

GRIDPP - UK Tier 1 Experiment Requests: 2021

Q121 data

UK Tier 1 Requests - 2021
CPU (HEPSPEC06)

VO requirements

	Usage last quarter	Alloc	Apr-21	May-21	Jun-21	Jul-21	Aug-21	Sep-21	Oct-21	Nov-21	Dec-21	Jan-22	Feb-22	Mar-22	Apr 2021	WLCG 20 pledge	WLCG 2021 pledge
ALICE	7423	10950	14940	14940	14940	14940	14940	14940	14940	14940	14940	14940	14940	14940	14940	10950	14940
ATLAS	170234	156436	173160	173160	173160	173160	173160	173160	173160	173160	173160	173160	173160	173160	173160	156436	173160
CMS	85181	52000	52000	52000	52000	52000	52000	52000	52000	52000	52000	52000	52000	52000	52000	52000	52000
LHCb	84457	81300	129150	129150	129150	129150	129150	129150	129150	129150	129150	129150	129150	129150	129150	81300	129150
Biomed	2																
DUNE	1570	10000	10000	10000	10000	10000	10000	10000	10000	10000	10000	10000	10000	10000	10000		
enmr	155	50	50	50	50	50	50	50	50	50	50	50	50	50	50		
ILC	319	600	600	600	600	600	600	600	600	600	600	600	600	600	600		
MOBRAIN																	
NA62	2813	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000		
T2K	0	600	600	600	600	600	600	600	600	600	600	600	600	600	600		
Pheno	34	200	200	200	200	200	200	200	200	200	200	200	200	200	200		
SNO+	622	200	200	200	200	200	200	200	200	200	200	200	200	200	200		
GridPP	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
IRIS																	
LSST	0	1000															
Virgo	0																
Other		10	10	10	10	10	10	10	10	10	10	10	10	10	10		
TOTAL	352814	315346	382910	382910	382910	382910	382910	382910	382910	382910	382910	382910	382910	382910	382910		
LCG Total	347295	300686	369250	369250	369250	369250	369250	369250	369250	369250	369250	369250	369250	369250	369250		
Sum of Non-LHC	3947	4660	3660	3660	3660	3660	3660	3660	3660	3660	3660	3660	3660	3660	3660	300686	369250
Fabric	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Reserve	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
CURR CAPACITY	458373	458373	455341	455340.9	619592.4	619592.4	619592.4	619592.4	619592.4	619592.4	619592.4	619592.4	619592.4	619592.4	619592.4		
HEADROOM	105559	143027	72431	72431	236682	236682	236682	236682	236682	236682	236682	236682	236682	236682	236682		

Ongoing requirement to be decided at the resource meeti

LSST no formal request currently (Dec 2020).

(Includes LiGO?, SKAtelescope...)

Usually 5% - set to zero for now
Estimated Capacity dependant on .

**UK Tier 1 Requests - 2021
DISK(TeraBytes)**

		Mar 21 Used	Mar 21 Alloc	Apr-21	May-21	Jun-21	Jul-21	Aug-21	Sep-21	Oct-21	Nov-21	Dec-21	Jan-22	Feb-22	Mar-22	95% of pledge into disk for each VO. 5% of pledge into tape buffers	WLCG 20 Pledge	Possible WLCG 2021 Pledge
ALICE Echo		640	1320	1599	1599	1599	1599	1599	1599	1599	1599	1599	1599	1599	1599	1254	1320	1599
ATLAS Echo		12160	13024	15540	15540	15540	15540	15540	15540	15540	15540	15540	15540	15540	15540	12373	13024	15540
CMS Echo		5268	5440	5440	5440	5440	5440	5440	5440	5440	5440	5440	5440	5440	5440	5168	5440	5440
LHCb Echo		6065	8370	8460	8460	8460	8460	8460	8460	8460	8460	8460	8460	8460	8460	7952	8370	8460
LIGO(echo)		13.6		100	100	100	100	100	100	100	100	100	100	100	100			
DUNE??		955.0		1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000			
SNO+				50	50	50	50	50	50	50	50	50	50	50	50			
NA62??		0.0																
LSST		0.0																
S3 testing for all VO (Echo)				100	100	100	100	100	100	100	100	100	100	100	100			
IRIS				5346	5346	5346	5346	5346	5346	5346	5346	5346	5346	5346	5346			
Castor Tape buffer (Castor)	1281.0		1281	1278	1278	1278	1278	1278	1278	1278	1278	1278	1278	1278	1278			
LCG Total	0	25102	28154	31039	31039	31039	31039	31039	31039	31039	31039	31039	31039	31039	31039		28154	31039
Echo TOTAL Allocated				37635	37635	37635	37635	37635	37635	37635	37635	37635	37635	37635	37635			
Echo CURR CAPACITY				40450	40450	48349	48349	48349	48349	48349	48349	48349	48349	48349	48349			
Echo HEADROOM				2815.0	2815.0	10714.2	10714.0	10714.0	10714.0	10714.0	10714.0	10714.0	10714.0	10714.0	10714.0			

1519.05
14763
5168
8037

1551.95

New allocation Sep 20

They use tape.
RAL does not provide on grid, just starting using S3 storage

Need to check the total allocatable

**UK Tier 1 Requests - 2021
TAPE(TeraBytes)**

	Mar 21 Used	Mar 21 Alloc	Apr-21	May-21	Jun-21	Jul-21	Aug-21	Sep-21	Oct-21	Nov-21	Dec-21	Jan-22	Feb-22	Mar-22	Apr 2021	WLCG 20 Pledge	Possible WLCG 2021 Pledge
ALICE	882	1131	1710	1710	1710	1710	1710	1710	1710	1710	1710	1710	1710	1710	1710	1131	1710
ATLAS	25039	32708	34780	34780	34780	34780	34780	34780	34780	34780	34780	34780	34780	34780	34780	32708	34780
CMS	17362	17600	17600	17600	17600	17600	17600	17600	17600	17600	17600	17600	17600	17600	17600	17600	17600
LHCb	13054	15270	17078	17078	17078	17078	17078	17078	17078	17078	17078	17078	17078	17078	17078	15270	17078
ILC	216	400	400	400	400	400	400	400	400	400	400	400	400	400	400		
MICE	44	100	100	100	100	100	100	100	100	100	100	100	100	100	100		
NA62	5947	4000	4600	4600	4600	4600	4600	4600	4600	4600	4600	4600	4600	4600	4600		
T2K	654	1300	1300	1300	1300	1300	1300	1300	1300	1300	1300	1300	1300	1300	1300		
Pheno		5	5	5	5	5	5	5	5	5	5	5	5	5	5		
SOLID	1175	100	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500		
SNO+	242	300	300	300	300	300	300	300	300	300	300	300	300	300	300		
DUNE		1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
Dteam/Ops		0	0	0	0	0	0	0	0	0	0	0	0	0	0		
DIRAC	2605	3000	3000	3000	3000	3000	3000	3000	3000	3000	3000	3000	3000	3000	3000		
DEAP3600		50	50	50	50	50	50	50	50	50	50	50	50	50	50		
Nuclear Physics																	
LSST																	
Other		15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0		
Fabric		0	0	0	0	0	0	0	0	0	0	0	0	0	0		
TOTAL	67220.0	76979.0	83438	83438	83438	83438	83438	83438	83438	83438	83438	83438	83438	83438	83438		
LCG Total 2018	56337.0	66709.0	71168	71168	71168	71168	71168	71168	71168	71168	71168	71168	71168	71168	71168		
LCG Total 2019																	
CURR CAPACITY	85000	85000	95486	93166	93166	93166	93166	93166	93166	93166	93166	93166	93166	93166	93166		
HEADROOM	17780.0	8021.0	12048.3	9727.8	9727.8	9727.8	9727.8	9727.8	9727.8	9727.8	9727.8	9727.8	9727.8	9727.8	9727.8		

Note increased allocation (over the pledge value agreed by the PMB Nov 2015)

New allocation 4.6PB agreed in Feb 2021
Plan to expand to 1.8PB during 2016

Planned to increase by 100TB each year

DUNE will be covered by IRIS resources

DIRAC will be covered by IRIS resources

Up to 150TB over time?

IRIS Capacity 13000

Notes:

1. WLCG pledges to be taken from REBUS database at <http://gstat-wlcg.cern.ch/apps/pledges/resources/> when available after October C-RRB
2. GridPP4 2015 numbers from: http://www.gridpp.ac.uk/docs/gridpp4/GridPP4_Proposal_Final.pdf. Page 9