



ALICE LCG AA Review Feedback

Fons Rademakers







- ALICE applauds the proposed merge of SEAL into ROOT and having one ROOT based core LCG AA infrastructure
- This is in line with what ALICE did propose 3 years ago in the annex of the LCG AA Blueprint
- ALICE is happy with the extra manpower assigned to ROOT development in line with its important role in providing the core LCG AA infrastructure
 - ALICE, as major and long time ROOT user, will continue providing significant manpower to the ROOT project





- ALICE does not use the SPI service and infrastructure
- Our software consists of only three packages: ROOT, AliRoot and AliEn
 - Install on all platforms is simply via "./configure; make"
 - AliRoot runs and is verified on Linux (any distribution and compiler) on i386, AMD64 and Itanium, MacOS X, Alpha TrueLinux, Sun Solaris and HP HP-UX
- We operate our own cvs, web, build and bug reporting servers to full satisfaction and with very low overhead





 ALICE never used SEAL and therefore there will be no issues with migration due to SEAL being merged into ROOT





- The complete ALICE computing is based on ROOT
- ALICE uses all features offered by ROOT and the CINT interpreter (I/O, Base, Geo, GUI, PROOF, etc., etc.)
- ALICE requires complete backward compatibility between ROOT versions (which till now ROOT has always provided)
- ALICE requires ROOT to be available on all possible platforms (which till now ROOT always has been)
- ALICE plans to use heavily PROOF for its analysis
- ALICE will continue to provide important manpower to support the ROOT and PROOF development
- ALICE strongly urges ROOT to maintain its development model and provide a system useful for as wide a community as possible, the larger the community the better and versatile the product will be benefiting us all





- ALICE does not use POOL
- ALICE does not plan to use ConDB
 - We had one requirement of no dependency on SEAL and POOL which was not honored



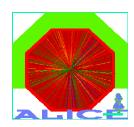


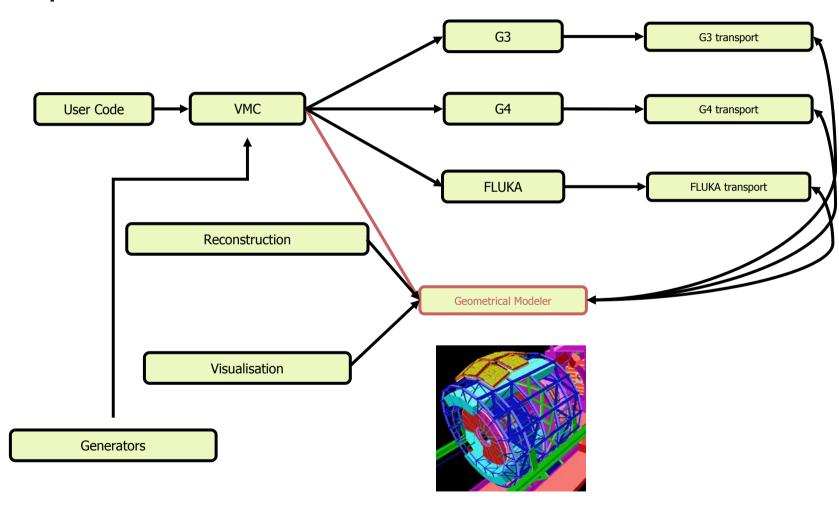


- ALICE did propose the Virtual MC as solution to abstract the experiment MC code from the actual MC engine and to allow easy comparisons between MC's (G3, G4, FLUKA)
- We are sorry that the VMC was never followed up in spite of recommendations made in previous reviews
- ALICE continues the development of VirtualMC



The Virtual MC







Simulation



- ALICE doesn't use GDML
 - Consistent use of algorithmic geometry definition based on ROOT TGeo geometry for simulation, reconstruction and event display
- ALICE has no use for GENSER
 - In particular for HIJING we maintain our own version and had to put substantial effort into debugging of the distributed version
- ALICE has interest in MCDB / shared event files, if readable via ROOT





- ALICE has developed TFluka, the Virtual MC implementation for FLUKA
- FLUKA will be our default transport engine and will be used for the next Physics Data Challenge
- No use for FLUGG, it never worked for the ALICE environment





- ALICE has doubts about the readiness of the hadronic part
- Interface with Geant 4 (Geant 4 VMC) implemented
- Interface using TGeo geometry designed and ready to be implemented when manpower available