Update on Spack HSF Packaging Forum 14 Mar 2017

Patrick Gartung FNAL

Current and upcoming Spack releases

- v 0.10 released
 - <u>https://github.com/LLNL/spack/releases/tag/v0.10.0</u>
- v 1.0 being worked on

HEP contributions accepted

- <u>https://github.com/LLNL/spack/pull/1671</u> Patch to gcc build to add @rpath and make it relocatable
 - accepted then reverted because it broke gcc 6.3 fortran on macOS Sierra
- <u>https://github.com/LLNL/spack/pull/943</u>
 LD_LIBRARY_PATH for compilers
 - ported to PR 2279
 - <u>https://github.com/LLNL/spack/pull/2279</u>

HEP contributions still in queue

- <u>https://github.com/LLNL/spack/pull/1013</u>
 Refinement of "Binary cache" tarballs for macOS
- <u>https://github.com/LLNL/spack/pull/445</u> "Binary cache" tarballs

Fireworks on MacOS Sierra

- Fireworks : Minimal set of CMSSW to read root data files and run event display.
- CMS specific spack packages:
 - https://github.com/gartung/cmssw-spack
- CMSSW config files used to build Fireworks with scram
 - <u>https://github.com/gartung/scram-tool-templ</u>
 - Fireworks package file substitutes spack install directory into templates in config files

Build Details

- First build of CMSSW with native clang.
 - Root built with Cocoa graphics
 - Uncovered some gnu specific templates
- Modified CMS dictionary class check python script to work with SIP enabled
- Got around the relocation problem by putting spack in
 - /Applications/spack
 - This allowed the creation of tarball that can be used by anyone on macOS Sierra
 - <u>http://home.fnal.gov/~gartung/spack-fwlite.tar.bz2</u>
 - "Published" in email with checksum to avoid using old versions.