



HSF Packaging Group: Introduction

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Ideas for Group Plans for 2019

- Main plans to continue with demonstrators and prototypes of packaging solutions in 2019
 - We would like these to aim at providing meaningful and testable solutions to the packaging problem for HEP
 - Based on the [use cases](#) we worked on last year
 - It will be good to have updates from each of these projects every few months
- Longer term goals and thoughts
 - CHEP2019 paper
 - Follow on from successful presentation in Sophia of the group's work
 - Update of the packaging group [technical note](#)
 - Considerable amount of work done since 2016

Ongoing Projects

- Building LCG-like software stack with Spack
 - Graeme and Javier work a small fraction of their time on this
 - Should be useful for ATLAS and FCC as first clients
 - Currently all dependencies for Gaudi are building correctly
 - Want to tidy up HSF [hep-spack](#) package repository
 - Remove some packages that went into upstream spack repo
 - Provide a place for the community to park recipes that are in a good state, but not yet accepted upstream
 - We will share the configuration for our setup in the HSF [spack-config](#) repo
 - We hope to get a CERN Summer Student to work on this too

SuperNEMO Stack with Spack

- SuperNEMO migrating to use Spack
 - Homebrew moving away from from-source builds, binaries work well on Linux, except until graphics (hence ROOT) come along
- Out the box, Spack provides all bar one dependency
 - Though await Javier's ROOT improvements
- Use cases maybe slightly different to those discussed
 - Will still support end users doing the install themselves...
 - ... but already using Docker/Singularity as binary deployment mechanism (no CVMFS yet)
- So far so good, some contributions likely:
 - To spack: "Spack update", "spack repo add <URL>" (like Homebrew...)
 - To WG: Maybe workflow/scripting for Container +Spack (+CVMFS) as a Developer Environment (e.g. support macOS/Windows for Linux-only software)

Ongoing Projects

- FNAL Spack / SpackDev
 - The MVP, last update October
- LHCb use of Nix
 - Chris Burr will update us today on that
- Use of Portage as a 'base system' on which we build
 - Nice tutorial from Guilherme last year

Are there any other projects or tools that people are aware of?

Meeting Cadence and Communication

- As the group has entered a phase where we are more working than discussing...
- Baseline schedule would be one meeting a month
 - Of course we can always try to convene extra meetings if needed
 - Stick to this day/time as it seems to work well for most
- **Next meeting, 27 February**

- Mailing list has been very responsive when questions are raised
 - Thanks! So don't be shy to use it

HOW2019 Workshop

- HSF/OSG/WLCG Workshop is this year in March
 - <https://indico.cern.ch/event/759388/>
 - Early registration closes this week
- Wide ranging workshop on the advances needed in software and computing in the next decade
 - Opportunity to reach discuss with HEP and non-HEP communities
 - Full set of HSF sessions (Reco, Analysis, Sim)
 - There is a Software Tools session where we will give an update from the group

The poster features the title 'HOW2019' in large, white, outlined letters with a circuit-like pattern of dots and lines. The background is dark with faint, glowing blue lines and text, suggesting a network or data environment. The text is white and black, providing clear information about the event.

Joint HSF, OSG & WLCG Meeting

HOW 2019

MARCH 18-22, 2019
Jefferson Lab • Newport News, Virginia, USA

SCIENTIFIC ORGANIZING COMMITTEE

Ian Bird, CERN	Michel Douvin, LAL-CNRS
Simone Campana, CERN	David Lange, Princeton University
Tim Cartwright, University of Wisconsin-Madison	Graeme A. Stewart, CERN
Ian Collier, STFC	Frank Wuerthwein, UC San Diego

LOCAL ORGANIZATION PROVIDED BY JEFFERSON LAB