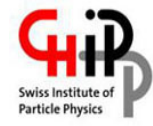


CHIPP

Computing Board Issues

Christoph Grab
ETH Zürich



04.10.2017

Bern

Introduction (1) – discussed in CHIPP Board 21.8.17

Preamble:

- Coordination of CHIPP – related LHC computing activities has been handled through the “CHIPP computing board” so far.

Immediate and longer terms needs require separate considerations:

- Immediate: I asked for confirmation of small changes to the coordination to cover the immediate issues for the **LHC-related computing**
- I proposed some steps in view of the longer term future of a **more general CHIPP computing** strategy.

Organisation for CHIPP computing (I)

(08/2017)

We propose the following minor modifications of definition of CHIPP computing board

- **“CHIPP LHC computing board “CLCB”, shall in future:**
 - **Decide** on all strategic and political issues, related to Swiss LHC computing, eg.
 - Strategy for negotiation of contracts between CHIPP, CSCS/ETHZ, etc.
 - Strategy for communication with SNF, FLARE (LA), SANW, ...
 - Strategy for re-distribution of resources among experiments
 - Strategy for long term evolution of computing model
 - Meetings called as needed by CCB chair (F2F or VC; at least 2/year)
 - This CLCB shall **rely on a technical advisory board**
 - chaired by CLCB chair
 - mandate defined below
 - This CLCB shall **consist** of the PI-representatives of the institutions+experiments i.e. present FLARE LHC computing grant holders.

Organisation for CHIPP computing (II)

(08/2017)

- **Technical advisory board to CHIPP LHC computing board**
 - **Deals with** all technical issues concerned with Swiss computing for **LHC**, discusses and decides on the Tier-2 level, and advises for Tier-3 level:
 - all technical issues for operation ()
 - compute resource provisioning
 - provides links to and cooperates with operations team in experiments
 - provides liaison to Tier-3 teams
 -
 - **Consists of** representatives of all CHIPP institutions, covering all LHC experiments with Swiss participations, CSCS and the Tier-3s. Additional experts may be invited for technical advice.
 - **Meets** F2F 2-3 times a year CSCS, AND ~biweekly operation meetings (VC); further discussions/meetings as needed.

→ *this proposed modifications were approved from the CHIPP board (21.8.2017).*

Organisation for CHIPP computing (II)

(08/2017)

CHIPP LHC Computing board decides on strategic issues. It is advised by technical a advisory board.

Technical Advisory board



G.Sciacca (UBe)
Luis M.Ruiz (UGe)

C.Grab (ETHZ) chair
T. Kljinsmaa (ETHZ)
D.Feichtinger (PSI)
N.Loktionova (PSI)

R.Bernet (UZH)
S.Tourneur, (EPFL)

P.Fernandez, M.Gila,
M. De Lorenzi (CSCS)

CHIPP LHC computing board

M.Weber (UBe)
T.Golling (UGe)

C.Grab (chair, ETHZ)
G.Dissertori (ETHZ)
D.Feichtinger (PSI)
F.Canelli (UZH)

U.Straumann / Serra (UZH)
A.Bay (EPFL)

T. Schulthess (CSCS)

Potential Computing Resources Growth (2017-2020)

Pledged on 30.09.2017

Pledges	2017	2018	2019
Compute [HSo6]	78,000	96,000	110,000
Storage [TB]	3,500	4,000	4,300

- Values by April of each year (compute pledges are 10% lower of installed capacity, not defined for 2020 yet)
- Numbers show the **maximum** that can be afforded with current flat budget. It would be wise to lower them a bit and put some money aside for extras (e.g. higher memory, DataWarp, scratch, additional projects, budget cuts, etc.)
- LHConCRAY shows more resources for the same cost, assuming a similar CPU efficiency & failure rates compared to Phoenix

Organisation for CHIPP computing (IV)

(08/2017)

- **Future strategies and needs of all CHIPP computing** should be dealt with **representatives of ALL the various communities in CHIPP.**
- Therefore we suggested to create an **interface for common strategic** discussion. We search for **contact persons** from the different CHIPP communities/pillars:
 - HEP : existing LHC computing steering board delegate
 - Neutrino physics
 - Low-energy + precision physics
 - Astro-particle physics
 - ????
- We will then call for a brainstorming meeting with these persons to discuss needs and then propose further steps.

→ Please send proposals for contact persons to A.Benelli and C.Grab.

Next steps

- **Decide on CHIPP LHC computing board modifications.**
- Still in 2017 – **CHIPP LHC computing board** needs to address following:
 - strategy LHConCRAY resource sharing
 - implementations of adequate CM+support model for all VOs
 - start re-optimize the resource splitting among experiments
 - start re-negotiations with ETH/CSCS in view of contract expiration
 - ...
- Collect names for **contact persons** from different pillars/communities, and then call for a brainstorming meeting to define the next steps for a **common overall CHIPP computing strategy**.