

The SiLA Connection

October 2024



STANDARDIZATION IN LAB AUTOMATION

OCTOBER 2024

[Why cyber security is a concern for automation specialists](#)

We are delighted to share with you the link to the second SiLA-article, published by our media partner [Drug Discovery World!](#)

Read what Mark Auty from [Unilever](#) has to say about cyber security and how SiLA is addressing this important matter: <https://www.ddw-online.com/why-cyber-security-is-a-concern-for-automation-specialists-31862-202410/>

Are you interested in learning more on the topic "Standards" and Cyber Security?

Then [join](#) the next SiLA Cyber Security Working Group meeting lead by Mark Auty on October 25th, 1pm BST.

Stay tuned for our next article on Democratizing laboratory automation by Tim Meyer, University of Göttingen.

See us at these events:

[PLA Conference India 2024](#)

October 15-16, Mumbai, India

[Future Labs LIVE US](#)

October, 30-31

[IUTA Analytik Tag](#)

November, 7

[Discovery US 2024](#)

November, 7-8

[Future Labs, Automation & Technology](#)

November, 12

[Future Labs, Automation & Technology](#)

December, 3



[The SiLA Installer is now generally available](#)

The SiLA Installer is designed to make the deployment and management of automation software more straightforward. Its user-friendly interface allows to install, update or run lab automation software from a single entry point.

Key Features of the SiLA Installer:

- Unified Platform: A single entry point for all laboratory automation applications.
- User-Friendly Interface: Easy to navigate, making installation and management of applications straightforward.
- Seamless Integration: Works with a wide range of laboratory automation tools.
- Enhanced Efficiency: Simplifies the process of deploying and running applications.

[Contact us](#) for more information.

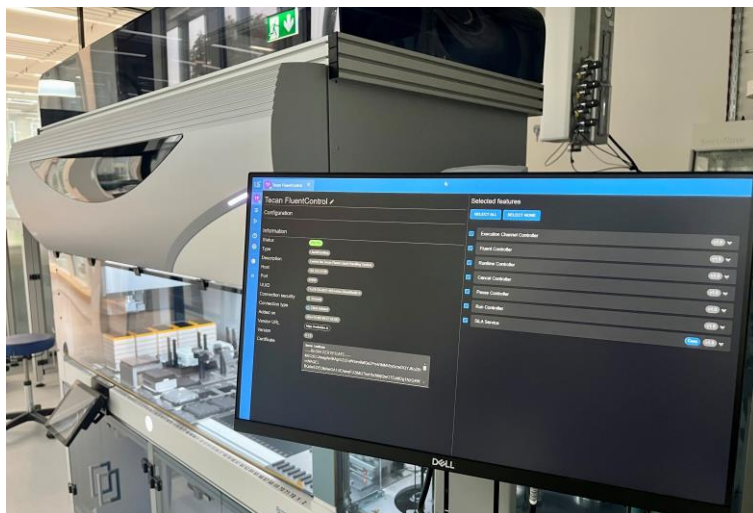
[Accelerating Automation with SiLA 2: A Success Story of Collaboration between UniteLabs, Roche, and Biosero](#)

In a recent collaborative project [Roche](#), [UniteLabs](#), and [Biosero](#) joined forces to deliver a modular solution streamlining automated laboratory workflows. The project, which started in late July, involved the development of a SiLA 2-compliant connector for the Tecan FluentControl software, the system that drives the [Tecan](#) Fluent liquid handling station.

The connector, developed entirely remotely by UniteLabs, fully supports the SiLA 2 1.1 standard, enabling encrypted and seamless cloud connectivity using server-initiated communication. Initially designed to integrate into larger workcells managed by Biosero's Green Button Go scheduling software, the connector's potential has already begun to extend beyond the original project scope. Since the successful Site Acceptance Test, there has been growing interest by other groups within Roche in utilizing the connector for additional use cases, driven by its ability to subscribe and respond to FluentControl's state, errors, and dialogs.

This effort demonstrates the value of investing in standardized device integration, particularly as laboratories move toward modular, future-proof infrastructures. By adhering to the SiLA 2 standard, the Tecan FluentControl connector ensures maximum flexibility and scalability for future implementations, enabling a wide range of automation solutions across various workflows. Additionally, the openness of SiLA 2 allows for plug-and-play integration with the UniteLabs platform, which will serve as a powerful integration layer for connecting applications and devices in future projects, enabling a modular laboratory architecture.

As members of the SiLA Consortium, UniteLabs, Roche, and Biosero benefited from shared expertise and resources, with Tecan (SiLA Member) providing invaluable support and access to documentation. This collective effort has resulted in a solution that goes beyond the immediate project to offer long-term value, demonstrating the importance of collaboration and open standards in driving innovation in laboratory automation.



The [FluentControl SiLA Server](#), a key component of this project, is open-source and available for anyone to use, making it an attractive option for labs looking to enhance their automation capabilities. By embracing SiLA 2 and open standards, all project partners have demonstrated their commitment to fostering a more connected and modular future for laboratory automation. Big thanks to Roche for the financial contribution and their commitment to make this an example that is publicly available.

You can also find this connector on the brand-new [SiLA Products website!](#)

Together, we are paving the way for the next generation of integrated and modular laboratory automation.

SiLA 2 Core Working Group

The SiLA 2 Core Working Group has made significant strides in multiple areas, with active developments and improvements across various repositories since spring 2024:

SiLA Installer: The development of the SiLA Installer is nearly complete, with the focus now shifting to testing. There's an innovative idea to extend its use beyond deployment to also execute functionalities like USC (Universal SiLA Client).

Repository updates:

- **sila_base:** The core SiLA repository continues to be maintained actively by this working group, with the community and Slack group participating in decision-making.
- **sila_python:** A critical fix (MR 67) has been implemented, addressing the handling of binary downloads. Additionally, efforts to resolve issues with encryption, self-signed certificates, and auto-discovery are ongoing.
- **sila_tecan:** A new release was issued on July 4, 2024, which fixed several minor bugs.
- **sila_browser:** A significant update, requested by SiLA Python Slack users, adds containerization support with Docker, enabling easier deployment and CI/CD integration.

Looking forward to 2025, the SiLA 2 Core Working Group aims to:

- **Expand Functionality:** Further enhance the capabilities of existing SiLA components, with a particular focus on improving interoperability and user experience.
- **Increase Adoption:** Strengthen outreach efforts to attract more users and contributors from diverse fields, ensuring the SiLA standard continues to meet the needs of modern laboratories.
- **Enhance Support for Plug-ins:** Address ongoing issues with plug-in support, particularly for the Universal SiLA Client (USC), ensuring a smoother and more reliable user experience.

General Information:

- **Active Participants:** The working group currently has a robust and engaged group of participants, including maintainers for key repositories like `sila_csharp`, `sila_python`, `sila_java`, and more.

Get Involved:

Interested in contributing? [Join the next meeting](#) on Wednesday, October 16th, 4-4.50pm (CET) or reach out to the working group on [Slack](#) to get started.



Robotics-4-Labautomation Symposium 2024, Konstanz, Germany, September 25th

Here is what our SiLA representative, Matt Neidhard, has to say about the event:

It was a pleasure to arrive in sunny Konstanz for the 2024 Robotics for Lab automation symposium on 25th September. It was a nice opportunity to learn about the progress that the TraceBOT project has made over the last 4 years, and to catch up with some old faces and have new discussions with some new faces.

The TraceBOT project requires collaboration between half a dozen institutions and private companies all based in Europe. They utilize ROS for cross collaboration and I had some very interesting conversations with attendees and TraceBOT contributors about the possibilities for cross collaboration using SiLA. In fact, I was even able to talk about some of the collaborations between [Biosero](#) and [Astech](#) where SiLA allows Biosero Green Button Go software to control Astech custom automation modules.

It's always pleasant to discuss the possibilities that a standard communication protocol for laboratory instruments will enable, and the conversations I had with attendees at the symposium were very enjoyable. **I was impressed by how many attendees were already familiar with the standard, and with how easily those that weren't familiar grasped the concept and the could recognize the advantages.**

Thanks again from the SiLA-Team to Matt and "Goodsila" for covering the event!

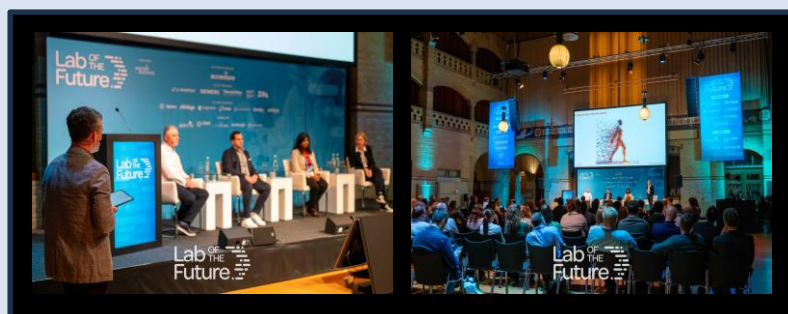


SiLA at Lab of the Future Europe in Amsterdam, October 1st-2nd

SiLA Director, Rob Harkness, acted as a moderator for the session on the topic "connected labs".

A great opportunity for SiLA to once again reinforce the importance of international standards to enable open connectivity and secure data transfer within the lab.

One of the most important aspects of modern labs, is how data is captured, managed, and optimized to drive forward R&D, and how user-centric and data centric designs can redefine the laboratory experience, to ensure no data is left behind. Now, with the advent of connected labs and digital transformations, we are in an era where data is not just an output but is actually a core asset that directly impacts decision making, innovation and time to market.



It was of great value and interest to the audience to hear from an expert panel on this topic!

Penny Smee from GSK, followed by Guillaume Lardier and Dennis Zolk from Sanofi and Nandini Kumar from Cognizant, shared insights from their work on connected labs.

SiLA at Drug Discovery, London UK, October 2nd-3rd

Robotics and Automation Track: Innovations and Applications

The ELRIG Drug Discovery is a major event in the UK calendar and DD24 in London on October 3rd was no different. Except that with over 4'000 registrations it was the biggest ever!

SiLA was again invited to curate the Robotics and Automation track, along with our co-chair Lorna Suckling ([GSK](#)).



With a packed agenda covering AI, robots and automation of various kinds, delegates heard excellent presentations on GSK, the automation of soli the development of end-to-end automation at handling – past and future, the latest on organ-on-chip thanks to a standardization roadmap, as well as a robotics gripper challenge from the new ARIA research agency in the UK that is open to all. And an excellent final panel launching the idea of “digital sustainability”.

Thanks to all who attended and gave their time to present. If you missed it, we are already planning the next edition for 2025!



 DRUG DISCOVERY 2024
AN ELRIG CONFERENCE
2-3 OCTOBER 2024
EXCEL LONDON

SiLA at Paperless Lab Academy (PLA) Conference in Mumbai, India, Oct. 15th -16th

We are delighted to be present again with a Deep Dive Workshop on October 16th, at the upcoming PLA Conference in Mumbai, India.

Together with SiLA Director, Burkhard Schaefer, you will experience a hands on session with the aim to prepare you for the application of laboratory digitization on a large scale through the use of data and communication standards.

We will explore the use of repeatable patterns to apply laboratory digitization at scale and conclude with a live session using real instruments.

The session will begin with an overview of SiLA and AnIML standards. As you go through these points, you will understand the role of data and communication standards in facilitating this process. Register here: https://www.paperlesslabacademy.com/india_registration/

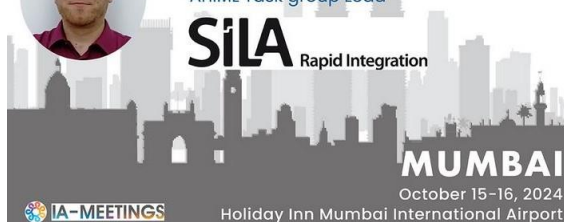


DEEP DIVE WORKSHOP | October 16, 2024 | 13:30 - 17:30

Hands on Lab Digitalisation
Instrument Connectivity and Data
Management at Scale using Standards



Burkhard Schaefer
SiLA Board Member
AnIML Task group Lead



SiLA at Future Labs LIVE, Philadelphia US, October 30th-31st

Delighted to announce that SiLA will be present at the Future Labs LIVE US event on Oct. 30-31, in Philadelphia US.

As a partner of the event, SiLA Directors, Patrick Courtney and Burkhard Schaefer, will be present and involved in the **topics around "trust and traceability of data" and "digitalization of the lab environment"**.

Register now for free and meet us at the event!

https://secure.terrapinn.com/V5/step1.aspx?E=10830&utm_source=partners&utm_medium=sila&utm_campaign=part&trc=part



Oct 30-31, 2024 | Pennsylvania Convention Center, PA

MEDIA PARTNER ANNOUNCEMENT

SiLA

Rapid Integration

REGISTER FOR FREE

8. IUTA-AnalytikTag – Schwerpunkt: Digitalisierung, Automation und Schnittstellen am 7. November 2024

Join the session at 2pm on the topic: Standardisierung und Schnittstellen im Labor: SiLA 2 oder LADS OPC UA oder und?



Dr. Daniel Juchli (SiLA CTO / [wega Informatik](#)) and Dr. Matthias Arnold, AixEngineers

Presentations and discussions will be held in German language only. Register here: <https://eveeno.com/250223898>

Join Future Labs, Automation & Technology on November 12th in San Diego

8.30am - SiLA ambassador Cindy Novak ([Avidity Bioscience](#)) giving a keynote presentation on: Avidity Biosciences' Generative AI Journey: Aligning AI Initiatives with Organizational Values and Goals

9.30am - Burkhard Schaefer ([splashlake](#) and SiLA) presenting on: Sustainable and Scalable Data Management and Integration in the Digital Lab



Accelerating R&D Through Advanced Technology,
Connected Instruments and Data Analytics
12 November 2024 | San Diego, CA, USA



Register here: <https://www.amg-world.co.uk/future-labs-automation-technology-west/registration/>

FOR MORE INFORMATION

Visit us at www.sila-standard.org

Email us at info@silastandard.org

Follow us on [Twitter](#) or [LinkedIn](#)