Sardana Follow-up Meeting (by ALBA)

14/02/2019

Feedback after ABCDA

Presentation added to:
Contributed Documents (WIKI)

Ideas or possible collaboration

- Configuration application based on Beacon server from the Bliss project (ESRF)
- Redis scan recorder for smooth integration with the silx application from the Bliss project (ESRF)
- Waypoint generation (scan point generator) / Malcolm project (Diamond)
- Jupyter notebooks from the bluesky project (NSLS-II)

Beamline **Con**figuration in Bliss (Beacon)

Beacon server

- Handles configuration (static) and settings (dynamic)
- TCP socket (random port) and UDS socket (random file in /tmp/)
- Configuration
  - Persistence in YAML file(s)
- Settings
  - Persistence in Redis database
- Can start Tango DB server which set/get configuration and settings
- Can start Web application for view/edit of configuration
- List of issues observed when tried with Sardana

ESRF plans for the Web application

- Redo it with the standards established at ESRF for web applications:
  - webpack, React, Redux stack.
- Establish a proper list of requirements e.g.
  - create/edit/save yml files directly from the web application
  - have "plugins" displaying an enhanced UI for special cases: like 'Icepap motor', 'Tango device', a particular equipment, etc.

Sardana configuration & settings

- Terminology
  - Configuration: definition of elements e.g. controllers, motors, detectors, etc.
  - Settings: motor's velocity, acceleration, step-per-unit?, limits
- Sardana configuration
  - Servers, devices, aliases, device properties
- Sardana settings
  - Attribute memorized values (velocity, acceleration, extra attribute, MG configuration)
  - Attribute properties: position limits, velocity limits, events configuration, labels, units, etc.
- Sardana element IDs problematic
  - require server running to add new configuration
  - otherwise you would need to manage the ids on your own

ALBA users experience

Users experience

- Continuous scans
  - Disable overshoot correction in continuous scan #1043
  - User would like to see the detectors data against the motor positions corresponding to the middle of the integration time - for the moment could be solved as data pre-processing
- Bug - motor group write positions are arriving as zeros
- Spock memory leak
- Expconf remote changes warning pop-up ideas for improvements
- Online plot decoupled from expconf

Update on SEP2

SEP2 progress

- Links to the sketches added to the SEP2 document
- Important assumptions: one frame per one value reference
- Passing value references works well as strings - demo
- TODOs:
  - Value references as strings or bytes?
  - VDS in H5
  - Configuration (value reference template, saving, etc) - will start on the channel level next week.