

ISPyB Developers

Web meeting

2019-12-02

Participants:

ALBA: Daniel Sanchez **Diamond:** James Hall, Karl Levik, Neil Smith **ESRF:** Solange Delageniere, Alejandro de Maria, Olof Svensson, Gianluca Santoni **Global Phasing:** Rasmus Fogh, Gerard Bricogne, **SOLEIL:** Tatiana Isabet, Idrissou Chado

Refactoring of ISPyB:

The aim of this web meeting was to discuss the question raised by the last steering committee which is to study the alternatives for the evolution of the current database and backend, or to make a fresh start and rewrite ISPyB.

In the DLS point of view, the question of evolution vs new database & web services could be divided into 4 items treated by a small working group. The items are the following:

1. Evolution of web services
2. New web services
3. Evolution of database
4. New database

But the question is who would be part of this working group?

DLS suggested we could identify what contribution each member could provide (act as lead, contributor, reviewer etc.). However, there was not much interest in this approach. It was suggested that there was not sufficient resource to run 4 groups in parallel. Instead we could split the steering committee question into two main topics: Database (evolution vs rewrite) and Web services (evolution vs rewrite).

ESRF points out that the first thing to do would be to clarify things by choosing on which back-end: ISPyB or SynchWEB, we want to work. Starting from scratch a new database or new web services could be the beginning of a new project then a new potential collaboration but in our opinion results will not happen in the near future and it does not concern directly to the MOU signed between us. In our opinion we need a solution that has to be taken at shorter term.

ESRF would prefer that a decision is taken and that includes the UI so everybody shares the software full stack (database, backend and user interface) and it was the case at the beginning of the project.

-> No ideal and easy answer

In another point, a major rewrite will take a long time, require a lot of manpower and will force us to stop new developments in the current versions (freeze current versions).

Global Phasing explained the situation of the MxCube collaboration before the current refactoring effort but it appears that there was less divergence at that point. Indeed, in ISPyB, the difficulty that we face is due to the fact that we work with different technology.

It was discussed whether to use microservices but again in which languages ? (DLS said that they don't really care). The advantage of micro services is that each one has a specific purpose and could be written in different languages if required. A vision for ISPyB based on a collection of services would allow sites to "pick and choose" which elements they want to use.

Finally DLS suggested it would be interesting to find out from the collaboration members if there is a preference for a software stack or technology. Would it help other members contribute to the ongoing development if new services were written in another language (e.g. python)? The steering committee question is a chance to think about the future direction of the ISPyB ecosystem.

Decisions:

- ❖ For the February meeting
 - ESRF propose to prepare the « General overview » and back-end
 - DLS will propose a technical solution for back-end evolution which will be discussed through the developers' mailing list.
 - A presentation of this solution will be done during the **next web meeting**.

Next Meeting:

Web meeting will be Monday January 20th 2020, 15 French time <https://whereby.com/ispyb>