

Open Source @ Siemens 2024

Welcome and latest news

11th edition

Technology & Collaboration Culture

A bit of guidance regarding logistics

We have **no special event team**, the people running our internal social coding platform `code.siemens.com` are serving you here as guests.



It's kind of a **family like event**, you get served by SREs, GitLab MVPs, python-gitlab maintainers and friends ... people having Open Source within their DNA.

01 Remote participants

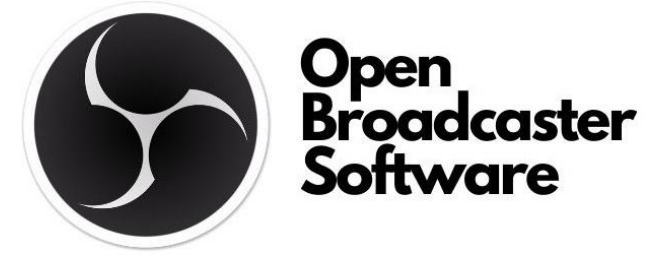
- Feel free to ask any questions in the chat during the presentation
- The moderators will address them during the talk or Q&A
- Hint: You can set your name by clicking on the profile icon

02

Presentations & recordings will be published on the event site

03 On-site

- Please use a microphone when speaking so remote participants can hear you
- Vegan / vegetarian food is marked
- **Keep the venue tidy**
- Empty bottles > bar, trash > recycle bin
- Just as you behave at family events ;-)



Thanks!



Latest news

10th Open Source @ Siemens event

This was the highlight of the year for us, the `code.siemens.com` crew!



We will do our best to have a concert again next year, stay tuned!



If you mix Kings of Leon with Coldplay and Imagine Dragons, then you'll get The Birthday Girls.

Source: <https://blog.siemens.com/2023/06/open-source-siemens-2023/>

Open Source Sponsoring as Code

```
1 projects:
2   mkdocs-material:
3     url: https://github.com/squidfunk/mkdocs-material
4     why: This framework is used as a direct dependency
5         of the Siemens docs theme which is the foundation
6         of many documentation websites maintained and
7         published on code.siemens.com. Sponsoring this
8         project is highly relevant for software developers
9         and will help keep our project's documentation
10        stack up-to-date and get new features.
11   indicators:
12     complexity: high
13     criticality: high
14     activity: high
15     fundraising: high
16
17 maintainers:
18   squidfunk:
19     url: https://github.com/sponsors/squidfunk
20     projects: [mkdocs-material]
21
22 payments:
23   # This is not the actual payment :)
24   - date: "1847-10-01"
25     approvers:
26       - werner.von.siemens@siemens.com
27       - johann.georg.halske@siemens.com
28     amounts:
29       squidfunk: 1847
```

Source: <https://blog.siemens.com/2023/09/how-siemens-supports-open-source-development/>

Special thanks to Florian, Marion, Alex (Finance) and compliance officers!

- It took us quite a while to set up, but now we are ready and compliant!
- First batch of sponsoring performed and well received by the communities.
- Next sponsoring batch is in preparation.

Siemens folks, here is the repository:

<https://code.siemens.com/code-ops/opensource>



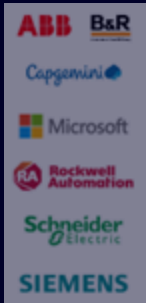
Probably the most innovative topic and process I've ever seen at Siemens from a Compliance perspective!

margo - Edge interoperability for industrial automation ecosystems

 Project Ox





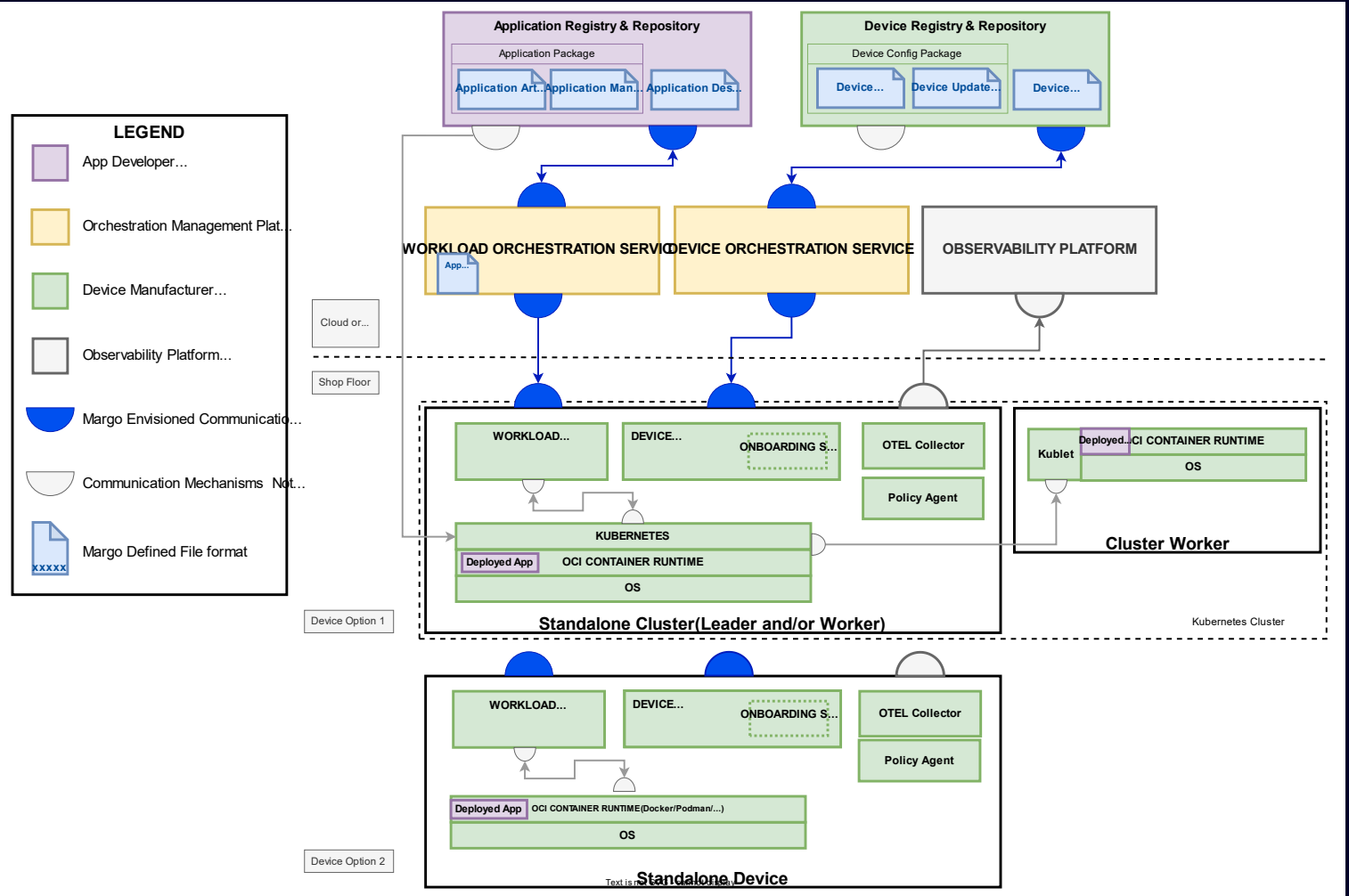


*The Margo initiative defines mechanisms for **interoperable orchestration** at scale of edge applications/**workloads and devices**. It will deliver the interoperability promise through an **open standard, a reference implementation and comprehensive compliance testing toolkit**. Margo unlocks barriers to innovation in complex multi-vendor environments and accelerates digital transformation for organizations of all sizes.*

*That's why it's named after the **Latin word for edge**.*

Source: <https://margo.org>

margo – Envisioned System Architecture (pre-draft)



“ With Industrial Operations X and Siemens Industrial Edge, we are committed to ecosystem openness. Margo supports extending the cross-vendor approach, enriching solution capabilities through a common standard.

Rolf Heinsohn
SVP Control at Siemens

"Margo strives to provide a specification and a reference implementation for a cross-vendor (OCI container) application runtime environment targeted towards the industrial automation space for shop-floor applications to become interoperable. This includes application life cycle management as well as necessary device management features."

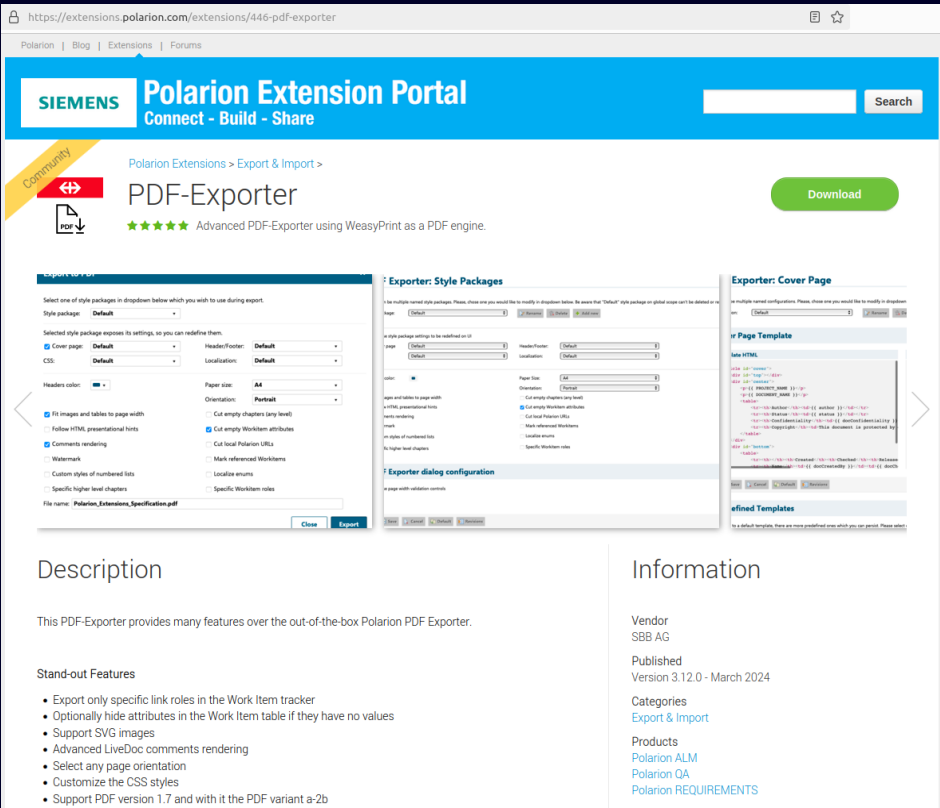
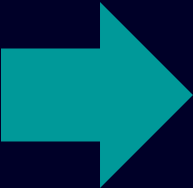
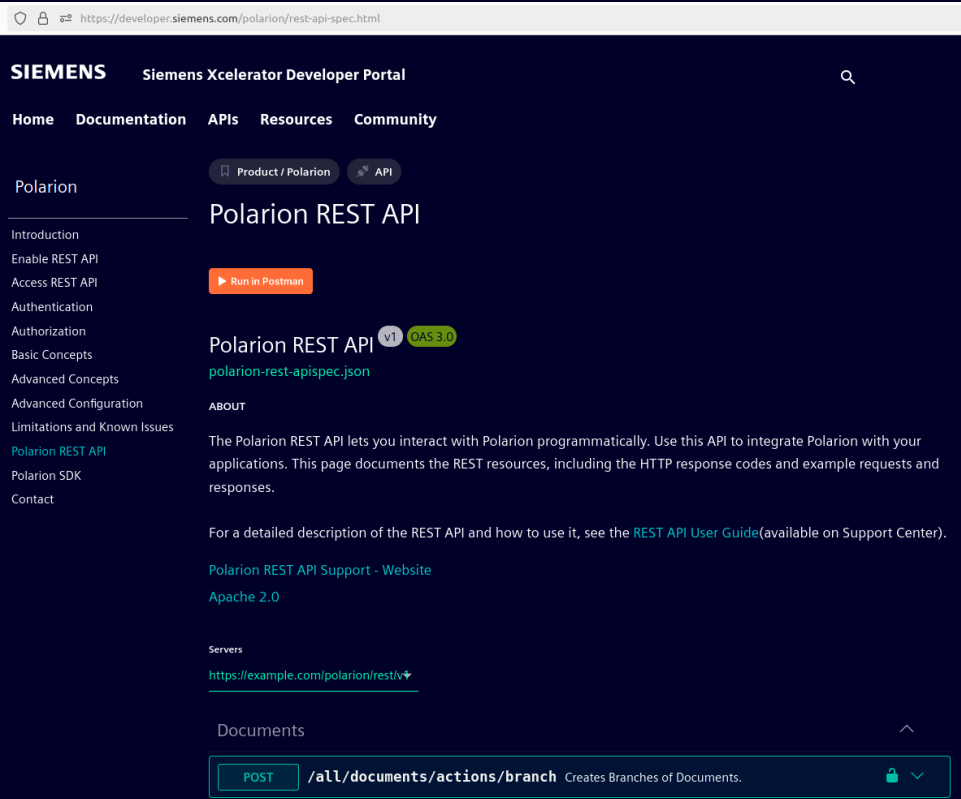
Christian Storn (Siemens), 2024

Source: <https://github.com/margo/specification/blob/pre-draft/system-design/figures/System-design.drawio.svg>



Customers request Open Source licenses from Siemens

SBB requested Siemens to publish the Polaron REST API under an Open Source license:



<https://github.com/orgs/SchweizerischeBundesbahnen/repositories>



code.siemens.com - insights

16.1



This month's Most Valuable Person (MVP) is jointly awarded to **Gerardo Navarro** and **Yuri Konotopov**

Gerardo has been consistently iterating over multiple releases to deliver the REST API endpoints for job token scope. Iteration is one of our core values at GitLab, and Gerardo has exemplified that with his multiple contributions to deliver the feature.

Due to the change in default CI_JOB_TOKEN behavior, users who automate creation of projects cannot also automate adding the projects allowed to use a CI_JOB_TOKEN with the project. This REST API endpoint enables our customers to automate this process again and drive increased adoption of a more secure CI_JOB_TOKEN workflow.

Thanks to Gerardo and the rest of the crew from Siemens!

Ongoing topics:

- Protected packages and protected container registry > insights tomorrow.
- Stability for MRs with > 300 comments.
- Bugfixes, corner case handling, etc.

- **>600 commits** from code.siemens.com crew to projects on GitHub.com during last year.
- **IPv6:** on shared runners, internet facing endpoints planned.
- We now use the **3rd IdP** since we started, from Entitlement to Ping ID to Entra ID, from SAML to OIDC.
- Business Partner on-boarding within minutes.
- **Registry v2:** Migration still ongoing, several MRs made, re-added some features to the import tool to import dangling manifests as well.

Upcoming topics



Contribute and maintain Open Source and Inner Source projects and amplify our developers with AI assistants. See <https://amplified.dev/>

Extend Credential Scanning and partnership with external platforms such as GitHub and GitLab

Share some more insights via the Siemens developers blog <https://blog.siemens.com/space/developers/>

Siemens folks, save the date (Nuremberg or via stream):

- [22nd Linux Community Event](#) – December 3rd
- [4th Inner Source Summit](#) – December 4th

Please provide feedback!

Remote participants



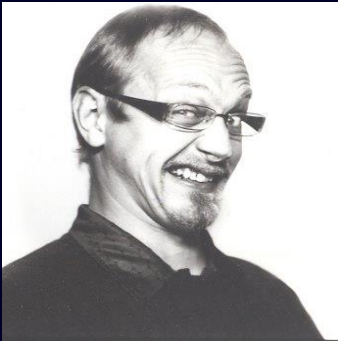
On-site guests



Welcome folks,
thanks for joining us!

Have fun!

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