# LIM, August 26, 2024

| | |
|---|---|
| Connected/present: | André Sailer (Chair), Andrei Kazarov, Ben Couturier, Edward Moyse, Ewelina Lobodzinska, Ilias Goulas, Johannes Elmsheuser, Reiner Hauser |
| Apologies: | Dmitri, Giulio |
| Indico: | https://indico.cern.ch/e/1449636 |
| Next Meeting: | September 9, 2024 |

## 1 Nightlies

In the beginning, Andre introduced the new nightly software stack based on gcc14 where the frame-pointers are not omitted. This platform is marked by `gcc14fp`.

The list of updated packages was started of with Boost (SPI-2635) in dev4. This required a patch for some include statements in Gaudi v38r3 that were patched in the LCG stacks, and the Gaudi!1618 merge request was created by Johannes. It was decided that Boost would only be updated in dev3 once a functioning release of Gaudi was made.

Andre reported on the request by the SWAN team to update kfp 2.4.0, kfp_pipeline_spec 0.3.0 (SPI-2637). Which also lead to an update of Protobuf **4.25.4** and subsequently grpc 1.**62.3**. The latter two packages were updated in all stacks.

ATLAS reported an issue with the updated Protobuf, and Andre remarked that maybe just moving to `find_package(Protobuf REQUIRED Config)` might be sufficient and pointed to this application in hadoop in LCGCmake.

On user request gcovr **7.2** (SPI-2636) was updated.

Finally a number of python checkers and linters was updated to keep them up-to-date: astroid **3.2.4**, autopep8 **2.3.1**, black **24.8.0**, flake8 **7.1.1**, flake8_bugbear **24.8.19**, pluggy 1.**5.0**, pre-commit 3.**8.0**, pycodestyle 2.**12.1**, pylint **3.2.6**, pytest 8.**3.2**

Then Andre reported on the downgrading of Cuda to 12.3 (SPI-2633) in the devcuda stacks since it is ohterwise not compatible with the binary of tensorflow we use. This does *not* affect the ATLAS stack, which includes cuda 12.4 indepently of other stacks.

ATLAS also reported that the previously mentioned issue with gcc14 was caused by undefined behaviour, when $-x$ vs $x$ hit int_max / int_min issues.

## 2 Releases and Layers

With respect to the LCG_106a release, Andre reported that the SPI would like to update a few more packages.: zfit, pydantic, correctionlib, coffea (SPI-2639), jupyterlab_rise (SPI-2638), and mypy, ruff, and DD4hep. And that it will be based on ROOT 6.32/04. And that SPI still have to make sure everything works. Then a new branch will be created to also include gcc14(fp) builds, which required many changes.

For the ATLAS layers LCG_106_ATLAS_7/8 (SPI-2626) and LCG_106_ATLAS_9/10 (SPI-2641) ATLAS stated that they have issues with rivet and sherpa and need to go back to previous versions.

## 3 Other Issues

## 4 AOB

### 4.1 ATLAS

ATLAS reported an increse in "maybe-no-threadsafe" warnings when moving from gcc14.1 to 14.2, and ATLAS requests an update of Doxygen in the stacks (SPI-2642).

### 4.2 LHCb

NTR