WP3 Best Practices Workshop
E-Logbook adapted from ELETTRA at CERIC

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E-Logbook adapted from Elettra at CERIC

Outline

- DonkiLOG (Elettra's e-logbook)
- Rocket.Chat

DonkiLOG (Elettra's e-logbook)

DonkiLOG

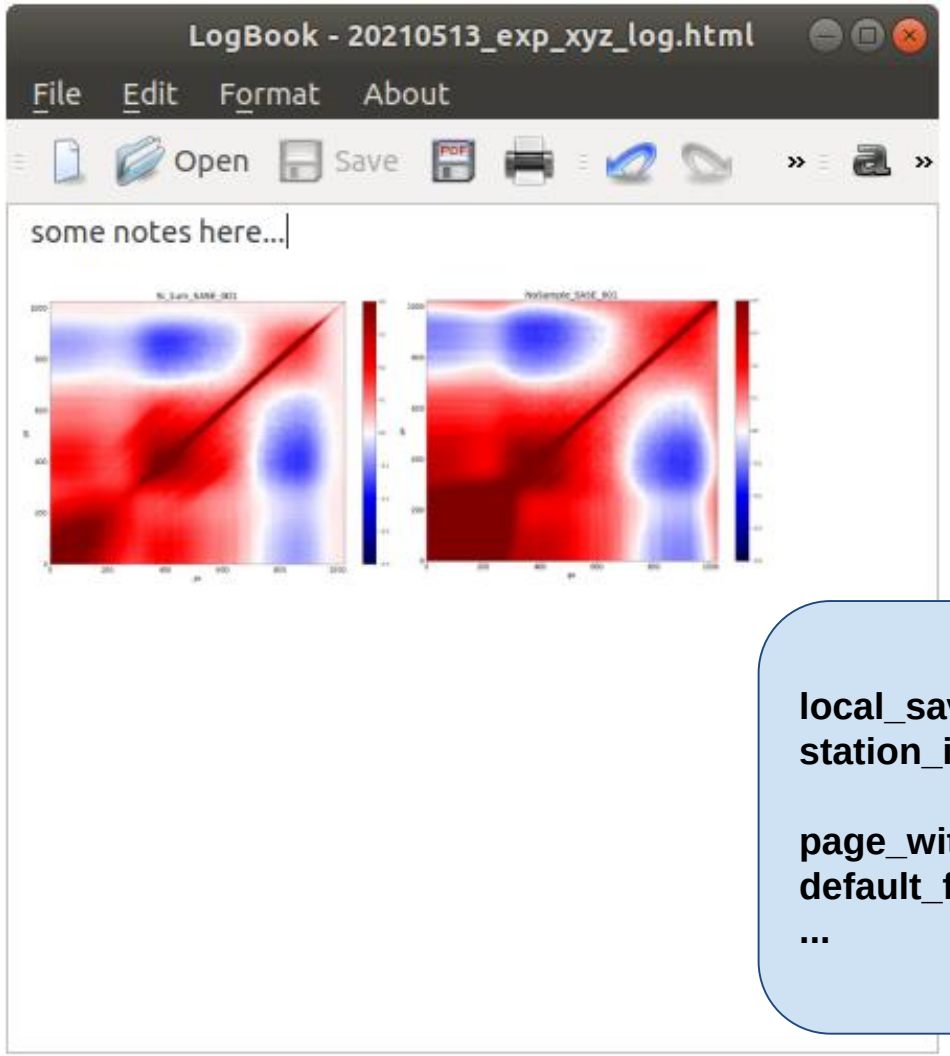
- Designed and developed by the Elettra **Software for Experiments Team** in collaboration with its beamline scientists (since 2013)
- used in 11 Elettra endstations

DonkiLOG (Elettra's e-logbook)

DonkiLOG

- small footprint desktop application built with Python 2.7 and PyQt4 implementing a WYSIWYG document editor
- not a centralized solution, an endstation must have its own deployment
- logs are saved in HTML and can be exported in PDF

DonkiLOG (Elettra's e-logbook)



DonkiLOG configuration file

local_save_path = /home/donkilog/logs
station_id = BEAMLINE_NAME

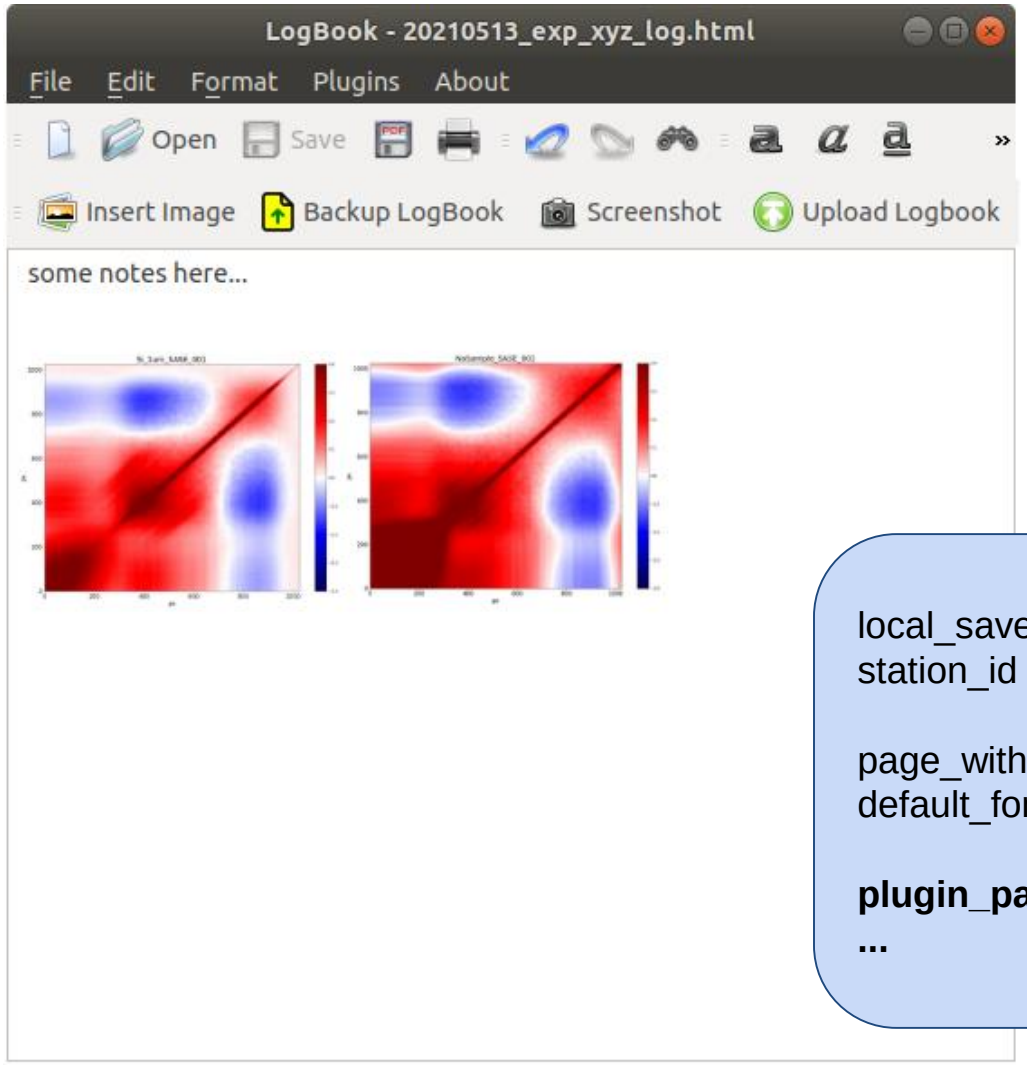
page_with = 750
default_fontsize = 14
...

DonkiLOG (Elettra's e-logbook)

DonkiLog extensibility

- DonkiLOG allows to be extended through the use of plugins
- a DonkiLOG plugin is a Python program implementing the following interface
  - **def label** - *returns a label to be placed on DonkiLOG toolbar*
  - **def icon** - *returns an icon to be placed on DonkiLOG toolbar*
  - **def applyAction** - *implements the plugin behaviour*

DonkiLOG (Elettra's e-logbook)



DonkiLOG configuration file

local_save_path = /home/donkilog/logs
station_id = BEAMLINE_NAME

page_with = 750
default_fontsize = 14

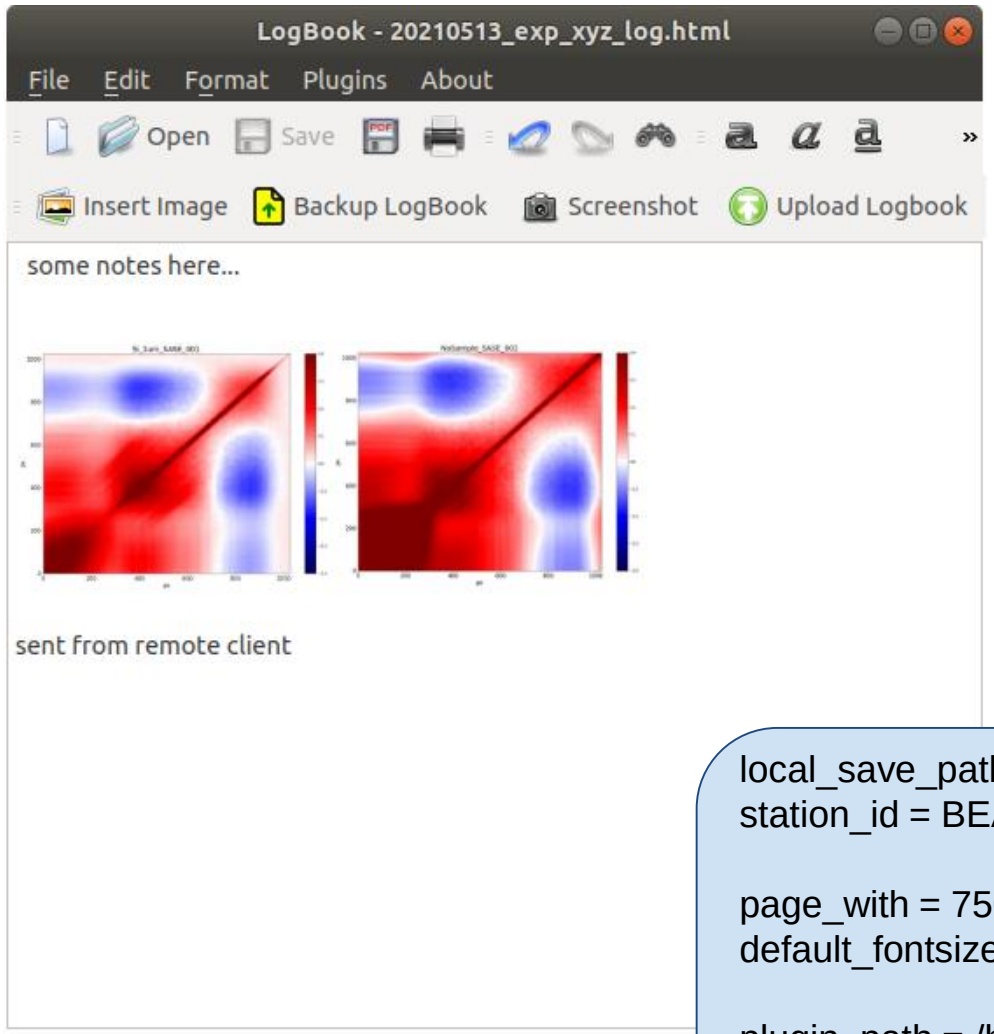
plugin_path = /home/donkilog/plugins
...

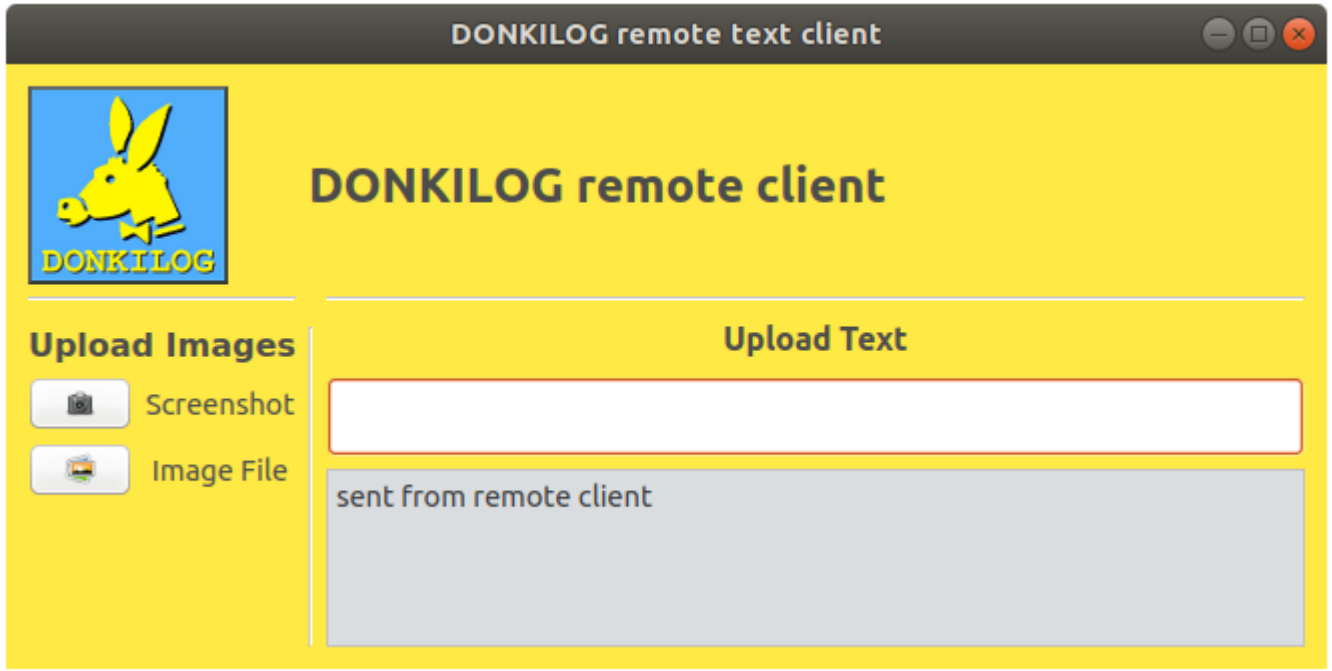
DonkiLOG (Elettra's e-logbook)

DonkiLOG remote client

- DonkiLOG has embedded an FTP server
- DonkiLOG remote client is a Python application built with PyQt4 used to remotely send text and images to DonkiLog via FTP

DonkiLOG (Elettra's e-logbook)






```
local_save_path = /home/donkilog/logs
station_id = BEAMLINE_NAME

page_with = 750
default_fontsize = 14

plugin_path = /home/donkilog/plugins

server_port = 5556
...
```

DonkiLOG configuration file

DonkiLOG (Elettra's e-logbook)

DAQ System Integration

- The same FTP protocol can be used to send text messages from the acquisition system of a beamline to record
  - instrument status
  - sample positioning

DonkiLOG (Elettra's e-logbook)

Pros and Cons

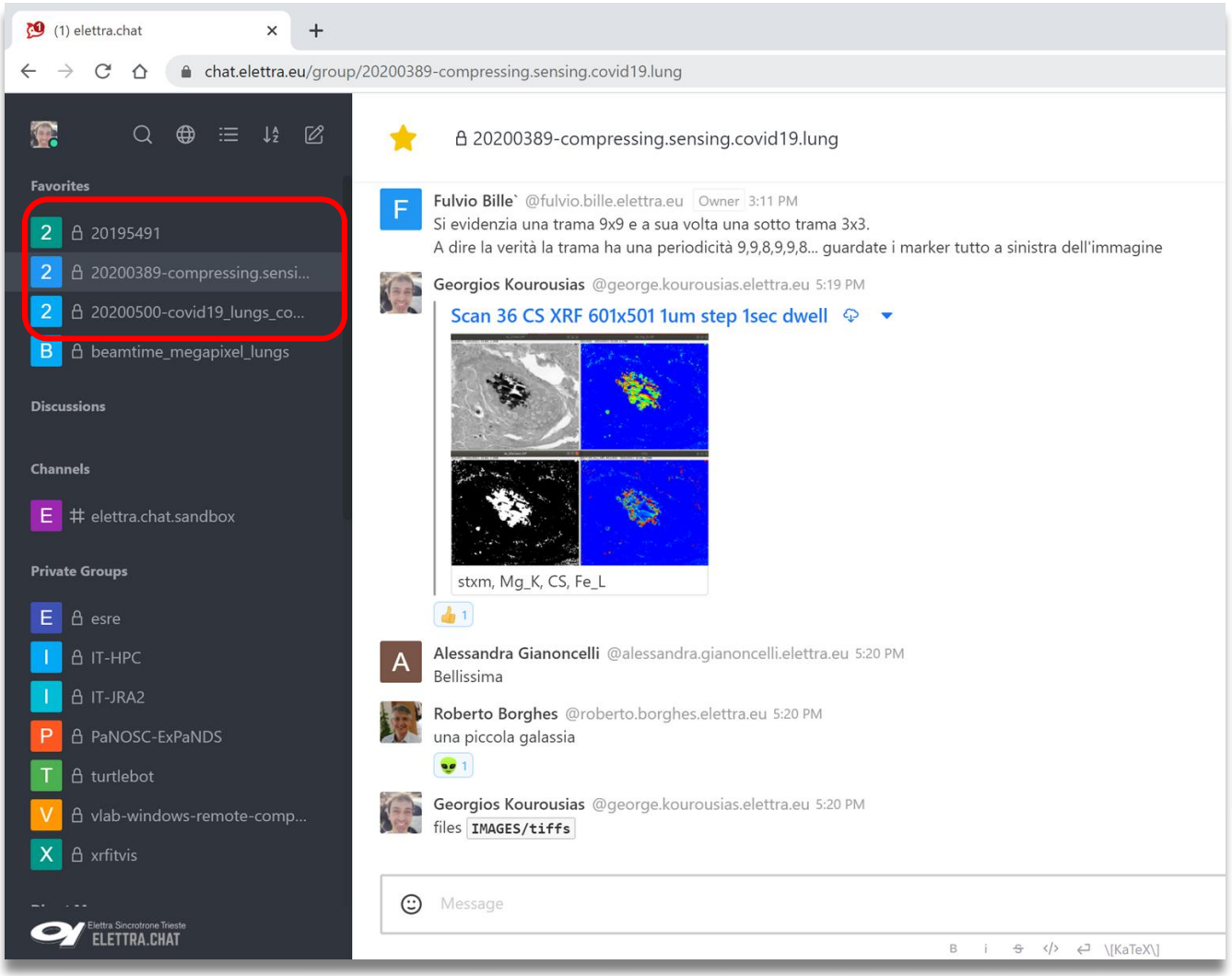
- Pros
  - very simple
  - easy to modify and extend through the plugin system
  - agnostic from the control system used
- Cons
  - standalone desktop application not integrated with a data catalogue
  - a web based solution could perhaps have been better

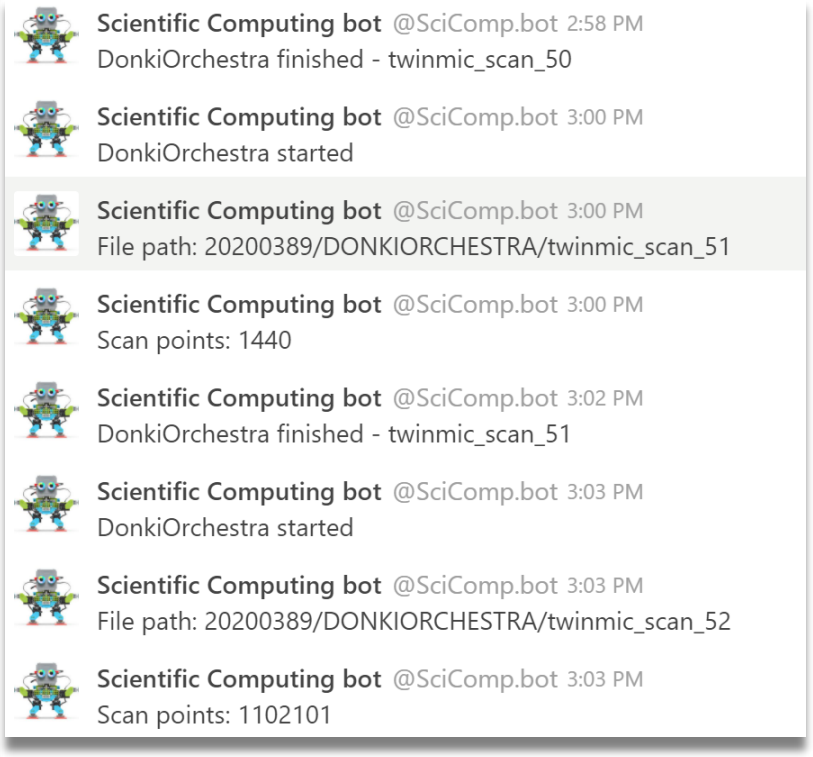
E-Logbook adapted from ELETTRA at CERIC

Resources

- DonkiLOG WYSIWYG source code
- DonkiLOG Remote Client source code

Rocket.Chat


(1) elettra.chat
chat.elettra.eu/group/20200389-compressing.sensing.covid19.lung
Favorites
20195491
20200389-compressing.sensi...
20200500-covid19_lungs_co...
beamtime_megapixel_lungs
Discussions
Channels
elettra.chat.sandbox
Private Groups
esre
IT-HPC
IT-JRA2
PaNOSC-ExPaNDS
turtlebot
vlab-windows-remote-comp...
xrfitvis
Elettra Sincrotrone Trieste
ELETTRA.CHAT
20200389-compressing.sensing.covid19.lung
Fulvio Bille` @fulvio.bille.elettra.eu Owner 3:11 PM
Si evidenzia una trama 9x9 e a sua volta una sotto trama 3x3.
A dire la verità la trama ha una periodicità 9,9,8,9,9,8... guardate i marker tutto a sinistra dell'immagine
Georgios Kourousias @george.kourousias.elettra.eu 5:19 PM
Scan 36 CS XRF 601x501 1um step 1sec dwell
stxm, Mg_K, CS, Fe_L
Alessandra Gianoncelli @alessandra.gianoncelli.elettra.eu 5:20 PM
Bellissima
Roberto Borghes @roberto.borghes.elettra.eu 5:20 PM
una piccola galassia
Georgios Kourousias @george.kourousias.elettra.eu 5:20 PM
files IMAGES/tiffs
Message


Scientific Computing bot @SciComp.bot 2:58 PM
DonkiOrchestra finished - twinmic_scan_50
Scientific Computing bot @SciComp.bot 3:00 PM
DonkiOrchestra started
Scientific Computing bot @SciComp.bot 3:00 PM
File path: 20200389/DONKIORCHESTRA/twinmic_scan_51
Scientific Computing bot @SciComp.bot 3:00 PM
Scan points: 1440
Scientific Computing bot @SciComp.bot 3:02 PM
DonkiOrchestra finished - twinmic_scan_51
Scientific Computing bot @SciComp.bot 3:03 PM
DonkiOrchestra started
Scientific Computing bot @SciComp.bot 3:03 PM
File path: 20200389/DONKIORCHESTRA/twinmic_scan_52
Scientific Computing bot @SciComp.bot 3:03 PM
Scan points: 1102101

Thank you

Acknowledgments: Roberto Borghes

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