

MXCuBE code camp 2024-05-30 minutes: development workflows

About development workflows for MXCuBE: coding, testing, deployment, collaborating, etc.

Participants

- Alessandro (Elettra)
- Andrey (Desy)
- Dan (Soleil)
- Fabien (MAX IV)
- Laís (ESS)

Minutes

- Dan:
What is a good development workflow?
- Fabien:
At BioMAX, no users on Monday, Tuesday and sometimes Wednesday so it is possible to use the beamline to develop software. This time is shared with beamline staff and other commissioning work. Rest of the week to clean up code and make pull requests or work on other tasks.
At MicroMAX, most coding work is done with emulators assembled in Docker Compose. Final tests are done at the beamline.
- Alessandro:
How to keep up to date with changes upstream on GitHub?
- Fabien:
ESRF talked a bit about their workflow in their talk the day before. They typically rebase their own changes on top of upstream every two weeks.
At MAX IV, we have a similar workflow, we rebase every two weeks. This is okay for now, but we will see if it is sustainable over time.
- Alessandro:
Is it possible to make a pull request on GitHub from the code on internal GitLab?
- Fabien:
As far as I know, it is not possible.
It is important to get very comfortable with git, to handle these kinds of cases, switching between multiple repositories.

- Laís:

It is worth investing time to learn git, it makes work much easier, especially in a collaboration like MXCuBE.

- Dan, presents UML diagram of some of the most important classes in MXCuBE-Core:

I made the diagram by hand, which is time consuming. I investigated writing a script that would extract info from code, and store info in Neo4J database. I chose Neo4J because I know it quite well. It would make querying info about the code base easy. I could put some more effort into it, if there is interest.

- Laís:

I would be interested in such diagram.

- Fabien:

In principle it should be feasible with Sphinx documentation system. I have tried it, but the resulting diagram was not readable. I should maybe try it again.