

# Architects Forum - Minutes

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**Date / Time:** 9 May 2019 - 14h  
**Agenda:** <https://indico.cern.ch/event/766425/>  
**Present:** P Mato, G Ganis (chair, notes), L Moneta (for A Naumann), G Cosmo, J Blomer, M K Simon, A Peters, G Stewart, G Eulisse, M Cattaneo, C Delort, M Clemencic, A Sailer, A Valassi (remote)  
**Next meeting:** 6 June 2019 - 14h

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## Introduction (G Ganis)

G Ganis reminded about the AFS phase-out of `/afs/cern.ch/sw/lcg`, which, as foreseen, entered the second phase on April 3rd, 2019, when a one-week long external disconnection test of the CERN AFS cell was performed. No major problems experienced during the test, indicating that there are no more major external dependencies on CERN AFS. The schedule for removing availability of `/afs/cern.ch/sw/lcg` is kept (end of year); progress is done on the ATLAS side to meet the milestone.

G Ganis also reminded that RHEL 8 has been released early May, which may indicate a close release of CentOS 8 (no date yet, but for 7 it was one month later). The EOL of CentOS 7 being 7/2024, i.e. at the end of LS3, this may have some implications on the strategy for CentOS 8 adoption. During the discussion that followed, it was noticed that, given that there are still sites on SLC6, clear guidelines about the OS transitions are needed. Clear decisions are also needed for the support for containers at the sites: containers are indeed used to mitigate the issues of finding diverse OS major/minor versions on the landing nodes, but they suffer from possible limitations coming from old kernels versions run in the hosts. There was consensus that these concerns need to be brought at the attention of the Grid Deployment / Management Boards.

G Ganis finally reminded the forthcoming events, including the ESPP in Granada, during which G Stewart will give a presentation about 'R&D: Computing And Software', and the [Bologna workshop](#) on Future Collider Software organized by INFN to bring together ILC/CLIC, FCC and CEPC, and to which SFT has decided to participate significantly to bring forward the ideas about the TurnKey Software System developed at CERN.

## SFT line management (P Mato)

Personnel movement:

- New TECH student started in May (Massimiliano Galli) to work in the area of PyROOT

- New STAG Vincenzo Padulano to work in the area of RDF

#### New Roles:

- G Ganis is the new FCC software coordinator at a 50% level job. Starting basically from now. Looking for replacement for some of his tasks.
- D Piparo is the next software and computing coordinator for CMS from September. From July he will stop his activities in the SFT group. Redistributing his responsibilities.

#### GSoC:

- Google allocated 34 slots to our CERN/HSF organisation this year, which is 5 more than last year!
- 6-7 students will be directly participating to projects in the SFT group

## Report from the SFT Projects

### ROOT

- The branch for the next release, v6.18-patches, will be created by the end of the week; the final release of v6.18 is expected by early/mid June.
- The highlights of the new release have been presented during a [Wednesday meeting with the experiments in April](#), among which several improvements in I/O, including the performance of TTreeReader and RDataFrame, and pyROOT .

### Simulation

- The first patch on 10.05, 10.05p1, was released early April, and a development tag produced end of April
- The schedule for the next release is now fixed:
  - v10.06 *beta* by end of June 2019
  - v10.06 by December 2019

### CernVM

- CernVM-FS
  - Preparing consolidation patch version v2.6.1; expected mid June 2019.
  - Defining the content of the feature version 2.7 expected in Q4/2019
- Workshop
  - Well advanced with an interesting line-up of invited speakers
    - See <https://indico.cern.ch/event/757415/> .

- Everybody welcome to attend! The technology session will be in the IT auditorium .

## SPI

- Campaign to reduce the JIRA backlog quite effective; now below 100 tickets, including the ones for the LCG\_96 preparation
- Defining the list of improvements / wishes for LCG\_96 (dedicated JIRA epic available).
- Keeping up-to-date with new compilers: GCC 9.1 already available for testing under contrib .

## Report from related Projects

### XRootD (M K Simon)

- An XRootD workshop will take place in Lyon on 11-12 June 2019
  - <https://indico.cern.ch/event/727208/>
- Release Candidate for release v4.10 being prepared (for tomorrow or early next week)
  - Includes new interface for CTA and the XrdCIHttp plug-in (developed by SFT)

### EOS (A Peters)

- Migration is progressing on schedule
- Building for new versions of OSs (Ubuntu, Fedora)
- In order to control the version of XRootD and avoid surprises difficult to debug, started shipping own version of XRootD, installed under /opt
- On the development side
  - Erasure coding is on good track; it will allow to save some money by reducing the amount of disks
  - Observed very interesting performance improvements testing with libfuse3 and kernel 5.0.9, mostly due to caching of symlinks and directories
    - Available already in kernel 4.20
    - Should try to get a backport to RHEL8 for real usefulness

## Stakeholders feedback

### LHCb (M Clemencic)

- Nothing particular, waiting for the new release, new ROOT, new compilers

## LC (A Sailer)

- Planning / investigating the move to Gaudi, etc ... in the context of the Turnkey Software System

## HSF (G Stewart)

- HSF/OSG/WLCG workshop at JLab very successful
- New working groups (analysis, simulation, reconstruction) very active, meeting regularly
- Pre-CHEP2019 HSF/WLCG workshop dedicated to analysis
  - Tentatively it will be on Saturday 2 Nov afternoon and Sunday 3 Nov morning

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G Ganis, 10 May 2019