Introduction to DUNE DB Group

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DUNE ND Software Integration Meeting
August 31, 2020

DUNE DB Group

Officially formed in early 2018 – prior to ProtoDUNE first run

Conveners:

Norm Buchanan (CSU) - Norm.Buchanan@colostate.edu
Paul Laycock (BNL) - laycock@bnl.gov

We currently meet bi-weekly although that will likely move to weekly as we get closer to the ProtoDUNE second run.

Wednesday 2:00 PM (central time) - "on week"
Thursday 10:30 AM (central time) – "off week"

We will have a parallel session at the upcoming collaboration meeting

Were planning 2nd DUNE DB Workshop this past Spring but clearly that has been delayed.

DUNE Databases

There will be many databases needed to serve DUNE – both FD and ND

- We have been focusing on FD (and ProtoDUNE) thus far

Database solution needs to cover the decades-long lifetime of DUNE and DUNE analyses

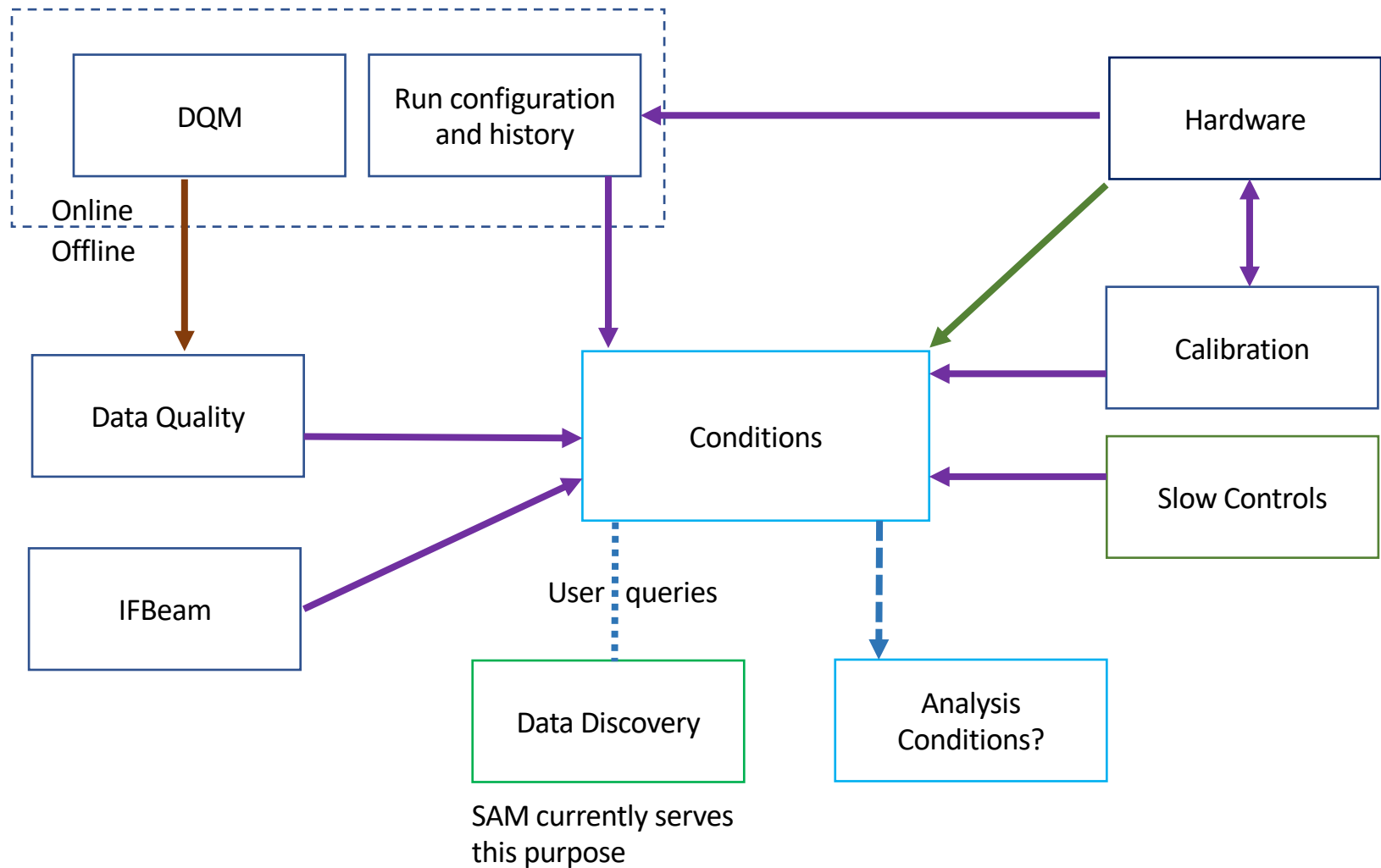- This includes operation and maintenance

We are currently at the development stage for most databases

Using ProtoDUNE as a testbed for the the database system

- ProtoDUNE Run I: IFBeam, Run Configuration/History implemented and demonstrated

- ProtoDUNE Run II: want to test all DBs – very ambitious

Over the past year group has been working on hardware DB

Overall Database Design (proposed)

More study and discussion needed to converge on design.

What can we do for you?

The DB requirements are driven by needs of the user

Now is the time to start the conversation to ensure that the ND software, physics, and hardware groups will have what is needed regarding databases

We are converging on the final requirements for the hardware DB – should be able to meet ND needs

You should be thinking about any special requirements you may have – especially if they go beyond what is planned for FD

- Storage needs (bandwidth)
- Specific databases
- Interfacing with HPC
- etcc…

What can we do for you?

Given the limited resources of the DB group lead-time is very important – and of course involvement of more people would be highly welcomed

It would particularly helpful to have a liaison between the ND software integration group and the DB group

Paul and/or I will try to attend this meeting more often, if not regularly, and you are welcome to join our meeting

Our wiki page is under development but contains some useful information.