LIM, June 7, 2021

Connected: Andre Sailer (chair), Reiner Hauser, Giulio Eulisse, Charles Delort, Pere Mato, Johannes Elmsheuser, Andrei Kazarov, Gerardo Ganis, Ari Kraut, Oksana Shadura, Omar Zapata, Ewelina Lobodzinska, Ilias Goulas, Edward Moyse, Marcin, Marco Clemencic

Apologies:

Indico: https://indico.cern.ch/event/1038092/

Next meeting: June 21

Status of things

Nightlies

- New packages: heaptrack (SPI-1888), distro
- Upgraded packages for the dev[34] development builds
  - dill (SPI-1879), mcTester 1.25.1 (SPI-1897), ccache 4.2.1 (SPI-1878), spark 3.1.2.cern1, madgraph 3.10.0
- devnxcals
  - Issues with pytimber installation solved (SPI-1871
- dev[34]python39
  - Stack including tensorflow 2.5 available
- dev[34] builds with clang11 and gcc10fp are now available
- The julia registry of packages is updated nightly on CVMFS (SPI-1910)

Omar: Regarding Julia: Does this mean the user do not have to install registries themselves?

Pere: Will provide instructions for users, users still have to setup the julia kernel once.

Johannes: have not tested clang11 builds yet, will do so very soon.

LCG_100

- Problems with the RPMs have been solved, or workarounds are available (SPI-1890, SPI-1891)
- Builds with clang11 and gcc10fp were done

Releases

LCG_100_LHCB_5/_6 (SPI-1872, SPI-1877)

Marco: LHCb layers fine

LCG_100_ATLAS_1 (SPI-1881)

Johannes: Works

LCG_100_ATLAS_2 (SPI-1889)

MCTester:

Andre: what is the status? Ping Andrii in the ticket

LCG_100_ATLAS_3 (SPI-1902)

LCG_100_ATLAS_4 (SPI-1912)

LCG_88b (SPI-1886)

LCG100_nxcals

Omar: All fine

Andre: Can we move away LCG_88b?

Ewelina: We will move to LCG_100 in October for the generators

Other issues:

SPI-1899

Marco: Have thought of never using base, instead using special build of DD4hep. E.g.: Only using LCG_101_LHCb_base, and then generator layers.

Andre: Can use top_packages feature to just built a subset of packages from the stack?

Marco: probably not at the moment as the LHCb build expects all things when building on top of a layer.

SPI-1903: Cuda11

Johannes: problem is still there, I will ping again on the ticket. Seems to be a problem with gcc8. Attila had a workaround.

Meta RPM/Spack:

Pere: Has been discussed before. Need a layer to pick up the latest version of the RPMs, right?

Marco: was discussed in the past, some part of the RPMs could be dropped, but needs work on the experiment side. As far as I recall.

Gerri: There were changes to the RPMs after the layers were created. Need to check the minutes. Does LHCb use those?

Marco: Do not use the top layers, only starting at the second layer.

Gerri: Having one DB for one release eases the strain. As long as there are not too many layers.

Marco: If we can continue like this OK, if we need to change something we need time to plan. If we move to spack, we will not use RPMs any longer.

Reiner: Need to look into building our own software with spack. Have not tested anything. Building new releases on top of LCG_100

Marco: will need to rebuild to install on our own CVMFS

gcc11

Johannes: What are the plans?

Andre: Have gcc11.1 available, can start building layers with it.

Johannes: ATLAS is interested

Marco: Also LHCb.

Andre: Can we drop one of the other gcc builds? 8, 9, 10?

Marco: Can drop gcc9.

Johannes: Need to keep gcc8 and 10.

Clang12

Andre: Same status as for gcc11, can we stop clang10 now that clang11 is running, and investigate clang12, and then stop clang11 once clang12 is working?

Marco: Yes

Johannes: Sounds good

CORAL/COOL:

Reiner: Building it as part of TDAQ. Worked fine, apart from highly parallel build. Will put it into our nightly and then point to our own version. Probably inside a couple of weeks.

Alice: NTR

Atlas:

LHCb:

CMS:

NA62:

SWAN:

Omar: Thematic CERN School of computing is want to use SWAN for GPU tutorial, asking for the nsys package.

Pere: Will see if this can be done, but only in bleeding edge. Remember this is not stable.

Omar: maybe only the nsys part will be done on bleeding edge, the rest on the stable.

Andre: What about HTCondor request?

Pere: Someone will investigate and then we can decide if this can be done or not.

BE/NXCals:

AOB:

Next meeting on June 21