0.7 G.S.T), 64.7%
 project cse001 has used 0.5 of 1.0 Generic Service Tokens, 45.3%

cse002 GR/N02337 Bird - Last Trade: re-enabled Start: 0 End 0
 cse002 used 2073627.4 of 3385251.3 PEHour MPP PE CPU (50137.6 of 81851.0 G.S.T), 61.3%
 cse002 used 486.8 of 1322.0 GByteYear HP Disk (3769.1 of 10235.4 G.S.T), 36.8%
 cse002 used 36484.5 of 70288.7 Hour SMP CPU (1417.5 of 2730.8 G.S.T), 51.9%
 cse002 used 190.8 of 1222.0 GByteYear MP Disk (818.6 of 5242.0 G.S.T), 15.6%
 cse002 used 228.6 of 414.5 GByteYear HSM/Tape (61.0 of 110.7 G.S.T), 55.2%
 cse002 used 5923.2 of 7435.4 Hour Green CPU (309.5 of 388.5 G.S.T), 79.7%
 cse002 used 142.8 of 446.7 PersonDay Support (1603.9 of 5019.1 G.S.T), 32.0%
 cse002 used 0.0 of 74.0 Day Training (0.0 of 339.4 G.S.T), 0.0%
 project cse002 has used 58117.3 of 105916.9 Generic Service Tokens, 54.9%

cse002 Daresbury - Last Trade: never Start: 0 End 0
 cse002a used 275790.1 of 506910.0 PEHour MPP PE CPU (6668.2 of 12256.4 G.S.T), 54.4%
 cse002a used 100.5 of 200.0 GByteYear HP Disk (778.3 of 1548.5 G.S.T), 50.3%
 cse002a used 7576.9 of 9950.0 Hour SMP CPU (294.4 of 386.6 G.S.T), 76.2%
 cse002a used 26.0 of 48.9 GByteYear MP Disk (111.5 of 209.8 G.S.T), 53.2%
 cse002a used 64.9 of 106.0 GByteYear HSM/Tape (17.3 of 28.3 G.S.T), 61.3%
 cse002a used 0.0 of 5000.0 Hour Green CPU (0.0 of 261.3 G.S.T), 0.0%
 subproject cse002a has used 7869.8 of 14690.8 Generic Service Tokens, 53.6%

cse002 Belfast - Last Trade: never Start: 0 End 0
 cse002b used 133254.1 of 233600.0 PEHour MPP PE CPU (3221.9 of 5648.1 G.S.T), 57.0%
 cse002b used 44.2 of 52.4 GByteYear HP Disk (342.1 of 405.7 G.S.T), 84.3%
 cse002b used 0.0 of 3000.0 Hour SMP CPU (0.0 of 116.6 G.S.T), 0.0%
 cse002b used 2.8 of 44.9 GByteYear MP Disk (12.0 of 192.6 G.S.T), 6.2%
 cse002b used 0.0 of 3.0 GByteYear HSM/Tape (0.0 of 0.8 G.S.T), 0.0%
 subproject cse002b has used 3576.0 of 6363.8 Generic Service Tokens, 56.2%

cse002 Cambridge - Matsci - Last Trade: never Start: 0 End 0
 cse002c used 243871.9 of 251826.0 PEHour MPP PE CPU (5896.5 of 6088.8 G.S.T), 96.8%
 cse002c used 36.6 of 54.4 GByteYear HP Disk (283.4 of 421.2 G.S.T), 67.3%
 cse002c used 0.0 of 3000.0 Hour SMP CPU (0.0 of 116.6 G.S.T), 0.0%
 cse002c used 17.2 of 50.4 GByteYear MP Disk (73.9 of 216.2 G.S.T), 34.2%
 cse002c used 7.4 of 52.0 GByteYear HSM/Tape (2.0 of 13.9 G.S.T), 14.1%
 subproject cse002c has used 6255.8 of 6856.6 Generic Service Tokens, 91.2%

<p>cse002 Cambridge - Physics - Last Trade: never Start: 0 End 0 cse002d used 61517.1 of 85531.0 PEHour MPP PE CPU (1487.4 of 2068.0 G.S.T), 71.9% cse002d used 4.5 of 26.7 GByteYear HP Disk (34.6 of 206.7 G.S.T), 16.7% cse002d used 1736.2 of 2900.0 Hour SMP CPU (67.5 of 112.7 G.S.T), 59.9% cse002d used 11.8 of 27.7 GByteYear MP Disk (50.5 of 118.8 G.S.T), 42.5% cse002d used 0.0 of 27.0 GByteYear HSM/Tape (0.0 of 7.2 G.S.T), 0.0% subproject cse002d has used 1640.0 of 2513.4 Generic Service Tokens, 65.2%</p>
<p>cse002 Bath - Last Trade: never Start: 0 End 0 cse002e used 398957.7 of 432619.0 PEHour MPP PE CPU (9646.3 of 10460.2 G.S.T), 92.2% cse002e used 87.2 of 145.0 GByteYear HP Disk (675.0 of 1122.6 G.S.T), 60.1% cse002e used 0.0 of 3075.0 Hour SMP CPU (0.0 of 119.5 G.S.T), 0.0% cse002e used 23.5 of 50.5 GByteYear MP Disk (100.8 of 216.6 G.S.T), 46.5% cse002e used 46.9 of 75.0 GByteYear HSM/Tape (12.5 of 20.0 G.S.T), 62.5% subproject cse002e has used 10434.6 of 11938.9 Generic Service Tokens, 87.4%</p>
<p>cse002 UCL - Last Trade: never Start: 0 End 0 cse002f used 84029.4 of 294561.0 PEHour MPP PE CPU (2031.7 of 7122.1 G.S.T), 28.5% cse002f used 17.8 of 59.1 GByteYear HP Disk (137.5 of 457.6 G.S.T), 30.1% cse002f used 0.0 of 3450.0 Hour SMP CPU (0.0 of 134.0 G.S.T), 0.0% cse002f used 16.5 of 54.6 GByteYear MP Disk (70.6 of 234.2 G.S.T), 30.1% cse002f used 0.0 of 3.3 GByteYear HSM/Tape (0.0 of 0.9 G.S.T), 0.0% subproject cse002f has used 2239.9 of 7948.8 Generic Service Tokens, 28.2%</p>
<p>cse002 Oxford - pcl - Last Trade: never Start: 0 End 0 cse002g used 117797.0 of 145392.0 PEHour MPP PE CPU (2848.2 of 3515.4 G.S.T), 81.0% cse002g used 6.1 of 32.8 GByteYear HP Disk (47.2 of 253.9 G.S.T), 18.6% cse002g used 61.8 of 1875.0 Hour SMP CPU (2.4 of 72.8 G.S.T), 3.3% cse002g used 14.1 of 30.8 GByteYear MP Disk (60.5 of 132.1 G.S.T), 45.8% cse002g used 0.0 of 2.2 GByteYear HSM/Tape (0.0 of 0.6 G.S.T), 0.0% subproject cse002g has used 2958.3 of 3974.9 Generic Service Tokens, 74.4%</p>
<p>cse002 Edinburgh - Last Trade: never Start: 0 End 0 cse002i used 240120.4 of 267928.0 PEHour MPP PE CPU (5805.8 of 6478.2 G.S.T), 89.6% cse002i used 32.2 of 51.0 GByteYear HP Disk (249.2 of 394.9 G.S.T), 63.1% cse002i used 0.0 of 2800.0 Hour SMP CPU (0.0 of 108.8 G.S.T), 0.0% cse002i used 9.3 of 46.5 GByteYear MP Disk (39.8 of 199.5 G.S.T), 20.0% cse002i used 0.0 of 2.8 GByteYear HSM/Tape (0.0 of 0.8 G.S.T), 0.0% subproject cse002i has used 6094.8 of 7182.0 Generic Service Tokens, 84.9%</p>
<p>cse002 Kent (UKC) - Last Trade: never Start: 0 End 0 cse002j used 117124.8 of 125943.0 PEHour MPP PE CPU (2831.9 of 3045.1 G.S.T), 93.0% cse002j used 47.0 of 50.0 GByteYear HP Disk (364.1 of 387.1 G.S.T), 94.1% cse002j used 0.0 of 2350.0 Hour SMP CPU (0.0 of 91.3 G.S.T), 0.0% cse002j used 5.2 of 33.6 GByteYear MP Disk (22.4 of 144.1 G.S.T), 15.5% cse002j used 0.0 of 100.0 GByteYear HSM/Tape (0.0 of 26.7 G.S.T), 0.0% subproject cse002j has used 3218.4 of 3694.4 Generic Service Tokens, 87.1%</p>
<p>cse002 Durham - Last Trade: never Start: 0 End 0 cse002k used 30723.7 of 50000.0 PEHour MPP PE CPU (742.9 of 1208.9 G.S.T), 61.4% cse002k used 5.7 of 45.0 GByteYear HP Disk (43.9 of 348.4 G.S.T), 12.6% cse002k used 0.0 of 3000.0 Hour SMP CPU (0.0 of 116.6 G.S.T), 0.0% cse002k used 5.7 of 45.0 GByteYear MP Disk (24.6 of 193.0 G.S.T), 12.8% subproject cse002k has used 811.4 of 1866.9 Generic Service Tokens, 43.5%</p>
<p>cse002 York - Last Trade: never Start: 0 End 0 cse002l used 0.0 of 50000.0 PEHour MPP PE CPU (0.0 of 1208.9 G.S.T), 0.0% cse002l used 1.1 of 5.0 GByteYear HP Disk (8.7 of 38.7 G.S.T), 22.5% cse002l used 0.0 of 3000.0 Hour SMP CPU (0.0 of 116.6 G.S.T), 0.0% cse002l used 9.1 of 10.0 GByteYear MP Disk (38.8 of 42.9 G.S.T), 90.5%</p>

subproject cse002l has used 47.5 of 1407.1 Generic Service Tokens, 3.4%

cse003 gr/m01784 Taylor - Last Trade: re-enabled Start: 0 End 0
 cse003 used 1060317.9 of 1191068.2 PEHour MPP PE CPU (25637.1 of 28798.5 G.S.T), 89.0%
 cse003 used 156.8 of 178.1 GByteYear HP Disk (1213.9 of 1378.6 G.S.T), 88.1%
 cse003 used 3721.0 of 26052.1 Hour SMP CPU (144.6 of 1012.2 G.S.T), 14.3%
 cse003 used 40.3 of 76.8 GByteYear MP Disk (172.9 of 329.4 G.S.T), 52.5%
 cse003 used 28.1 of 750.0 GByteYear HSM/Tape (7.5 of 200.2 G.S.T), 3.7%
 cse003 used 107021.4 of 138819.7 Hour Green CPU (5592.1 of 7253.6 G.S.T), 77.1%
 cse003 used 24.5 of 25.3 PersonDay Support (275.3 of 283.9 G.S.T), 97.0%
 cse003 used 6.0 of 10.0 Day Training (27.5 of 45.9 G.S.T), 60.0%
 project cse003 has used 33070.9 of 39302.3 Generic Service Tokens, 84.1%

cse003 MP1 - Last Trade: never Start: 0 End 0
 cse003a used 59570.9 of 68000.0 PEHour MPP PE CPU (1440.3 of 1644.2 G.S.T), 87.6%
 cse003a used 27.9 of 31.0 GByteYear HP Disk (216.4 of 240.0 G.S.T), 90.1%
 cse003a used 525.8 of 826.0 Hour SMP CPU (20.4 of 32.1 G.S.T), 63.7%
 cse003a used 10.3 of 15.0 GByteYear MP Disk (44.3 of 64.3 G.S.T), 68.9%
 cse003a used 0.0 of 20.0 GByteYear HSM/Tape (0.0 of 5.3 G.S.T), 0.0%
 cse003a used 15927.3 of 15000.0 Hour Green CPU (832.2 of 783.8 G.S.T), 106.2%
 subproject cse003a has used 2553.7 of 2769.7 Generic Service Tokens, 92.2%

cse003 MP2 - Last Trade: never Start: 0 End 0
 cse003b used 635248.3 of 690000.0 PEHour MPP PE CPU (15359.5 of 16683.3 G.S.T), 92.1%
 cse003b used 34.7 of 38.0 GByteYear HP Disk (268.4 of 294.2 G.S.T), 91.2%
 cse003b used 0.5 of 1647.0 Hour SMP CPU (0.0 of 64.0 G.S.T), 0.0%
 cse003b used 4.7 of 8.0 GByteYear MP Disk (20.0 of 34.3 G.S.T), 58.4%
 cse003b used 0.0 of 40.0 GByteYear HSM/Tape (0.0 of 10.7 G.S.T), 0.0%
 cse003b used 77805.6 of 80000.0 Hour Green CPU (4065.5 of 4180.2 G.S.T), 97.3%
 subproject cse003b has used 19713.5 of 21266.7 Generic Service Tokens, 92.7%

cse003 MP3 - Last Trade: never Start: 0 End 0
 cse003c used 0.0 of 1.0 PEHour MPP PE CPU (0.0 of 0.0 G.S.T), 0.0%
 cse003c used 0.2 of 2.0 GByteYear HP Disk (1.8 of 15.5 G.S.T), 11.9%
 cse003c used 0.0 of 407.0 Hour SMP CPU (0.0 of 15.8 G.S.T), 0.0%
 cse003c used 0.1 of 0.8 GByteYear MP Disk (0.6 of 3.4 G.S.T), 18.1%
 cse003c used 0.0 of 10.0 GByteYear HSM/Tape (0.0 of 2.7 G.S.T), 0.0%
 subproject cse003c has used 2.5 of 37.4 Generic Service Tokens, 6.6%

cse003 MP4 - Last Trade: never Start: 0 End 0
 cse003d used 0.0 of 0.0 PEHour MPP PE CPU (0.0 of 0.0 G.S.T)
 cse003d used 0.0 of 0.5 GByteYear HP Disk (0.0 of 3.9 G.S.T), 0.0%
 cse003d used 0.0 of 100.0 Hour SMP CPU (0.0 of 3.9 G.S.T), 0.0%
 cse003d used 0.0 of 0.2 GByteYear MP Disk (0.0 of 0.9 G.S.T), 0.0%
 cse003d used 0.0 of 2.5 GByteYear HSM/Tape (0.0 of 0.7 G.S.T), 0.0%
 subproject cse003d has used 0.0 of 9.3 Generic Service Tokens, 0.0%

cse003 MP5 - Last Trade: never Start: 0 End 0
 cse003e used 0.0 of 0.0 PEHour MPP PE CPU (0.0 of 0.0 G.S.T)
 cse003e used 0.0 of 1.0 GByteYear HP Disk (0.0 of 7.7 G.S.T), 0.0%
 cse003e used 0.0 of 206.0 Hour SMP CPU (0.0 of 8.0 G.S.T), 0.0%
 cse003e used 0.0 of 0.4 GByteYear MP Disk (0.0 of 1.7 G.S.T), 0.0%
 cse003e used 0.0 of 5.0 GByteYear HSM/Tape (0.0 of 1.3 G.S.T), 0.0%
 subproject cse003e has used 0.0 of 18.8 Generic Service Tokens, 0.0%

cse003 MP6 - Last Trade: never Start: 0 End 0
 cse003f used 15812.9 of 20000.0 PEHour MPP PE CPU (382.3 of 483.6 G.S.T), 79.1%
 cse003f used 1.3 of 2.0 GByteYear HP Disk (9.7 of 15.5 G.S.T), 62.9%
 cse003f used 0.0 of 407.0 Hour SMP CPU (0.0 of 15.8 G.S.T), 0.0%
 cse003f used 0.1 of 0.8 GByteYear MP Disk (0.3 of 3.4 G.S.T), 8.3%
 cse003f used 0.0 of 10.0 GByteYear HSM/Tape (0.0 of 2.7 G.S.T), 0.0%
 subproject cse003f has used 392.4 of 521.0 Generic Service Tokens, 75.3%

<p>cse003 MP7 - Last Trade: never Start: 0 End 0 cse003g used 0.0 of 0.0 PEHour MPP PE CPU (0.0 of 0.0 G.S.T) cse003g used 0.0 of 1.4 GByteYear HP Disk (0.0 of 10.8 G.S.T), 0.0% cse003g used 0.0 of 288.0 Hour SMP CPU (0.0 of 11.2 G.S.T), 0.0% cse003g used 0.0 of 0.6 GByteYear MP Disk (0.0 of 2.4 G.S.T), 0.0% cse003g used 0.0 of 7.0 GByteYear HSM/Tape (0.0 of 1.9 G.S.T), 0.0% subproject cse003g has used 0.0 of 26.3 Generic Service Tokens, 0.0%</p>
<p>cse003 EC1 - Last Trade: never Start: 0 End 0 cse003h used 36746.1 of 42000.0 PEHour MPP PE CPU (888.5 of 1015.5 G.S.T), 87.5% cse003h used 10.7 of 12.0 GByteYear HP Disk (83.0 of 92.9 G.S.T), 89.3% cse003h used 9.5 of 162.0 Hour SMP CPU (0.4 of 6.3 G.S.T), 5.9% cse003h used 5.2 of 6.0 GByteYear MP Disk (22.3 of 25.7 G.S.T), 86.5% cse003h used 0.0 of 4.0 GByteYear HSM/Tape (0.0 of 1.1 G.S.T), 0.0% subproject cse003h has used 994.1 of 1141.5 Generic Service Tokens, 87.1%</p>
<p>cse003 EC2 - Last Trade: never Start: 0 End 0 cse003i used 36143.3 of 38000.0 PEHour MPP PE CPU (873.9 of 918.8 G.S.T), 95.1% cse003i used 18.4 of 20.0 GByteYear HP Disk (142.5 of 154.8 G.S.T), 92.0% cse003i used 61.0 of 407.0 Hour SMP CPU (2.4 of 15.8 G.S.T), 15.0% cse003i used 1.5 of 2.0 GByteYear MP Disk (6.4 of 8.6 G.S.T), 74.6% cse003i used 25.6 of 30.0 GByteYear HSM/Tape (6.8 of 8.0 G.S.T), 85.3% cse003i used 0.0 of 1000.0 Hour Green CPU (0.0 of 52.3 G.S.T), 0.0% subproject cse003i has used 1032.0 of 1158.3 Generic Service Tokens, 89.1%</p>
<p>cse003 EC3 - Last Trade: never Start: 0 End 0 cse003j used 2980.1 of 16598.0 PEHour MPP PE CPU (72.1 of 401.3 G.S.T), 18.0% cse003j used 9.5 of 12.0 GByteYear HP Disk (73.4 of 92.9 G.S.T), 79.0% cse003j used 0.0 of 407.0 Hour SMP CPU (0.0 of 15.8 G.S.T), 0.0% cse003j used 1.8 of 3.0 GByteYear MP Disk (7.9 of 12.9 G.S.T), 61.0% cse003j used 0.0 of 10.0 GByteYear HSM/Tape (0.0 of 2.7 G.S.T), 0.0% cse003j used 0.0 of 5000.0 Hour Green CPU (0.0 of 261.3 G.S.T), 0.0% subproject cse003j has used 153.3 of 786.8 Generic Service Tokens, 19.5%</p>
<p>cse003 EC4 - Last Trade: never Start: 0 End 0 cse003k used 33624.7 of 68000.0 PEHour MPP PE CPU (813.0 of 1644.2 G.S.T), 49.4% cse003k used 1.6 of 2.0 GByteYear HP Disk (12.2 of 15.5 G.S.T), 78.6% cse003k used 0.0 of 826.0 Hour SMP CPU (0.0 of 32.1 G.S.T), 0.0% cse003k used 0.0 of 1.6 GByteYear MP Disk (0.2 of 6.9 G.S.T), 2.7% cse003k used 0.0 of 20.0 GByteYear HSM/Tape (0.0 of 5.3 G.S.T), 0.0% subproject cse003k has used 825.4 of 1703.9 Generic Service Tokens, 48.4%</p>
<p>cse003 EC5 - Last Trade: never Start: 0 End 0 cse003m used 15426.3 of 18000.0 PEHour MPP PE CPU (373.0 of 435.2 G.S.T), 85.7% cse003m used 2.1 of 3.0 GByteYear HP Disk (16.0 of 23.2 G.S.T), 68.8% cse003m used 0.0 of 288.0 Hour SMP CPU (0.0 of 11.2 G.S.T), 0.0% cse003m used 0.1 of 0.6 GByteYear MP Disk (0.3 of 2.4 G.S.T), 12.5% cse003m used 0.0 of 7.0 GByteYear HSM/Tape (0.0 of 1.9 G.S.T), 0.0% subproject cse003m has used 389.3 of 473.9 Generic Service Tokens, 82.1%</p>
<p>cse003 EC6 - Last Trade: never Start: 0 End 0 cse003n used 7850.2 of 11746.0 PEHour MPP PE CPU (189.8 of 284.0 G.S.T), 66.8% cse003n used 32.0 of 35.0 GByteYear HP Disk (247.9 of 271.0 G.S.T), 91.5% cse003n used 0.0 of 288.0 Hour SMP CPU (0.0 of 11.2 G.S.T), 0.0% cse003n used 0.1 of 0.6 GByteYear MP Disk (0.2 of 2.4 G.S.T), 10.0% cse003n used 0.6 of 7.0 GByteYear HSM/Tape (0.2 of 1.9 G.S.T), 8.3% subproject cse003n has used 438.1 of 570.4 Generic Service Tokens, 76.8%</p>

cse006 gr/m05201 Briddon - Last Trade: Mon Dec 10 08:50:25 2001 Start: 0 End 0
 cse006 used 2306991.2 of 2305580.0 PEHour MPP PE CPU (55780.1 of 55746.0 G.S.T), 100.1%
 cse006 used 19.4 of 19.6 GByteYear HP Disk (150.5 of 151.7 G.S.T), 99.2%
 cse006 used 439561.3 of 444209.5 Hour SMP CPU (17077.6 of 17258.2 G.S.T), 99.0%
 cse006 used 4.5 of 5.0 GByteYear MP Disk (19.5 of 21.4 G.S.T), 90.9%
 cse006 used 46371.2 of 46681.5 Hour Green CPU (2423.0 of 2439.2 G.S.T), 99.3%
 cse006 used 0.0 of 4.0 PersonDay Support (0.0 of 44.9 G.S.T), 0.0%
 cse006 used 0.0 of 91.4 Day Training (0.0 of 419.2 G.S.T), 0.0%
 project cse006 has used 75450.7 of 76080.7 Generic Service Tokens, 99.2%

cse007 gr/m05348 Foulkes - Last Trade: re-enabled Start: 0 End 0
 cse007 used 474918.3 of 472711.2 PEHour MPP PE CPU (11482.9 of 11429.5 G.S.T), 100.5%
 cse007 used 21.5 of 52.0 GByteYear HP Disk (166.3 of 402.6 G.S.T), 41.3%
 cse007 used 3191.4 of 3729.0 Hour SMP CPU (124.0 of 144.9 G.S.T), 85.6%
 cse007 used 4.3 of 53.1 GByteYear MP Disk (18.6 of 227.9 G.S.T), 8.1%
 cse007 used 0.0 of 541.3 GByteYear HSM/Tape (0.0 of 144.5 G.S.T), 0.0%
 cse007 used 18013.1 of 15006.6 Hour Green CPU (941.2 of 784.1 G.S.T), 120.0%
 cse007 used 1.0 of 4.0 PersonDay Support (11.2 of 44.9 G.S.T), 25.0%
 cse007 used 2.0 of 2.0 Day Training (9.2 of 9.2 G.S.T), 100.0%
 project cse007 has used 12753.4 of 13187.6 Generic Service Tokens, 96.7%

cse009 GR/20607 Catlow - Last Trade: Thu Sep 20 15:23:17 2001 Start: 0 End 0
 cse009 used 955295.8 of 1846749.2 PEHour MPP PE CPU (23097.8 of 44652.0 G.S.T), 51.7%
 cse009 used 131.0 of 712.2 GByteYear HP Disk (1014.3 of 5514.0 G.S.T), 18.4%
 cse009 used 22409.8 of 49491.7 Hour SMP CPU (870.7 of 1922.8 G.S.T), 45.3%
 cse009 used 9.7 of 646.7 GByteYear MP Disk (41.6 of 2774.2 G.S.T), 1.5%
 cse009 used 0.0 of 2714.9 GByteYear HSM/Tape (0.0 of 724.8 G.S.T), 0.0%
 cse009 used 11753.5 of 31558.6 Hour Green CPU (614.1 of 1649.0 G.S.T), 37.2%
 cse009 used 9.0 of 275.5 PersonDay Support (101.1 of 3095.5 G.S.T), 3.3%
 cse009 used 0.0 of 26.5 Day Training (0.0 of 121.6 G.S.T), 0.0%
 project cse009 has used 25739.7 of 60453.9 Generic Service Tokens, 42.6%

cse013 GR/M50539 Leschziner - Last Trade: re-enabled Start: 0 End 0
 cse013 used 726174.3 of 4797760.0 PEHour MPP PE CPU (17558.0 of 116003.7 G.S.T), 15.1%
 cse013 used 19.7 of 195.8 GByteYear HP Disk (152.8 of 1516.3 G.S.T), 10.1%
 cse013 used 6493.0 of 29364.5 Hour SMP CPU (252.3 of 1140.9 G.S.T), 22.1%
 cse013 used 9.4 of 308.0 GByteYear MP Disk (40.1 of 1321.2 G.S.T), 3.0%
 cse013 used 19.6 of 504.0 GByteYear HSM/Tape (5.2 of 134.5 G.S.T), 3.9%
 cse013 used 0.0 of 9.0 PersonDay Support (0.0 of 101.1 G.S.T), 0.0%
 cse013 used 3.0 of 57.5 Day Training (13.8 of 263.8 G.S.T), 5.2%
 project cse013 has used 18022.2 of 120481.5 Generic Service Tokens, 15.0%

cse013 - ICL - Last Trade: never Start: 0 End 0
 cse013a used 34.4 of 20000.0 PEHour MPP PE CPU (0.8 of 483.6 G.S.T), 0.2%
 cse013a used 0.3 of 2.0 GByteYear HP Disk (2.1 of 15.5 G.S.T), 13.7%
 cse013a used 0.0 of 500.0 Hour SMP CPU (0.0 of 19.4 G.S.T), 0.0%
 cse013a used 0.0 of 5.0 GByteYear MP Disk (0.2 of 21.4 G.S.T), 0.7%
 cse013a used 0.0 of 2.0 GByteYear HSM/Tape (0.0 of 0.5 G.S.T), 0.0%
 subproject cse013a has used 3.1 of 540.5 Generic Service Tokens, 0.6%

cse013 - Loughborough - Last Trade: never Start: 0 End 0
 cse013b used 236031.9 of 300000.0 PEHour MPP PE CPU (5706.9 of 7253.6 G.S.T), 78.7%
 cse013b used 3.6 of 8.0 GByteYear HP Disk (27.6 of 61.9 G.S.T), 44.5%
 cse013b used 3275.6 of 3800.0 Hour SMP CPU (127.3 of 147.6 G.S.T), 86.2%
 cse013b used 1.5 of 15.0 GByteYear MP Disk (6.3 of 64.3 G.S.T), 9.8%
 cse013b used 0.0 of 5.0 GByteYear HSM/Tape (0.0 of 1.3 G.S.T), 0.0%
 subproject cse013b has used 5868.1 of 7528.9 Generic Service Tokens, 77.9%

cse013 - Surrey - Last Trade: never Start: 0 End 0
 cse013c used 39528.5 of 80000.0 PEHour MPP PE CPU (955.7 of 1934.3 G.S.T), 49.4%
 cse013c used 3.8 of 8.0 GByteYear HP Disk (29.4 of 61.9 G.S.T), 47.4%
 cse013c used 0.0 of 1800.0 Hour SMP CPU (0.0 of 69.9 G.S.T), 0.0%
 cse013c used 0.7 of 15.0 GByteYear MP Disk (2.9 of 64.3 G.S.T), 4.6%
 cse013c used 0.0 of 5.0 GByteYear HSM/Tape (0.0 of 1.3 G.S.T), 0.0%
 subproject cse013c has used 988.0 of 2131.8 Generic Service Tokens, 46.3%

cse013 - QMW - Last Trade: never Start: 0 End 0
 cse013d used 450579.6 of 500000.0 PEHour MPP PE CPU (10894.4 of 12089.4 G.S.T), 90.1%
 cse013d used 6.5 of 8.0 GByteYear HP Disk (50.0 of 61.9 G.S.T), 80.7%
 cse013d used 0.6 of 1800.0 Hour SMP CPU (0.0 of 69.9 G.S.T), 0.0%
 cse013d used 2.0 of 15.0 GByteYear MP Disk (8.6 of 64.3 G.S.T), 13.3%
 cse013d used 19.6 of 30.0 GByteYear HSM/Tape (5.2 of 8.0 G.S.T), 65.3%
 subproject cse013d has used 10958.3 of 12293.6 Generic Service Tokens, 89.1%

cse016 GR/M18256 Cant - Last Trade: Tue Jun 29 13:31:17 1999 Start: 0 End 0
 cse016 used 3077.3 of 129784.5 PEHour MPP PE CPU (74.4 of 3138.0 G.S.T), 2.4%
 cse016 used 8.9 of 19.4 GByteYear HP Disk (68.8 of 150.6 G.S.T), 45.7%
 cse016 used 0.1 of 1.5 GByteYear MP Disk (0.3 of 6.2 G.S.T), 4.7%
 cse016 used 0.0 of 150.9 GByteYear HSM/Tape (0.0 of 40.3 G.S.T), 0.0%
 project cse016 has used 143.5 of 3335.1 Generic Service Tokens, 4.3%

cse023 GR/M16023 Allen - Last Trade: Tue Oct 2 19:13:36 2001 Start: 0 End 0
 cse023 used 572.9 of 1055.1 PEHour MPP PE CPU (13.9 of 25.5 G.S.T), 54.3%
 cse023 used 1.2 of 5.0 GByteYear HP Disk (9.4 of 38.7 G.S.T), 24.2%
 cse023 used 5277.1 of 6000.0 Hour SMP CPU (205.0 of 233.1 G.S.T), 88.0%
 cse023 used 40.9 of 55.0 GByteYear MP Disk (175.6 of 235.9 G.S.T), 74.4%
 cse023 used 4.6 of 100.0 GByteYear HSM/Tape (1.2 of 26.7 G.S.T), 4.6%
 cse023 used 178208.5 of 181276.0 Hour Green CPU (9311.8 of 9472.0 G.S.T), 98.3%
 project cse023 has used 9716.9 of 10032.0 Generic Service Tokens, 96.9%

cse024 GR/M44453 Tennyson - Last Trade: re-enabled Start: 0 End 0
 cse024 used 810620.7 of 825202.6 PEHour MPP PE CPU (19599.8 of 19952.3 G.S.T), 98.2%
 cse024 used 47.4 of 115.0 GByteYear HP Disk (366.7 of 890.4 G.S.T), 41.2%
 cse024 used 159.3 of 8586.1 Hour SMP CPU (6.2 of 333.6 G.S.T), 1.9%
 cse024 used 41.5 of 78.1 GByteYear MP Disk (178.2 of 335.2 G.S.T), 53.2%
 cse024 used 610.1 of 705.1 GByteYear HSM/Tape (162.9 of 188.2 G.S.T), 86.5%
 cse024 used 14263.9 of 67342.6 Hour Green CPU (745.3 of 3518.8 G.S.T), 21.2%
 cse024 used 0.0 of 24.0 PersonDay Support (0.0 of 269.7 G.S.T), 0.0%
 cse024 used 0.0 of 0.0 Day Training (0.0 of 0.0 G.S.T)
 project cse024 has used 21059.0 of 25488.2 Generic Service Tokens, 82.6%

cse027 GR/M21652 Imregun - Last Trade: Fri Aug 24 09:40:13 2001 Start: 0 End 0
 cse027 used 105.9 of 105.9 PEHour MPP PE CPU (2.6 of 2.6 G.S.T), 100.0%
 cse027 used 0.8 of 0.6 GByteYear HP Disk (6.0 of 4.9 G.S.T), 122.2%
 cse027 used 29280.7 of 29647.3 Hour SMP CPU (1137.6 of 1151.8 G.S.T), 98.8%
 cse027 used 4.2 of 116.6 GByteYear MP Disk (17.8 of 500.0 G.S.T), 3.6%
 cse027 used 12.6 of 151.5 GByteYear HSM/Tape (3.4 of 40.4 G.S.T), 8.3%
 cse027 used 26125.1 of 30855.4 Hour Green CPU (1365.1 of 1612.3 G.S.T), 84.7%
 cse027 used 0.0 of 0.0 PersonDay Support (0.0 of 0.0 G.S.T)
 cse027 used 0.0 of 0.0 Day Training (0.0 of 0.0 G.S.T)
 project cse027 has used 2532.4 of 3312.0 Generic Service Tokens, 76.5%

cse030 GR/M56234 Cates - Last Trade: Tue Jul 31 19:50:13 2001 Start: 0 End 0
 cse030 used 234557.9 of 341463.6 PEHour MPP PE CPU (5671.3 of 8256.2 G.S.T), 68.7%
 cse030 used 263.1 of 344.9 GByteYear HP Disk (2036.7 of 2670.6 G.S.T), 76.3%
 cse030 used 11246.8 of 24873.2 Hour SMP CPU (437.0 of 966.4 G.S.T), 45.2%
 cse030 used 243.1 of 389.5 GByteYear MP Disk (1043.0 of 1670.8 G.S.T), 62.4%
 cse030 used 267.9 of 634.1 GByteYear HSM/Tape (71.5 of 169.3 G.S.T), 42.3%
 cse030 used 15274.3 of 120865.6 Hour Green CPU (798.1 of 6315.5 G.S.T), 12.6%
 cse030 used 51.0 of 76.0 PersonDay Support (573.0 of 853.9 G.S.T), 67.1%
 cse030 used 7.0 of 12.0 Day Training (32.1 of 55.0 G.S.T), 58.3%
 project cse030 has used 10662.7 of 20957.7 Generic Service Tokens, 50.9%

cse030 Edinburgh - Last Trade: never Start: 0 End 0
 cse030a used 64053.8 of 91000.0 PEHour MPP PE CPU (1548.7 of 2200.3 G.S.T), 70.4%
 cse030a used 138.3 of 160.0 GByteYear HP Disk (1070.7 of 1238.8 G.S.T), 86.4%
 cse030a used 2920.1 of 6500.0 Hour SMP CPU (113.5 of 252.5 G.S.T), 44.9%
 cse030a used 63.9 of 85.0 GByteYear MP Disk (273.9 of 364.6 G.S.T), 75.1%
 cse030a used 212.9 of 250.0 GByteYear HSM/Tape (56.8 of 66.7 G.S.T), 85.2%
 cse030a used 0.0 of 14000.0 Hour Green CPU (0.0 of 731.5 G.S.T), 0.0%
 subproject cse030a has used 3063.7 of 4854.5 Generic Service Tokens, 63.1%

cse030 QMW - Last Trade: never Start: 0 End 0
 cse030b used 149751.8 of 180000.0 PEHour MPP PE CPU (3620.8 of 4352.2 G.S.T), 83.2%
 cse030b used 112.4 of 150.0 GByteYear HP Disk (870.0 of 1161.4 G.S.T), 74.9%
 cse030b used 42.3 of 3600.0 Hour SMP CPU (1.6 of 139.9 G.S.T), 1.2%
 cse030b used 161.0 of 200.0 GByteYear MP Disk (690.6 of 857.9 G.S.T), 80.5%
 cse030b used 26.8 of 135.8 GByteYear HSM/Tape (7.2 of 36.2 G.S.T), 19.8%
 cse030b used 0.0 of 30000.0 Hour Green CPU (0.0 of 1567.6 G.S.T), 0.0%
 subproject cse030b has used 5190.1 of 8115.1 Generic Service Tokens, 64.0%

cse030 Oxford - Last Trade: never Start: 0 End 0
 cse030c used 18310.7 of 18310.7 PEHour MPP PE CPU (442.7 of 442.7 G.S.T), 100.0%
 cse030c used 1.1 of 1.7 GByteYear HP Disk (8.6 of 13.2 G.S.T), 65.2%
 cse030c used 0.0 of 1000.0 Hour SMP CPU (0.0 of 38.9 G.S.T), 0.0%
 cse030c used 3.6 of 10.0 GByteYear MP Disk (15.6 of 42.9 G.S.T), 36.4%
 cse030c used 0.0 of 0.0 GByteYear HSM/Tape (0.0 of 0.0 G.S.T)
 cse030c used 0.0 of 3500.0 Hour Green CPU (0.0 of 182.9 G.S.T), 0.0%
 subproject cse030c has used 466.9 of 720.5 Generic Service Tokens, 64.8%

cse030 Bristol - Last Trade: never Start: 0 End 0
 cse030d used 0.0 of 2000.0 PEHour MPP PE CPU (0.0 of 48.4 G.S.T), 0.0%
 cse030d used 8.3 of 12.0 GByteYear HP Disk (64.3 of 92.9 G.S.T), 69.2%
 cse030d used 0.0 of 500.0 Hour SMP CPU (0.0 of 19.4 G.S.T), 0.0%
 cse030d used 10.2 of 20.0 GByteYear MP Disk (43.9 of 85.8 G.S.T), 51.1%
 cse030d used 0.0 of 20.0 GByteYear HSM/Tape (0.0 of 5.3 G.S.T), 0.0%
 subproject cse030d has used 108.2 of 251.8 Generic Service Tokens, 43.0%

cse030 Leeds - Last Trade: never Start: 0 End 0
 cse030e used 0.0 of 0.0 PEHour MPP PE CPU (0.0 of 0.0 G.S.T)
 cse030e used 0.0 of 0.0 GByteYear HP Disk (0.0 of 0.0 G.S.T)
 cse030e used 0.0 of 0.0 Hour SMP CPU (0.0 of 0.0 G.S.T)
 cse030e used 0.0 of 0.0 GByteYear MP Disk (0.0 of 0.0 G.S.T)
 cse030e used 0.0 of 0.0 GByteYear HSM/Tape (0.0 of 0.0 G.S.T)
 subproject cse030e has used 0.0 of 0.0 Generic Service Tokens

cse030 Cambridge - Last Trade: never Start: 0 End 0
 cse030f used 0.0 of 0.0 PEHour MPP PE CPU (0.0 of 0.0 G.S.T)
 cse030f used 0.0 of 0.0 GByteYear HP Disk (0.0 of 0.0 G.S.T)
 cse030f used 0.0 of 1000.0 Hour SMP CPU (0.0 of 38.9 G.S.T), 0.0%
 cse030f used 0.0 of 8.0 GByteYear MP Disk (0.0 of 34.3 G.S.T), 0.0%
 cse030f used 0.0 of 10.0 GByteYear HSM/Tape (0.0 of 2.7 G.S.T), 0.0%
 cse030f used 0.0 of 3500.0 Hour Green CPU (0.0 of 182.9 G.S.T), 0.0%

<p>subproject cse030f has used 0.0 of 258.7 Generic Service Tokens, 0.0%</p> <p>cse030 Sheffield - Last Trade: never Start: 0 End 0 cse030g used 0.0 of 0.0 PEHour MPP PE CPU (0.0 of 0.0 G.S.T) cse030g used 0.0 of 0.0 GByteYear HP Disk (0.0 of 0.0 G.S.T) cse030g used 0.0 of 0.0 Hour SMP CPU (0.0 of 0.0 G.S.T) cse030g used 0.0 of 0.0 GByteYear MP Disk (0.0 of 0.0 G.S.T) cse030g used 0.0 of 0.0 GByteYear HSM/Tape (0.0 of 0.0 G.S.T) subproject cse030g has used 0.0 of 0.0 Generic Service Tokens</p>
<p>cse035 GR/M76720 King - Last Trade: Fri Feb 2 16:20:49 2001 Start: 0 End 0 cse035 used 389041.0 of 425689.3 PEHour MPP PE CPU (9406.5 of 10292.6 G.S.T), 91.4% cse035 used 13.4 of 18.0 GByteYear HP Disk (103.9 of 139.4 G.S.T), 74.5% cse035 used 0.0 of 0.3 Hour SMP CPU (0.0 of 0.0 G.S.T), 6.0% cse035 used 0.0 of 0.6 GByteYear MP Disk (0.0 of 2.4 G.S.T), 1.2% cse035 used 9.1 of 26.0 GByteYear HSM/Tape (2.4 of 6.9 G.S.T), 34.9% project cse035 has used 9512.9 of 10441.3 Generic Service Tokens, 91.1%</p>
<p>cse036 GR/M78502 Duff - Last Trade: re-enabled Start: 0 End 0 cse036 used 10.9 of 617.1 PEHour MPP PE CPU (0.3 of 14.9 G.S.T), 1.8% cse036 used 0.4 of 3.0 GByteYear HP Disk (3.2 of 23.2 G.S.T), 13.6% cse036 used 78.3 of 399.9 Hour SMP CPU (3.0 of 15.5 G.S.T), 19.6% cse036 used 0.2 of 3.0 GByteYear MP Disk (1.0 of 12.9 G.S.T), 8.1% project cse036 has used 7.5 of 66.6 Generic Service Tokens, 11.3%</p>
<p>cse041 GR/M84879 Imregun - Last Trade: re-enabled Start: 0 End 0 cse041 used 588.6 of 12981.4 PEHour MPP PE CPU (14.2 of 313.9 G.S.T), 4.5% cse041 used 0.7 of 119.7 GByteYear HP Disk (5.6 of 926.6 G.S.T), 0.6% cse041 used 1136.5 of 4531.4 Hour SMP CPU (44.2 of 176.1 G.S.T), 25.1% cse041 used 0.0 of 123.5 GByteYear MP Disk (0.2 of 529.6 G.S.T), 0.0% cse041 used 16.1 of 230.3 GByteYear HSM/Tape (4.3 of 61.5 G.S.T), 7.0% cse041 used 0.0 of 60.0 PersonDay Support (0.0 of 674.2 G.S.T), 0.0% cse041 used 0.0 of 5.0 Day Training (0.0 of 22.9 G.S.T), 0.0% project cse041 has used 68.4 of 2704.7 Generic Service Tokens, 2.5%</p>
<p>cse043 GR/M85241 Williams - Last Trade: Thu Oct 18 15:49:55 2001 Start: 0 End 0 cse043 used 2152.2 of 149987.2 PEHour MPP PE CPU (52.0 of 3626.5 G.S.T), 1.4% cse043 used 1.0 of 10.0 GByteYear HP Disk (7.9 of 77.4 G.S.T), 10.2% cse043 used 0.0 of 6.2 Hour SMP CPU (0.0 of 0.2 G.S.T), 0.2% cse043 used 1.3 of 4.8 GByteYear MP Disk (5.4 of 20.8 G.S.T), 26.1% cse043 used 0.0 of 28.8 GByteYear HSM/Tape (0.0 of 7.7 G.S.T), 0.0% cse043 used 2.0 of 2.0 PersonDay Support (22.5 of 22.5 G.S.T), 100.0% cse043 used 4.0 of 4.0 Day Training (18.3 of 18.3 G.S.T), 100.1% project cse043 has used 106.2 of 3773.4 Generic Service Tokens, 2.8%</p>
<p>cse050 GR/N/38152 Bradley - Last Trade: Fri Jul 27 09:18:59 2001 Start: 0 End 0 cse050 used 0.0 of 104742.3 PEHour MPP PE CPU (0.0 of 2532.5 G.S.T), 0.0% cse050 used 0.0 of 11.0 GByteYear HP Disk (0.0 of 85.2 G.S.T), 0.0% cse050 used 0.0 of 1300.0 Hour SMP CPU (0.0 of 50.5 G.S.T), 0.0% cse050 used 0.0 of 4.5 GByteYear HSM/Tape (0.0 of 1.2 G.S.T), 0.0% cse050 used 0.0 of 20.0 PersonDay Support (0.0 of 224.7 G.S.T), 0.0% cse050 used 0.0 of 10.0 Day Training (0.0 of 45.9 G.S.T), 0.0% project cse050 has used 0.0 of 2940.0 Generic Service Tokens, 0.0%</p>
<p>cse052 GR/N17683 Hayes - Last Trade: Fri Jun 15 10:36:37 2001 Start: 0 End 0 cse052 used 33062.1 of 274025.7 PEHour MPP PE CPU (799.4 of 6625.6 G.S.T), 12.1% cse052 used 1.3 of 8.5 GByteYear HP Disk (9.8 of 65.8 G.S.T), 14.9% cse052 used 0.0 of 600.0 Hour SMP CPU (0.0 of 23.3 G.S.T), 0.0% cse052 used 0.0 of 8.5 GByteYear MP Disk (0.0 of 36.5 G.S.T), 0.0% cse052 used 0.0 of 3.0 GByteYear HSM/Tape (0.0 of 0.8 G.S.T), 0.0% cse052 used 0.0 of 10.0 PersonDay Support (0.0 of 112.4 G.S.T), 0.0% cse052 used 0.0 of 25.0 Day Training (0.0 of 114.7 G.S.T), 0.0% project cse052 has used 809.2 of 6979.0 Generic Service Tokens, 11.6%</p>



cse053 GR/R04225 Leschziner - Last Trade: Mon Oct 15 12:52:06 2001 Start: 0 End 0
 cse053 used 7518.6 of 319557.6 PEHour MPP PE CPU (181.8 of 7726.5 G.S.T), 2.4%
 cse053 used 0.4 of 115.0 GByteYear HP Disk (3.4 of 890.4 G.S.T), 0.4%
 cse053 used 48.5 of 14000.0 Hour SMP CPU (1.9 of 543.9 G.S.T), 0.3%
 cse053 used 0.0 of 85.0 GByteYear MP Disk (0.2 of 364.6 G.S.T), 0.0%
 cse053 used 0.0 of 100.0 GByteYear HSM/Tape (0.0 of 26.7 G.S.T), 0.0%
 cse053 used 495.1 of 1850.9 Hour Green CPU (25.9 of 96.7 G.S.T), 26.7%
 cse053 used 0.0 of 15.0 PersonDay Support (0.0 of 168.5 G.S.T), 0.0%
 cse053 used 0.0 of 8.0 Day Training (0.0 of 36.7 G.S.T), 0.0%
 project cse053 has used 213.1 of 9854.0 Generic Service Tokens, 2.2%

cse055 GR/N66810 Staunton - Last Trade: Mon Aug 6 09:05:54 2001 Start: 0 End 0
 cse055 used 939.4 of 24604.0 PEHour MPP PE CPU (22.7 of 594.9 G.S.T), 3.8%
 cse055 used 0.4 of 2.5 GByteYear HP Disk (3.3 of 19.4 G.S.T), 17.0%
 cse055 used 0.0 of 3.1 Hour SMP CPU (0.0 of 0.1 G.S.T), 0.0%
 cse055 used 0.0 of 5.0 PersonDay Support (0.0 of 56.2 G.S.T), 0.0%
 cse055 used 0.0 of 10.0 Day Training (0.0 of 45.9 G.S.T), 0.0%
 project cse055 has used 26.0 of 716.4 Generic Service Tokens, 3.6%

cse056 GR/N24773 Imregun - Last Trade: Fri Jul 20 08:55:22 2001 Start: 0 End 0
 cse056 used 0.0 of 53852.2 PEHour MPP PE CPU (0.0 of 1302.1 G.S.T), 0.0%
 cse056 used 0.0 of 40.0 GByteYear HP Disk (0.0 of 309.7 G.S.T), 0.0%
 cse056 used 71.7 of 622.3 Hour SMP CPU (2.8 of 24.2 G.S.T), 11.5%
 cse056 used 0.0 of 5.0 PersonDay Support (0.0 of 56.2 G.S.T), 0.0%
 cse056 used 0.0 of 10.0 Day Training (0.0 of 45.9 G.S.T), 0.0%
 project cse056 has used 2.8 of 1738.0 Generic Service Tokens, 0.2%

cse057 GR/R23909 Krushelnick - Last Trade: Fri Sep 7 11:39:20 2001 Start: 0 End 0
 cse057 used 2310.0 of 86751.6 PEHour MPP PE CPU (55.9 of 2097.5 G.S.T), 2.7%
 cse057 used 0.1 of 30.0 GByteYear HP Disk (1.0 of 232.3 G.S.T), 0.4%
 cse057 used 1.7 of 62.2 Hour SMP CPU (0.1 of 2.4 G.S.T), 2.7%
 cse057 used 0.5 of 462.7 Hour Green CPU (0.0 of 24.2 G.S.T), 0.1%
 cse057 used 0.0 of 20.0 PersonDay Support (0.0 of 224.7 G.S.T), 0.0%
 cse057 used 0.0 of 10.0 Day Training (0.0 of 45.9 G.S.T), 0.0%
 project cse057 has used 57.0 of 2627.0 Generic Service Tokens, 2.2%

cse063 GR/R46151 Sandham - Last Trade: Tue Dec 11 09:17:13 2001 Start: 0 End 0
 cse063 used 141.7 of 404163.7 PEHour MPP PE CPU (3.4 of 9772.2 G.S.T), 0.0%
 cse063 used 0.6 of 100.0 GByteYear HP Disk (4.5 of 774.2 G.S.T), 0.6%
 cse063 used 0.0 of 0.6 Hour SMP CPU (0.0 of 0.0 G.S.T), 0.1%
 cse063 used 0.0 of 50.0 GByteYear MP Disk (0.0 of 214.5 G.S.T), 0.0%
 cse063 used 0.0 of 525.0 GByteYear HSM/Tape (0.0 of 140.1 G.S.T), 0.0%
 cse063 used 0.0 of 30.0 PersonDay Support (0.0 of 337.1 G.S.T), 0.0%
 cse063 used 0.0 of 10.0 Day Training (0.0 of 45.9 G.S.T), 0.0%
 project cse063 has used 7.9 of 11284.0 Generic Service Tokens, 0.1%

cse066 GR/R30907 Coveney - Last Trade: Mon Sep 3 10:18:08 2001 Start: 0 End 0
 cse066 used 9649.6 of 87981.1 PEHour MPP PE CPU (233.3 of 2127.3 G.S.T), 11.0%
 cse066 used 2.7 of 90.0 GByteYear HP Disk (21.1 of 696.8 G.S.T), 3.0%
 cse066 used 232.7 of 15000.0 Hour SMP CPU (9.0 of 582.8 G.S.T), 1.6%
 cse066 used 2.7 of 18.0 GByteYear MP Disk (11.8 of 77.4 G.S.T), 15.2%
 cse066 used 725.1 of 64652.8 Hour Green CPU (37.9 of 3378.2 G.S.T), 1.1%
 cse066 used 0.0 of 21.0 PersonDay Support (0.0 of 236.0 G.S.T), 0.0%
 cse066 used 3.0 of 6.0 Day Training (13.8 of 27.5 G.S.T), 50.0%
 project cse066 has used 326.9 of 7126.0 Generic Service Tokens, 4.6%

cse071 GR/R23657 Iacovides - Last Trade: Fri Oct 5 16:21:54 2001 Start: 0 End 0
 cse071 used 0.0 of 3729.7 Hour VPP_CPU (0.0 of 1753.5 G.S.T), 0.0%
 cse071 used 0.0 of 20.0 GByteYear Fuji Disk (0.0 of 85.8 G.S.T), 0.0%
 cse071 used 0.0 of 5.0 PersonDay Support (0.0 of 56.2 G.S.T), 0.0%
 cse071 used 0.0 of 6.0 Day Training (0.0 of 27.5 G.S.T), 0.0%
 project cse071 has used 0.0 of 1923.0 Generic Service Tokens, 0.0%

cse075 GR/R59540 Coveney - Last Trade: Wed Oct 10 16:28:38 2001 Start: 0 End 0
 cse075 used 0.0 of 438021.5 PEHour MPP PE CPU (0.0 of 10590.8 G.S.T), 0.0%
 cse075 used 0.0 of 217.0 GByteYear HP Disk (0.0 of 1679.9 G.S.T), 0.0%
 cse075 used 0.0 of 150.0 GByteYear MP Disk (0.0 of 643.4 G.S.T), 0.0%
 cse075 used 0.0 of 300000.0 Hour Green CPU (0.0 of 15675.6 G.S.T), 0.0%
 cse075 used 0.0 of 34.0 PersonDay Support (0.0 of 382.0 G.S.T), 0.0%
 cse075 used 0.0 of 14.0 Day Training (0.0 of 64.2 G.S.T), 0.0%
 project cse075 has used 0.0 of 29036.0 Generic Service Tokens, 0.0%

cse084 GR/R47066 Needs - Last Trade: Tue Nov 13 12:39:29 2001 Start: 0 End 0
 cse084 used 18932.6 of 306225.8 PEHour MPP PE CPU (457.8 of 7404.1 G.S.T), 6.2%
 cse084 used 2.3 of 270.0 GByteYear HP Disk (17.6 of 2090.4 G.S.T), 0.8%
 cse084 used 0.0 of 600.0 Hour SMP CPU (0.0 of 23.3 G.S.T), 0.0%
 cse084 used 1.1 of 69.1 GByteYear MP Disk (4.8 of 296.6 G.S.T), 1.6%
 cse084 used 2725.0 of 78664.5 Hour Green CPU (142.4 of 4110.4 G.S.T), 3.5%
 cse084 used 0.0 of 34.0 PersonDay Support (0.0 of 382.0 G.S.T), 0.0%
 cse084 used 0.0 of 24.0 Day Training (0.0 of 110.1 G.S.T), 0.0%
 project cse084 has used 622.5 of 14417.0 Generic Service Tokens, 4.3%

cse085 GR/R64957 Sandham - Last Trade: Tue Dec 11 09:51:37 2001 Start: 0 End 0
 cse085 used 39818.4 of 1388400.0 PEHour MPP PE CPU (962.8 of 33569.7 G.S.T), 2.9%
 cse085 used 19.8 of 650.0 GByteYear HP Disk (152.9 of 5032.5 G.S.T), 3.0%
 cse085 used 1574.7 of 4045.2 Hour SMP CPU (61.2 of 157.2 G.S.T), 38.9%
 cse085 used 13.3 of 750.0 GByteYear MP Disk (56.9 of 3217.2 G.S.T), 1.8%
 cse085 used 115.3 of 1375.0 GByteYear HSM/Tape (30.8 of 367.1 G.S.T), 8.4%
 cse085 used 30123.0 of 655628.0 Hour Green CPU (1574.0 of 34257.9 G.S.T), 4.6%
 cse085 used 0.0 of 257.1 Hour VPP_CPU (0.0 of 120.9 G.S.T), 0.0%
 cse085 used 0.0 of 0.6 GByteYear Fuji Disk (0.0 of 2.4 G.S.T), 0.0%
 cse085 used 0.0 of 15.0 PersonDay Support (0.0 of 168.5 G.S.T), 0.0%
 cse085 used 0.0 of 6.0 Day Training (0.0 of 27.5 G.S.T), 0.0%
 project cse085 has used 2838.5 of 76921.0 Generic Service Tokens, 3.7%

csn001 Webb & GST/02/2846 Killworth & T/S/2001/00187 New - Last Trade: Wed Nov 28 14:36:04 2001 Start: 0 End 0
 csn001 used 383931.1 of 559253.1 PEHour MPP PE CPU (9283.0 of 13522.0 G.S.T), 68.7%
 csn001 used 200.2 of 320.3 GByteYear HP Disk (1549.7 of 2479.6 G.S.T), 62.5%
 csn001 used 31390.6 of 84584.3 Hour SMP CPU (1219.6 of 3286.2 G.S.T), 37.1%
 csn001 used 187.1 of 362.3 GByteYear MP Disk (802.5 of 1554.1 G.S.T), 51.6%
 csn001 used 4597.9 of 15221.7 GByteYear HSM/Tape (1227.4 of 4063.5 G.S.T), 30.2%
 csn001 used 135873.2 of 290781.5 Hour Green CPU (7099.7 of 15193.9 G.S.T), 46.7%
 csn001 used 607.0 of 838.8 Hour VPP_CPU (285.4 of 394.4 G.S.T), 72.4%
 csn001 used 2.2 of 6.3 GByteYear Fuji Disk (9.4 of 27.1 G.S.T), 34.7%
 csn001 used 3.0 of 29.2 PersonDay Support (33.7 of 328.1 G.S.T), 10.3%
 csn001 used 1.0 of 26.0 Day Training (4.6 of 119.2 G.S.T), 3.8%
 project csn001 has used 21515.0 of 40968.1 Generic Service Tokens, 52.5%

csn003 UGAMP O'Neill - Last Trade: Fri Nov 30 09:28:54 2001 Start: 0 End 0
 csn003 used 2576875.2 of 3013062.0 PEHour MPP PE CPU (62305.5 of 72852.0 G.S.T), 85.5%
 csn003 used 54.0 of 113.9 GByteYear HP Disk (418.0 of 881.6 G.S.T), 47.4%
 csn003 used 16488.6 of 17527.5 Hour SMP CPU (640.6 of 681.0 G.S.T), 94.1%
 csn003 used 51.5 of 93.8 GByteYear MP Disk (220.7 of 402.3 G.S.T), 54.9%
 csn003 used 19910.7 of 23729.9 GByteYear HSM/Tape (5315.2 of 6334.7 G.S.T), 83.9%
 csn003 used 2728.6 of 96407.7 Hour Green CPU (142.6 of 5037.5 G.S.T), 2.8%
 csn003 used 52150.1 of 62034.1 Hour VPP_CPU (24518.1 of 29165.1 G.S.T), 84.1%
 csn003 used 265.1 of 326.4 GByteYear Fuji Disk (1137.3 of 1400.0 G.S.T), 81.2%
 csn003 used 0.0 of 3.0 Hour Compaq EV67 CPU (0.0 of 0.5 G.S.T), 0.0%
 csn003 used 0.0 of 1.7 GByteYear Compaq Disk (0.0 of 7.1 G.S.T), 0.0%
 csn003 used 0.0 of 0.0 PersonDay Support (0.0 of 0.0 G.S.T)
 csn003 used 4.0 of 4.0 Day Training (18.3 of 18.3 G.S.T), 100.0%
 project csn003 has used 94716.5 of 116780.0 Generic Service Tokens, 81.1%

csn006 GR9/3550 Price - Last Trade: Mon Oct 8 15:30:12 2001 Start: 0 End 0
 csn006 used 1348313.8 of 1458538.9 PEHour MPP PE CPU (32600.5 of 35265.6 G.S.T), 92.4%
 csn006 used 89.6 of 122.2 GByteYear HP Disk (693.4 of 946.4 G.S.T), 73.3%
 csn006 used 68193.9 of 132056.1 Hour SMP CPU (2649.4 of 5130.6 G.S.T), 51.6%
 csn006 used 11.6 of 65.5 GByteYear MP Disk (49.7 of 281.0 G.S.T), 17.7%
 csn006 used 0.0 of 20.3 GByteYear HSM/Tape (0.0 of 5.4 G.S.T), 0.0%
 csn006 used 43817.5 of 63675.1 Hour Green CPU (2289.6 of 3327.2 G.S.T), 68.8%
 project csn006 has used 38282.6 of 44956.1 Generic Service Tokens, 85.2%

csn011 GST/02/1889 Thorpe - Last Trade: Mon Oct 8 17:31:33 2001 Start: 0 End 0
 csn011 used 16981.8 of 33788.7 PEHour MPP PE CPU (410.6 of 817.0 G.S.T), 50.3%
 csn011 used 6.8 of 13.6 GByteYear HP Disk (52.7 of 105.0 G.S.T), 50.2%
 project csn011 has used 463.3 of 922.0 Generic Service Tokens, 50.3%

csn012 NER/A/S/2000/01315 Tennyson - Last Trade: re-enabled Start: 0 End 0
 csn012 used 0.0 of 1.2 GByteYear MP Disk (0.0 of 5.0 G.S.T), 0.1%
 csn012 used 4395.6 of 4850.7 Hour VPP_CPU (2066.6 of 2280.5 G.S.T), 90.6%
 csn012 used 7.6 of 9.3 GByteYear Fuji Disk (32.6 of 40.0 G.S.T), 81.4%
 project csn012 has used 2099.1 of 2325.5 Generic Service Tokens, 90.3%

csn013 GR3/12954 Voke - Last Trade: re-enabled Start: 0 End 0
 csn013 used 925.2 of 1711.2 Hour VPP_CPU (435.0 of 804.5 G.S.T), 54.1%
 csn013 used 0.0 of 2.3 GByteYear Fuji Disk (0.0 of 9.9 G.S.T), 0.0%
 project csn013 has used 435.0 of 814.4 Generic Service Tokens, 53.4%

csn014 GST/02/2785 Llewellyn-Jones - Last Trade: re-enabled Start: 0 End 0
 csn014 used 0.0 of 658.3 PEHour MPP PE CPU (0.0 of 15.9 G.S.T), 0.0%
 csn014 used 0.0 of 15.0 GByteYear HP Disk (0.0 of 116.1 G.S.T), 0.0%
 csn014 used 0.0 of 12.9 Hour SMP CPU (0.0 of 0.5 G.S.T), 0.0%
 csn014 used 0.0 of 5.0 GByteYear MP Disk (0.0 of 21.4 G.S.T), 0.0%
 project csn014 has used 0.0 of 154.0 Generic Service Tokens, 0.0%

csn015 Proctor - Last Trade: Fri Nov 2 15:36:08 2001 Start: 0 End 0
 csn015 used 176884.9 of 225123.9 PEHour MPP PE CPU (4276.8 of 5443.2 G.S.T), 78.6%
 csn015 used 2.1 of 5.0 GByteYear HP Disk (16.2 of 38.7 G.S.T), 41.8%
 csn015 used 267.1 of 330.1 Hour SMP CPU (10.4 of 12.8 G.S.T), 80.9%
 csn015 used 37.3 of 99.3 GByteYear MP Disk (159.9 of 425.8 G.S.T), 37.5%
 csn015 used 1117.9 of 2450.1 GByteYear HSM/Tape (298.4 of 654.1 G.S.T), 45.6%
 csn015 used 53422.9 of 68546.5 Hour Green CPU (2791.5 of 3581.7 G.S.T), 77.9%
 csn015 used 0.0 of 3451.8 Hour VPP_CPU (0.0 of 1622.8 G.S.T), 0.0%
 csn015 used 0.0 of 4.9 GByteYear Fuji Disk (0.0 of 21.0 G.S.T), 0.0%
 csn015 used 2.0 of 10.0 PersonDay Support (22.5 of 112.4 G.S.T), 20.0%
 csn015 used 3.0 of 10.0 Day Training (13.8 of 45.9 G.S.T), 30.0%
 project csn015 has used 7589.4 of 11958.4 Generic Service Tokens, 63.5%

csn017 Payne GR3/12917 - Last Trade: Fri May 18 14:22:04 2001 Start: 0 End 0
 csn017 used 435.9 of 5031.5 PEHour MPP PE CPU (10.5 of 121.7 G.S.T), 8.7%
 csn017 used 0.2 of 5.0 GByteYear HP Disk (1.3 of 38.7 G.S.T), 3.4%
 csn017 used 512.6 of 2237.4 Hour SMP CPU (19.9 of 86.9 G.S.T), 22.9%
 csn017 used 1.1 of 5.0 GByteYear MP Disk (4.5 of 21.4 G.S.T), 21.1%
 csn017 used 0.0 of 16.0 PersonDay Support (0.0 of 179.8 G.S.T), 0.0%
 csn017 used 2.0 of 18.0 Day Training (9.2 of 82.6 G.S.T), 11.1%
 project csn017 has used 45.5 of 531.1 Generic Service Tokens, 8.6%

csn036 NER/T/S/1999/00110 Haines - Last Trade: Mon Jun 11 15:58:18 2001 Start: 0 End 0
 csn036 used 0.1 of 128237.1 PEHour MPP PE CPU (0.0 of 3100.6 G.S.T), 0.0%
 csn036 used 0.2 of 60.0 GByteYear HP Disk (1.6 of 464.5 G.S.T), 0.3%
 csn036 used 90.0 of 400.0 Hour SMP CPU (3.5 of 15.5 G.S.T), 22.5%
 csn036 used 0.0 of 60.0 GByteYear MP Disk (0.0 of 257.4 G.S.T), 0.0%
 csn036 used 0.0 of 700.0 GByteYear HSM/Tape (0.0 of 186.9 G.S.T), 0.0%
 csn036 used 0.0 of 2.0 PersonDay Support (0.0 of 22.5 G.S.T), 0.0%
 csn036 used 0.0 of 5.0 Day Training (0.0 of 22.9 G.S.T), 0.0%
 project csn036 has used 5.1 of 4070.3 Generic Service Tokens, 0.1%

csp003 Lyne PPA/G/S/1999/00190 - Last Trade: re-enabled Start: 0 End 0
 csp003 used 8020.8 of 14037.2 PEHour MPP PE CPU (193.9 of 339.4 G.S.T), 57.1%
 csp003 used 0.6 of 4.0 GByteYear HP Disk (4.5 of 31.0 G.S.T), 14.5%
 csp003 used 13.4 of 261.9 Hour SMP CPU (0.5 of 10.2 G.S.T), 5.1%
 csp003 used 0.7 of 4.0 GByteYear MP Disk (2.9 of 17.2 G.S.T), 16.7%
 csp003 used 0.0 of 10.0 GByteYear HSM/Tape (0.0 of 2.7 G.S.T), 0.0%
 csp003 used 3.0 of 8.0 PersonDay Support (33.7 of 89.9 G.S.T), 37.5%
 csp003 used 4.0 of 4.0 Day Training (18.3 of 18.3 G.S.T), 100.0%
 project csp003 has used 253.9 of 508.6 Generic Service Tokens, 49.9%

csp004 PPA/G/0/2000/00024 Bell - Last Trade: Thu Mar 29 12:49:04 2001 Start: 0 End 0
 csp004 used 4372.0 of 86221.7 PEHour MPP PE CPU (105.7 of 2084.7 G.S.T), 5.1%
 csp004 used 3.6 of 47.0 GByteYear HP Disk (27.7 of 363.9 G.S.T), 7.6%
 csp004 used 33.2 of 4274.0 Hour SMP CPU (1.3 of 166.1 G.S.T), 0.8%
 csp004 used 2.5 of 24.0 GByteYear MP Disk (10.9 of 103.0 G.S.T), 10.6%
 csp004 used 0.0 of 7.0 PersonDay Support (0.0 of 78.7 G.S.T), 0.0%
 csp004 used 0.0 of 8.0 Day Training (0.0 of 36.7 G.S.T), 0.0%
 project csp004 has used 145.6 of 2833.0 Generic Service Tokens, 5.1%

HPCI Daresbury - Last Trade: re-enabled Start: 0 End 0
 hpcid used 34444.1 of 34882.9 PEHour MPP PE CPU (832.8 of 843.4 G.S.T), 98.7%
 hpcid used 3.0 of 3.8 GByteYear HP Disk (23.4 of 29.6 G.S.T), 79.3%
 hpcid used 4061.3 of 4920.4 Hour SMP CPU (157.8 of 191.2 G.S.T), 82.5%
 hpcid used 1.4 of 1.7 GByteYear MP Disk (6.2 of 7.2 G.S.T), 85.6%
 hpcid used 10817.5 of 9717.4 Hour Green CPU (565.2 of 507.8 G.S.T), 111.3%
 hpcid used 1.0 of 1.0 Day Training (4.6 of 4.6 G.S.T), 99.7%
 project hpcid has used 1590.0 of 1583.7 Generic Service Tokens, 100.4%

HPCI Edinburgh - Last Trade: Wed Jul 11 12:09:29 2001 Start: 0 End 0
 hpcie used 1255.3 of 4070.6 PEHour MPP PE CPU (30.4 of 98.4 G.S.T), 30.8%
 hpcie used 3.0 of 4.7 GByteYear HP Disk (23.3 of 36.6 G.S.T), 63.7%
 hpcie used 698.4 of 770.8 Hour SMP CPU (27.1 of 29.9 G.S.T), 90.6%
 hpcie used 1.9 of 2.8 GByteYear MP Disk (8.2 of 12.0 G.S.T), 68.2%
 hpcie used 1728.7 of 1739.8 Hour Green CPU (90.3 of 90.9 G.S.T), 99.4%
 project hpcie has used 179.3 of 267.9 Generic Service Tokens, 66.9%

HPCI Southampton - Last Trade: re-enabled Start: 0 End 0
 hpcis used 737.9 of 5825.0 PEHour MPP PE CPU (17.8 of 140.8 G.S.T), 12.7%
 hpcis used 31.7 of 31.6 GByteYear HP Disk (245.7 of 244.8 G.S.T), 100.4%
 hpcis used 37.8 of 1074.0 Hour SMP CPU (1.5 of 41.7 G.S.T), 3.5%
 hpcis used 3.1 of 3.0 GByteYear MP Disk (13.4 of 12.8 G.S.T), 104.6%
 project hpcis has used 278.4 of 440.2 Generic Service Tokens, 63.2%

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ukhec - Last Trade: Thu Oct 18 17:45:15 2001 Start: 0 End 0
ukhec used 0.0 of 10000.0 PEHour MPP PE CPU (0.0 of 241.8 G.S.T), 0.0%
ukhec used 0.0 of 10.0 GByteYear HP Disk (0.0 of 77.4 G.S.T), 0.0%
ukhec used 0.0 of 10000.0 Hour SMP CPU (0.0 of 388.5 G.S.T), 0.0%
ukhec used 0.0 of 10.0 GByteYear MP Disk (0.0 of 42.9 G.S.T), 0.0%
ukhec used 0.0 of 5302.4 Hour Green CPU (0.0 of 277.1 G.S.T), 0.0%
ukhec used 0.0 of 750.0 Hour VPP_CPU (0.0 of 352.6 G.S.T), 0.0%
ukhec used 0.0 of 3.0 GByteYear Fuji Disk (0.0 of 12.9 G.S.T), 0.0%
ukhec used 2.0 of 2.0 Day Training (9.2 of 9.2 G.S.T), 99.7%
project ukhec has used 9.2 of 1402.4 Generic Service Tokens, 0.7%
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Appendix 6

Code	PI	Subject	Subject Area
Cse002	Dr Nicolas Harrison (Gillan)	Support for the UKCP	Physics
Cse003	Prof. Ken Taylor	HPC Consortiums 98- 2000	Physics
Cse004	Dr Neil Sandham	UK Turbulence	Engineering
Cse006	Dr Patrick Briddon	Covalently Bonded Materials	Materials
Cse007	Dr Matthew Foulkes	Quantum Many Body Theory	Physics
Cse008	Dr Mark Vincent (Hillier)	Model Chemical Reactivity	Chemistry
Cse009	Dr Ben Slater (Catlow)	HPC in Materials Chemistry	Chemistry
Cse010	Dr John Williams	Free Surface Flows	Engineering
Cse011	Dr John Williams	Open Channel Flood Plains	Engineering
Cse013	Dr David Aspley (Leschziner)	Complex Engineering Flows	Engineering
Cse014	Dr Cassiano de Oliverira (Goddard)	Probs in Nuclear Safety	Engineering
Cse016	Dr Stewart Cant	Turbulent Combustion	Engineering
Cse018	Dr Stewart Cant	Turbulent Flames	Engineering
Cse019	Dr Jason Lander (Berzins)	ROPA	Information Technology
Cse020	Dr Marek Szularz	Symmetric Eigenproblem	Information Technology
Cse021	Dr Julie Staunton	Magentisim	Physics
Cse022	Mr Niall Branley (Jones)	Turbulent Flames	Engineering
Cse023	Allen	Liquid Crystalline Materials	Robin Pinning
Cse024	Dr Robert Allan (Tennyson)	ChemReact 98-2000	Chemistry
Cse025	Dr Niels Rene Walet (Bishop)	Nuclear Theory Progamme	Physics
Cse026	Dr Maureen Neal	J90 move	
Cse027	Dr M Imregun	J90 move	
Cse028	Prof. P.W. Bearman	J90 move	
Cse029	Dr David Aspley (Leschziner)	J90 move	Engineering
Cse030	Prof M Cates	HPC for Complex Fluids	Physics
Cse031	Brebbia	J90 move	
Cse033	Dr M Imregun	Tubomachinery core compressor	Chemistry
Cse034	Dr Paul Durham	R&D of liner/non-linear systems	Mathematics
Csn001	Mrs Beverly de Cuevas (Webb)	HPCI Global Ocean Consortium	
Csn002	Dr Mark Vincent (Hillier)	Pollutant Sorption on Mineral Surf	
Csn003	Dr Lois Steenman-Clark (O'Neill)	UGAMP	
Csn005	Dr Huw Davies	Constraining Earth Mantle	
Csn006	Dr John Brodholt (Price)	Density Functional Methods	
Csn007	Dr John Brodholt (Price)	Density Functional Methods	
Csn008	Hulton	Sub-Glacial Process	
Csn009	Dr Roger Proctor		
Csn010	Dr Jason Lander (Mobbs)	Flow over Complex terrain	
Csn011	Dr Ed Dicks (Thorpe)	J90 move	
Csb001	Dr David Houldershaw (Goodfellow)	Macromolecular Interactions	
Csb002	Dr Adrian Mulholland (Danson)	Stability of Enzymes at high temp	
Csb003	Dr John Carling (Williams)	J90 move	
Css001	Dr Stan Openhaw	Human Systems Modelling	
Css002	Dr Robert Crouchley	Dropout in panel surveys	
Hpcid	Dr Robert Allan		
Hpcie	Dr David Henty		
Hpcis	Dr Denis Nicole		
Cs2001	Dr Sudhir Jain	3D Ising Spin Glass	
Cs2002	Dr Ingrid Stairs (Lyne)	Millisecond Pulsars	
Cs2003	Mr Tom Coulthard	Holocene Sediment Fluxes	
Cs2004	Dr A. Paul Watkins	Internal Combustion Engine	
Cs2005	Mr Sean Walsh	Arabidopsis Genome	
Cs2006	Prof. Walter Temmerman	Superconductivity & Magmetisim	
Cs2007	Choularton	Precipitation in the Mountains	
Cs2008	Dr Matthew Genge	Extraterrestrial Mineral Surfaces	
Cs3001	Mr John Andrew Staveley	Helical Coherent Structures	