### What do we have now?

- Sardana training materials
- Sardana follow-up meeting materials
- Sardana wiki with links to articles, etc.
- Sardana issues/pr discussions
- SEPs
- Sardana web page <u>www.sardana-controls.org</u> that contains links to:
  - Home Page
  - Project Page (github)
  - Download from PyPI
  - Sardana 2.4 documentation

# Sardana Documentation - top level

(User's Guide and Developers Guide will be discussed in more details later on)

- User's Guide
  - o <u>Overview</u>
  - Getting started
  - o Spock
  - o <u>Sardana-Taurus Widgets</u>
  - o Scans
  - Standard macro catalog
  - o Screenshots
  - o FAQ
- Developer's Guide
  - o <u>Overview</u>
  - Writing macros
  - Writing controllers
  - Writing recorders
  - Sardana Testing
  - o API
  - o Migration guide
  - o <u>Examples</u>
  - Development guidelines

- Sardana Enhancement Proposals
- Glossary
  - Nice chapter
- To do
  - It lists missing documentation (TODOs).
  - o It is autogenerated.
- History of changes
  - Competes with CHANGELOG.md
  - o It could be removed
  - o <u>History of modifications</u>
  - o <u>Version history</u>
  - <u>Index</u>
  - Module Index
  - Search Page

# Zibi's impressions about the documentation

- Users documentation is intended to be followed chapter-by-chapter. It is for the beginners.
- Developers documentation is more a reference with some hierarchical order.

#### Color guide:

- Highlight color:
  - green more or less fine
  - yellow requires work
  - red completely missing or wrong
- Text color:
  - Links from documentation
  - o Zibi's comments

## User's Guide

### Overview

- Requires review and small corrections. But in general OK
- What do we "sell" to our users
- Starting a procedure
- <u>Taurus as a toolkit for applications</u>
- Configure don't program
  - TODO: Remove Sardana configuration GUI
- How to write your own procedure
- How to adapt it to your own hardware
  - TODO: Sketch is not visible and does not add information
- Symbolic Sketch

#### Getting started

Installing

#### Upgrade installation instructions on Windows

- Could be moved to a separate, upper level chapter e.g. Installation.
- Working directly from Git
  - Could be moved to a separate, upper level chapter e.g. Installation.
- Dependencies
  - Could be moved to a separate, upper level chapter e.g. Installation.

- o Running the server
- Running the client
  - sar\_demo is here.

#### Spock

- Starting spock from the command line
  - "Running the client" chapter already explains how to start spock, but it may be ok, if someone enters just to read the spock chapter.
- Starting spock with a custom profile
- Spock IPython Primer
- Executing macros
- Stopping macros
- Exiting spock
- Getting help
- Moving motors
  - Could be moved to "Getting Started" chapter.
- Counting
  - Could be moved to "Getting Started" chapter.
- Scanning
  - Could be moved to "Getting Started" chapter.
  - Some of the environment variables are described here
- Using spock as a Python console
- <u>Using spock as a Tango console</u>
- Sardana-Taurus Widgets
  - MacroExecutor
  - Sequencer
    - TODO: Document loading from plain text
  - Experiment Configuration
    - TODO: Missing big part

#### Sardana Editor

- TODO: Missing documentation
- Scans

- Step scans
- Continuous scans
  - TODO: what should we do with ascanc?

#### Configuration

 Environment variables are defined here. This should be a link to environment variables

#### Standard macro catalog

- How to generate the catalogue automatically from the Sardana macros
- In general this is quite complete, maybe some recently added macros are missing.
- motion related macros
- o counting macros
- diffractometer related macros
- <u>environment related macros</u>
- list related macros
- measurement configuration macros
- o general hooks macros
- advanced element manipulation macros
- reload code macros
- o <u>scan macros</u>

#### Screenshots

- could be updated but not priority
- Sardana oriented graphical user interfaces
- Graphical user interface screen shots
  - TODO: Remove Sardana configuration GUI

### <u>FAQ</u>

- are very poorly explained, missing links
- What is the Sardana SCADA and how do I get an overview over the different components?
- How do I install Sardana?
- How to work with Taurus GUI?
- How to produce your own Taurus GUI panel?

- How to call procedures?
- How to write procedures?
- How to write scan procedures?
- How to adapt SARDANA to your own hardware?
- How to add your own file format?
- How to use the standard macros?
- How to add conditions in macros?
  - TODO: remove it
- How to write your own Taurus application?
- Which are the standard Taurus graphical GUI components?
- How to write your own Taurus widget?
- How to work with the graphical GUI editor?
- What are the minimum software requirements for sardana?
- How to configure the system?
- How to write your own Taurus schema?
- What are the interfaces to the macro server and the pool?
- What are the data file formats used in the system and how can I
  read them?
- What is the file format of the configuration files?
- How to access EPICS

## Developer's Guide

- Overview
  - Each of the elements contains links to the Reference (description of each of the concepts), Sardana API, Tango API
  - MotorGroup is missing?

#### Global overview

Architecture: client - server, different configurations: Sardana,
 Pool, MacroServer

Macro Server

- Door is introduced
- Poo
- Controller
- o Motor
- Pseudo moto
  - Drift Correction is here
- IO register
- Trigger/gate
- Counter/timer
- OD experiment channel
- 1D experiment channel
- 2D experiment channel
- Pseudo counter
- Measurement Group
  - Maybe introduce actions here?
- Writing macros
  - General macro development
    - Macro result is not documented
  - Scan macro development
    - Scan hooks are explained here
    - "C" continuous scans are explained instead of "ct"
- Writing controllers
  - What is a controller
  - How to write a motor controller.
  - How to write a counter/timer controller.
  - How to write a 0D controller
  - How to write a 1D controller.
    - Better document them after SEP2
  - How to write a 2D controller
    - Better document them after SEP2
  - How to write a trigger/gate controller.
    - How to write an I/O register controller

#### How to write a pseudo motor controller

- How to write a pseudo counter controller
- Writing recorders
  - Overview
  - What is a recorder?
  - Type of recorders
  - Writing a custom recorder
  - Configuration

#### Sardana Testing

- General test documentation
- Run Sardana tests from command line
- <u>Test-driven development example</u>
- Sardana Unit Test examples
- API
- o Macro API
- o Controller API
- o Motor API
- o <u>I/O register</u>
- Counter/timer API
- o <u>OD experiment channel API</u>
- 1D experiment channel API
- 2D experiment channel API
- Trigger/gate API
- Pseudo motor API
- Pseudo counter API
- o Measurement group API
- o Pool tango API
- Macro server tango API
- Library
  - Macros documentation is duplicated here!
- Test API

- Migration guide
  - Some part of it competes with CHANGELOG.md.
  - But it would be an interesting chapter for eventual future migration guides.
  - How to migrate your macro code
  - How to migrate your controller code
- Examples
  - o <u>Macro examples</u>
  - Controller examples
    - Contains template what should we do with it?
- Development guidelines
  - o Overview
  - How to contribute to sardana
    - Competes with CONTRIBUTING.md
  - Cloning and forking sardana from Git
    - Duplication from how to install Sardana
    - TODO: Remove this chapter
  - The old code repositories
    - TODO: Remove this chapter.
  - o <u>Documentation</u>
  - Coding conventions
    - Extend them, for example with variables naming lowercase with underscores, etc...