



# Validation of Installed Capacity

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WLCG MB

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# Gstat 2.0

- gstat 2.0 was described by Laurence Field at the November GDB <http://indico.cern.ch/materialDisplay.py?sessionId=6&materialId=0&confId=45481>
- There are site views of Tier0, 1, 2 for WLCG
- Now in the process of validating the data published
- There are SAM tests to check that sites publish and sanity checks on the values published
- But only sites know what they should be publishing.
- I have compared some data with the published WLCG Tier1 accounts



GStat 2.0 - Microsoft Internet Explorer provided by STFC

http://gstat-prod.cern.ch/gstat/summary/WLCG\_TIER/1/

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## GStat 2.0

Geo View | LDAP View | **Site Views** | Service View | Stats

Summary Filters: WLCG\_TIER Values: 1

Show 25 entries Search:

Name	Monitoring Status	CPUs		Storage Space (GB)			Grid Jobs		
		Physical	Logical	Total Online	Used Online	Total Nearline	Total	Running	Waiting
<a href="#">FZK-LCG2</a>	WARNING	2,396	8,400	3,499,034	22%	0	50,639	537%	0%
<a href="#">IN2P3-CC</a>	N/A	1,074	4,296	0	0%	0	8,791	119%	0%
<a href="#">INFN-T1</a>	CRITICAL	572	2,862	220,625	89%	9,510,000	14,249	226%	0%
<a href="#">NDGF-T1</a>	N/A	9,280	9,280	1,550,684	38%	0	0	0%	0%
<a href="#">NIKHEF-ELPROD</a>	CRITICAL	1,504	5,104	299,288	252%	0	694	13%	0%
<a href="#">pic</a>	OK	174	1,329	1,100,000	90%	47,550,000	8,323	526%	0%
<a href="#">RAL-LCG2</a>	OK	1,004	4,304	3,082,379	46%	3,382,702	6,363	146%	0%
<a href="#">SARA-MATRIX</a>	CRITICAL	550	4,400	1,000,000	0%	8,000,000	7,334	148%	0%
<a href="#">Taiwan-LCG2</a>	CRITICAL	251	1,385	220,000	90%	9,510,000	13,353	628%	0%
<a href="#">TRIUMF-LCG2</a>	CRITICAL	622	1,540	0	0%	0	1,589	83%	0%
<b>Total</b>		<b>17,427</b>	<b>42,900</b>	<b>10,972,010</b>	<b>4,957,819</b>	<b>77,952,702</b>	<b>111,335</b>	<b>87,336</b>	<b>23,999</b>

Done Internet 100%



# Validation of Tier1 by gstat

SITE-NAME	CPU (SI2K)				Disk(TB)				Tape (TB)		
	Pledge 2009 (kSI2K)	Monthly (kSI2K)	Accounts	gstat	Pledge 2009	Accounts Installed	Accounts Allocated	gstat	Pledge 2009	Accounts Installed	gstat
CERN	32,970	37,594	37,594,000	13,476,648	10,065	7,774	7,774	0.609	25,063	25,083	
FZK-LCG2	10,355	10,355	10,355,000	17,127,600	5,142	5,142	3,868	3,498	7,190	7,190	
IN2P3	7,998	7,998	7,998,000	9,342,180	4,600	4,600	2,553	0	5,175	5,200	
INFN-T1	5,300	3,000	3,000,000	4,607,820	2,300	1,379	1,300	220	2,600	1,500	9,510
NDGF-T1	3,030	3,030	3,030,000	3,047,280	1,580	1,580	1,202	1,583	1,660	1,660	
NL-T1	7,544	3,833	3,833,000	19,816,720	3,753	1,110	940	1,229	3,548	460	8,000
pic	2,591	2,591	2,591,000	1,595,181	1,702	1,042	1,067	1,100	1,844	1,050	47,550
RAL-LCG	5,775	5,775	5,775,000	4,304,000	3,401	2,684	2,508	3,082	4,045	2,070	3,318
Taiwan	5,000	2,432	2,432,000	3,747,170	3,000	2,500	1,340	220	5,000	3,000	9,510
Triumf	1,420	905	905,000	3,384,240	990	500	500	0	750	750	
BNL	7,337	7,337	7,337,000	N/A	5,822	3,800	3,000	N/A	3,277	3,000	
FNAL	5,100	5,100	5,100,000	N/A	2,600	2,600	2,600	N/A	7,100	9,771	
	94,420	89,950	89,950,000	80,448,839	44,955	34,711	28,652	10,933	67,252	60,734	77,888

Account Data - October 2009, Gstat - November 2009



# Agreement

SITE-NAME	CPU (SI2K)				Disk(TB)				Tape (TB)		
	Pledge 2009 (kSI2K)	Monthly (kSI2K)	Accounts	gstat	Pledge 2009	Accounts Installed	Accounts Allocated	gstat	Pledge 2009	Accounts Installed	gstat
CERN	32,970	37,594	37,594,000	13,476,648	10,065	7,774	7,774	0.609	25,063	25,083	
FZK-LCG2	10,355	10,355	<b>10,355,000</b>	<b>17,127,600</b>	5,142	5,142	<b>3,868</b>	<b>3,498</b>	7,190	7,190	
IN2P3	7,998	7,998	<b>7,998,000</b>	<b>9,342,180</b>	4,600	4,600	2,553	0	5,175	5,200	
INFN-T1	5,300	3,000	3,000,000	4,607,820	2,300	1,379	1,300	220	2,600	1,500	9,510
NDGF-T1	<b>3,030</b>	3,030	<b>3,030,000</b>	<b>3,047,280</b>	<b>1,580</b>	<b>1,580</b>	1,202	<b>1,583</b>	1,660	1,660	
NL-T1	7,544	3,833	3,833,000	19,816,720	3,753	<b>1,110</b>	940	<b>1,229</b>	3,548	460	8,000
pic	2,591	2,591	<b>2,591,000</b>	<b>1,595,181</b>	1,702	<b>1,042</b>	1,067	<b>1,100</b>	1,844	1,050	47,550
RAL-LCG	5,775	5,775	<b>5,775,000</b>	<b>4,304,000</b>	3,401	<b>2,684</b>	2,508	<b>3,082</b>	4,045	2,070	3,318
Taiwan	5,000	2,432	2,432,000	3,747,170	3,000	2,500	1,340	220	5,000	3,000	9,510
Triumf	1,420	905	905,000	3,384,240	990	500	500	0	750	750	
BNL	7,337	7,337	7,337,000	N/A	5,822	3,800	3,000	N/A	3,277	3,000	
FNAL	5,100	5,100	5,100,000	N/A	2,600	2,600	2,600	N/A	7,100	9,771	
	94,420	89,950	89,950,000	80,448,839	44,955	34,711	28,652	10,933	67,252	60,734	77,888

Very little agreement of cpu

Figures in **bold black** are sites who have explained the discrepancy



# Discrepancies?

SITE-NAME	CPU (SI2K)				Disk(TB)				Tape (TB)		
	Pledge 2009 (kSI2K)	(kSI2K)	Monthly Accounts	gstat	Pledge 2009	Accounts Installed	Accounts Allocated	gstat	Pledge 2009	Accounts Installed	gstat
CERN	32,970	37,594	<b>37,594,000</b>	<b>13,476,648</b>	10,065	7,774	7,774	<b>0.609</b>	25,063	25,083	
FZK-LCG2	10,355	10,355	<b>10,355,000</b>	<b>17,127,600</b>	5,142	5,142	<b>3,868</b>	<b>3,498</b>	7,190	7,190	
IN2P3	7,998	7,998	<b>7,998,000</b>	<b>9,342,180</b>	4,600	4,600	2,553	<b>0</b>	5,175	5,200	
INFN-T1	5,300	3,000	<b>3,000,000</b>	<b>4,607,820</b>	2,300	1,379	1,300	<b>220</b>	2,600	1,500	<b>9,510</b>
NDGF-T1	<b>3,030</b>	3,030	<b>3,030,000</b>	<b>3,047,280</b>	<b>1,580</b>	<b>1,580</b>	1,202	<b>1,583</b>	1,660	1,660	
NL-T1	7,544	3,833	<b>3,833,000</b>	<b>19,816,720</b>	3,753	<b>1,110</b>	940	<b>1,229</b>	3,548	460	<b>8,000</b>
pic	2,591	2,591	<b>2,591,000</b>	<b>1,595,181</b>	1,702	<b>1,042</b>	<b>1,067</b>	<b>1,100</b>	1,844	1,050	<b>47,550</b>
RAL-LCG	5,775	5,775	<b>5,775,000</b>	<b>4,304,000</b>	3,401	<b>2,684</b>	<b>2,508</b>	<b>3,082</b>	4,045	2,070	<b>3,318</b>
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Triumf	1,420	905	<b>905,000</b>	<b>3,384,240</b>	990	500	500	<b>0</b>	750	750	
BNL	7,337	7,337	7,337,000	N/A	5,822	3,800	3,000	N/A	3,277	3,000	
FNAL	5,100	5,100	5,100,000	N/A	2,600	2,600	2,600	N/A	7,100	9,771	
	94,420	89,950	89,950,000	80,448,839	44,955	34,711	28,652	10,933	67,252	60,734	77,888

Many possible reasons:

Site has installed more resource since September.

Gstat measures everything, accounts are only LHC Vos

Site not publishing correctly

Can T1s explain next week?



# Tier2s

- 84 sites publishing as T2s
- 73 in T2 Report (signed MoU)
- Should be 164 T2 sites
  - need to flag as such
- Of the 74 shown here, many are not publishing storage
- Will eventually compare values with pledges
- Please encourage sites to flag as T2, publish and validate storage numbers

Country	Federation	Name	Monitoring Status	Physical	Logical	TotalUsed (GB)	Used/Online
Australia	AU-ATLAS	Australia-ATLAS	CRITICAL	112	376	277377	5%
Austria	AT-HEPHY-VIENNA-UIBK	HEPHY-UIBK	CRITICAL	39	262	53604	2%
Canada	CA-EAST-T2	TORONTO-LCG2	CRITICAL	415	415	22881	49%
Canada	CA-WEST-T2	ALBERTA-LCG2	CRITICAL			0	0%
Canada	CA-WEST-T2	VICTORIA-LCG2	CRITICAL			0	0%
China	CN-IHEP	BEIJING-LCG2	CRITICAL	896	896	100327	16%
Estonia	EE-NICPB	TASK	CRITICAL	2	8	1082	1%
Finland	FI-HIP-T2	CSC	CRITICAL			0	0%
France	FR-GRIF	GRIF	N/A			0	0%
France	FR-IN2P3-CC-T2	IN2P3-CC-T2	N/A			0	0%
France	FR-IN2P3-IPHC	IN2P3-IPHC	CRITICAL	224	1024	236995	89%
France	FR-IN2P3-LAPP	IN2P3-LAPP	CRITICAL	160	512	182361	19%
France	FR-IN2P3-SUBATECH	IN2P3-SUBATECH	CRITICAL	120	380	0	0%
Germany	DE-DESY-GOE-ATLAS-T2	GoeGrid	CRITICAL	1680	1680	517973	4%
Germany	DE-DESY-RWTH-CMS-T2	DESY-HH	CRITICAL	742	2956	633350	49%
Germany	DE-DESY-RWTH-CMS-T2	DESY-ZN	N/A	168	672	0	0%
Germany	DE-DESY-RWTH-CMS-T2	RWTH-Aachen	N/A	506	2024	564294	57%
Germany	DE-FREIBURG-WUPPERTAL	UNI-FREIBURG	CRITICAL	238	708	0	0%
Germany	DE-FREIBURG-WUPPERTAL	wuppertalprod	CRITICAL	32	1	0	0%
Germany	DE-MCAT	LZ-LMU	CRITICAL	300	600	511195	17%
Germany	DE-MCAT	M3PEC	CRITICAL	6	24	1473	5%
Hungary	HU-HGCC-T2	BUDAPEST	CRITICAL	113	426	99997	67%
Hungary	HU-HGCC-T2	ELTE	CRITICAL	40	40	0	0%
India	IN-DAE-KOLKATA-TIER2	IN-DAE-VECC-01	CRITICAL	26	52	0	0%
India	IN-DAE-KOLKATA-TIER2	IN-DAE-VECC-02	CRITICAL	156	156	0	0%
India	IN-INDIACMS-TIFR	INDIACMS-TIFR	CRITICAL	320	320	365322	24%
Israel	IL-HEPTier-2	IL-TAU-HEP	CRITICAL	16	64	64918	0%
Israel	IL-HEPTier-2	TECHNION-HEP	CRITICAL	36	144	38724	25%
Israel	IL-HEPTier-2	WEIZMANN-LCG2	CRITICAL	56	180	0	0%
Italy	IT-LHCb-federation	INFN-CNAF-LHCB	CRITICAL	572	2862	79	2%
Italy	IT-LHCb-federation	INFN-LNL-2	CRITICAL	440	1128	241959	76%
Italy	IT-LHCb-federation	INFN-PISA	N/A	680	1720	3125543516	52%
Italy	IT-LHCb-federation	INFN-ROMA1	CRITICAL	73	262	195358	46%
Italy	IT-LHCb-federation	INFN-TORINO	N/A	108	336	3935	2%
Japan	JP-Tokyo-ATLAS-T2	TOKYO-LCG2	CRITICAL	60	120	357477	41%
Poland	PL-TIER2-WLCC	CYFRONET-LCG2	CRITICAL	596	2384	269300	44%
Portugal	PT-LIP-LCG-Tier2	LIP-Coimbra	CRITICAL	44	176	113190	37%
Portugal	PT-LIP-LCG-Tier2	LIP-Lisbon	CRITICAL	134	536	198397	62%
Republic of Korea	KR-KISTI-T2	KTU-BG-GLITE	CRITICAL	38	38	0	0%
Republic of Korea	KR-KNU-T2	LCG_KNU	CRITICAL	336	336	0	0%
Romania	RO-LCG	RO-02-NIPNE	CRITICAL	84	212	73823	12%
Romania	RO-LCG	RO-03-UPB	CRITICAL	122	356	293	6%
Romania	RO-LCG	RO-07-NIPNE	CRITICAL	548	424	92021	14%
Romania	RO-LCG	RO-11-NIPNE	CRITICAL	16	32	492	5%
Russian Fed.	RU-RDIG	JINR-LCG2	CRITICAL	314	992	367448	46%
Russian Fed.	RU-RDIG	RRC-KI	CRITICAL	0	0	0	0%
Russian Fed.	RU-RDIG	ru-Moscow-FIAN-LCG2	CRITICAL	30	52	44498	5%
Russian Fed.	RU-RDIG	ru-Moscow-MEPHI-LCG2	CRITICAL	54	168	37388	4%
Russian Fed.	RU-RDIG	RU-Novosibirsk-BINP	N/A	20	40	12999	38%
Russian Fed.	RU-RDIG	Ru-Troitsk-ISR-LCG2	CRITICAL	160	160	59998	31%
Slovenia	SI-SIGNET	SIGNET	CRITICAL	239	582	0	0%
Spain	ES-ATLAS-T2	Ifae	CRITICAL			0	0%
Spain	ES-ATLAS-T2	IfIC-LCG2	OK			0	0%
Spain	ES-ATLAS-T2	UAM-LCG2	CRITICAL			0	0%
Spain	ES-CMS-T2	CIEMAT-LCG2	CRITICAL	298	836	258034	49%
Spain	ES-CMS-T2	IFCA-LCG2	CRITICAL	460	1778	214	57834%
Spain	ES-LHCb-T2	UB-LCG2	CRITICAL	85	275	0	0%
Switzerland	CH-CHIPP-CSCS	CSCS-LCG2	CRITICAL	240	960	444798	43%
Taipei	TW-FTT-T2	TW-FTT	CRITICAL	254	508	350186	65%
UK	UK-London-Tier2	UKI-LT2-Brunel	CRITICAL	26	161	110469	78%
UK	UK-London-Tier2	UKI-LT2-RHUL	CRITICAL	400	400	263995	33%
UK	UK-NorthGrid	UKI-NORTHGRID-LIV-HEP	CRITICAL	790	832	242109	28%
UK	UK-NorthGrid	UKI-NORTHGRID-MAN-HEP	N/A			0	0%
UK	UK-ScottGrid	UKI-SCOTGRID-DURHAM	CRITICAL			0	0%
UK	UK-ScottGrid	UKI-SCOTGRID-ECDF	N/A	460	1436	8	50%
UK	UK-ScottGrid	UKI-SCOTGRID-GLASGOW	CRITICAL	618	1912	448047	35%
UK	UK-SouthGrid	EFA-JET	CRITICAL	254	254	1721	52%
UK	UK-SouthGrid	UKI-SOUTHGRID-BHAM-HEP	CRITICAL	308	332	60492	18%
UK	UK-SouthGrid	UKI-SOUTHGRID-BRIS-HEP	CRITICAL			46884495360	18%
UK	UK-SouthGrid	UKI-SOUTHGRID-CAM-HEP	CRITICAL			0	0%
UK	UK-SouthGrid	UKI-SOUTHGRID-OX-HEP	CRITICAL	426	432	139950	43%
UK	UK-SouthGrid	UKI-SOUTHGRID-RALPP	N/A	460	1544	557265	35%
USA	T2_US_MIT	MPI-K	CRITICAL	16	32	0	0%