



UNIBE-LHEP site report

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LABORATORIUM FÜR HOCHENERGIEPHYSIK
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HammerCloud Gangarobot

http://dashb-atlas-ssb.cern.ch/dashboard/request.py/siteviewhistorywithstatistics?columnid=562&view=Shifter%20view#time=720&start_date=&end_date=&use_downtimes=false&merge_colors=false&sites=multiple&clouds=ND&site=UNIBE-LHEP,UNIBE-LHEP-UBELIX,UNIBE-LHEP-UBELIX_MCORE,UNIBE-LHEP_CLOUD,UNIBE-LHEP_CLOUD_MCORE,UNIBE-LHEP_MCORE

History Legend

offline brokeroff online NoQueue test

Historic view for "panda_queues_all" from 11:45 01.08.2016 to 11:45 31.08.2016

Show 100 entries

Search:

PANDA queue	SITE Name	TIER	CLOUD	History plot time bin = 60 hours	offline		brokeroff		online		NoQueue		test	
					%	count	%	count	%	count	%	count	%	count
UNIBE-LHEP	UNIBE-LHEP	T2	ND		0	0	0	0	88.82	14	0	0	10.9	11
UNIBE-LHEP-UBELIX	UNIBE-LHEP	T2	ND		0	0	0	0	99.44	4	0	0	0.28	1
UNIBE-LHEP-UBELIX_MCORE	UNIBE-LHEP	T2	ND		0	0	0	0	99.44	4	0	0	0.28	1
UNIBE-LHEP_CLOUD	UNIBE-LHEP	T2	ND		0	0	0	0	99.44	4	0	0	0.28	1
UNIBE-LHEP_CLOUD_MCORE	UNIBE-LHEP	T2	ND		0	0	0	0	99.44	4	0	0	0.28	1
UNIBE-LHEP_MCORE	UNIBE-LHEP	T2	ND		0	0	0	0	88.82	14	0	0	10.9	11

Showing 1 to 6 of 6 entries

First Previous 1 Next Last

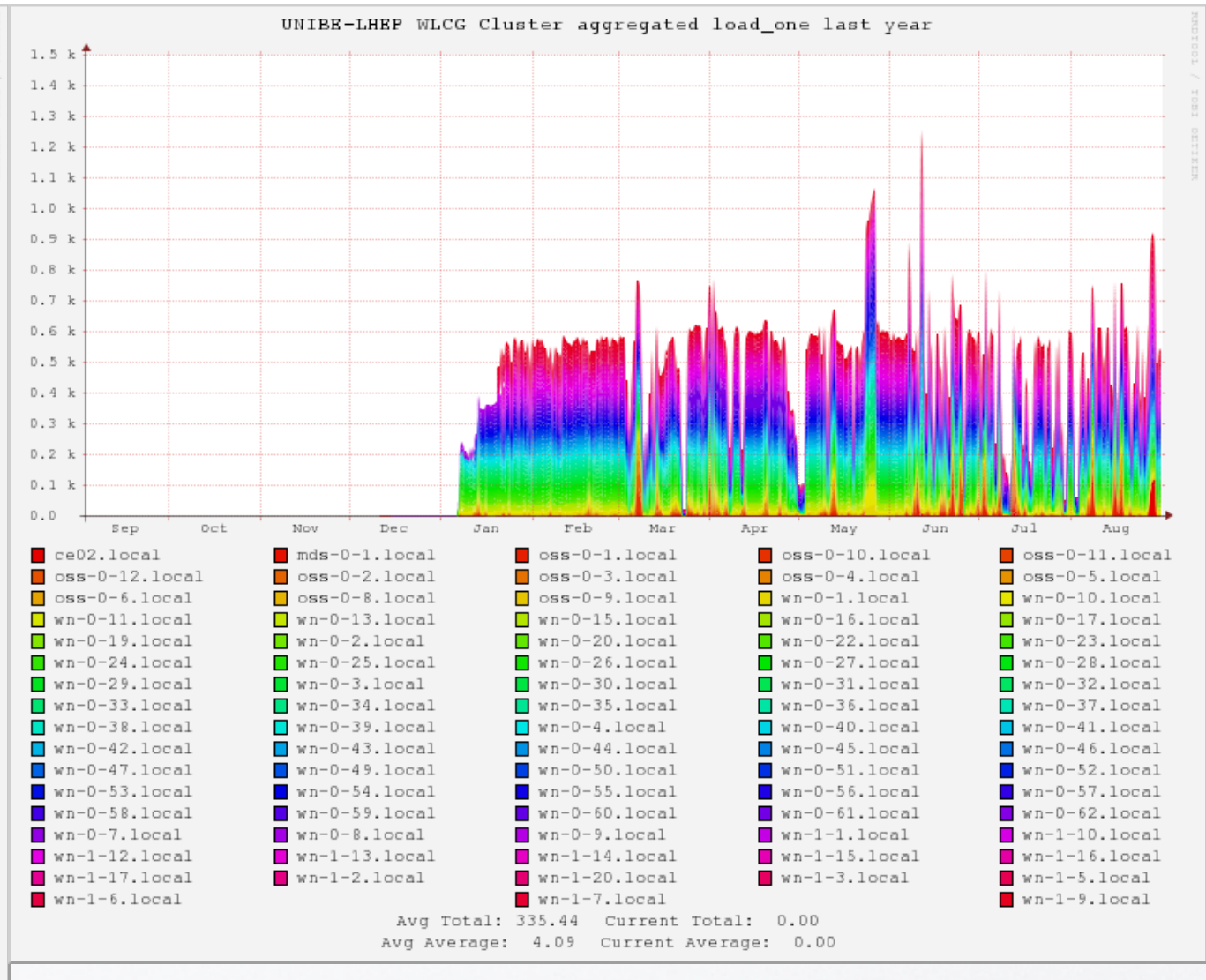
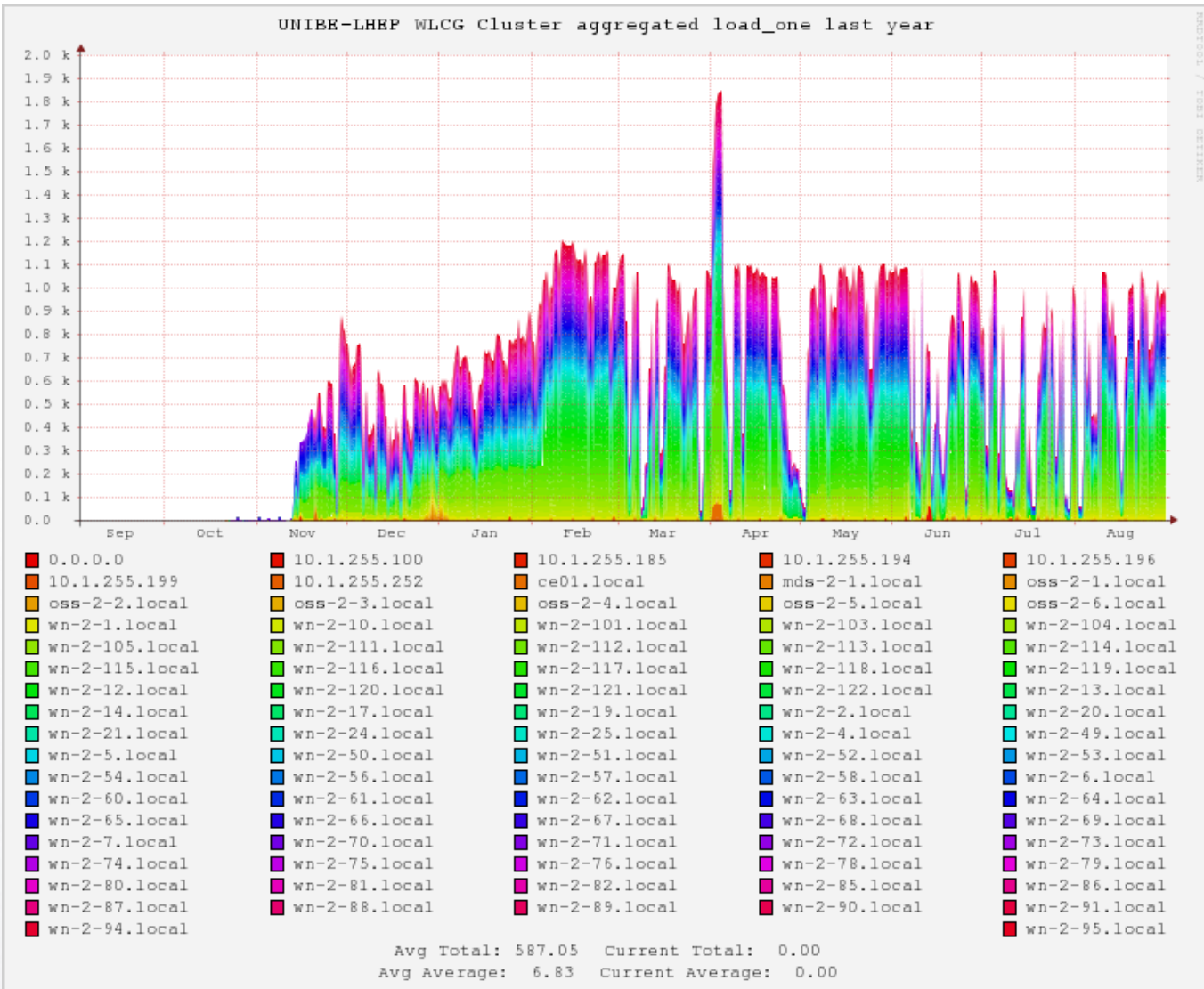


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ce01 11.85-HEP-SPEC06

ce02 8.52-HEP-SPEC06



Nodes: 67
Cores: 1100
Installed Capacity: 13038 HS06

Nodes: 82
Cores: 816
Installed Capacity: 6956





Issues and mitigations

- ➔ Full root partitions on SunBlade nodes due to misuse of /tmp
- ➔ Some crashes of one Lustre MDS



Outstanding work (urgent)

➔ Upgrade DPM head node to SLC6

- > Only SLC5 machine at UNIBE-LHEP
- > Upgrade complicated by migration to puppet as configuration tool (yaim no longer supported)
- > Further complication is the site-bdii service on the same machine
- > Started development on a VM
- > In principle all ingredients are there, but....

➔ Provide the monthly storage dumps to ATLAS

- > Requested for performing consistency checks and automated cleanup of “Dark data”

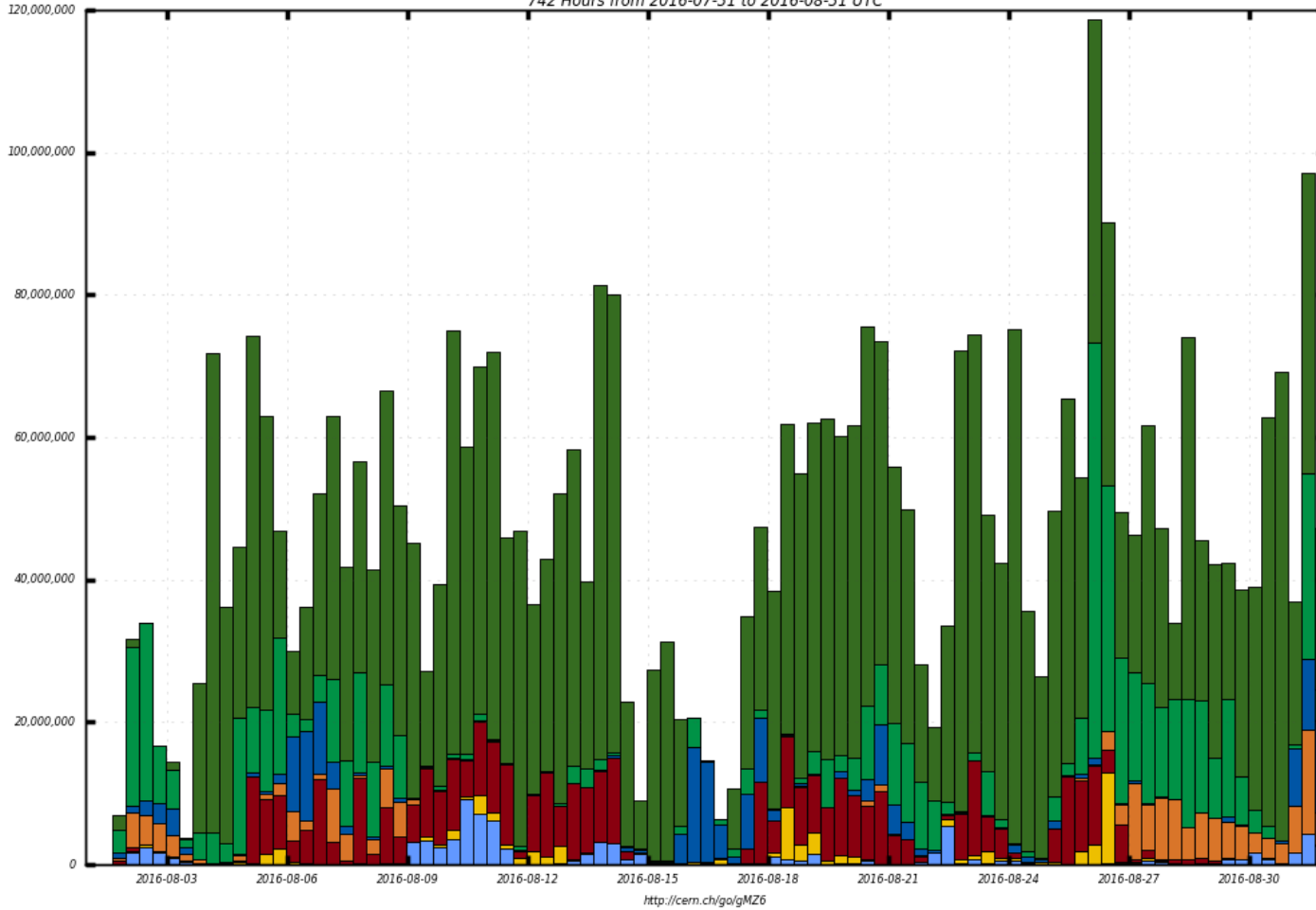


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Wall Clock consumption All Jobs in seconds

742 Hours from 2016-07-31 to 2016-08-31 UTC



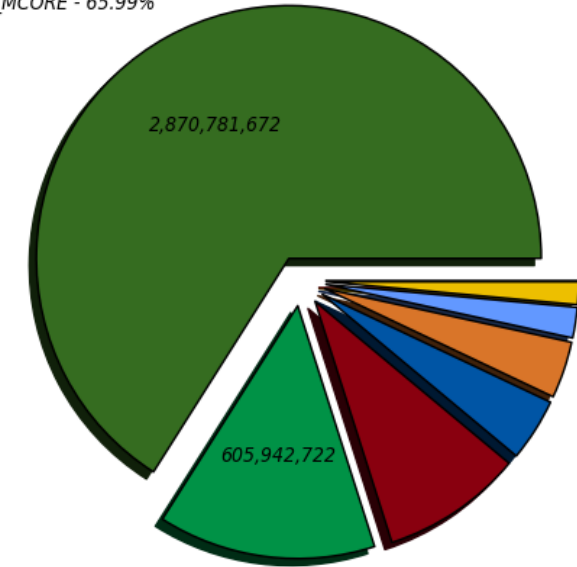
■ UNIBE-LHEP_MCORE
 ■ UNIBE-LHEP_UBELIX
 ■ UNIBE-LHEP
 ■ UNIBE-LHEP_CLOUD
 ■ UNIBE-LHEP_CLOUD_MCORE
■ ANALY_UNIBE-LHEP-UBELIX
■ UNIBE-LHEP_UBELIX_MCORE
■ ANALY_UNIBE-LHEP

Maximum: 118,604,963 , Minimum: 0.00 , Average: 47,282,741 , Current: 47,293,351



Wall Clock consumption All Jobs in seconds (Sum: 4,350,012,221)

UNIBE-LHEP_MCORE - 65.99%

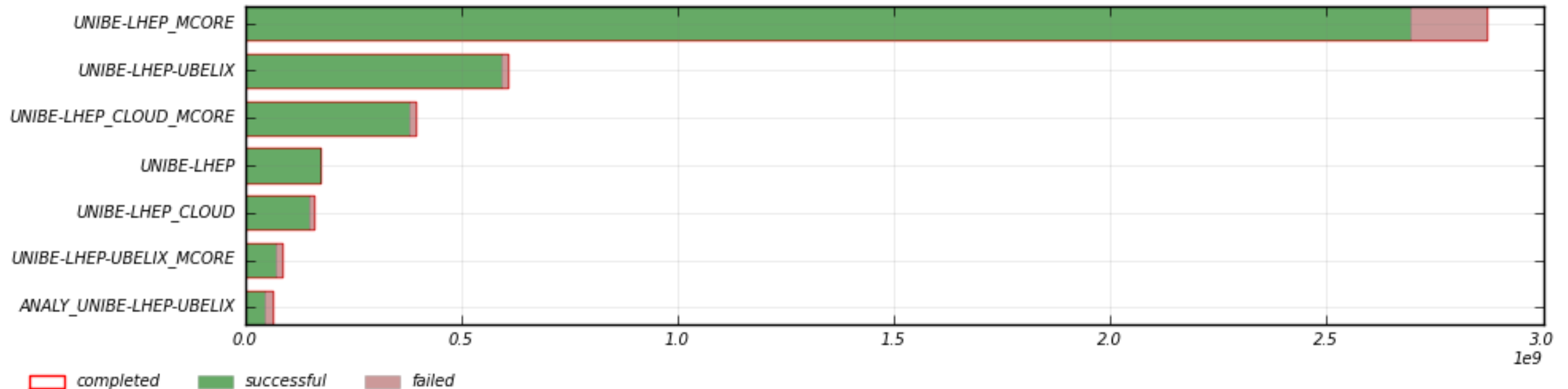


UNIBE-LHEP_UBELIX - 13.93%

<http://cern.ch/go/gMZ6>

■ UNIBE-LHEP_MCORE - 65.99% (2,870,781,672)
 ■ UNIBE-LHEP_UBELIX - 13.93% (605,942,722)
■ UNIBE-LHEP_CLOUD_MCORE - 9.03% (392,743,656)
 ■ UNIBE-LHEP - 4.02% (174,931,101)
■ UNIBE-LHEP_CLOUD - 3.63% (157,797,035)
 ■ UNIBE-LHEP_UBELIX_MCORE - 1.95% (84,802,064)
■ ANALY_UNIBE-LHEP-UBELIX - 1.45% (63,013,971)
■ ANALY_UNIBE-LHEP - 0.00% (0.00)

WallClock consumption in seconds



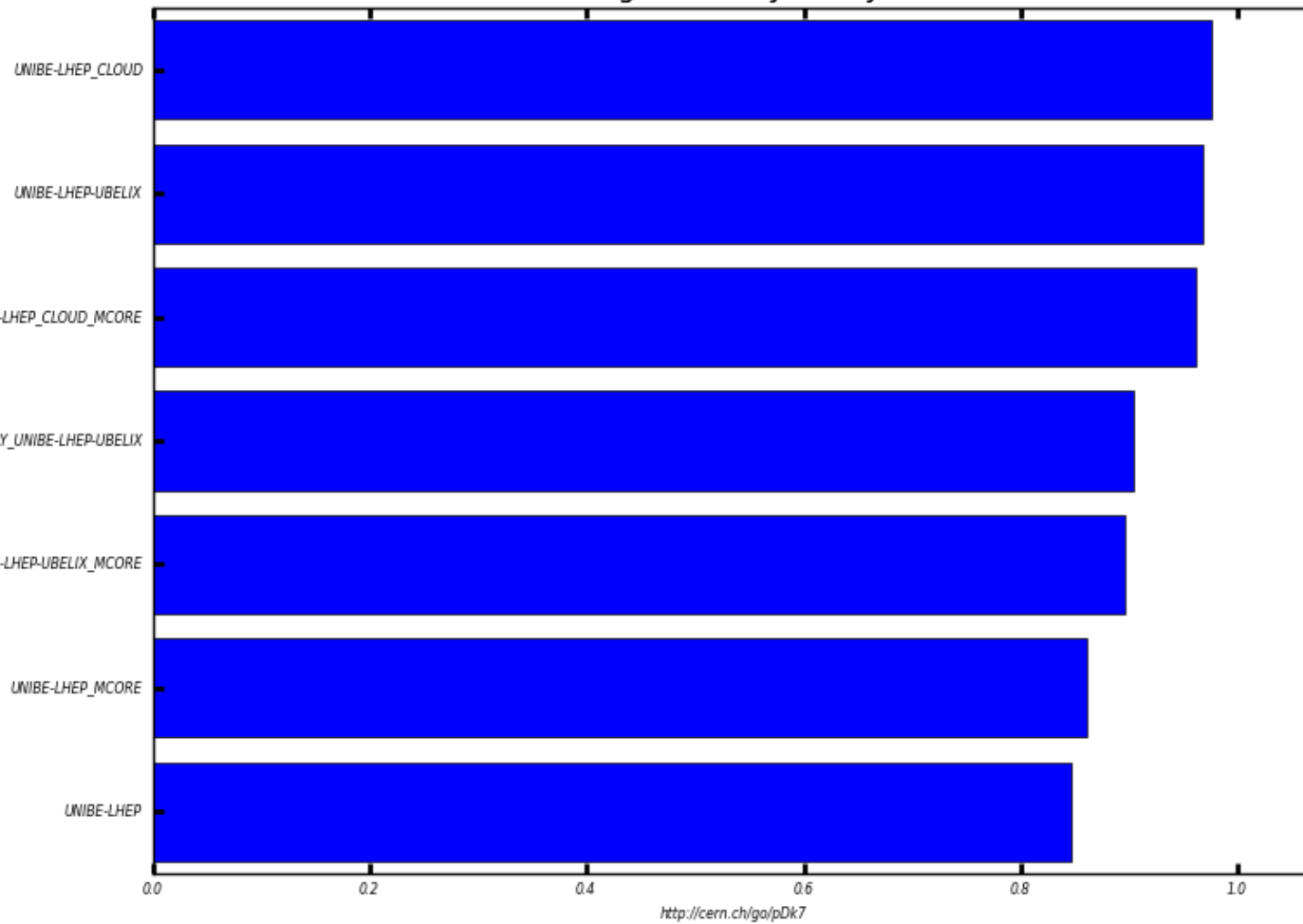
completed
■ successful
■ failed



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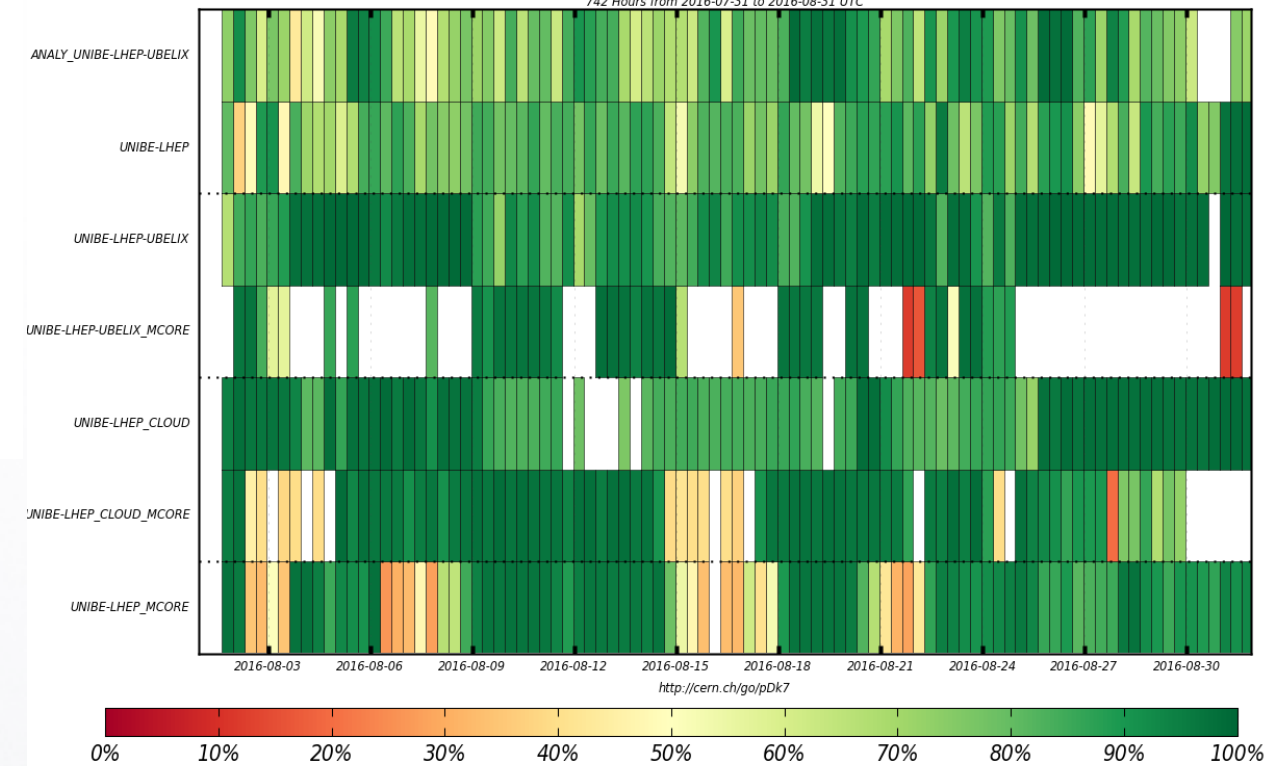


Average Efficiency Good Jobs



Efficiency Good Jobs

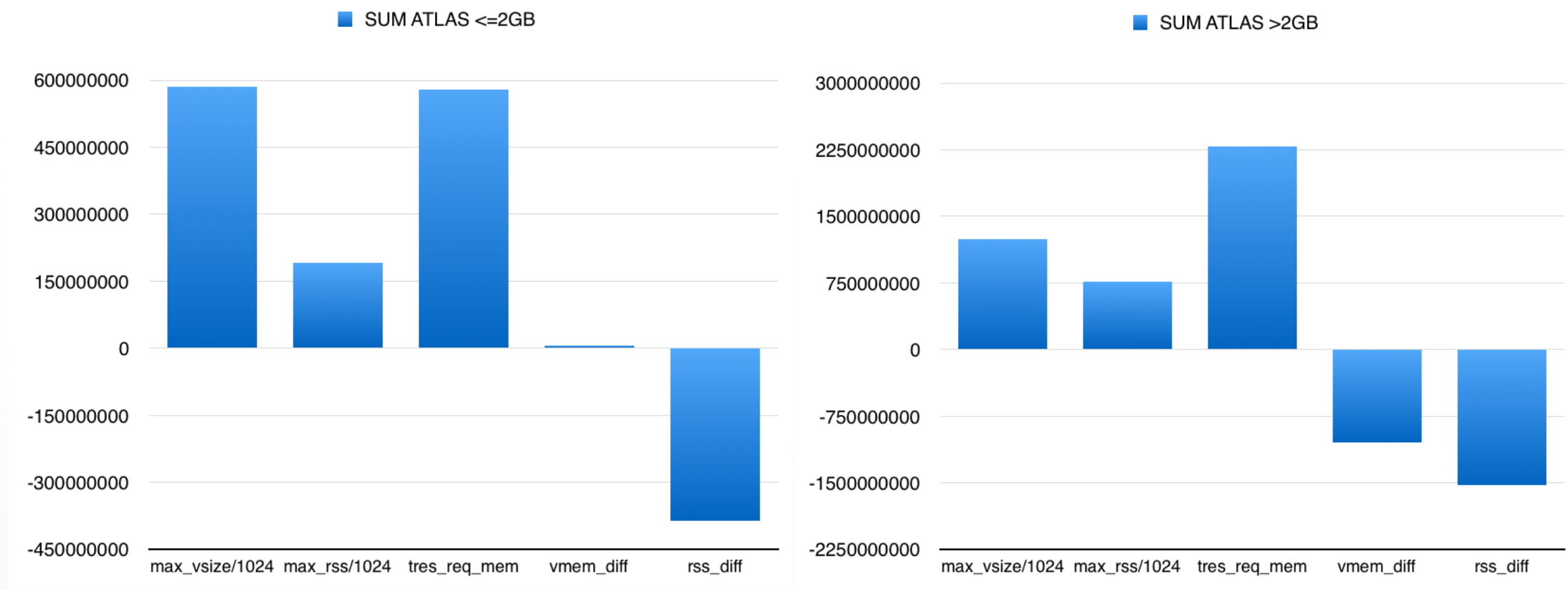
742 Hours from 2016-07-31 to 2016-08-31 UTC



- CSCS-TOD1
- CSCS-LCG2
- UNIBE-LHEP-UBELIX
- UNIBE-LHEP
- UNIBE-LHEP-UBELIX_MCORE
- CSCS-LCG2_MCORE
- ARC_MCORE



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Plans for the future

→ Increase CPU capacity (looking for funds)

➔ **Recuperation of one more batch of old CERN TDAQ/HLT servers**

- > To replace some of the dead old nodes
- > Quite useful to absorb non ATLAS requests (t2k.org, uboone)
- > e.g. can offer 8GB/core slots to uboone “efficiently”

➔ **Preparing for two Power Cuts**

- September
- December

➔ **Cost study: in-house HW vs Cloud**

- > We have preliminary cost study results. Final version will be presented at CHEP
- > Based on performance of the SWITCHengines 300-core cluster during a 6-month unattended operation period
- > Input to future cost-effective deployment model discussion and the LHConCray project