

➡ "Minimal" approach

So far as "NGI-CH Operation Manager" I have adopted the strategy of following up and reporting only on issues strictly related to the Swiss Grid operations

I plan to broaden involvement (yet not dramatically)

I invite feedback on what YOU like to hear from me

- minimal
- fair
- more than necessary
- a "lot"

➡ Security

I am aware that all of you are informed of risks/incidents from independent sources

Yet, as "NGI-CH security officer" I am obliged to proactively follow up and report be patient :-)



Topics

- ➡ Multi-core accounting for EGI
- ➡ Argus status in EGI
- ➡ Security (recent and ongoing)

 \Leftrightarrow



Multi-core accounting for EGI

* "Accounting of Multicore jobs requires publishing to the EMI3 APEL database. Almost all EGI sites have now migrated to EMI3 accounting clients. Only a few insignificant stragglers left."

There are several ways of publishing:

The APEL client.

Other ARC CEs use JURA which publishes direct to APEL from each CE so there is no site database. Ncores and ncpus are published.

➡ APEL Client

• APEL parser gathers data on number of cpus and cores from the batch systems (except GE) provided an option is switched on. **parallel=true** (/etc/apel/parser.cfg In the section labelled [batch])

- This option is off by default so multicore sites need reminding to turn it on.
- First priority is to get sites publishing from now.
- If they want to backdate their publishing they will need to re parse their batch logs
- APEL will provide detailed instructions on this

• We had planned to change the default setting to parallel=true but this will only take effect for fresh installations. An update does not overwrite the local config. You would not want it to.

\rightarrow ARC CE

• Out of the box with Jura



Multi-core accounting for EGI

➡ EGI Accounting portal views

• The development portal now has a view including ncores (Processors) and ncpus(Nodes) for those sites which publish them.

- Views include Wallclock and Wallclock*ncores
- Efficiency based on Wallclock*ncores
- Feedback sought on how this data is displayed.
- Once everyone is publishing then this portal view will be complete

Ncores=0 is a recent addition and highlights sites who have not set parallel=true



Multi-core accounting for EGI

CSCS-LCG2 by SubmitHost and NUMBER PROCESSORS.

LHC VOs. February 2014 - January 2015.

The following table shows the distribution of grouped by SubmitHost and NUMBER PROCESSORS (only information about LHC VOs is returned).

by SubmitHost and NUMBER PROCESSORS									
SubmitHost	0	1	8	Total	%				
cream01.lcg.cscs.ch:8443/cream-slurm-atlas	0	227,851,220	0	227,851,220	0.04%				
cream01.lcg.cscs.ch:8443/cream-slurm-atlashimem	0	3,195,280	0	3,195,280	0.00%				
cream01.lcg.cscs.ch:8443/cream-slurm-cms	0	94,265,163,220	0	94,265,163,220	14.56%				
cream01.lcg.cscs.ch:8443/cream-slurm-lcgadmin	0	20,711,600	0	20,711,600	0.00%				
cream01.lcg.cscs.ch:8443/cream-slurm-lhcb	0	36,256,975,960	0	36,256,975,960	5.60%				
cream02.lcg.cscs.ch:8443/cream-slurm-atlas	0	93,659,022,830	0	93,659,022,830	14.47%				
cream02.lcg.cscs.ch:8443/cream-slurm-atlashimem	0	3,235,360	0	3,235,360	0.00%				
cream02.lcg.cscs.ch:8443/cream-slurm-cms	0	71,515,456,990	0	71,515,456,990	11.05%				
cream02.lcg.cscs.ch:8443/cream-slurm-lcgadmin	0	21,012,100	0	21,012,100	0.00%				
cream02.lcg.cscs.ch:8443/cream-slurm-lhcb	0	38,565,709,450	0	38,565,709,450	5.96%				
cream03.lcg.cscs.ch:8443/cream-slurm-atlashimem	0	344,010	0	344,010	0.00%				
cream03.lcg.cscs.ch:8443/cream-slurm-cms	0	69,933,496,500	0	69,933,496,500	10.80%				
cream03.lcg.cscs.ch:8443/cream-slurm-lcgadmin	0	17,225,030	0	17,225,030	0.00%				
cream03.lcg.cscs.ch:8443/cream-slurm-lhcb	0	30,196,707,000	0	30,196,707,000	4.66%				
cream04.lcg.cscs.ch:8443/cream-slurm-atlas	0	37,800	0	37,800	0.00%				
cream04.lcg.cscs.ch:8443/cream-slurm-atlashimem	0	2,501,870	0	2,501,870	0.00%				
cream04.lcg.cscs.ch:8443/cream-slurm-cms	0	18,972,140	0	18,972,140	0.00%				
cream04.lcg.cscs.ch:8443/cream-slurm-lcgadmin	0	15,683,230	0	15,683,230	0.00%				
cream04.lcg.cscs.ch:8443/cream-slurm-lhcb	0	20,070,244,140	0	20,070,244,140	3.10%				
gsiftp://arc01.lcg.cscs.ch:2811/jobs	15,902,857,370	39,168,666,270	0	55,071,523,640	8.51%				
gsiftp://arc02.lcg.cscs.ch:2811/jobs	15,913,841,770	20,668,375,720	100,914,854,180	137,497,071,670	21.24%				
Total	31,816,699,140	514,630,587,720	100,914,854,180	647,362,141,040					
Percentage	4.91%	79.50%	15.59%						
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Click here for a Extended CSV dump of this table									
Click here for XML encoded data									



Multi-core accounting for EGI

UNIBE-ID by SubmitHost and NUMBER PROCESSORS. LHC VOs. February 2014 - January 2015.

The following table shows the distribution of grouped by SubmitHost and NUMBER PROCESSORS (only information about LHC VOs is returned).

by SubmitHost and NUMBER PROCESSORS									
SubmitHost	0	1	8	Total	%				
gsiftp://nordugrid.unibe.ch:2811/jobs	0	26,709,970,205	5,047,383,099	31,757,353,304	100.00%				
Total	0	26,709,970,205	5,047,383,099	31,757,353,304					
Percentage	0.00%	84.11%	15.89%						
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									

UNIBE-LHEP by SubmitHost and NUMBER PROCESSORS.

LHC VOs. February 2014 - January 2015.

The following table shows the distribution of grouped by SubmitHost and NUMBER PROCESSORS (only information about LHC VOs is returned).

by SubmitHost and NUMBER PROCESSORS								
SubmitHost	0	1	8	16	Total	%		
gsiftp://ce01.lhep.unibe.ch:2811/jobs	283	60,157,954,848	18,370,135,775	0	78,528,090,906	61.09%		
gsiftp://ce02.lhep.unibe.ch:2811/jobs	0	31,416,711,160	8,580,246,751	0	39,996,957,911	31.11%		
gsiftp://ce03.lhep.unibe.ch:2811/jobs	924,220,949	0	0	9,104,613,189	10,028,834,138	7.80%		
Total	924,221,232	91,574,666,008	26,950,382,526	9,104,613,189	128,553,882,955			
Percentage	0.72%	71.23%	20.96%	7.08%				
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								



Multi-core accounting for EGI

CSCS-LCG2

http://accounting-devel.egi.eu/show.php?ExecutingSite=CSCS-

 $\underline{\texttt{LCG2\&query=sum_normcpu\&startYear=2014\&startMonth=2\&endYear=2015\&endMonth=1\&yrartMonth=2\&endYear=2015\&endMonth=1&yrartMonth=2\&endYear=2015\&endMonth=1&yrartMonth=2\&endYear=2015\&endMonth=2\&endYear=2015\&endMonth=2\&endYear=2015&endMonth=2&endYear=2015&endMonth=2&endYear=2015&endMonth=2&endYear=2015&endMonth=2&endYear=2015&endMonth=2&endYear=2&$

ange=SubmitHost&xrange=NUMBER

+PROCESSORS&groupVO=lhc&chart=GRBAR&scale=LIN&localJobs=onlygridjobs

UNIBE-ID

http://accounting-devel.egi.eu/show.php?ExecutingSite=UNIBE-

ID&query=sum normcpu&startYear=2014&startMonth=2&endYear=2015&endMonth=1&yran

ge=SubmitHost&xrange=NUMBER

+PROCESSORS&groupVO=lhc&chart=GRBAR&scale=LIN&localJobs=onlygridjobs

UNIBE-LHEP

http://accounting-devel.egi.eu/show.php?ExecutingSite=UNIBE-

LHEP&query=sum_normcpu&startYear=2014&startMonth=2&endYear=2015&endMonth=1&yr ange=SubmitHost&xrange=NUMBER

+PROCESSORS&groupVO=lhc&chart=GRBAR&scale=LIN&localJobs=onlygridjobs



Status of ARGUS in EGI

Workshop:

ARGUS Future & Support, 11 Dec. 204, CERN - <u>http://indico.cern.ch/event/348018/</u>

ARGUS Collaboration: <u>https://twiki.cern.ch/twiki/bin/view/LCG/</u>

Collaborative community efforts:

- INFN supports PAP component

 Could take PDP + PEPd on board if e.g. INDIGO-DataCloud gets approved

 NIKHEF supports C clients
 - Used e.g. by gLExec
 - EGI
 - Release management, staged rollout, deployment campaigns
 - 1st and 2nd level support
 - Scale testing with partner sites
 - MW Readiness Validation activity



Status of ARGUS in EGI

Potential new partners

CESNET

- Testing, maybe development
- **UNICORE**
 - Connection via CANL
- ARC
 - Client needs fixing
- Call for expressions of interest?
- You can make a difference and be recognized for it!"



Security (recent and ongoing)

CVE-2014-6271 (bash code injection)

CVE-2014-9322 (kernel - 18 Dec 2014) Critical Vulnerability, kernel upgrade needed before Christmas Break https://wiki.egi.eu/wiki/EGI_CSIRT: Alerts/Linux-2014-12-17

CVE-2015-0235 (glibc - 17 Jan 2015) <u>https://access.redhat.com/security/cve/CVE-2015-0235</u> https://rhn.redhat.com/errata/RHSA-2015-0092.html

Incident 7782: ddos attack affected EGI services
Incident 7765: security incident at ARNES (Very good response from local Security Team)

Cloud Incident triggered various weak points, EGI-CSIRT needs a Cloud Tech expert with security background (Boris Patrak, CESNET), needs to be formalized. (identify/solve operational problems in Incident Response, e.g. traceability, central control over running vms)

Collaboration EGI-CSIRT/WLCG: Pakiti and MW Readiness WG WLCG wants: Controlled deployment of WLCG middleware across sites. Monitoring of packages installed on sites with Pakiti

Central Suspension: ARGUS