Status report from the Hep Software Foundation Startup Team

Pere Mato (CERN), Torre Wenaus (BNL)
for the HSF Startup Team

Dec 3 2014 HSF iFB Meeting
https://indico.cern.ch/event/355946/

This meeting

This talk

- An incremental status report on developments since the last iFB meeting on Nov 5

Followed by open discussions

- The white paper analysis + proposed startup plan document came out on Nov 11, and you've all now read it ;-) so we can discuss your reactions
- The SLAC workshop plans have developed, as reported in the talk
  - We can discuss all aspects but particularly the agenda, questionnaire and list of potential activities/services are where the meat is

Two more startup team members added

Amber Boehnlein (SLAC)

Peter Elmer (Princeton)

Daniel Elvira (FNAL)

Frank Gaede (DESY)

Michel Jouvin (LAL, IN2P3)

Pere Mato (CERN)

Dario Menasce (INFN)

Graeme Stewart (Glasgow)

Craig Tull (LBNL)

Andrea Valassi (CERN)

Brett Viren (BNL)

Torre Wenaus (BNL)

Meetings and presentations

- Startup team meetings (meeting notes on the website)
  - Nov 10
  - Nov 17
  - Nov 26
- Presentation to LHCb
  - Generally positive feedback. They expressed worry over how an experiment can participate, whether significant effort is required [no], e.g. packaging requirements [no].
- Presentation to CMS
  - Generally positive feedback, concerned that there wouldn't be time at the SLAC workshop to fully present CMS views [certainly true, we should have a contact meeting to get their input soon, well before the workshop]
- Brief presentation to ATLAS Software this morning
  - Focused on announcing the workshop
- Presentations to WLCG (Management Board, Overview Board, Grid Deployment Board)

Mailing lists

- HEP S&C community website
  - http://groups.google.com/d/forum/hep-sw-comp
  - Announced along with the HSF SLAC workshop
  - ~100 people have signed up, so a long way to go
  - Please encourage your communities to sign up
- Google-free self-signup to lists
  - We learned it is easier than we previously advertised to sign up to google group lists without logging into google or using gmail
    - Simply send mail with 'subscribe' as the *subject* (not content) to <listname>+subscribe@googlegroups.com, e.g. for the list above, hep-sw-comp+subscribe@googlegroups.com

Website

- hepsoftwarefoundation.org content development
  - All approved user accounts can now add and edit content (everyone has the 'editor' role)
  - Content pages have an 'Edit' tab to edit existing content
    - People are encouraged to improve/correct entries that someone else created, as well as create their own
    - Revision history is kept, can revert to previous versions, no one (except admins) can delete pages. ie wiki-like capability
  - Info on adding new content on the 'Site development' page (top tab)
- Software catalog / knowledge base R&D
  - hepsoftwarefoundation.org presently uses Drupal to implement the software catalog and knowledge base
  - Drupal supports the essential features -- e.g. cross-referencing software with the experiments that use it -- but non-trivial
  - Brett Viren is prototyping a possible alternative based on Semantic Mediawiki (https://semantic-mediawiki.org/) which adds to a wiki the RDBMS-like capabilities that the catalog/knowledge base calls for
    - Will appear on the website soon, so we can all compare and decide

Draft White Paper Analysis and Proposed Startup Plan V1.0

http://hepsoftwarefoundation.org/sites/default/files/HSFwhitepaperanalysisandstartupplanV1.0.pdf

Table of Contents

- Draft document released Nov 11
- Dedicated discussion later in this meeting
- Lays out initial ideas, proposals for building the HSF
  - The HSF will be what people bring to it; all encouraged to get involved
  - The HSF aims to marshal existing resources so they are used more effectively. It is not establishing a program that will require new resources and funding
- Document has twofold purpose:
  - Analyse and summarise the many proposals and ideas expressed in the White Papers
  - Take the next step beyond a bare summary: synthesise, together with other inputs, into a proposal as to how to proceed
    - Sections include, as well as a factual summary, the startup team's assessment of how the HSF should approach the area
    - Document concludes with a summary of the startup team's recommended (and partially underway) course of action
    - The plan will evolve as practical experience is gained and as a result of further discussions, in particular those at the upcoming SLAC workshop
- Made a late attempt to add to the document a list of potential activities/services ('services' not implying funding requirements), but decided to write that up separately

Contacts

- One on one contacts, small discussions, presentations have continued
  - See the startup team meeting notes
- We thought a month ago we would have started by now to have the more organized contact meetings that we plan as a complement to smaller discussions -- we haven't yet
  - We're ready to -- the key prerequisite was getting the document out -- just haven't had time
- We have identified responsibles on the startup team for each of the contact meetings, will have as many as possible before the holidays
  - Feel free to proactively get in touch with them
- These discussions often involve correcting mistaken impressions, e.g.
  - HSF is concerned only with big players (no!)
  - High barrier to entry, like requirements on packaging, software process (no!)
- We're starting to get approaches about letters of support. We agreed that
  - It is too early in the HSF's development to consider providing letters
  - Proposals are free to point to HSF documents and materials that help to make their case, but without any direct comment from HSF

Contact meeting organizers (from startup team)

- Generators/theory: Pere
- ATLAS: Torre
- CMS: Daniel, Pete
- Linear collider: Frank
- LHCb: completed (Pere)
- ALICE: Pere
- Intensity frontier: Daniel, Brett
- Astro: Torre, Dario
- Belle II: Pere, Torre
- Nuclear (beyond ALICE): Michel, Torre (perhaps later, not in first round)

Guide to discussion/input: Focus areas

What do you think should be the main areas of focus?
- Evolving software to optimize performance
- Promoting compatibility, interoperability and integration testing
- Promoting common software developments
  - A place where people can bring their ideas and projects and turn them into common efforts
- Improving communication and expertise sharing within HEP and with non HEP partners
- Support for software careers and on training
- Incubating and promoting innovation
- Others?

Guide to discussion/input:
Potential activities/services the HSF could offer

We're drafting a list to gather focused feedback:

- Project hosting infrastructure
- Building and testing infrastructure
- Teams for certification and integration
- Software repositories and package managers
- Access to computing resources on many platforms and architectures
- Access to software development tools
- Training in software technologies and tools
- Support for IP and licensing issues
- Peer reviews
- Access to scientific software journals
- Task forces or "SWAT" teams to solve specific issues
- Consultancy for new experiments or projects

Guide to discussion/input: Questionnaire

- Decided to assemble a questionnaire to get focused feedback on key questions
  - From contact discussions
  - From contributors to the SLAC workshop
- Backgrounds to the questionnaire are
  - the synthesis/plan document
  - the summary of focus areas
  - the potential activities/services list
- The current draft questionnaire:
  - In general terms, what should the HSF be and do, and what should it not be and do? What should its main areas of focus be?
  - Any feedback related to the work performed so far by the startup team?
  - Could you comment on the white papers summary document?
  - How could the HSF be helpful (not helpful) to your project? Which of the proposed activities/services could be helpful, and are we overlooking others?
  - What can you and/or your project bring to the HSF? Do you see potential to form new collaborations via the HSF, e.g. through parts of your projects becoming common software efforts?
  - What should the next steps for the HSF be after the SLAC workshop?

HSF Workshop at SLAC

- January Tue 20 and Wed 21, 2015
- http://hepsoftwarefoundation.org/workshop-slac-jan-2015
- Thu 22 reserved for ancillary meetings
  - Fri 23 potentially available also. Not Mon 19, it's a US holiday
- Still waiting for the official website from SLAC
- A few details…

The HEP Software Foundation Workshop group block is now confirmed and guests may begin to book reservations. Your guests can reserve their rooms in two ways. They may contact our front desk, 24 hours a day at (650) 926-2800 or book online athttp://guesthouse.stanford.edu/reservations. Please advise guests to use the group code HEP0115 in order to receive the correct rate and be included in the group block.

SLAC Workshop Goals

Main goal: Refine next steps for building HSF

- Survey what has been done so far (previous workshop, startup team, White Papers synthesis, startup plan, etc.)
- Invite a range of large and small projects to briefly express their views on how the HSF could be useful to them, and what they can bring to it
- Invite a wide range of experiments, small communities, individual users to express their views in lightning talks
- Discuss new project initiatives which might be launched under the Foundation umbrella
- Hear the views of institutions and funding agencies
- Come to consensus and conclusions on the next steps in starting up the HSF.

SLAC Workshop Draft Agenda

Will soon appear on Indico. Remote connection possible.

- Welcome
- Current Status
  - What has been done so far (previous workshop, startup team, White Papers synthesis, startup plan, etc.)
- Learning from others
  - Invite communities with similar initiatives (e.g. Apache SF)
- Project's Views
  - Invite large and not so large projects to express their views in participating to the Foundation (e.g. Geant4, ROOT, HepForge, …) (talks of 20' max)
- User's Views
  - Invite as many as possible experiments, small communities, individual users to express their views (lightning 5' talks)
- New project initiatives
  - Opportunity for new projects to be launched under the Foundation umbrella
- Funding Agencies Views
  - Invite institutions and funding agencies to express their views
- Discussion and Conclusions
  - Structured discussion to reach consensus and agreements

From the Nov 5 slides: Timeline to [today's] iFB meeting
(with comments on where we actually are)

- Right away: official announcement of the SLAC workshop
  - *Pre-announcement made, official one held up at SLAC until this week*
- Complete synthesis document draft *(done)*
- Begin having contact meetings, using the document as introduction/background *(still only small discussions thus far)*
- Based on contact meetings and discussions, begin planning/tailoring Foundation activities to the declared interests *(made a list of possible activities/services, and a questionnaire, to focus the feedback)*
- Encourage early contributors to the website, respond to feedback, continue development *(ongoing)*
- Fill out the plans for the SLAC workshop and ancillary meetings *(ongoing)*
  - By end Nov, have the plans firm enough to allow people to book their flights *(done as of today)*
- For the next iFB meeting, have a first early workplan/timeline informed by the first round of contacts *(proceeding with plan/timeline proposed in the document, progressively more informed as we have more contact discussions!)*

Timeline from now to the SLAC workshop

- Finalize questionnaire, list of potential activities/services
  - As further background material for contact meetings, workshop contributors
- Contact meetings, before the holidays if possible
- Finalize SLAC agenda and start lining up speakers, before the holidays as much as possible
  - Still being open to late contributions
- Ongoing website development, encouraging broad participation in building the software knowledge base
- Another iFB meeting before the workshop? Jan 7 would be the candidate date, will enough people be around? (Jan 14 would be pointless, too close to the workshop)