



Elettra Sincrotrone Trieste



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# MXCuBE in ELETTRA Status Report

- **XRD1 (X-ray diffraction)**
  - Huber Kappa Goniometer, Pilatus 2M, Arinax BZoom and no sample-changer
  - MXCuBE adopted this year - Deployment finalization in these weeks
- **XRD2 (X-ray diffraction 2)**
  - Arinax MD2s, Pilatus 6M, Arinax BZoom and a custom sample-changer
  - MXCuBE adopted since 2018 - Upgrade to MXCuBE 4 next year

## XRD2

- **Version (deployed):** *mxcubeweb* master b79f2fd8 (2018) + local changes
- **Deployment:**
  - Installed on a workstation (Ubuntu 18.04.4 LTS) exposed to the internet
  - Users authentication via VUO (lims HO)
  - Python 2.7 without conda environment
  - Acquisition is fully under control of MXCuBE
- **Usage:**
  - Users most of the time are supervised by beamline scientist
- **Next steps:**
  - Upgrade to the last version of MXCuBE 4
  - Reorganize the deployment: dedicated server, python3 and conda environment

## XRD1

- **Version (development - testing):**
  - mxcube: devel 1.36.0 + local changes
  - mxcube-web: devel 1.89.0 + local changes
- **Deployment:**
  - Will be installed on server (Ubuntu 22.04 LTS) exposed to the internet
  - Users authentication via VUO (lims HO)
  - Conda environment with python3.10
  - All the actuator TANGO devices are directly integrated, but the acquisition logic will stay on the current acquisition system
- **Usage:**
  - On site users use the current acquisition system based on QT, Taurus and TANGO
  - Remote users will use the MXCuBE platform, which will expose a sub set of the complete operations provided by the current acquisition system

## Daiquiri - Braggy

- **Version:** *main d24ac065 (03/2022) + local changes*
- **Deployment:**
  - Server Ubuntu 22.04.2 LTS (braggy.elettra.eu)
  - Conda environment with python3.10
  - VUO Authentication
  - Single instance for multiple beamlines (XRD1, XRD2)

## Synchweb

- **Version:** *master 2021-R3 + few local changes*
- **Deployment:**
  - Server CentOS 7 (synchweb.elettra.eu)
  - Php 5.4.16 :(
- **Next steps:**
  - Upgrade to the last version 2023-R5.1 (php 7.3 :) )



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Thank you!





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