

MXCuBE developers' meeting

15 June 2021

Participants:

- Marcus Oscarsson, Antonia Beteva, (ESRF)
- Meghdad Yazdi, Elmir Jagudin (MAX IV)
- Jordi Andreu (ALBA).
- Lais do Carmo (LNLS)
- Rasmus Fogh (Global Phasing)
- Ivars Karpics, (EMBL Hamburg)
- Martin Savko (SOLEIL)
- Michael Hellmig (HZB)

Minutes: Rasmus

Site status

It is decided that the site status overview will no longer form part of the agenda, as it took too much time for too few news, given the high frequency of developers' meetings. Instead participants are invited to report if they have anything particularly important to say

RF reported that a worrying problem with incompatibility between the `gevent` and `py4j` libraries in Python 3 had been successfully resolved thanks to help from other MXCuBE colleagues. Global Phasing gives official thanks. Just on the 13th of June, MS at SOLEIL and GPhL had run a test together, proving that the Global Phasing workflow had been successfully ported to the PX2 production branch, which is very similar to the master branch. There are now working GPhL installations (just about) at SOLEIL, ALBA, and EMBL-HH, and work has started on preparing for installation at Massif-1, where the existing experimental workflow would call the GPhL workflow for running experiments.

MS also reported on the 13th of June test, which apart from the workflow part had been a good opportunity to test the new interface, and which showed that the workflow could work without problems using only HDF5 files.

Feedback on MXCuBE meeting

Reactions were few, and positive, with particular contentment at the expanding membership.

AB raised the point whether we needed new developers'-only mailing lists and/or should revisit rules on who can raise issues etc. The additional participants had not signed the same memorandum of understanding as the rest, and the steering committee might want input also on how much resource was taken up. For now it was agreed to leave things as they are, let each institution decide how much resource to put into any issues that appeared to be mainly for the benefit of new members, and to refer questions to the steering committee as they arise.

Enhancement proposals

The general idea of the MXCuBE Enhancement Proposal (MEP) was unanimously accepted, and the current template was accepted as a good place to start. It was noted that it remains possible to make code changes without having to make a MEP first.

The question was raised whether the MEPs should have a separate repository of their own, which would make for a cleaner organisation of the repositories. After some discussion it was agreed to keep the MEPs in the mxcube core until further notice, since 1) this would render them more visible and favour their uptake, 2) they should anyway be limited to issues that were not specific to either the Qt or the web version, at least for the time being.

MEP-01

The MEP-01 proposal about branching and release procedures was well received. RF re-raised a question from the github discussion, whether the workflow proposed in MEP01, with a single development branch, a single release branch, and a linear, unbranched structure, would be sufficient to support a project where a lot of development happened locally on site-specific branches. As explained by JA, the idea was that MXCuBE would henceforth expect that new developments respected the API, and sites kept track of which (semantic) branch they were synced with (developing from). This should eliminate any need for supporting development in side branches, and should greatly simplify development across multiple sites, without any need for a more complex branching system. All participants concurred.

In addition it was agreed that we should develop rules for 'good practice' as we went forward, and that sites should be encouraged to merge local developments (assumed to be respecting the API) back into the development branch. We were

reminded that the versioning system of the MEP was more complex than simple semantic versioning, and that we should use the more powerful syntax. Finally it was agreed that we would keep the name 'master' for the actively developed branch (referred to as 'development' in the MEP).

It was agreed that we could use either github hooks or bumpversion for version increases, the meeting trusting in JA's expert judgement. JA (ACTION) promised to prepare some draft scripts for using github hooks in master and bumpversion for the release branch.

There was further discussion on when to make the first release. There were some outstanding issues, to wit classes to be refactored (as signaled by AB), that we should try to get organised. It was eventually agreed that we should aim to make a first (version 0) release around the time of the next developers' meeting in July, without letting ourselves be held up by the need to finish refactoring first.

The future release schedule is not settled yet. More frequent releases would be useful as markers of work being finished, but the optimal frequency would depend on the kind of tests and acceptance procedures we eventually agreed. It is expected that the PyPi installation would mainly be useful for new entrants, and/or for automatic tests. A test docker would be useful to test dependencies. Proposed tests include simply starting up a mockup instance, linting (with changes to the linting profile if necessary), and more automated tests TBD. Global Phasing workflows would require additional manual testing, as they depend for testing on the Global Phasing image simulation program.

Any Other Business

RF asked to be given access to make github pushes on the mx3docker repository. MO arranged for this immediately.

Next Meeting

The date for the next developers' meeting should be in the second half of July. It proved non-obvious to find a date that did not clash with anybody's holidays. MO (ACTION) will set up a Doodle poll.