

# Servicing HEP experiments with a complete set of ready integrated and configured common software components

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The LCG Applications Area at CERN provides basic software components for the LHC experiments such as ROOT, POOL, COOL which are developed in house and also a set of “external” software packages (~ 70) which are needed in addition such as Python, Boost, Qt, CLHEP, etc. These packages target many different areas of HEP computing such as data persistency, math, simulation, grid computing, databases, graphics, etc. Other packages provide tools for documentation, debugging, scripting languages and compilers. All these packages are provided in a consistent manner on different compilers, architectures and operating systems. The Software Process and Infrastructure project (SPI) is responsible for the continuous testing, coordination, release and deployment of these software packages. The main driving force for the actions carried out by SPI are the needs of the LHC experiments, but also other HEP experiments could profit from the set of consistent libraries provided and receive a stable and well tested foundation to build their experiment software frameworks.

This presentation will first provide a brief description of the tools and services provided for the coordination, testing, release, deployment and presentation of LCG/AA software packages and then focus on a second set of tools provided for outside LHC experiments to deploy a stable set of HEP related software packages both as binary distribution or from source.

## Presentation type (oral | poster)

oral

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