



WLCG Operations Coordination report

Andrea Sciabà
IT-SDC

On behalf of the WLCG Operations Coordination team

GDB
12th March 2014



Outline

- Previous report on February 12th
- News
- Experiments
- Oracle updates
- Status of task forces
- Conclusions

News

- Now tracking also Oracle interventions due to the upcoming wave of upgrades

Site	Instances	Current Version	WLCG services	Upgrade plans
CERN	CMSR	11.2.0.4	CMS computing services	Done on Feb 27th
CERN	CASTOR Nameserver	11.2.0.4	CASTOR for LHC experiments	Done on Mar 04th
CERN	CASTOR Public	11.2.0.4	CASTOR for LHC experiments	Done on Mar 06th
CERN	CASTOR Alicestg, Atlasstg, Cmsstg	11.2.0.3	CASTOR for LHC experiments	Upgrade planned: 10-14th March
CERN	CASTOR LHCbstg	11.2.0.3	CASTOR for LHC experiments	Upgrade planned: 25th March
CERN	LHCBR	11.2.0.3	LHCb LFC, LHCb Dirac bookkeeping	TBA: upgrade to 12.1.0.1
CERN	ATLR, ADCR	11.2.0.3	ATLAS conditions, ATLAS computing services	TBA: upgrade to 11.2.0.4
CERN	LCGR	11.2.0.3	All other grid services (including e.g. Dashboard, FTS)	TBA: upgrade to 11.2.0.4 (tentatively 18th March)
CERN	HR DB	11.2.0.3	VOMRS	TBA: upgrade to 11.2.0.4 (tentatively 14th April)
CERN	CMSONR_ADG	11.2.0.3	CMS conditions (through Frontier)	TBA: upgrade to 11.2.0.4 (tentatively May)
BNL		11.2.0.3	ATLAS LFC, ATLAS conditions(?)	TBA: upgrade to 11.2.0.4 (tentatively June)
RAL		11.2.0.3	ATLAS conditions	TBA: upgrade to 11.2.0.4 (tentatively June)
IN2P3		11.2.0.3	ATLAS conditions	TBA: upgrade to 11.2.0.4 (tentatively middle of March)
TRIUMF	TRAC	11.2.0.4	ATLAS conditions	Done

Recent and future WLCG Operations Coordination meetings

- Next planning meeting on April 3rd
- Until July:
 - March 20
 - April 3, 17
 - May 8, 22 (shifted due to May 1)
 - June 5, 19
 - July 7-9 (WLCG Workshop, Barcelona)
 - July 24 (shifted due to workshop)

Experiment news (1/2)

- ALICE
 - No changes in the Wigner vs. Meyrin job failure rates and CPU efficiencies: still under investigation
- ATLAS
 - Temporarily, all **DDM traffic** on CERN **FTS-3** (due to problems at RAL)
 - **Rucio migration** in progress, no major issues so far
 - Campaign to have **more sites joining FAX** and allowing remote data access. The goal is to achieve ~10% of data access traffic via WAN in DC14
 - Plan to investigate **HTTP** as technology for **storage federations** and compare to xrootd. Sites should keep **HTTP/WebDAV** access enabled indefinitely

Experiment news (2/2)

- CMS
 - **DBS3** in production
 - Working on using CVMFS for nightly builds
 - Would like to run **multicore jobs** at scale in a **Tier-1** in March
 - Reintroduced **5% share for analysis** (/cms/Role=pilot) at Tier-1's
 - It also fixes the SAM test scheduling issues
- LHC*b*
 - Running incremental **stripping** (6-8 weeks) **heavy loads** on stagers at Tier-1's
 - Jobs taking longer to run in Wigner due to less powerful WNs
 - Asked all its Tier-1 sites to add a **SRM.nearline** endpoint in GOCDDB to be able to declare separate downtimes for tape backends

Middleware news

- Security fix release of StoRM
- Various fixes published for the problem of **512-bit proxies** being refused when both sides of a connection use openssl $\geq 1.0.1e$ (on SL6)
 - New ProxyRenewal daemon
 - Fixed in HTCondor v8.0.6
 - New gLite WMS release, already installed at CERN
- dCache team accepted to **extend support for 2.2** as 2.6 is not yet compatible with EnStore

Oracle upgrades

- CERN plans to upgrade to the latest Oracle **releases** and new **hardware**, mostly to happen in March
 - **11.2.0.4** (last for 11g) and **12.1.0.1** (first for 12c)
 - Both already available since October for testing
 - No single version will entirely fit in Run2
 - Software and hardware together to minimise downtime and risk
 - Easy to fall back in case of problems
 - Much more **RAM** (48 GB → 128 GB)
 - More **SSD** caches
 - Move from 11g to 12c will be **gradual**. First candidates: ATLARC (archive + TAGS) and LHCB (bookkeeping, LFC)
- Tier1's are advised to upgrade to 11.2.0.4 by the end of June

gLExec

- Only 16 tickets to sites still open
- CMS doing the final checks before turning on SAM test criticality

SHA-2

- Discovered that VOMRS works fine with SHA-2 certificates following a VOMS upgrade to EMI-3 in November
 - This will not change anything in the transition to VOMS-Admin
- VOMS-Admin test cluster available since February 17
 - Being tested by VO admins
- Will need to start a campaign to have the future VOMS servers (which have certificates from the new CA) recognised across WLCG

perfSONAR

- pS 3.3.2 is now baseline
- April 1st is the deadline for all sites to have pS deployed, configured, registered and accessible from outside for monitoring
 - Still ~50% of sites not OK
 - Prototype MaDDash dashboard [available](#)
- All instructions on twiki
 - IP ranges to open on firewall
 - <https://twiki.cern.ch/twiki/bin/view/LCG/PerfsonarDeployment>

FTS-3

- FTS-3 incident at RAL on February 18
- CERN would like to decommission FTS-2 by August 1st
 - OK for ATLAS and LHC*b*, to be discussed in CMS
- Discussing how to properly integrate multiple FTS-3 servers with experiment frameworks

Machine/job features

- For batch, there is a prototype ready for testing
 - Another based on CouchDB for clouds, already stress-tested
 - Experiments should give their feedback
- Progressing in the interaction with Igor Sfiligoi's project on bidirectional communication

Multicore deployment

- First reports on activities from experiments (ATLAS and CMS) and sites
- Analysing batch systems to match functionality with what is needed for multicore scheduling
 - HTCondor (RAL), Grid Engine (KIT) OK, SLURM and Torque/Maui to do
- Job submission patterns clearly affect tuning, performance and resource waste
- Discussing accounting issues

WMS decommissioning

- LHCb agreed to decommission the CERN WMS instance by April
 - Green light from all experiments
- SAM instances have their own timeline

Middleware readiness

- Experiments started writing instructions for sites to enable test service instances to be tested using experiment tools
- Next meeting on March 18 to discuss:
 - Additional products to be added to the list (e.g. CREAM, ARC, etc.)
 - Consider using also experiment SAM tests for the readiness verification
 - How to deal with UI, WN releases

Conclusions

- Multicore TF and middleware readiness WG already very active
- Oracle upgrades in spring, gradually moving to 12c
- Sites should finish deploying perfSONAR as soon as possible
- Next planning meeting on April 3rd