

# Meetings 2021

Meeting 08-11-2021 17:00

## Attendees

- Markus Mirz
- Jonas Baude
- Darren Leniston

## Agenda Items

Item	Description
SOGNO Releases	How we will work releases
Deployment	Deployment at German DSO
Kafka	Kafka streams to transform IoT data before writing to DB
Reverse Proxy	Status of reverse proxy

## Discussion Items

Item	Who	Notes
SOGNO Releases	All	Questions about navigation, what do we want users to see? How do we share the project and github pages? SEO, LinkedIn? Markus will ask LFE members about this.
Deployment	All	SOGNO has been used in Platone, in a workpackage in another project, SOGNO services (PMU data visualisation) being used to store and visualise data aggregations. They are using AKS and have some specific requirements for configuration which is providing useful learnings to bring back to SOGNO platform deployments.
Kafka	All	LFE SOGNO requires implementation of Kafka integration. Will contact FLEDGE project for input on this item. Currently investigating Kafka streams and custom Kafka
connector. There should be a prototype ready in the next couple weeks. Omicron, Alliander, RTE.		
Reverse Proxy	All	Reverse proxy implementation in Platone project, to allow user to feel they are using one API although referencing separate services. Some limitations of Kubernetes in this case, if wanting to use managed auth services may require reconfiguration of Kubernetes ingress controller as auth config would be static in here. Within Azure environment, this is not possible. Considering adding another reverse proxy behind ingress and would be responsible for polling separate identify management service. Could also control access to particular services based on identity.

Meeting 08-10-2021 17:00

## Attendees

- Markus Mirz
- Marco Pau
- Jonas Baude
- Darren Leniston

## Agenda Items

Item	Description
SOGNO Releases	How we will work releases

## Discussion Items

Item	Who	Notes
SOGNO Releases	All	Too many sub projects to describe, need to define releases in some nice way. Want to create general API's (e.g. Load Forecasting) and then document this via ReDoc. Aim for two releases per year (for example the Ubuntu xx.04 and xx.10 release cycle every 6 months). Should have all example deployments in line with a release. Dependencies are automatically validated via LFX.

## Meeting 14-06-2021

### Attendees

- Markus Mirz
- Antonello Monti
- Marco Pau
- Jonas Baude
- John Mertic
- Darren Leniston
- Petr Musilek

### Agenda Items

Item	Description
Organisation	Check invitation / calendar for TSC
Arch Figure	Included updated architecture figure
ProLoaF	ProLoaF forecasting tool on GitHub
RWTH PMU Demo	RWTH PMU demo live
Kafka	Discuss usage of Kafka
Reverse Proxy	Progress on implementing the reverse proxy
API frontend	New version progress
Integration Efforts	Current status of integrations with other projects
API for SE	API development for State Estimation
Events	Upcoming events
AOB	Any other business

## Discussion Items

Item	Who	Notes
Organisation	All	Current zoom link should work until the end of the year
Arch Figure	All	Newer more detailed architecture diagram has been added to the <a href="#">overview</a> , it is also interactive and will take users to the services repos on GitHub
ProLoaF	All	New load forecasting service has been added to the repo on GitHub, <a href="#">ProLoaF</a>
RWTH PMU Demo	RWTH	<a href="#">Demo has been setup in RWTH with live data</a> , which will aim to run continuously and be publicly available, architecture will the SOGNO model. Further work planned to bring all components into Kubernetes.

Kafka /Strimzi	RWTH	Support for MQTT/AMQP Kafka/Strimzi is being added currently, work will continue on this. VILLAS/DPSim support for Kafka is available
Reverse Proxy	RWTH, WIT	Work on this is continuing, Live demo is using nginx reverse proxy ingress controller.
API frontend	All	New version to replace deprecated Python package as it was deprecated. New project added, <a href="#">dpsim-api</a> REST api written in Rust.
Integration Efforts	All	Integration with FLEDGE through kafka. ProLoaF and Alliander forecasting tool. Simulation tools - DPSim and PowSyBl. OperatorFabric as GUI with Message Broker in between. Will discuss in more detail at the next TSC.
AOB	All	Some services from original SOGNO project is not in place, such as Power Quality and FLISR. Should we plan to add these at a later date? Power Quality would be relatively easy to add, FLISR would require more work as some customised algorithms were used to suit the trials, these would need to be generalised before being integrated into LFE SOGNO.

## Meeting 10-05-2021

### Attendees

- Marco Pau
- Markus Mirz
- Darren Leniston
- Daniel Lazaro
- Petr Musilek
- Steffen Vogel

### Agenda Items

Item	Description
Menti about topics to be discussed	Option for members to add topics to discuss
Reverse Proxy (WIT)	Present approaches undertaken previously (Kubernetes + Helm, Docker)
Architecture diagram (one slide)	Update to SOGNO Architecture diagram
Kafka Strimzi	meetings with Omicron and RWTH group, separate project?
Repos Added	service docs, started with DPSim. Voltage control
State-Estimation	Discussed (dynamic) state-estimation with Tennet
New design for REST API frontends	

### Discussion Items

Item	Who	Notes
Menti about topics to be discussed	All	TSC members can use this tool to add discussion topics to the agenda.
Repos Added	All	More repositories added since last meeting, more documentation added for services as sub-documentation to avoid coupling with main SOGNO platform documentation area. Will explore sticking with adding specific documentation for services, keeping everything modular. Voltage Control repository added to GitHub.
Reverse Proxy (WIT)	WIT, RWTH	Discussed methods explored with NGINX and experience that WIT have had in the past. Group agrees that we should keep everything based in Kubernetes. Should services still have their own separate namespace still? We should discuss this item.

Architecture diagram (one slide)	RWTH	Markus has re-done the Architecture diagram to make them a bit more detailed. One aim would be to make these diagrams interactive where a user can click on an element (e.g. RT-Simulation) and be taken to the repository. Could be done with SVG.
Kafka & Strimzi	All	After summer summit RWTH had a discussion with Omicron. Strimzi is an open-source solution for Kafka on Kubernetes. Group in RWTH has some experience with Strimzi but it is not that easy to set up (Strimzi still in early development). SOGNO and FLEDGE integration with Kafka, if done, why not make this available to all projects? Needs further discussion as more projects seem interested in supporting Kafka, but from feedback with more experienced people, this is not an easy process.
State-Estimation	RWTH	Plans to improving libraries (e.g. more versions which are more applicable to SOs), had a discussion with Tennet about collaborating on dynamic SE, nothing concrete yet but continuing the discussion. Next month should have more updates on this item.
New Design	All	Moving away from a current Service API implementation with poorly-maintained Python package, good time to re-do Service API methodology, allowing Service API to send request to message broker, which can then be forwarded to workers, providing more asynchronous operation. Will also provide more overal with another project being run in RWTH, so implementation work can be shared.

## Action Items

Item	Responsible	Due Date
Share TOGAF architecture example	WIT	

## Meeting 12-04-2021

### Attendees

- Antonello Monti
- Jonas Baude
- Mark McGranaghan
- Markus Mirz
- Mihai Smolnikar
- Darren Leniston
- Daniel Lazaro
- Petr Musilek
- Steffen Vogel

### Agenda Items

Item	Description
Organisation	Early adoption stage, project status, repos etc
Current development	LFE Summer Summit
Discussion of next steps	LF FLEDGE integration, SE service REST API, VC integration with helm example
AOB	Any other business to discuss

### Discussion Items

Item	Who	Notes
Organisation	All	Project moving onto next stage (Early Adoption Stage). Some new repos have been set up, <a href="#">helm chart repo</a> and <a href="#">example deployments</a> , containing scripts to easily set up some SOGNO services with helm charts. Now that the helm charts are in place, easier to add more services.
Integrations	All	Questions about further integration with other LFE projects, for example <a href="#">OperatorFabric</a> . Integration of Kafka with Kubernetes is a challenge, there is a solution name <a href="#">Strimzi</a> which provides a way to run a Kafka cluster on Kubernetes. With Kafka support in place will allow for more integrations. Some tooling may not be free with Kafka, may need some investigating.

Reverse Proxy Implementation	All	Next items to tackle before bringing in more services - Reverse Proxy, API Skeleton. Reverse Proxy - There may be some existing functionality for this in Kubernetes, or some other projects may do something similar, list of some <a href="#">options viewable here</a> .
API Skeleton	All	Aim for OpenAPI based specification. What would be shared between independent service APIs? If there are shared API specs, investigate a common place for these. This should serve as a place to start from. Suggestion to instead look at providing API guidelines to help steer how the service APIs should be defined, or could combine these where the guidelines reference a base OpenAPI specification.
AOB	All	Question of best practice to handle Asynchronous jobs, could be added to the API guidelines to outline common way to handle this. <a href="#">AsyncAPI</a>

## Action Items

Item	Responsible	Due Date
Review possible reverse proxy solutions (send ideas/feedback to Markus)	All	For next meeting
Review API management tools	All	For next meeting

## Meeting 08-03-2021

### Attendees

- John Mertic
- Jonas Baude
- Lukas Lankes
- Marco Pau
- Markus Mirz
- Darren Leniston
- Daniel Lazaro
- Miha Smolnikar
- Petr Musilek
- Steffen Vogel

### Agenda Items

Item	Description
Organisation	Wiki or Github Notes, project status, legal documents
Guidelines	Data models and formats, Deployment
Integration with LF FLEDGE project	What to integrate

### Discussion Items

Item	Who	Notes
Project Status	All	DCO sign-offs and licensing done for current services (State Estimation, Load Forecasting, Voltage Control) and tools (Real-time simulator, IEC61970, Grid Editor). John can add to LFE insights. Currently working on demos for LF Summer Summit (SE and VC), aim is to have services deployable with Helm Charts and Kubernetes (Helm Charts are in place).
Legal Documents	All	Trademark discussion status - Link from sogno-energy.eu (H2020) to LFE SOGNO, need to speak to Fiona Williams about this item.
Project Charter	All	Two points to discuss - license for future projects (Decided on Apache2), Mission Statement - SOGNO is creating plug-and-play, cloud-native, micro-services to implement our next generation of data-driven monitoring and control systems. TSC has approved the project charter.

Integration with LF FLEDGE Project	All	Most applicable plugins to SOGNO (at present): Southbound plugins - IEC104, IEC61850, MQTT, OpenWeatherMap. Northbound - HTTP, IEC104. FledgePOWER, downstream project of FLEDGE, idea is to develop plugins that are specific to power systems, with the aim to upstream these to FLEDGE.
Guidelines for services/functions	All	Once demo is done, then bring in CI/Testing with aim to get badges. Data models & formats - CIM IEC61970 (CIMpy, CIM++), IEC61968 (PlatONE), IEC104 (LF FLEDGE), IEC61850 (LF FLEDGE), would need to build components to work with IEC61968, partial support in CIM++, nothing ready for this at the moment, but it is important as it is a DSO focused data format, important for SOGNO LFE as it is targeted primarily at the DSO, test with RTDS stack (after LF summer summit). Check with Data Architecture LFE working group - <a href="https://docs.google.com/document/d/1QcHqPRSmUUJQIJnfygGDkOpDPId6U1V22pBuvZvDYk/edit#heading=h.g0v5yhj0kiyj">https://docs.google.com/document/d/1QcHqPRSmUUJQIJnfygGDkOpDPId6U1V22pBuvZvDYk/edit#heading=h.g0v5yhj0kiyj</a> & <a href="https://wiki.lfenergy.org/display/HOME/Data+Architecture+Working+Group">https://wiki.lfenergy.org/display/HOME/Data+Architecture+Working+Group</a> .
Deployment		Deployment - Kubernetes and helm charts/cofigs, new repo with example deployments available - <a href="https://github.com/sogno-platform/example-deployments">https://github.com/sogno-platform/example-deployments</a> .

## Action Items

Item	Responsible	Due Date
CIM IEC61968 Support		

## Meeting 08-02-2021

### Attendees

- Markus Mirz
- Marco Pau
- John Mertic
- Mark Riddoch
- Daniel Lazaro
- Petr Musilek
- Lindsay Gendreau
- Lukas
- Darren Leniston

### Agenda Items

Item	Description
Notes Location	Discuss using the Wiki or GitHub for project notes
Project Status	Current status of the project (DCO sign-offs, relicensing)
Legal Documents	Status of the trademark transfer and alternative solutions e.g. renaming the project
Guidelines/requirements for introducing new services/functions	Interfaces between services, data models & formats, deployment, CI/Testing
AOB	Is there anything else to discuss?

### Discussion Items

Item	Who	Notes
Additions to Agenda	All	No additions recommended
Notes Location	All	No preference from partners for the location of notes. Markus is going to try out using the wiki.

Project Status	All	Many of the services/tools signed off, some are awaiting sign-off + relicensing. A few issues with contributions from outside sources regarding relicensing of work, these have been resolved. Licenses are a mix of MPL2 and Apache2, for new projects coming in, suggestion is that we aim for Apache2 license.
Legal Documents	All	Project manager for SOGNO gave approval to use SOGNO trademark. Existing SOGNO domain currently in use, LFE would prefer to have ownership of this domain to avoid confusion between SOGNO EU and SOGNO LFE, current domain is owned by Ericsson. At the least there needs to be some indication on the existing SOGNO website that work is continuing via SOGNO LFE.
Guidelines for services/functions	All	Recommended interfaces between services - Should guidelines enforce services to support all chosen technologies? Each service should leverage one or two core protocols to ensure service interaction (e.g. HTTP/REST + MQTT). Data models & formats - Integration with LF FLEDGE, Investigate which FLEDGE plugins could be integrate with SOGNO services (e.g. openweathermap + load prediction). List of FLEDGE plugins updated regularly, grows rapidly. For streaming grid measurement data from field devices, some functionality for translating between protocols may make data easier for some services to digest.
Road map	All	Services - Plan is to start with State Estimation and Voltage Control services to provide K3s demos, SE has been proven in the field, SE & VC can be run with simulation. Partners agreed that we should prepare an example with FLEDGE integration. Documentation - We should create docs/API spec template for services

## Meeting 11-01-2021

### Agenda

- Welcome/Introductions
  - Note-taker
- Role of the Technical Steering Committee
  - Responsible for the technical governance of the project (see technical charter)
- Nominate & Elect a Chairperson/Secretary
  - The TSC appoints ...
- Approve/Review Legal Docs
  - Project Charter
- DCO - Provide an overview
  - <https://developercertificate.org/>
  - <https://docs.releng.linuxfoundation.org/en/latest/infra/github.html>
- Infrastructure updates
  - Walkthrough TSC Checklist
  - Codebase, Licenses, Code scan, Repo location
  - Code scanning
  - [GitHub: Contribution Guidelines](#)
  - [Copyright Notices](#)
- Communication
  - Blog, Newsletter, Tweets
    - Contingent on SOGNO trademark approval
- Governance
  - TAC Representative - For information purposes
- Meeting Cadence going forward
  - Monthly or Bi-Weekly cadence

### Minutes

- main responsibilities of TSC members
  - take part in meetings
  - responsive to issues, e.g. github, mailing lists
- recommendations on communication channels
  - [slack](#) for synchronous communication, mailing lists asynchronous
  - [mailing lists](#) for broader audience due to different time zones
  - formal decisions on mailing lists
- chair person
  - runs meetings in the future
  - contact to LFE
  - TAC participation
  - initial chair appointed: Markus Mirz
- secretary
  - note taking
  - rotating or one fixed person
  - decided for rotating secretary
- Legal docs
  - waiting for decision on trademark of SOGNO EU project
- DCO
  - collection of DCO sign-offs is in progress for several repos
- meeting cadence

- initial cadence is once per month
- tasks
  - tsc template to be copied into sogno org: <https://github.com/lf-energy/tsc-template>
  - decide on charter, terms of chair person etc.
  - list projects that can be scanned already