# Monthly Reporting

# Report from 01 April 2023 to 30 April 2023

#### Report for Resource Pool Archer2 on archer2

A total of 4,210,560 CUs were available during this period.

#### **Use and Allocations (by Project)**

In the following table, Charged refers to usage which was charged against the project Allocation; whereas Used refers to usage including uncharged time. Uncharged time can arise from use of the Low Priority queue and/or during times when charging is disabled on the service.

The (Allocation) column is the time allocated to the project, scaled according to the reporting period and shown as a fraction of the available resources. If this report period is a sub-period of the Allocation period then the SAFE calculates the Allocation for this sub-period based on a linear spend profile of the total Allocation. If the usage for a project is not linear across the full Allocation period the the Use can be larger than the extrapolated Allocation.

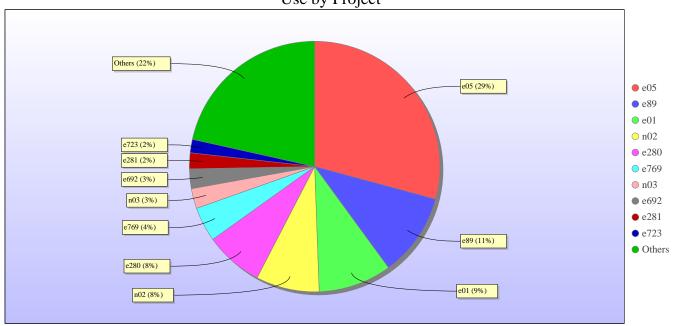
Project	Project Class	Number of Jobs	Charged CUs		•	Utilisation		Allocation
e572	Leadership Awards	15	12.0	0.00%			2,038.5	
e645	Leadership Awards	1,815	6,128.6					
e787	Leadership Awards	0	0.0	0.00%				
e683	Pioneer Projects	411	4,345.0	0.10%	·			
e685	Pioneer Projects	245	2,450.1	0.06%	3,410.3	0.08%	12,113.0	
e686	Pioneer Projects	905	20,874.9	0.50%	30,142.4	0.72%	18,236.2	0.43%
e687	Pioneer Projects	684	49,294.3	1.17%	49,441.6	1.17%	21,618.2	0.51%
e688	Pioneer Projects	277	20,122.3	0.48%	20,181.3	0.48%	32,949.6	0.78%
e689	Pioneer Projects	1	5,948.8	0.14%	5,948.8	0.14%	22,878.2	0.54%
e690	Pioneer Projects	247	28,919.6	0.69%			24,867.6	0.59%
e691	Pioneer Projects	58	20,600.5	0.49%	20,600.5	0.49%	25,353.0	0.60%
e692	Pioneer Projects	75	100,270.7	2.38%			19,138.1	0.45%
c01	Class1a	1,524	13,282.9	0.32%	13,964.8	0.33%	24,710.2	0.59%
e348	Class1a	3,287	5,494.2	0.13%			13,892.7	
e575	Class1a	188	1,613.0				2,609.3	
e607	Class1a	364	7,812.7	0.19%			9,641.0	
e609	Class1a	1,436	5,515.5	0.13%			18,760.1	0.45%
e643	Class1a	57	869.0	0.02%			2,241.6	
e647	Class1a	548	1,338.9	0.03%			37,860.2	
e649	Class1a	0	0.0	0.00%			1,002.8	
e663	Class1a	285	2,082.1	0.05%		0.05%	2,955.5	
e664	Class1a	0	0.0	0.00%			870.3	
e667	Class1a	57	2,858.1	0.07%		0.07%	2,024.7	
e694	Class1a	0	0.0	0.00%			2,788.0	
e696	Class1a	59	295.2	0.01%			406.2	
e697	Class1a	44	14,824.3	0.35%		0.94%	8,634.5	
e700	Class1a	12	439.0	0.01%			2,735.4	
e701	Class1a	0	0.0	0.00%			1,840.1	0.04%
e705	Class1a	33	4,531.9	0.11%			3,657.5	
e707	Class1a	0	0.0	0.00%	0.0	0.00%	17,003.2	0.40%

Project	Project Class	Number of Jobs	Charged CUs	Charged Utilisation	Used CUs	Utilisation	Allocated CUs	Allocation
e708		0 3003	0.0		0.0	0.00%	1,957.0	0.05%
e708		458	141.8		141.8	0.00%	3,913.9	
e710		159	17,525.1	0.42%	19,770.9	0.47%	22,087.5	
e721	Class1a	53	68.9		70.4		2,704.9	
e728		19	1,645.4	0.04%	1,694.5	0.04%	2,316.1	0.06%
e751	Class1a	111	637.2	0.02%	637.2	0.02%	4,970.2	0.12%
e752		0	0.0	0.00%	0.0	0.00%	3,442.6	
e758		389	4,870.8		4,930.9	0.12%	4,507.3	
e761	Class1a	87	911.3		50,385.3	1.20%	1,515.5	0.04%
e763	Class1a	0	0.0	0.00%	0.0	0.00%	165.8	0.00%
e764	Class1a	11	2,081.5	0.05%	2,081.5	0.05%	19,319.7	0.46%
e769	Class1a	477	81,587.6	1.94%	175,827.0	4.18%	24,730.9	0.59%
e770		0	0.0	0.00%	0.0	0.00%	6,631.4	0.16%
e786	Class1a	68	696.8	0.02%	696.8	0.02%	9,449.7	0.22%
e6337	Class1a	0	0.0	0.00%	0.0	0.00%	1,826.0	0.04%
ec110		0	0.0	0.00%	0.0	0.00%	978.5	
e01	Consortia	3,035	308,788.2	7.33%	372,629.4	8.85%	339,890.4	8.07%
e05	Consortia	32,637	637,373.7	15.14%	1,149,626.7	27.30%	766,751.1	18.21%
e89	Consortia	24,861	399,909.0		423,490.6		368,372.1	8.75%
e280		5,535	172,046.0		295,773.3		207,230.0	4.92%
e281	Consortia	2,356	80,532.0		80,676.7	1.92%	92,839.1	2.20%
e283	Consortia	6,429	59,213.5	1.41%	59,413.1	1.41%	49,735.2	1.18%
e585	Consortia	175	0.0	0.00%	8,423.4	0.20%	0.2	0.00%
e772		2,742	23,935.8		24,772.1	0.59%	56,830.1	1.35%
e773	Consortia	50	457.8	0.01%	457.8	0.01%	11,219.8	0.27%
e762		0	0.0	0.00%	0.0	0.00%	179.4	0.00%
e766		12	569.5		617.9	0.01%	641.7	0.02%
e768		0	0.0	0.00%	0.0	0.00%	663.1	0.02%
e771	Pump Priming	0	0.0		0.0	0.00%	131.9	0.00%
e784		0	0.0	0.00%	0.0	0.00%	652.5	0.02%
e785		114	18.6 302.2		18.6		658.2	0.02%
e788 e789		253 32	3,341.3	0.01% 0.08%	303.3 9,072.2	0.01% 0.22%	648.8 552.7	0.02% 0.01%
e769 e790		49	461.3		9,072.2		648.6	
e790 e791	Pump Priming	12	6.3	0.01%	6.3	0.00%	306.0	0.02%
e791		0	0.0		0.0	0.00%	306.0	0.01%
	Access to HPC	7	332.5		332.5	0.01%	4,478.5	
	Access to HPC	104	3,194.9	0.08%	14,920.0	0.35%	3,315.7	0.08%
	Access to HPC	0	0.0	0.00%	0.0	0.00%	5,342.5	0.13%
	Access to HPC	555	20,260.9	0.48%	20,262.7	0.48%	4,664.5	0.11%
	Access to HPC	289	7,940.2		8,023.9		8,289.2	
	Access to HPC	202	1,578.0		1,578.0		2,072.3	
	Access to HPC	99	1,550.1	0.04%	1,550.1	0.04%	13,114.8	
	Access to HPC	59	217.8	0.01%	217.8		64,934.3	
	Access to HPC	122	18,205.0		18,205.0		24,462.1	0.58%
e755	Access to HPC	12	5,246.7	0.12%	5,246.7	0.12%	7,321.0	0.17%
e774	Access to HPC	399	4,890.5	0.12%	4,890.5	0.12%	9,456.5	0.22%
e775	Access to HPC	23	21,548.1	0.51%	21,548.1	0.51%	15,231.6	0.36%
	Access to HPC	28	2,506.3		2,506.3		5,635.7	0.13%
	Access to HPC	20	0.0		37,390.7	0.89%	6,854.2	
	Access to HPC	792	3,473.0		3,481.6		8,103.2	
	Access to HPC	327	2,790.6		2,790.6		761.6	
	Access to HPC	76	8,274.9		8,274.9		6,092.7	0.14%
	Access to HPC	10	1.5		1.5		1,523.2	
	Access to HPC	12	2,143.7	0.05%	3,103.8	0.07%	2,029.1	0.05%
	Access to HPC	161	283.4		283.4	0.01%	5,556.6	
EPSRC Total		96,048	2,221,483.2		3,262,589.6		2,575,621.4	61.17%
n01	Consortia	3,623	62,911.5		63,231.6		99,836.1	2.37%
n02		47,848	305,474.9		322,098.1	7.65%	415,655.7	9.87%
n03		4,280	101,625.2		101,651.0		69,672.1	1.65%
n09	Pump Priming	0	0.0		0.0		659.5	
NERC Total	011	55,751	470,011.6		486,980.6	11.57%	585,823.4	13.91%
b19	Class1a	2	98.3	0.00%	98.3	0.00%	2,636.5	0.06%

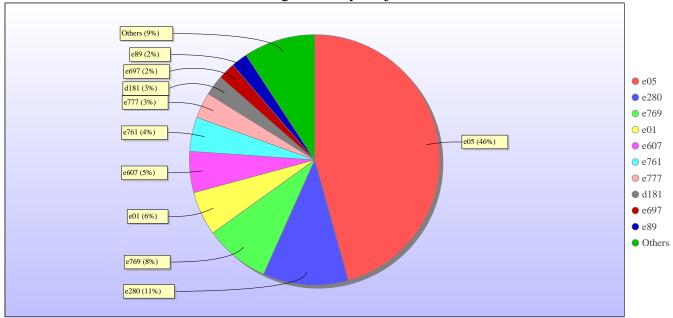
Project	Project Class	Number of Jobs	Charged CUs	Charged Utilisation	Used CUs	Utilisation	Allocated CUs	Allocation
BBSRC Total		2	98.3	0.00%	98.3	0.00%	2,636.5	0.06%
e756	Leadership Awards	102	117.3	0.00%	117.3	0.00%	10,016.4	
e760	Leadership Awards	139	528.1	0.01%	528.7	0.01%	163.1	0.00%
e723	Class1a	1,724	66,093.4	1.57%	67,963.8	1.61%	41,218.2	0.98%
e738	Class1a	59	3.2	0.00%	3.2		16,578.4	0.39%
UKRI Total		2,024	66,742.1	1.59%	68,613.0	1.63%	67,976.1	1.61%
pr1u1555	DECI: EXEC	36	677.3	0.02%	677.3	0.02%	270.0	0.01%
pr1ush02	DECI: HOME	59	719.7	0.02%	719.7	0.02%	1,941.4	0.05%
PRACE Total		95	1,397.0	0.03%	1,397.0	0.03%	2,211.4	0.05%
ecseaa26	eCSE	6	2,076.7	0.05%	2,076.7	0.05%	356.7	0.01%
ecseab03	eCSE	0	0.0	0.00%	0.0	0.00%	46.6	0.00%
ecseac14	eCSE	28	3.5	0.00%	3.5	0.00%	63.2	0.00%
ecseac15	eCSE	0	0.0	0.00%	0.0	0.00%	129.7	0.00%
ecsead03	eCSE	0	0.0	0.00%	0.0	0.00%	124.3	0.00%
ecsead08	eCSE	18	296.4	0.01%	3,801.4	0.09%	77.0	0.00%
ecseae03	eCSE	6	0.0	0.00%	0.2	0.00%	69.8	0.00%
ecseae04	eCSE	612	5,005.4	0.12%	5,005.4	0.12%	115.7	0.00%
ecseae08	eCSE	0	0.0	0.00%	0.0	0.00%	115.4	0.00%
ecseae09	eCSE	0	0.0	0.00%	0.0	0.00%	113.0	0.00%
ecseaf01	eCSE	1	0.1	0.00%	0.1	0.00%	101.1	0.00%
ecseaf02	eCSE	0	0.0	0.00%	0.0	0.00%	51.0	0.00%
ecseaf03	eCSE	0	0.0	0.00%	0.0	0.00%	49.1	0.00%
ecseaf04	eCSE	0	0.0	0.00%	0.0	0.00%	63.0	0.00%
ecseaf06	eCSE	0	0.0	0.00%	0.0		97.6	
ecseag01	eCSE	0	0.0	0.00%	0.0	0.00%	66.7	0.00%
ecseag02	eCSE	3	0.1	0.00%	0.1	0.00%	84.3	0.00%
ecseag03	eCSE	71	983.4	0.02%	983.4	0.02%	60.9	0.00%
ecseag06	eCSE	43	3.7	0.00%	3.7	0.00%	41.7	0.00%
ecseag08	eCSE	0	0.0	0.00%	0.0	0.00%	56.5	0.00%
ecseag09	eCSE	0	0.0	0.00%	0.0	0.00%	60.7	0.00%
ecseah03	eCSE	0	0.0	0.00%	0.0	0.00%	116.6	0.00%
ecseah05	eCSE	0	0.0	0.00%	0.0	0.00%	49.1	0.00%
ecseah06	eCSE	0	0.0	0.00%	0.0	0.00%	106.1	0.00%
ecseah10	eCSE	0	0.0	0.00%	0.0	0.00%	10.4	0.00%
ecseah11	eCSE	0	0.0	0.00%	0.0	0.00%	7.1	0.00%
ecseah12	eCSE	0	0.0	0.00%	0.0	0.00%	86.7	0.00%
eCSE Total		788	8,369.2	0.20%	11,874.4	0.28%	2,319.8	
d35	Research	78	1.0	0.00%	1.1	0.00%	164.4	0.00%
d011	Research	129	6.6	0.00%	6.6	0.00%	170.0	0.00%
d114	Research	0	0.0		0.0		5,057.7	
d137	Research	0	0.0		0.0		1,631.7	
d142	Research	21	0.2		0.2		4,934.2	
d170	Research	0	0.0		0.0		49.7	0.00%
d175	Research	0	0.0		0.0	0.00%	1,368.4	
d193	Research	0	0.0	0.00%	0.0	0.00%	328.8	0.01%
d435	Research	770	23.3		6,280.7	0.15%	82.2	0.00%
d436	Research	47	1.8		1.8		328.8	
dc129	Research	339	201.9	0.00%	201.9	0.00%	3,315.7	0.08%
d105	Industrial	0	0.0		0.0	0.00%	3,315.7	0.08%
d181	Industrial	140	15,885.4	0.38%	45,275.0		1,009.1	0.02%
d190	Industrial	0	0.0	0.00%	0.0		1,643.8	
d433	Industrial	0	0.0	0.00%	0.0	0.00%	82.9	
d434	Industrial	0	0.0		0.0		15.2	0.00%
i01	Industrial	0	0.0	0.00%	0.0	0.00%	265.3	0.01%
i18	Industrial	40	3,059.2		3,059.2	0.07%	2,275.3	0.05%
i21	Industrial	0	0.0		0.0		16,578.4 33.2	0.39%
i24 i25	Industrial Industrial	0	0.0	0.00% 0.00%	0.0	0.00% 0.00%	33.2 82.9	0.00% 0.00%
		-						
i26	Industrial	114	607.3		607.3		414.5 497.4	
i238	Industrial	0	0.0		0.0			
i239	Industrial	39	573.1	0.01%	573.1	0.01%	1,009.5	0.02%

Project	Project	Number	Charged	Charged	Used CUs	Utilisation	Allocated	Allocation
	Class	of Jobs	CUs	Utilisation			CUs	
i241	Industrial	29	5,827.7	0.14%	5,855.8	0.14%	2,272.2	0.05%
i242	Industrial	0	0.0		0.0	0.00%	660.8	0.02%
i243	Industrial	19	1,126.7	0.03%	1,126.7	0.03%	233.8	0.01%
i244	Industrial	0	0.0		0.0	0.00%	1,889.2	0.04%
m22oc	Training	207	26.3	0.00%	75.0	0.00%	379.7	0.01%
m22ol	Training	0	0.0	0.00%	0.0	0.00%	379.7	0.01%
m22ext	Training	27	2.8	0.00%	2.8	0.00%	151.9	0.00%
mdisspt	Training	0	0.0	0.00%	0.0	0.00%	143.9	0.00%
m22exts1	Training	0	0.0	0.00%	0.0	0.00%	75.9	0.00%
ta046	Training	0	0.0	0.00%	0.0	0.00%	30.9	0.00%
ta047	Training	0	0.0		0.0	0.00%	30.9	0.00%
ta052	Training	8	6.4	0.00%	6.4	0.00%	494.9	0.01%
ta053	Training	0	0.0		0.0	0.00%	32.5	0.00%
ta067	Training	0	0.0	0.00%	0.0	0.00%	18.4	0.00%
ta068	Training	0	0.0		0.0	0.00%	18.4	0.00%
ta069	Training	0	0.0	0.00%	0.0	0.00%	18.4	0.00%
ta070	Training	8	13.7	0.00%	13.7	0.00%	590.2	0.01%
ta084	Training	19	26.0	0.00%	26.0	0.00%	739.2	0.02%
ta085	Training	0	0.0	0.00%	0.0	0.00%	37.0	0.00%
ta086	Training	0	0.0	0.00%	0.0	0.00%	18.5	0.00%
ta087	Training	0	0.0	0.00%	0.0	0.00%	18.5	0.00%
ta093	Training	174	0.2	0.00%	7,317.8	0.17%	724.6	0.02%
ta094	Training	3,627	255.2	0.01%	2,215.1	0.05%	2,469.3	0.06%
ta095	Training	0	0.0	0.00%	0.0	0.00%	61.7	0.00%
ta096	Training	27	0.6		0.6	0.00%	61.7	0.00%
ta097	Training	0	0.0	0.00%	0.0	0.00%	61.7	0.00%
ta100	Training	3	0.4	0.00%	0.4	0.00%	44.7	0.00%
ta101	Training	0	0.0		0.0	0.00%	98.0	0.00%
ta102	Training	114	0.0		13,418.2	0.32%	561.7	0.01%
ta103	Training	0	0.0	0.00%	0.0	0.00%	68.9	0.00%
ta104	Training	23	0.0		0.0	0.00%	143.0	0.00%
ta105	Training	16	0.6		0.6	0.00%	60.8	0.00%
ta106	Training	395	4.0	0.00%	4.0	0.00%	121.7	0.00%
ta107	Training	0	0.0	0.00%	0.0	0.00%	146.2	0.00%
ta108	Training	0	0.0	0.00%	0.0	0.00%	123.9	0.00%
d191	Service	0	0.0		0.0	0.00%	4.1	0.00%
y01	Service	0	0.0	0.00%	0.0	0.00%	72.4	0.00%
y02	Service	35	0.9	0.00%	0.9	0.00%	821.9	0.02%
y07	Service	0	0.0	0.00%	0.0	0.00%	80.2	0.00%
y23	Service	0	0.0	0.00%	0.0	0.00%	82.2	0.00%
z01	Service	0	0.0	0.00%	0.0	0.00%	8.0	0.00%
z02	Service	3	0.1	0.00%	0.1	0.00%	8.2	0.00%
z19	Service	741	21,251.5	0.50%	19,280.1	0.46%	40,983.6	0.97%
z99	Service	0	0.0	0.00%	0.0	0.00%	0.8	0.00%
DirectorsTime Total		7,192	48,903.0	1.16%	105,351.3	2.50%	99,699.3	2.37%
Total		161,900	2,817,004.3	66.90%	3,936,904.1	93.50%	3,336,288.0	79.24%

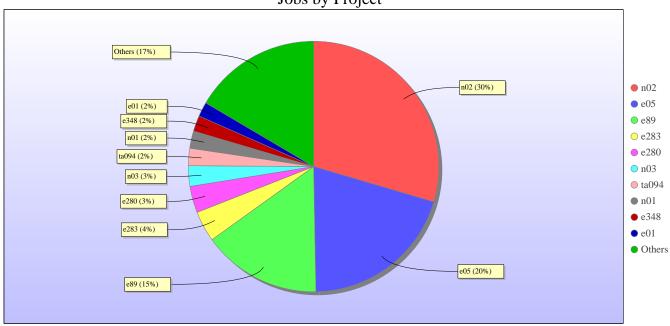
Use by Project







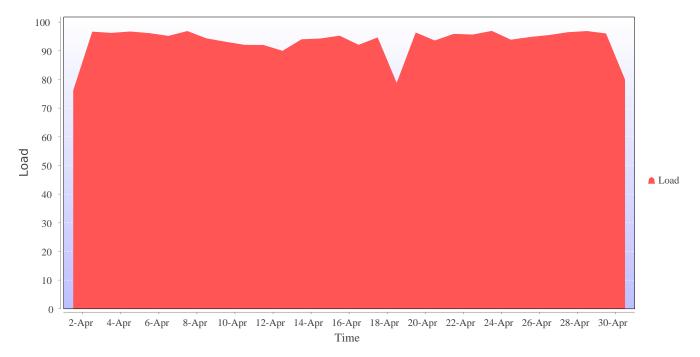
Jobs by Project



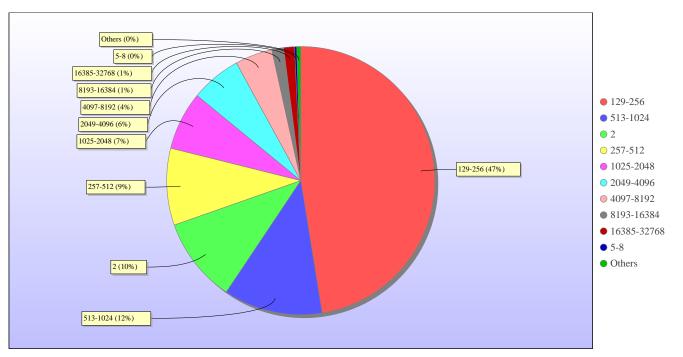
# CUs (by Size)

Size	CUs	Number of Jobs
1	0	3
2	0	16,587
3-4	0	59
5-8	0	415
9-16	0	23
17-32	0	135
129-256	173,645.674	76,826
257-512	129,713.452	15,007
513-1024	271,697.758	19,308
1025-2048	390,544.219	
2049-4096	418,077.277	9,863
4097-8192	613,059.893	7,274
8193-16384	353,456.928	2,335
16385-32768	260,584.937	2,093
32769-65536	60,420.2	315
65537-131072	91,660.025	155
131073-262144	50,960.39	94
524289-1048576	3,183.502	2

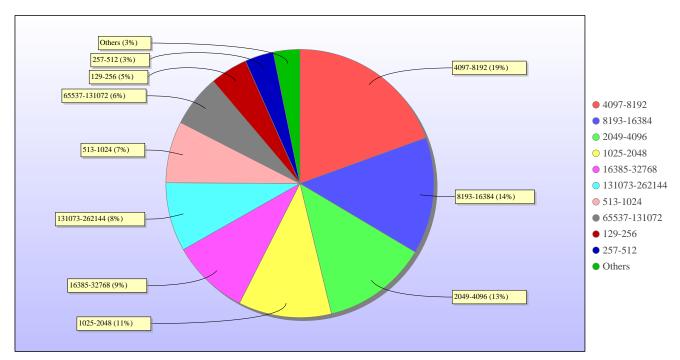
# **Load plots**



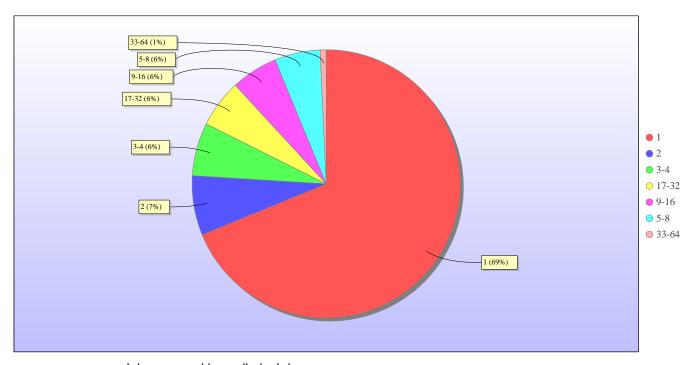
#### Percentage load on machine



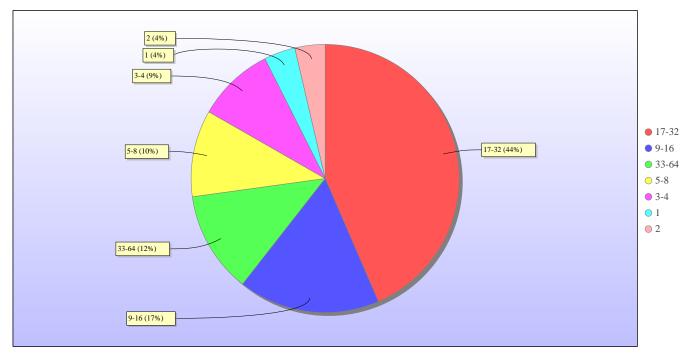
Jobs by Size



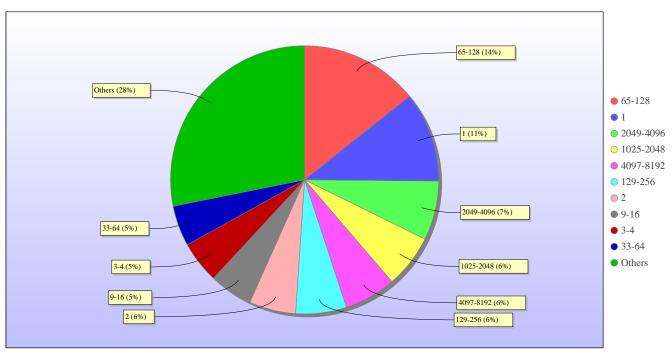
CUs used by Size



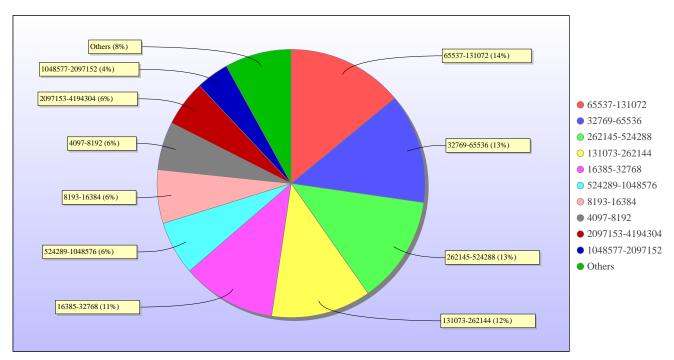
Jobs grouped by wall-clock-hours



CUs used grouped by wall-clock-hours



Jobs grouped by core-hours

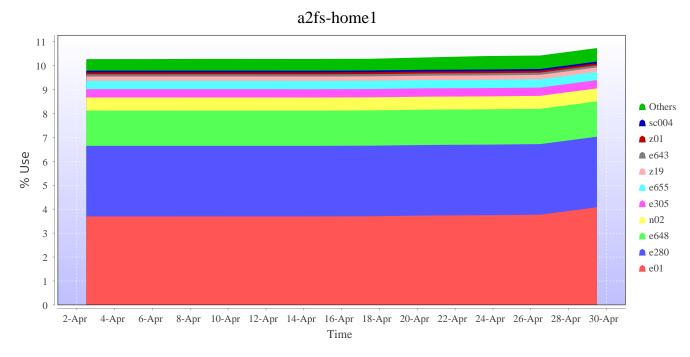


CUs used grouped by core-hours

## Disk usage

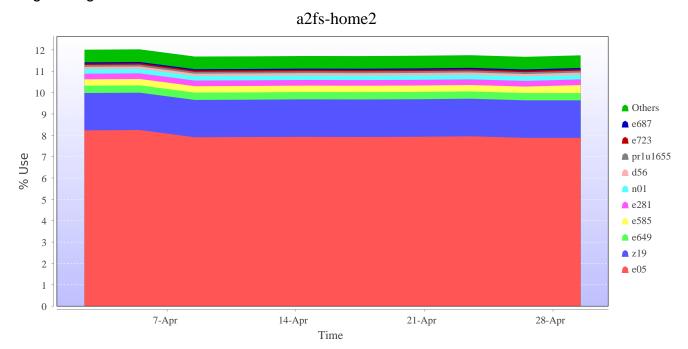
### Disk usage for home (a2fs-home1)

This is a plot of Disk Use on a2fs-home1 against time. The plot is divided into a number of classes according to Project. This is a stacked plot so the top of the plot represents the total usage at a given time.



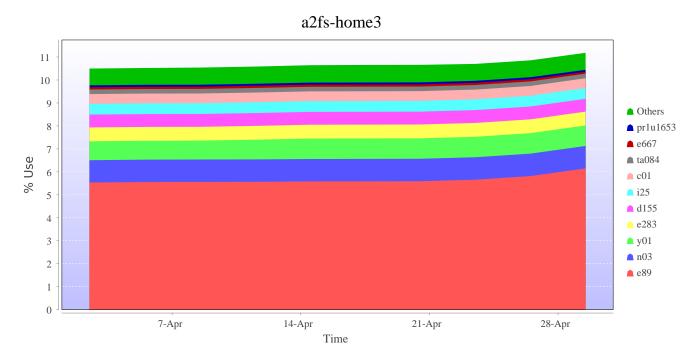
# Disk usage for home (a2fs-home2)

This is a plot of Disk Use on a2fs-home2 against time. The plot is divided into a number of classes according to Project. This is a stacked plot so the top of the plot represents the total usage at a given time.



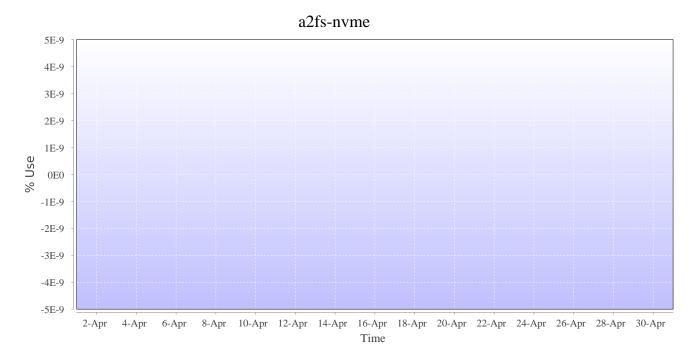
### Disk usage for home (a2fs-home3)

This is a plot of Disk Use on a2fs-home3 against time. The plot is divided into a number of classes according to Project. This is a stacked plot so the top of the plot represents the total usage at a given time.



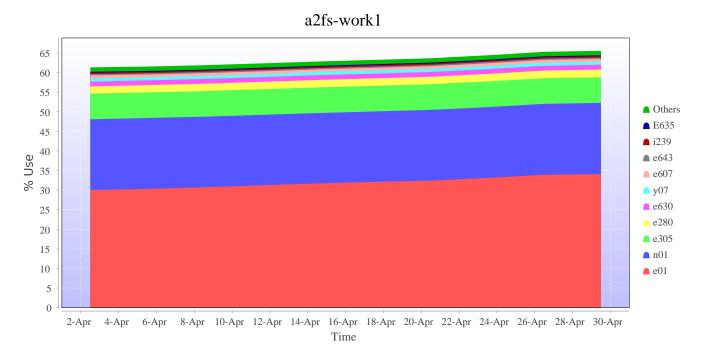
## Disk usage for work-nVME (a2fs-nvme)

This is a plot of Disk Use on a2fs-nvme against time. The plot is divided into a number of classes according to Project. This is a stacked plot so the top of the plot represents the total usage at a given time.



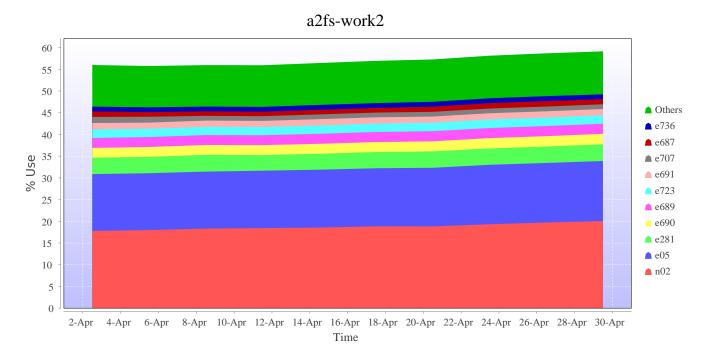
### Disk usage for work (a2fs-work1)

This is a plot of Disk Use on a2fs-work1 against time. The plot is divided into a number of classes according to Project. This is a stacked plot so the top of the plot represents the total usage at a given time.



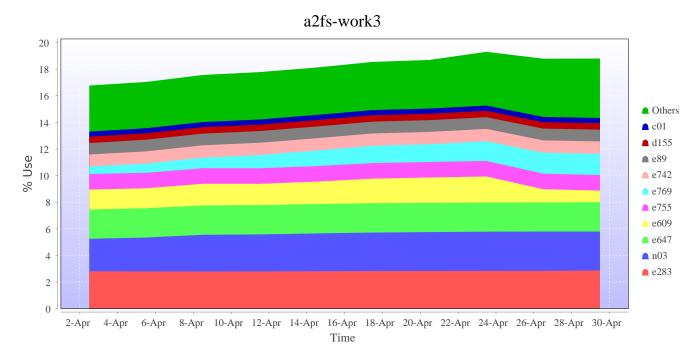
## Disk usage for work (a2fs-work2)

This is a plot of Disk Use on a2fs-work2 against time. The plot is divided into a number of classes according to Project. This is a stacked plot so the top of the plot represents the total usage at a given time.



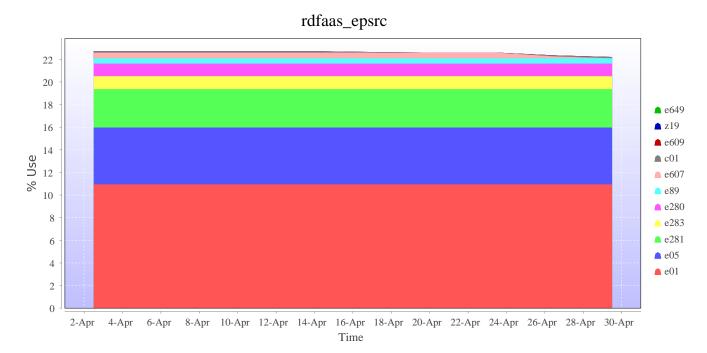
#### Disk usage for work (a2fs-work3)

This is a plot of Disk Use on a2fs-work3 against time. The plot is divided into a number of classes according to Project. This is a stacked plot so the top of the plot represents the total usage at a given time.



## Disk usage for epsrc ( rdfaas\_epsrc )

This is a plot of Disk Use on rdfaas\_epsrc against time. The plot is divided into a number of classes according to Project. This is a stacked plot so the top of the plot represents the total usage at a given time.



# Disk usage for general ( rdfaas\_general )

This is a plot of Disk Use on rdfaas\_general against time. The plot is divided into a number of classes according to Project. This is a stacked plot so the top of the plot represents the total usage at a given time.

