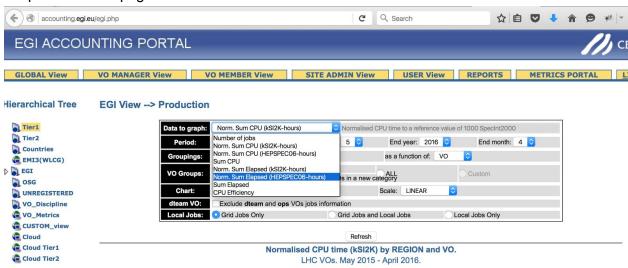Accounting Overview:
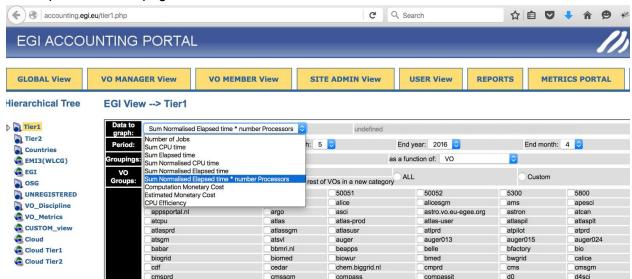
From main page:

Sum Normalized Elapsed time * Number Processor: why in Tier1/s but not in main?

Snapshot of main page

Vs snapshot of Tier1 page
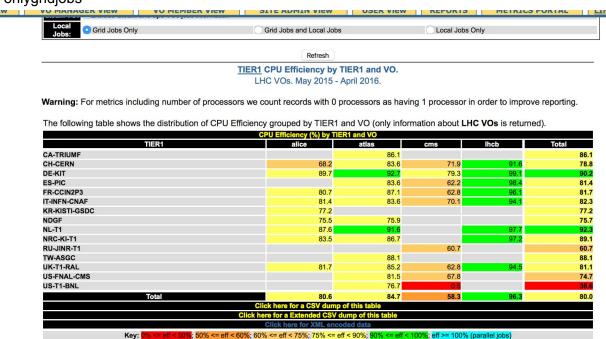

why Sum Normalised Elapsed time * number Processors is available only in that view?

CPU Efficiency (CPU/WALL*processors) in Tier1/2 view

It seems OK in Tier1 view
http://accounting.egi.eu/tier1.php?query=cpueff&startYear=2015&startMonth=5&endYear=2016&endMonth=4&yrange=TIER1&xrange=VO&groupVO=lhc&chart=GRBAR&scale=LIN&localJobs=onlygridjobs

Local Jobs:	◉ Grid Jobs Only	○ Grid Jobs and Local Jobs	○ Local Jobs Only

Refresh

TIER1 CPU Efficiency by TIER1 and VO.
LHC VOs. May 2015 - April 2016.

Warning: For metrics including number of processors we count records with 0 processors as having 1 processor in order to improve reporting.

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

CPU Efficiency (%) by TIER1 and VO					
TIER1	alice	atlas	cms	lhcb	Total
CA-TRIUMF		86.1			86.1
CH-CERN	68.2	83.6	71.9	91.6	78.8
DE-KIT	89.7	92.7	79.3	99.1	90.2
ES-PIC		83.6	62.2	98.4	81.4
FR-CCIN2P3	80.7	87.1	62.8	96.1	81.7
IT-INFN-CNAF	81.4	83.6	70.1	94.1	82.3
KR-KISTI-GSDC	77.2				77.2
NDGF	75.5	75.9			75.7
NL-T1	87.6	91.6		97.7	92.3
NRC-KI-T1	83.5	86.7		97.2	89.1
RU-JINR-T1			60.7		60.7
TW-ASGC		88.1			88.1
UK-T1-RAL	81.7	85.2	62.8	94.5	81.1
US-FNAL-CMS		81.5	67.8		74.7
US-T1-BNL		76.7	0.5		38.6
Total	80.6	84.7	58.3	96.3	80.0
Click here for a CSV dump of this table					
Click here for a Extended CSV dump of this table					
Click here for XML encoded data					

Key: 0% <= eff < 50%; 50% <= eff < 60%; 60% <= eff < 75%; 75% <= eff < 90%; 90% <= eff < 100%; eff >= 100% (parallel jobs)
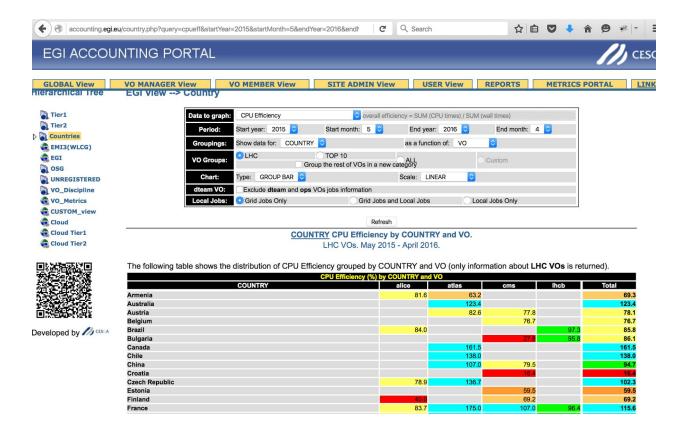
The information in the previous table is also shown in the following graph.

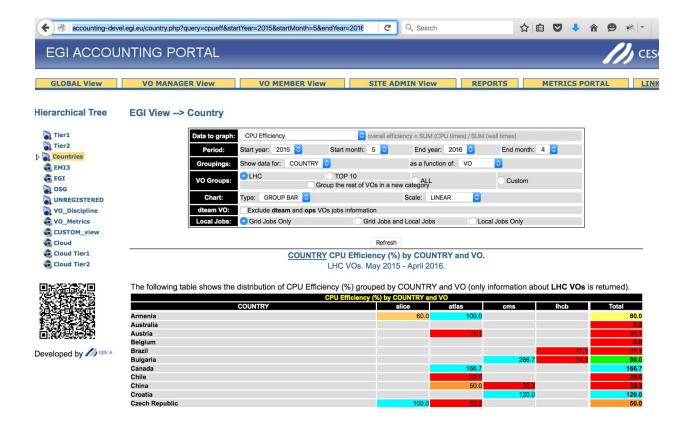# CPU/WALL >>100% in country view

But it is NOT ok in Country view.

http://accounting.egi.eu/country.php?query=cpueff&startYear=2015&startMonth=5&endYear=2016&endMonth=4&yRange=COUNTRY&xRange=VO&voGroup=lhc&chart=GRBAR&scale=LIN&localJobs=onlygridjobs

EGI ACCOUNTING PORTAL

CES

| GLOBAL View | VO MANAGER View | VO MEMBER View | SITE ADMIN View | USER View | REPORTS | METRICS PORTAL | LINK |

Hierarchical Tree **EGI View --> Country**

- Tier1
- Tier2
- ▷ Countries
- EMI3(WLCG)
- EGI
- OSG
- UNREGISTERED
- VO_Discipline
- VO_Metrics
- CUSTOM_view
- Cloud
- Cloud Tier1
- Cloud Tier2

Developed by CESCA

Data to graph:	CPU Efficiency ⌄ overall efficiency = SUM (CPU times) / SUM (wall times)
Period:	Start year: 2015 ⌄ Start month: 5 ⌄ End year: 2016 ⌄ End month: 4 ⌄
Groupings:	Show data for: COUNTRY ⌄ as a function of: VO ⌄
VO Groups:	● LHC ○ TOP 10 ○ ALL ○ Custom ☐ Group the rest of VOs in a new category
Chart:	Type: GROUP BAR ⌄ Scale: LINEAR ⌄
dteam VO:	☐ Exclude **dteam** and **ops** VOs jobs information
Local Jobs:	● Grid Jobs Only ○ Grid Jobs and Local Jobs ○ Local Jobs Only

Refresh

COUNTRY CPU Efficiency by COUNTRY and VO.
LHC VOs. May 2015 - April 2016.

The following table shows the distribution of CPU Efficiency grouped by COUNTRY and VO (only information about **LHC VOs** is returned).

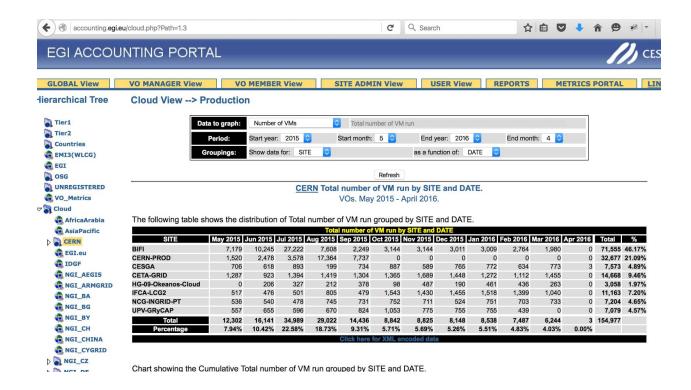| CPU Efficiency (%) by COUNTRY and VO					
COUNTRY	alice	atlas	cms	lhcb	Total
Armenia	81.6	63.2			69.3
Australia		123.4			123.4
Austria		82.6	77.8		78.1
Belgium			76.7		76.7
Brazil	84.0			97.3	85.8
Bulgaria			27.8	95.8	86.1
Canada		161.5			161.5
Chile		138.0			138.0
China		107.0	79.5		94.7
Croatia			16.4		16.4
Czech Republic	78.9	136.7			102.3
Estonia			59.5		59.5
Finland	40.0		69.2		69.2
France	83.7	175.0	107.0	96.4	115.6

And not even in the devel portal.

http://accounting-devel.egi.eu/country.php?query=cpueff&startYear=2015&startMonth=5&endYear=2016&endMonth=4&yrange=COUNTRY&xrange=VO&groupVO=lhc&chart=GRBAR&scale=LIN&localJobs=onlygridjobs
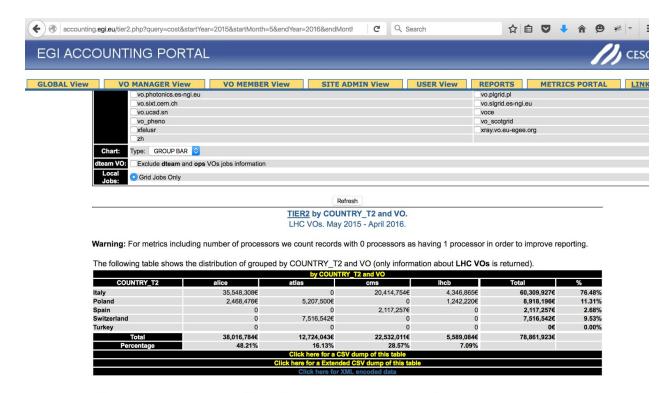
EGI ACCOUNTING PORTAL

CES

| GLOBAL View | VO MANAGER View | VO MEMBER View | SITE ADMIN View | REPORTS | METRICS PORTAL | LINK |

Hierarchical Tree

Tier1
Tier2
▷ Countries
EMI3
EGI
OSG
UNREGISTERED
VO_Discipline
VO_Metrics
CUSTOM_view
Cloud
Cloud Tier1
Cloud Tier2

Developed by CESCA

EGI View --> Country

Data to graph:	CPU Efficiency	overall efficiency = SUM (CPU times) / SUM (wall times)
Period:	Start year: 2015	Start month: 5	End year: 2016	End month: 4
Groupings:	Show data for: COUNTRY	as a function of: VO
VO Groups:	LHC	TOP 10	ALL	Custom
		Group the rest of VOs in a new category		
Chart:	Type: GROUP BAR	Scale: LINEAR	
dteam VO:	Exclude dteam and ops VOs jobs information		
Local Jobs:	Grid Jobs Only	Grid Jobs and Local Jobs	Local Jobs Only	

Refresh

COUNTRY CPU Efficiency (%) by COUNTRY and VO.
LHC VOs. May 2015 - April 2016.

The following table shows the distribution of CPU Efficiency (%) grouped by COUNTRY and VO (only information about **LHC VOs** is returned).

CPU Efficiency (%) by COUNTRY and VO					
COUNTRY	alice	atlas	cms	lhcb	Total
Armenia	60.0	100.0			80.0
Australia					0.0
Austria		11.1			11.1
Belgium					0.0
Brazil				11.1	11.1
Bulgaria			266.7	14.3	90.0
Canada		166.7			166.7
Chile		20.0			20.0
China		50.0	22.2		35.3
Croatia			120.0		120.0
Czech Republic	100.0	33.3			50.0

Cloud view: what is this?

http://accounting.egi.eu/cloud.php?Path=1.3

EGI ACCOUNTING PORTAL

CES

| GLOBAL View | VO MANAGER View | VO MEMBER View | SITE ADMIN View | USER View | REPORTS | METRICS PORTAL | LIN |

Hierarchical Tree

- Tier1
- Tier2
- Countries
- EMI3(WLCG)
- EGI
- OSG
- UNREGISTERED
- VO_Metrics
- ▽ Cloud
  - AfricaArabia
  - AsiaPacific
  - ▷ CERN
  - EGI.eu
  - IDGF
  - NGI_AEGIS
  - NGI_ARMGRID
  - NGI_BA
  - NGI_BG
  - NGI_BY
  - NGI_CH
  - NGI_CHINA
  - NGI_CYGRID
  - ▷ NGI_CZ

Cloud View --> Production

Data to graph:	Number of VMs	Total number of VM run
Period:	Start year: 2015	Start month: 5	End year: 2016	End month: 4
Groupings:	Show data for: SITE	as a function of: DATE

Refresh

CERN Total number of VM run by SITE and DATE.
VOs. May 2015 - April 2016.

The following table shows the distribution of Total number of VM run grouped by SITE and DATE.

SITE	May 2015	Jun 2015	Jul 2015	Aug 2015	Sep 2015	Oct 2015	Nov 2015	Dec 2015	Jan 2016	Feb 2016	Mar 2016	Apr 2016	Total	%
BIFI	7,179	10,245	27,222	7,608	2,249	3,144	3,144	3,011	3,009	2,764	1,980	0	71,555	46.17%
CERN-PROD	1,520	2,478	3,578	17,364	7,737	0	0	0	0	0	0	0	32,677	21.09%
CESGA	706	618	893	199	734	887	589	765	772	634	773	3	7,573	4.89%
CETA-GRID	1,287	923	1,394	1,419	1,304	1,365	1,689	1,448	1,272	1,112	1,455	0	14,668	9.46%
HG-09-Okeanos-Cloud	0	206	327	212	378	98	487	190	461	436	263	0	3,058	1.97%
IFCA-LCG2	517	476	501	805	479	1,543	1,430	1,455	1,518	1,399	1,040	0	11,163	7.20%
NCG-INGRID-PT	536	540	478	745	731	752	711	524	751	703	733	0	7,204	4.65%
UPV-GRyCAP	557	655	596	670	824	1,053	775	755	755	439	0	0	7,079	4.57%
Total	12,302	16,141	34,989	29,022	14,436	8,842	8,825	8,148	8,538	7,487	6,244	3	154,977	
Percentage	7.94%	10.42%	22.58%	18.73%	9.31%	5.71%	5.69%	5.26%	5.51%	4.83%	4.03%	0.00%		

Click here for XML encoded data

Chart showing the Cumulative Total number of VM run grouped by SITE and DATE.

Computation Monetary cost: what is this?

http://accounting.egi.eu/tier2.php?query=cost&startYear=2015&startMonth=5&endYear=2016&endMonth=4&yrange=COUNTRY_T2&xrange=VO&groupVO=lhc&chart=GRBAR&scale=LIN&localJobs=onlygridjobs

EGI ACCOUNTING PORTAL

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| GLOBAL View | VO MANAGER View | VO MEMBER View | SITE ADMIN View | USER View | REPORTS | METRICS PORTAL | LINK |

☐ vo.photonics.es-ngi.eu
☐ vo.sixt.cern.ch
☐ vo.ucad.sn
☐ vo_pheno
☐ xfelusr
☐ zh

☐ vo.plgrid.pl
☐ vo.slgrid.es-ngi.eu
☐ voce
☐ vo_scotgrid
☐ xray.vo.eu-egee.org

Chart: Type: GROUP BAR ▼

dteam VO: ☐ Exclude **dteam** and **ops** VOs jobs information

Local Jobs: ◉ Grid Jobs Only

[Refresh]

TIER2 by COUNTRY_T2 and VO.
LHC VOs. May 2015 - April 2016.

Warning: For metrics including number of processors we count records with 0 processors as having 1 processor in order to improve reporting.

The following table shows the distribution of grouped by COUNTRY_T2 and VO (only information about **LHC VOs** is returned).

COUNTRY_T2	alice	atlas	cms	lhcb	Total	%
Italy	35,548,308€	0	20,414,754€	4,346,865€	60,309,927€	76.48%
Poland	2,468,476€	5,207,500€	0	1,242,220€	8,918,196€	11.31%
Spain	0	0	2,117,257€	0	2,117,257€	2.68%
Switzerland	0	7,516,542€	0	0	7,516,542€	9.53%
Turkey	0	0	0	0	0€	0.00%
Total	38,016,784€	12,724,043€	22,532,011€	5,589,084€	78,861,923€	
Percentage	48.21%	16.13%	28.57%	7.09%		

Click here for a CSV dump of this table
Click here for a Extended CSV dump of this table
Click here for XML encoded data

Chart showing the Cumulative grouped by COUNTRY_T2 and VO (only information about **LHC VOs** is returned).

One other small point:

Why not having Elapsed time * Num Processor?

why not having also elapsed time * number of processors?
—> this would be actually the easiest more basic info that also experiment can crosscheck. The experiments don't know the normalisation applied by the site but they know how much time *processors they got from the site.
In the link here one example, TRIUMF.

http://accounting.egi.eu/tier1.php?Path=1.2&query=sum_normelap_nprocessors&startYear=2015&startMonth=5&endYear=2016&endMonth=4&yrange=SITE&xrange=DATE&groupVO=lhc&chart=GRBAR&scale=LIN&localJobs=onlygridjobs

...

…

In general on the portal:
Would be nice if from an accounting portal we have all and only the useful and validated information.
All the rest should be hidden/removed.
We also need to agree on which are the info that we really need.

General view on accounting for memory/cores

As agreed at the WLCG management board few months ago,
ATLAS is requesting the sites to provide 2GB physical memory per core.
ATLAS is also kindly requesting to some sites (the ones that can) to provide the possibility to run a fraction of the ATLAS jobs on high memory (>=4GB memory per core) resources.

ATLAS is going to provide the memory requirements for all the jobs to allow the site to maximize the resources usage.
ATLAS suggest that we keep accounting as simple as possible.

Minor note
If the goodwilling sites providing HighMemory slots jobs need to improve their accounting for these slots and would need to advertise the cores "not fully used" we would need to know how they do this to make sure that our workload management system broker jobs accordingly.

Opportunistic resources:

•Please, provide feedback on how you would like opportunistic resources accounting to be performed and whether you consider this could be done the through central accounting portal
It depends on the opportunistic resources.
we believe we cannot ask places like HPC/CloudProviders to publish into the accounting portal.
What we do have is our JobDashboard, and there for sure we want to have the overview.
If we want to use the accounting portal as the "WLCG overview", then maybe we should ask at least the possibility to inject data a posteriori, in this case we could (experiments or opportunistic resource provider) inject "if needed".

Space accounting

•Please, provide some details on how you currently perform space accounting
•Whether you have any needs from WLCG for this
•How you envisage to do this in a SRM-less world
ATLAS do direct checks each approx20mins, using gfal clients, on the space tokens the sites allocate to ATLAS.
ATLAS do have a plan for the SRMless world: DDM is proposing a structure (extension of what we had few years ago for gridftp only sites), and this could be then fetched and collected as today we collect the info from each storage. This is also discussed with CMS

REBUS

•Please, explain what REBUS functionality is used and whether any of the published data there is useful, otherwise, please describe which information or functionality is missing
•Please, state whether information about installed/available capacity is needed
•Available capacity (HW which is actually usable) as opposed to installed capacity (HW which is in place)
•Note that capacity definitions are being discussed!

ATLAS use REBUS as the place where the pledge are collected from the sites. we need it (or similar).

ATLAS use installed/available capacity to have a guess of the core power.

Would be useful to know how much a site can provide to each VO, e.g. a working installed capacity by site. This would most probably need to be extended because as of today this installed capacity per federation is used to match with pledges, while ATLAS would be interested to know how much it is really available, including over-the pledge and opportunistic resources.

Additional note: for accounting numbers for computing a +/- 10% can be considered ok.