35th Tango Community Meeting

Report of Contributions

Contribution ID: **4** Type: **not specified**

Welcome words

Tuesday, 14 September 2021 13:30 (5 minutes)

Welcome to the 35th Tango Community Meeting

Presenter: LECLERCQ, Nicolas (ESRF)

Session Classification: Welcome

Contribution ID: **5** Type: **not specified**

Opening Address

Tuesday, 14 September 2021 13:35 (10 minutes)

Some words to open and set the scene of the Tango Community Meeting.

Presenter: GOTZ, Andy (ESRF)

Session Classification: Welcome

Contribution ID: **6** Type: **not specified**

Implementation of Tango & Sardana in a Laboratory Scale at Max Born Institute

Tuesday, 14 September 2021 15:05 (20 minutes)

With the ongoing simplification of installation and administration as well as with the improvements of documentations, complex control systems such as TANGO become also interesting and feasible for smaller institutions without dedicated IT support units. Especially the tight binding to Python enables an easy access for experimentalists already at the student level. At the same time, laser-driven light sources now routinely cover the XUV and X-ray photon ranges, which requires similar beamline setups as known from large-scale facilities. Here we present the current status of the implementation of Tango and Sardana at the Max Born Institute in Berlin, Germany, which covers rather small single machine as well as complex multi-server and client setups for the different types of experiments.

Presenter: Dr SCHICK, Daniel (Max Born Institute)

Session Classification: Projects Status

Contribution ID: **7** Type: **not specified**

Tango based data archiving for the CALA high power laser facility

Tuesday, 14 September 2021 15:25 (20 minutes)

The Centre for Advanced Laser Applications (CALA) in Munich is home to the ATLAS-3000 high power laser dedicated to research on laser particle acceleration and applications thereof. We employ Tango as a control system for a growing number of hardware devices and specifically to record experimental data in an automated fashion. After a short overview of the facility, the talk will introduce the features and implementation of this archiving system.

Presenter: Dr DOYLE, Leonard (CALA)

Session Classification: Projects Status

Contribution ID: **8** Type: **not specified**

PyTango Status Report

Tuesday, 14 September 2021 16:45 (20 minutes)

Latest news from the PyTango project.

Presenter: Mr JOUBERT, Anton (SARAO)

Session Classification: Tango Ecosystem

Contribution ID: **9** Type: **not specified**

SKAO Status Update

Tuesday, 14 September 2021 13:45 (20 minutes)

Latest news from SKAO project.

Presenter: Mr VRCIC, Sonja (SKAO)

Session Classification: Projects Status

Contribution ID: **10** Type: **not specified**

C++ Tango Kernel Status

Tuesday, 14 September 2021 16:25 (20 minutes)

Latest news from the C++ kernel core developers.

Presenters: Mr LISZCZ, Michal (S2Innovation); BOURTEMBOURG, Reynald (ESRF); Mr BRAUN, Thomas (Byte Physics)

Session Classification: Tango Ecosystem

Contribution ID: **11** Type: **Talk**

S2Innovation community involvement and development

Tuesday, 14 September 2021 15:45 (20 minutes)

From its beginning in 2017, the S2Innovation collaborates with Institutes and companies from the Tango Controls Community as well as actively participate in Tango Control maintenance and development. The presentation will give an update on the recent progress of its development and a summary of its involvement in Tango Controls development.

Primary author: GORYL, Piotr (S2Innovation Sp. z o. o,)

Co-authors: Mr LISZCZ, Michal (S2Innovation); Mr KĘDROŃ, Krystian

Presenter: GORYL, Piotr (S2Innovation Sp. z o. o,)

Session Classification: Projects Status

Contribution ID: **12** Type: **Talk**

Deployment of the alarm-handler system at Elettra and Fermi

Wednesday, 15 September 2021 14:35 (15 minutes)

A number of alarm-handler device servers and cumbia based GUIs have been deployed in both Elettra and Fermi control systems to handle thousands of alarms.

Primary author: SCALAMERA, Graziano (Elettra Sincrotrone Trieste S.C.p.A.)

Co-author: PIVETTA, Lorenzo (Elettra Sincrotrone Trieste S.C.p.A.)

Presenters: SCALAMERA, Graziano (Elettra Sincrotrone Trieste S.C.p.A.); PIVETTA, Lorenzo (Elettra Sincrotrone Trieste S.C.p.A.)

Session Classification: Tango Ecosystem

Contribution ID: **13** Type: **Talk**

IC@MS Status

Wednesday, 15 September 2021 14:20 (15 minutes)

IC@MS is an web application providing REST API for managing alarm system. During the presentation we will show progress of project development and
demonstrate application.

Primary authors: GANDOR, Michal (S2Innovation); NABYWANIEC, Mateusz (S2Innovation)

Presenters: GANDOR, Michal (S2Innovation); NABYWANIEC, Mateusz (S2Innovation)

Session Classification: Tango Ecosystem

Contribution ID: **14** Type: **Talk**

Taurus Status Report

Tuesday, 14 September 2021 17:05 (15 minutes)

Taurus is a framework for creating GUIs and CLIs for a control system using python and Qt.

This talk is a quick status report of the latest developments in Taurus, among which we highlight a new major version (Taurus 5) involving large refactoring of the code to modernize and improve it.

Primary authors: PASCUAL IZARRA, Carlos; RESZELA, Zbigniew

Presenter: PASCUAL IZARRA, Carlos

Session Classification: Tango Ecosystem

Contribution ID: **15** Type: **Talk**

TangoGQL and Vue.js web applications at SOLARIS

Wednesday, 15 September 2021 14:05 (15 minutes)

At SOLARIS, we mainly use Taurus GUIs to conduct experiments and check beamlines' statuses. Due to necessary and heavy customisation of the library modules (custom classes etc.), some of the applications began having performance problems. After TangoGQL had been released, we started to use it as backend for our web applications that replace problematic GUIs. This talk will cover our modest accomplishments in TANGO web development.

Primary author: NOGA, Tomasz (SOLARIS)

Co-authors: Mr ZAREMBA, Wojciech (SOLARIS); Mr GRĘBLA, Maciej (SOLARIS)

Presenter: NOGA, Tomasz (SOLARIS)

Session Classification: Tango Ecosystem

Contribution ID: **16** Type: **Pitch**

TUI for Tango devices

Wednesday, 15 September 2021 15:50 (10 minutes)

Wrote a simple TUI for navigating Tango devices as a Rust learning project.

See https://github.com/SKAJohanVenter/tango-controls-tui

Packages used:
- https://crates.io/crates/tango-client
- https://crates.io/crates/tui

Primary author: VENTER, Johan (SARAO)

Presenter: VENTER, Johan (SARAO)

Session Classification: Tango Ecosystem

Contribution ID: **17** Type: **Pitch**

Embedding a debugger in your PyTango device (lightning talk)

Wednesday, 15 September 2021 15:40 (10 minutes)

A very quick look at how we embedded a debugger (debugpy) into all SKA PyTango devices. This allows us to attach a VS Code debugger to a running device and peek inside.

Primary author: JOUBERT, Anton (SARAO)

Co-author: DI CARLO, Matteo (INAF)

Presenter: JOUBERT, Anton (SARAO)

Session Classification: Tango Ecosystem

Contribution ID: **18** Type: **Talk**

High-speed data streaming at MAX IV

Wednesday, 15 September 2021 15:10 (15 minutes)

MAX IV has seen an explosion in high-rate detectors. In order to cope with this amount of data we decided to change how the data acquisition should work. In this context a new paradigm has been developed to use data streams and a dedicated data acquisition cluster based on Kubernetes.

Primary author: ROSENDAHL, Emil

Presenter: ROSENDAHL, Emil

Session Classification: Tango Ecosystem

Contribution ID: **19** Type: **Talk**

ESRF-EBS Status

Tuesday, 14 September 2021 14:25 (20 minutes)

The ESRF-Extremely Brilliant Source (ESRF-EBS) is the first-of-a-kind fourth-generation high-energy synchrotron. After only a 20-month shutdown, scientific users were back to carry out experiments with the new source. This talk gives an overview of the EBS status from its Accelerator Control Unit (ACU) point of view. It also offers the opportunity to present some of the projects currently under development.

Primary author: LECLERCQ, Nicolas (ESRF)

Presenter: LECLERCQ, Nicolas (ESRF)

Session Classification: Projects Status

Contribution ID: **20** Type: **Talk**

Managing distributed systems with fandango

Wednesday, 15 September 2021 15:25 (15 minutes)

This talk will make an overview of the current scripts and devices used to manage distributed systems using fandango as an alternative to Jive/Astor. It will also open some discussions regarding the evolution of distributed-event systems.

Primary author: RUBIO MANRIQUE, Sergio

Presenter: RUBIO MANRIQUE, Sergio

Session Classification: Tango Ecosystem

Contribution ID: **21** Type: **Talk**

Sardana Status Report

Tuesday, 14 September 2021 17:20 (20 minutes)

Sardana is a software suite for Supervision, Control and Data Acquisition in scientific installations. Here we present a yearly status report of the latest developments in Sardana as the result of the Sardana Community collaboration.

Primary authors: NÚÑEZ, Teresa; AMJAD, Abdullah; ENQUIST, Henrik; FORSBERG, Johan; PIEKARSKI, Michał (NSRC SOLARIS); PASCUAL IZARRA, Carlos; RESZELA, Zbigniew

Presenter: RESZELA, Zbigniew

Session Classification: Tango Ecosystem

Contribution ID: **22** Type: **Talk**

Tango based GMRT Control System : An Exploratory Prototype for the SKA Telescope Manager

Tuesday, 14 September 2021 14:05 (20 minutes)

The Giant Metrewave Radio Telescope (GMRT), built and operated by the NCRA (India) is a SKA path-finder facility. The Monitor & Control system of GMRT is upgraded using the TANGO software framework. It is developed in synergy with the SKA-TM work package by considering similar design ideas and technology choices. The Tango based GMRT Control (TGC) System is composed of specification driven generic control nodes which are organized hierarchically. The configuration defined in the Tango database, and custom RDBMS schema is used to identify the role of control nodes in the control hierarchy. The TGC system has been operational since the last couple of years.
This talk will cover the learning and experiences from the Tango based Next Generation GMRT M&C System, such as implementation of the Tango framework, specification driven system to promote loose coupling, aggregation node implementation for antenna array and sub-arrays, and the context based fully featured GUIs using the Taurus etc.

Primary author: Mr KODILKAR, Jitendra (National Centre for Radio Astrophysics - Giant Metrewave Radio Telescope, Pune, India)

Presenter: Mr KODILKAR, Jitendra (National Centre for Radio Astrophysics - Giant Metrewave Radio Telescope, Pune, India)

Session Classification: Projects Status

Contribution ID: **23** Type: **Talk**

PUMA framework achieves load balancing and failover

Wednesday, 15 September 2021 16:00 (15 minutes)

Latest developments in the PUMA framework for the design of reliable, secure, scalable and user-oriented multi platform user interfaces have targeted the load balancing and failover objectives. A multi host environment has been set up to test the features, that are currently of service to the clients.

Primary author: STRANGOLINO, Giacomo (Elettra Sincrotrone Trieste)

Presenter: STRANGOLINO, Giacomo (Elettra Sincrotrone Trieste)

Session Classification: Tango Ecosystem

Contribution ID: **24** Type: **Talk**

Pogo Roadmap

Wednesday, 15 September 2021 13:35 (15 minutes)

Proposal for a roadmap for pogo in the coming year.
All the items presented are open for discussion.

Primary authors: LACOSTE, Damien (ESRF); Mr KĘDROŃ, Krystian

Presenter: LACOSTE, Damien (ESRF)

Session Classification: Tango Ecosystem

Contribution ID: **25** Type: **Talk**

About IK Compagny

Wednesday, 15 September 2021 16:50 (10 minutes)

Presenter: MERKULOVA, Olga (IK Company)

Session Classification: News from the Steering Commity

Contribution ID: **26** Type: **Talk**

About Byte Physics

Wednesday, 15 September 2021 17:00 (10 minutes)

Presenter: Mr BRAUN, Thomas (Byte Physics)

Session Classification: News from the Steering Commity

Contribution ID: **27** Type: **Talk**

About S2 Innovation

Wednesday, 15 September 2021 17:20 (10 minutes)

Presenter: GORYL, Piotr (S2Innovation Sp. z o. o,)

Session Classification: News from the Steering Commity

Contribution ID: **28** Type: **Talk**

About Observatory Science

Wednesday, 15 September 2021 17:10 (10 minutes)

Presenter: Mr GREER, Alan (Observatory Science)

Session Classification: News from the Steering Commity

Contribution ID: **29** Type: **Talk**

Latest news from the Tango Steering Committee

Wednesday, 15 September 2021 16:40 (10 minutes)

The Tango Steering Committee is made up of the sites who have signed a common collaboration to maintain and further develop Tango Controls by co-financing developments. Strategic decisions about the roadmap are discussed in the TSC meetings and guide the choice of developments to finance. This talk will present the latest news from the TSC, specifically the outcomes of the tendering process which was carried out in 2021.

Presenter: GOTZ, Andy (ESRF)

Session Classification: News from the Steering Commity

Contribution ID: **30** Type: **not specified**

Q&A

Wednesday, 15 September 2021 17:30 (10 minutes)

Presenter: LECLERCQ, Nicolas (ESRF)

Session Classification: News from the Steering Commity

Contribution ID: **31** Type: **not specified**

Taranta Status

Wednesday, 15 September 2021 13:50 (15 minutes)

Presenter: RIBEIRO, Hélder (Atlar Innovation)

Session Classification: Tango Ecosystem