

Welcome and workshop expectations

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Librarian and Integrators Workshop, 20 May 2018

Welcome to the Librarians and Integrators Workshop !!

- ❖ Outline

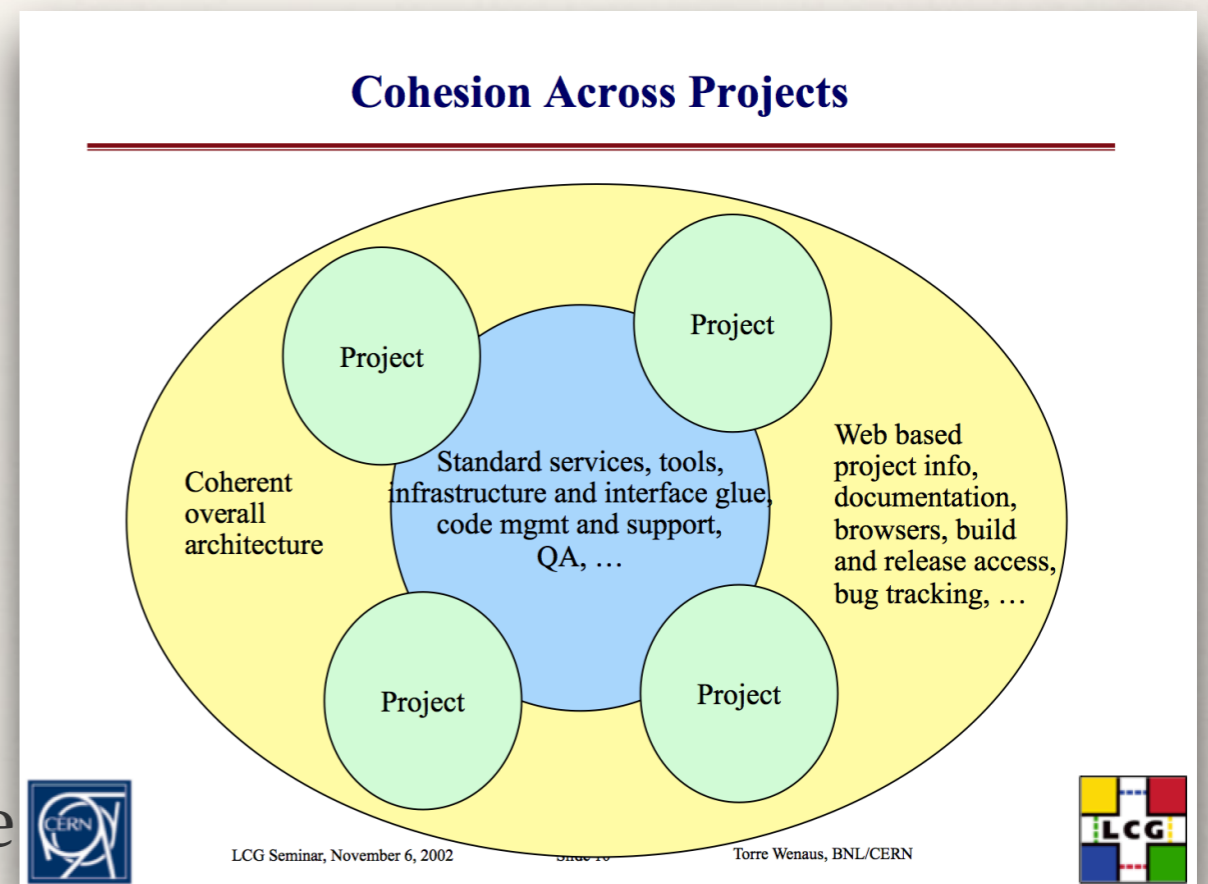
- ❖ Introduction to the SFT group
- ❖ The SPI project: historical perspective
- ❖ What we want to achieve with this workshop

The EP-SFT Group

- ❖ The group **develops and maintains common scientific software** for the physics experiments in close collaboration with the EP experimental groups, the IT department and collaborating HEP institutes
 - ❖ Geant4, ROOT, Gaudi, CernVM, ...
- ❖ The group provides a **common infrastructure and expertise** to the experiments
 - ❖ selects & maintains tools used in the development process
 - ❖ manages stack of >300 external software packages
 - ❖ provides people to the experiments to fulfill key roles
 - ❖ training (CSC, GridKa, CERN Technical Training, ...)
- ❖ The group leads and participates actively to **community initiatives** such as HEP Software Foundation (HSF)

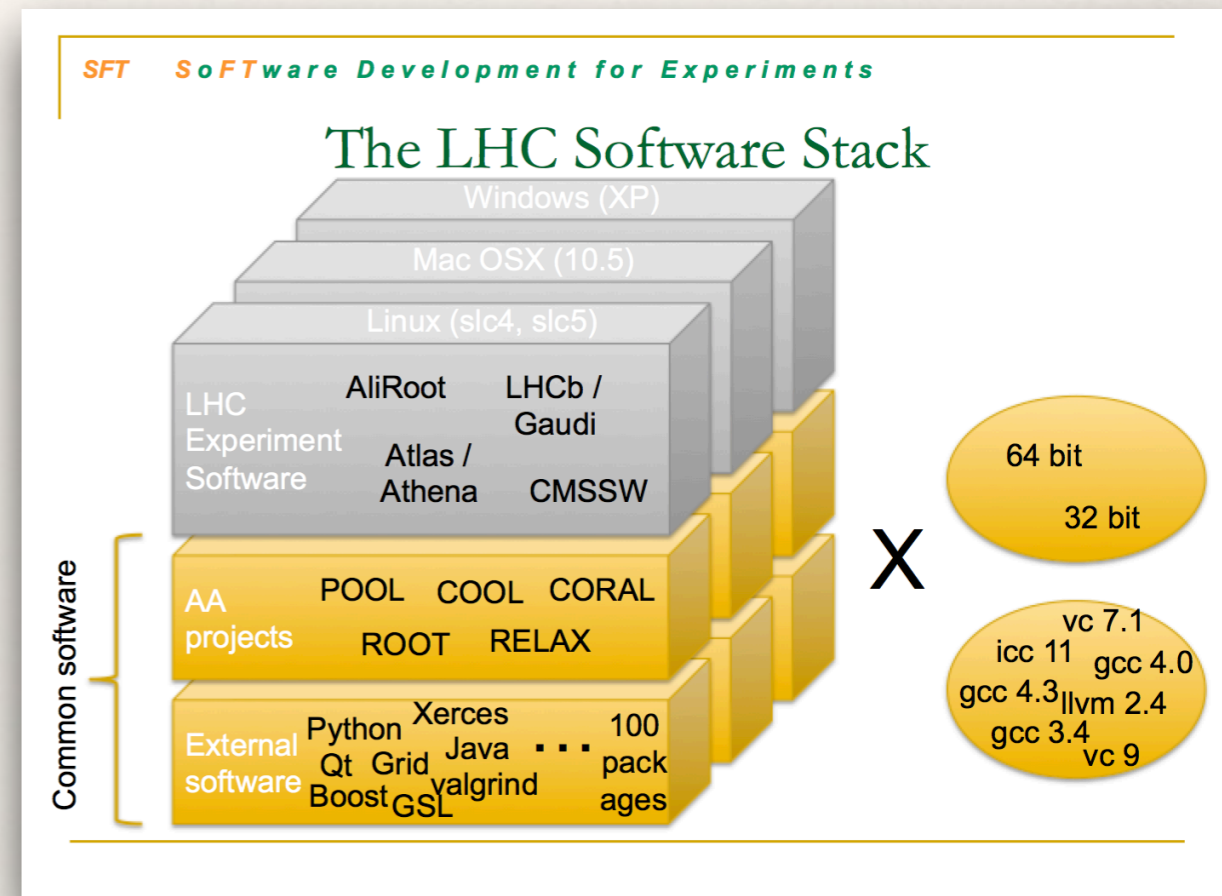
Historical Perspective

- ❖ The *Software Process and Infrastructure* project was started in the early days of the LCG Application Area (~2002)
 - ❖ “Standard services, tools, infrastructure and interface glue, code mgmt and support, QA, ...”
 - ❖ Was one of the first projects started and resourced (A. Aimar)
 - ❖ Evolved later to “Software and development services: external libraries, savannah, software distribution, support for build, test, QA, etc. (A. Pfeiffer)
 - ❖ The bigger emphasis was to provide common tools and practices to the LCG-AA projects



LCG External Software Stack

- ❖ SPI evolved to provide a rather large software stack of external packages
 - ❖ ~100 packages
- ❖ Developed LCGCMT (S. Roiser)
 - ❖ A set of scripts and configuration files based on CMT
 - ❖ Improved release time
- ❖ Much bigger weight for Nightly Build system
 - ❖ Essential for testing / validating AA software packages such as ROOT, POOL, etc.
 - ❖ Experiments could build their software on top of SPI provided nightlies



Integrating MC Generators

- ❖ GENSER project was born at the same time as SPI
 - ❖ For many years the software release and installation procedures were very different
 - ❖ Almost unmanageable complexity
- ❖ Unification of procedures with the introduction of the LCGCMake tool (mid-2013) (B. Hegner)
 - ❖ See next presentation by P. Mendez
- ❖ The main particularity is the need to provide several versions of MC generators for a given LCG configuration

Goals for this Workshop

- ❖ An opportunity to re-orientate the SFT activities to better server the internal and external projects
- ❖ Review the status of the SPI project
 - ❖ Compare what is provided versus what is currently needed or will be needed in the next 2-3 years (for Run3 after LS2)
 - ❖ Identify the strong points and weaknesses
- ❖ Listen to the LHC users and other communities to identify common areas of interest
 - ❖ We have tried to cover in the agenda all LHC experiments and current clients
- ❖ Establish a common strategy that will cope with the new requirements of the LHC users and other communities
 - ❖ Aligned with HSF common directions if possible

All the ingredients to define the SPI program of work during LS2