

Python bindings for C++ using PyROOT/cppyy: the experience from PyCool in COOL

Monday, May 30, 2016 4:30 PM (15 minutes)

The COOL software is used by the ATLAS and LHCb experiments to handle the time variation and versioning of their conditions data, using a variety of different relational database technologies. While the COOL core libraries are written in C++ and are integrated in the experiment C++ frameworks, a package offering Python bindings of the COOL C++ APIs, PyCool, is also provided and has been an essential component of the ATLAS conditions data management toolkit for over 10 years. Almost since the beginning, the implementation of PyCool has been based on ROOT to generate Python bindings for C++, initially using Reflex and PyROOT in ROOT5 and more recently using clang and cppyy in ROOT6. This presentation will describe the PyCool experience with using ROOT to generate Python bindings for C++, throughout the many evolutions of the underlying technology.

Talk Length

15 minutes

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