



# WLCG - Tier-2 Accounting Summary

July 2008

Efficiency factor for Tier-2 sites - utilisation 60% of pledge as specified in TDR

CPU usage in month (KSI2K-Hrs)

Federation - Accounting Name	2008 CPU Pledge (KSI2K)	pledge inc. efficiency (KSI2K-Hrs)	Site(s)	ALICE	ATLAS	CMS	LHCb	Total	used as % of pledge
Australia, University of Melbourne			Australia-ATLAS Australia-UNIMELB-LCG2						
<b>AU-ATLAS</b>	<b>150</b>	<b>66,960</b>							
Austria, Austrian Tier-2 Federation			HEPHY-UIBK		17,473			17,473	
<b>AT-HEPHY-VIENNA-UIBK</b>	<b>540</b>	<b>241,056</b>			<b>17,473</b>			<b>17,473</b>	<b>7%</b>
Belgium, Belgian Tier-2 Federation			BEgrid-ULB-VUB BelGrid-UCL						
<b>BE-TIER2</b>	<b>1,050</b>	<b>468,720</b>							
Canada-East Federation			TORONTO-LCG2						
<b>CA-EAST-T2</b>	<b>200</b>	<b>89,280</b>							
Canada-West Federation			ALBERTA-LCG2 SFU-LCG2 VICTORIA-LCG2		45,794 41,864 4,465			45,794 41,864 4,465	
<b>CA-WEST-T2</b>	<b>300</b>	<b>133,920</b>			<b>92,123</b>			<b>4,465</b>	<b>3%</b>
China, IHEP, Beijing			BEIJING-LCG2		10,036	15,384		25,420	
<b>CN-IHEP</b>	<b>400</b>	<b>178,560</b>			<b>10,036</b>	<b>15,384</b>		<b>25,420</b>	<b>14%</b>
Czech Rep., FZU AS, Prague			praguelcg2 prague_cesnet_lcg2	37,283	11,470			48,753 8,570	
<b>CZ-Prague-T2</b>	<b>164</b>	<b>73,210</b>		<b>37,283</b>	<b>20,040</b>			<b>57,323</b>	<b>78%</b>
Estonia, NICPB, Tallinn			T2_Estonia			25,519		25,519	
<b>EE-NICPB</b>	<b>150</b>	<b>66,960</b>				<b>25,519</b>		<b>25,519</b>	<b>38%</b>
Finland, NDGF/HIP Tier2			CSC						
<b>FI-HIP-T2</b>	<b>564</b>	<b>251,770</b>							
France, CC-IN2P3 AF			IN2P3-CC-T2	256,340	243,202	157,300	778	657,620	
<b>FR-IN2P3-CC-T2</b>	<b>1,500</b>	<b>669,600</b>		<b>256,340</b>	<b>243,202</b>	<b>157,300</b>	<b>778</b>	<b>657,620</b>	<b>98%</b>
France, GRIF, Paris			GRIF	341,664	171,920	113,501	122,574	749,659	
<b>FR-GRIF</b>	<b>1,642</b>	<b>732,989</b>		<b>341,664</b>	<b>171,920</b>	<b>113,501</b>	<b>122,574</b>	<b>749,659</b>	<b>102%</b>
France, LAPP, Annecy			IN2P3-LAPP		61,941		33,669	95,610	
<b>FR-IN2P3-LAPP</b>	<b>600</b>	<b>267,840</b>			<b>61,941</b>		<b>33,669</b>	<b>95,610</b>	<b>36%</b>
France, LPC, Clermont-Ferrand			IN2P3-LPC						
<b>FR-IN2P3-LPC</b>	<b>800</b>	<b>357,120</b>							
France, SUBATECH, Nantes			IN2P3-SUBATECH	209,209				209,209	
<b>FR-IN2P3-SUBATECH</b>	<b>312</b>	<b>139,277</b>		<b>209,209</b>				<b>209,209</b>	<b>150%</b>
Germany, GSI, Darmstadt			GSI-LCG2	9				9	
<b>DE-GSI</b>	<b>660</b>	<b>294,624</b>		<b>9</b>				<b>9</b>	<b>0%</b>
Germany, ATLAS Federation FR/W			UNI-FREIBURG wuppertalprod		37,815 14,594			37,815 14,594	
<b>DE-FREIBURGWUPPERTAL</b>	<b>584</b>	<b>260,698</b>			<b>52,409</b>			<b>52,409</b>	<b>20%</b>

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Germany, ATLAS Federation, Munich			LRZ-LMU		69,330			69,330	
			MPPMU		21,482		12	21,494	
<b>DE-MCAT</b>	<b>622</b>	<b>277,661</b>			<b>90,812</b>		<b>12</b>	<b>90,824</b>	<b>33%</b>
Germany, ATLAS Federation, DESY			DESY-HH		94,224			94,224	
			DESY-ZN		101,377			101,377	
<b>DE-DESY-ATLAS-T2</b>	<b>583</b>	<b>260,251</b>			<b>195,601</b>			<b>195,601</b>	<b>75%</b>
Germany, CMS Federation			DESY-HH			111,981		111,981	
			DESY-ZN			79		79	
			RWTH-Aachen			103,176		103,176	
<b>DE-DESY-RWTH-CMS-T2</b>	<b>1,050</b>	<b>468,720</b>				<b>215,236</b>		<b>215,236</b>	<b>46%</b>
Hungary, HGCC Federation			BUDAPEST	33,366	72	5,072	7	38,517	
			ELTE						
<b>HU-HGCC-T2</b>	<b>270</b>	<b>120,528</b>		<b>33,366</b>	<b>72</b>	<b>5,072</b>	<b>7</b>	<b>38,517</b>	<b>32%</b>
India, TIFR, Mumbai			INDIACMS-TIFR			5,801		5,801	
<b>IN-INDIACMS-TIFR</b>	<b>450</b>	<b>200,880</b>				<b>5,801</b>		<b>5,801</b>	<b>3%</b>
India, VECC/SINP, Kolkata			IN-DAE-VECC-01						
<b>IN-DAE-KOLKATA-TIER2</b>	<b>450</b>	<b>200,880</b>							
Israel, HEP-IL Tier-2 Federation			WEIZMANN-LCG2						
			TAU-LCG2						
<b>IL-HEPTier-2</b>	<b>280</b>	<b>124,992</b>							
Italy, INFN ALICE Federation			INFN-BARI	58,132				58,132	
			INFN-CATANIA	60,122				60,122	
			INFN-FRASCATI						
			INFN-LNL-2	23,274				23,274	
			INFN-MILANO						
			INFN-NAPOLI-ATLAS						
			INFN-PISA	1				1	
			INFN-ROMA1						
			INFN-ROMA1-CMS						
			INFN-TORINO	66,311				66,311	
<b>IT-ALICE-federation</b>	<b>750</b>	<b>334,800</b>		<b>207,840</b>				<b>207,840</b>	<b>62%</b>
Italy, INFN ATLAS Federation			INFN-BARI		7,317			7,317	
			INFN-CATANIA						
			INFN-FRASCATI		10,373			10,373	
			INFN-LNL-2		5,203			5,203	
			INFN-MILANO		6,695			6,695	
			INFN-NAPOLI-ATLAS		31,286			31,286	
			INFN-PISA		3,368			3,368	
			INFN-ROMA1		33,396			33,396	
			INFN-ROMA1-CMS						
			INFN-TORINO		288			288	
<b>IT-ATLAS-federation</b>	<b>750</b>	<b>334,800</b>			<b>97,926</b>			<b>97,926</b>	<b>29%</b>

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Italy, INFN CMS Federation			INFN-BARI			25,422		25,422	
			INFN-CATANIA			62		62	
			INFN-FRASCATI						
			INFN-LNL-2			44,962		44,962	
			INFN-MILANO			50		50	
			INFN-NAPOLI-ATLAS			113		113	
			INFN-PISA			161,803		161,803	
			INFN-ROMA1						
			INFN-ROMA1-CMS			2,703		2,703	
			INFN-TORINO						
<b>IT-CMS-federation</b>	<b>850</b>	<b>379,440</b>				<b>235,115</b>		<b>235,115</b>	<b>62%</b>
Italy, INFN LHCb Federation			INFN-BARI				199	199	
			INFN-CATANIA				4	4	
			INFN-FRASCATI						
			INFN-LNL-2				260	260	
			INFN-MILANO				138	138	
			INFN-NAPOLI-ATLAS				1,176	1,176	
			INFN-PISA				1,053	1,053	
			INFN-ROMA1						
			INFN-ROMA1-CMS						
			INFN-TORINO				8	8	
<b>IT-LHCb-federation</b>	<b>350</b>	<b>156,240</b>					<b>2,838</b>	<b>2,838</b>	<b>2%</b>
Japan, ICEPP, Tokyo			TOKYO-LCG2		137,999			137,999	
<b>JP-Tokyo-ATLAS-T2</b>	<b>1,000</b>	<b>446,400</b>			<b>137,999</b>			<b>137,999</b>	<b>31%</b>
Republic of Korea, KISTI, Daejeon			KR-KISTI-GCRT-01	617				617	
<b>KR-KISTI-T2</b>	<b>100</b>	<b>44,640</b>		<b>617</b>				<b>617</b>	<b>1%</b>
Norway, UNINETT SIGMA Tier-2			NO-NORGRID-T2						
<b>NO-NORDGRID-T2</b>	<b>110</b>	<b>49,104</b>							
Pakistan, Pakistan Tier-2 Federation			NCP-LCG2		90	44	7	141	
			PAKGRID-LCG2		6	30	7	43	
<b>PK-CMS-T2</b>	<b>795</b>	<b>354,888</b>			<b>96</b>	<b>74</b>	<b>14</b>	<b>184</b>	<b>0%</b>
Poland, Polish Tier-2 Federation			CYFRONET-IA64						
			CYFRONET-LCG2	191,698	68,792		323	260,813	
			PSNC	283,004	23,506	49	103	306,662	
			WARSAW-EGEE			11,769		11,769	
<b>PL-TIER2-WLCG</b>	<b>1,250</b>	<b>558,000</b>		<b>474,702</b>	<b>92,298</b>	<b>11,818</b>	<b>426</b>	<b>579,244</b>	<b>104%</b>

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Portugal, LIP Tier-2 Federation			LIP-Coimbra		945	12,373		13,318	
			LIP-Lisbon		1,484	9,046		10,530	
<b>PT-LIP-LCG-Tier2</b>	<b>750</b>	<b>334,800</b>			<b>2,429</b>	<b>21,419</b>		<b>23,848</b>	<b>7%</b>
Romania, Romanian Tier-2 Federation			NIHAM	532,135				532,135	
			RO-02-NIPNE		17,809			17,809	
			RO-07-NIPNE	1	55,676		52	55,729	
			RO-11-NIPNE				602	602	
<b>RO-LCG</b>	<b>1,300</b>	<b>580,320</b>		<b>532,136</b>	<b>73,485</b>		<b>654</b>	<b>606,275</b>	<b>104%</b>
Russian Fed., Russian Data-Intensive GRID			RU-Protvino-IHEP	10,082	119	4,359	290	14,850	
			ITEP	66,799	13,209	29,361	21,538	130,907	
			JINR-LCG2	85,428	105,032	116,901	19,725	327,086	
			RRC-KI	208,713	5,109	227	1,472	215,521	
			ru-Moscow-SINP-LCG2	71,268	7,373	18,581	51	97,273	
			ru-Moscow-FIAN-LCG2						
			ru-Moscow-MEPHI-LCG2		687			687	
			RU-SPbSU	8	365			373	
			RU-Phys-SPbSU						
			ru-PNPI	103,162	28,089	11,341	13,589	156,181	
			Ru-Troitsk-INR-LCG2	944,955		93	133	945,181	
<b>RU-RDIG</b>	<b>3,000</b>	<b>1,339,200</b>		<b>1,490,415</b>	<b>159,983</b>	<b>180,863</b>	<b>56,798</b>	<b>1,888,059</b>	
Slovenia, SiGNET			SiGNET		27,537			27,537	
<b>SI-SiGNET</b>	<b>300</b>	<b>133,920</b>			<b>27,537</b>			<b>27,537</b>	<b>21%</b>
Spain, ATLAS Federation			lfae		64,734			64,734	
			IFIC-LCG2		34,702			34,702	
			UAM-LCG2		737			737	
<b>ES-ATLAS-T2</b>	<b>875</b>	<b>390,600</b>			<b>100,173</b>			<b>100,173</b>	<b>26%</b>
Spain, CMS Federation			CIEMAT-LCG2			136,164		136,164	
			IFCA-LCG2			73,395		73,395	
<b>ES-CMS-T2</b>	<b>760</b>	<b>339,264</b>			<b>209,559</b>			<b>209,559</b>	<b>62%</b>
Spain, LHCb Federation			UB-LCG2				671	671	
			USC-LCG2				41,122	41,122	
<b>ES-LHCb-T2</b>	<b>296</b>	<b>132,134</b>					<b>41,793</b>	<b>41,793</b>	<b>32%</b>
Sweden, SNIC Tier-2			SE-SNIC-T2						
<b>SE-SNIC-T2</b>	<b>981</b>	<b>437,918</b>							
Switzerland, CHIPP			CSCS-LCG2		71,316	40,100	15,681	127,097	
<b>CH-CHIPP-CSCS</b>	<b>680</b>	<b>303,552</b>			<b>71,316</b>	<b>40,100</b>	<b>15,681</b>	<b>127,097</b>	<b>42%</b>

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Taipei, Taiwan Analysis Facility Federation			TW-FTT		95,960	38,873		134,833	
<b>TW-FTT-T2</b>	<b>400</b>	<b>178,560</b>			<b>95,960</b>	<b>38,873</b>		<b>134,833</b>	<b>76%</b>
Turkey, Turkish Tier-2 Federation			TR-03-METU		4,569	480		5,049	
			TR-10-ULAKBIM		6,445	345		6,790	
<b>TR-Tier2-federation</b>	<b>850</b>	<b>379,440</b>			<b>11,014</b>	<b>825</b>		<b>11,839</b>	<b>3%</b>
UK, London Tier 2			UKI-LT2-Brunel	2	50,109	43,182	20,866	114,159	
			UKI-LT2-IC-HEP	2	59,199	72,052	2,436	133,689	
			UKI-LT2-IC-LeSC	1	303	30,617	16	30,937	
			UKI-LT2-QMUL		58,165	105	15,948	74,218	
			UKI-LT2-RHUL		145,879	60,082	33,081	239,042	
			UKI-LT2-UCL-CENTRAL						
			UKI-LT2-UCL-HEP		3,967			3,967	
<b>UK-London-Tier2</b>	<b>1,017</b>	<b>453,989</b>		<b>5</b>	<b>317,622</b>	<b>206,038</b>	<b>72,347</b>	<b>596,012</b>	<b>131%</b>
UK, NorthGrid			UKI-NORTHGRID-LANCS-HEP		30,854	78	12,350	43,282	
			UKI-NORTHGRID-LIV-HEP	1	128,458	60	36,778	165,297	
			UKI-NORTHGRID-MAN-HEP		168,797	283	34,505	203,585	
			UKI-NORTHGRID-SHEF-HEP		57,212		10,585	67,797	
<b>UK-NorthGrid</b>	<b>725</b>	<b>323,640</b>		<b>1</b>	<b>385,321</b>	<b>421</b>	<b>94,218</b>	<b>479,961</b>	<b>148%</b>
UK, ScotGrid			UKI-SCOTGRID-DURHAM		3,233	11	1,392	4,636	
			ScotGRID-Edinburgh						
			UKI-SCOTGRID-ECDF		91,334		646	91,980	
			UKI-SCOTGRID-GLASGOW		107,390	119	4,239	111,748	
<b>UK-ScotGrid</b>	<b>925</b>	<b>412,920</b>			<b>201,957</b>	<b>130</b>	<b>6,277</b>	<b>208,364</b>	<b>50%</b>
UK, SouthGrid			EFDA-JET						
			UKI-SOUTHGRID-BHAM-HEP	2	1,443	135	8,767	10,347	
			UKI-SOUTHGRID-BRIS-HEP		334	13,896	3,972	18,202	
			UKI-SOUTHGRID-CAM-HEP		15,594	160	24,945	40,699	
			UKI-SOUTHGRID-OX-HEP		12,864	291	24,801	37,956	
			UKI-SOUTHGRID-RALPP	1	74,882	46,031	2,149	123,063	
<b>UK-SouthGrid</b>	<b>959</b>	<b>428,098</b>		<b>3</b>	<b>105,117</b>	<b>60,513</b>	<b>64,634</b>	<b>230,267</b>	<b>54%</b>
Ukraine, Ukrainian Tier-2 Federation			Information to become available in 2008						
<b>UA-</b>	<b>1,166</b>	<b>520,502</b>							
USA, Great Lakes ATLAS T2			AGLT2		509,604			509,604	
<b>US-AGLT2</b>	<b>965</b>	<b>430,776</b>			<b>509,604</b>			<b>509,604</b>	<b>118%</b>
USA, Northeast ATLAS T2			BU_ATLAS_Tier2		154,291			154,291	
<b>US-NET2</b>	<b>665</b>	<b>296,856</b>			<b>154,291</b>			<b>154,291</b>	<b>52%</b>

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USA, Midwest ATLAS T2			MWT2_UC		392,119			392,119	
			MWT2_IU		244,922			244,922	
<b>US-MWT2</b>	<b>1,112</b>	<b>496,397</b>			<b>637,041</b>			<b>637,041</b>	<b>128%</b>
USA, Southwest ATLAS T2			OU_OCHEP_SWT2		169,993			169,993	
			SWT2-CPB		6,264			6,264	
			UTA_SWT2		13,436			13,436	
<b>US-SWT2</b>	<b>1,386</b>	<b>618,710</b>			<b>189,693</b>			<b>189,693</b>	<b>31%</b>
USA, SLAC ATLAS T2			WT2		206,510			206,510	
<b>US-WT2</b>	<b>820</b>	<b>366,048</b>			<b>206,510</b>			<b>206,510</b>	<b>56%</b>
USA, Caltech CMS T2			CIT_CMS_T2			211,999		211,999	
<b>T2_US_Caltech</b>	<b>1,000</b>	<b>446,400</b>				<b>211,999</b>		<b>211,999</b>	<b>47%</b>
USA, Florida CMS T2			Uflorida-PG			306		306	
			Uflorida-IHEPA			550		550	
			Uflorida-HPC		2,901	111,335		114,236	
<b>T2_US_Florida</b>	<b>1,000</b>	<b>446,400</b>			<b>2,901</b>	<b>112,191</b>		<b>115,092</b>	<b>26%</b>
USA, MIT CMS T2			MIT_CMS		1,133	10,070		11,203	
<b>T2_US_MIT</b>	<b>1,000</b>	<b>446,400</b>			<b>1,133</b>	<b>10,070</b>		<b>11,203</b>	<b>3%</b>
USA, Nebraska CMS T2			Nebraska		4	60,799		60,803	
<b>T2_US_Nebraska</b>	<b>1,000</b>	<b>446,400</b>			<b>4</b>	<b>60,799</b>		<b>60,803</b>	<b>14%</b>
USA, Purdue CMS T2			Purdue-Lear						
			Purdue-RCAC			14,528		14,528	
			Purdue-Steele			405		405	
<b>T2_US_Purdue</b>	<b>1,000</b>	<b>446,400</b>				<b>14,933</b>		<b>14,933</b>	<b>3%</b>
USA, UC San Diego CMS T2			UCSDT2			76,857		76,857	
<b>T2_US_UCSD</b>	<b>1,000</b>	<b>446,400</b>				<b>76,857</b>		<b>76,857</b>	<b>17%</b>
USA, U. Wisconsin CMS T2			GLOW		1	674,548		674,549	
<b>T2_US_Wisconsin</b>	<b>1,000</b>	<b>446,400</b>			<b>1</b>	<b>674,548</b>		<b>674,549</b>	<b>151%</b>
<b>Grand Total</b>	<b>46,208</b>	<b>20,627,252</b>		<b>3,583,590</b>	<b>4,537,040</b>	<b>2,704,958</b>	<b>512,720</b>	<b>11,338,308</b>	<b>55%</b>