



#### Key Features

- Pure python
- Client-Server design, GUI anywhere
- Defined/enforced hardware interfaces
- Configure GUI and Controller via JSON
- Flexible driver types
- Direct access to hardware capabilities, fast scanning
- Fast scanning with live visualization

These 3 boxes could be replaced by Bluesky and dataBroker. Juliane was working on this when she left and we have a rough implementation

#### Development needs involving BCS

- Improved threading (some things aren't thread safe)
- Improved communication (sockets, threads, ZMQ)
- Improved drivers (better use of BCS-API, others)
- New drivers (coordinated coarse-fine motor scans)
- Connect to user authentication and metadata

#### Development needs involving Computing Program

- Better integration of ZMQ for detector data
- Connect to streaming analysis and viz
- Bluesky integration

#### BLS responsibilities

- Manage GUI, scan definitions, scan routines, data visualization and storage
- Specify hardware
- Develop drivers
- Bluesky integration

Abstract classes with defined interface.  
"motor" and "daq" classes

Combination of custom and vendor code.  
"controller" class

Hardware