



HSF Conditions DB Activity Introduction

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Overview

- A little history
- Goals of the activity
- A target white paper
- Today's agenda

A little history

- “Conditions Data” was one of the working groups of the HSF Community White Paper:
A Roadmap for HEP Software and Computing R&D for the 2020s, The HEP Software Foundation, Albrecht, J. et al., Comput Softw Big Sci (2019) 3, 7 <https://doi.org/10.1007/s41781-018-0018-8>
- The Conditions Data Working Group wrote a fuller report:
<https://arxiv.org/abs/1901.05429>
- There was a good level of consensus across experiments about best practices, including:
 - Loose coupling between client and server using RESTful interfaces
 - The ability to cache queries as well as payloads
 - Separation of payload queries from metadata queries

Goals of the HSF Conditions Databases Activity

- From the webpage:

<https://hepsoftwarefoundation.org/activities/conditionsdb.html>

- “The main goal of this HSF activity is to provide a forum for cross-experiment Conditions Database discussions with as broad an audience as possible. By first discussing and documenting use cases and their associated functionality, one aim of the group is to then converge on an API specification with a reference implementation.”

Goals of the HSF Conditions Databases Activity

- The problem:
 - a. taxonomy
 - b. the old XY problem
- For (a), we use “conditions data” to refer to a particular subset of all of the metadata that accompany experiment data-taking. Specifically it’s the subset needed for offline data processing (see Giacomo’s talk). The use cases are a critical part of the problem specification. This is neither intuitive nor universally accepted.
- For (b), given the above, we are clearly not starting with a well-defined problem.

A target White Paper

- The first target for the activity should be to define the problem
- A white paper documenting the use cases and defining the requirements we derive from these use cases would be very useful for the community
- We will try to avoid talking about solutions and technology choices at this stage, but recognise this is something that will require effort
- Giacomo will present use cases today
 - What did we miss? A good topic for the next meeting
- Requirements are tricky, we've started collecting them here:
 - <https://docs.google.com/document/d/1SBC3ugwNj5frChCvA4fRk2exGm4upCzGaUsppPWUwvI/edit?usp=sharing>
 - Discuss this when it makes sense, possibly in the next meeting

Today's agenda

HSF Conditions Database Activity Meeting

Wednesday 6 Apr 2022, 14:30 → 16:00 Europe/Zurich
42/R-001 (CERN)

Description <https://hepsoftwarefoundation.org/activities/conditionsdb.html>

Videoconference  HSF Conditions Database Activity Meeting [Join](#) 42/R-001

14:30 → 14:50 **Introduction to the Conditions DB Activity** 20m

Introduction including the overall goals of the activity:
The main goal of this HSF activity is to provide a forum for cross-experiment Conditions Database discussions with as broad an audience as possible. By first discussing and documenting use cases and their associated functionality, one aim of the group is to then converge on an API specification with a reference implementation.

Speaker: Paul James Laycock (Brookhaven National Laboratory (US))

14:50 → 15:10 **Conditions Database use cases, workflows and requirements** 20m

Using experience from CMS, ATLAS and Belle II, what use cases and workflows do we need to support, and what requirements can we infer?

Speaker: Giacomo Govi (Universita e INFN, Padova (IT))

[Conditions DB R...](#)

15:10 → 15:40 **Discussion** 30m

Towards the goals

Speakers: Andrea Formica (Université Paris-Saclay (FR)), Andrea Formica (CEA/IRFU,Centre d'etude de Saclay Gif-sur-Yvette (FR)), Giacomo Govi (Universita e INFN, Padova (IT)), Paul James Laycock (Brookhaven National Laboratory (US))