LIM, 9 Jun 2020

Vidyo only meeting following CERN directives to face coronavirus crisis.

Present: O Zapata, D Konstantinov, A Kazarov, E M Lobodzinska, G Eulisse,

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

M Clemencic, R Bachmann, E Moyse, O Shadura, M Nowak

Agenda: https://indico.cern.ch/event/927792/

Next meeting: 23 June 2020

Status of Things

Nightlies

New/upgraded packages

Rivet 3.1.1, Yoda 1.8.2, Geant4 10.06.p02, Graphviz_Py 0.11.1, Geant4 10..06.p02, YamlCpp 0.6.3, pybind11 2..5.0, COOL/CORAL 3.3.1, XRootD 4.12.2.

New patched version of sherpa 2.2.10 (p4).

AoB

Lapack removed (provided by OpenBLAS).

ROOT 6.22-patches on dev3.

LCG 97 ATLAS 2

Dedicated dev4atlas nightly to test the required ATLAS layer (see <u>SPI-1571</u>). Issues with fastjet understood and fixed. Still configuration issues to be understood (<u>ATLINFR-3575</u>). Given the timing, this will be LCG 97a ATLAS 2.

The desiccated layer is still needed because it requires HepMC3, not yet in use by LHCb.

LCG_97a

All blockers for ROOT v6.20/06 removed; tag should come on June 10th.

A branch LCG_97a has been created in CMake off of LCG_97. The additional package currently in the branch:

OpenBLAS 0.3.9, sherpa/sherpa-openmpi 2.2.10p4, Frontier_Client 2.9.1, Delphes 3.4.3pre01, YamlCpp 0.6.3, Gaudi v33r1 (patched), Geant4 10.06.p02, COOL/CORAL 3_3_1

Python dependencies will be fixed. A problem with max numbe of threads for OpenBLAS will also be addressed (it has been after the meeting). The question of upgrading XRootD was not clearly resolved.

It will build for CentOS7, gcc 8,9, clang10, python2,3; Ubuntu 18.

CentOS8, Ubuntu 20 will be also considered.

(During the meeting gcc 10 was also mentioned, but ROOT 6.20/06 does not support gcc 10, so there will be no build for that).

AoB

RPMs for clang 10 and gcc 10

LHCb requested that RPMs for clang 10 and gcc 010 are made available. This will be done ASAP.

LCG_98 preparation

With the branching of ROOT 6.22-patches the preparation of LCG_98 is open. An epic has been created: SPI-1637.

MC sources deployed on CernVM-FS

ATLAS long standing request to have MC sources for LCG_88 (SPI-1224). Now available at

/cvmfs/sft.cern.ch/lcg/sources/LCG 88/

LHCb expressed interest in having the source of the nightlies for debugging. This will be discussed internally and a solution proposed. It should include at least the 'projects' packages and a selected list of externals.

Spack update

Investigation continued and the recipes update to reflect the content of LCG_97, also fostered by Key4HEP interest. Closer interest of LHCb and/or ATLAS is required to advance. The list of possibly interesting packages not yet available will be provided.

Further LHCb requests

The Git commit hash of the nightlies builds should be available. The one of ROOT is is available in the ROOT dirs: can this be extended to all packages? Probably not, but a solution will be found.

The HEAD of DD4hep should be available in dev3.

Compilers

Cuda 11 has been released and will be made available under contrib.