The European Synchrotron

AbstractLims

ICAT and SSO integration

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Documentation - GitHub and ReadTheDocs

The pull requests and the documentation can be found on GitHub:
PR # 1079: https://github.com/mxcube/mxcubecore/pull/1079
PR # 1492: https://github.com/mxcube/mxcubeweb/pull/1492

Documentation on read the docs:
https://mxcubecore--1079.org.readthedocs.build/en/1079/dev/lims_integration.html#ispybabstractlims

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Current status

- The work have been tested and validated on the ESRF MX beamlines the last 6-8 months. Most of that work is to make sure that systems (User portal, ICAT, ISPyB, MXCuBE) involved work as expected for synchronization of, users, sessions etc.

- SSO and ICAT tested on MASSIF1 during spring and deployed since August.

- ICAT integration with proposal login deployed on all other MX beamlines since beginning of October. Switch to SSO will be done in January 2025

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Background

- ISPyB is no longer the standard LIMS, need for LIMS Abstraction as more sites use other systems
- At ESRF we needed a solution where we could synchronize to and from both **ISPyB** and **ICAT**
- At ESRF, retrieving session information for a user is done via **ICAT** thus a requirement for **SSO**

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- Cleanup and merging of **ISPyBClient** and **ISPyBRestClient** have resulted in a new **AbstractLims**, very similar to the previous **ISPyBClient** (for now)

- Structures exchanged between **AbstractLims** and the internals of MXCuBE documented, to be modeled in a next iteration

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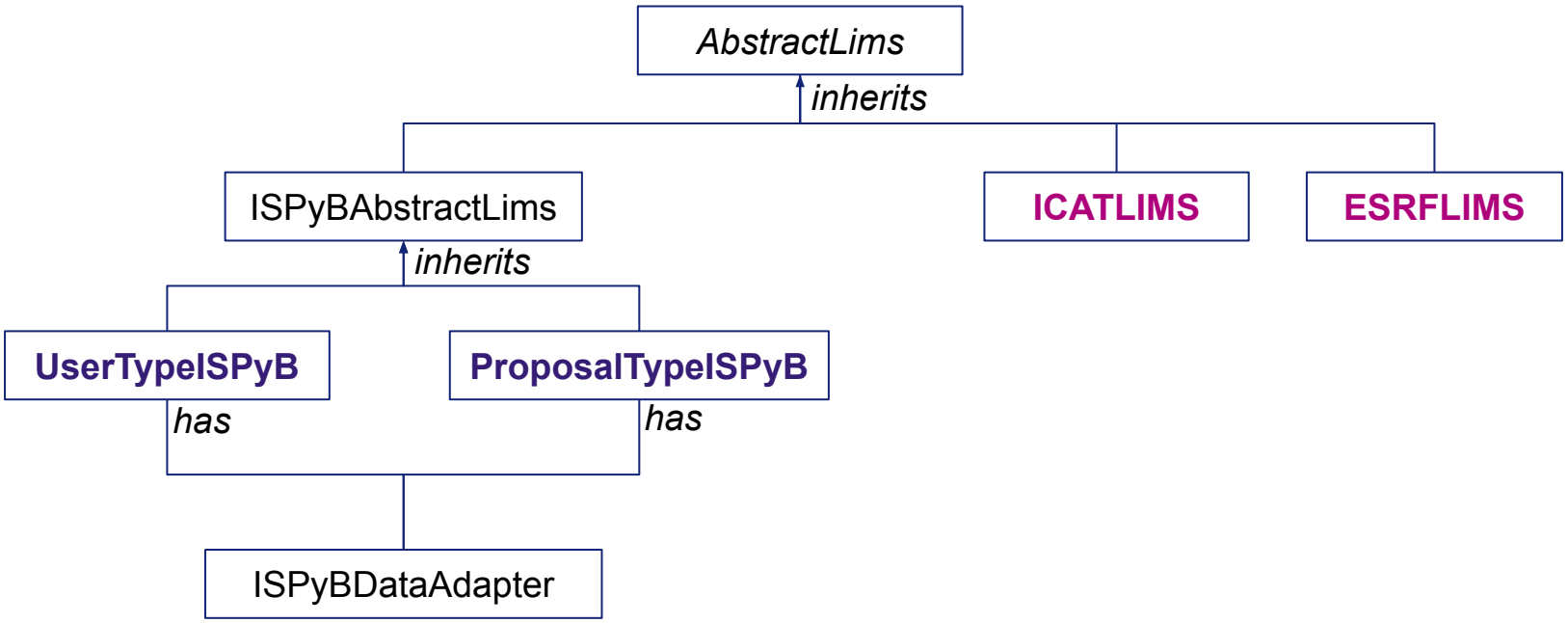

- ISPyBClient have been split into two classes **ProposalTypeISPyB** and **UserTypeISPyB**
- Introduction of adapter to abstract communication technology, such as SOAP and REST
- **ICATLIMS** for ICAT and **ESRFLIMS** for ICAT and ISPyB

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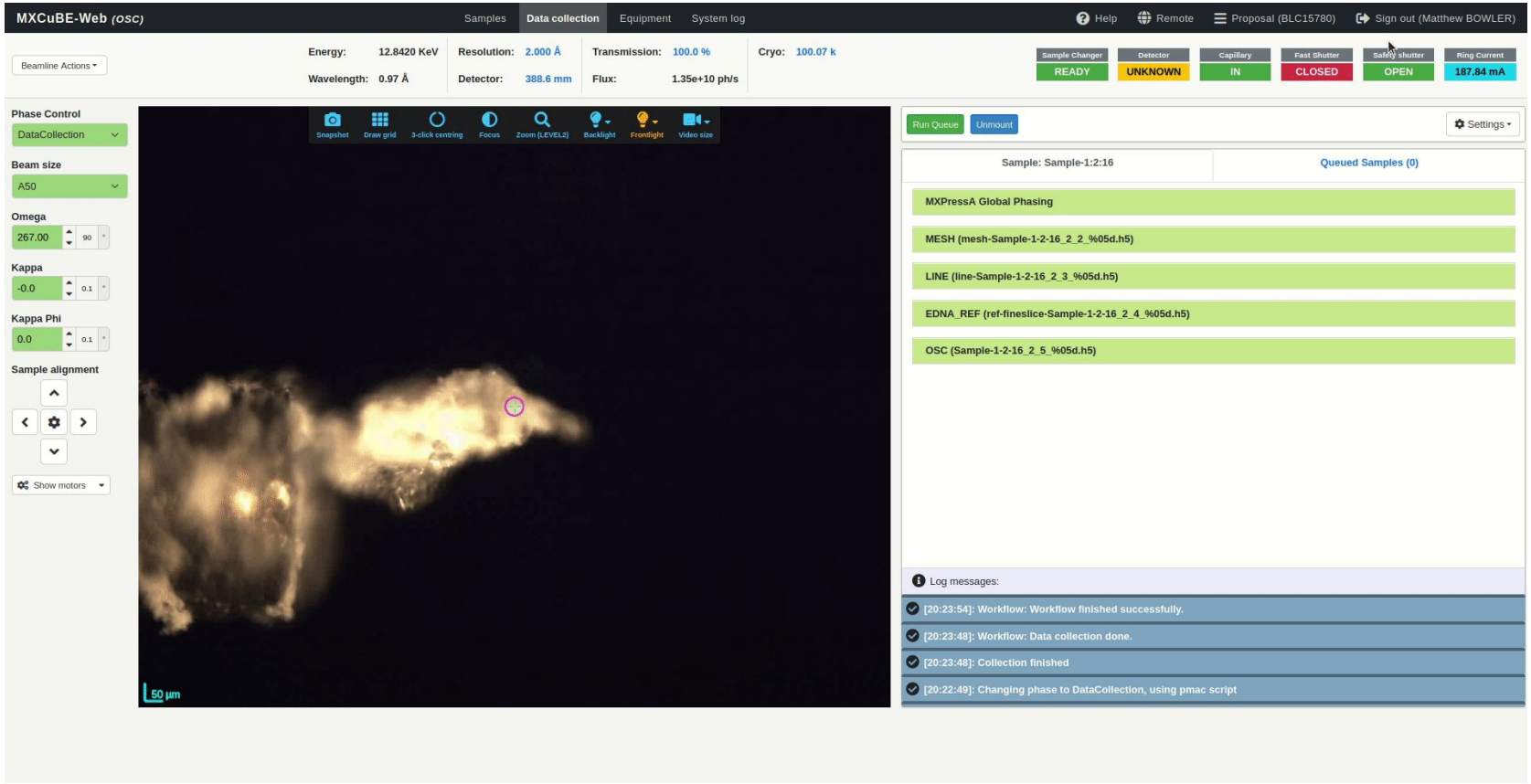
Selecting a session



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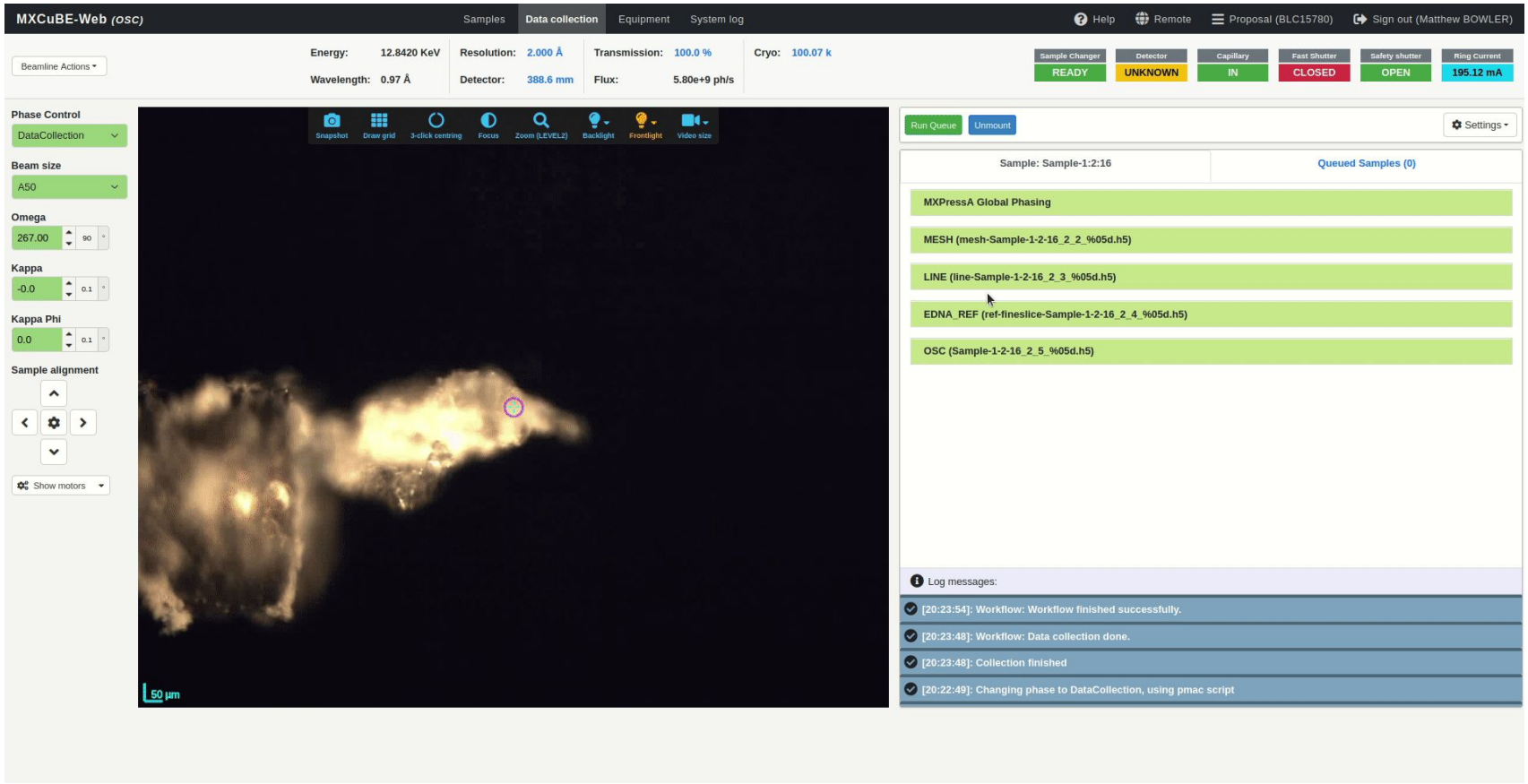
Synchronizing with LIMS - ISPyB or DRAC



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Future work

- Further refinement of **AbstractLims** and creating models for the data exchanged, internally, between **AbstractLims** and MXCuBE

- mxcubeweb - **UserManager**:
    - Keep the existing **UserManager** as it is (proposal and user based login)
    - Create a new **UserManager** only for user based login
    - Remove proposal login completely ?

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Questions

Thank you for your attention

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