Architects Forum - Minutes

Date / Time:	6 June 2019 - 14h
Agenda:	https://indico.cern.ch/event/766426/
Present:	P Mato, G Ganis (chair, notes), A Naumann, J Blomer, W Lampl,
	E Moises, M Cattaneo, A Sailer, P Buncic, A Valassi (remote)
Next meeting:	11 July 2019 - 14h

Introduction (G Ganis)

G Ganis reminded the ESPP symposium in Granada and the main messages from the computing session: i) progress on training and careers recognition really is needed; ii) recognized role of good software to help closing the gap required-available resources; iii) strong support for R&D (across major labs, w/ non-HEP, w/ industry); iv) cost optimization should include both detector and computing together.

G Ganis reported that at the ITUM on 2 June 2019 a revisitation of the AFS phase-out was announced by IT, based on the fact that the concerns about the longevity of the upstream OpenAFS are significantly reduced. It was said that CERN IT will take the rest of the year to review the strategy and migration plan.

G Ganis finally reminded the forthcoming events, including the <u>Bologna workshop</u> 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 FELLOW, Omar Zapata, to work on the KT project the Israeli company All-In-Image
- New TECH student started in June (Jan Priessnitz) to work in the area of CernVM-FS with Jakob
- One new TRNEs, and first two first Summer Students have arrived.

Helping SHiP on the software

• The collaboration will be providing funding for 2 months

• Build and development infrastructure, CI, CVMFS installation, generation of dockers images, etc.

Future Collider Software Workshop

- Meeting to discuss common software for future colliders in Bologna
- Strong connection with the Turnkey Software stack

Topic: The NA61/SHINE usage of the LCG software stack (A Marcinek)

A Marcinek presented the NA61/SHINE software requirements and the way they use the LCG stacks (see <u>slides</u>).

A short discussion followed during which the need to use ROOT v5 was invetsigated. Antoni said that moving to ROOT v6 is not, in principle, a major thing but the little required needs to be done and since there is no dedicated man power, it is difficult to predict when. The fact that they are now connected with SFT may help them to move on.

Report from the SFT Projects

ROOT

- Working on the finalization of ROOT v6.18, expected in two weeks.
- ROOT v6.18-rc1 in the LCG stack since two weeks but no feedback by experiments at the dedicated meeting on 5 June 2019; also the attendance was very reduced, apparently due to clashes with ATLAS/LHCb meetings; investigating the best ways to avoid this for the future.
 - LHCb builds regularly and successfully with dev3 and dev4, providing feedback and tests for the release candidate
- Training of trainers meeting organized for Friday 14 June 2019; expected attendance: 17 people.

Simulation

(G Cosmo by email)

• Nothing particular; v10.06 *beta* still scheduled by end of June 2019

CernVM

- CernVM
 - Two patch released for v3 and v4 of the appliance following upstream RHEL security patches.
- CernVM-FS
 - Still preparing consolidation patch version v2.6.1, now expected early July 2019.
 - Defining the content of the feature version 2.7 expected in Q4/2019
- Workshop
 - About 40 people attended; very good atmosphere
 - Very interesting technology session: slides and video recordings available
 - Main messages:
 - HPC: options available in CernVM-FS should be OK; should monitor closely the situation
 - Containers: good integration with CernVM-FS is a priority; need to find a better support model for the CSI plugin for Kubernetes (too CERN specific)
 - Improvement of publishing is still a hot topic; the main use case are the nightlies for continuous testing.
 - See also the <u>summary of the workshop</u> presented at the SFT Monday meeting.

SPI

- Proposal for a layered software stack to provide a better multiversion support
- Content of LCG_96 almost finalized: almost ready for the release candidate.
- New compiler versions: GCC 9.1 available for testing under contrib .

Stakeholders feedback

ALICE (P Buncic)

- Affected by a TFormula problem in ROOT v6 (low priority)
- Addressing some security issues in XRootD

LHCb (M Cattaneo)

- Working on splitting the software in legacy and production for Run3
- Plan to release asap after LCG_96

LC (A Sailer)

• Investigating move to Gaudi in the context of the Turnkey Software System

G Ganis, 10 June 2019