Input to WLCG ws: “Software topics”
Software topics

Keys to successful common projects

Best candidates for commonality:

✦ Basic underlying libraries that are open source and well supported (Why can not all HEP software be open source by HL-LHC?)

✦ Infrastructure for analysis model revolutions: analysis workflows will need big changes given the massive data volumes.
  - No need to reinvent independently (or maybe at all if tools from other fields can be solutions)

✦ Hard to imagine revolutionary user-facing interface changes

HSF

HSF should become an important forum for promoting use of common infrastructure, facilitating the choice of well supported products when experiments are searching for new utilities

Adoption of projects needs to be considered within the complex infrastructure of experiments

✦ Easiest targets are at the bottom (grid middleware, Generators, ROOT, Geant4) and top (high-level reco, analysis, ML tools) of the tool stack

Another potential target area is in algorithms designed for non-x86