Pending issues - no workaround yet

LCMAPS is still logging excessively in /var/log/messages resulting in large messages log files. Supposed to be fixed in Update 11 but it's not (<u>https://savannah.cern.ch/bugs/?88569</u>)

WMS log file location is still split between /var/log/wms and /var/log/glite. Everything should go to /var/log/glite. Supposed to be fixed in Update 11 but it's not (<u>https://savannah.cern.ch/bugs/?86682</u>). The gservices-wms-admintools RPM will have to be updated with the new path when the log location changes.

Known EMI-1 issues and already implemented workarounds

EMI-1 WMS not supported wildcards for authorization -https://ggus.eu/ws/ticket_info.php?ticket=74257

In addition to <vo> and <vo>/* (done in glite.tpl), we need to explicitly allow all groups and roles for each supported VO. This was generated like this:

- get list of roles and groups for each VO from http://operations-portal.egi.eu/vo
- make sure that for each group, the 3 roles production, lcgadmin, pilot are allowed (even if not explicitly present in <u>http://operations-portal.egi.eu/vo</u> for the group)
- for CMS the list in the portal is not complete, so fetch missing groups (combined with the 3 roles) from the VOMS server:

```
source /afs/cern.ch/project/gd/LCG-share/sl5/etc/profile.d/grid-env.sh; voms-
proxy-init --voms dteam; voms-admin --vo cms --host lcg-voms.cern.ch list-
groups
```

These additional authorization entries were added in a separate file cluster/gridwms/authorizationworkaround.tpl (included in glite.tpl)

It is likely that we will discover missing roles/groups and they will have to be added to authorizationworkaround.tpl, then: (will restart wmproxy service)

```
wassh root@wms3[...] "ncm_wrapper.sh --configure yaim_usersconf &&
/opt/glite/yaim/bin/yaim -r -f config_glite_wms -s /etc/lcg-quattor-site-
info.def -n WMS -n LB"
```

Cron job deletes /var/proxycache when no activity -https://ggus.eu/ws/ticket_info.php?ticket=78295

As a workaround we touch /var/proxycache/DO_NOT_DELETE_THIS_FOLDER in the yaim post-action /opt/glite/yaim/functions/post/config_glite_wms deployed via filecopy (this post function is used for other things as well)

Condor 7.4.2 not truncating Matchlog log file

This is a known problem in condor (cf.

http://comments.gmane.org/gmane.comp.distributed.condor.user/20533). The file can quickly grow to GB's.

More recent versions of condor solve the problem but it would have to be seen with the developpers what versions are actually supported (configuration files may change etc.). Version 7.4.2 is the one found in the EMI 3rd-party repository http://emisoft.web.cern.ch/emisoft/dist/EMI/1/sl5/x86_64/third-party/

As a workaround we set up a daily logrotate of the Matchlog file and keep only 1 rotated log (via ncm-altlogrotate)

Missing job to clean up LBProxy database entries -https://ggus.eu/ws/ticket_info.php?ticket=75881

Without this the mysql database keeps growing forever.

A cron job to run glite-lb-purge with -x option is added in glite.tpl. We must specify a value for -done otherwise all jobs in the Done state are cleaned up (while not in the "regular" LBServer cleanup = glite-lb-purge without -x)

See: <u>http://egee.cesnet.cz/mediawiki/index.php/LB_purge_and_export_to_JP#glite-lb-purge</u>

Note that jobs cleaned with -x are moved to the zombie_jobs table (querying their status results in "410 Gone")

High memory usage of in glite-wms-workload daemon -https://ggus.eu/ws/ticket_info.php?ticket=76149

Possible high memory usage in glite-wms-workload daemon. cf. <u>https://savannah.cern.ch/task/?20342</u>

WMS developpers recommended (in <u>https://ggus.eu/ws/ticket_info.php?ticket=76149</u>) to install the jemalloc alternative malloc() to avoid high memory usage. Without it, we end up with the workload manager filling all the memory. But tests concluded that jemalloc performs not visibly better than default malloc(). On the other hand libtcmalloc from google-perftools reduces memory usage by 50%. A google-perftools build (and dependency libunwind) for slc5/x86_64 was done by Linux support.

We install the google-perftools package and set in /etc/glite-wms/glite_wms.conf (via customized YAIM actions):

RuntimeMalloc = "/usr/lib64/libtcmalloc_minimal.so.0";

However this is still not sufficient for CMS servers. We use a lemon sensor to monitor memory usage of the workload_manager daemon and restart it when it uses >10GB of memory. See <u>RQF0039939</u> and the <u>prod/cluster/gridwms/wms_lemon</u> CDB template (included in <u>gridwms/config</u>).