LIM, 27 November 2018

Present: I Goulas, J Heinz, J Cervantes, G Folger, D Konstantinov, G Eulisse,

B Couturier, M Clemencic, E Obreshkov, G Ganis,

I Razumov, W Lampl, S Muzaffar, M Nowak, A Kazarov, G Folger

Agenda: https://indico.cern.ch/event/773535/

Next meeting: 11 Dec 2018

Status of Things

Summary of last two weeks

Builds. Builds for Ubuntu 18.04 have been made available on CernVM-FS both for python2 and python3. Both builds are currently suffering from incompatibilities with the python installations coming from the distro (see <u>SPI-1084</u>). During the discussion it was suggested to evaluate the real need for PYTHONHOME (unsetting fixes the problem). It was also remarked that the version provided by the builds are very close of the one provided by the distro, so one should perhaps consider using the distro ones for the builds. It was also mentioned that a similar problem appeared in the past with SLC6, though nobody remembered the solution adopted (to be checked).

Action(s): check in which cases PYTHONHOME can be unset; check solution adopted for SLC6.

Updates and fixes. The packages *davix* and *grpcio* were updated respectively to version 0.7.1 and 1.6.0 . Fixes for the R_HOME issue have been implemented, as well as with Herwig++ 2.7.1 and superchic; a problem with CORAL tests coming and going was understood and fixed; CORAL tests for python3 have been added.

AoB. JH presented his consistency improvements of the information published in lcginfo.cern.ch . This was also the opportunity to understand what is the usage of this pages. Both LHCb and ATLAS said that they used them to monitor diffs of releases or builds. The information about the platform availability of packages should be more precise. It was stressed that production platforms should be as close as possible in terms of package content. This does not apply to Ubuntu.

Actions(s): Investigate the possibility to introduce more detailed information on the platform availability per package

Points of discussion

Automatic extension of PYTHON search path.

In order to solve the problem with configuration of bundles, MC <u>proposed</u> to add a dedicated sitecustomize.py file under lib/pythonX.Y/site-packages; this will not interfere with views. The general feeling was quite positive. An alternative, used in CMS, to use PTH files was considered to static for the case at hand, although it could lead to shorter search paths. It was decided to try out MC suggestion from LCG_94a.

Action(s): add post-installation scripts to provide the additional files required, in CernVM-FS and RPMs

C++ ABI incompatibility problem experienced by SWAN on SLC6.

The relevant expected people were absent, and many details relevant for the discussion missing. The general feeling is that they should not be using the releases or to move to a more recent platform. Any action or decision postponed.

Next steps

Preparation of LCG 94a will start soon. Main features:

- ROOT v6.14/06
- Davix 0.7.1
- Dedicated sitecustomize.py for dynamic python search path definition
- Any fixes in generators and packages worth being ported

RPMs for clang 6.0.0 will be available soon; a full LCG_94 build with clang 6.0.0 will follow. A build for clang 7.0.0, gcc 8 will be available by the end of the week or so. LHCb needs clang 7.0.0 for a crucial fix for a clang 6.0.0 bug crashing they stacks. (clang builds are used both by ATLAS and LHCb for cross-checking).

LHCb would like a newer version of clang-format (clang 7.0.0).

Validation of gcc 8 by ATLAS is progressing but not yet conclusive.

LHCb requests an update of GDB.

Action(s): prepare toolchain for LCG_94a; provide clang 6.0.0 RPM; provide clang 7.0.0 build on CernVM-FS, inclusive of clang-format; provide new version of GDB.