

WLCG Resource Reporting

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Task Force


- Email list
 - project-lcg-gdb-cloud-reporting@cern.ch
- Phone conferences
 - <https://indico.cern.ch/category/6241/>
- Draft proposal
 - Summary of what was discussed
 - Use case
 - Proposal
 - Requirements

Use Case

- WLCG is supported by MoUs
 - MoUs represent a commitment to support WLCG
- Pledges are a renewal of that commitment
 - And the level of that commitment
- Ensure sufficient resources are in place
 - Report on how those resources were used
- Cloud usage must therefore also be reported
 - Can not be considered production otherwise

Resource Balance and Usage




WLCG RResource, Balance & USage WLCG Home | Contact | GGUS | Admin Login

 **REBUS: Topology**

Topology | Pledges | Capacities | Report | Trends

Topology

All Tiers | Tier 0 | Tier 1 | Tier 2

   Search:

Tier	Country	Federation Name	Federation Accounting Name	Site(s)	Infrastructure	Institute Name
Tier 0	Switzerland	CH-CERN	CERN-PROD	CERN-PROD	EGI	CERN
Tier 1	Canada	CA-TRIUMF	TRIUMF-LCG2	TRIUMF-LCG2	EGI	TRIUMF
Tier 1	France	FR-CCIN2P3	IN2P3-CC	IN2P3-CC	EGI	IN2P3
Tier 1	Germany	DE-KIT	FZK-LCG2	FZK-LCG2	EGI	KIT (Karlsruhe Institute of Technology)
Tier 1	Italy	IT-INFN-CNAF	INFN-T1	INFN-T1	EGI	INFN CNAF, Bologna
Tier 1	Netherlands	NL-T1	NIKHEF-ELPROD	NIKHEF-ELPROD	EGI	NIKHEF

Pledges

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REBUS: Pledge Summary

Topology **Pledges** Capacities Report Trends

Pledges > Pledge Summary Federation Resources

Year: 2015 VO Requirements Pledge Summary Pledge Validation

Note: Sorting by multiple columns is not supported by REBUS. Clicking on the column headers which they want to add to the sort. Hovering mouse over the column headers to get descriptions of table columns.

All Tiers **Tier 0** Tier 1 Tier 2

Search:

Tier	Pledge Type	ALICE	Required	Balance	ATLAS	Required	Balance	CMS	Required	Balance	LHCb	Required	Balance	SUM	Required	Balance
Tier 0	CPU (HEP-SPEC06)	175,000	175,000	0%	205,000	205,000	0%	271,000	271,000	0%	36,000	36,000	0%	687,000	687,000	0%
Tier 0	Disk (Tbytes)	14,500	14,500	0%	14,000	14,000	0%	15,000	15,000	0%	5,500	5,500	0%	49,000	49,000	0%
Tier 0	Tape (Tbytes)	16,200	16,200	0%	33,000	33,000	0%	35,000	35,000	0%	11,200	11,200	0%	95,400	95,400	0%
Tier 1	CPU (HEP-SPEC06)	146,520	120,000	22%	492,699	450,000	9%	276,550	300,000	-8%	139,131	118,000	18%	1,054,900	988,000	7%
Tier 1	Disk (Tbytes)	15,779	17,800	-11%	41,374	36,000	15%	24,146	26,000	-7%	14,041	11,700	20%	95,340	91,500	4%
Tier 1	Tape (Tbytes)	14,014	10,200	37%	70,190	65,000	8%	66,894	74,000	-10%	28,094	23,700	19%	179,192	172,900	4%
Tier 2	CPU (HEP-SPEC06)	183,443	200,000	-8%	575,727	520,000	11%	521,448	500,000	4%	60,581	66,000	-8%	1,341,199	1,286,000	4%
Tier 2	Disk (Tbytes)	16,468	22,700	-27%	54,919	53,000	4%	32,156	29,000	11%	1,964	1,900	3%	105,507	106,600	-1%

Showing 1 to 8 of 8 entries

Resource Reporting –T1

Hierarchical Tree

- Tier1
- Tier2
- Countries
- EGI
- DSG
- UNREGISTERED
- VO_Discipline
- VO_Metrics
- CUSTOM_view



Developed by  CESGA

EGI View --> Tier1

Data to graph: Norm. Sum CPU (HEPSPEC06-hours) Normalised CPU time to a reference value of HEPSPEC06

Period: Start year: 2014 Start month: 12 End year: 2014 End month: 12

Groupings: Show data for: TIER1 as a function of: VO

VO: LHC TOP 10 ALL Custom

Groups: Group the rest of VOs in a new category

Chart: Type: GROUP BAR Scale: LINEAR

dstream VO: Exclude dstream and eps VOs jobs information

Local Jobs: Grid Jobs Only Grid Jobs and Local Jobs Local Jobs Only

Refresh

TIER1 Normalised CPU time (HEPSPEC06) by TIER1 and VO.
LHC VOs. December 2014 - December 2014.

The following table shows the distribution of Normalised CPU time (HEPSPEC06) grouped by TIER1 and VO (only information about LHC VOs is returned).

Normalised CPU time [units HEPSPEC06.Hours] by TIER1 and VO							
TIER1	alice	atlas	cms	lhc	Total	%	
CA-TRIUMF	0	23,193,808	0	0	23,193,808	5.44%	
CH-CERN	11,519,888	1,418,664	5,969,196	8,552,596	25,460,344	5.97%	
ES-PIC	0	3,371,460	4,670,668	16,044,060	24,086,196	5.65%	
FR-CCIN2P3	15,816,512	5,878,272	4,510,260	28,667,956	54,873,000	12.87%	
IT-INFN-CNAF	17,616,076	7,964,464	11,460,260	27,065,736	64,128,536	15.04%	
KR-KISTI-GSDC	11,266,400	0	0	0	11,266,400	2.64%	
NDGF	14,508,216	4,735,692	0	0	19,243,908	4.51%	
NL-T1	11,812,680	10,380,468	0	14,651,816	36,844,964	8.64%	
NRC-KI-T1	9,028,616	1,850,364	0	16,180,324	27,059,304	6.34%	
RU-JINR-T1	0	0	3,811,536	0	3,811,536	0.89%	
TW-ASGC	0	455,616	432	0	456,048	0.11%	
UK-T1-RAL	18,539,624	8,859,932	7,297,404	24,148,232	58,843,192	13.80%	
US-FNAL-CMS	0	0	52,460,812	0	52,460,812	12.30%	
US-T1-BNL	0	24,738,936	0	0	24,738,936	5.80%	
Total	110,116,012	92,867,676	90,180,568	133,306,728	426,468,984		
Percentage	25.82%	21.78%	21.15%	31.26%			

[Click here for a CSV dump of this table](#)
[Click here for an Extended CSV dump of this table](#)
[Click here for XML, encoded data](#)

Resource Reporting –T2

EGI ACCOUNTING PORTAL 

[GLOBAL View](#) |
 [VO MANAGER View](#) |
 [VO MEMBER View](#) |
 [SITE ADMIN View](#) |
 [USER View](#) |
 [REPORTS](#) |
 [METRICS PORTAL](#) |
 [LINKS](#)

Accounting Reports -> Tier2

Period: Start year: Start month: End year: End month:

[Refresh](#)

WLCG - Tier-2 Accounting Report.
January 2015 - January 2015.

Normalized CPU time (units HEPSPC66 Hours) by TIER2 and VO										
COUNTRY	FEDERATION	2014 CPU Pledge (HEPSPC66) AvD.	pledge ins. efficiency (HEPSPC66-Hrs)	SITE	alice	atlas	cms	hcb	Total	used as % of pledge
Australia	AU-ATLAS	8500.00	4,426,800	Australia-ATLAS		303,956			303,956	
				Total		303,956			303,956	6.87%
				WallClock		240,560			240,560	
Austria	AT-HEPHY-WIENNA-UIBK	6857.00	3,571,128	HEPHY-UIBK		5,844			5,844	
				HEPHY-Wienna			240,252		240,252	
				Total		5,844	240,252		246,096	6.99%
Belgium	BE-TIER2	16800.00	8,748,440	WallClock		11,524	297,844		309,368	
				SDGrid-ULB-VUB			340,640		340,640	
				BelGrid-UCL			203,944		203,944	
Brazil	BR-SP-SPRACE	13698.00	7,133,918	Total			544,582		544,582	6.22%
				WallClock			631,320		631,320	
				GridUNESP_CENTRAL				295,344		295,344
Canada	CA-EAST-T2	10625.00	5,533,500	SPRACE			295,344		295,344	
				Total			295,344		295,344	4.14%
				WallClock			385,216		385,216	
Canada	CA-WEST-T2	10625.00	5,533,500	CA-MCGILL-CUMED-T2					156,948	
				CA-SCINET-T2		156,948			156,948	2.84%
				Total		156,948			156,948	
China	CN-HEP	9600.00	4,999,680	CA-VICTORIA-WESTGRID-T2					220,216	
				SFU-CCG2		192,512			192,512	
				Total		192,800			192,800	6.42%
China	CN-HEP	9600.00	4,999,680	WallClock		395,312			395,312	
				BEIJING-CCG2		872,676			872,676	
				Total		1,800	126,964		128,784	2.57%
Czech Republic	CZ-Prague-T2	12000.00	6,249,600	WallClock		1,800	126,964		128,784	
				praguekg2		6,932	182,216		189,248	
				Total					0	
Estonia	EE-MCPB	45000.00	21,434,000	WallClock					0	
				T2_Estonia					0	
				Total					0	
Finland	FI-HP-T2	6300.00	3,281,040	FI-HP-T2			92,144		92,144	
				Total			92,144		92,144	2.81%
				WallClock			199,488		199,488	
France	FR-GRF	30962.00	19,641,480	GRF	5,717,488	699,980	630,540	1,292,190	8,340,198	
				Total	5,717,488	699,980	630,540	1,292,190	8,340,198	43.00%
				WallClock	5,884,464	797,912	725,216	1,387,116	8,674,248	
France	FR-IN2P3-CC-T2	17350.00	9,039,880	IN2P3-CC-T2		411,880	144		412,024	
				Total		411,880	144		412,024	4.50%
				WallClock		485,640	364		485,952	
France	FR-IN2P3-CC-T2	17350.00	9,039,880	IN2P3-CPPM		1,708,260		862,832	2,481,190	
				Total		1,708,260		862,832	2,481,190	

Proposal

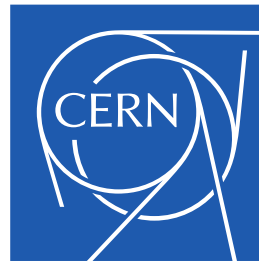
- Build upon existing tooling
 - APEL
 - Cloud providers publish into APEL
 - Including HEP-SPEC06 benchmarking metric
 - EGI Accounting Portal
 - Provides Tier 0/1 and Tier 2 summaries
 - REBUS
 - Incorporate cloud accounting information
 - Both separate and combined views

Requirements

- Cloud accounting record
 - Specification exists
 - Is anything missing or not clear?
- Publishers
 - With supporting documentation
 - Examples of providing the benchmarking metric
- New EGI Accounting Portal view for WLCG
- Validation
 - Cross-check results
- Identify and implement changes in REBUS

Next Steps

- Polish and publish draft proposal
 - Improve the proposal using the feedback
- Identify the missing components
 - And provide a plan to address this



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