

Annual Review for Grid eXchange Fabric

Maarten Mulder & Robert Tusveld - Alliander

ALFENERGY

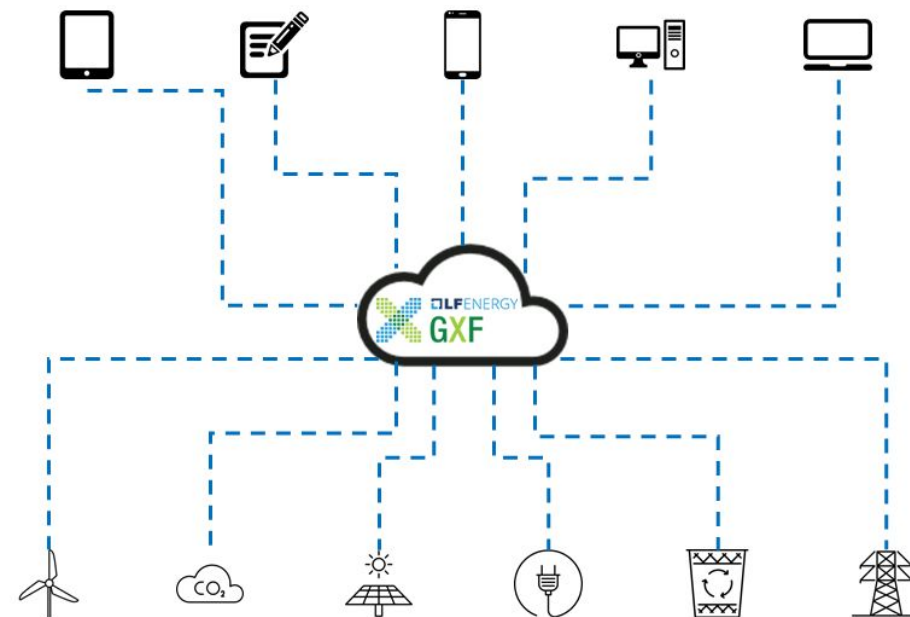




Grid eXchange Fabric

Grid eXchange Fabric (GXF) is a software platform that enables hardware monitoring and control in the public space. GXF provides several functions out of the box and provides scalability & high availability, high security, a generic design, and no vendor lock-in. GXF is currently deployed in [several public use cases](#), including microgrids, smart metering, public lighting, and distribution automation.

GXF is open, independent, and driven by its community, developed using open-source best practices and designed to use open standards. This enables third parties to develop new and innovative solutions. The trade-off is flexibility and freedom. Unlike closed proprietary software, open-source software can be altered and extended by any developer familiar with the source code. This grants organizations freedom from “vendor lock-in,” assures long-term viability, and creates industry opportunities for support, consulting, and training.



Mission: The platform to connect with any digital device to collect data and support functions.

Scope: To communicate with digital devices for example in the business-critical security zone.

Incubation Project review criteria

To be considered for the Incubation Stage, the project must meet the following requirements:

- Have an open and documented technical governance
- Complete and approve the Technical Charter and agree to transfer any relevant trademarks to The Linux Foundation or its affiliate, LF Projects, LLC, and to assist in filing for any relevant unregistered ones.
- Have achieved and maintained an [OpenSSF Best Practices Badge](#) at the ['Passing' level](#).
- Have had a successful license scan with any critical issues remedied - Done
- Have a defined project mission and scope – Slide 2
- The project's functional architecture is built out in the [LF Energy ArchiMate tool](#) thanks to Prince Singh
- An overview of the project's architecture and features defined onGitbook
- The project roadmap is defined
- Community and contributor growth assessment will be presented
- Receive the affirmative majority vote of the TAC.

Past year

- Stable contributor strength
- Stable commits growth
- Ambition make a step in the direction of the Graduation Stage
- To busy with infrastructure changes

Incubation Project review criteria:

- License scan 3 (old) findings explained



Active contributors

Active contributor is an individual who performed activities such as commits, issues, or pull requests during the selected time period. [Learn more](#)

54 📈 58.8% (+20)
vs. 34 last period



Geographical distribution

Distribution of the geographical location of contributors and the headquarters of their organizations. [Learn more](#)

Organizations Contributors All activities



NL Netherlands	2 organizations · 22%
CA Canada	1 organization · 11%
PL Poland	1 organization · 11%
Unknown location	5 organizations · 56%

Commit Activities

Number of commits performed during the selected period. [Learn more](#)

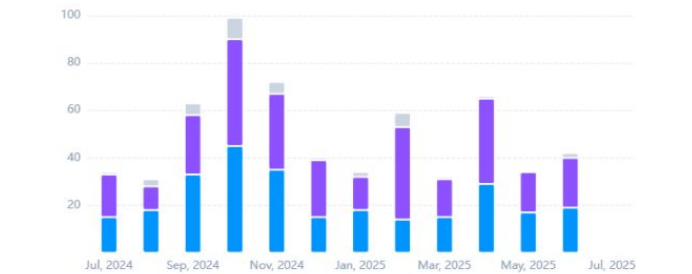
2,244 📉 15.1% (-400)
vs. 2,644 last period



Pull requests

Comparison between opened and merged (or closed) pull requests during the selected period. [Learn more](#)

Total pull requests performed 📉 14% (-99) vs. 705 last period 🕒 Avg. velocity 6 days



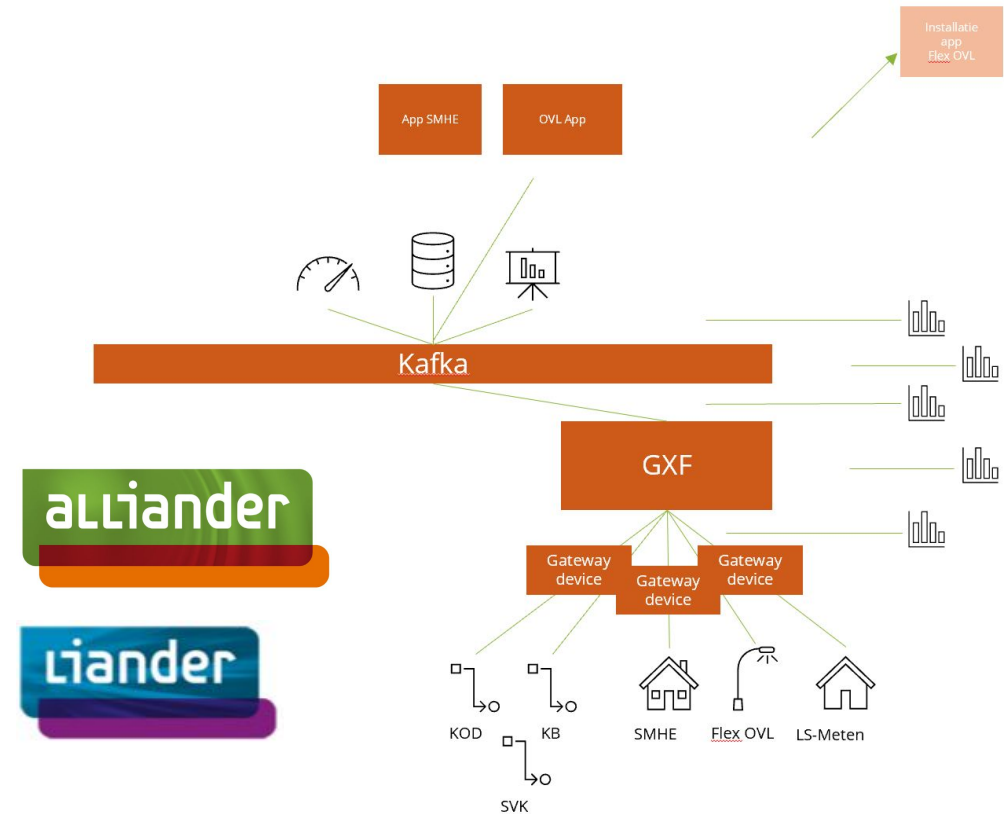
Open	Total 273	vs. last period 📉 8.7% (-26)
Merged	Total 297	vs. last period 📈 23.8% (-93)
Closed	Total 36	vs. last period 📈 125% (+20)

Organizations contributing and/or using in production

- Alliander is Maintainer and deliver the GXF solutions to Liander.
- At the moment there are no other users/contributors.

Key Achievements in the past year:

- LS-meten **3.000** devices in production
- SMHE **6.000.000+** devices in production
- Flex ovl CI/CD ready container based **20.000** devices in production
- KOD for integrated battery powered device production will start in the next year



Next year

- Developing new chains for distribution automation.
 - Cathodic protection
 - Fault detection
 - Medium Voltage measurements
- Technology improvements (security scan).
- Growth plan for coming years.
 - Discussion with hardware supplier
 - Simplify our code base
- Internal discussion about Open Source for our frond end applications.
- Improve documentation.

Early Adoption Project review criteria

- Demonstrate growth in the project's community.
 - Stable contributor strength
 - Stable commits growth
- Technical Governance of the project is operational.
 - Internal steering committee is in place
 - Achievement of the OpenSSF Best Practice badge at the ['Silver' Level](#)
- Development of a growth plan, to be done in conjunction with their project mentor(s) at the TAC.
 - The release plan depends on the roadmap and future plans of Alliander
 - Focus on continuous quality improvement

>> Our proposal is to remain in the early adoption stage for the coming year.

Areas the project could use help on

- We could use assistance with reviewing documentation.

Feedback on working with LF Energy

- It's good to see the community is growing. Well done!