CSAR Service - Management Report

March 2003

This report documents the quality of the CSAR service during the month of March 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 March 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.

March 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 30th 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.

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 March 1st to 31st inclusive. Overall, the CPARS Performance Achievement in March 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

	2002/3											
Service Quality Measure	April	May	June	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	March
HPC Services Availability												
Availability in Core Time (% of time)	96.17%	96.08%	97.66%	99.2%	99.75%	98.75%	99.77%	99.25%	99.21%	99.46%	99.73%	100%
Availability out of Core Time (% of time)	97.75%	99.90%	99%	100%	100%	99.42%	99.52%	99.57%	100%	99.89%	100.00%	99.81%
Number of Failures in month	2	1	4	0	- 1	2	1		0	3	1	1
Mean Time between failures in 52 week rolling period (hours)	302	324	313	365	381	381	398	417	515	487	487	515
Fujitsu Service Availability												
Availability in Core Time (% of time)	96.89%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Availability out of Core Time (% of time)	98.92%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Help Desk												
Non In-depth Queries - Max Time to resolve 50% of all queries	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25
Non In-depth Queries - Max Time to resolve 95% of all queries	<1	<2	<5	<2	<2	<1	<2	<2	<2	<0.5	<1	<2
Administrative Queries - Max Time to resolve 95% of all queries	<2	<3	<5	<2	<0.5	<2	<0.5	<0.5	<0.5	<1	<0.5	<1
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 mon	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 $x = \frac{143}{(143+40+233)} + \text{[Fermat availability } x = \frac{40}{(143+40+233)} + \text{Green availability } x = \frac{233}{(143+40+233)} + \frac{143}{(143+40+233)} + \frac{143}{(143+40+23)} + \frac{$

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

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

	2002/3											
Service Quality Measure	April	May	June	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	March
HPC Services Availability												
Availability in Core Time (% of time)	0.078	0.078	0.078	0	-0.039	0.039	-0.039	0	0	0	-0.039	-0.058
Availability out of Core Time (% of time)	0.039	-0.047	0.000	-0.047	-0.047	0	-0.039	-0.039	-0.047	-0.047	-0.047	-0.047
Number of Failures in month	0	-0.008	0.000	-0.009	-0.008	0	-0.008	-0.008	-0.009	0	-0.008	-0.008
Mean Time between failures in 52 week rolling period (hours)	0	0	0	0	0	0	0	0	-0.008	0	0	-0.008
Help Desk												
Non In-depth Queries - Max Time to resolve 50% of all queries	-0.019	-0.019	-0.019	-0.019	-0.019	-0.019	-0.019	-0.019	-0.019	-0.019	-0.019	-0.019
Non In-depth Queries - Max Time to resolve 95% of all queries	-0.016	0	0.031	0	0	-0.016	0	0	0	-0.019	-0.016	0
Administrative Queries - Max Time to resolve 95% of all queries	0	0.016	0.031	0	-0.019	0	-0.019	-0.019	-0.019	-0.016	-0.019	-0.016
Help Desk Telephone - % of calls answered within 2 minutes	-0.004	-0.004	-0.004	-0.004	-0.004	-0.004	-0.004	-0.004	-0.004	-0.004	-0.004	-0.004
Others												
Normal Media Exchange Requests - average response time	-0.002	-0.002	-0.002	-0.002	-0.002	-0.002	-0.002	-0.002	-0.002	-0.002	-0.002	-0.002
New User Registration Time (working days)	-0.019	-0.019	-0.019	-0.019	-0.019	-0.019	-0.019	-0.019	-0.019	-0.019	-0.019	-0.019
Management Report Delivery Times (working days)	0	0	0	0	0	0	0	0	0	0	0	0
System Maintenance - no. of sessions taken per system in the mon	0	0	0	0	0	0	0	0	0	0	0	0
Monthly Total & overall Service Quality Rating for each period:	0.03	0.00	0.05	-0.05	-0.08	-0.01	-0.07	-0.05	-0.06	-0.06	-0.09	-0.09

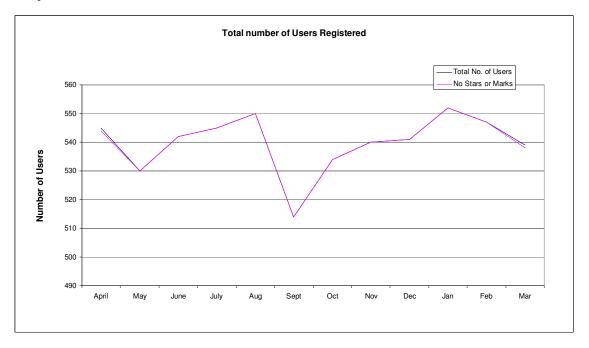
Table 3

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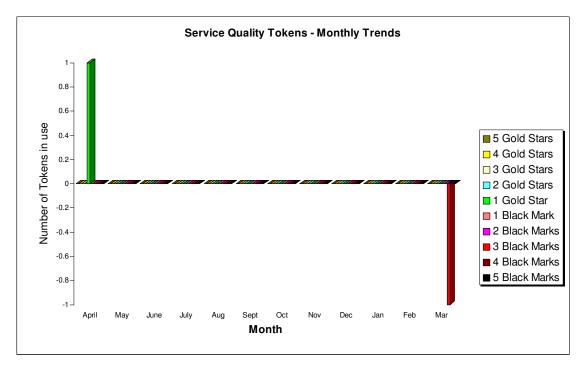
2.2 Service Quality Tokens

The position at the end of March 2003 is that one of the 539 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 Marks	Consortia	Date Allocated	Reason Given				
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 158% of Baseline capacity.

Job Throughput Against Baseline CSAR Service Provision

Period: 1st to 31st March 2003

_	Baseline	Actual Usage in	Actual % Utilisation c/w
	Capacity for	Period	Baseline during Period
	Period	(GFLOP Years)	
	(GFLOP Years)		
Has CfS failed to deliver Baseline MPP Computing Capacity for EPSRC?	12.17	19.26	158.3%
	Baseline	Job Time Demands	Job Demand above
	Capacity for	in Period	110% of Baseline during
	Period		Period (Yes/No)?
	(GFLOP Years)		
2. Have Users submitted work demanding > 110% of the Baseline during period?	12.17	21.9	Yes
		Number of Jobs at	Number of Jobs at least
		least 4 days old at	4 days old at end
		end Period	Period is not zero
			(Yes/No)?
3. Are there User Jobs oustanding at the end of the period over 4 days old?		3	Yes
		Minimum Job Time	Minimum Job Time
		Demands as % of	Demand above 90% of
		Baseline during	Baseline during Period
		Period	(Yes/No)?
4. Have Users submitted work demands above 90% of the Baseline during period?		71%	No
	Number of	Average % of time	Average % of time each
	standard Job	each queue	queue contained jobs in
	Queues (ignoring priorities)	contained jobs in the Period	the Period is > 97%?
	priorities)	and i cinou	

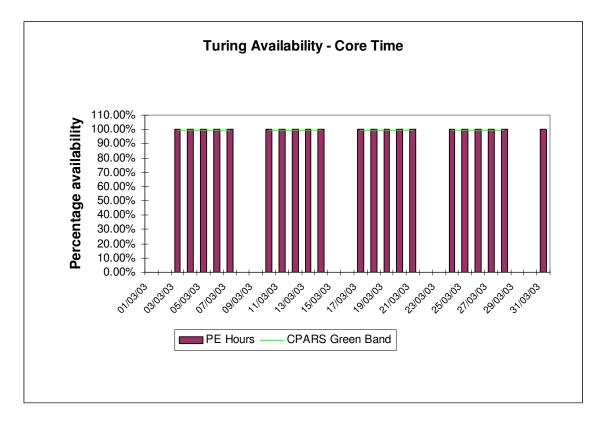
3. System Availability

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.

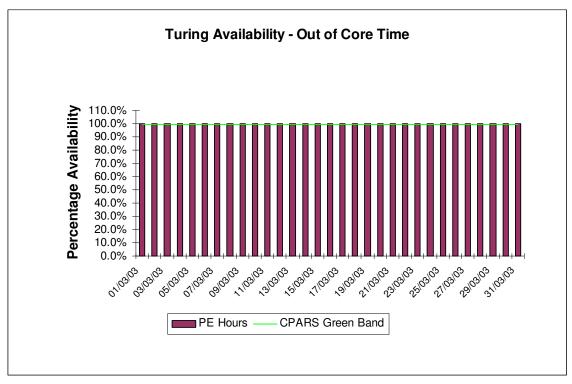
3.1 Cray T3E-1200E System (Turing)

The following graphs show the availability of Turing both in core time and out of core time respectively during the period of 1^{st} to 31^{st} March.

Turing availability for March:



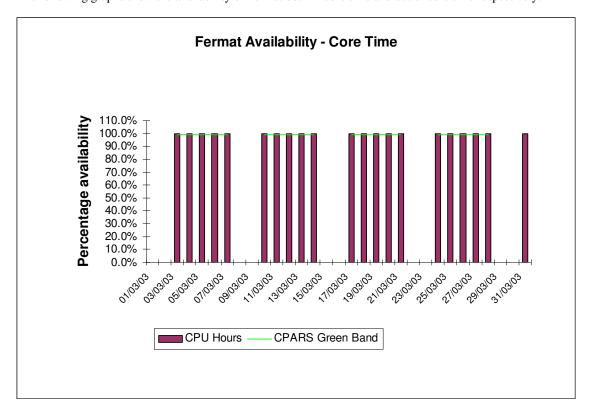
Availability of Turing in core time during March was excellent, with no outages.



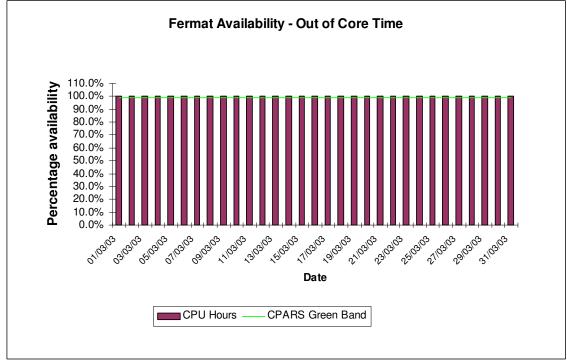
Availability of Turing out of core time during March was excellent, with no outages.

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 March was excellent, with no outages.



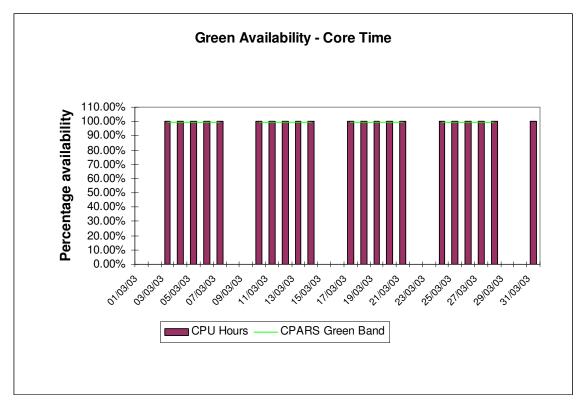
Availability of Fermat out of core time during March was excellent, with no outages.

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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 March was excellent, with no outages.



Availability of Green out of core time during March was very good, with one brief outage on the 21st.

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 March 1st to 31st is provided by Project/User Group, totalled by Research Council and overall. This covers:

• CPU usage Turing: 544,940 PE Hours Fermat: 17,228.6 CPU Hours Wren (Batch): 3.46 CPU Hours Wren (Interactive): 256.02 CPU Hours Green: 104,062 CPU Hours Fujitsu CPU usage Fuji: 3,489 CPU Hours Turing: User Disk allocation 69.4 GB Years Fermat: 106.78 GB Years SAN HV: 20.66 GB Years 3.907 GB Years HSM/tape usage

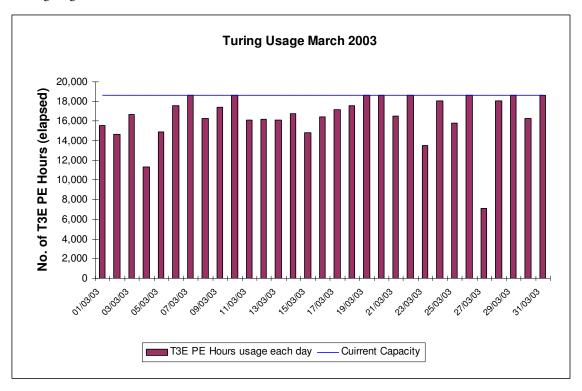
In addition, the following graphs are provided to illustrate usage per month, historically:

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

4.1 Cray T3E-1200E System (Turing)

The following graph shows the usage of Turing during each day of March 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 March:



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

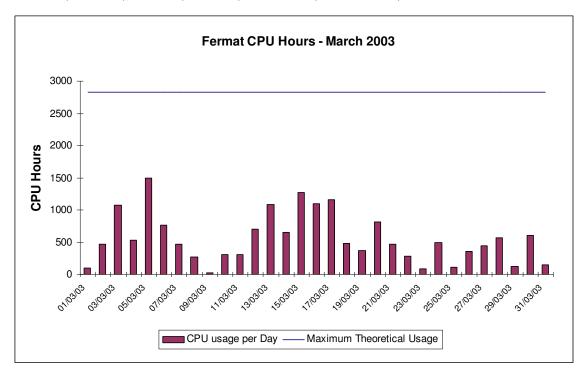
The graph also indicates the workload was close to 100% of maximum theoretical capacity some parts of the month.

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.

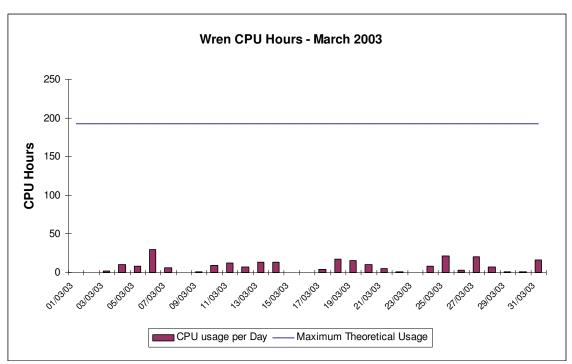
4.2 SGI Origin2000 System (Fermat)

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).



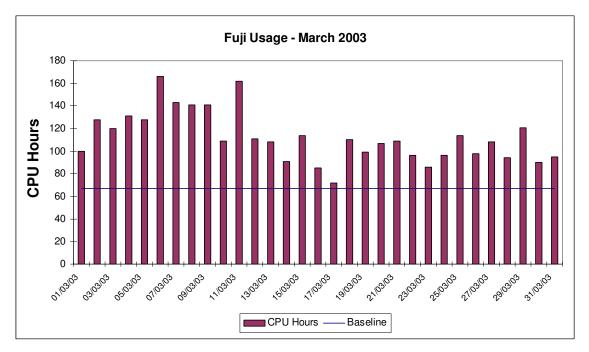
The above graph shows the variable utilisation of the Origin 128. As interactive usage was removed from Fermat at the beginning of March, Fermat is now a dedicated batch system.

4.3 SGI Origin300 System (Wren)



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

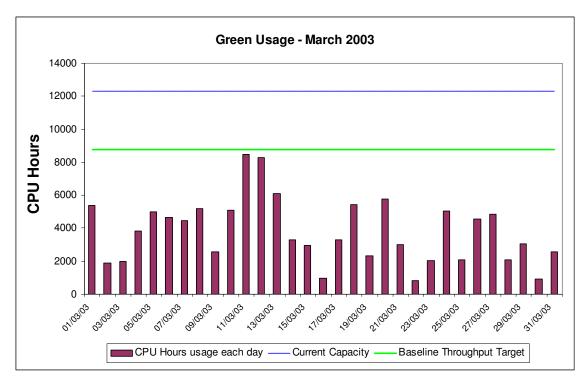
4.4 Fujitsu VPP 300/8 System (Fuji)



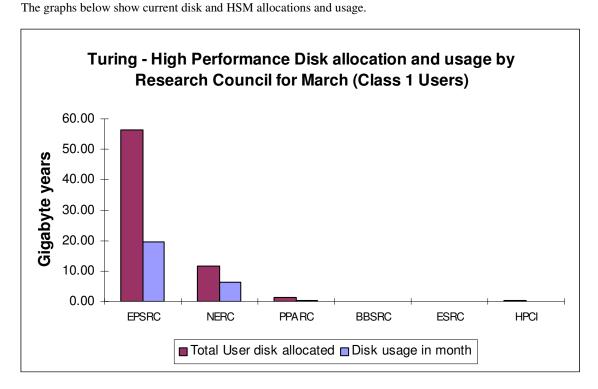
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Fuji utilisation was again variable over the month with the overall position resulting in usage above baseline. The Fujitsu system was withdrawn from service at the end of March.

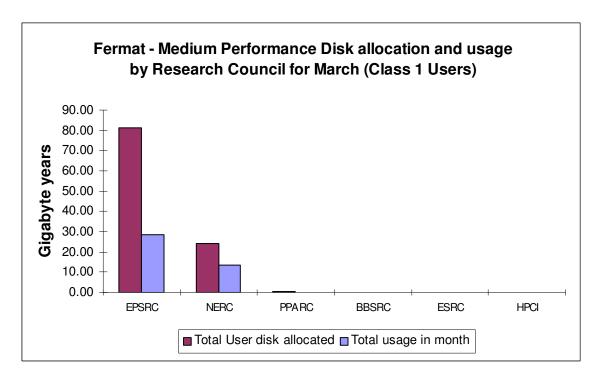
4.5 SGI Origin3000 System (Green)



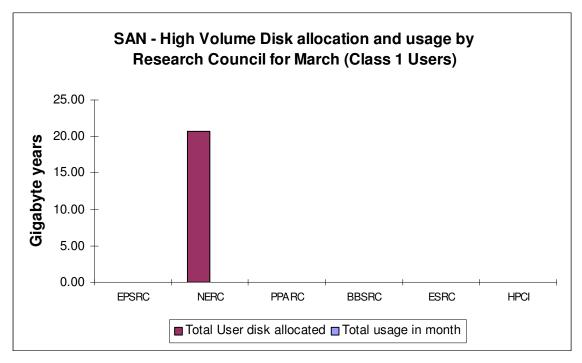
The above graph shows the utilisation of Green for the month of March.



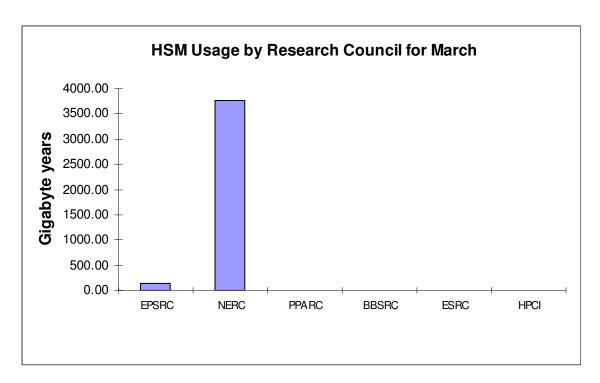
The preceding graph shows actual usage on average against the current allocation of disk on the Turing system.



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

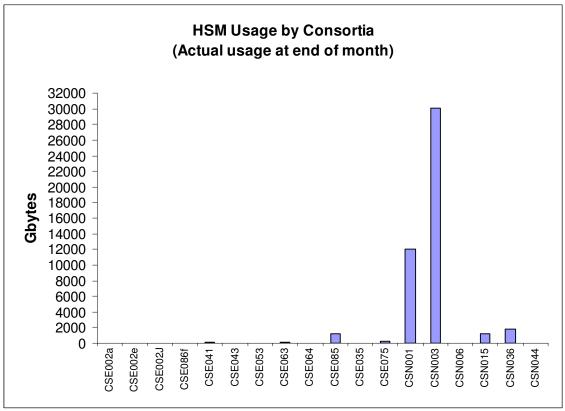


The above graph shows the disk allocation against usage on average of the new SAN High Volume (HV) disk.

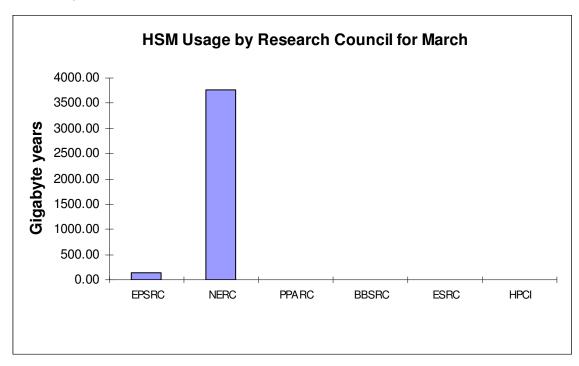


The above graph shows the total usage of the HSM facility by Research Council.

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

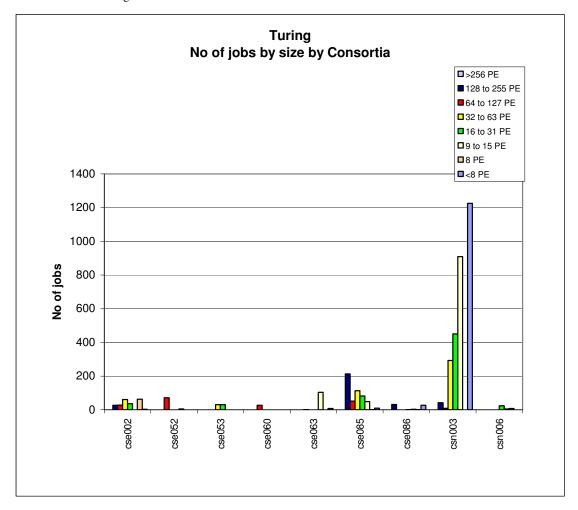


CSE085 (Sandham), CSN001 (De Cuevas), CSN003 (Steenman-Clark), CSN015 (Proctor) & CSN036 (Woolf) were the major users of HSM resource.



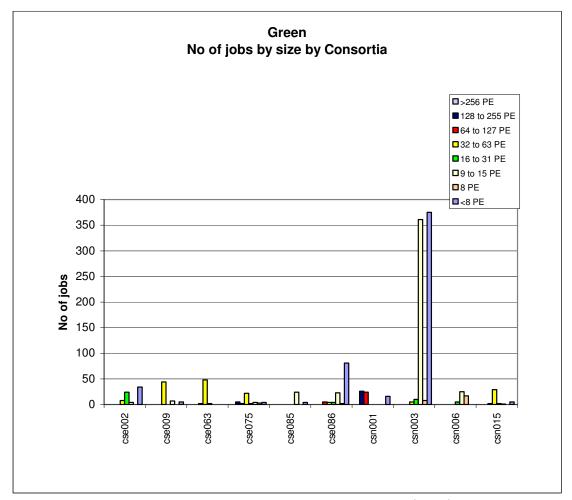
4.7 Processor Usage and Job Statistics Charts

Job statistics for Turing:



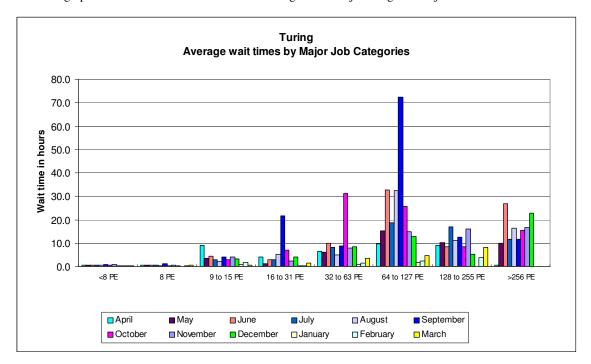
The above graph shows the number of jobs of the major sizes run in the period 1st to 31st March 2003.

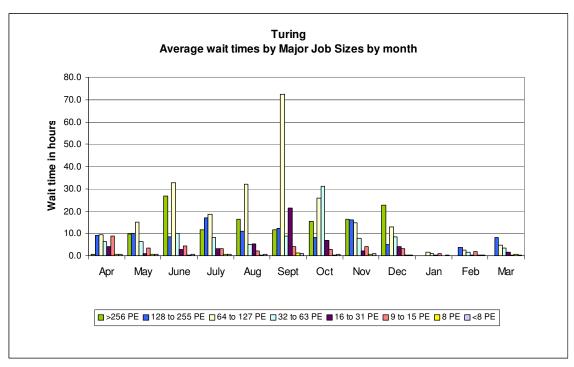
Job statistics for Green:



The above graph shows the number of jobs of the major sizes run in the period 1st to 31st March 2003.

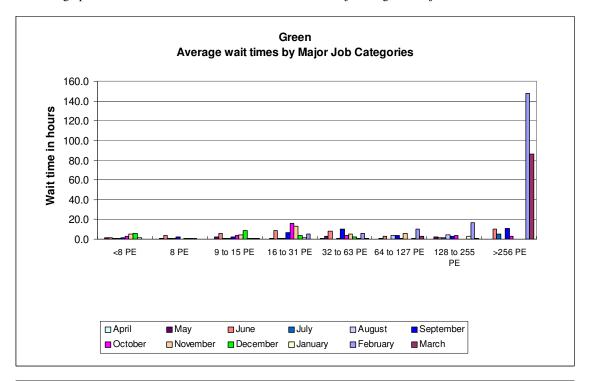
The next graph shows the wait times in hours on Turing for the major categories of jobs.

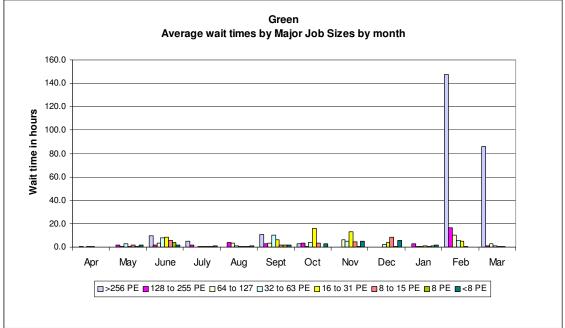




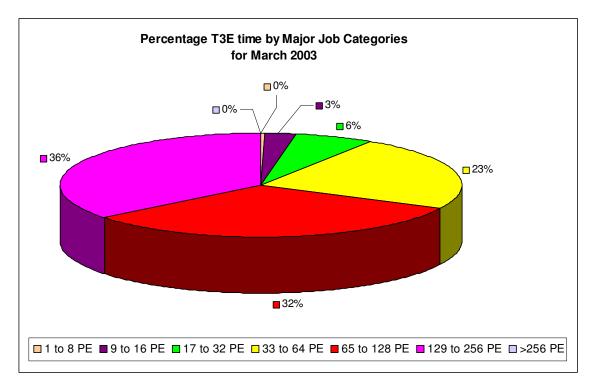
The chart above shows the average wait time trend on Turing over the last 12 months.

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

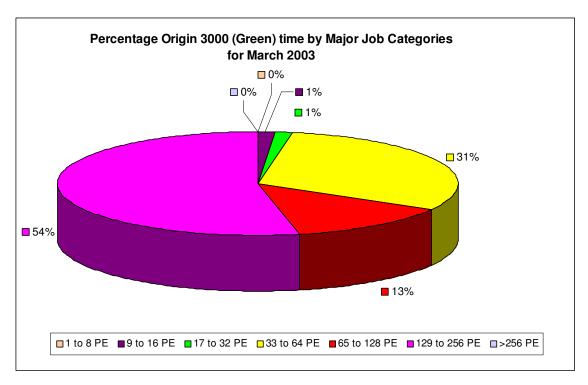




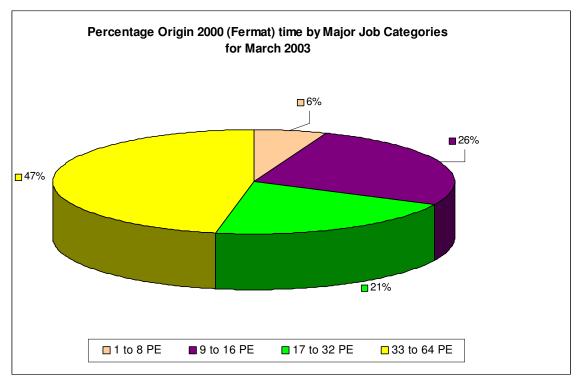
The chart above shows the average wait time trend on Green for the last 12 month period. The lengthy wait time this month is due to one large job being queued and being unable to start because of the volume of smaller 24 hour jobs. A rundown has been introduced on the machines to help alleviate this effect.



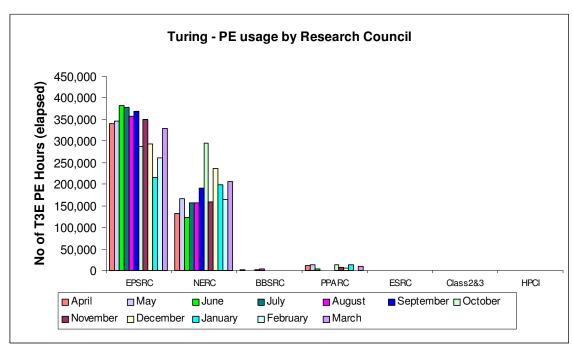
The workload on Turing for March was fairly evenly spread across the mid- to upper-end ranges of PEs.



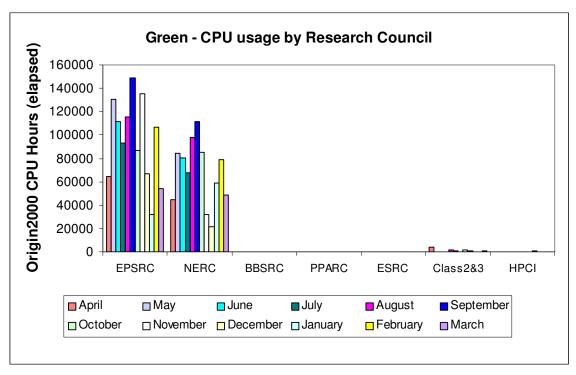
The greatest percentage of workload on Green, 54%, was in the 129 to 256 PE range.



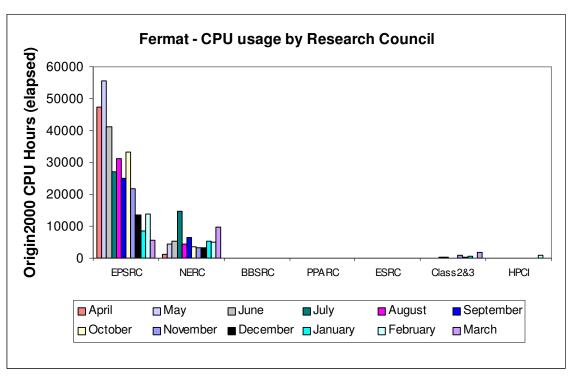
Workload across Fermat for March was fairly evenly spread, with a slightly higher concentration being seen in the 33 to 64 PE range at 47%.



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



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

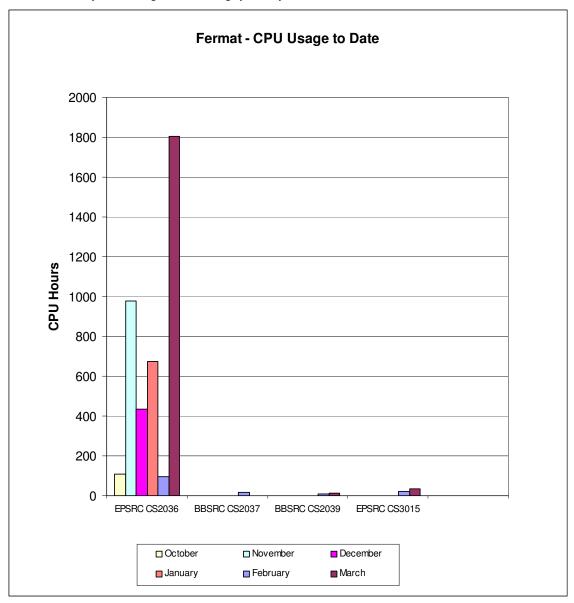


Origin 2000 CPU usage is shown by Research Council during the past 12 months of service in the above chart.

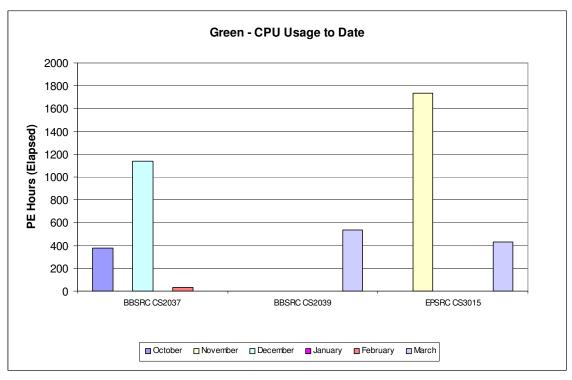
4.8 Class 2 & 3 Usage Charts

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.

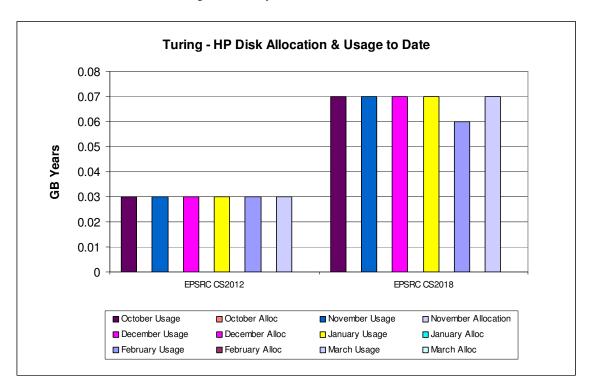
There is currently no PE usage of the Turing system by class 2 and class 3 users.



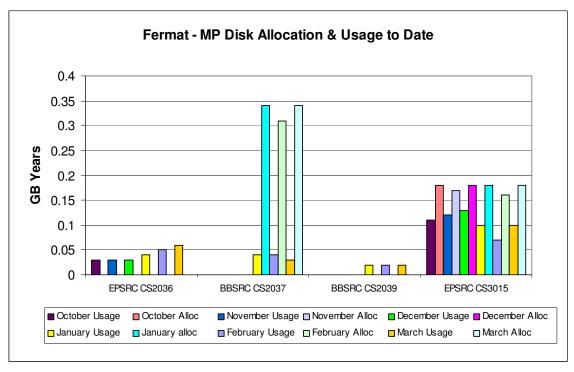
The above chart shows the CPU usage of the Fermat system by class 2 and class 3 users.



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.

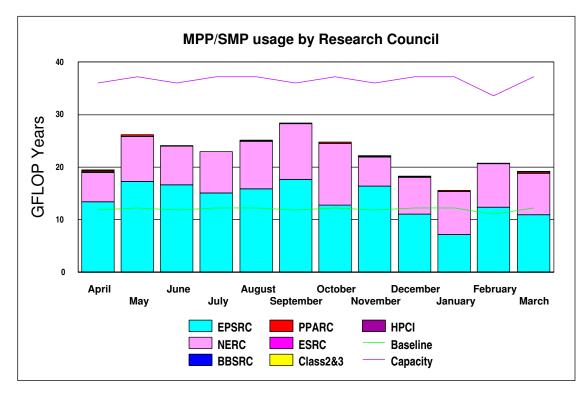


The above chart shows the most significant disk allocations on the Fermat system for class 2 and class 3 users. There is currently no HSM usage by class 2 and class 3 users.

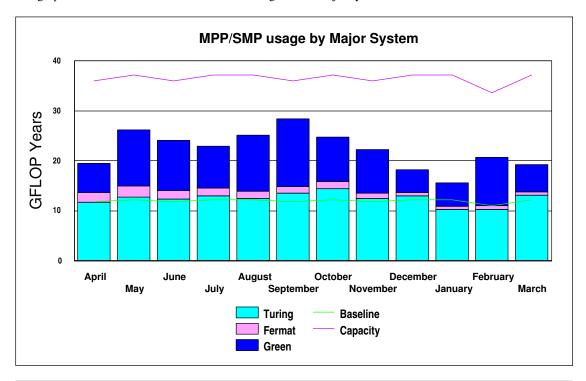
4.9 Charts of Historical Usage

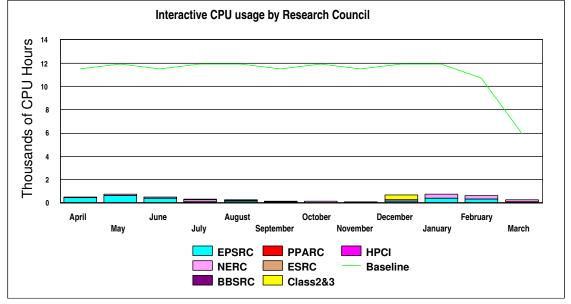
In all the Usage Charts, the baseline varies dependant on the number of days in each month, within a 365-day year.

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



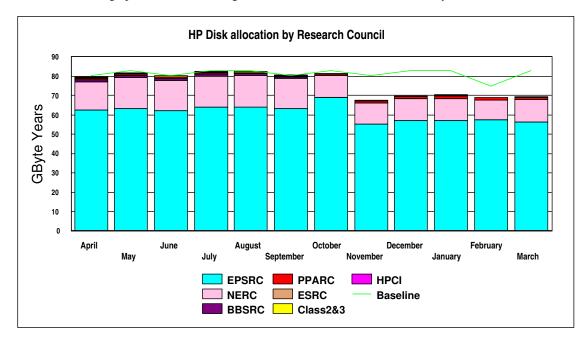
The graph below shows the historic SMP/MPP usage on the major systems.



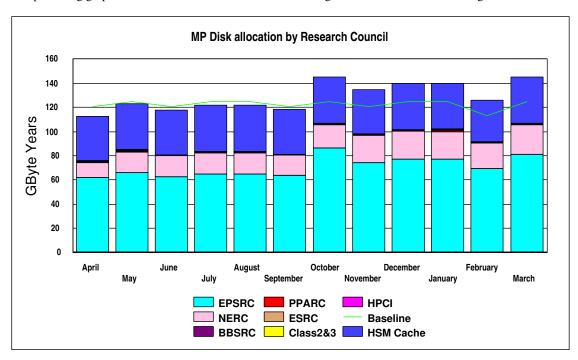


The above graph shows the historic interactive usage of the 'baseline' Fermat system (equivalent to 16@250Mhz CPUs) up to the end of February 2003, at which point the interactive usage was transferred to Wren and Fermat became a batch-only system. Eight of the higher speed 500Mhz CPUs in the Origin 300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

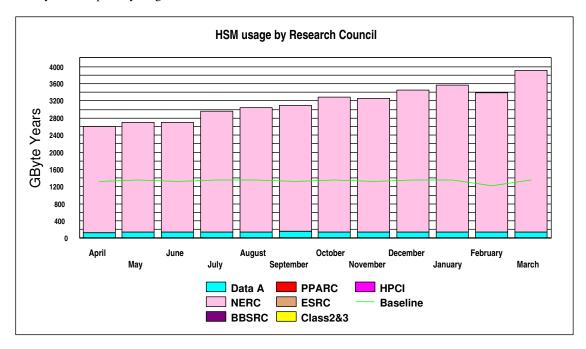


The preceding graph illustrates the historic allocation of the High Performance Disk on Turing.

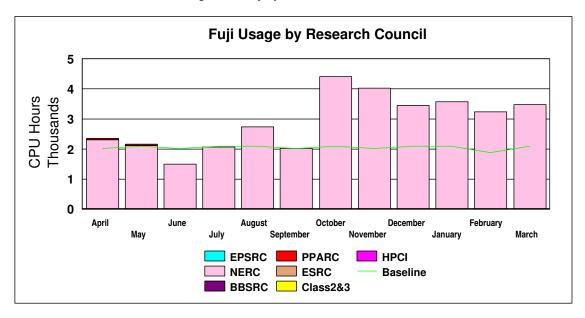


The graph above illustrates the historic allocation of the Medium Performance Disk on Fermat.

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.



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



The Fujitsu system usage was well above baseline again this month. This system was withdrawn from service at the end of March, in accordance with the wishes of 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 March, 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.

The end of March saw the decommissioning of the Fujitsu VPP 300/8 system Fuji, in accordance with the wishes of NERC.

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 into the service by 30th June 2003 as a test system for a forthcoming 256-PE Altix system which is to be introduced by September 30th 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 and 4 additional fibre-attached tape drives. These will be used to improve the response and reliability of the Data Migration Facility and to automate remote copying of file system backups.

6. Conclusion

March 2003 saw the overall CPARS rating at Green with the baseline being exceeded by 58.3%.

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 March 2003

Appendix 2 contains the Percentage shares by Consortium for March 2003

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

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

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

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

CfS

Issue 1.0
Appendix 1

The summary accounts for the month of March 2003 can be found at the URL below

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

	March 2003	Percentage CDII time nor concenting for	Format in March 2002
Percentage PE time per consortia for Turing in		Percentage CPU time per consortia for	
Consortia CSE002	% Machine Time 6.16	Consortia CSE002	% Machine Time
			10.93
CSE021	0.00	CSE021	0.00
CSE023	0.00	CSE023	0.00
CSE025	0.00	CSE025	0.00
CSE030	0.00	CSE030	0.00
CSE055	0.00	CSE055	0.00
CSE057	0.00	CSE057	0.00
CSE084	0.34	CSE084	0.00
CSE086	2.71	CSE086	5.36
CSE004	0.00	CSE004	0.00
CSE013	0.00	CSE013	0.00
SE014	0.00	CSE014	0.00
CSE016	0.00	CSE016	0.00
SE027	0.00	CSE027	0.00
SE040	0.00	CSE040	0.00
SE041	0.00	CSE041	0.51
SE043	0.06	CSE043	0.00
SE050	0.00	CSE050	0.00
SE052	13.38	CSE052	0.00
SE053	0.97	CSE053	0.00
SE056	0.00	CSE056	4.72
CSE063	2.21	CSE063	0.00
SE064	0.00	CSE064	10.04
SE085	29.26	CSE085	0.01
SE008	0.00	CSE008	0.00
SE009	0.40	CSE009	0.00
SE024	0.00	CSE024	0.00
SE033	0.00	CSE033	0.00
SE035	0.24	CSE035	0.00
SE060	4.39	CSE060	0.00
SE020	0.00	CSE020	0.00
SE066	0.25	CSE066	0.00
CSE075	0.00	CSE075	0.08
CSE076	0.00	CSE076	0.00
CSE034	0.00	CSE034	0.00
CSE036	0.00	CSE036	0.00
CS3016	0.00	CS3016	0.51
IPCI Southampton	0.00	HPCI Southampton	0.00
IPCI Daresbury	0.00	HPCI Daresbury	0.00
IPCI Edinburgh	0.00	HPCI Edinburgh	0.00
CSN001	0.00	CSN001	46.22
SN003	35.71	CSN003	10.65
SN005	0.00	CSN005	0.00
CSN006	2.01	CSN006	0.00
SN007	0.00	CSN007	0.00
CSN010	0.00	CSN010	0.00
SN012	0.00	CSN012	0.00
SN015	0.03	CSN015	0.00
SN017	0.00	CSN017	0.00
SN036	0.00	CSN036	0.21
SN044	0.00	CSN044	0.00
SN052	0.00	CSN052	0.00
SB001	0.00	CSB001	0.00
SB002	0.00	CSB002	0.00
SP004	1.88	CSP004	0.00
S2018	0.00	CS2004	0.00
S2033	0.00	CS2033	0.00
S2034	0.00	CS2034	0.00
S2035	0.00	CS2035	0.00
S2036	0.00	CS2036	10.47
S2037	0.00	CS2037	0.00
S3001	0.00	CS2037 CS2039	0.00
	0.00	CS3002	0.08
Sanna			
S3002	0.00	CERONE	
S3005	0.00	CS3005	0.00
	0.00 0.00 0.00	CS3005 CS3010 CS3015	0.00 0.00 0.21

Percentage CPU time per consortia for	Green in March 2003	Percentage CPU time per consortia for	Wren in March 2003
Consortia	% Machine Time	Consortia	% Machine Time
CSE002	6.80	CSE002	0.02
CSE086	1.00	CSE086	19.52
CSE041	0.00	CSE041	0.07
CSE053	0.00	CSE053	0.01
CSE056	0.00	CSE056	0.03
CSE063	24.44	CSE063	1.03
CSE064	0.00	CSE064	0.15
CSE085	2.80	CSE085	0.10
CSE009	11.30	CSE009	4.22
CSE075	5.93	CSE075	1.44
CSE076	0.00	CSE076	2.57
HPCI Daresbury	0.00	HPCI Daresbury	0.02
CSN001	27.53	CSN001	8.68
CSN003	8.30	CSN003	50.86
CSN006	3.95	CSN006	0.06
CSN015	7.03	CSN015	3.02
CSN036	0.00	CSN036	0.66
CSP004	0.00	CSP004	1.04
CS2036	0.00	CS2036	0.00
CS2039	0.52	CS2039	0.25
CS3015	0.41	CS3015	8.28

	by Consortia for Turing in March 2003	Percentage disc allocation	Percentage disc allocation by Consortia for Fermat in March 2003			
Consortia	%Allocation	Consortia	%Allocation			
CSE002	27.94	CSE002	7.86			
CSE021	0.00	CSE021	0.00			
E023	0.00	CSE023	0.00			
025	0.00	CSE025	0.00			
E030	0.00	CSE030	7.95			
E055	0.12	CSE055	0.00			
E057	0.04	CSE057	0.00			
:084	1.47	CSE084	1.59			
086	12.46	CSE086	7.93			
004	0.00	CSE004	0.00			
013	1.57	CSE013	0.41			
014	0.00	CSE014	0.00			
016	0.00	CSE016	0.00			
027	0.00	CSE027	0.00			
040	0.03	CSE040	0.39			
041	0.06	CSE041	0.07			
043	0.06	CSE043	0.08			
052	0.36	CSE052	0.00			
053	0.19	CSE053	0.07			
:053	0.19	CSE053 CSE056	0.07			
063	1.22	CSE063	0.00			
064	0.03	CSE064	0.07			
085	18.36	CSE085	8.75			
009	6.54	CSE009	1.59			
024	0.00	CSE024	0.00			
033	0.00	CSE033	0.00			
35	0.85	CSE035	0.00			
)19	0.00	CSE019	0.00			
20	0.00	CSE020	0.00			
166	1.43	CSE066	832.55			
75	7.18	CSE075	37.45			
76	0.13	CSE076	0.44			
34	0.00	CSE034	0.00			
036	0.03	CSE036	0.01			
Southampton	0.00	HPCI Southampton	0.00			
Daresbury	0.12	HPCI Daresbury	0.04			
Edinburgh	0.12	HPCI Edinburgh	0.07			
1001	2.45	CSN001	11.93			
1003	3.79	CSN003	2.19			
005	0.00	CSN005	0.00			
1006	6.12	CSN006	1.59			
007	0.00	CSN007	0.00			
010	0.00	CSN010	0.00			
012	0.00	CSN012	0.00			
1015	0.24	CSN015	1.17			
017	0.01	CSN017	0.23			
036	3.67	CSN036	5.57			
052	0.22	CSN052	0.00			
01	0.06	CSB001	0.00			
004	1.83	CSP004	0.64			
	0.49	CS2037	0.32			
		CS3010	0.00			
2037 8010 8015	0.00 0.26	CS3015	0.14			

Percentage usage of HSM by Consortium for March 2003								
Consortium	% Usage							
CSE002	0.19							
CSE086	0.04							
CSE013	0.00							
CSE041	0.28							
CSE043	0.02							
CSE053	0.02							
CSE063	0.14							
CSE064	0.03							
CSE085	2.47							
CSE035	0.02							
CSE075	0.56							
CSN001	25.74							
CSN003	64.02							
CSN006	0.01							
CSN015	2.67							
CSN036	3.78							
CSN044	0.02							

Percentage PE usage on Turing by Research Council for March 2003			Percentage CPU usage on Fermat by Research Council for March 2003			
reformage re usage on furning by nesearch council for March 2003		tor March 2003	reicemage Gro usage on reimat by Research Council for March 2003			
Research Council	% Usage		Research Council	% Usage		
EPSRC	60.36		EPSRC	42.33		
HPCI	0.00		HPCI	0.51		
NERC	37.75		NERC	57.07		
BBSRC	0.00		BBSRC	0.08		
ESRC	0.00		ESRC	0.00		
PPARC	1.88		PPARC	0.00		
	l		J		L	
Percentage PE usage	on Green by Research Council	for March 2003	Percentage CPU usa	ge on Wren by Research Counci	l for March 2003	
Research Council	% Usage		Research Council	% Usage		
EPSRC	52.67		EPSRC	35.44		
HPCI	0.00		HPCI	0.02		
NERC	46.81		NERC	63.27		
BBSRC	0.52		BBSRC	0.25		
ESRC	0.00		ESRC	0.00		
PPARC	0.00		PPARC	1.04		

Percentage Disc allocated on Turing by Research Council for March 2003		cil for March 2003	Percentage Disc allocated on Fermat by Research Council for March 200		
Research Council	% Allocated		Research Council	% Allocated	
EPSRC	81.35		EPSRC	76.24	
HPCI	0.24		HPCI	0.16	
NERC	16.50		NERC	22.69	
BBSRC	0.06		BBSRC	0.32	
ESRC	0.00		ESRC	0.00	
PPARC	1.83		PPARC	0.64	
Percentage Disc allocat	ed as SAN UHP by Research Co	uncil for March 2003	Percentage Disc allo	cated as SAN HV by Research C	ouncil for March 2003
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 March 2003								
Research Council	<u>% usage</u>							
EPSRC	3.76							
HPCI	0.00							
NERC	96.24							
BBSRC	0.00							
ESRC	0.00							
PPARC	0.00							

Appendix 4

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 Mar 2003	Total Apps Support from July 2000	Opt Support for Mar 2003	Total Opt Support from July 2000	Total Support Used	Trainin g 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 cse019	Jaffri, K Lander, J (Dr)			Keith Taylor Kevin Roy								
cse020	Zunici, J (DI)			Kevin Roy								
cse021	Staunton, J (Dr)			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	

cse025 cse026 cse027 cse028 cse029 cse030 cse031 cse031	Walet, N R (Dr) Neal, M (Dr) Apsley, D D (Dr) Desplat, J C (Dr)	High Performance Computing for	Dhoning	Martyn Foster						2	1.5
cse027 cse028 cse029 cse030	Apsley, D D (Dr) Desplat, J C (Dr)	Computing for	Dhori								
cse027 cse028 cse029 cse030	Apsley, D D (Dr) Desplat, J C (Dr)	Computing for	Diveri								
cse028 cse029 cse030	(Dr) Desplat, J C (Dr)	Computing for	Physi			11					
cse029	(Dr) Desplat, J C (Dr)	Computing for	Dhumi								
cse030	(Dr) Desplat, J C (Dr)	Computing for	Dhami			1					
	Desplat, J C (Dr)	Computing for	Dlami	Keith Taylor							
cse031	n land	Complex Fluids	Physics	Andrew Jones	103		21	5	51	31	7
	D 100										
cse033	Breard, C (Dr)					i					
cse034				Kevin Roy							
	Jenkins, S (Dr)	Ab Initio Simulations of Catalytic Processes at Extended Metal Surfaces	Chemistry	Neil Stringfellow							
cse036	Duff, I (Prof)	Research & Development of Algorithms & Software for Large- Scale Linear & Non-Linear Systems	Maths	Adrian Tate							
cse040	Badcock, K (Dr)	Prediction of Non- Linear Flutter Characteristics by Numerical Path Following & Model Reduction	Aerospace Engineering								
cse041	Wu, X (Dr)	Flutter & Noise Generation Mechanisms - Turbomachinery Fan Assemblies	Mechanical Engineering	Keith Taylor	60					5	
cse043	Williams, J (Dr)	Numerical Simulation of Flow over a Rough Bed	Engineering	Neil Stringfellow	4		2	2	4	4	4
cse050	Bradley, D (Prof)	Flame Instabilities: their influence on turbulent combustion & incorporation in mathematical models.	Mechanical Engineering		20					10	
							1				
cse051											
cse052	Di Mare, F (Miss)	Heat Transfer in Turbine Combustors	Mechanical Engineering	Jon Gibson	10					25	
cse053	Leschziner, M (Prof)	Coupling RANS Near-Wall Turbulence Models with Large Eddy Simulation Strategies	Aerospace Engineering	Mike Pettipher	15					8	

								-	33uc 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)	Aerothermalelasticit y 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 preformance of anisotropy-resolving turbulence models in post-reattachment recovery region of separated flow using Large Eddy Simulation	Aerodynami cs	Mike Pettipher	10			8	
cse066	Coveney, P V (Prof)	New clay-polymer nanocomposites using diversity- discovery methods: synthesis, processing and testing	IT	Neil Stringfellow	21			6	3

										ssue 1.0
cse071	Iacovides (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	П	Neil Stringfellow	14	5		5	14	
cse076	Briddon, P (Dr)	HPC facilities for the first principles simulation of covalently bonded materials	IT	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	

												33uc 1.0
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	60.5		1		55	58	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
						11	1.1	11	11	1		

									1	ssue 1.0
csn036	Woolf, A (Mr)	Assimilation of Altimeter, Radiometer & in situ data into the OCCAM model. Analysis of water properties & transports	Environment al Science	Zoe Chaplin	2				5	
csn044	Steenman- Clark, L (Dr)	Earth Observation Project	Meteorology	Zoe Chaplin						
csb001	Houldershaw, D (Dr)	Use of Cray T3E for multiple long trajectories of protein unfolding	Crystallogra phy	Keith Taylor	6	1.5		3.5	4	2
csb002	Mulholland, A (Dr)			Robin Pinning						
csb003	Carling, J (Dr)								3	
csp002	Chapman, S				2				8	4
csp003	Ord, S M (Mr)			Stephen Pickles	11.79	10		11	12	12
csp004	Bell, K L (Prof)	A Programme for Atomic Physics for Astrophysics at Queen's University	Astronomy	Keith Taylor	7				8	
csp006	Jain, R (Dr)	Numerical Simulation of forced magnetic reconnection in the solar corona	Physics	Jon Gibson					12	
css001	Boyle, P (Dr)			John Brooke					20	
css002	Crouchley, R (Dr)			John Brooke					2.5	2
HPCID	Allan, R (Dr)					i			1	1
HPCIE	Henty, D (Dr)									
HPCIS	Nicole, D (Dr)									
UKHEC	Allan, R (Dr)	UK HEC Collaboration, Core Support for High- End Computing 1999-2002		Andrew Jones					2	2
cs2001				Stephen Pickles					10	
cs2002				John Brooke	0.25			0.25		
cs2003										
cs2004				Keith Taylor						
cs2005										
cs2006				Mike Pettipher						
cs2007									1	1

											,	ssue 1.0
cs2008				Robin Pinning	7.91					7.91		
cs2009	Pennington, V (Dr)			Michael Bane								
cs2010												
cs2011	Mallinger, F (Dr)											
cs2012	Qin, N (Prof)										1.5	1.5
cs2014	Karlin, V (Dr)										2	2
cs2015	Tejera Cuesta, P (Mr)			Keith Taylor							3	1.5
	I (MI)											
cs2016	Miles, J J (Dr)				2							
cs2017	Eisenbach, M (Mr)											
cs2018												
cs2019												
cs2020					1							
cs2021											6	1
cs2022											3	2
cs2023												
cs2024 cs2026											1	
cs2026 cs2027					6] <u> </u>		<u> </u>	<u> </u>		4	
cs2028	Annett (Dr)				2						2	
cs2029	Timet (D1)											
cs2030	McKenna, K										1	1
	(Mr)											
cs2031	Ess											
cs2032	Jain, R (Dr)											
cs2033 cs2034	De Souza, M	Indium interactions	Physics	Jon Gibson								
	M (Dr)	in silicon for future ULSI technologies.										
cs2035	Barakos, G (Dr)	Detached Eddy Simulation of Aerodynamics & Aerocautics of Cavity Flows	Aerospace Engineering	Keith Taylor								
cs2036	Farid, Vakili- Tahami (Mr)	MPI Evaluation	Mechanical Aerospace & Manufacturi ng Engineering	Jon Gibson	1.7				1	1		
cs2037	Domene, Carmen (Dr)	Ab initio molecular dynamics of ion in membrane proteins										
cs2038	Excell, P (Prof)	Computational Bioelectromagnetic Modelling of Human Cellular Processes for Mobile Phone Safety Research.	Informatics		1							
cs2039	Carlborg (Dr)	Genetic Analysis of Complex Traits	Genetics & Biometry									
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
cs3005	Zarei, B (Mr)			John Brooke	10						5	3
cs3006					4						5	1
cs3007	Finch, E				37		7		5	12	5	
cs3008	Alsherg. B				3						13	

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	(Dr)									
cs3009	Flower, D (Dr)				2				3	
cs3010	Kemsley, K (Dr)				4				8	1
cs3012	Austin, J (Prof)				5		3	3	3	2
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					

Appendix 5

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

cs2036 Hayhurst

Last Trade: Mon Feb 10 16:29:47 2003

Usage:

0.0 of 78.4 Hour Wren CPU (0.0 of 3.9 G.S.T), 0.0%

4486.3 of 4937.1 Hour SMP CPU (174.3 of 191.8 G.S.T), 90.9%

0.0 of 1.0 GByteYear MP Disk (0.0 of 3.6 G.S.T), 0.0%

1.0 of 1.7 PersonDay Support (29.4 of 50.0 G.S.T), 58.8%

Total usage for project cs2036 203.7 of 249.3 Generic Service Tokens, 81.7%

cs2037 Domene

Last Trade: re-enabled

Usage:

0.0 of 1.6 Hour Wren CPU (0.0 of 0.1 G.S.T), 1.1% 17.0 of 384.1 Hour SMP CPU (0.7 of 14.9 G.S.T), 4.4% 1.5 of 4.7 GByteYear MP Disk (5.2 of 16.7 G.S.T), 31.5% 1169.7 of 1244.0 Hour Green CPU (61.1 of 65.0 G.S.T), 94.0%

Total usage for project cs2037 67.0 of 96.7 Generic Service Tokens, 69.3%

cs2039 Carlborg

Last Trade: Mon Mar 3 09:34:39 2003

Usage:

2.1 of 20.2 Hour Wren CPU (0.1 of 1.0 G.S.T), 10.6% 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% 538.8 of 1834.6 Hour Green CPU (28.2 of 95.9 G.S.T), 29.4%

Total usage for project cs2039 29.2 of 99.6 Generic Service Tokens, 29.3%

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:

84.7 of 235.3 Hour Wren CPU (4.2 of 11.7 G.S.T), 36.0% 507.0 of 648.8 Hour SMP CPU (19.7 of 25.2 G.S.T), 78.1% 1.8 of 2.0 GByteYear MP Disk (6.5 of 7.1 G.S.T), 90.9%

4633.7 of 6596.1 Hour Green CPU (242.1 of 344.7 G.S.T), 70.2%

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 272.5 of 501.2 Generic Service Tokens, 54.4%

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%

csb001 27/B13508 Goodfellow

Last Trade: re-enabled

Usage:

148619.6 of 250989.4 PEHour MPP PE CPU (3593.4 of 6068.6 G.S.T), 59.2%

8.2 of 48.1 GByteYear HP Disk (48.6 of 286.4 G.S.T), 17.0%

0.4 of 1.2 Hour SMP CPU (0.0 of 0.0 G.S.T), 28.3%

6.1 of 13.7 GByteYear MP Disk (21.9 of 49.0 G.S.T), 44.7%

0.0 of 115.0 GByteYear HSM/Tape (0.0 of 72.2 G.S.T), 0.0%

2454.8 of 12444.9 Hour Green CPU (128.3 of 650.3 G.S.T), 19.7%

3.5 of 6.0 PersonDay Support (102.9 of 176.5 G.S.T), 58.3%

2.0 of 4.0 Day Training (21.5 of 43.2 G.S.T), 49.8%

Total usage for project csb001 3916.6 of 7346.2 Generic Service Tokens, 53.3%

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), 69.9%

Total usage for project cse001 0.4 of 0.8 Generic Service Tokens, 44.8%

cse002 GR/N02337 Bird

Last Trade: Tue Dec 3 10:39:15 2002

Usage:

3022094.1 of 3078966.1 PEHour MPP PE CPU (73070.4 of 74445.4 G.S.T), 98.2%

783.8 of 1322.0 GByteYear HP Disk (4665.6 of 7869.1 G.S.T), 59.3%

27.9 of 102.8 Hour Wren CPU (1.4 of 5.1 G.S.T), 27.1%

147421.3 of 162260.2 Hour SMP CPU (5727.5 of 6304.1 G.S.T), 90.9%

301.7 of 1222.0 GByteYear MP Disk (1077.5 of 4364.3 G.S.T), 24.7%

385.1 of 414.5 GByteYear HSM/Tape (241.9 of 260.4 G.S.T), 92.9%

265202.4 of 256260.5 Hour Green CPU (13857.4 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 102916.5 of 110913.3 Generic Service Tokens, 92.8%

cse002 Daresbury Last Trade: never

Usage:

489320.5 of 502686.0 PEHour MPP PE CPU (11831.1 of 12154.3 G.S.T), 97.3%

131.6 of 200.0 GByteYear HP Disk (783.5 of 1190.5 G.S.T), 65.8%

27.5 of 25.0 Hour Wren CPU (1.4 of 1.2 G.S.T), 110.0%

34577.7 of 35350.0 Hour SMP CPU (1343.4 of 1373.4 G.S.T), 97.8%

33.8 of 48.9 GByteYear MP Disk (120.8 of 174.6 G.S.T), 69.2%

70.3 of 106.0 GByteYear HSM/Tape (44.2 of 66.6 G.S.T), 66.3%

38123.2 of 22500.0 Hour Green CPU (1992.0 of 1175.7 G.S.T), 169.4%

Total usage for subproject cse002a 16116.4 of 16136.3 Generic Service Tokens, 99.9%

cse002 Belfast

Last Trade: never

Usage:

359402.6 of 388170.0 PEHour MPP PE CPU (8689.9 of 9385.5 G.S.T), 92.6%

101.9 of 120.0 GByteYear HP Disk (606.7 of 714.3 G.S.T), 84.9%

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%

11.7 of 44.9 GByteYear MP Disk (41.8 of 160.4 G.S.T), 26.0%

0.0 of 3.0 GByteYear HSM/Tape (0.0 of 1.9 G.S.T), 0.0%

Total usage for subproject cse002b 10098.1 of 11056.6 Generic Service Tokens, 91.3%

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%

49.3 of 54.4 GByteYear HP Disk (293.3 of 323.8 G.S.T), 90.6%

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%

 $26.3 \ \text{of} \ 50.4 \ \text{GByteYear} \ \text{MP Disk} \ (94.0 \ \text{of} \ 180.0 \ \text{G.S.T}), \ 52.2\%$

9.9 of 52.0 GByteYear HSM/Tape (6.2 of 32.6 G.S.T), 19.0%

Total usage for subproject cse002c 9385.6 of 9516.7 Generic Service Tokens, 98.6%

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%

14.6 of 26.7 GByteYear HP Disk (86.8 of 158.9 G.S.T), 54.6%

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%

21.5 of 27.7 GByteYear MP Disk (76.8 of 98.9 G.S.T), 77.6%

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 3026.2 of 3534.4 Generic Service Tokens, 85.6%

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%

168.2 of 199.0 GByteYear HP Disk (1000.9 of 1184.5 G.S.T), 84.5%

0.0 of 4.0 Hour Wren CPU (0.0 of 0.2 G.S.T), 0.0%

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0.0 of 1.0 Hour SMP CPU (0.0 of 0.0 G.S.T), 0.0% 36.5 of 50.5 GByteYear MP Disk (130.4 of 180.4 G.S.T), 72.3% 121.0 of 75.0 GByteYear HSM/Tape (76.0 of 47.1 G.S.T), 161.3% Total usage for subproject cse002e 12214.3 of 12467.5 Generic Service Tokens, 98.0% 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% 26.9 of 59.1 GByteYear HP Disk (160.0 of 351.8 G.S.T), 45.5% 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% 27.7 of 54.6 GByteYear MP Disk (98.9 of 195.0 G.S.T), 50.7% 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 4263.7 of 4403.6 Generic Service Tokens, 96.8% cse002 Oxford - pcl Last Trade: never Usage: 120318.5 of 120319.0 PEHour MPP PE CPU (2909.1 of 2909.2 G.S.T), 100.0% 17.2 of 32.8 GByteYear HP Disk (102.5 of 195.2 G.S.T), 52.5% 0.3 of 8.0 Hour Wren CPU (0.0 of 0.4 G.S.T), 3.8% 1905.4 of 1875.0 Hour SMP CPU (74.0 of 72.8 G.S.T), 101.6% 29.3 of 30.8 GByteYear MP Disk (104.7 of 110.0 G.S.T), 95.2% 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 4100.9 of 4135.2 Generic Service Tokens, 99.2% 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% 45.2 of 51.0 GByteYear HP Disk (269.0 of 303.6 G.S.T), 88.6% 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% 13.2 of 46.5 GByteYear MP Disk (47.1 of 166.1 G.S.T), 28.4% 0.0 of 2.8 GByteYear HSM/Tape (0.0 of 1.8 G.S.T), 0.0% Total usage for subproject cse002i 9185.0 of 8338.6 Generic Service Tokens, 110.2% cse002 Kent (UKC) Last Trade: never Usage: 240735.3 of 239888.0 PEHour MPP PE CPU (5820.7 of 5800.2 G.S.T), 100.4% 83.5 of 100.0 GByteYear HP Disk (496.8 of 595.2 G.S.T), 83.5% 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% 19.1 of 33.6 GByteYear MP Disk (68.3 of 120.0 G.S.T), 56.9% 63.5 of 100.0 GByteYear HSM/Tape (39.9 of 62.8 G.S.T), 63.5% 151264.4 of 156113.0 Hour Green CPU (7903.9 of 8157.2 G.S.T), 96.9% Total usage for subproject cse002j 14329.6 of 14735.8 Generic Service Tokens, 97.2%

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% 27.9 of 45.0 GByteYear HP Disk (165.8 of 267.9 G.S.T), 61.9% 0.0 of 1.0 Hour SMP CPU (0.0 of 0.0 G.S.T), 0.0% 12.2 of 45.0 GByteYear MP Disk (43.7 of 160.7 G.S.T), 27.2%

Total usage for subproject cse002k 1599.4 of 3088.3 Generic Service Tokens, 51.8%

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%

2.4 of 5.0 GByteYear HP Disk (14.4 of 29.8 G.S.T), 48.5%

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%

19.5 of 30.0 GByteYear MP Disk (69.5 of 107.1 G.S.T), 64.9%

Total usage for subproject cse002l 507.8 of 983.3 Generic Service Tokens, 51.6%

cse009 GR/20607 Catlow

Last Trade: Mon Feb 24 09:30:15 2003

Usage:

1740817.7 of 1738836.8 PEHour MPP PE CPU (42090.7 of 42042.8 G.S.T), 100.1%

199.0 of 728.3 GByteYear HP Disk (1184.3 of 4335.3 G.S.T), 27.3%

34.5 of 79.4 Hour Wren CPU (1.7 of 3.9 G.S.T), 43.4%

52016.7 of 55111.5 Hour SMP CPU (2020.9 of 2141.2 G.S.T), 94.4%

34.2 of 646.7 GByteYear MP Disk (122.3 of 2309.7 G.S.T), 5.3%

0.0 of 0.9 GByteYear HSM/Tape (0.0 of 0.6 G.S.T), 0.0%

253455.3 of 254206.0 Hour Green CPU (13243.6 of 13282.8 G.S.T), 99.7%

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 58928.2 of 64401.2 Generic Service Tokens, 91.5%

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%

475.1 of 440.0 GByteYear MP Disk (1696.9 of 1571.4 G.S.T), 108.0%

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 7779.2 of 8323.7 Generic Service Tokens, 93.5%

cse030 Oxford Last Trade: never

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:

423874.9 of 424189.3 PEHour MPP PE CPU (10248.8 of 10256.4 G.S.T), 99.9%

22.5 of 23.3 GByteYear HP Disk (134.1 of 138.5 G.S.T), 96.8% 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), 3.4% 19.1 of 18.7 GByteYear HSM/Tape (12.0 of 1.18 G.S.T), 101.9%

Total usage for project cse035 10394.9 of 10408.6 Generic Service Tokens, 99.9%

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% 0.7 of 3.0 GByteYear HP Disk (4.4 of 17.9 G.S.T), 24.5% 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 (1.5 of 10.7 G.S.T), 14.2%

Total usage for project cse036 10.3 of 59.0 Generic Service Tokens, 17.4%

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%

0.2 of 6.0 GByteYear HP Disk (1.4 of 35.8 G.S.T), 3.8%

4.6 of 6.8 GByteYear MP Disk (16.3 of 24.4 G.S.T), 66.7%

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 18.1 of 321.3 Generic Service Tokens, 5.6%

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 (8.2 of 712.4 G.S.T), 1.1%

0.2 of 78.4 Hour Wren CPU (0.0 of 3.9 G.S.T), 0.2%

1699.0 of 4431.4 Hour SMP CPU (66.0 of 172.2 G.S.T), 38.3%

1.3 of 123.5 GByteYear MP Disk (4.8 of 440.9 G.S.T), 1.1%

158.7 of 230.3 GByteYear HSM/Tape (99.7 of 144.6 G.S.T), 68.9%

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 192.9 of 3606.4 Generic Service Tokens, 5.3%

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 (9.9 of 59.5 G.S.T), 16.6%

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 (9.2 of 17.3 G.S.T), 53.0%

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 3736.0 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%

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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
377435.9 of 418004.1 PEHour MPP PE CPU (9125.9 of 10106.8 G.S.T), 90.3%
5.2 of 12.2 GByteYear HP Disk (30.8 of 72.5 G.S.T), 42.5%
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 9156.7 of 10505.6 Generic Service Tokens, 87.2%
cse053 GR/R04225 Leschziner
Last Trade: re-enabled
Usage:
50167.3 of 319557.6 PEHour MPP PE CPU (1213.0 of 7726.5 G.S.T), 15.7%
1.8 of 115.0 GByteYear HP Disk (10.6 of 684.5 G.S.T), 1.5%
0.3 of 78.4 Hour Wren CPU (0.0 of 3.9 G.S.T), 0.4%
73.9 of 13900.0 Hour SMP CPU (2.9 of 540.0 G.S.T), 0.5%
1.3 of 85.0 GByteYear MP Disk (4.8 of 303.6 G.S.T), 1.6%
0.9 of 100.0 GByteYear HSM/Tape (0.5 of 62.8 G.S.T), 0.9%
612.4 of 1850.9 Hour Green CPU (32.0 of 96.7 G.S.T), 33.1%
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 1263.8 of 9945.2 Generic Service Tokens, 12.7%
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%
1.7 of 2.5 GByteYear HP Disk (10.3 of 14.9 G.S.T), 69.0%
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 224.0 of 864.5 Generic Service Tokens, 25.9%
cse056 GR/N24773 Imregun
Last Trade: Tue Feb 18 12:13:04 2003
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%
2165.1 of 33674.1 Hour SMP CPU (84.1 of 1308.3 G.S.T), 6.4%
1.0 of 43.9 GByteYear MP Disk (3.7 of 156.8 G.S.T), 2.3%
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%
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Total usage for project cse056 87.8 of 1817.0 Generic Service Tokens, 4.8%

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 (3.9 of 178.6 G.S.T), 2.2%

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 59.8 of 2998.5 Generic Service Tokens, 2.0%

cse060 GR/R17058 Robb

Last Trade: Mon Mar 17 16:26:26 2003

Usage:

37298.0 of 120607.5 PEHour MPP PE CPU (901.8 of 2916.1 G.S.T), 30.9%

0.0 of 3.0 GByteYear HP Disk (0.0 of 17.9 G.S.T), 0.0%

0.0 of 9254.6 Hour Green CPU (0.0 of 483.6 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 901.8 of 3819.2 Generic Service Tokens, 23.6%

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:

63546.6 of 288901.7 PEHour MPP PE CPU (1536.5 of 6985.3 G.S.T), 22.0%

13.6 of 100.0 GByteYear HP Disk (80.9 of 595.2 G.S.T), 13.6%

2.7 of 10.8 Hour Wren CPU (0.1 of 0.5 G.S.T), 24.8%

167.9 of 62.9 Hour SMP CPU (6.5 of 2.4 G.S.T), 267.1%

0.0 of 50.0 GByteYear MP Disk (0.0 of 178.6 G.S.T), 0.0%

22.8 of 525.0 GByteYear HSM/Tape (14.3 of 329.8 G.S.T), 4.3%

24291.9 of 69408.8 Hour Green CPU (1269.3 of 3626.8 G.S.T), 35.0%

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 2907.7 of 11865.6 Generic Service Tokens, 24.5%

cse064 GR/R43570 Leschziner

Last Trade: Thu Oct 17 18:03:11 2002

Usage:

14115.1 of 115039.1 PEHour MPP PE CPU (341.3 of 2781.5 G.S.T), 12.3%

0.3 of 35.0 GByteYear HP Disk (2.0 of 208.3 G.S.T), 1.0%

2.2 of 78.4 Hour Wren CPU (0.1 of 3.9 G.S.T), 2.8%

5853.0 of 21900.0 Hour SMP CPU (227.4 of 850.8 G.S.T), 26.7%

0.3 of 33.0 GByteYear MP Disk (1.0 of 117.9 G.S.T), 0.9%

2.8 of 4.0 GByteYear HSM/Tape (1.8 of 2.5 G.S.T), 69.8%

55.3 of 23136.6 Hour Green CPU (2.9 of 1208.9 G.S.T), 0.2%

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 598.0 of 5554.0 Generic Service Tokens, 10.8%

cse066 GR/R30907 Coveney Last Trade: re-enabled

Usage:

63660.1 of 87981.1 PEHour MPP PE CPU (1539.2 of 2127.3 G.S.T), 72.4%

12.0 of 90.0 GByteYear HP Disk (71.5 of 535.7 G.S.T), 13.3%

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% 12.4 of 18.0 GByteYear MP Disk (44.4 of 64.5 G.S.T), 69.0%

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 2416.9 of 7370.6 Generic Service Tokens, 32.8%

cse071 GR/R23657 lacovides Last Trade: Fri Oct 5 16:21:54 2001

Usage:

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:

8401.4 of 264758.5 PEHour MPP PE CPU (203.1 of 6401.5 G.S.T), 3.2%

31.4 of 217.0 GByteYear HP Disk (186.6 of 1291.5 G.S.T), 14.4%

15.1 of 300.6 Hour Wren CPU (0.7 of 14.9 G.S.T), 5.0%

5153.2 of 31500.0 Hour SMP CPU (200.2 of 1223.8 G.S.T), 16.4%

214.8 of 690.5 GByteYear MP Disk (767.2 of 2466.1 G.S.T), 31.1%

119.0 of 1636.4 GByteYear HSM/Tape (74.7 of 1027.9 G.S.T), 7.3%

58247.4 of 300000.0 Hour Green CPU (3043.5 of 15675.6 G.S.T), 19.4%

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 4530.0 of 29251.9 Generic Service Tokens, 15.5%

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%

1.1 of 1.3 GByteYear HP Disk (6.7 of 8.0 G.S.T), 83.7%

90.7 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%

6.5 of 27.2 GByteYear MP Disk (23.4 of 97.1 G.S.T), 24.1%

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 24298.1 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 Oct 16 16:04:52 2002

Usage:

0.0 of 7079.3 Hour SMP CPU (0.0 of 275.0 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 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:

256407.4 of 306225.8 PEHour MPP PE CPU (6199.6 of 7404.1 G.S.T), 83.7%

17.9 of 270.0 GByteYear HP Disk (106.5 of 1607.1 G.S.T), 6.6%

186.9 of 78.4 Hour Wren CPU (9.3 of 3.9 G.S.T), 238.3%

4282.4 of 14384.3 Hour SMP CPU (166.4 of 558.9 G.S.T), 29.8%

22.8 of 75.6 GByteYear MP Disk (81.4 of 270.1 G.S.T), 30.1%

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 10760.2 of 14636.0 Generic Service Tokens, 73.5%

cse085 GR/R64957 Sandham

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

Usage:

915991.9 of 1388400.0 PEHour MPP PE CPU (22147.5 of 33569.7 G.S.T), 66.0%

215.0 of 650.0 GByteYear HP Disk (1279.5 of 3869.0 G.S.T), 33.1%

3.0 of 78.4 Hour Wren CPU (0.2 of 3.9 G.S.T), 3.9%

2296.4 of 3945.2 Hour SMP CPU (89.2 of 153.3 G.S.T), 58.2% 156.4 of 750.0 GByteYear MP Disk (558.6 of 2678.6 G.S.T), 20.9% 1348.4 of 2373.2 GByteYear HSM/Tape (847.0 of 1490.7 G.S.T), 56.8% 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% 5.0 of 6.0 Day Training (53.8 of 64.5 G.S.T), 83.3% Total usage for project cse085 35350.8 of 75901.8 Generic Service Tokens, 46.6% cse086 GR/R83118 Taylor Last Trade: Tue Mar 4 11:11:59 2003 Usage: 407598.9 of 521898.0 PEHour MPP PE CPU (9855.2 of 12618.8 G.S.T), 78.1% 75.2 of 162.7 GByteYear HP Disk (447.7 of 968.4 G.S.T), 46.2% 426.8 of 2208.1 Hour Wren CPU (21.1 of 109.4 G.S.T), 19.3% 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% 8025.6 of 13449.2 Hour SMP CPU (311.8 of 522.5 G.S.T), 59.7% 98.4 of 497.0 GByteYear MP Disk (351.3 of 1775.0 G.S.T), 19.8% 14.3 of 3750.0 GByteYear HSM/Tape (9.0 of 2355.5 G.S.T), 0.4% 97203.0 of 758900.0 Hour Green CPU (5079.1 of 39654.1 G.S.T), 12.8% 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 16222.3 of 60440.7 Generic Service Tokens, 26.8% cse086a MP1 Last Trade: never Usage: 283592.6 of 340000.0 PEHour MPP PE CPU (6856.9 of 8220.8 G.S.T), 83.4% 4.7 of 10.0 GByteYear HP Disk (27.7 of 59.5 G.S.T), 46.6% 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% 6.1 of 10.0 GByteYear MP Disk (21.8 of 35.7 G.S.T), 61.1% 0.0 of 10000.0 Hour Green CPU (0.0 of 522.5 G.S.T), 0.0% Total usage for subproject cse086a 6906.5 of 8850.4 Generic Service Tokens, 78.0% 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% 18.4 of 20.0 GByteYear HP Disk (109.7 of 119.0 G.S.T), 92.1% 117.3 of 200.0 Hour Wren CPU (5.8 of 9.9 G.S.T), 58.7% 2088.8 of 4000.0 Hour SMP CPU (81.2 of 155.4 G.S.T), 52.2% 14.5 of 20.0 GByteYear MP Disk (51.8 of 71.4 G.S.T), 72.6% 95076.9 of 100000.0 Hour Green CPU (4968.0 of 5225.2 G.S.T), 95.1% Total usage for subproject cse086b 6387.9 of 6983.4 Generic Service Tokens, 91.5% cse086d MP4 Last Trade: never Usage: 0.0 of 0.1 GByteYear HP Disk (0.3 of 0.6 G.S.T), 49.3% 0.0 of 0.1 GByteYear MP Disk (0.2 of 0.4 G.S.T), 48.7% Total usage for subproject cse086d 0.5 of 1.0 Generic Service Tokens, 49.1%

cse086e MP5 Last Trade: never

Usage

48.8 of 500.0 PEHour MPP PE CPU (1.2 of 12.1 G.S.T), 9.8% 1.0 of 2.0 GByteYear HP Disk (5.9 of 11.9 G.S.T), 49.7% 264.6 of 450.0 Hour Wren CPU (13.1 of 22.3 G.S.T), 58.8% 0.0 of 5.0 GbyteYear HV Disk SAN /v (0.0 of 8.9 G.S.T), 0.0% 3231.2 of 4000.0 Hour SMP CPU (125.5 of 155.4 G.S.T), 80.8% 7.4 of 10.0 GByteYear MP Disk (26.5 of 35.7 G.S.T), 74.2% 545.9 of 10000.0 Hour Green CPU (28.5 of 522.5 G.S.T), 5.5%

Total usage for subproject cse086e 200.8 of 768.9 Generic Service Tokens, 26.1%

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%
1.9 of 2.0 GByteYear HP Disk (11.4 of 11.9 G.S.T), 95.7%
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%
11.5 of 15.0 GByteYear MP Disk (41.0 of 53.6 G.S.T), 76.5%
14.3 of 40.0 GByteYear HSM/Tape (9.0 of 25.1 G.S.T), 35.8%
0.0 of 10000.0 Hour Green CPU (0.0 of 522.5 G.S.T), 0.0%

Total usage for subproject cse086f 61.7 of 745.9 Generic Service Tokens, 8.3%

cse086g EC2 Last Trade: never

Usage:

564.3 of 5000.0 PEHour MPP PE CPU (13.6 of 120.9 G.S.T), 11.3%
18.9 of 20.0 GByteYear HP Disk (112.8 of 119.0 G.S.T), 94.7%
44.2 of 200.0 Hour Wren CPU (2.2 of 9.9 G.S.T), 22.1%
276.0 of 400.0 Hour SMP CPU (10.7 of 15.5 G.S.T), 69.0%
34.5 of 35.0 GByteYear MP Disk (123.2 of 125.0 G.S.T), 98.6%
0.0 of 50.0 GByteYear HSM/Tape (0.0 of 31.4 G.S.T), 0.0%
1580.2 of 10000.0 Hour Green CPU (82.6 of 522.5 G.S.T), 15.8%
Total usage for subproject cse086g 345.1 of 944.3 Generic Service Tokens, 36.5%

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% 3.9 of 3.2 GByteYear HP Disk (23.2 of 19.0 G.S.T), 121.9%

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% 14.1 of 20.0 GByteYear MP Disk (50.5 of 71.4 G.S.T), 70.7% 0.0 of 10000.0 Hour Green CPU (0.0 of 522.5 G.S.T), 0.0%

Total usage for subproject cse086h 1202.6 of 1841.6 Generic Service Tokens, 65.3%

cse086i EC4 Last Trade: never

Usage:

0.0 of 0.1 GByteYear HP Disk (0.3 of 0.6 G.S.T), 48.7% 0.0 of 0.1 GByteYear MP Disk (0.2 of 0.4 G.S.T), 48.7%

Total usage for subproject cse086i 0.5 of 1.0 Generic Service Tokens, 48.7%

cse086j BEC1 Last Trade: never

Usage:

28606.5 of 30000.0 PEHour MPP PE CPU (691.7 of 725.4 G.S.T), 95.4% 0.9 of 3.0 GByteYear HP Disk (5.3 of 17.9 G.S.T), 29.6% 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 (0.6 of 17.9 G.S.T), 3.6% 0.0 of 1000.0 Hour Green CPU (0.0 of 52.3 G.S.T), 0.0% Total usage for subproject cse086j 697.6 of 823.2 Generic Service Tokens, 84.7% cse086k BEC2 Last Trade: never Usage: 0.0 of 0.1 GByteYear HP Disk (0.3 of 0.6 G.S.T), 48.7% 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% 9.2 of 10.0 GByteYear MP Disk (32.8 of 35.7 G.S.T), 91.9% Total usage for subproject cse086k 118.8 of 221.1 Generic Service Tokens, 53.7% 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% 0.0 of 8500.0 Hour Green CPU (0.0 of 444.1 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 5.0 Day Training (0.0 of 53.8 G.S.T), 0.0% Total usage for project cse098 0.0 of 9069.0 Generic Service Tokens, 0.0% csehpcx - benchmarking Last Trade: Fri Oct 4 14:39:35 2002 Usage: 9804.9 of 134743.4 PEHour MPP PE CPU (237.1 of 3257.9 G.S.T), 7.3% 8.4 of 18.9 GByteYear HP Disk (50.2 of 112.5 G.S.T), 44.7% 0.0 of 1464.1 Hour Wren CPU (0.0 of 72.5 G.S.T), 0.0% 0.5 of 1867.0 Hour SMP CPU (0.0 of 72.5 G.S.T), 0.0% 2.6 of 56.4 GByteYear MP Disk (9.4 of 201.3 G.S.T), 4.7% 21193.2 of 23136.6 Hour Green CPU (1107.4 of 1208.9 G.S.T), 91.6% Total usage for project csehpcx 1404.1 of 4925.7 Generic Service Tokens, 28.5% csn001 Webb & GST/02/2846 Killworth & T/S/2001/00187 New Last Trade: Thu Jan 9 12:24:23 2003 Usage:

403672.0 of 418058.5 PEHour MPP PE CPU (9760.3 of 10108.1 G.S.T), 96.6%

291.9 of 420.3 GByteYear HP Disk (1737.3 of 2501.6 G.S.T), 69.4% 88.7 of 201.8 Hour Wren CPU (4.4 of 10.0 G.S.T), 43.9% 86822.5 of 149188.6 Hour SMP CPU (3373.2 of 5796.2 G.S.T), 58.2% 362.2 of 702.2 GByteYear MP Disk (1293.4 of 2507.7 G.S.T), 51.6% 16983.0 of 18405.7 GByteYear HSM/Tape (10667.7 of 11561.4 G.S.T), 92.3% 735043.9 of 760920.9 Hour Green CPU (38407.6 of 39759.7 G.S.T), 96.6% 58.0 of 60.5 PersonDay Support (1705.9 of 1779.4 G.S.T), 95.9% 3.0 of 15.3 Day Training (32.3 of 164.4 G.S.T), 19.6% Total usage for project csn001 66981.9 of 74188.5 Generic Service Tokens, 90.3%

csn003 UGAMP O'Neill

Last Trade: Tue Mar 25 11:13:56 2003

Usage

4959844.7 of 4999409.5 PEHour MPP PE CPU (119922.7 of 120879.3 G.S.T), 99.2%

89.7 of 113.9 GByteYear HP Disk (534.0 of 677.7 G.S.T), 78.8%

230.1 of 2664.9 Hour Wren CPU (11.4 of 132.0 G.S.T), 8.6%

61.7 of 470.3 GbyteYear HV Disk SAN /v (110.3 of 841.4 G.S.T), 13.1%

23931.7 of 25259.2 Hour SMP CPU (929.8 of 981.4 G.S.T), 94.7%

72.0 of 93.8 GByteYear MP Disk (257.3 of 334.9 G.S.T), 76.8%

46879.8 of 49884.6 GByteYear HSM/Tape (29447.1 of 31334.6 G.S.T), 94.0%

97316.3 of 97888.0 Hour Green CPU (5085.0 of 5114.8 G.S.T), 99.4%

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 156456.0 of 160504.6 Generic Service Tokens, 97.5%

csn006 GR9/3550 Price

Last Trade: Mon Jan 20 16:15:10 2003

Usage:

1589385.2 of 1674524.0 PEHour MPP PE CPU (38429.3 of 40487.8 G.S.T), 94.9%

152.8 of 192.2 GByteYear HP Disk (909.3 of 1144.3 G.S.T), 79.5%

131.5 of 78.4 Hour Wren CPU (6.5 of 3.9 G.S.T), 167.7%

70825.3 of 72126.1 Hour SMP CPU (2751.7 of 2802.2 G.S.T), 98.2%

37.2 of 85.5 GByteYear MP Disk (133.0 of 305.4 G.S.T), 43.5%

5.7 of 20.3 GByteYear HSM/Tape (3.6 of 12.7 G.S.T), 28.2%

433901.2 of $465084.9\ Hour\ Green\ CPU\ (22672.2\ of\ 24301.6\ G.S.T),\ 93.3\%$

Total usage for project csn006 64905.6 of 69057.9 Generic Service Tokens, 94.0%

csn012 NER/A/S/2000/01315 Tennyson 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), 61.5%

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 (0.0 of 3.8 G.S.T), 0.5%

0.0 of 9518.0 Hour Green CPU (0.0 of 497.3 G.S.T), 0.0%

Total usage for project csn012 2.4 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%

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), 158.1% 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% 3.0 of 13.6 GByteYear MP Disk (10.9 of 48.6 G.S.T), 22.4% 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 155.3 of 922.7 Generic Service Tokens, 16.8%

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%

18.2 of 30.0 GByteYear HP Disk (108.6 of 178.6 G.S.T), 60.8%

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%

35.5 of 50.0 GByteYear MP Disk (126.7 of 178.6 G.S.T), 71.0%

1418.5 of 2014.0 GByteYear HSM/Tape (891.0 of 1265.1 G.S.T), 70.4%

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 2385.2 of 4306.9 Generic Service Tokens, 55.4%

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%

7.2 of 53.8 GByteYear HSM/Tape (4.5 of 33.8 G.S.T), 13.4%

Total usage for project csn044 245.1 of 421.0 Generic Service Tokens, 58.2%

csn052 GST/02/2658 Mackay

Last Trade: Mon Mar 10 11:55:29 2003

Usage:

1.4 of 33021.9 PEHour MPP PE CPU (0.0 of 798.4 G.S.T), 0.0%

0.1 of 25.0 GByteYear HP Disk (0.9 of 148.8 G.S.T), 0.6%

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

Total usage for project csn052 54.7 of 1001.0 Generic Service Tokens, 5.5%

csp004 PPA/G/0/2000/00024 Bell

Last Trade: Wed Jan 22 14:16:39 2003

Usage:

90444.2 of 99402.3 PEHour MPP PE CPU (2186.8 of 2403.4 G.S.T), 91.0%

16.1 of 47.0 GByteYear HP Disk (95.7 of 279.8 G.S.T), 34.2%

4.6 of 862.6 Hour Wren CPU (0.2 of 42.7 G.S.T), 0.5%

48.1 of 1174.0 Hour SMP CPU (1.9 of 45.6 G.S.T), 4.1%

10.5 of 24.0 GByteYear MP Disk (37.4 of 85.7 G.S.T), 43.7%

0.0 of 1.0 PersonDay Support (0.0 of 29.4 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 csp004 2322.1 of 2908.2 Generic Service Tokens, 79.8%

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%

HPCI Daresbury

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

Usage:

34673.1 of 34482.9 PEHour MPP PE CPU (838.4 of 833.8 G.S.T), 100.6%

4.3 of 3.8 GByteYear HP Disk (25.8 of 22.7 G.S.T), 113.4%

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 (7.5 of 6.0 G.S.T), 124.2%

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 1605.5 of 1581.9 Generic Service Tokens, 101.5%

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%

4.3 of 4.7 GByteYear HP Disk (25.7 of 28.1 G.S.T), 91.2%

698.4 of 770.8 Hour SMP CPU (27.1 of 29.9 G.S.T), 90.6%

3.2 of 2.8 GByteYear MP Disk (11.5 of 10.0 G.S.T), 114.6%

1728.7 of 1739.8 Hour Green CPU (90.3 of 90.9 G.S.T), 99.4%

Total usage for project hpcie 197.1 of 257.4 Generic Service Tokens, 76.6%

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%

CfS

Appendix 6

Coc002 Wander, A (Dr.) Support for the UKCP Physics	Project	PI Name	Subject	Discipline/Department
Salari, Ben HPC Computing Application in Materials Chemistry Chemistry				
Section	cse002	Wander, A (Dr)	Support for the UKCP	Physics
Coci056 Duff, 1 (PoO) Research & Development of Algorithms & Software for Large-Scale Lance (Scale Lance & Nova Lance Systems) Multis	cse009	Slater, Ben	HPC Computing Applications in Materials Chemistry	Chemistry
Cec041 Williams, J (Dr) Platter & Noise Generation Mechanisms - Turbomachinery Fan According	cse035	Jenkins, S (Dr)	Ab Initio Simulations of Catalytic Processes at Extended Metal Surfaces	Chemistry
Assemblies Coci050 Diradley, D (Prof) Flame Instabilities: their influence on nurbalear combustion & Engineering	cse036	Duff, I (Prof)		Maths
Cee650 Bradley, D (Prof) Plane Insiabilities: their influence on turbalent combustion & incorporation in malecturical models. Micchanical Engineering incorporation in malecturical models. Micchanical Engineering	cse041	Wu, X (Dr)		Mechanical Engineering
csc652 Di Mare, F (Miss)	cse043	Williams, J (Dr)	Numerical Simulation of Flow over a Rough Bed	Engineering
Cee053 Leschziner, M (Prof) Coupling RANS Near-Wall Turbulence Models with Large Eddy Simulation Strategies Aerospace Engineering	cse050	Bradley, D (Prof)		Mechanical Engineering
Cse055 Staunton, J (Dr) Al-initio theory of magnetic anisotropy in transition metal ferromagnets Physics	cse052	Di Mare, F (Miss)	Heat Transfer in Turbine Combustors	Mechanical Engineering
Cxc056 Chen, T. (Dr)	cse053	Leschziner, M (Prof)		Aerospace Engineering
Cse057 Evans, R (Dr) Relativistic Particle Generation from Ultra-Intense Laser Plasma Physics	cse055	Staunton, J (Dr)	Ab-initio theory of magnetic anisotropy in transition metal ferromagnets	Physics
cse060 Robb, M (Prof) CCP1 Renewal plas falgship project on Car-Parrinello in Chemistry Chemistry	cse056	Chen, T (Dr)		Mechanical Engineering
cse061 Imregun, M (Prof) Casing treatment modelling for the investigation of stall, flutter and noise mechanisms in turbomachinery compressors. cse063 Sandham, N (Prof) Computational Aerocaustics for Turbulent Plane Jets Aerospace Engineering Improvement of predictive performance of anisotropy-resolving turbulence models in post-reatmentance trocvery region of separated flow using Large Eddy Simulation cse066 Coveney, P V (Prof) New clay-polymer nanocomposites using diversity-discovery methods: synthesis, processing and testing cse071 Iacovides (Dr) The Practical Computation of Three-Dimensional Time-Dependent Turbulent Flows in Rotating Cardies cse072 Karlin, V (Dr) Structure & Dynamics of Utstable Premixed Laminar Flames Engineering cse074 Luo (Dr) Consortium on Computational Combustion for Engineering Engineering Applications 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 Non-Premixed Pacitive Flows. cse082 Barakos, G (Dr) Combustion Model Development for Large-Eddy Simulation of Non-Premixed Reactive Flows. cse084 Needs, R (Dr) The Consortium for Computational Quantum Many-Body Theory Physics cse089 Wiercigroch, M (Dr) Nonlinear Dynamics, & Rock Contact Fracture Mechanics in Modelling Engineering cse089 Wiercigroch, M (Dr) Indium interaction in silicon for ULSI technologies cse080 De Souza, M M (Dr) Indium interaction in silicon for ULSI technologies Physics cse0001 De Cuevas, B (Mrs)	cse057	Evans, R (Dr)		Physics
csc063 Sandham, N (Prof) Computational Aerocaustics for Turbulent Plane Jets Aerospace Engineering csc064 Leschziner, M (Prof) Improvement of predictive performance of anisotropy-resolving turbulence models in post-reatachment recovery region of separated flow using Large Eddy Simulation csc066 Coveney, P V (Prof) New clay-polymer nanocomposites using diversity-discovery methods: synthesis, processing and testing csc071 Incovides (Dr) The Practical Computation of Three-Dimensional Time-Dependent Turbulent Flows in Rotating Cavities csc072 Karlin, V (Dr) Structure & Dynamics of Unstable Premixed Laminar Flames Engineering csc074 Luo (Dr) Consortium on Computational Combustion for Engineering Applications csc075 Novik, K (Dr) The Reality Grid - a tool for investigating condensed matter & materials IT csc076 Briddon, P (Dr) HPC facilities for the first principles simulation of covalently bonded materials csc077 Kronenburg, A (Dr) Combustion Model Development for Large-Eddy Simulation of Non-Premixed Reactive Flows. csc082 Barakos, G (Dr) CFD Study of Three-dDimensional Dynamic Shelf Aerospace Engineering csc084 Needs, R (Dr) The Consortium for Computational Quantum Many-Body Theory Physics csc085 Sandham, N (Prof) Multiphoton, Electron Collisions and BEC HPC Consortium 2002-2004 Physics csc089 Wiercigroch, M (Dr) Nonlinear Dynamics & Rock Contact Fracture Mechanics in Modelling of Vibration Enhanced Drilling csc098 De Souza, M M (Dr) Indium interaction in silicon for ULSI technologies Physics	cse060	Robb, M (Prof)	CCP1 Renewal plus falgship project on Car-Parrinello in Chemistry	Chemistry
Leschziner, M (Prof) Improvement of predictive performance of anisotropy-resolving turbulence models in post-reattachment recovery region of separated flow using Large Eddy Simulation Separated flow using Large Eddy Simulation	cse061	Imregun, M (Prof)		Mechanical Engineering
turbulence models in post-reattachment recovery region of separated flow using Large Eddy Simulation cse066	cse063	Sandham, N (Prof)	Computational Aerocaustics for Turbulent Plane Jets	Aerospace Engineering
synthesis, processing and testing Cse071 Iacovides (Dr) The Practical Computation of Three-Dimensional Time-Dependent Turbulent Flows in Rotating Cavities	cse064	Leschziner, M (Prof)	turbulence models in post-reattachment recovery region of separated	Aerodynamics
Turbulent Flows in Rotating Cavities	cse066	Coveney, P V (Prof)		П
Cse074	cse071	Iacovides (Dr)		Mechanical Engineering
Applications Cse075 Novik, K (Dr) The Reality Grid - a tool for investigating condensed matter & materials IT	cse072	Karlin, V (Dr)	Structure & Dynamics of Unstable Premixed Laminar Flames	Engineering
Cse076 Briddon, P (Dr) HPC facilities for the first principles simulation of covalently bonded materials TT	cse074	Luo (Dr)		Engineering
Cse077 Kronenburg, A (Dr) Combustion Model Development for Large-Eddy Simulation of Non-Premixed Reactive Flows. Mechanical Engineering	cse075	Novik, K (Dr)	The Reality Grid - a tool for investigating condensed matter & materials	IT
Premixed Reactive Flows. Cse082 Barakos, G (Dr) CFD Study of Three-dDimensional Dynamic Shelf Aerospace Engineering	cse076	Briddon, P (Dr)		IT
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	cse077	Kronenburg, A (Dr)		Mechanical Engineering
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	cse082	Barakos, G (Dr)	CFD Study of Three-dDimensional Dynamic Shelf	Aerospace Engineering
Cse086 Taylor, K (Prof) Multiphoton, Electron Collisions and BEC HPC Consortium 2002-2004 Physics	cse084	Needs, R (Dr)	The Consortium for Computational Quantum Many-Body Theory	Physics
Cse089 Wiercigroch, M (Dr) Nonlinear Dynamics & Rock Contact Fracture Mechanics in Modelling of Vibration Enhanced Drilling Engineering	cse085	Sandham, N (Prof)	UK Turbulence Consortium	Engineering
cse098 De Souza, M M (Dr) Indium interaction in silicon for ULSI technologies Physics csn001 De Cuevas, B (Mrs) OCCAM Ocean/Earth Sciences	cse086	Taylor, K (Prof)	Multiphoton, Electron Collisions and BEC HPC Consortium 2002-2004	Physics
csn001 De Cuevas, B (Mrs) OCCAM Ocean/Earth Sciences	cse089	Wiercigroch, M (Dr)		Engineering
	cse098	De Souza, M M (Dr)	Indium interaction in silicon for ULSI technologies	Physics
Csn003 Steenman-Clark, L (Dr) UGAMP Meteorology	csn001	De Cuevas, B (Mrs)	OCCAM	Ocean/Earth Sciences
	csn003	Steenman-Clark, L (Dr)	UGAMP	Meteorology

csn006	Brodholt, J (Dr)		Geological Sciences
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 & Manufacturin 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)		