

LIM, 10 Sep 2019

Present: J Heinz, I Razumov, R Hauser, J C Villanueva, W Lampl, A Kazarov, G Eulisse, B Couturier, M Clemencic, M Nowak, G Folger, C Delort, I Goulas, R Bachmann, G Ganis (chair), M Mikhasenko, D Konstantinov

Remote: A Marcinek

Agenda: <https://indico.cern.ch/event/847318/>

Next meeting: 24 September 2019

New attenders

Mikhail Mikhasenko joins the LIM meetings as COMPASS representative. At one of the next meetings he will give a short presentation about the current situation of the COMPASS software stack and the expectations from this community.

Richard Bachmann joined the SFT group as technical student on Sept 1st. He will replace and continue the work of Johannes Heinz, whose contract will end on October 31st.

Status of LCG_96a

- The branch for LCG_96a was finally created on 5 Sept 2019. The first build for x86-64-centos7-gcc8-opt was ready over the weekend.
- Branching was delayed by a LHCb request about gcc8 which came just after the last LIM:
 - Because of the problem described in [ROOT-10220](#) LHCb cannot move directly to gcc9 as initially foreseen. They requested to revisit gcc 8.3 which solves many problems of gcc 8.2 and does not suffer from the same limitations vis-à-vis of the llvm available in ROOT.
 - Initial tests of gcc 8.3 for the LCG stack, back in February, were abandoned because of a problem with Qt5 . Since then a new version fo Qt5 has been released which compiles with gcc 8.3 .
 - A successful build of dev4 with gcc 8.3 could be delivered after upgrading Qt5 and a few other packages. This version was validated by LHCb.
 - It was then decided to use gcc 8.3 for the LCG_96a gcc8 builds
- A few other issues have emerged after branching:
 - ROOT has fixed several crucial bugs and they are going to release very shortly version 6.18/04
 - List of bugs fixed in this version:
 - <https://sft.its.cern.ch/jira/browse/ROOT-10224>
 - <https://sft.its.cern.ch/jira/browse/ROOT-10294>

- <https://sft.its.cern.ch/jira/browse/ROOT-10297>
- <https://sft.its.cern.ch/jira/browse/ROOT-10306>
- <https://sft.its.cern.ch/jira/browse/ROOT-10305>

Commonly agreed that would be good to have this in the release

- Very recent requests for upgrade of range_v3 and a fix for the tensorflow installation are desirable for inclusion.
- It was therefore decided to include all that in the new patch release.
- A build with gcc9 will be provided despite the issues with ROOT.
- After the meeting the SPI team decided to create a new branch LCG_96b to avoid confusion with the already partially build and published LCG_96a .

Discussion triggered by SPI-1424

- In the ticket SPI-1424, A Kraznahorkay put the finger of an inconsistency embedded in the current build and release workflow. The net result is that, while compatible, libraries expected to be the same are physically different in RPMs and CernVM-FS. This is because the RPMs are not build from tarfiles but a new build which can also be with a different compiler version.
- It was agreed that this is an unwanted feature and will be fixed as soon as possible
 - Although will not be possible to fix for LCG_96b
- The solution will ensure that the tarfiles are the only and single source of binaries, used for the CernVM-FS installation and to create the RPMs.
- A detailed recipe will be designed, based on initial thoughts of M Clemencic, that only the latest version of a given compiler is installed by the RPM machinery. The goal is to have that in place for the next release.

AoB

- The list of packages not building with python3 will be circulated by J Heinsz for comments and feedback from experiments. The level of maintenance of each package should also be specified.
- ATLAS requested the upgrade of the Oracle client. C Delort will follow the issue.