LIM, 26 May 2020

Vidyo only meeting following CERN directives to face coronavirus crisis.

Present: O Zapata, D Konstantinov, R Hauser, E M Lobodzinska, A Kazarov,

G Ganis (chair), G Amadio, I Goulas, I Razumov, G Folger,

M Clemencic, P Mato, R Bachmann, E Moyse

Agenda: https://indico.cern.ch/event/923136/

Next meeting: 9 June 2020

Status of Things

Nightlies

New/upgraded packages

PostgreSQL 2.12, libpqxx 7.1.1, PyGraphviz 1.5. Ready to go: Rivet 3.1.1, Yoda 1.8.2.

A₀B

New hash technique consolidated, dev4 builds typically through in about 10'-15'. Fixed SWIG environment.

LCG_97 / LCG_97a

LCG_97_ATLAS_2

Dedicated dev4atlas nightly to test the required ATLAS layer (see <u>SPI-1571</u>). Identified issues with fastjet / TLS possibly due to compiler / binutils mismatch.

Following a request of Ed Moyse it will be checked that the nightly branch contains exactly the same versions asked for the layer.

Given the timing, this will be LCG_97a_ATLAS_2.

LCG_97a

The situation did not evolve much. We are still waiting for ROOT v6.20/06, now expected before the end of this week; still two blockers, for LHCb and ALICE, to be fixed. The new ROOT tag will also contain a crucial fix for ATLAS (see also next subsection).

The additional package upgrade will be limited to the ones strictly needed, OpenBLAS, Sherpa, PyGraphviz and few others. The epic <u>SPI-1609</u> will be updated accordingly.

Builds will certainly be provided for the LHCb requests - centos7, gcc9 {opt, dbg} and python{2,3}. Given the wide range of interest, we will also provide gcc8 and the newer gcc10 and clang10.

Given the timing, Ubuntu will be provided for the patch release (18.04 LTS and possibly 20.04 LTS).

AoB

ATLAS request to patch old releases for TChain bug

An ATLAS member requested to port the TChain fix included in 6.20/06 back to 6.18 and 6.16, and to have releases including these fixes (see <u>SPI-1632</u>). The ROOT tags requested in the tickets are still not existing. ATLAS representatives will investigate the situation and follow up on the ticket.

OpenBLAS / Lapack

Currently the Lapack package is provided in the stacks via NetLib and via OpenBLAS. There is general agreement that the second implementation is better. A proposal to remove Lapack from netlib has been translated in a merge-request (see also SPI-1612). This is also what CMS does; in addition CMS builds Herwig++/ThePeg with CBlas coming from OpenBLAS, obtaining a visible speed-up (not quantified, though). At the meeting it was agreed to merge the request and to observe the behaviour of the nightlies.

After the meeting A Kraznahorkay reported that ATLAS is already using Lapck for OpenBLAS and that they should not be affected by the change.

Compilers / Debuggers

Gcc compiler versions 9.3 and 10.1 are available under contrib for CentOS7 and CentOS8. This required to bring it binutils 2.33.1 .

Cuda 10.1 is also available.

GDB 9.1, available since February, has also been build for CentOS7 and Ubuntu 18.04. An issue with CMake preventing building for SLC6; see <u>SPI-1159</u>.