

MXCuBE developers' meeting

23 February 2022

Participants:

- Marcus Oscarsson, Antonia Beteva (ESRF)
- Rasmus Fogh (Global Phasing)
- Clemente Borges (DESY)
- Bo Yi (NSRRC)
- Meghdad Yazdi (MAXIV)
- Annie Heroult (Elettra)
- Martin Savko (SOLEIL)

Minutes: Rasmus

Site status

None proffered

Repository workflow and releases

The branching and workflow proposed in MEP-01 (Jordi Andreu), is agreed. As of this moment, all PRs should be made to the develop branch.

It is noted that there are only two permanent branches – master, and develop. Release candidate and feature branches are created from develop, and are reabsorbed and vanish once they are merged in. Hotfix branches are created from main and again vanish after use.

It is agreed that 1) we follow semantic versioning, 2) version tags reflect the state of the **next** release. This is in accordance with MEP-01. For clarity, this means we need the following version bumps:

- The major version is bumped (on develop) when we accept a PR that breaks the current API.
- The minor version is bumped automatically when we make a new release. i.e., when we make release 1.2.0. the development branch is automatically bumped to 1.3.0. This assumes that the next release will add functionality, and frees us from worrying about when to bump. Develop then stays on 1.3.0.devN from that moment onwards.

- Patch (bugfix) releases are created by branching from the main branch, e.g. from 1.2.1 to 1.2.2.dev0.

Feature branch naming is free. It is recommended that **if** you choose to start a feature branch tag with e.g. '1.3' the code should (expect to) conform to the (upcoming) 1.3 release.

There is an optional tag name for beamline-specific code. Such code generally is kept locally and the naming is free. For the purpose of sharing we may use a suffix of '+<beamline>.freetext' E.g. tag "1.3.2+ESRF.v3" would represent a local ESRF branch that conforms to version 1.3 of the repository (except for ESRF-specific code, that can be freely changed) and incorporates the bug fixes of 1.3.2. The final 'v2' is free text and serves as a local specifier. Beamlines remain free to not follow this naming convention for internal branches, but names that do match this convention must satisfy the relevant conditions.

We shall be making a changelog for all future releases. See MEP-01 and links therein for guidance. For the first release we shall try to summarise the (extensive) refactoring work going into this release.

ACTIONS

- MO to update contribution guidelines in documentation
- MO to write a draft of the first changelog.
- RF to update MEP-01 to reflect these decisions (DONE)

Workgroups

As proposed by MO, the meeting agrees to start two workgroups to follow in more detail the development of 1) queues and workflows (coordinated by RF), 2) The Abstract Diffractometer (coordinated by AB). Membership is voluntary, and open. The workgroups will be run through issues on mxcube.org, and will each make a tag to use for marking PRs. Hopefully this should promote work on these topics, and lighten the developers' meetings by removing some detailed discussions to a different forum.

Queue and workflows

There are a number of related issues confronting this working group, all having to do with combining individual operations into wholes.

- The queue itself. Does it need refactoring? How to fit front-end and back-end representations, with the web and Qt versions?
- Workflows – we currently have EDNA and GPhL. How much scope is there for harmonising the two? How do their special needs fit with the queue?

- Abstract Procedures. How and when will they be implemented? Will they all be individual and beamline-specific, or will they also be used for specifying MXCuBE-wide procedures?
- HardwareObjects – which tasks should go to these as opposed to workflows or procedures?

In the discussion OS and RF agreed that the two workflow frameworks were not harmonisable, since they had (each for good reasons) made different architectural choices.

The example of X-ray centring was discussed as a related task that needed harmonisation. A general way to execute X-ray centring was seen as a useful addition to MXCuBE. This could be achieved either by implementing the (existing but broken) X-ray centring HardwareObject, by using calls to existing (EDNA) workflow, or by making relevant Abstract Procedures.

Any Other Business

It was agreed that all naming in the code must be spelled in UK English – specifically we should use ‘centring’ (and not ‘centering’), ‘characterisation’ (and not ‘characterization’), etc.

It is not after all ;possible to hold the next half-yearly meeting as a physical meeting. ESRF undertakes to hold it, but as a virtual meeting, and will endeavour to arrange for the subsequent meeting to be held as a physical meeting, in Grenoble.

Next Meeting

MO to send out a Doodle.