

Architects Forum - Minutes

Date / Time:	28 February 2019 - 14h
Agenda:	https://indico.cern.ch/event/766422/
Present:	P Mato, G Ganis (chair, notes), G Cosmo, J Blomer, M K Simon, A Peters, G Stewart, G Eulisse, W Lampl, T Boccali, M Cattaneo, M Clemencic, A Sailer, A Valassi
Next meeting:	4 April 2019 - 14h

Introduction (G Ganis)

G Ganis reminded the topic of the days, an overview of the SFT PoW following the presentations which took place during January and February.

He also reminded about the AFS phase-out of /afs/cern.ch/sw/lcg, which started, following the schedule, early february, with the AFS area made inaccessible (except for a few known sub-directories); this allowed to uncover less unknown users, which have been redirected to use the /cvmfs/sft.cern.ch area. A web page advising on the migration strategy is available at <https://ep-dep-sft.web.cern.ch/afs-phaseout> .

SFT line management (P Mato)

- Personnel changes
 - Junior fellow (Andrea Stano) started in February - helping us own the migration to Drupal 8 of several EP web sites (including SFT projects such as ROOT, Geant4,...)
 - The new LD for fast simulation (Anna Zaborowska) is starting tomorrow
 - The selection for the new LD opening is finalizing in couple of weeks
- Students
 - 11 summer students will probably be granted (MS and NMS)
 - GSOC, the umbrella organization CERN-HSF has been select this year by Google again
- A proposal for a Scientific Software Institute was presented at the Scientific Computing Forum
 - Propose a strong collaboration among European research institutions & labs, European Universities and physics experiments on software R&D, engineering and sustainability to tackle HL-LHC computing challenges
 - The main aim is to attract funding and students from universities to work on our problems.

SFT plan of work for 2019 (G Ganis, P Mato)

A summary of the main directions indicated by the plans of work of the SFT main projects was presented by G Ganis. The main common guidelines for all projects are: consolidation, both of the code base and of the {build, test, validation} infrastructure, which is required to guarantee the quality of the complex products delivered; and the need to focus on user needs, monitoring the essential feedback from the community.

A discussion followed the presentation about slide 9 (Current Vectorization Status); P Mato reported that the results were evolving and that the current status was that the scalar mode of GeantV was significantly faster than G4; the explanation of such a finding was under investigation. (*ed.: an update on the subject can be found in [A Gheata talk at ACAT 2019](#)*).

Report from the SFT Projects

ROOT

Not represented.

Ed.: Version 6.16 released on 24 January 2019.

Simulation

Geant4 10.04.p3 was released, containing the backport of a feature needed by CMS.

Preparing a patch release for 10.05 and dev release for early March. The plan of work will be discussed during the technical forum at the end of March.

Training courses at CERN: beginners help on 23-24 January; advanced on 26-27 March.

CernVM

CernVM appliance 4.2 following the upgrade RHEL 7.6 to 7.7 released on 4 February 2019.

CernVM-FS v2.6 under finalization; it includes the shrinkwrap utility, support for publication metrics, better integration for file-based distribution of container images. Target release date end of March . Working to address typical and useful showcases with new 'HSF' oriented repositories (*sw.hsf.org*) and the CERN container dedicated repository, *unpacked.cern.ch*, following an initiative from CMS.

The next CernVM Users Workshop enters the critical preparation phase; the main technological theme is around serverless cloud computing. The workshop will take place at CERN between 3 and 5th of June 2019 .

SPI

LCG_95 released based on ROOT v6.16; includes improvements in the setup of python packages, and in the compiler RPMs.

The team is continuing to work at the consolidation of the build infrastructure, in particular the RPM repository and the container images.

The Openlab ARM nodes will be replaced with equivalent ones provided by TechLab; a CERN summer student project to port LCG stacks to ARM has been submitted.

Report from related Projects

XRootD (M K Simon)

Version 4.9 released last week. Feature release: full support for TPC. A major release is foreseen for the end of the year (v5.0, featuring encryption).

COOL/CORAL (C Delort)

Nothing to report. Consequence of AFS phaseout is the ATLAS request for Doxygen docs.

Stakeholders feedback

HSF (G Stewart)

Workshop in three weeks; preparation proceeding well; 221 participants to date (ed.: 246 final).

LHCb (M Clemencic)

Moving forward with adding the Apache 2 license, with copyright CERN, to GAUDI, for the benefits also of ATLAS.

CMS (T Boccali)

Final ok for Apache 2 license in CMSSW. David Lange will join AF as CMS contact from next meeting.