

LIM, June 3, 2024

Connected/present: André Sailer (Chair), Bertrand Bellenot, Dmitri Konstantinov, Ewelina Lobodzinska, Ilias Goulas, Johannes Elmsheuser, Pere Mato, Reiner Hauser, Stefan Ghinescu

Indico: <https://indico.cern.ch/e/1412890>

Next Meeting: June 17, 2024

1 Nightlies

Andre presented the large number of packages that were updated. Most were due to a combination of [SPI-2524](#), [SPI-2568](#) and [SPI-2560](#), which were updates for Machine Learning packages and CUDA 12.4 (**new packages in bold**): `cuda 12.4`, `cuda 9.1.1.17`, `TensorRT 10.0.1.6`, `cupy 13.0.0`, `llvmmin 17.0.6`, **`pycuda 2024.1`**, `pyopencl 2024.1`, `tvm 0.16.0`, `pybind11 2.11.1` `awkward 2.6.4`, `awkward_cpp 33`, `blosc 1.11.1`, **`blosc2 2.5.1`**, `coffea 2024.5.0`, `cons 0.4.6`, **`cramjam 2.8.3`**, `dask 2024.5.0`, `dask_awkward 2024.3.0`, `dask_histogram 2024.3.0`, `distributed 2024.5.0`, **`etuples 0.3.9`**, `networkx 3.2.1`, `servicex 2.8.0`, `setuptools 69.5.1`, `sympy 1.12`, `tabulate 0.9.0`, `uproot 5.3.7` `faiss 1.8.0`, `genshi 0.7.7`, `httpstan 4.12.0`, `h5py 3.11.0`, `huggingface_hub 0.23.0`, `jax 0.4.28` `jaxlib 0.4.28`, `jupyter_packaging 0.12.3`, `keras 3.3.3`, `langchain_community 0.2.0`, `langchain_core 0.2.1`, `langchain_text_splitters 0.2.0`, `langchain 0.2.0`, `langsmith 0.1.59`, `m2crypto 0.41.0`, `mimesis 11.1.0`, **`minikanren 1.0.3`**, **`multipledispatch 1.0.0`**, **`namex 0.0.8`**, `ndindex 1.8`, **`numba_stats 1.7.0`**, `numpy 1.26.4`, `onnx 1.16.0`, **`op-tree 0.11.0`**, `pandas 2.2.2`, `pbr 6.0.0`, `psutil 5.9.8`, **`pycpuinfo 9.0.0`**, `pysimdjson 5.0.2`, `pyshtools 4.12.2`, **`pytensor 2.19.0`**, `pytables 3.9.2`, `python_dateutil 2.9.0`, `pytorch_lightning 2.2.4`, `tensorflow 2.16.1` (not yet on aarch64), `tensorboard 2.16.2`, `tensorflow_model_optimisation 0.8.0`, `tensorflow_probability 0.24.0`, **`tf_keras 2.16.0`**, `tokenizers 0.19.0`, `torch 2.3.0` `torchmetrics 1.4.0` **`post0`**, `torchvision 0.18.0`, `onnxruntime 1.17.3`, `tf2onnx 1.16.1`, `torch_geometric 2.5.3`, `transformers 4.41.0`, `typing_extension 4.11.0`, **`tzdata 2024.1`**, `webargs 8.4.0`, `zfit 0.20.3`.

Other updated packages and their related tickets were Julia 1.10.3([!2232](#)), `valgrind 3.23.0` ([SPI-2558](#)); `Boost 1.85`, `Gaudi 38.2` ([SPI-2559](#)); **`Qibo 0.2.7`**, **`qibojit 0.1.3`**, **`openqasm3 0.5.0`**, **`antlr4_python3_runtime 4.13.1`**, **`hyperopt 0.2.7`**, **`cma 3.3.0`** ([SPI-2564](#)); `Davix 0.8.6` ([SPI-2565](#)); Java: 17.0.11**p9** (contrib only), 11.0.23**p9** (swan only) ([SPI-2567](#)); `Pythia8.312`([SPI-2576](#)); **`geneva 1.0-rc3`**([SPI-2577](#)).

And some packages had to be removed as they were too obsolete or currently incompatible.

- tensorflow_estimator, theano: packages obsolete
- pathlib2: not needed for python 3, not python 3.11 compatible at all
- hls4ml, QKeras: not tensorflow 2.16.1 / keras 3 compatible, temporarily removed

2 Releases and Layers

2.1 LCG_106 ([SPI-2575](#))

For LCG_106 the discussion with respect to the timeline concluded that a release in the next couple of weeks was adequate. Merging Python 3.11 was deemed to be desirable, but support for gcc14 could wait. In particular the latest Davix version was not compatible at this point in time, and cuda 12.4 is not compatible with gcc14 either. The update of Vc 1.4.4 ([SPI-2579](#)) was also to be included.

At that point in time, it was not known that a patch for ROOT 6.32 was imminent.

2.2 LCG_106_ATLAS_1/2 ([SPI-2580](#))

It was concluded that this layer should be done once LCG_106 was released.

2.3 LCG_104_ATLAS_17/18 ([SPI-2569](#))

ATLAS requested the inclusion of a few new generators in this layer. In particular the build configuration of EPOS4 was not clear for the SPI team. It was decided to not include EPOS4 in this layer, and first figure out a working configuration, starting from a basic configuration of the package.

3 Other Issues

3.1 CentOS7

There were no objections to disable CentOS7 builds.

4 AOB

4.1 ATLAS

NTR

4.2 LHCb

N/C

4.3 ROOT

Bertrand reported that the release of ROOT 6.32 went well.

4.4 ALICE

4.5 NA62

NTR