

DEVPYLON, DEVVIMBA...GAME CHANGERS AT LULI

TUMBCM032

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ABSTRACT

This poster focuses on two linked software components: DevPylon and DevVimba. Each affected to a type of cameras: Basler via PyPylon wrapper interface of Pylon Software suite and Prosilica via Vimba SDK library, respectively. These two Tango [1] devices are Python scripts constructed and generated via **POGO** [2]. They offer a specific way to monitor more than 100 CCD cameras in the facility at an image acquisition and display rate up to 10 Hz for a maximum of 300-shot at 1-minute rate per day and on an always-ON mode throughout the day.

PURPOSE

2 types of cameras, 2 Tango devices with similar properties and attributes: ONE GUI

TANGO-CONTROL ADVANTAGES

Multi-languages, OS independent and valuable panel of tools for management and monitoring

AVAILABILITY



Find these two Python devices on the Tango-Controls gitlab!



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True 🔽 .

True 🔽 🔽

True 🖵 🗔

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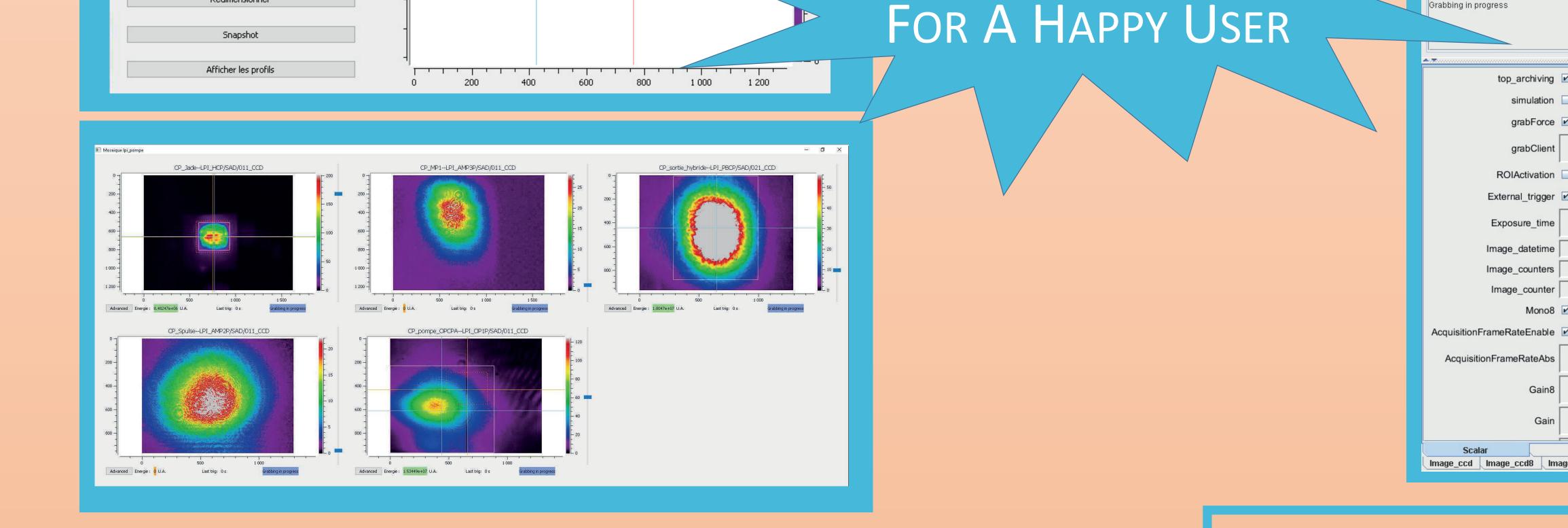
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True

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CAMERAS ONE GUI AND ONE ONLY PROSILICA BASLER 💊 🔍 💷 느 💻 🐷 🖾 🗯 🇯 🖵 📾 👯 🕂 🛩 Trigger (check: External/uncheck: Internal) Mode (check: 8-bits/uncheck: 16-bits) Acquisition pause 762 Position croix 2 457 Position croix ' CP_amp03 CP_amp03 Appliquer centroide Centroide > Centroide ^v 433 (1623.75) pix.(um Delta X Delta Y energie_ccd Dimensions du faisceau Configuration Avancée SIMILAR ATKPANELS Sauver Position de Référence Charger Position de Référence - 10 AtkPanel 5.4 : LAM_AMP03/SAD/021_CCD A SINGLE EXPERIENCE LUT dynamique Preferences + Seuil LUT fixe 16 LAM_AMP03/SAD/021_CCD 1 000 -LAM AMP03/SAD/021 CCD Redimensionner



The DevCalculs device associated with DevPylon and DevVimba allows a real-time computation of centroid, alarm zone, local maximum, etc. and also displays userdefined references.

The next step will be to integrate other cameras and create a library to consolidate these features; it's a big investment of resources for our lab at this moment due to the use of specific PyPylon/Vimba libraries. Interested? Come and join us! Tango is the Future. Soon on The Moon!?

top_archiving 🗹

simulation

grabForce 🗹

grabClient

ROIActivation

External_trigger

Exposure time

mage datetime

mage_counters

Image_counter

Mono8

131

100000 us

20230906T152058

53

3299753

3.00 fps

image sizes

AKNOWLEDGMENT & REFERENCES

Special thanks to Tango community colleagues who shared experience and helped construct and develop Apollon Control System [1] Tango Controls website: <u>http://www.tango-controls.org</u> [2] POGO is a Tango Controls class generator

CONFERENCE LINK

See our other poster TUPDP012 about Apollon facility commandcontrol in the session on Tango at LULI

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Keywords: TANGO, Python, software, data acquisition, camera



