



Operations

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Central service support



- For the record:
 - Keep them running OK, improve the SW
 - See talks by Miguel and Pavlo
 - HW upgrades!



Machine	Machine status			Machine type			
	Online	Uptime	Load	Kernel	Machine model	CPU	CPUs
43. alientest03	✓	36d 4:10	0.03	3.19.0-18...	ProLiant DL380 Gen9	Xeon E5-2687W v3 3.10GHz	40
8. db6c	✓	14d 9:11	4.27	3.19.0-21...	ProLiant DL380 Gen9	Xeon E5-2687W v3 3.10GHz	40
40. pcalimonitor4	✓	258d 21:30	0.96	3.13.0-37...	ProLiant DL380p Gen8	Xeon E5-2690 2.90GHz	32
38. pcalimonitor2	✓	258d 21:29	1.1	3.13.0-37...	ProLiant DL380p Gen8	Xeon E5-2690 2.90GHz	32
37. pcalimonitor	✓	258d 21:30	9.04	3.13.0-37...	ProLiant DL380p Gen8	Xeon E5-2690 v2 3.00GHz	40
27. alienvm1	✓	258d 21:29	1.02	3.13.0-37...	ProLiant DL380p Gen8	Xeon E5-2690 v2 3.00GHz	40
13. db9	✓	258d 21:30	0.08	3.13.0-37...	ProLiant DL380p Gen8	Xeon E5-2690 2.90GHz	32
11. db7	✓	258d 21:28	1.09	3.13.0-37...	ProLiant DL380p Gen8	Xeon E5-2690 2.90GHz	32
36. pcaliweb02	✓	209d 9:29	0.09	3.13.0-40...	ProLiant DL380p Gen8	Xeon E5-2690 2.90GHz	32
42. alientest02	✓	22d 5:58	0.03	3.19.0-18...	ProLiant DL380p Gen8	Xeon E5-2690 v2 3.00GHz	40
10. db6e	✓	52d 8:55	0.38	3.19.0-16...	ProLiant DL380 G7	Xeon X5680 3.33GHz	24

	Mem	
	Total ▲	Used
...	755.8 GB	98.49 GB
...	755.8 GB	300.2 GB
...	377.9 GB	16.43 GB
...	377.9 GB	15.26 GB
...	377.9 GB	116.6 GB
...	377.9 GB	26.77 GB
...	377.9 GB	16.47 GB
...	377.9 GB	8.521 GB
...	377.9 GB	7.43 GB
...	377.9 GB	9.621 GB
...	283.4 GB	115.4 GB

Site support



- Alert and/or assist sites having issues with their VOBOX services, CE, WN, SE
 - Noticed in MonALISA and/or reported by users/admins
- Help new sites get started
 - HPC → see Costin's talk
 - Clouds → several ongoing and planned activities
- Assist sites with changes
 - SE additions, upgrades, migrations, cleanups
 - See talks of Miguel and Adrian
 - Transition to ARC CE
 - Thanks to Pavlo
- Interface with WLCG
 - SAM tests
 - Reporting

User support

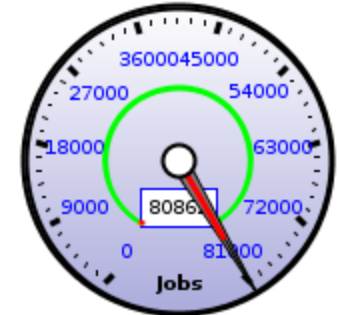
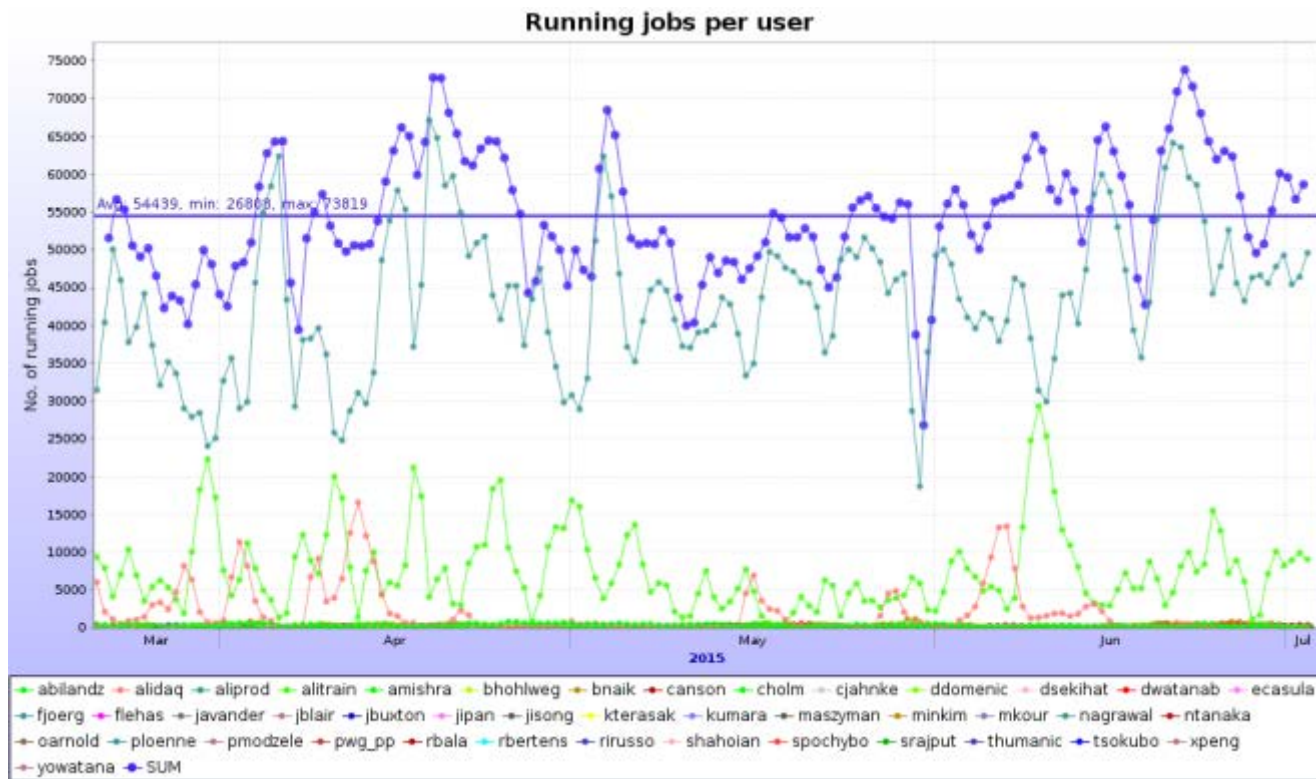


- “Cannot get token!”
 - Often due to issue with user machine or network
- Mistakes in JDL
 - Bad TTL, inconsistent SW versions, ...
 - AliEn now **catches** some of these → see Miguel’s talk
- Segfaults / memory leaks not seen in a quick test
 - Uninitialized variables, undeclared transients, double deletes, lacking cleanup, ...
- Problem with installing AliEn, AliRoot, ...
 - Dario’s **exact recipes** usually are the answer
- CAF?
 - Got a whole lot easier with the transition to the **VCAF!**
 - See Dario’s talk
- Many experts on the analysis task force and operations lists help other users → **thanks!**

Busy times



- 82k concurrent jobs reached on April 19
- 80k for many hours on June 21-22
- Taking advantage of increased + opportunistic resources



RFC proxies



- All WLCG VOBOXes are running with RFC proxies since a few months
- We then tried making the AliEn v2-19.276 the default for “alienv”
- That caused simulation jobs everywhere to fail in libgfortran
- We went back to v2-19.223 as default
 - It has the same version of that library...
- We discovered that the way we use 276 at the sites still has some “pollution” from the default version (now again 223)
→ to be fixed
- The matter still needs to be debugged further

Middleware



- **SL5** will be deprecated for MW next spring
 - Already there have been openssl compatibility issues
 - Will only get worse
- **CentOS/EL7** will come this autumn
 - Myproxy.cern.ch was upgraded already
- **ARC CE + HTCondor** becoming more popular
 - BITP and RAL in production since last autumn
 - GRIF_IRFU, Oxford
 - CERN prototype OK → HTCondor will replace LSF
 - Some issues will be fixed in the AliEn ARC client

SAM



- New Availability / Reliability profile based on selected MonALISA results not yet critical
- Waiting for a few Dashboard GUI fixes to be released to production
- The new profile should take over after the summer break
- Sites will first be alerted to compare old and new profile results
 - SE test failures will reduce the A / R!
- Direct submission to ARC CE in production since a few months (also for LHCb)
 - Thanks to Pavlo!

Xrootd



- Sites need to start planning upgrades to Xrootd ≥ 4.1
 - Stable and well supported
 - Required for IPv6 support
 - Steadily becoming more important
- T1 sites are particularly concerned
 - They receive raw data exported from T0
 - Latest CASTOR incompatible with old xrd3cp
 - Gateway hosts have been set up as a temporary workaround
- Communication via LCG Task Force list as usual for expert advice
- SL6 hosts now can have xrootd for ALICE installed through rpms!
 - <http://linuxsoft.cern.ch/wlwg/>
 - Thanks to Adrian Sevcenco!

Networks



- KISTI OPN link at 10 Gbps since Apr 24
- KISTI **leadership** for network evolution in Asia
 - Proposal to use OPN link also for LHCONE
→ **improve connectivity** of Asian T2 sites
 - Conference on network evolution in Asia, Sep 22-24
 - <https://indico.cern.ch/event/395656/>

- **Raw data export to KISTI OK**
 - 600+ MB/s
 - Via CASTOR gateway hosts!



Sites mostly OK – thanks!



However...

- VOBOX or WN **issues**
 - CVMFS problem, CE not ready for jobs, myproxy running low, ...
 - Absence of “system” library
 - HEP_OSlibs rpm helps avoid that
- Files **unavailable** due to SE problem
- Admins please check site issues page
 - <http://alimonitor.cern.ch/siteinfo/issues.jsp>
- **Subscribe to relevant notifications**
 - <http://alimonitor.cern.ch/xml.jsp>