# **CSAR Service - Management Report**

# **April 2003**

This report documents the quality of the CSAR service during the month of April 2003.

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 April 2003. The information, in particular, covers the availability and usage of the main CSAR Service High Performance Computing (HPC) systems:

- > Cray T3E-1200E/776 (Turing)
- ➤ SGI Origin2000/128 (Fermat)
- ➤ SGI Origin3000/512 (Green)
- ➤ SGI Origin300/16 (Wren)

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

April has seen the workload of the three primary systems at variable levels.

LSF, with CPUsets, is now in full production usage on Fermat and Green, with usage of these systems growing steadily.

CSAR has been granted an 18 month extension of service contract until June 30<sup>th</sup> 2006. With this extension CfS is implementing a further technology refresh which will introduce a 256 processor Itanium-2 (Madison) based SGI Altix by end September 2003.

4 additional fibre-attached tape drives have been installed this month. These will be used to improve the response and reliability of the Data Migration Facility and to automate remote copying of file system backups.

# 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

<u>Table 1</u> 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** 

		Performance Targets				
Service Quality Measure	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

<u>Table 2</u> gives actual performance information for the period of April 1<sup>st</sup> to 30th inclusive. Overall, the CPARS Performance Achievement in April 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** 

										200	02/3	
Service Quality Measure	May	June	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	March	April
HPC Services Availability												
Availability in Core Time (% of time)	96.08%	97.66%	99.2%	99.75%	98.75%	99.77%	99.25%	99.21%	99.46%	99.73%	100%	99.74%
Availability out of Core Time (% of time)	99.90%	99%	100%	100%	99.42%	99.52%	99.57%	100%	99.89%	100.00%	99.81%	99.81%
Number of Failures in month	1	4	0	1	2	1		0	3	1	1	1
Mean Time between failures in 52 week rolling period (hours)	324	313	365	381	381	398	417	515	487	487	515	548
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	<2	<5	<2	<2	<1	<2	<2	<2	<0.5	<1	<2	<3
Administrative Queries - Max Time to resolve 95% of all queries	<3	<5	<2	<0.5	<2	<0.5	<0.5	<0.5	<1	<0.5	<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	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<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	10	10	10	10	10	10	10	10
System Maintenance - no. of sessions taken per system in the mor	1 2	2	2	2	2	2	2	2	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, Fermat and Green at installation:

Turing availability x 143/(143+40+233)] + [Fermat availability x 40/(143+40+233) + Green availability x 233/(143+40+233)]

2 Mean Time between failures for Service Credits is formally calculated based on a rolling 12 month period.

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<u>Table 3</u> gives Service Credit values for the month of April. 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.

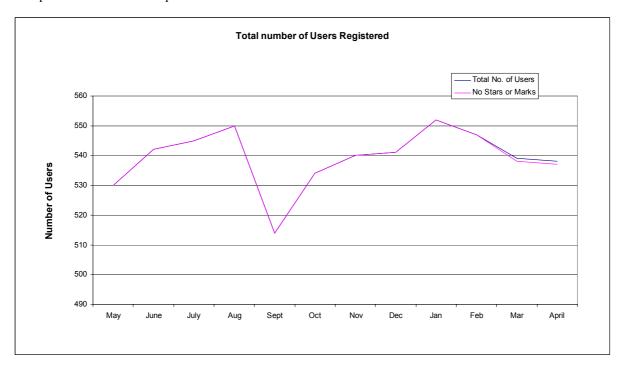
#### **CSAR Service - Service Quality Report - Service Credits**

May									200	02/3	
iviay	June	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	March	April
0.078	0.078	0	-0.039	0.039	-0.039	0	0	0	-0.039	-0.058	-0.039
-0.047	0.000	-0.047	-0.047	0	-0.039	-0.039	-0.047	-0.047	-0.047	-0.047	-0.047
-0.008	0.000	-0.009	-0.008	0	-0.008		-0.009	0	-0.008	-0.008	-0.008
0	0	0	0	0	0	0	-0.008	0	0	-0.008	-0.008
-0.019	-0.019	-0.019	-0.019	-0.019	-0.019	-0.019	-0.019	-0.019	-0.019	-0.019	-0.019
0	0.031	0	0	-0.016	0	0	0	-0.019	-0.016	0	0.016
0.016	0.031	0	-0.019	0	-0.019	-0.019	-0.019	-0.016	-0.019	-0.016	0
-0.004	-0.004	-0.004	-0.004	-0.004	-0.004	-0.004	-0.004	-0.004	-0.004	-0.004	-0.004
-0.002	-0.002	-0.002	-0.002	-0.002	-0.002	-0.002	-0.002	-0.002	-0.002	-0.002	-0.002
-0.019	-0.019	-0.019	-0.019	-0.019	-0.019	-0.019	-0.019	-0.019	-0.019	-0.019	-0.019
0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0
	,		,			,	,	,	,	,	-0.07
	-0.047 -0.008 0 -0.019 0 0.016 -0.004 -0.002 -0.019	-0.047 0.000 -0.008 0.000 0 0 -0.019 -0.019 0 0.031 -0.004 -0.004 -0.002 -0.002 -0.019 -0.019 0 0	-0.047 0.000 -0.047 -0.008 0.000 -0.009 0 0 0 -0.019 -0.019 -0.019 0 0.031 0 -0.016 0.031 0 -0.004 -0.004 -0.004 -0.002 -0.002 -0.002 -0.019 -0.019 -0.019 0 0 0	-0.047	-0.047 0.000 -0.047 0.047 0 -0.008 0.000 -0.009 -0.008 0 0 0 0 0 0 0 -0.019 -0.019 -0.019 -0.019 0 0.031 0 0 -0.019 0 -0.016 0.031 0 -0.019 0 -0.004 -0.004 -0.004 -0.004 -0.004 -0.002 -0.002 -0.002 -0.002 -0.019 0 0 0 0 0 0	-0.047	-0.047	-0.047	-0.047	-0.047	-0.047   0.000   -0.047   -0.047   0   -0.039   -0.039   -0.047   -0.047   -0.047   -0.047   -0.047   -0.047   -0.047   -0.047   -0.047   -0.047   -0.047   -0.047   -0.047   -0.047   -0.008   -0.009   -0.019   -0.019   -0.019   -0.019   -0.019   -0.019   -0.019   -0.019   -0.019   -0.019   -0.019   -0.019   -0.019   -0.019   -0.016   -0.019   -0.016   -0.019   -0.016   -0.019   -0.016   -0.004

Table 3

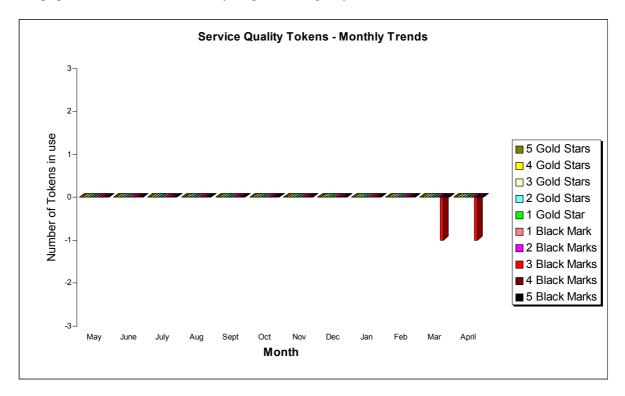
### 2.2 Service Quality Tokens

The position at the end of April 2003 is that one of the 538 users had awarded three black marks to the service.



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 one user has allocated black marks to the service:

SUMMARY OF SERVICE QUALITY TOKEN USAGE							
No of Stars or	Consortia	Date Reason Given					
Marks		Allocated					
3 black marks	csn001	27/03/03	Problems with access to /hold				

## 2.3 Throughput Target against Baseline

The baseline is shown in GFLOP-Years for consistency with the other information contained within this report.

The Baseline Target for throughput was achieved this month. The actual usage figure was 149% of Baseline capacity.

#### Job Throughput Against Baseline CSAR Service Provision

Period: 1st to 30th April 2003

	Baseline Capacity for Period (GFLOP Years)	Actual Usage in Period (GFLOP Years)	Actual % Utilisation c/w Baseline during Period
Has CfS failed to deliver Baseline MPP Computing Capacity for EPSRC?	11.78	17.56	149.1%
	Baseline Capacity for Period (GFLOP Years)	Job Time Demands in Period	Job Demand above 110% of Baseline during Period (Yes/No)?
2. Have Users submitted work demanding > 110% of the Baseline during period?	11.78	19.7	Yes
		Number of Jobs at least 4 days old at end Period	Number of Jobs at least 4 days old at end Period is not zero (Yes/No)?
Are there User Jobs oustanding at the end of the period over 4 days old?		3	Yes
Have Users submitted work demands above 90% of the Baseline during period?		Minimum Job Time Demands as % of Baseline during Period 69%	Minimum Job Time Demand above 90% of Baseline during Period (Yes/No)?
	Number of standard Job Queues (ignoring priorities)	Average % of time each queue contained jobs in the Period	Average % of time each queue contained jobs in the Period is > 97%?
Majority of Job Queues contained jobs from Users for more than 97% during period?	4	87%	No

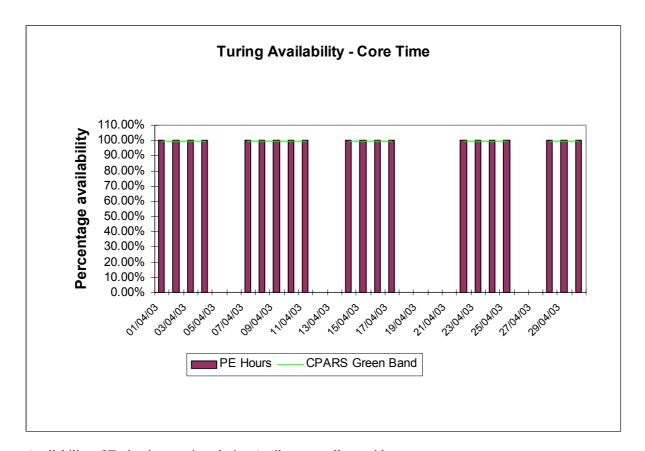
## 3. System Availability

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.

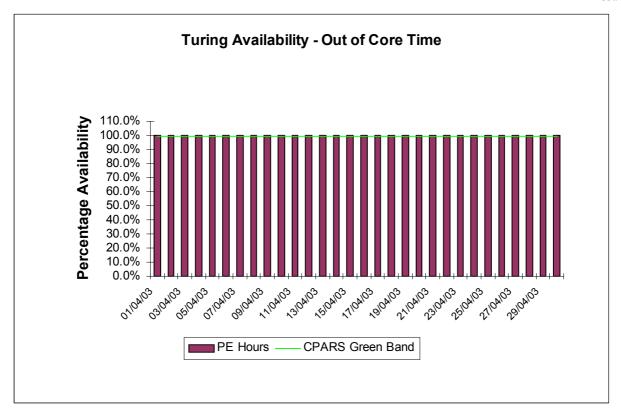
#### 3.1 Cray T3E-1200E System (Turing)

The following graphs show the availability of Turing both in core time and out of core time respectively during the period of 1<sup>st</sup> to 30<sup>th</sup> April.

Turing availability for April:



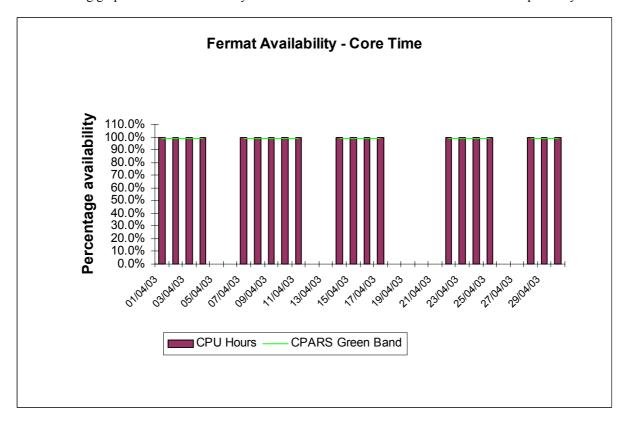
Availability of Turing in core time during April was excellent, with no outages.



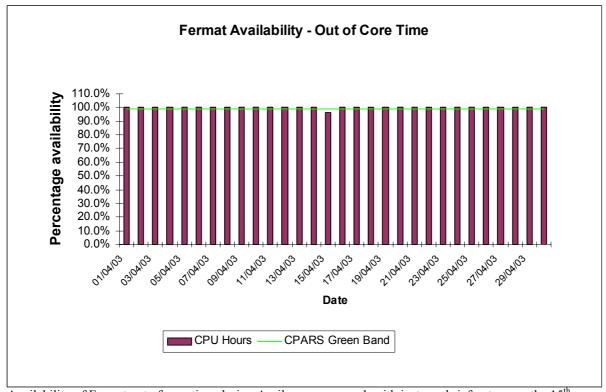
Availability of Turing out of core time during April was excellent, with no outages.

### 3.2 SGI Origin2000 System (Fermat)

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



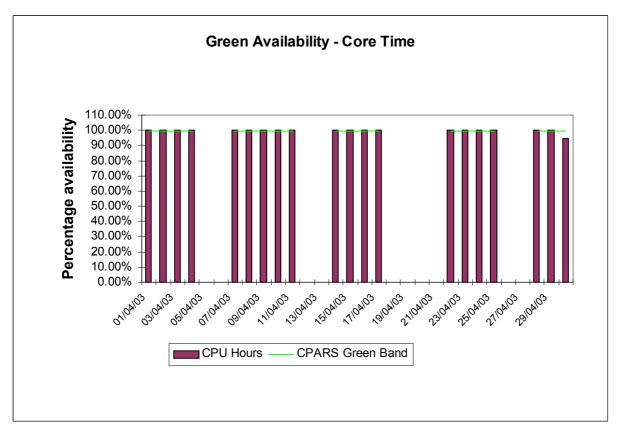
Availability of Fermat in core time during April was excellent, with no outages.



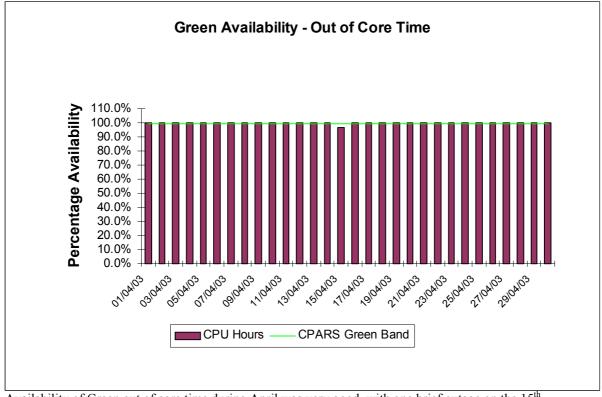
Availability of Fermat out of core time during April was very good, with just one brief outage on the 15<sup>th</sup>.

#### 3.3 SGI Origin3000 System (Green)

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



Availability of Green in core time during April was very good, with one short outage on the 30th.



Availability of Green out of core time during April was very good, with one brief outage on the 15<sup>th</sup>.

## 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 April 1<sup>st</sup> to 30<sup>th</sup> is provided by Project/User Group, totalled by Research Council and overall. This covers:

• CPU usage Turing: 439,970 PE Hours Fermat: 10,636 CPU Hours Wren (Batch): 0.7 CPU Hours Wren (Interactive): 344.7 CPU Hours 125,063 CPU Hours Green: User Disk allocation Turing: 64.5 GB Years Fermat: 103.68 GB Years SAN HV: 24.66 GB Years • HSM/tape usage 3,869.94 GB Years

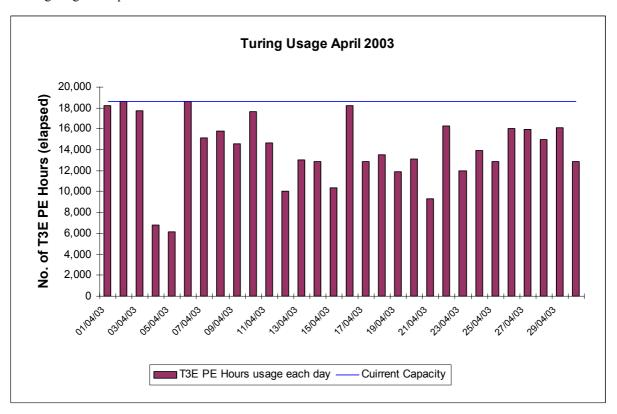
In addition, the following graphs are provided to illustrate usage per month, historically:

- a) MPP/SMP (T3E/Origin) Usage by month, showing usage each month of CPU (GFLOP-Years as per NPB), split by Research Council and by system. 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 and overall Capacity are shown by overlaid horizontal lines.
- 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 April 2003. 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 April:



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

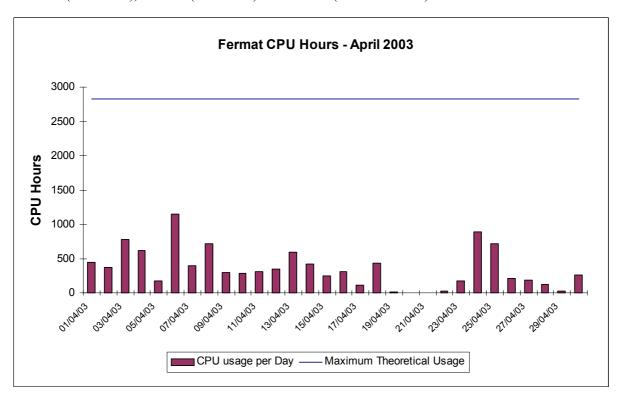
The graph also indicates the workload was close to 100% of maximum theoretical capacity some parts of the month.

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.

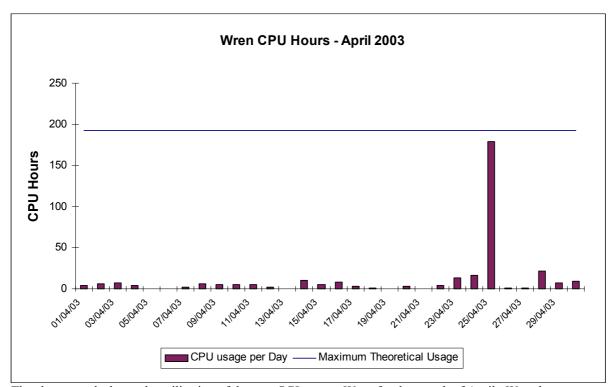
#### 4.2 SGI Origin2000 System (Fermat)

The usage of the Origin system was low. The groups most heavily using the Fermat system are CSE002 (Wander), CSE064 (Leschziner), CSN001 (De Cuevas) and CSN003 (Steenman-Clark).



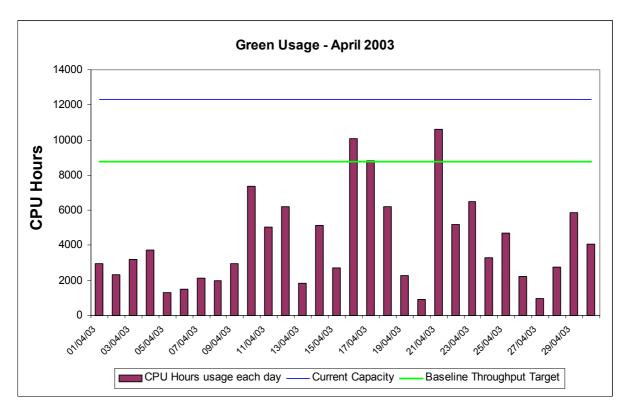
The above graph shows the variable utilisation of the Origin 128. As interactive usage was removed from Fermat at the beginning of March, Fermat is now a dedicated batch system.

#### 4.3 SGI Origin300 System (Wren)



The above graph shows the utilisation of the new SGI system Wren for the month of April. Wren has now taken over from Fermat as the interactive machine.

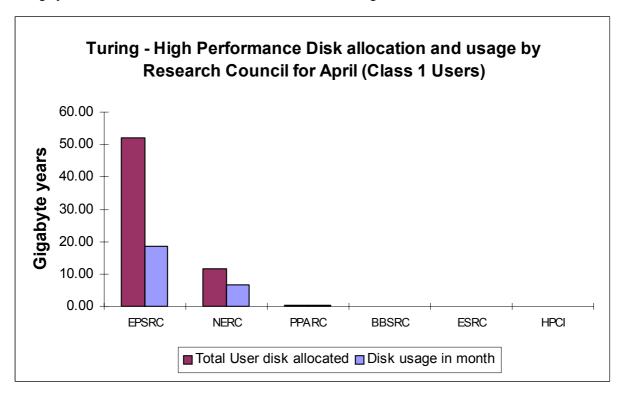
#### 4.4 SGI Origin3000 System (Green)



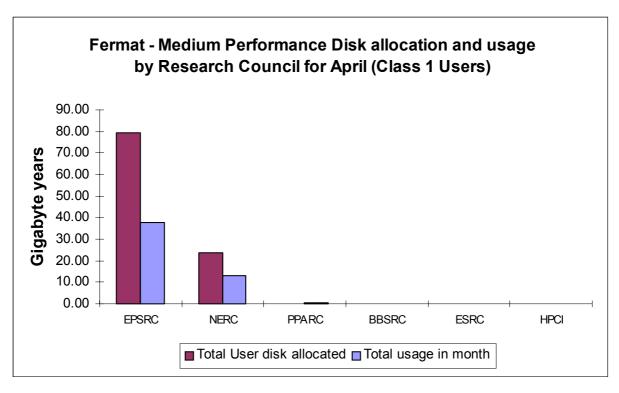
The above graph shows the utilisation of Green for the month of April.

#### 4.6 Disk/HSM Usage Chart

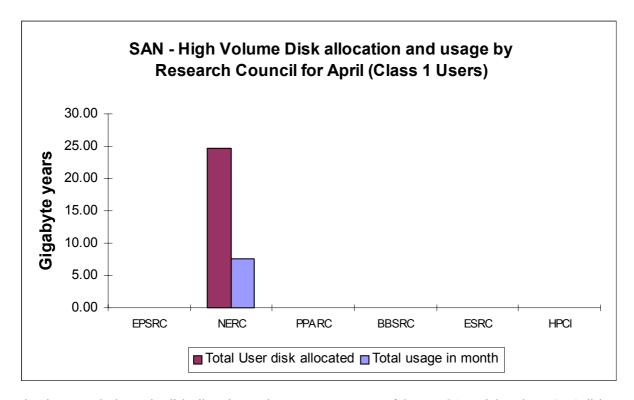
The graphs below show current disk and HSM allocations and usage.



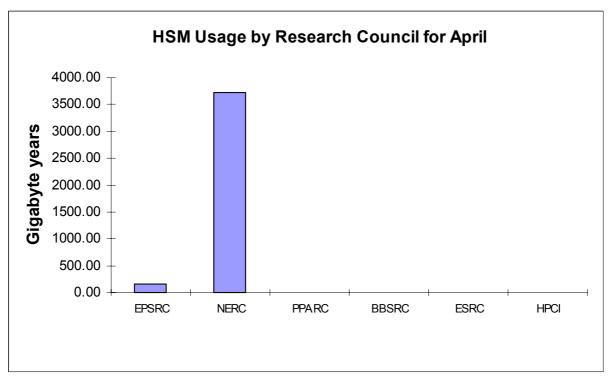
The preceding graph shows actual usage on average against the current allocation of disk on the Turing system.



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

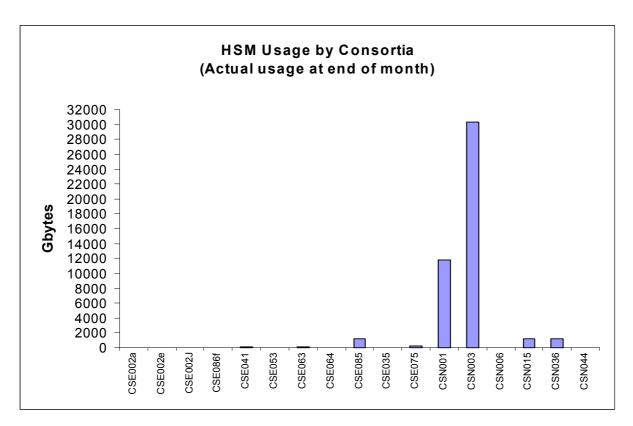


The above graph shows the disk allocation against usage on average of the new SAN High Volume (HV) disk.

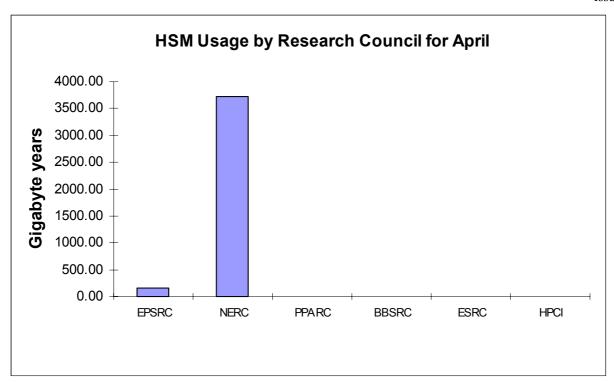


The above graph shows the total usage of the HSM facility by Research Council.

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

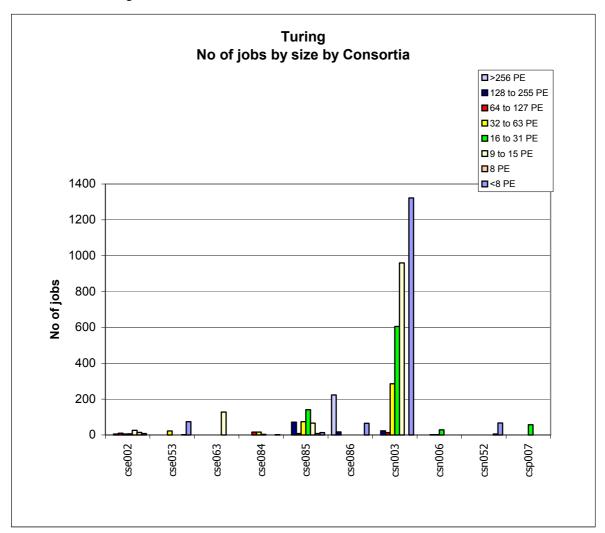


CSE085 (Sandham), CSN001 (De Cuevas), CSN003 (Steenman-Clark), CSN015 (Proctor) & CSN036 (Woolf) were the major users of HSM resource.



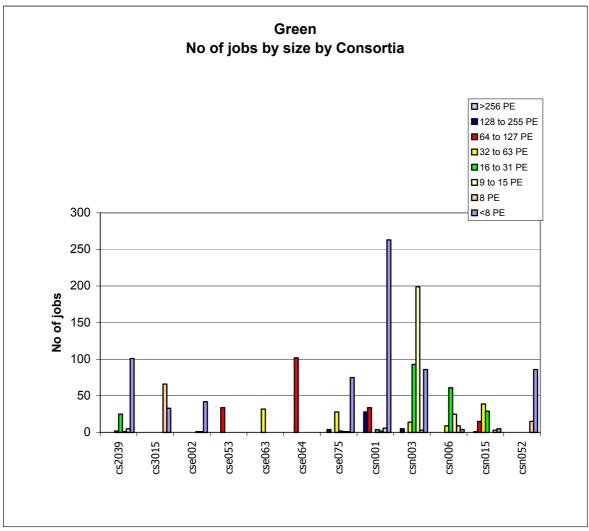
## 4.7 Processor Usage and Job Statistics Charts

Job statistics for Turing:



The above graph shows the number of jobs of the major sizes run in the period  $1^{\text{st}}$  to  $30^{\text{th}}$  April 2003.

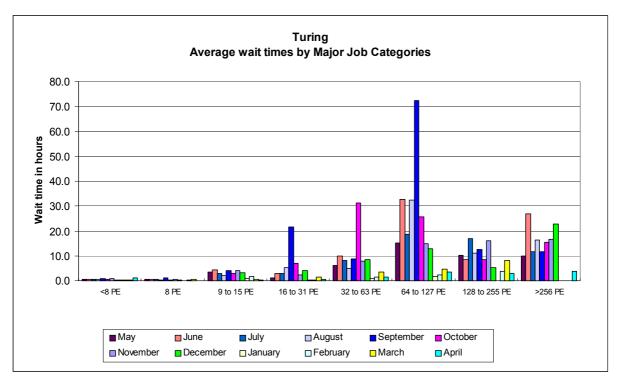
Job statistics for Green:

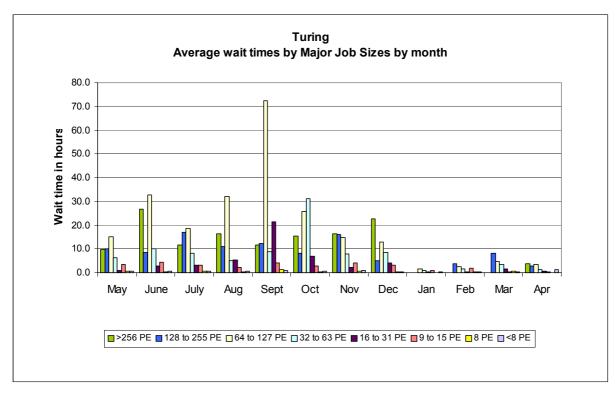


The above graph shows the number of jobs of the major sizes run in the period  $1^{st}$  to  $30^{th}$  April 2003.

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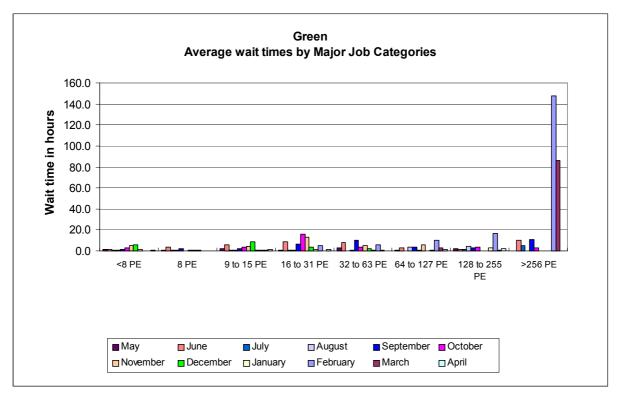
The next graph shows the wait times in hours on Turing for the major categories of jobs.

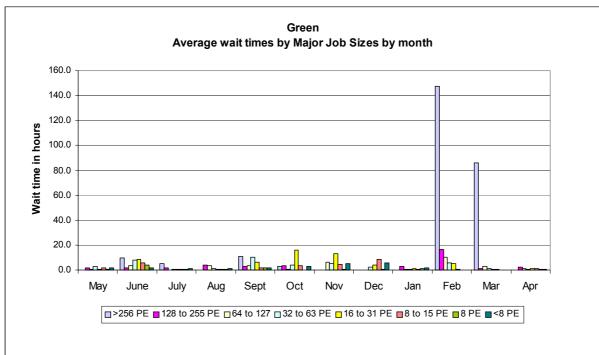




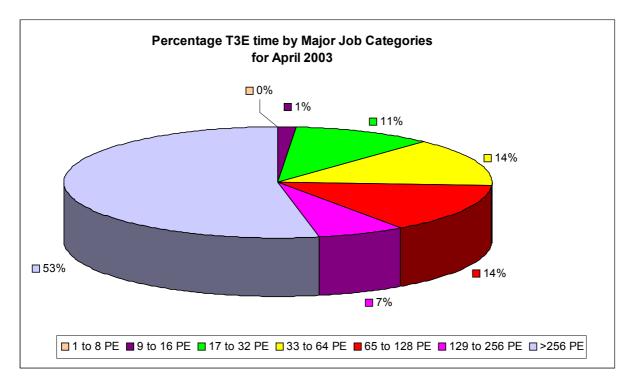
The chart above shows the average wait time trend on Turing over the last 12 months.

The next graph shows the wait times in hours on Green for the major categories of jobs:

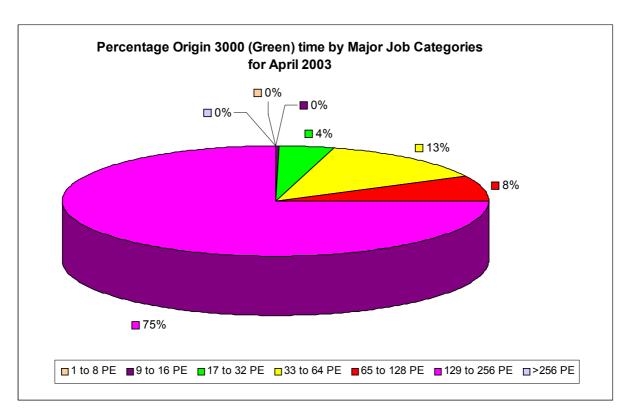




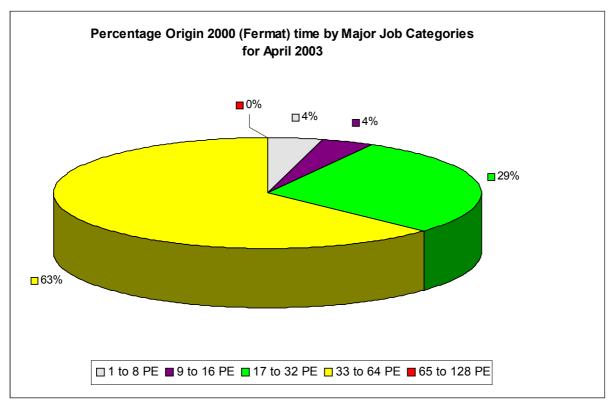
The chart above shows the average wait time trend on Green for the last 12 month period.



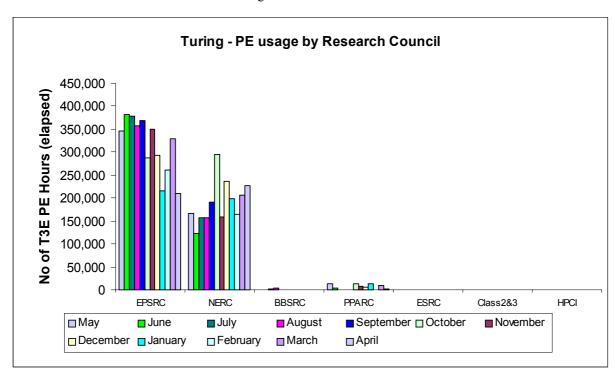
The highest concentration of workload on Turing for April was in the >256 PE range, at 53%.



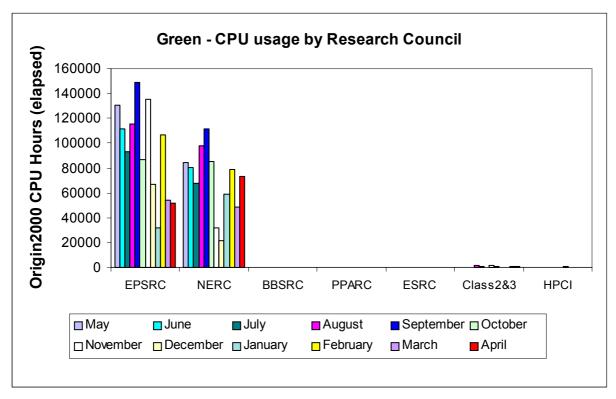
The greatest percentage of workload on Green, 75%, was in the 129 to 256 PE range.



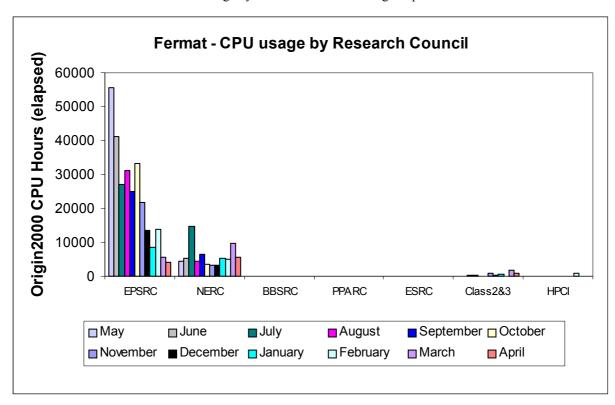
The greatest proportion of work on Fermat for April was in the 33 to 64 PE range, at 63%. There was also a small amount of work in the 65 to 128 PE range on Fermat this month.



Turing PE usage is shown by Research Council during the past 12 months of service in the above chart; NERC's usage now starting to exceed EPSRC's.



The above chart shows Green CPU usage by Research Council during the past 12 months of service.

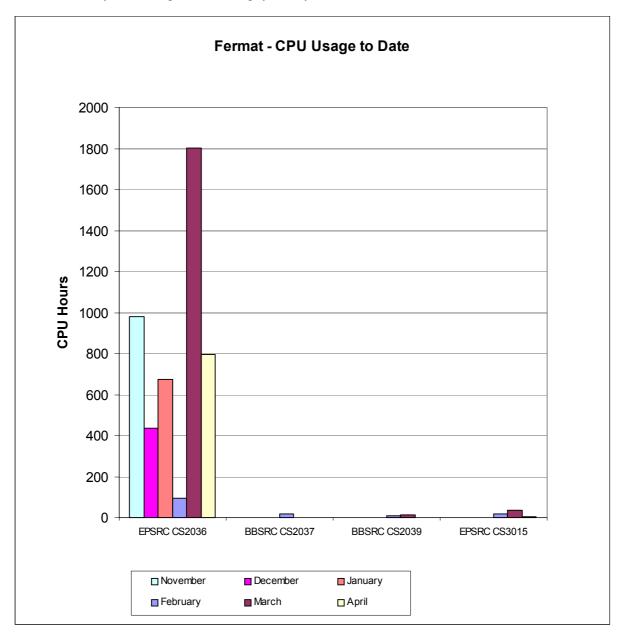


Origin 2000 CPU usage is shown by Research Council during the past 12 months of service in the above chart.

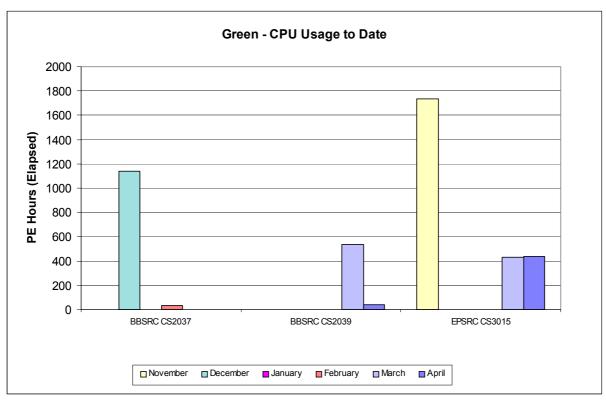
#### 4.8 Class 2 & 3 Usage Charts

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.

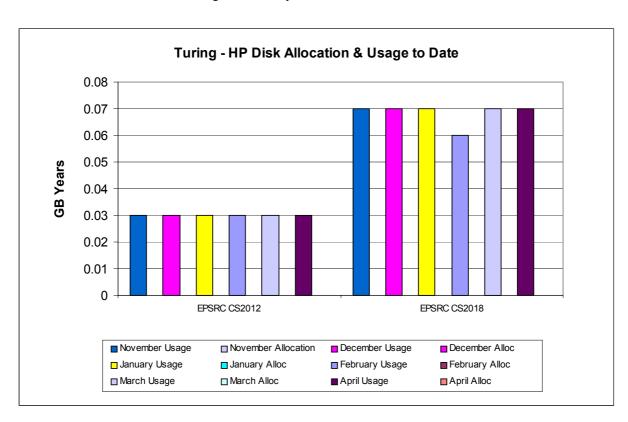
There is currently no PE usage of the Turing system by class 2 and class 3 users.



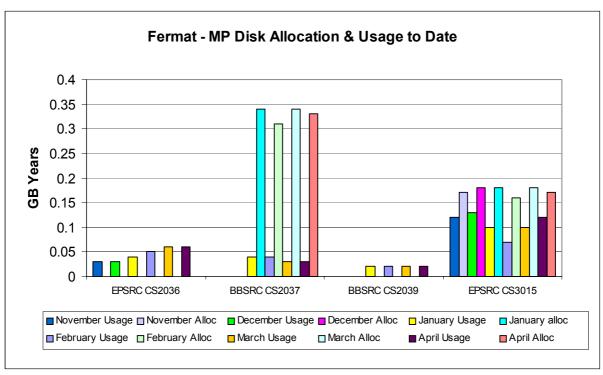
The above chart shows the CPU usage of the Fermat system by class 2 and class 3 users.



The above chart shows the CPU usage of Green 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.

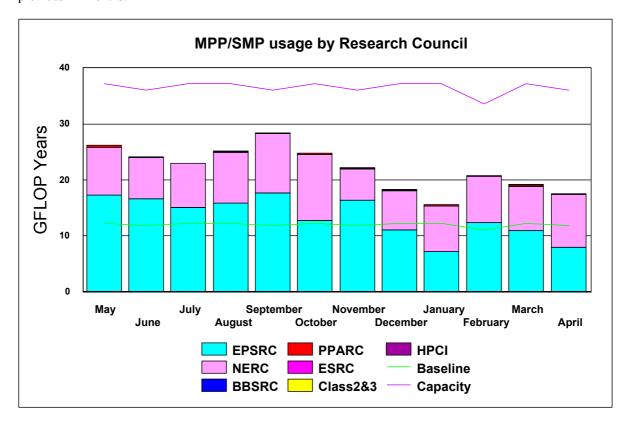


The above chart shows the most significant disk allocations on the Fermat system for class 2 and class 3 users. There is currently no HSM usage by class 2 and class 3 users.

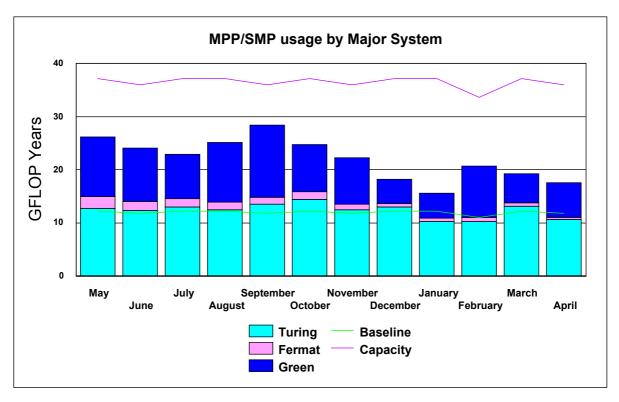
#### 4.9 Charts of Historical Usage

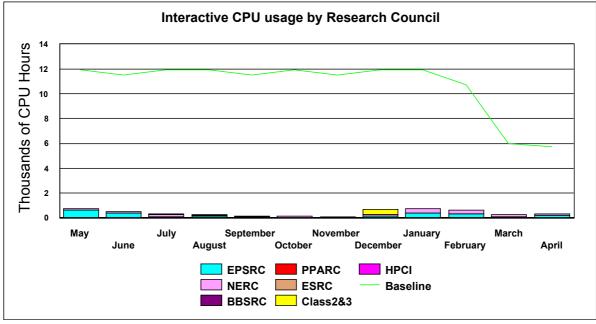
In all the Usage Charts, the baseline varies dependant on the number of days in each month, within a 365-day year.

The graph below shows the GFLOP Year utilisation on Turing and Fermat by Research Council for the previous 12 months.



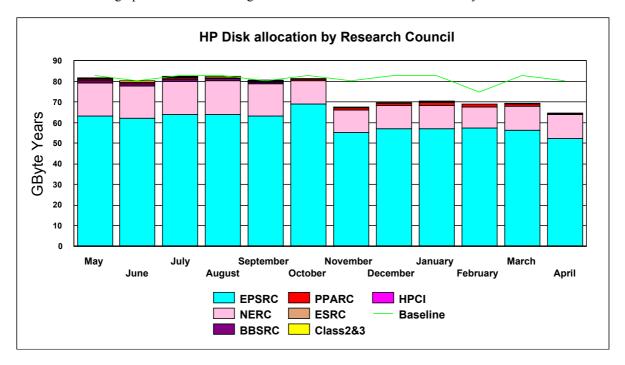
The graph below shows the historic SMP/MPP usage on the major systems, with NERC exceeding EPSRC's usage this month.



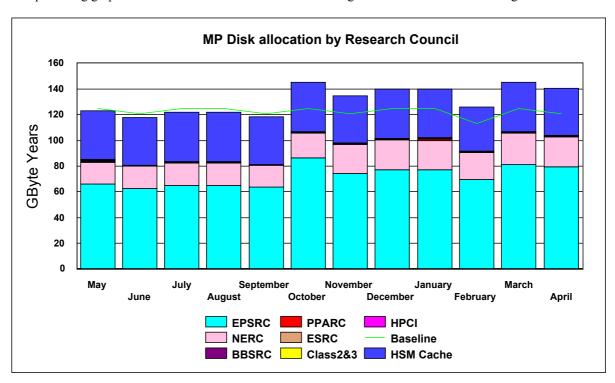


The above graph shows the historic interactive usage of the 'baseline' Fermat system (equivalent to 16@250Mhz CPUs) up to the end of February 2003, at which point the interactive usage was transferred to Wren and Fermat became a batch-only system. Eight of the higher speed 500Mhz CPUs in the Origin 300 system (Wren) deliver the baseline capacity equivalent to that which was previously available on Fermat for interactive usage.

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

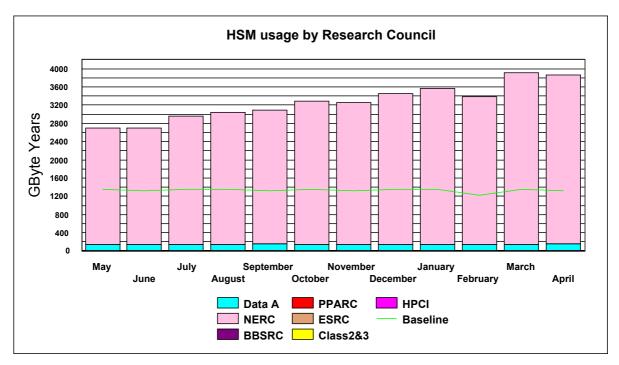


The preceding graph illustrates the historic allocation of the High Performance Disk on Turing.



The graph above illustrates the historic allocation of the Medium Performance Disk on Fermat.

The graph below shows the historic HSM usage by Research Council funded projects, now above Baseline at 41 Terabytes. The primary usage is for NERC.



## 4.9 Guest System Usage Charts

There is currently no Guest System usage.

### 5. Service Status, Issues and Plans

#### 5.1 Status

The service was fully utilised in April, with usage exceeding baseline.

During the month there was a fairly balanced spread of work across all major systems.

Wren has now taken over from Fermat as the interactive system, leaving Fermat to be a dedicated batch system.

4 additional fibre-attached tape drives have been installed this month. These will be used to improve the response and reliability of the Data Migration Facility and to automate remote copying of file system backups.

#### 5.2 Issues

There are no issues to report this month.

#### 5.3 Plans

Plans are now underway to introduce a 32-PE Altix system (Reynolds) into the service by 30<sup>th</sup> June 2003. This will be superseded by a 256-PE Altix system (Newton) during September 2003. Further details will be announced as they become available.

It is also the intention of CfS to further upgrade the Silo configuration by the addition of a second tape silo within the next few months.

#### 6. Conclusion

April 2003 saw the overall CPARS rating at Green with the baseline being exceeded by 49.1%.

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 April 2003

Appendix 2 contains the Percentage shares by Consortium for April 2003

Appendix 3 contains the Percentage shares by Research Council for April 2003

Appendix 4 contains the Training, Applications and Optimisation support figures to the end of April 2003

Appendix 5 contains a breakdown of resource usage by Consortia to the end of April 2003.

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 April 2003 can be found at the URL below

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

Percentage PE time per conso	rtia for Turing in April 2003			Percentage CPU time per cons	sortia for Fermat in April 2003		
Consortia		% Machine Time		Consortia		% Machine Time	
CSE002		1.73	1	CSE002		9.04	
CSE030		0.00		CSE030		0.00	
CSE055		0.00		CSE055		0.00	
CSE057		0.00		CSE057		0.00	
CSE084		3.28		CSE084		0.00	
CSE086		12.74		CSE086		6.83	
CSE004		0.00		CSE004		0.00	
CSE013		0.00		CSE013		0.00	
CSE040		0.00		CSE040		0.00	
CSE041		0.00		CSE041		0.00	
CSE043		0.00		CSE043		0.00	
CSE050		0.00		CSE050		0.00	
CSE052		9.08		CSE052		0.00	
CSE053		0.14		CSE053		0.00	
CSE056		0.00		CSE056		0.55	
CSE063		2.12		CSE063		0.00	
CSE064		0.00		CSE064		10.66	
CSE085		16.78		CSE085		0.00	
CSE085 CSE008			1	CSE085 CSE008		0.00	
		0.00	1				
CSE009		0.00		CSE009		0.00	
CSE035		0.07		CSE035		0.00	
CSE060		1.70	1	CSE060		0.00	
CSE020		0.00		CSE020		0.00	
CSE066		0.01		CSE066		0.00	
CSE075		0.00		CSE075		12.82	
CSE076		0.00		CSE076		0.00	
CSE034		0.00		CSE034		0.00	
CSE036		0.00		CSE036		0.00	
CS3016		0.00		CS3016		0.00	
HPCI Southampton		0.00		HPCI Southampton		0.00	
HPCI Daresbury		0.00		HPCI Daresbury		0.00	
HPCI Edinburgh		0.00		HPCI Edinburgh		0.00	
CSN001		0.00		CSN001		40.35	
CSN001 CSN003				CSN003			
		49.28				12.23	
CSN005		0.00		CSN005		0.00	
CSN006		2.41		CSN006		0.00	
CSN007		0.00		CSN007		0.00	
CSN010		0.00		CSN010		0.00	
CSN012		0.00		CSN012		0.00	
CSN015		0.00	1	CSN015		0.00	
CSN017		0.00		CSN017		0.00	
CSN036		0.00	1	CSN036		0.00	
CSN044		0.00		CSN044		0.00	
CSN052		0.00	1	CSN052		0.00	
CSB001		0.00	1	CSB001		0.00	
CSB002		0.00		CSB002		0.00	
CSP004		0.16	1	CSP004		0.00	
			1				
CS2018		0.00		CS2004		0.00	
CS2033		0.00		CS2033		0.00	
CS2034		0.00	1	CS2034		0.00	
CS2035		0.00	1	CS2035		0.00	
CS2036		0.00		CS2036		7.49	
CS2037		0.00		CS2037		0.00	
CS3001		0.00	1	CS2039		0.00	
CS3002		0.00		CS3002		0.00	
CS3005		0.00		CS3005		0.00	
CS3010		0.00		CS3010		0.00	
CS3015		0.00		CS3015		0.03	
0000.0		0.00	ı	0000.0	1	0.00	ļ.

Percentage CPU time per consortia for 0	Green in April 2003	Percentage CPU time per consortia	Percentage CPU time per consortia for Wren in April 2003			
Consortia % Machine Time		Consortia	% Machine Time			
CSE002	0.01	CSE002	0.03			
CSE084	0.00	CSE084	0.11			
CSE086	0.81	CSE086	2.71			
CSE098	0.00	CSE098	0.00			
CSE041	0.00	CSE041	49.39			
CSE053	13.65	CSE053	0.42			
CSE056	0.00	CSE056	0.00			
CSE063	15.80	CSE063	1.09			
CSE064	1.38	CSE064	2.85			
CSE085	0.00	CSE085	6.21			
CSE082	0.00	CSE082	0.01			
CSE009	0.77	CSE009	0.56			
CSE075	8.72	CSE075	1.45			
CSE076	0.00	CSE076	0.08			
CSN001	29.97	CSN001	6.95			
CSN003	4.00	CSN003	23.79			
CSN006	21.56	CSN006	0.64			
CSN015	2.95	CSN015	2.50			
CSN052	0.01	CSN052	0.00			
CSP006	0.00	CSP006	0.74			
CS2036	0.00	CS2036	0.07			
CS2039	0.03	CS2039	0.38			
CS3015	0.35	CS3015	0.18			

centage disc allocation by Consortia for Turing in April 2003		Percentage disc allocation by Consortia for Fermat in April 2003		
onsortia	%Allocation	Consortia	%Allocation	
SE002	29.10	CSE002	7.86	
SE030	0.00	CSE030	7.40	
E055	0.12	CSE055	0.00	
E057	0.05	CSE057	0.00	
E084	1.53	CSE084	1.58	
E086	9.52	CSE086	7.92	
E013	1.19	CSE013	0.23	
E040	0.03	CSE040	0.40	
E041	0.06	CSE041	0.08	
E043	0.06	CSE043	0.08	
E052	0.06	CSE043	0.00	
E052	0.39	CSE052 CSE053	0.00	
		CSE053 CSE056		
E056	0.00		0.12	
E063	1.27	CSE063	0.00	
E064	0.03	CSE064	0.08	
E085	19.12	CSE085	8.72	
E009	6.82	CSE009	1.58	
035	0.90	CSE035	0.00	
)19	0.00	CSE019	0.00	
020	0.00	CSE020	0.00	
066	1.49	CSE066	0.82	
175	7.47	CSE075	38.38	
76	0.12	CSE076	0.43	
34	0.00	CSE034	0.00	
36	0.03	CSE036	0.01	
Southampton	0.00	HPCI Southampton	0.00	
Daresbury	0.12	HPCI Daresbury	0.04	
l Edinburgh	0.12	HPCI Edinburgh	0.08	
001	2.54	CSN001	11.89	
003	3.95	CSN003	2.38	
1005	0.00	CSN005	0.00	
006	6.37	CSN006	1.58	
1007	0.00	CSN007	0.00	
NO10	0.00	CSN010	0.00	
010	0.00	CSN010 CSN012	0.00	
	0.00	CSN012 CSN015	1.23	
015		l l		
017	0.02	CSN017	0.24	
1036	3.83	CSN036	5.55	
052	1.19	CSN052	0.00	
001	0.06	CSB001	0.00	
2004	0.70	CSP004	0.14	
037	0.00	CS2037	0.32	
015	0.00	CS3015	0.16	

Percentage usage of	HSM by Consortium for April 2003
Consortium	% Usage
CSE002	0.18
CSE086	0.04
CSE013	0.00
CSE041	0.27
CSE043	0.00
CSE053	0.03
CSE063	0.32
CSE064	0.03
CSE085	2.47
CSE035	0.01
CSE075	0.55
CSN001	25.43
CSN003	65.37
CSN006	0.01
CSN015	2.67
CSN036	2.61
CSN044	0.02

Percentage PE usage	ercentage PE usage on Turing by Research Council for April 2003		Percentage CPU usag	ge on Fermat by Research Cour
Research Council	<u>% Usage</u>		Research Council	% Usage
EPSRC	47.72		EPSRC	47.42
HPCI	0.00		HPCI	0.00
NERC	51.70		NERC	52.58
BBSRC	0.00		BBSRC	0.00
ESRC	0.00		ESRC	0.00
PPARC	0.58		PPARC	0.00
	l			<u> </u>
Percentage PE usage	on Green by Research Council	or April 2003	Percentage CPU usage	ge on Wren by Research Counc
Research Council	<u>% Usage</u>		Research Council	% Usage
EPSRC	41.48		EPSRC	64.99
HPCI	0.00		HPCI	0.00
NERC	58.49		NERC	33.88
BBSRC	0.03		BBSRC	0.38
			1	
ESRC	0.00		ESRC	0.00

Percentage Disc allocat	Percentage Disc allocated on Turing by Research Council for April 2003			Percentage Disc allocated on Fermat by Research Council for April 2003				
Research Council	% Allocated		Research Council	% Allocated				
EPSRC	80.84		EPSRC	76.51				
HPCI	0.25		HPCI	0.12				
NERC	18.16		NERC	22.91				
BBSRC	0.06		BBSRC	0.32				
ESRC	0.00		ESRC	0.00				
PPARC	0.70		PPARC	0.14				
Percentage Disc allocat	ed as SAN UHP by Research Co	uncil for April 2003	Percentage Disc allo	cated as SAN HV by Research C				
EPSRC	0.00		EPSRC	0.00				
HPCI	0.00		HPCI	0.00				
NERC	0.00		NERC	100.00				
BBSRC	0.00		BBSRC	0.00				
ESRC	0.00		ESRC	0.00				
PPARC	0.00		PPARC	0.00				

Percentage HSM usage by Research Council for April 2003								
Research Council	<u>% usage</u>							
EPSRC	3.90							
HPCI	0.00							
NERC	96.10							
BBSRC	0.00							
ESRC	0.00							
PPARC	0.00							

The following tables show the training and support resource usage by the consortias in person days to the current month.

Project	PI	Subject	Discipline/ Department	Liaison Officer	Support Bought	Apps Support for Apr 2003	Total Apps Support from July 2000	Opt Support for Apr 2003	Total Opt Support from July 2000	Total Support Used	Training Bought	Training Used
cse002	Wander, A (Dr)	Support for the UKCP	Physics	Neil Stringfellow	446.7		12.25			144.25	74	3
cse003	Dundas, D (Dr)	HPC Consortiums 98-2000		Martyn Foster	25.27		6		15.5	24.5	10	6
cse004	Sandham, N (Prof)	UK Turbulence		Keith Taylor							2	2
cse006	Briddon, P (Dr)	Covalently Bonded Materials		Kevin Roy	4				4	4		
cse007	Foulkes, M (Dr)	Quantum Many Body Theory		Martyn Foster	4					1	2	2
cse008	Vincent, M (Dr)	Model Chemical Reactivity		Robin Pinning								
cse009	Slater, Ben	HPC Computing Applications in Materials Chemistry	Chemistry	Kevin Roy	275.5		6		3	9	26.5	
cse010	Williams, J (Dr)	Free Surface Flows		Dan Kidger	15.95					15.95		
cse011	Williams, J (Dr)	Open Channel Flood Plains		Dan Kidger	2.18					2.18	1	
cse012												
cse013	Leschziner, M (Prof)	Large Eddy Simulation for Aerospace & Turbomachinery Dynamics	Mechanical Engineering	Mike Pettipher	9						57.5	10
cse014	de Oliverira, C (Dr)	Problems in Nuclear Safety		Dan Kidger	3							
cse016	Cant, S (Dr)	Turbulent Combustion		Keith Taylor								
cse017	Luo, K (Dr)	Large Eddy Simulation & Modelling of Buoyant Plumes & Smoke Spread in Enclosures		Keith Taylor	2.44						5	
cse018	Jaffri, K			Keith Taylor								
cse019	Lander, J (Dr)			Kevin Roy								
cse020 cse021	Staunton, J (Dr)			Kevin Roy John Brooke	0.2						1.04	1
cse022	Jones, W P (Prof)			Keith Taylor								
cse023	Allen, M (Prof)			Robin Pinning								
cse024	Allan, R J (Dr)			Ben Jesson	24						300	

											ssue 1.0
cse025	Walet, N R (Dr)			Martyn Foster						2	1.5
cse026	Neal, M (Dr)										
cse027											
cse028											
cse029	Apsley, D D			Keith Taylor							
CSE023	(Dr)			Keitii Tayloi							
cse030	Desplat, J C	High Performance	Physics	Andrew	103	21		5	51	31	7
	(Dr)	Computing for		Jones							
		Complex Fluids									
021											
cse031											
cse033	Breard, C (Dr)										
cse034				Kevin Roy							
cse035	Jenkins, S (Dr)	Ab Initio Simulations	Chemistry	Neil							
		of Catalytic Processes at Extended Metal		Stringfellow							
		Surfaces									
cse036	Duff, I (Prof)	Research &	Maths	Adrian Tate							
230030	2, 1 (1101)	Development of	.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,								
		Algorithms &									
		Software for Large- Scale Linear & Non-									
		Linear Systems									
								L	L	L	
cse040	Badcock, K	Prediction of Non-	Aerospace				ĺ				
	(Dr)	Linear Flutter	Engineering								
		Characteristics by									
		Numerical Path Following & Model									
		Reduction									
cse041	Wu, X (Dr)	Flutter & Noise	Mechanical	Keith Taylor	60					5	
	,(=1)	Generation	Engineering								
		Mechanisms - Turbomachinery Fan									
		Assemblies									
		1 issemones									
						<u> </u>					
cse043	Williams, J (Dr)	Numerical	Engineering	Neil	4	2		2	4	4	4
		Simulation of Flow over a Rough Bed		Stringfellow							
		over a Rough Bed									
cse050	Bradley, D	Flame Instabilities:	Mechanical		20					10	
	(Prof)	their influence on	Engineering								
		turbulent combustion & incorporation in									
		mathematical models.									
					<u></u>	<u> </u>					
cse051											
cse052	Di Mare, F	Heat Transfer in	Mechanical	Jon Gibson	10					25	
	(Miss)	Turbine Combustors	Engineering								
						 	<u> </u>				
cse053	Leschziner, M	Coupling RANS	Aerospace	Mike	15					8	
	(Prof)	Near-Wall	Engineering	Pettipher							
		Turbulence Models with Large Eddy									
		Simulation Strategies									

									33 <b>uc</b> 1.0
cse055	Staunton, J (Dr)	Ab-initio theory of magnetic anisotropy in transition metal ferromagnets	Physics	Andrew Jones	5			10	
cse056	Chen, T (Dr)	Aerothermalelasticity Modelling of Air Riding Seals for Large Gas Turbines	Mechanical Engineering	Keith Taylor	5			10	
cse057	Evans, R (Dr)	Relativistic Particle Generation from Ultra-Intense Laser Plasma Interactions	Physics	Andrew Jones	20			10	
cse060	Robb, M (Prof)	CCP1 Renewal plus falgship project on Car-Parrinello in Chemistry	Chemistry	Neil Stringfellow	10			10	
cse061	Imregun, M (Prof)	Casing treatment modelling for the investigation of stall, flutter and noise mechanisms in turbomachinery compressors.	Mechanical Engineering		5			5	
cse063	Sandham, N (Prof)	Computational Aerocaustics for Turbulent Plane Jets	Aerospace Engineering	Adrian Tate	30			10	
cse064	Leschziner, M (Prof)	Improvement of predictive performance of anisotropy-resolving turbulence models in post-reattachment recovery region of separated flow using Large Eddy Simulation	Aerodynamics	Mike Pettipher	10			8	
cse066	Coveney, P V (Prof)	New clay-polymer nanocomposites using diversity-discovery methods: synthesis, processing and testing	П	Neil Stringfellow	21			6	3

										35uc 1.0
cse071	lacovides (Dr)	The Practical Computation of Three-Dimensional Time-Dependent Turbulent Flows in Rotating Cavities	Mechanical Engineering	Mike Pettipher	5				6	
cse072	Karlin, V (Dr)	Structure & Dynamics of Unstable Premixed Laminar Flames	Engineering	Jon Gibson	18				9	6
cse074	Luo (Dr)	Consortium on Computational Combustion for Engineering Applications	Engineering	Jon Gibson						
cse075	Novik, K (Dr)	The Reality Grid - a tool for investigating condensed matter & materials	IΤ	Neil Stringfellow	14	5		5	14	
cse076	Briddon, P (Dr)	HPC facilities for the first principles simulation of covalently bonded materials	П	Adrian Tate	20		11	11		
cse077	Kronenburg, A (Dr)	Combustion Model Development for Large-Eddy Simulation of Non- Premixed Reactive Flows.	Mechanical Engineering						2	
cse082	Barakos, G (Dr)	CFD Study of Three- Dimensional Dynamic Shelf	Aerospace Engineering		5				1	
cse084	Needs, R (Dr)	The Consortium for Computational Quantum Many-Body Theory	Physics	Adrian Tate	19				10	
cse085	Sandham, N (Prof)	UK Turbulence Consortium	Engineering	Adrian Tate	15				6	5
cse086	Taylor, K (Prof)	Multiphoton, Electron Collisions and BEC HPC Consortium 2002- 2004	Physics	Kevin Roy	35		5	5	116	

cse089	Wiercigroch, M (Dr)	Nonlinear Dynamics & Rock Contact Fracture Mechanics in Modelling of Vibration Enhanced Drilling	Engineering	Keith Taylor	15					7	
cse098	De Souza M M (Dr)	Indium interactionsin silicon for ULSI technologies	Physics		5					5	
csn001	De Cuevas, B (Mrs)	OCCAM	Ocean/Earth Sciences	Zoe Chaplin	70.5	1	3	58	61	20	3
csn002	Vincent, Mark (Dr)			Robin Pinning							
csn003	Steenman- Clark, L (Dr)	UGAMP	Meteorology	Zoe Chaplin				1	1	12.1	4
csn005	Huw Davies, J (Dr)			Fumie Costen	27				27	6	6
csn006	Brodholt, J (Dr)		Geological Sciences	Neil Stringfellow							
csn007				Stephen Pickles							
csn008				Michael Bane							
csn009	Proctor, R (Dr)			Michael Bane							
csn010				Kevin Roy	2					5	
csn011	Gray, S L (Dr)										
csn012	Tennyson, J (Prof)	Calculated Absorption by water vapour at near infra- red & optical wavelengths	Physics & Astronomy	Andrew Jones							
csn013	Voke, P (Prof)	Large Eddy Simulation Extended by Extreme Value Theory for the Prediction of Dispersion, Concentration Threshold Boundaries & Field Connectivity	Mechanical & Materials Engineering	Keith Taylor							
csn014	Llewellyn Jones (Prof)		Physics & Astronomy	Andrew Jones							
csn015	Proctor, R (Dr)	A Testbed for Zooplankton Models of the Irish Sea	Coastal & Marine Sciences	Zoe Chaplin	20	2			2	10	3
csn017	Payne, A (Dr)	Stability of the Antarctic Ice Sheet	Geography	Kevin Roy	16			2	2	18	2

											1	ssue 1.0
csn036	Woolf, A (Mr)	Assimilation of	Environmenta	Zoe Chaplin	2						5	
		Altimeter,	1 Science									
		Radiometer & in situ										
		data into the OCCAM model.										
		Analysis of water										
		properties &										
		transports										
csn044	Steenman-	Earth Observation	Meteorology	Zoe Chaplin								
CSHO44	Clark, L (Dr)	Project	ivicteorology	Zoc Chaphin								
		110,111										
csb001	Houldershaw, D	Use of Cray T3E for	Crystallograp	Keith Taylor	6		1.5			3.5	4	2
	(Dr)	multiple long	hy									
		trajectories of protein unfolding										
csb002	Mulholland, A			Robin Pinning								
	(Dr)			1								
						<u></u>	<u> </u>					
csb003	Carling, J (Dr)										3	
csp002	Chapman, S				2						8	4
	(Dr)											
csp003	Ord, S M (Mr)			Stephen	11.79		10			11	12	12
ı .	`			Pickles								
csp004	Bell, K L (Prof)	A Programme for	Astronomy	Keith Taylor	7						8	
		Atomic Physics for		'								
		Astrophysics at										
		Queen's University Belfast (2001-2005)										
		Bellast (2001-2003)										
csp006	Jain, R (Dr)	Numerical	Physics	Jon Gibson							12	
Cspood	Jani, K (Di)	Simulation of forced	rilysics	Jon Gloson							12	
		magnetic										
		reconnection in the										
		solar corona										
css001	Boyle, P (Dr)			John Brooke							20	
css002	Crouchley, R			John Brooke							2.5	2
	(Dr)											
HPCID	Allan, R (Dr)										1	1
HPCIE	Henty, D (Dr)											
HPCIS	Nicole, D (Dr)											
UKHEC	Allan, R (Dr)	UK HEC		Andrew Jones							2	2
UKITEC	Anan, K (DI)	Collaboration, Core		Andrew Jones								
		Support for High-End										
		Computing 1999-										
		2002										
cs2001				Stephen							10	
				Pickles								
cs2002				John Brooke	0.25					0.25		
	<u> </u>											
cs2003												
cs2004				Keith Taylor								
cs2005												
cs2006				Mike								
-52000				Pettipher								
								L	l	L	L	
cs2007											1	1
cs2008				Robin Pinning	7.91					7.91		
C32000				Room Filling	/.71					/.71		

										1	ssue 1.0
cs2009	Pennington, V			Michael Bane							
	(Dr)										
cs2010											
cs2011	Mallinger, F										
CS2011	(Dr)										
2012										1.5	1.5
cs2012	Qin, N (Prof)									1.5	1.5
cs2014	Karlin, V (Dr)									2	2
cs2015	Tejera Cuesta, P			Keith Taylor						3	1.5
	(Mr)				I	I	l				
cs2016	Miles, J J (Dr)				2						
cs2017	Eisenbach, M										
CS2017	(Mr)										
	(1411)										
											ļ
cs2018											
cs2019											
cs2020					1						
cs2021										6	1
cs2022										3	2
cs2023											
cs2024											
										1	
cs2026										1	
cs2027	<u> </u>				6					4	<u> </u>
cs2028	Annett (Dr)				2					2	
cs2029											
	Mal/ "									1	1
cs2030	McKenna, K (Mr)									1	1
1											
cs2031	Ess	<u> </u>									
cs2032	Jain, R (Dr)										
cs2033											
	D. C MM	To diama internationalis	Dlanda	I Cib							
cs2034	De Souza, M M (Dr)	Indium interactions in silicon for future	Physics	Jon Gibson	I	I	l				
	(DI)	ULSI technologies.			I	I	l				
		o Lor teemiologies.			I	I	l				
					I	I	l				
					I	I	l				
2025	D 1 C(D)	D ( 1 1E11		TZ 1:4 TE 1							
cs2035	Barakos, G (Dr)	Detached Eddy Simulation of	Aerospace Engineering	Keith Taylor							
		Aerodynamics &	Linginicering		I	I	l				
		Aerocautics of Cavity			I	I	l				
		Flows			I	I	l				
2026	D 11 77 131	NOVE 1	36 1 1 1	1 07							
cs2036	Farid, Vakili-	MPI Evaluation	Mechanical	Jon Gibson	1.7	I	l	1	1		
	Tahami (Mr)		Aerospace & Manufacturin		I	I	l				
			g Engineering								
			8 8 8								
					I	I	l				
cs2037	Domene,	Ab initio molecular									
632037	Carmen (Dr)	dynamics of ion in			I	I	l				
	(= 1)	membrane proteins			I	I	l				
					I	I	l				
cs2038	Excell, P (Prof)	Computational	Informatics		1						
		Bioelectromagnetic									
		Modelling of Human Cellular Processes for									
		Cellular Processes for									
		Mobile Phone Safety Research.									
		Kesearch.									
cs2039	Carlborg (Dr)	Genetic Analysis of	Genetics &								
		Complex Traits	Biometry								
			'								
2001					6.0					10.47	1
cs3001					6.8					10.45	3
cs3002	Novik, K (Dr)									2	2
cs3003	Chambers, E										
	(Dr)										
cs3004	Avis, N (Prof)			Jo Leng	19					12	1
				l							
cs3005	Zarei, B (Mr)			John Brooke	10					5	3
cs3006					4					5	1
	F: 1 -						-				-
cs3007	Finch, E				37		7	5	12	5	
cs3008	Alsberg, B (Dr)				3					13	
cs3009	Flower, D (Dr)				2					3	
cs3010	Kemsley, K				4					8	1
<u> </u>	(Dr)										
cs3012	Austin, J (Prof)				5			3	3	3	2

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cs3013	Raval, R (Prof)				2				
cs3014	MacLaren, J (Dr)				2				
cs3015	Hampshire, D (Dr)	High Performance Computational Solutions for the Ginzburg-Landau Equations that describe Flux Pinning in High-Field Superconductors	Physics	Keith Taylor	2			5	
cs3016	Petchey, O (Dr)	Randomisation test for the significance of functional diversity for eco-system processes	Animal & Plant Sciences	Adrian Tate	2				
cs3017	Gross, M (Mr)	Numerical Simulation of Laser Materials Processing	Engineering		3				
cs3018	Durrant, M (Dr)	Functional modelling of oxalate-degrading enzymes & of lipoxygenase using quantum calculations.	Biology		3			3	
cs3019	Bengough (Dr)	Lattice-Boltzmann simulation of water & solute transport in porous media.	Physics		2				

The following table shows resource utilisation by Consortia to the end of April 2003.

cs2039 Carlborg Last Trade: Mon Mar 3 09:34:39 2003 Usage: 3.5 of 20.2 Hour Wren CPU (0.2 of 1.0 G.S.T), 17.2% 24.1 of 25.6 Hour SMP CPU (0.9 of 1.0 G.S.T), 94.4% 0.0 of 0.5 GByteYear MP Disk (0.0 of 1.8 G.S.T), 0.0% 578.0 of 1834.6 Hour Green CPU (30.2 of 95.9 G.S.T), 31.5% Total usage for project cs2039 31.3 of 99.6 Generic Service Tokens, 31.4% cs2041 Filippone Last Trade: Thu Mar 20 13:59:37 2003 Usage: 0.0 of 10.1 Hour Wren CPU (0.0 of 0.5 G.S.T), 0.0% 0.0 of 12.5 GByteYear MP Disk (0.0 of 44.5 G.S.T), 0.0% 0.0 of 1052.6 Hour Green CPU (0.0 of 55.0 G.S.T), 0.0% Total usage for project cs2041 0.0 of 100.0 Generic Service Tokens, 0.0% cs3015 Hampshire Last Trade: re-enabled Usage: 84.8 of 285.3 Hour Wren CPU (4.2 of 14.1 G.S.T), 29.7% 509.8 of 648.8 Hour SMP CPU (19.8 of 25.2 G.S.T), 78.6% 2.0 of 3.0 GByteYear MP Disk (7.1 of 10.7 G.S.T), 66.3% 5138.6 of 16049.3 Hour Green CPU (268.5 of 838.6 G.S.T), 32.0% 0.0 of 2.0 PersonDay Support (0.0 of 58.8 G.S.T), 0.0% 0.0 of 5.0 Day Training (0.0 of 53.8 G.S.T), 0.0% Total usage for project cs3015 299.6 of 1001.2 Generic Service Tokens, 29.9% cs3016 Petchey Last Trade: re-enabled Usage: 42.7 of 78.4 Hour Wren CPU (2.1 of 3.9 G.S.T), 54.4% 937.7 of 9920.1 Hour SMP CPU (36.4 of 385.4 G.S.T), 9.5% 0.0 of 0.5 GByteYear MP Disk (0.0 of 1.8 G.S.T), 0.0% 0.0 of 2.0 PersonDay Support (0.0 of 58.8 G.S.T), 0.0% Total usage for project cs3016 38.5 of 449.9 Generic Service Tokens, 8.6% cs3017 Gross Last Trade: Mon Jan 13 10:31:13 2003 Usage: 0.0 of 100.3 Hour Wren CPU (0.0 of 5.0 G.S.T), 0.0% 0.0 of 1.3 Hour SMP CPU (0.0 of 0.1 G.S.T), 0.0% 0.0 of 25.0 GByteYear MP Disk (0.0 of 89.3 G.S.T), 0.0% 0.0 of 6075.3 Hour Green CPU (0.0 of 317.4 G.S.T), 0.0% 0.0 of 3.0 PersonDay Support (0.0 of 88.2 G.S.T), 0.0% Total usage for project cs3017 0.0 of 500.0 Generic Service Tokens, 0.0% cs3019 Bengough Last Trade: Tue Dec 17 12:55:36 2002 Usage: 0.0 of 360.1 Hour Wren CPU (0.0 of 17.8 G.S.T), 0.0% 0.5 of 10648.7 Hour SMP CPU (0.0 of 413.7 G.S.T), 0.0% 0.0 of 3.0 GByteYear MP Disk (0.0 of 10.7 G.S.T), 0.0% 0.0 of 2.0 PersonDay Support (0.0 of 58.8 G.S.T), 0.0% Total usage for project cs3019 0.0 of 501.1 Generic Service Tokens, 0.0%

CSE001 - Admin users

Last Trade: Fri Oct 8 15:16:30 1999 Usage: 0.0 of 12.4 PEHour MPP PE CPU (0.0 of 0.3 G.S.T), 0.0% 0.1 of 0.1 GByteYear HP Disk (0.4 of 0.5 G.S.T), 70.2% Total usage for project cse001 0.4 of 0.8 Generic Service Tokens, 45.1% cse002 GR/N02337 Bird Last Trade: re-enabled Usage: 3029700.6 of 3078966.1 PEHour MPP PE CPU (73254.3 of 74445.4 G.S.T), 98.4% 802.6 of 1322.0 GByteYear HP Disk (4777.3 of 7869.1 G.S.T), 60.7% 28.0 of 102.8 Hour Wren CPU (1.4 of 5.1 G.S.T), 27.2% 148382.8 of 162260.2 Hour SMP CPU (5764.9 of 6304.1 G.S.T), 91.4% 309.8 of 1222.0 GByteYear MP Disk (1106.6 of 4364.3 G.S.T), 25.4% 392.2 of 414.5 GByteYear HSM/Tape (246.3 of 260.4 G.S.T), 94.6% 265209.9 of 256260.5 Hour Green CPU (13857.8 of 13390.1 G.S.T), 103.5% 144.2 of 144.3 PersonDay Support (4242.6 of 4242.6 G.S.T), 100.0% 3.0 of 3.0 Day Training (32.3 of 32.3 G.S.T), 100.0% Total usage for project cse002 103283.5 of 110913.3 Generic Service Tokens, 93.1% cse002 Daresbury Last Trade: never Usage: 493368.1 of 502686.0 PEHour MPP PE CPU (11929.0 of 12154.3 G.S.T), 98.1% 133.6 of 200.0 GByteYear HP Disk (795.5 of 1190.5 G.S.T), 66.8% 27.6 of 25.0 Hour Wren CPU (1.4 of 1.2 G.S.T), 110.3% 35538.5 of 35350.0 Hour SMP CPU (1380.7 of 1373.4 G.S.T), 100.5% 34.4 of 48.9 GByteYear MP Disk (123.0 of 174.6 G.S.T), 70.4% 70.7 of 106.0 GByteYear HSM/Tape (44.4 of 66.6 G.S.T), 66.7% 38123.2 of 22500.0 Hour Green CPU (1992.0 of 1175.7 G.S.T), 169.4% Total usage for subproject cse002a 16266.0 of 16136.3 Generic Service Tokens, 100.8% cse002 Belfast Last Trade: never Usage:

362960.7 of 388170.0 PEHour MPP PE CPU (8775.9 of 9385.5 G.S.T), 93.5% 105.5 of 120.0 GByteYear HP Disk (628.2 of 714.3 G.S.T), 87.9% 0.0 of 6.0 Hour Wren CPU (0.0 of 0.3 G.S.T), 0.0% 19555.1 of 20446.0 Hour SMP CPU (759.7 of 794.4 G.S.T), 95.6% 12.4 of 44.9 GByteYear MP Disk (44.1 of 160.4 G.S.T), 27.5% 0.0 of 3.0 GByteYear HSM/Tape (0.0 of 1.9 G.S.T), 0.0% Total usage for subproject cse002b 10208.0 of 11056.6 Generic Service Tokens, 92.3%

cse002 Cambridge - Matsci Last Trade: never Usage: 371895.7 of 371396.0 PEHour MPP PE CPU (8992.0 of 8979.9 G.S.T), 100.1% 50.0 of 54.4 GByteYear HP Disk (297.7 of 323.8 G.S.T), 91.9% 0.0 of 6.0 Hour Wren CPU (0.0 of 0.3 G.S.T), 0.0% 0.0 of 1.0 Hour SMP CPU (0.0 of 0.0 G.S.T), 0.0% 26.9 of 50.4 GByteYear MP Disk (96.1 of 180.0 G.S.T), 53.4% 9.9 of 52.0 GByteYear HSM/Tape (6.2 of 32.6 G.S.T), 19.0% Total usage for subproject cse002c 9392.0 of 9516.7 Generic Service Tokens, 98.7%

cse002 Cambridge - Physics Last Trade: never Usage: 88900.2 of 89901.0 PEHour MPP PE CPU (2149.5 of 2173.7 G.S.T), 98.9% 15.3 of 26.7 GByteYear HP Disk (91.0 of 158.9 G.S.T), 57.2% 0.1 of 8.0 Hour Wren CPU (0.0 of 0.4 G.S.T), 0.8% 18353.7 of 27938.0 Hour SMP CPU (713.1 of 1085.4 G.S.T), 65.7% 22.5 of 27.7 GByteYear MP Disk (80.5 of 98.9 G.S.T), 81.3% 0.0 of 27.0 GByteYear HSM/Tape (0.0 of 16.9 G.S.T), 0.0% 0.0 of 0.5 Hour Green CPU (0.0 of 0.0 G.S.T), 0.0%

Total usage for subproject cse002d 3034.0 of 3534.4 Generic Service Tokens, 85.8%

cse002 Bath
Last Trade: never
Usage:
455233.5 of 457233.0 PEHour MPP PE CPU (11007.0 of 11055.3 G.S.T), 99.6%
173.2 of 199.0 GByteYear HP Disk (1031.0 of 1184.5 G.S.T), 87.0%
0.0 of 4.0 Hour Wren CPU (0.0 of 0.2 G.S.T), 0.0%
0.0 of 1.0 Hour SMP CPU (0.0 of 0.0 G.S.T), 0.0%
37.3 of 50.5 GByteYear MP Disk (133.4 of 180.4 G.S.T), 73.9%
123.3 of 75.0 GByteYear HSM/Tape (77.5 of 47.1 G.S.T), 164.4%
Total usage for subproject cse002e 12248.8 of 12467.5 Generic Service Tokens, 98.2%

cse002 UCL
Last Trade: never
Usage:
84029.5 of 89030.0 PEHour MPP PE CPU (2031.7 of 2152.6 G.S.T), 94.4%
27.5 of 59.1 GByteYear HP Disk (163.4 of 351.8 G.S.T), 46.5%
0.0 of 12.0 Hour Wren CPU (0.0 of 0.6 G.S.T), 0.0%
4775.9 of 3450.0 Hour SMP CPU (185.6 of 134.0 G.S.T), 138.4%
28.6 of 54.6 GByteYear MP Disk (102.1 of 195.0 G.S.T), 52.4%
0.0 of 3.3 GByteYear HSM/Tape (0.0 of 2.1 G.S.T), 0.0%
34210.9 of 29998.0 Hour Green CPU (1787.6 of 1567.5 G.S.T), 114.0%
Total usage for subproject cse002f 4270.4 of 4403.6 Generic Service Tokens, 97.0%

cse002 Oxford - pcl
Last Trade: never
Usage:
120318.8 of 120319.0 PEHour MPP PE CPU (2909.2 of 2909.2 G.S.T), 100.0%
18.2 of 32.8 GByteYear HP Disk (108.1 of 195.2 G.S.T), 55.4%
0.3 of 8.0 Hour Wren CPU (0.0 of 0.4 G.S.T), 3.9%
1905.4 of 1875.0 Hour SMP CPU (74.0 of 72.8 G.S.T), 101.6%
30.6 of 30.8 GByteYear MP Disk (109.2 of 110.0 G.S.T), 99.2%
0.0 of 2.2 GByteYear HSM/Tape (0.0 of 1.4 G.S.T), 0.0%
17426.1 of 16195.0 Hour Green CPU (910.5 of 846.2 G.S.T), 107.6%
Total usage for subproject cse002g 4111.0 of 4135.2 Generic Service Tokens, 99.4%

cse002 Edinburgh
Last Trade: never
Usage:
366804.2 of 304793.0 PEHour MPP PE CPU (8868.9 of 7369.5 G.S.T), 120.3%
46.0 of 51.0 GByteYear HP Disk (273.9 of 303.6 G.S.T), 90.2%
0.0 of 8.0 Hour Wren CPU (0.0 of 0.4 G.S.T), 0.0%
0.0 of 12800.0 Hour SMP CPU (0.0 of 497.3 G.S.T), 0.0%
13.4 of 46.5 GByteYear MP Disk (48.0 of 166.1 G.S.T), 28.9%
0.0 of 2.8 GByteYear HSM/Tape (0.0 of 1.8 G.S.T), 0.0%
Total usage for subproject cse002i 9190.8 of 8338.6 Generic Service Tokens, 110.2%

cse002 Kent (UKC)
Last Trade: never
Usage:
240735.7 of 239888.0 PEHour MPP PE CPU (5820.7 of 5800.2 G.S.T), 100.4%
85.8 of 100.0 GByteYear HP Disk (510.5 of 595.2 G.S.T), 85.8%
0.0 of 6.0 Hour Wren CPU (0.0 of 0.3 G.S.T), 0.0%
0.0 of 1.0 Hour SMP CPU (0.0 of 0.0 G.S.T), 0.0%
20.1 of 33.6 GByteYear MP Disk (71.8 of 120.0 G.S.T), 59.8%
67.9 of 100.0 GByteYear HSM/Tape (42.6 of 62.8 G.S.T), 67.9%
151271.9 of 156113.0 Hour Green CPU (7904.3 of 8157.2 G.S.T), 96.9%
Total usage for subproject cse002j 14349.9 of 14735.8 Generic Service Tokens, 97.4%

cse002 Durham Last Trade: never Usage: 57482.5 of 110000.0 PEHour MPP PE CPU (1389.9 of 2659.7 G.S.T), 52.3% 29.3 of 45.0 GByteYear HP Disk (174.6 of 267.9 G.S.T), 65.2%

0.0 of 1.0 Hour SMP CPU (0.0 of 0.0 G.S.T), 0.0% 12.7 of 45.0 GByteYear MP Disk (45.2 of 160.7 G.S.T), 28.1% Total usage for subproject cse002k 1609.6 of 3088.3 Generic Service Tokens, 52.1% cse002 York Last Trade: never Usage: 17530.3 of 35000.0 PEHour MPP PE CPU (423.9 of 846.3 G.S.T), 50.1% 2.5 of 5.0 GByteYear HP Disk (14.9 of 29.8 G.S.T), 50.2% 0.0 of 2.0 Hour Wren CPU (0.0 of 0.1 G.S.T), 0.0% 0.0 of 1.0 Hour SMP CPU (0.0 of 0.0 G.S.T), 0.0% 20.1 of 30.0 GByteYear MP Disk (71.9 of 107.1 G.S.T), 67.1% Total usage for subproject cse002l 510.7 of 983.3 Generic Service Tokens, 51.9% cse009 GR/20607 Catlow Last Trade: re-enabled Usage: 1740828.0 of 1738836.8 PEHour MPP PE CPU (42091.0 of 42042.8 G.S.T), 100.1% 203.4 of 728.3 GByteYear HP Disk (1210.5 of 4335.3 G.S.T), 27.9% 36.4 of 79.4 Hour Wren CPU (1.8 of 3.9 G.S.T), 45.8% 52016.7 of 55111.5 Hour SMP CPU (2020.9 of 2141.2 G.S.T), 94.4% 35.9 of 646.7 GByteYear MP Disk (128.2 of 2309.7 G.S.T), 5.5% 0.0 of 0.9 GByteYear HSM/Tape (0.0 of 0.6 G.S.T), 0.0% 254419.1 of 254206.0 Hour Green CPU (13293.9 of 13282.8 G.S.T), 100.1% 9.0 of 9.5 PersonDay Support (264.7 of 279.4 G.S.T), 94.7% 0.0 of 0.5 Day Training (0.0 of 5.4 G.S.T), 0.0% Total usage for project cse009 59011.0 of 64401.2 Generic Service Tokens, 91.6% cse030 Edinburgh Last Trade: never Usage: 102882.3 of 110480.0 PEHour MPP PE CPU (2487.6 of 2671.3 G.S.T), 93.1% 206.6 of 234.4 GByteYear HP Disk (1229.5 of 1395.2 G.S.T), 88.1% 2920.1 of 3200.0 Hour SMP CPU (113.5 of 124.3 G.S.T), 91.3% 101.2 of 120.0 GByteYear MP Disk (361.4 of 428.6 G.S.T), 84.3% 410.6 of 516.3 GByteYear HSM/Tape (257.9 of 324.3 G.S.T), 79.5% 0.0 of 1.0 Hour Green CPU (0.0 of 0.1 G.S.T), 0.0% Total usage for subproject cse030a 4449.8 of 4943.7 Generic Service Tokens, 90.0% cse030 QMW Last Trade: never Usage: 196350.5 of 213142.1 PEHour MPP PE CPU (4747.5 of 5153.5 G.S.T), 92.1% 190.9 of 215.0 GByteYear HP Disk (1136.4 of 1279.8 G.S.T), 88.8% 8.0 of 0.0 Hour Wren CPU (0.4 of 0.0 G.S.T), 40075.0% 2056.3 of 3000.0 Hour SMP CPU (79.9 of 116.6 G.S.T), 68.5% 482.8 of 440.0 GByteYear MP Disk (1724.3 of 1571.4 G.S.T), 109.7% 188.1 of 322.2 GByteYear HSM/Tape (118.2 of 202.4 G.S.T), 58.4% 0.0 of 1.0 Hour Green CPU (0.0 of 0.1 G.S.T), 0.0% Total usage for subproject cse030b 7806.6 of 8323.7 Generic Service Tokens, 93.8%

cse030 Oxford Last Trade: never

Usage:

18310.7 of 18310.7 PEHour MPP PE CPU (442.7 of 442.7 G.S.T), 100.0%

1.1 of 2.0 GByteYear HP Disk (6.6 of 11.9 G.S.T), 55.4%

0.0 of 50.0 Hour SMP CPU (0.0 of 1.9 G.S.T), 0.0%

7.7 of 10.0 GByteYear MP Disk (27.6 of 35.7 G.S.T), 77.2%

0.0 of 0.0 GByteYear HSM/Tape (0.0 of 0.0 G.S.T)

0.0 of 1.0 Hour Green CPU (0.0 of 0.1 G.S.T), 0.0%

Total usage for subproject cse030c 476.9 of 492.3 Generic Service Tokens, 96.9%

cse030 Bristol Last Trade: never

Usage: 0.0 of 50.0 PEHour MPP PE CPU (0.0 of 1.2 G.S.T), 0.0% 10.7 of 12.0 GByteYear HP Disk (63.4 of 71.4 G.S.T), 88.8% 0.0 of 50.0 Hour SMP CPU (0.0 of 1.9 G.S.T), 0.0% 11.8 of 14.0 GByteYear MP Disk (42.0 of 50.0 G.S.T), 83.9% 0.0 of 0.0 GByteYear HSM/Tape (0.0 of 0.0 G.S.T) Total usage for subproject cse030d 105.4 of 124.6 Generic Service Tokens, 84.6% cse030 Leeds Last Trade: never Usage: 0.0 of 0.0 PEHour MPP PE CPU (0.0 of 0.0 G.S.T) 0.0 of 0.0 GByteYear HP Disk (0.0 of 0.0 G.S.T) 0.0 of 0.0 Hour SMP CPU (0.0 of 0.0 G.S.T) 0.0 of 0.0 GByteYear MP Disk (0.0 of 0.0 G.S.T) 0.0 of 0.0 GByteYear HSM/Tape (0.0 of 0.0 G.S.T) Total usage for subproject cse030e 0.0 of 0.0 Generic Service Tokens, 0.0% cse030 Cambridge Last Trade: never Usage: 0.0 of 0.0 PEHour MPP PE CPU (0.0 of 0.0 G.S.T) 0.0 of 0.0 GByteYear HP Disk (0.0 of 0.0 G.S.T) 0.0 of 200.0 Hour SMP CPU (0.0 of 7.8 G.S.T), 0.0% 0.0 of 3.0 GByteYear MP Disk (0.0 of 10.7 G.S.T), 0.0% 0.0 of 0.0 GByteYear HSM/Tape (0.0 of 0.0 G.S.T) 0.0 of 1.0 Hour Green CPU (0.0 of 0.1 G.S.T), 0.0% Total usage for subproject cse030f 0.0 of 18.5 Generic Service Tokens, 0.0% cse030 Sheffield Hallam Last Trade: never Usage: 8896.1 of 8900.0 PEHour MPP PE CPU (215.1 of 215.2 G.S.T), 100.0% 5.0 of 5.8 GByteYear HP Disk (29.9 of 34.2 G.S.T), 87.5% 0.0 of 50.0 Hour SMP CPU (0.0 of 1.9 G.S.T), 0.0% 4.5 of 6.0 GByteYear MP Disk (15.9 of 21.4 G.S.T), 74.4% 0.0 of 0.0 GByteYear HSM/Tape (0.0 of 0.0 G.S.T) 0.0 of 0.0 Hour Green CPU (0.0 of 0.0 G.S.T) Total usage for subproject cse030g 261.0 of 272.8 Generic Service Tokens, 95.7% cse035 GR/M76720 King Last Trade: Fri Dec 6 15:42:12 2002 Usage: 424181.4 of 424189.3 PEHour MPP PE CPU (10256.2 of 10256.4 G.S.T), 100.0% 23.1 of 23.3 GByteYear HP Disk (137.5 of 138.5 G.S.T), 99.3% 0.0 of 0.3 Hour SMP CPU (0.0 of 0.0 G.S.T), 6.0% 0.0 of 0.6 GByteYear MP Disk (0.1 of 2.0 G.S.T), 3.5% 19.7 of 18.7 GByteYear HSM/Tape (12.4 of 11.8 G.S.T), 105.0% Total usage for project cse035 10406.1 of 10408.6 Generic Service Tokens, 100.0% cse036 GR/M78502 Duff Last Trade: re-enabled Usage: 40.3 of 617.1 PEHour MPP PE CPU (1.0 of 14.9 G.S.T), 6.5% 0.8 of 3.0 GByteYear HP Disk (4.5 of 17.9 G.S.T), 25.1% 0.0 of 15.7 Hour Wren CPU (0.0 of 0.8 G.S.T), 0.0% 88.0 of 379.9 Hour SMP CPU (3.4 of 14.8 G.S.T), 23.2% 0.4 of 3.0 GByteYear MP Disk (1.6 of 10.7 G.S.T), 14.5% Total usage for project cse036 10.4 of 59.0 Generic Service Tokens, 17.7%

cse040 GR/M84350 Badcock Last Trade: re-enabled

Usage:

18.9 of 5000.0 PEHour MPP PE CPU (0.5 of 120.9 G.S.T), 0.4%

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0.2 of 6.0 GByteYear HP Disk (1.5 of 35.8 G.S.T), 4.1%
5.0 of 6.8 GByteYear MP Disk (17.8 of 24.4 G.S.T), 72.7%
0.0 of 2.5 PersonDay Support (0.0 of 72.2 G.S.T), 0.0%
0.0 of 6.3 Day Training (0.0 of 68.1 G.S.T), 0.0%
Total usage for project cse040 19.7 of 321.3 Generic Service Tokens, 6.1%
cse041 GR/M84879 Imregun
Last Trade: re-enabled
Usage:
588.6 of 12981.4 PEHour MPP PE CPU (14.2 of 313.9 G.S.T), 4.5%
1.4 of 119.7 GByteYear HP Disk (8.4 of 712.4 G.S.T), 1.2%
171.1 of 78.4 Hour Wren CPU (8.5 of 3.9 G.S.T), 218.2%
1699.1 of 4431.4 Hour SMP CPU (66.0 of 172.2 G.S.T), 38.3%
1.4 of 123.5 GByteYear MP Disk (5.1 of 440.9 G.S.T), 1.2%
169.2 of 230.3 GByteYear HSM/Tape (106.3 of 144.6 G.S.T), 73.5%
0.0 of 60.0 PersonDay Support (0.0 of 1764.7 G.S.T), 0.0%
0.0 of 5.0 Day Training (0.0 of 53.8 G.S.T), 0.0%
Total usage for project cse041 208.5 of 3606.4 Generic Service Tokens, 5.8%
cse043 GR/M85241 Williams
Last Trade: re-enabled
Usage:
146564.2 of 148935.0 PEHour MPP PE CPU (3543.7 of 3601.1 G.S.T), 98.4%
1.7 of 10.0 GByteYear HP Disk (10.1 of 59.5 G.S.T), 17.0%
0.0 of 6.2 Hour SMP CPU (0.0 of 0.2 G.S.T), 0.2%
2.6 of 4.8 GByteYear MP Disk (9.5 of 17.3 G.S.T), 54.7%
20.0 of 28.8 GByteYear HSM/Tape (12.6 of 18.1 G.S.T), 69.7%
4.0 of 4.0 PersonDay Support (117.6 of 117.8 G.S.T), 99.8%
4.0 of 4.0 Day Training (43.0 of 43.0 G.S.T), 100.1%
Total usage for project cse043 3736.6 of 3857.0 Generic Service Tokens, 96.9%
cse050 GR/N/38152 Bradley
Last Trade: re-enabled
Usage:
0.0 of 104742.3 PEHour MPP PE CPU (0.0 of 2532.5 G.S.T), 0.0%
0.0 of 11.0 GByteYear HP Disk (0.0 of 65.5 G.S.T), 0.0%
0.0 of 78.4 Hour Wren CPU (0.0 of 3.9 G.S.T), 0.0%
0.3 of 1200.0 Hour SMP CPU (0.0 of 46.6 G.S.T), 0.0%
0.0 of 4.5 GByteYear HSM/Tape (0.0 of 2.8 G.S.T), 0.0%
0.0 of 20.0 PersonDay Support (0.0 of 588.2 G.S.T), 0.0%
0.0 of 10.0 Day Training (0.0 of 107.5 G.S.T), 0.0%
Total usage for project cse050 0.0 of 3347.1 Generic Service Tokens, 0.0%
cse052 GR/N17683 Hayes
Last Trade: Tue Feb 11 10:04:11 2003
Usage:
417367.9 of 418004.1 PEHour MPP PE CPU (10091.4 of 10106.8 G.S.T), 99.8%
5.4 of 12.2 GByteYear HP Disk (32.3 of 72.5 G.S.T), 44.5%
0.0 of 0.0 Hour Wren CPU (0.0 of 0.0 G.S.T)
0.0 of 0.0 Hour SMP CPU (0.0 of 0.0 G.S.T)
0.0 of 8.5 GByteYear MP Disk (0.0 of 30.4 G.S.T), 0.0%
0.0 of 3.0 GByteYear HSM/Tape (0.0 of 1.9 G.S.T), 0.0%
0.0 of 10.0 PersonDay Support (0.0 of 294.1 G.S.T), 0.0%
0.0 of 0.0 Day Training (0.0 of 0.0 G.S.T)
Total usage for project cse052 10123.7 of 10505.6 Generic Service Tokens, 96.4%
cse053 GR/R04225 Leschziner
Last Trade: Tue Apr 8 09:06:47 2003
Usage:
50794.6 of 259557.6 PEHour MPP PE CPU (1228.1 of 6275.8 G.S.T), 19.6%
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Last Trade: Tue Apr 8 09:06:47 2003
Usage:
50794.6 of 259557.6 PEHour MPP PE CPU (1228.1 of 6275.8 G.S.T), 19.6%
1.9 of 115.0 GByteYear HP Disk (11.5 of 684.5 G.S.T), 1.7%
1.7 of 78.4 Hour Wren CPU (0.1 of 3.9 G.S.T), 2.2%
73.9 of 13900.0 Hour SMP CPU (2.9 of 540.0 G.S.T), 0.5%
1.6 of 85.0 GByteYear MP Disk (5.8 of 303.6 G.S.T), 1.9%
2.0 of 100.0 GByteYear HSM/Tape (1.3 of 62.8 G.S.T), 2.0%

17672.5 of 29614.9 Hour Green CPU (923.4 of 1547.4 G.S.T), 59.7% 0.0 of 15.0 PersonDay Support (0.0 of 441.2 G.S.T), 0.0% 0.0 of 8.0 Day Training (0.0 of 86.0 G.S.T), 0.0% Total usage for project cse053 2173.0 of 9945.2 Generic Service Tokens, 21.9% cse055 GR/N66810 Staunton Last Trade: Mon Aug 6 09:05:54 2001 Usage: 8840.4 of 24604.0 PEHour MPP PE CPU (213.7 of 594.9 G.S.T), 35.9% 1.8 of 2.5 GByteYear HP Disk (10.8 of 14.9 G.S.T), 72.3% 0.0 of 3.1 Hour SMP CPU (0.0 of 0.1 G.S.T), 0.0% 0.0 of 5.0 PersonDay Support (0.0 of 147.1 G.S.T), 0.0% 0.0 of 10.0 Day Training (0.0 of 107.5 G.S.T), 0.0% Total usage for project cse055 224.5 of 864.5 Generic Service Tokens, 26.0% cse056 GR/N24773 Imregun Last Trade: Tue Feb 18 12:13:04 2003 Usage: 0.0 of 100.2 PEHour MPP PE CPU (0.0 of 2.4 G.S.T), 0.0% 0.0 of 40.0 GByteYear HP Disk (0.0 of 238.0 G.S.T), 0.0% 0.1 of 78.4 Hour Wren CPU (0.0 of 3.9 G.S.T), 0.1% 2223.6 of 33674.1 Hour SMP CPU (86.4 of 1308.3 G.S.T), 6.6% 1.1 of 43.9 GByteYear MP Disk (4.1 of 156.8 G.S.T), 2.6% 0.0 of 0.0 PersonDay Support (0.0 of 0.0 G.S.T) 0.0 of 10.0 Day Training (0.0 of 107.5 G.S.T), 0.0% Total usage for project cse056 90.5 of 1817.0 Generic Service Tokens, 5.0% cse057 GR/R23909 Krushelnick Last Trade: Fri Sep 7 11:39:20 2001 Usage: 2310.0 of 86751.6 PEHour MPP PE CPU (55.9 of 2097.5 G.S.T), 2.7% 0.7 of 30.0 GByteYear HP Disk (4.1 of 178.6 G.S.T), 2.3% 1.7 of 62.2 Hour SMP CPU (0.1 of 2.4 G.S.T), 2.7% 0.5 of 462.7 Hour Green CPU (0.0 of 24.2 G.S.T), 0.1% 0.0 of 20.0 PersonDay Support (0.0 of 588.2 G.S.T), 0.0% 0.0 of 10.0 Day Training (0.0 of 107.5 G.S.T), 0.0% Total usage for project cse057 60.0 of 2998.5 Generic Service Tokens, 2.0% cse060 GR/R17058 Robb Last Trade: Mon Apr 7 12:05:34 2003 Usage: 44775.0 of 120607.5 PEHour MPP PE CPU (1082.6 of 2916.1 G.S.T), 37.1% 0.0 of 3.0 GByteYear HP Disk (0.0 of 17.9 G.S.T), 0.0% 0.0 of 0.0 Hour Wren CPU (0.0 of 0.0 G.S.T), 51.2% 0.0 of 1.2 GByteYear MP Disk SAN (0.0 of 5.2 G.S.T), 0.0% 0.0 of 9154.6 Hour Green CPU (0.0 of 478.3 G.S.T), 0.0% 0.0 of 10.0 PersonDay Support (0.0 of 294.1 G.S.T), 0.0% 0.0 of 10.0 Day Training (0.0 of 107.5 G.S.T), 0.0% Total usage for project cse060 1082.6 of 3819.2 Generic Service Tokens, 28.3% cse061 GR/R42672 Imregun Last Trade: Thu Oct 17 15:11:50 2002 Usage: 0.0 of 85875.0 PEHour MPP PE CPU (0.0 of 2076.3 G.S.T), 0.0% 0.0 of 50.1 GByteYear HP Disk (0.0 of 298.3 G.S.T), 0.0% 0.0 of 5.0 PersonDay Support (0.0 of 147.1 G.S.T), 0.0% 0.0 of 5.0 Day Training (0.0 of 53.8 G.S.T), 0.0% Total usage for project cse061 0.0 of 2575.5 Generic Service Tokens, 0.0%

cse063 GR/R46151 Sandham

Last Trade: Thu Mar 13 11:50:09 2003

Usage:

72895.0 of 288901.7 PEHour MPP PE CPU (1762.5 of 6985.3 G.S.T), 25.2%

14.4 of 100.0 GByteYear HP Disk (85.8 of 595.2 G.S.T), 14.4%

6.4 of 10.8 Hour Wren CPU (0.3 of 0.5 G.S.T), 59.6% 167.9 of 62.9 Hour SMP CPU (6.5 of 2.4 G.S.T), 267.2% 0.0 of 50.0 GByteYear MP Disk (0.0 of 178.6 G.S.T), 0.0% 35.3 of 525.0 GByteYear HSM/Tape (22.1 of 329.8 G.S.T), 6.7% 45450.5 of 69408.8 Hour Green CPU (2374.9 of 3626.8 G.S.T), 65.5% 0.0 of 5.0 PersonDay Support (0.0 of 147.1 G.S.T), 0.0% 0.0 of 0.0 Day Training (0.0 of 0.0 G.S.T) Total usage for project cse063 4252.2 of 11865.6 Generic Service Tokens, 35.8%

cse064 GR/R43570 Leschziner Last Trade: Thu Oct 17 18:03:11 2002 Usage: 14116.7 of 115039.1 PEHour MPP PE CPU (341.3 of 2781.5 G.S.T), 12.3% 0.4 of 35.0 GByteYear HP Disk (2.2 of 208.3 G.S.T), 1.0% 12.1 of 78.4 Hour Wren CPU (0.6 of 3.9 G.S.T), 15.4% 6986.8 of 21900.0 Hour SMP CPU (271.4 of 850.8 G.S.T), 31.9% 0.4 of 33.0 GByteYear MP Disk (1.3 of 117.9 G.S.T), 1.1% 3.9 of 4.0 GByteYear HSM/Tape (2.5 of 2.5 G.S.T), 98.2% 1774.9 of 23136.6 Hour Green CPU (92.7 of 1208.9 G.S.T), 7.7% 0.0 of 10.0 PersonDay Support (0.0 of 294.1 G.S.T), 0.0% 2.0 of 8.0 Day Training (21.5 of 86.0 G.S.T), 25.0% Total usage for project cse064 733.5 of 5554.0 Generic Service Tokens, 13.2%

cse066 GR/R30907 Coveney Last Trade: re-enabled

Usage: 63700.5 of 87981.1 PEHour MPP PE CPU (1540.2 of 2127.3 G.S.T), 72.4% 13.0 of 90.0 GByteYear HP Disk (77.2 of 535.7 G.S.T), 14.4% 0.0 of 78.4 Hour Wren CPU (0.0 of 3.9 G.S.T), 0.0% 2389.0 of 14900.0 Hour SMP CPU (92.8 of 578.9 G.S.T), 16.0% 13.3 of 18.0 GByteYear MP Disk (47.5 of 64.5 G.S.T), 73.6% 12184.5 of 64652.8 Hour Green CPU (636.7 of 3378.2 G.S.T), 18.8% 0.0 of 21.0 PersonDay Support (0.0 of 617.6 G.S.T), 0.0% 3.0 of 6.0 Day Training (32.3 of 64.5 G.S.T), 50.0%

Total usage for project cse066 2426.6 of 7370.6 Generic Service Tokens, 32.9%

cse071 GR/R23657 lacovides Last Trade: Fri Oct 5 16:21:54 2001 0.0 of 5.0 PersonDay Support (0.0 of 147.1 G.S.T), 0.0%

0.0 of 6.0 Day Training (0.0 of 64.5 G.S.T), 0.0%

Total usage for project cse071 0.0 of 211.6 Generic Service Tokens, 0.0%

cse072 GR/R66692 Karlin Last Trade: re-enabled

Usage:

2.6 of 160329.2 PEHour MPP PE CPU (0.1 of 3876.6 G.S.T), 0.0% 0.0 of 3.0 GByteYear HP Disk (0.0 of 17.9 G.S.T), 0.0%

0.0 of 15.7 Hour Wren CPU (0.0 of 0.8 G.S.T), 0.0%

0.0 of 163.0 Hour SMP CPU (0.0 of 6.3 G.S.T), 0.0%

0.0 of 24.0 GByteYear MP Disk (0.0 of 85.7 G.S.T), 0.0% 0.0 of 84.0 GByteYear HSM/Tape (0.0 of 52.8 G.S.T), 0.0%

0.0 of 18.0 PersonDay Support (0.0 of 529.4 G.S.T), 0.0%

6.0 of 9.0 Day Training (64.5 of 96.8 G.S.T), 66.7%

Total usage for project cse072 64.6 of 4666.2 Generic Service Tokens, 1.4%

cse074 GR/R66197 Luo

Last Trade: Wed Jan 2 15:22:45 2002

Usage:

0.0 of 15370.1 PEHour MPP PE CPU (0.0 of 371.6 G.S.T), 0.0%

0.0 of 6.0 GByteYear HP Disk (0.0 of 35.7 G.S.T), 0.0%

0.0 of 600.0 Hour SMP CPU (0.0 of 23.3 G.S.T), 0.0%

0.0 of 9.0 GByteYear MP Disk (0.0 of 32.1 G.S.T), 0.0%

Total usage for project cse074 0.0 of 462.8 Generic Service Tokens, 0.0%

cse075 GR/R59540 Coveney Last Trade: Mon Jan 27 15:38:41 2003 Usage: 8401.6 of 264758.5 PEHour MPP PE CPU (203.1 of 6401.5 G.S.T), 3.2% 36.2 of 217.0 GByteYear HP Disk (215.3 of 1291.5 G.S.T), 16.7% 20.1 of 300.6 Hour Wren CPU (1.0 of 14.9 G.S.T), 6.7% 6516.4 of 31500.0 Hour SMP CPU (253.2 of 1223.8 G.S.T), 20.7% 254.6 of 690.5 GByteYear MP Disk (909.3 of 2466.1 G.S.T), 36.9% 140.1 of 1636.4 GByteYear HSM/Tape (88.0 of 1027.9 G.S.T), 8.6% 69522.9 of 300000.0 Hour Green CPU (3632.7 of 15675.6 G.S.T), 23.2% 0.0 of 34.0 PersonDay Support (0.0 of 1000.0 G.S.T), 0.0% 5.0 of 14.0 Day Training (53.8 of 150.5 G.S.T), 35.7% Total usage for project cse075 5356.4 of 29251.9 Generic Service Tokens, 18.3%

cse076 GR/R66975 Briddon

Last Trade: Fri Aug 30 09:40:32 2002

Usage:

8754.3 of 4161.1 PEHour MPP PE CPU (211.7 of 100.6 G.S.T), 210.4% 1.2 of 1.3 GByteYear HP Disk (7.2 of 8.0 G.S.T), 89.8% 91.0 of 504.6 Hour Wren CPU (4.5 of 25.0 G.S.T), 18.0% 268169.5 of 267888.9 Hour SMP CPU (10418.8 of 10407.9 G.S.T), 100.1% 7.0 of 27.2 GByteYear MP Disk (25.0 of 97.1 G.S.T), 25.7% 254717.4 of 260197.5 Hour Green CPU (13309.5 of 13595.9 G.S.T), 97.9% 11.0 of 20.0 PersonDay Support (323.5 of 588.2 G.S.T), 55.0% 0.0 of 53.5 Day Training (0.0 of 575.0 G.S.T), 0.0%

Total usage for project cse076 24300.2 of 25397.7 Generic Service Tokens, 95.7%

cse077 GR/R69792 Kronenburg Last Trade: Thu Oct 17 14:11:09 2002

Usage:

0.0 of 400000.6 PEHour MPP PE CPU (0.0 of 9671.5 G.S.T), 0.0%

0.0 of 22.5 GByteYear HP Disk (0.0 of 134.0 G.S.T), 0.0%

0.0 of 2.0 Day Training (0.0 of 21.5 G.S.T), 0.0%

Total usage for project cse077 0.0 of 9827.0 Generic Service Tokens, 0.0%

cse082 GR/R79654 Barakos

Last Trade: Wed Apr 16 09:00:14 2003

0.0 of 15.7 Hour Wren CPU (0.0 of 0.8 G.S.T), 0.1% 0.0 of 5559.3 Hour SMP CPU (0.0 of 216.0 G.S.T), 0.0% 0.0 of 55.0 GByteYear MP Disk (0.0 of 196.5 G.S.T), 0.0% 0.0 of 55.0 GByteYear HSM/Tape (0.0 of 34.6 G.S.T), 0.0% 0.0 of 1115.3 Hour Green CPU (0.0 of 58.3 G.S.T), 0.0% 0.0 of 5.0 PersonDay Support (0.0 of 147.1 G.S.T), 0.0% 0.0 of 1.0 Day Training (0.0 of 10.8 G.S.T), 0.0%

Total usage for project cse082 0.0 of 663.9 Generic Service Tokens, 0.0%

cse084 GR/R47066 Needs Last Trade: re-enabled

Usage:

270838.1 of 306225.8 PEHour MPP PE CPU (6548.5 of 7404.1 G.S.T), 88.4% 18.9 of 270.0 GByteYear HP Disk (112.3 of 1607.1 G.S.T), 7.0% 187.3 of 78.4 Hour Wren CPU (9.3 of 3.9 G.S.T), 238.8% 4282.7 of 14384.3 Hour SMP CPU (166.4 of 558.9 G.S.T), 29.8% 24.4 of 75.6 GByteYear MP Disk (87.2 of 270.1 G.S.T), 32.3% 80324.2 of 78955.4 Hour Green CPU (4197.1 of 4125.6 G.S.T), 101.7% 0.0 of 19.0 PersonDay Support (0.0 of 558.8 G.S.T), 0.0% 0.0 of 10.0 Day Training (0.0 of 107.5 G.S.T), 0.0%

Total usage for project cse084 11120.8 of 14636.0 Generic Service Tokens, 76.0%

cse085 GR/R64957 Sandham

Last Trade: Mon Jan 6 14:15:52 2003

Usage:

989813.6 of 1388400.0 PEHour MPP PE CPU (23932.4 of 33569.7 G.S.T), 71.3%

227.3 of 650.0 GByteYear HP Disk (1352.9 of 3869.0 G.S.T), 35.0% 24.5 of 78.4 Hour Wren CPU (1.2 of 3.9 G.S.T), 31.3% 2296.4 of 3945.2 Hour SMP CPU (89.2 of 153.3 G.S.T), 58.2% 165.5 of 750.0 GByteYear MP Disk (590.9 of 2678.6 G.S.T), 22.1% 1443.9 of 2373.2 GByteYear HSM/Tape (906.9 of 1490.7 G.S.T), 60.8% 198558.2 of 643628.0 Hour Green CPU (10375.1 of 33630.9 G.S.T), 30.8% 0.0 of 15.0 PersonDay Support (0.0 of 441.2 G.S.T), 0.0% 6.0 of 6.0 Day Training (64.5 of 64.5 G.S.T), 100.0% Total usage for project cse085 37313.2 of 75901.8 Generic Service Tokens, 49.2%

cse086 GR/R83118 Taylor Last Trade: re-enabled

463651.2 of 521898.0 PEHour MPP PE CPU (11210.5 of 12618.8 G.S.T), 88.8% 81.4 of 162.7 GByteYear HP Disk (484.4 of 968.4 G.S.T), 50.0% 436.2 of 2208.1 Hour Wren CPU (21.6 of 109.4 G.S.T), 19.8% 0.0 of 12.9 GByteYear HP Disk SAN - /d (0.0 of 76.8 G.S.T), 0.0% 0.0 of 46.6 GbyteYear HV Disk SAN /v (0.0 of 83.4 G.S.T), 0.0% 8752.1 of 13449.2 Hour SMP CPU (340.0 of 522.5 G.S.T), 65.1% 106.6 of 497.0 GByteYear MP Disk (380.6 of 1775.0 G.S.T), 21.4% 15.7 of 3750.0 GByteYear HSM/Tape (9.9 of 2355.5 G.S.T), 0.4% 98212.3 of 758900.0 Hour Green CPU (5131.8 of 39654.1 G.S.T), 12.9% 5.0 of 35.0 PersonDay Support (147.1 of 1029.4 G.S.T), 14.3% 0.0 of 116.0 Day Training (0.0 of 1247.3 G.S.T), 0.0%

Total usage for project cse086 17725.8 of 60440.7 Generic Service Tokens, 29.3%

cse086a MP1 Last Trade: never

Usage 339637.5 of 360000.0 PEHour MPP PE CPU (8212.0 of 8704.3 G.S.T), 94.3% 5.1 of 10.0 GByteYear HP Disk (30.2 of 59.5 G.S.T), 50.7% 0.0 of 200.0 Hour Wren CPU (0.0 of 9.9 G.S.T), 0.0% 0.0 of 50.0 Hour SMP CPU (0.0 of 1.9 G.S.T), 0.0% 6.5 of 10.0 GByteYear MP Disk (23.3 of 35.7 G.S.T), 65.2% 0.0 of 10000.0 Hour Green CPU (0.0 of 522.5 G.S.T), 0.0% Total usage for subproject cse086a 8265.5 of 9333.9 Generic Service Tokens, 88.6%

cse086b MP2 Last Trade: never Usage: 48448.5 of 58000.0 PEHour MPP PE CPU (1171.4 of 1402.4 G.S.T), 83.5% 20.5 of 25.0 GByteYear HP Disk (121.9 of 148.8 G.S.T), 81.9% 117.7 of 200.0 Hour Wren CPU (5.8 of 9.9 G.S.T), 58.9% 2088.8 of 4000.0 Hour SMP CPU (81.2 of 155.4 G.S.T), 52.2% 16.2 of 20.0 GByteYear MP Disk (57.7 of 71.4 G.S.T), 80.8% 95102.2 of 100000.0 Hour Green CPU (4969.3 of 5225.2 G.S.T), 95.1%

Total usage for subproject cse086b 6407.3 of 7013.1 Generic Service Tokens, 91.4%

cse086d MP4 Last Trade: never Usage:

0.1 of 0.1 GByteYear HP Disk (0.3 of 0.6 G.S.T), 53.4% 0.1 of 0.1 GByteYear MP Disk (0.2 of 0.4 G.S.T), 52.8%

Total usage for subproject cse086d 0.5 of 1.0 Generic Service Tokens, 53.2%

cse086e MP5 Last Trade: never

48.8 of 500.0 PEHour MPP PE CPU (1.2 of 12.1 G.S.T), 9.8% 1.1 of 2.0 GByteYear HP Disk (6.4 of 11.9 G.S.T), 53.8% 266.5 of 450.0 Hour Wren CPU (13.2 of 22.3 G.S.T), 59.2% 0.0 of 5.0 GbyteYear HV Disk SAN /v (0.0 of 8.9 G.S.T), 0.0% 3930.5 of 4000.0 Hour SMP CPU (152.7 of 155.4 G.S.T), 98.3% 7.8 of 10.0 GByteYear MP Disk (28.0 of 35.7 G.S.T), 78.4% 546.1 of 10000.0 Hour Green CPU (28.5 of 522.5 G.S.T), 5.5%

Total usage for subproject cse086e 230.0 of 768.9 Generic Service Tokens, 29.9%

cse086f EC1 Last Trade: never

Usage:

3.3 of 5000.0 PEHour MPP PE CPU (0.1 of 120.9 G.S.T), 0.1% 2.1 of 5.0 GByteYear HP Disk (12.6 of 29.8 G.S.T), 42.4% 0.7 of 200.0 Hour Wren CPU (0.0 of 9.9 G.S.T), 0.3% 4.8 of 50.0 Hour SMP CPU (0.2 of 1.9 G.S.T), 9.6% 12.5 of 15.0 GByteYear MP Disk (44.5 of 53.6 G.S.T), 83.1% 15.7 of 40.0 GByteYear HSM/Tape (9.9 of 25.1 G.S.T), 39.3% 0.0 of 10000.0 Hour Green CPU (0.0 of 522.5 G.S.T), 0.0%

Total usage for subproject cse086f 67.3 of 763.7 Generic Service Tokens, 8.8%

cse086g EC2 Last Trade: never

Usage:

571.7 of 5000.0 PEHour MPP PE CPU (13.8 of 120.9 G.S.T), 11.4% 21.6 of 25.0 GByteYear HP Disk (128.4 of 148.8 G.S.T), 86.3% 51.2 of 200.0 Hour Wren CPU (2.5 of 9.9 G.S.T), 25.6% 303.2 of 400.0 Hour SMP CPU (11.8 of 15.5 G.S.T), 75.8% 38.5 of 40.0 GByteYear MP Disk (137.6 of 142.9 G.S.T), 96.3% 0.0 of 50.0 GByteYear HSM/Tape (0.0 of 31.4 G.S.T), 0.0% 2564.1 of 10000.0 Hour Green CPU (134.0 of 522.5 G.S.T), 25.6% Total usage for subproject cse086g 428.1 of 991.9 Generic Service Tokens, 43.2%

cse086h EC3 Last Trade: never

Usage:

46335.1 of 50000.0 PEHour MPP PE CPU (1120.3 of 1208.9 G.S.T), 92.7%
4.2 of 3.9 GByteYear HP Disk (25.2 of 23.2 G.S.T), 108.5%
0.0 of 200.0 Hour Wren CPU (0.0 of 9.9 G.S.T), 0.0%
219.9 of 250.0 Hour SMP CPU (8.5 of 9.7 G.S.T), 87.9%
14.2 of 20.0 GByteYear MP Disk (50.8 of 71.4 G.S.T), 71.1%
0.0 of 10000.0 Hour Green CPU (0.0 of 522.5 G.S.T), 0.0%

Total usage for subproject cse086h 1204.9 of 1845.7 Generic Service Tokens, 65.3%

cse086i EC4 Last Trade: never

Usage:

0.1 of 0.1 GByteYear HP Disk (0.3 of 0.6 G.S.T), 52.8% 0.1 of 0.1 GByteYear MP Disk (0.2 of 0.4 G.S.T), 52.8%

Total usage for subproject cse086i 0.5 of 1.0 Generic Service Tokens, 52.8%

cse086j BEC1 Last Trade: never

Usage:

28606.5 of 35000.0 PEHour MPP PE CPU (691.7 of 846.3 G.S.T), 81.7%

1.0 of 3.0 GByteYear HP Disk (5.8 of 17.9 G.S.T), 32.3% 0.0 of 200.0 Hour Wren CPU (0.0 of 9.9 G.S.T), 0.0%

0.0 of 0.1 Hour SMP CPU (0.0 of 0.0 G.S.T), 0.2%

0.2 of 5.0 GByteYear MP Disk (0.7 of 17.9 G.S.T), 3.9% 0.0 of 1000.0 Hour Green CPU (0.0 of 52.3 G.S.T), 0.0%

Total usage for subproject cse086j 698.1 of 944.1 Generic Service Tokens, 73.9%

cse086k BEC2 Last Trade: never

Usage:

0.1 of 0.1 GByteYear HP Disk (0.3 of 0.6 G.S.T), 52.8% 0.0 of 200.0 Hour Wren CPU (0.0 of 9.9 G.S.T), 0.0% 2205.0 of 4500.0 Hour SMP CPU (85.7 of 174.8 G.S.T), 49.0% 9.8 of 15.0 GByteYear MP Disk (34.9 of 53.6 G.S.T), 65.1%

Total usage for subproject cse086k 120.9 of 238.9 Generic Service Tokens, 50.6%

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cse089 GR/R85556 Wiercigroch
Last Trade: re-enabled
Usage:
0.0 of 8242.8 PEHour MPP PE CPU (0.0 of 199.3 G.S.T), 0.0%
0.0 of 45.1 GByteYear HP Disk (0.0 of 268.2 G.S.T), 0.0%
0.0 of 15.0 PersonDay Support (0.0 of 441.2 G.S.T), 0.0%
0.0 of 7.0 Day Training (0.0 of 75.3 G.S.T), 0.0%
Total usage for project cse089 0.0 of 984.0 Generic Service Tokens, 0.0%
cse098 GR/S20062 De Souza
Last Trade: Fri Feb 7 10:25:19 2003
0.0 of 333000.0 PEHour MPP PE CPU (0.0 of 8051.5 G.S.T), 0.0%
0.0 of 20.0 GByteYear HP Disk (0.0 of 119.0 G.S.T), 0.0%
0.0 of 10.0 Hour Wren CPU (0.0 of 0.5 G.S.T), 0.0%
0.0 of 3975.4 Hour SMP CPU (0.0 of 154.5 G.S.T), 0.0%
0.0 of 10.0 GByteYear MP Disk (0.0 of 35.7 G.S.T), 0.0%
0.0 of 100.0 GByteYear HSM/Tape (0.0 of 62.8 G.S.T), 0.0%
5.7 of 8500.0 Hour Green CPU (0.3 of 444.1 G.S.T), 0.1%
0.0 of 5.0 PersonDay Support (0.0 of 147.1 G.S.T), 0.0%
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0.0 of 5.0 Day Training (0.0 of 53.8 G.S.T), 0.0%

Total usage for project cse098 0.3 of 9069.0 Generic Service Tokens, 0.0%

csn001 Webb & GST/02/2846 Killworth & T/S/2001/00187 New Last Trade: Wed Apr 16 09:35:04 2003 Usage: 403672.1 of 418058.5 PEHour MPP PE CPU (9760.3 of 10108.1 G.S.T), 96.6% 293.5 of 420.3 GByteYear HP Disk (1747.1 of 2501.6 G.S.T), 69.8% 112.7 of 401.8 Hour Wren CPU (5.6 of 19.9 G.S.T), 28.1% 91114.2 of 149188.6 Hour SMP CPU (3539.9 of 5796.2 G.S.T), 61.1% 374.5 of 902.2 GByteYear MP Disk (1337.4 of 3222.0 G.S.T), 41.5% 17966.9 of 20997.7 GByteYear HSM/Tape (11285.8 of 13189.5 G.S.T), 85.6% 772670.4 of 793791.3 Hour Green CPU (40373.6 of 41477.2 G.S.T), 97.3% 58.0 of 70.5 PersonDay Support (1705.9 of 2073.5 G.S.T), 82.3% 3.0 of 15.3 Day Training (32.3 of 164.4 G.S.T), 19.6% Total usage for project csn001 69787.8 of 78552.5 Generic Service Tokens, 88.8%

Total usage for project csehpcx 1417.3 of 4925.7 Generic Service Tokens, 28.8%

csn003 UGAMP O'Neill
Last Trade: Mon Apr 7 10:24:00 2003
Usage:
5176677.6 of 6248258.3 PEHour MPP PE CPU (125165.4 of 151074.9 G.S.T), 82.8%
92.3 of 113.9 GByteYear HP Disk (549.2 of 677.7 G.S.T), 81.0%
312.4 of 2664.9 Hour Wren CPU (15.5 of 132.0 G.S.T), 11.7%
86.3 of 470.3 GbyteYear HV Disk SAN /v (154.4 of 841.4 G.S.T), 18.4%
25232.9 of 153954.2 Hour SMP CPU (980.3 of 5981.4 G.S.T), 16.4%
74.5 of 93.8 GByteYear MP Disk (266.1 of 334.9 G.S.T), 79.5%
49409.6 of 65916.4 GByteYear HSM/Tape (31036.2 of 41404.8 G.S.T), 75.0%
102315.6 of 193578.0 Hour Green CPU (5346.2 of 10114.8 G.S.T), 52.9%
1.0 of 2.7 PersonDay Support (29.4 of 78.4 G.S.T), 37.5%
12.0 of 12.1 Day Training (129.0 of 130.1 G.S.T), 99.2%
Total usage for project csn003 163671.8 of 210770.3 Generic Service Tokens, 77.7%

## csn006 GR9/3550 Price

Last Trade: re-enabled Usage: 1599990.8 of 1674524.0 PEHour MPP PE CPU (38685.7 of 40487.8 G.S.T), 95.5% 156.9 of 192.2 GByteYear HP Disk (933.8 of 1144.3 G.S.T), 81.6% 133.8 of 78.4 Hour Wren CPU (6.6 of 3.9 G.S.T), 170.6% 70825.3 of 72126.1 Hour SMP CPU (2751.7 of 2802.2 G.S.T), 98.2% 38.9 of 85.5 GByteYear MP Disk (138.9 of 305.4 G.S.T), 45.5% 6.2 of 20.3 GByteYear HSM/Tape (3.9 of 12.7 G.S.T), 30.6% 460843.7 of 465084.9 Hour Green CPU (24080.0 of 24301.6 G.S.T), 99.1% Total usage for project csn006 66600.6 of 69057.9 Generic Service Tokens, 96.4%

Last Trade: Fri Mar 28 09:40:00 2003 Usage 96.8 of 250.1 PEHour MPP PE CPU (2.3 of 6.0 G.S.T), 38.7% 0.0 of 0.0 Hour Wren CPU (0.0 of 0.0 G.S.T), 2233.5% 0.0 of 0.0 Hour SMP CPU (0.0 of 0.0 G.S.T), 8.0% 0.0 of 1.1 GByteYear MP Disk (0.1 of 3.8 G.S.T), 3.4% 0.0 of 9518.0 Hour Green CPU (0.0 of 497.3 G.S.T), 0.0%

Total usage for project csn012 2.5 of 507.1 Generic Service Tokens, 0.5%

csn014 GST/02/2785 Llewellyn-Jones Last Trade: Tue Aug 27 15:35:33 2002 Usage: 0.0 of 658.3 PEHour MPP PE CPU (0.0 of 15.9 G.S.T), 0.0% 0.0 of 15.0 GByteYear HP Disk (0.0 of 89.3 G.S.T), 0.0% 0.0 of 0.8 Hour Wren CPU (0.0 of 0.0 G.S.T), 0.0% 0.0 of 11.9 Hour SMP CPU (0.0 of 0.5 G.S.T), 0.0%

0.0 of 5.0 GByteYear MP Disk (0.0 of 17.9 G.S.T), 0.0%

Total usage for project csn014 0.0 of 123.6 Generic Service Tokens, 0.0%

csn015 Proctor

Last Trade: Wed Apr 16 16:48:08 2003

csn012 NER/A/S/2000/01315 Tennyson

Usage:

254248.2 of 470776.0 PEHour MPP PE CPU (6147.4 of 11382.8 G.S.T), 54.0% 4.9 of 13.1 GByteYear HP Disk (28.9 of 78.1 G.S.T), 37.0% 31.9 of 78.4 Hour Wren CPU (1.6 of 3.9 G.S.T), 40.7% 735.9 of 1562.0 Hour SMP CPU (28.6 of 60.7 G.S.T), 47.1% 53.8 of 99.3 GByteYear MP Disk (192.2 of 354.5 G.S.T), 54.2% 2716.1 of 3330.5 GByteYear HSM/Tape (1706.1 of 2092.0 G.S.T), 81.6% 171711.6 of 303613.7 Hour Green CPU (8972.3 of 15864.4 G.S.T), 56.6% 2.0 of 10.0 PersonDay Support (58.8 of 294.1 G.S.T), 20.0% 3.0 of 862.6 Day Training (32.3 of 9275.3 G.S.T), 0.3% Total usage for project csn015 17168.1 of 39405.8 Generic Service Tokens, 43.6%

csn017 Payne GR3/12917 Last Trade: re-enabled

Usage:

435.9 of 435.9 PEHour MPP PE CPU (10.5 of 10.5 G.S.T), 100.0% 0.4 of 0.2 GByteYear HP Disk (2.2 of 1.4 G.S.T), 163.4% 0.0 of 78.4 Hour Wren CPU (0.0 of 3.9 G.S.T), 0.0% 2025.0 of 2137.4 Hour SMP CPU (78.7 of 83.0 G.S.T), 94.7% 3.3 of 13.6 GByteYear MP Disk (11.7 of 48.6 G.S.T), 24.2% 603.3 of 2126.6 Hour Green CPU (31.5 of 111.1 G.S.T), 28.4% 0.0 of 16.0 PersonDay Support (0.0 of 470.6 G.S.T), 0.0% 2.0 of 18.0 Day Training (21.5 of 193.5 G.S.T), 11.1% Total usage for project csn017 156.2 of 922.7 Generic Service Tokens, 16.9%

csn036 NER/T/S/1999/00110 Haines

Last Trade: Tue Oct 22 16:39:08 2002

Usage: 1158.7 of 10737.1 PEHour MPP PE CPU (28.0 of 259.6 G.S.T), 10.8% 20.7 of 30.0 GByteYear HP Disk (123.2 of 178.6 G.S.T), 69.0% 12.7 of 78.4 Hour Wren CPU (0.6 of 3.9 G.S.T), 16.2% 2091.8 of 25193.4 Hour SMP CPU (81.3 of 978.8 G.S.T), 8.3%

41.2 of 50.0 GByteYear MP Disk (147.3 of 178.6 G.S.T), 82.5%
1519.4 of 2014.0 GByteYear HSM/Tape (954.4 of 1265.1 G.S.T), 75.4%
21990.5 of 25450.3 Hour Green CPU (1149.0 of 1329.8 G.S.T), 86.4%
0.0 of 2.0 PersonDay Support (0.0 of 58.8 G.S.T), 0.0%
0.0 of 5.0 Day Training (0.0 of 53.8 G.S.T), 0.0%
Total usage for project csn036 2483.9 of 4306.9 Generic Service Tokens, 57.7%

csn044 Earth Observation

Last Trade: Wed Aug 28 11:09:50 2002

Usage:

9948.9 of 13857.9 PEHour MPP PE CPU (240.6 of 335.1 G.S.T), 71.8%

0.0 of 5.0 GByteYear HP Disk (0.0 of 30.0 G.S.T), 0.0% 0.0 of 28.4 Hour Wren CPU (0.0 of 1.4 G.S.T), 0.0% 0.2 of 73.9 Hour SMP CPU (0.0 of 2.9 G.S.T), 0.3%

0.0 of 5.0 GByteYear MP Disk (0.0 of 17.9 G.S.T), 0.0%

7.9 of 53.8 GByteYear HSM/Tape (5.0 of 33.8 G.S.T), 14.7%

Total usage for project csn044 245.5 of 421.0 Generic Service Tokens, 58.3%

csn052 GST/02/2658 Mackay Last Trade: Fri Apr 18 10:42:59 2003

Usage:

3.5 of 32909.9 PEHour MPP PE CPU (0.1 of 795.7 G.S.T), 0.0%

0.9 of 23.0 GByteYear HP Disk (5.4 of 136.9 G.S.T), 4.0%

0.0 of 4.9 Hour Wren CPU (0.0 of 0.2 G.S.T), 0.2%

0.0 of 1.0 GByteYear HP Disk SAN - /d (0.0 of 6.0 G.S.T), 0.0%

0.0 of 0.0 GByteYear MP Disk SAN (0.0 of 0.0 G.S.T), 0.0%

0.0 of 0.6 Hour SMP CPU (0.0 of 0.0 G.S.T), 0.4%

0.0 of 1.7 GByteYear MP Disk (0.0 of 6.0 G.S.T), 0.0%

8.1 of 46.3 Hour Green CPU (0.4 of 2.4 G.S.T), 17.6%

5.0 of 5.0 Day Training (53.8 of 53.8 G.S.T), 100.0%

Total usage for project csn052 59.7 of 1001.0 Generic Service Tokens, 6.0%

csp006 PPA/G/S/2001/00050 Browning Last Trade: Wed Mar 26 11:34:05 2003

Usage:

0.0 of 111.6 Hour Wren CPU (0.0 of 5.5 G.S.T), 0.0%

0.0 of 20699.4 Hour SMP CPU (0.0 of 804.2 G.S.T), 0.0%

0.0 of 20.0 GByteYear MP Disk (0.0 of 71.4 G.S.T), 0.0%

0.0 of 12.0 Day Training (0.0 of 129.0 G.S.T), 0.0%

Total usage for project csp006 0.0 of 1010.2 Generic Service Tokens, 0.0%

csp007 PPA/G/O/2002/00004 Hibbert

Last Trade: Tue Apr 1 15:29:22 2003

Usage:

1864.8 of 49999.7 PEHour MPP PE CPU (45.1 of 1208.9 G.S.T), 3.7%

0.0 of 80.0 GByteYear HP Disk (0.0 of 476.2 G.S.T), 0.0%

2.6 of 600.0 Hour Wren CPU (0.1 of 29.7 G.S.T), 0.4%

0.0 of 60.0 GByteYear HP Disk SAN - /d (0.0 of 357.1 G.S.T), 0.0%

0.0 of 600.0 Hour SMP CPU (0.0 of 23.3 G.S.T), 0.0%

Total usage for project csp007 45.2 of 2095.3 Generic Service Tokens, 2.2%

**HPCI** Daresbury

Last Trade: Mon Oct 7 10:07:27 2002

Usage:

34683.7 of 34482.9 PEHour MPP PE CPU (838.6 of 833.8 G.S.T), 100.6%

4.4 of 3.8 GByteYear HP Disk (26.3 of 22.7 G.S.T), 115.5%

1.9 of 0.0 Hour Wren CPU (0.1 of 0.0 G.S.T), 484965.4%

4062.9 of 4120.4 Hour SMP CPU (157.8 of 160.1 G.S.T), 98.6%

2.1 of 1.7 GByteYear MP Disk (7.6 of 6.0 G.S.T), 126.7%

10817.5 of 10497.3 Hour Green CPU (565.2 of 548.5 G.S.T), 103.1%

1.0 of 1.0 Day Training (10.8 of 10.8 G.S.T), 99.7%

Total usage for project hpcid 1606.4 of 1581.9 Generic Service Tokens, 101.6%

**HPCI** Edinburgh

Last Trade: Wed Jul 11 12:09:29 2001

Usage:

1759.1 of 4070.6 PEHour MPP PE CPU (42.5 of 98.4 G.S.T), 43.2% 4.4 of 4.7 GByteYear HP Disk (26.2 of 28.1 G.S.T), 92.9% 698.4 of 770.8 Hour SMP CPU (27.1 of 29.9 G.S.T), 90.6% 3.3 of 2.8 GByteYear MP Disk (11.8 of 10.0 G.S.T), 117.5% 1728.7 of 1739.8 Hour Green CPU (90.3 of 90.9 G.S.T), 99.4% Total usage for project hpcie 197.9 of 257.4 Generic Service Tokens, 76.9%

HPCI Southampton Last Trade: re-enabled

Usage:

737.9 of 5825.0 PEHour MPP PE CPU (17.8 of 140.8 G.S.T), 12.7% 31.7 of 31.6 GByteYear HP Disk (188.9 of 188.2 G.S.T), 100.4% 37.8 of 1074.0 Hour SMP CPU (1.5 of 41.7 G.S.T), 3.5% 3.1 of 3.0 GByteYear MP Disk (11.2 of 10.7 G.S.T), 104.6%

Total usage for project hpcis 219.4 of 381.5 Generic Service Tokens, 57.5%

## Appendix 6

Project	PI Name	Subject	Discipline/Department
Troject	111 Mille	Sabject	Візогрініе, Вершинені
cse002	Wander, A (Dr )	Support for the UKCP	Physics
cse009	Slater, Ben	HPC Computing Applications in Materials Chemistry	Chemistry
cse035	Jenkins, S (Dr)	Ab Initio Simulations of Catalytic Processes at Extended Metal Surfaces	Chemistry
	Johnma, 5 (B1)	The same same same same same same same sam	Chembay
cse036	Duff, I (Prof)	Research & Development of Algorithms & Software for Large-Scale Linear & Non-Linear Systems	Maths
cse041	Wu, X (Dr)	Flutter & Noise Generation Mechanisms - Turbomachinery Fan Assemblies	Mechanical Engineering
cse043	Williams, J (Dr)	Numerical Simulation of Flow over a Rough Bed	Engineering
cse050	Bradley, D (Prof)	Flame Instabilities: their influence on turbulent combustion & incorporation in mathematical models.	Mechanical Engineering
cse052	Di Mare, F (Miss)	Heat Transfer in Turbine Combustors	Mechanical Engineering
cse053	Leschziner, M (Prof)	Coupling RANS Near-Wall Turbulence Models with Large Eddy Simulation Strategies	Aerospace Engineering
cse055	Staunton, J (Dr)	Ab-initio theory of magnetic anisotropy in transition metal ferromagnets	Physics
cse056	Chen, T (Dr)	Aerothermalelasticity Modelling of Air Riding Seals for Large Gas Turbines	Mechanical Engineering
cse057	Evans, R (Dr)	Relativistic Particle Generation from Ultra-Intense Laser Plasma Interactions	Physics
cse060	Robb, M (Prof)	CCP1 Renewal plus falgship project on Car-Parrinello in Chemistry	Chemistry
cse061	Imregun, M (Prof)	Casing treatment modelling for the investigation of stall, flutter and noise mechanisms in turbomachinery compressors.	Mechanical Engineering
cse063	Sandham, N (Prof)	Computational Aerocaustics for Turbulent Plane Jets	Aerospace Engineering
cse064	Leschziner, M (Prof)	Improvement of predictive performance of anisotropy-resolving turbulence models in post-reattachment recovery region of separated flow using Large Eddy Simulation	Aerodynamics
cse066	Coveney, P V (Prof)	New clay-polymer nanocomposites using diversity-discovery methods: synthesis, processing and testing	IT
cse071	Iacovides (Dr)	The Practical Computation of Three-Dimensional Time-Dependent Turbulent Flows in Rotating Cavities	Mechanical Engineering
cse072	Karlin, V (Dr)	Structure & Dynamics of Unstable Premixed Laminar Flames	Engineering
cse074	Luo (Dr)	Consortium on Computational Combustion for Engineering Applications	Engineering
cse075	Novik, K (Dr)	The Reality Grid - a tool for investigating condensed matter & materials	IT
cse076	Briddon, P (Dr)	HPC facilities for the first principles simulation of covalently bonded materials	IT
cse077	Kronenburg, A (Dr)	Combustion Model Development for Large-Eddy Simulation of Non- Premixed Reactive Flows.	Mechanical Engineering
cse082	Barakos, G (Dr)	CFD Study of Three-dDimensional Dynamic Shelf	Aerospace Engineering
cse084	Needs, R (Dr)	The Consortium for Computational Quantum Many-Body Theory	Physics
cse085	Sandham, N (Prof)	UK Turbulence Consortium	Engineering
cse086	Taylor, K (Prof)	Multiphoton, Electron Collisions and BEC HPC Consortium 2002-2004	Physics
cse089	Wiercigroch, M (Dr)	Nonlinear Dynamics & Rock Contact Fracture Mechanics in Modelling of Vibration Enhanced Drilling	Engineering
cse098	De Souza, M M (Dr)	Indium interaction in silicon for ULSI technologies	Physics
csn001	De Cuevas, B (Mrs)	OCCAM	Ocean/Earth Sciences
		-	
csn003	Steenman-Clark, L (Dr)	UGAMP	Meteorology

csn012	Tennyson, J (Prof)	Calculated Absorption by water vapour at near infra-red & optical wavelengths	Physics & Astronomy
csn013	Voke, P (Prof)	Large Eddy Simulation Extended by Extreme Value Theory for the Prediction of Dispersion, Concentration Threshold Boundaries & Field Connectivity	Mechanical & Materials Engineering
csn014	Llewellyn Jones (Prof)		Physics & Astronomy
csn015	Proctor, R (Dr)	A Testbed for Zooplankton Models of the Irish Sea	Coastal & Marine Sciences
csn017	Payne, A (Dr)	Stability of the Antarctic Ice Sheet	Geography
csn036	Woolf, A (Mr)	Assimilation of Altimeter, Radiometer & in situ data into the OCCAM model. Analysis of water properties & transports	Environmental Science
csn044	Steenman-Clark, L (Dr)	Earth Observation Project	Meteorology
csb001	Houldershaw, D (Dr)	Use of Cray T3E for multiple long trajectories of protein unfolding	Crystallography
csp004	Bell, K L (Prof)	A Programme for Atomic Physics for Astrophysics at Queen's University Belfast (2001-2005)	Astronomy
csp006	Jain, R (Dr)	Numerical Simulation of forced magnetic reconnection in the solar corona	Physics
HPCID	Allan, R (Dr)		
HPCIE	Henty, D (Dr)		
cs2036	Farid, Vakili-Tahami (Mr)	MPI Evaluation	Mechanical Aerospace & Manufacturing Engineering
cs2037	Domene, Carmen (Dr)	Ab initio molecular dynamics of ion in membrane proteins	
cs2039	Carlborg (Dr)	Genetic Analysis of Complex Traits	Genetics & Biometry
cs3015	Hampshire, D (Dr)	High Performance Computational Solutions for the Ginzburg-Landau Equations that describe Flux Pinning in High-Field Superconductors	Physics
cs3016	Petchey, O (Dr)	Randomisation test for the significance of functional diversity for eco- system processes	Animal & Plant Sciences
cs3017	Gross, M (Mr)	Numerical Simulation of Laser Materials Processing	Engineering
cs3018	Durrant, M (Dr)	Functional modelling of oxalate-degrading enzymes & of lipoxygenase using quantum calculations.	Biology
cs3019	Bengough (Dr)	Lattice-Boltzmann simulation of water & solute transport in porous media.	Physics
cs4001	White P		
cs4002	Cooper A (Miss)		