related topics

- Prepare a new machine for the nightlies

general

- login details for the user `lhcbsoft` are known by Marco Cl., Ben and Thomas
- the nightlies server is running on `lxbuild171` aka `buildlhcb07`
- Coverity is running on `lxbuild161` aka `buildlhcb01`
- a job can be started by hand with `~lhcbsoft/bin/nightliesClient.sh PLATFORM SLOT` (requiring a running server on `lxbuild171`
- a job for a specific platform can be restarted with
  - ♦ a running 'restart' nightlies server, i.e. a server in addition to the standard server, which takes the configuration from HEAD of svn and runs on a different port
    - ◊ i.e. sarted on `build135` with `~lhcbsoft/bin/nightliesServer.sh restart`
  - ♦ starting a slot on a platform with `~lhcbsoft/bin/restart.py --slot SLOT --platform PLATFORM`
    - ◊ it takes care of old build directories (locally and on AFS)
    - ◊ it renames the previous local build directory to `platformOLD` for debugging (beware of clogging the local build dir)
    - ◊ if the previous build dir is not needed call with `--purge`

System monitoring⬈

- Sometimes the system glitches and the monitoring marks an (transient) error
  - ♦ this happens especially for sensors depending on AFS, e.g. the rss feed monitor checking the db on AFS
  - ♦ if an error appears for more than 20minutes (the update frequency) it is probably not a transient one...

Tips for using the LHCb Nightlies System

- to fix a corrupted rss database file in `$LHCBNIGHTLIES/db`, i.e.
  `/afs/cern.ch/lhcb/software/nightlies/db`
  - ♦ dump the existing db into a temporary file with `sqlite3 nightlies.results ".dump" > temp.sql`
  - ♦ read it back with `sqlite3 nightlies.results < temp.sql`
- AFS
  - ♦ to create a new volume on AFS
    - ◊ `afs_admin create -q SIZEAS100000 /afs/cern.ch/lhcb/PATH/WHERE/TO/MOUNT q.lhcb.NAME-OF-VOLUME`
  - ♦ to list the access rights `fs listacl PATH/`
    - ◊ change ACLs with `fs setacl -dir . -acl USER:GROUPRIGHTSl` man⬈
- Coverity services on `lxbuild161`
  - ♦ to get the current status `/build/coverity/coverity-integrity-manager/bin $ ./cov-im-ctl status`,i.e., in the monitoring⬈
  - ♦ to start the processes `/build/coverity/coverity-integrity-manager/bin $ ./cov-im-ctl start`

Known unpleasantnesses

- the server process for Coverity web interface (`java` / `tomcat`) can to run for days/weeks without problems and suddenly start to hog memory/swap

- ◆ this will probably cause `lxbuild161` aka `buildlhcb01` to die and makes Joel unhappy
- ◆ normally, this behavior should not arise much anymore, since the coverity processes are restarted all two days via acron
- ◆ if it occurs and `lxbuild161` has to be restarted, the coverity processes have to be started by hand (see above)
- Coverity on `lxbuild161` uses the RAM disk on `/dev/shm/` for the actual build and the output is copied at the end onto disk
  - ◆ occasionally the RAM disk is purged (by an unknown process :-/) so that the currently running and following projects get ruined
    - ◊ the creation date of the RAM disk is available in the monitoring☞ or in file `/dev/shm/date.log`
    - ◊ if the start date of the RAM disk is later than the start times of Coverity during the run days (started Wednesdays & Fridays around 3:06), the Coverity nightlies have to be stopped and restarted by hand
- especially dev builds can get quite large, so that the disk usage on the build nodes has to be monitored☞
- sometimes the rss feed database gets corrupted during AFS hiccups. If there is a corrupted db error in the monitoring☞ for more than 20minutes fix the db as described above

occurring errors

- a new project is not build
  - ◆ a newly created project is added to a slot but the build fails really early around cmt and checkout
    - ◊ check, if the project is known to LbScripts (via LbLogin)
    - ◊ maybe it is only in dev --> run the dev version of LbLogin for the given platform and see if it works

Useful stuff

- copy `qmtest` dir from today (Wednesday) by hand onto the AFS-dir (in `/build/nightlies` on the build machine)
  - ◆ `find ./ -type d -iname "*Wed*qmtest" -mtime -1 -print -exec cp -a '{}' $LHCBNIGHTLIES/www/logs/. \;`
- or just today's logs (in `/build/nightlies` on the build machine)
  - ◆ `cp -a lhcb-*/Wed/*/www/* $LHCBNIGHTLIES/www/logs/`

-- ThomasHartmann - 28-Feb-2012

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