TAC Meeting

23 November 2021

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TAC Voting Members
New members in **bold**

Full Name	Account Name	Appointed By
Boris DOLLEY	RTE (Reseau de Transport dElectricite)	Vote of TSC Committee - OperatorFabric
Anne Tilloy	RTE (Reseau de Transport dElectricite)	Vote of TSC Committee - PowSyBl
Carmen Best	Recurve	Vote of TSC Committee - OpenEEmeter
Arjan Stam	Alliander	Membership Entitlement
Jonas van den Bogaard	Alliander	Vote of TSC Committee - GXF
Benoît Jeanson	RTE (Reseau de Transport dElectricite)	Membership Entitlement
Antonello Monti	RWTH Aachen University	Vote of TSC Committee - SOGNO

The Power of Together

LF Energy Hosted Project Leads
Changes in **bold**

Project	Project Lead(s)
PowSyBl	Anne Tilloy, RTE
OperatorFabric	Boris Dolley, RTE
OpenEEmeter	Carmen Best, Recurve
GXF	Jonas van den Bogaard, Alliander
SOGNO	Antonello Monti, RWTH Aachen University
EM2	*none*
CoMPAS	Frederic Fouseret, RTE
FledgePOWER	Akli Rahmoun, RTE
Hyphae	Kotaro Jinushi, Sony ESL
openLEADR	Lonneke Driessen & Stan Janssen, OpenADR
SEAPATH	Eloi Bail, Savoir-faire Linux
Grid Capacity Map	*none*
Shapeshifter	Jelle Wijnja, Alliander
OpenSTF	Frank Kreuwel, Alliander
EVerest	*none*
Green Energy Hub	**Martin F. Hansen, Energinet**
FlexMeasures	*none*

Agenda

Opening (25 Minutes)

- **Summary of last TAC meeting & Updates from the Board Meeting**
- **Working Group updates**
- **Security WG discussion**
- **Landscape updates**
- **TAC Sponsors for projects**

TAC Business (50 Minutes)

- SEAPATH annual review
- OpenLEADR annual review

Outreach updates (10 Minutes)

Closing and next meeting (5 Minutes)

Summary of last TAC meeting

- Meeting notes and deck at
  https://wiki.lfenergy.org/display/HOME/Technical+Advisory+Council#
  TechnicalAdvisoryCouncil-MeetingMinutes

Updates from the Board

TAC Sponsors for projects

As part of the benefit for LF Energy projects, the TAC has a sponsor for each project.

"Appointment of an existing TAC member by the TAC that will act as a sponsor of the project and provide recommendations regarding governance best practices."

ASK: Volunteer to be a TAC sponsor for a project

Project	Current Level	TAC Sponsor
CoMPAS	Incubation	
EVerest	Sandbox	
FlexMeasures	Incubation	
FledgePOWER	Incubation	Benoît Jeanson
Green Data Hub	Incubation	
Grid Capacity Map	Incubation	
GXF	Early Adoption	Jonas van den Bogaard
Hyphae	Incubation	Antonello Monti
OpenEEmeter	Incubation	Carmen Best
OpenLEADR	Incubation	
OpenSTEF	Incubation	Jonas van den Bogaard
OperatorFabric	Early Adoption	Boris Dolley
PowSyBl	Early Adoption	Anne Tilloy
SEAPATH	Incubation	Benoît Jeanson
Shapeshifter	Incubation	Jonas van den Bogaard
SOGNO	Early Adoption	Antonello Monti

Working Groups update

Based on feedback, we reduced down the active working groups to the list below.

ACTIONS:

- Ensure lead(s) identified and have groups operational
- Establish charter for each group
- Schedule annual reviews for each group in December/January

Name	Description	Lead
Full Architecture WG (FAWG)	Architecture standing committee to develop the overall architecture for LF Energy	Benoît Jeanson, RTE
Data Architecture WG (DAWG)	Working group on Data Architecture	
Security WG	Working Group on Security	Markus Mirz, RWTH Aachen University

Full Architecture WG (FAWG)

- THE REGULAR FAWG IS THE FOURTH MONDAY OF THE MONTH
- DATA ARCHITECTURE (DAWG) ARE ONLY SCHEDULED PER TOPIC (NO REGULAR OFFICE HOURS).
- Special FAWG January 20, 2022
  - Archimate modeling for reference architectures
  - Next step - An Archimate show and tell where you can learn to use the tool!
    - January 20, 2022
    - 7a PT, 10a ET, 4p CET

Security WG

- Not much resonance so far on the mailing list
    - Are we not reaching the right audience?
    - Is the topic not prioritized in member organisations?
    - Bad time to reach out due to end-of-year stress?

- Advertise the effort in FAWG?
- Identify one project that is already taking great care of security?

Landscape now with more project info!

We are using the LF Energy Landscape to showcase more project information:

- Mailing List/Slack Channel
- LFX Insights
- SBOM
- Wiki
- TSC Meeting Notes
- Calendar
- Contribution Guidelines

ACTION: Project leads please review your entry and ensure it is accurate; issue PR for any changes needed.

more...   total: ⚫ ★52

Crunchbase	crunchbase.com/organization/lf-energy		
LinkedIn	linkedin.com/company/lf-energy		
Twitter	@LFE_Foundation	Latest Tweet	this week
First Commit	5 years ago	Latest Commit	3 weeks ago
Contributors	35	Headcount	1-10
Headquarters	San Francisco, California		
Mailing List	https://lists.lfenergy.org/g/sogno-discussion		
Slack Channel	#sogno		
LFX Insights	https://insights.lfx.linuxfoundation.org/projects/lfenergy%2Fsogno		
Wiki Page	https://wiki.lfenergy.org/display/HOME/SOGNO		
SBOM	https://github.com/lfscanning/spdx-lfenergy/tree/main/sogno		
TSC Meeting Notes	https://github.com/sogno-platform/tsc/tree/master/tsc/meetings		
Calendar	https://lists.lfenergy.org/g/sogno-tsc/calendar		
Contribution Guidelines	https://github.com/sogno-platform/tsc/blob/master/CONTRIBUTING.md		

LF Energy Early Adoption   LF Project

Open Source Software   License Mozilla Public License

CII Best Practices 25%

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Scope of the project

Develop a "**reference design**" and "i**ndustrial grade**" open source real-time platform that can run **virtualized automation and protection applications** (for the power grid industry in the first place and potentially beyond). This platform is intended to **host multi-provider applications**

Our needs

High performance required
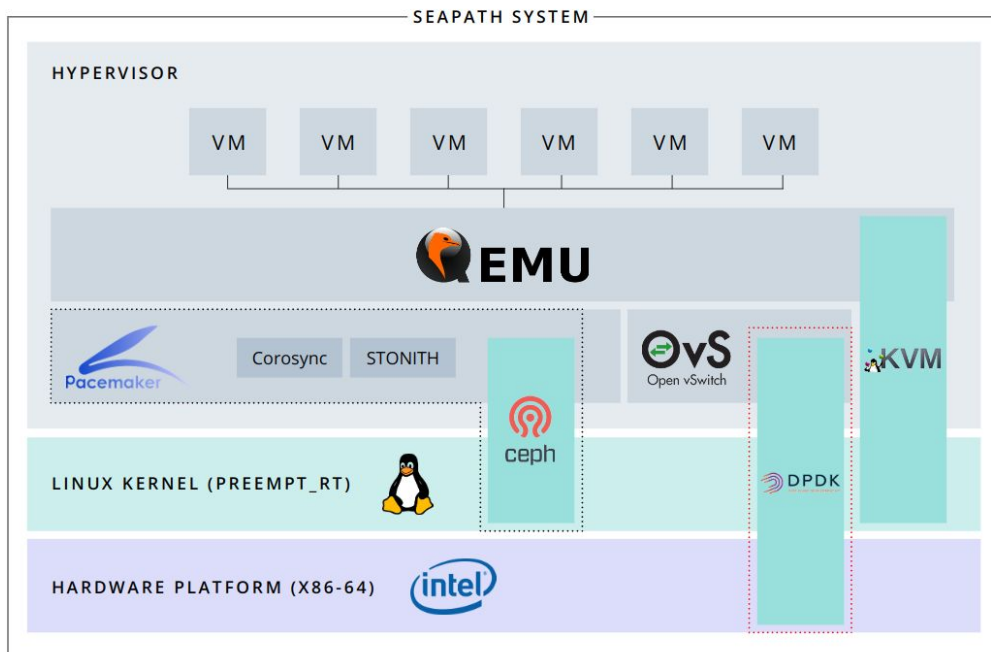
• Real-time

• Low latency

Adaptable

• Cybersecurity

• Customizable

• Hardware agnostic

• Updatable

Following the state of the art

• Integrate innovative Open-source components

Do not want to reinvent the wheel

Utilizing existing technology

SEAPATH SYSTEM

HYPERVISOR

VM VM VM VM VM VM

QEMU

Pacemaker Corosync STONITH ceph OvS Open vSwitch DPDK KVM

LINUX KERNEL (PREEMPT_RT)

HARDWARE PLATFORM (X86-64) intel

······ Only used in cluster mode

······ Optionnal for high performance networking

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yocto PROJECT

A Yocto layer to

- Configure the packages used (Linux Kernel)
- Configure each Open-source software (enabling/disabling features)
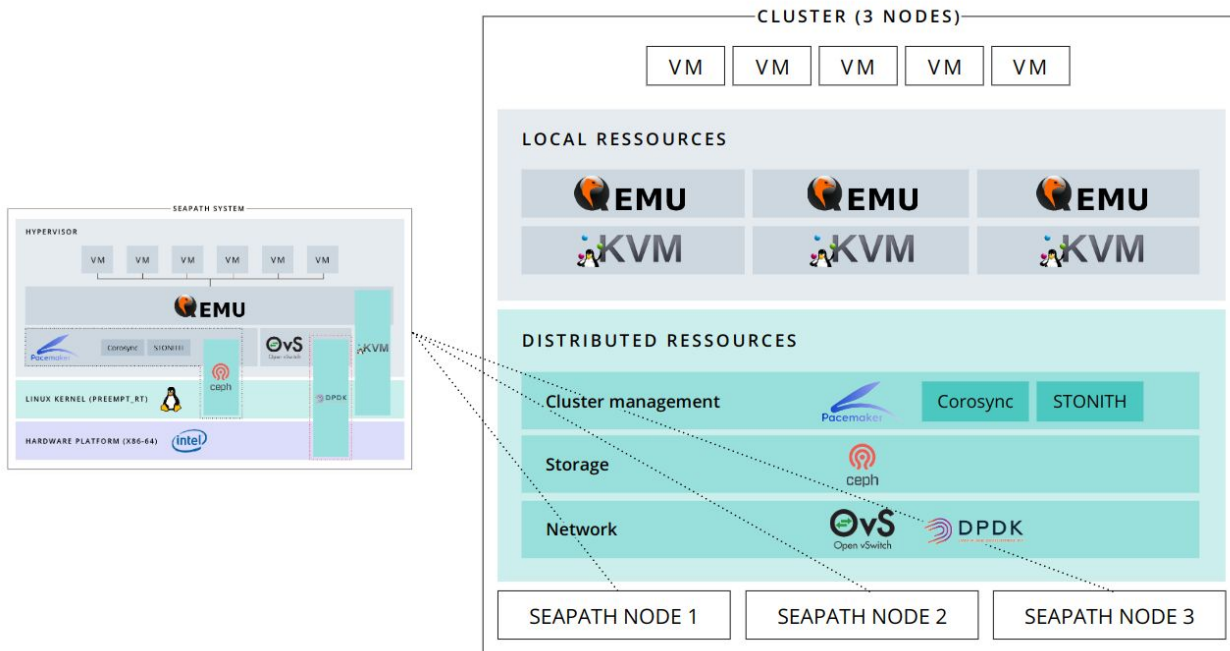- Install only relevant services / applications

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ANSIBLE

Deploy & configure applications with Ansible

- Custom Network configuration
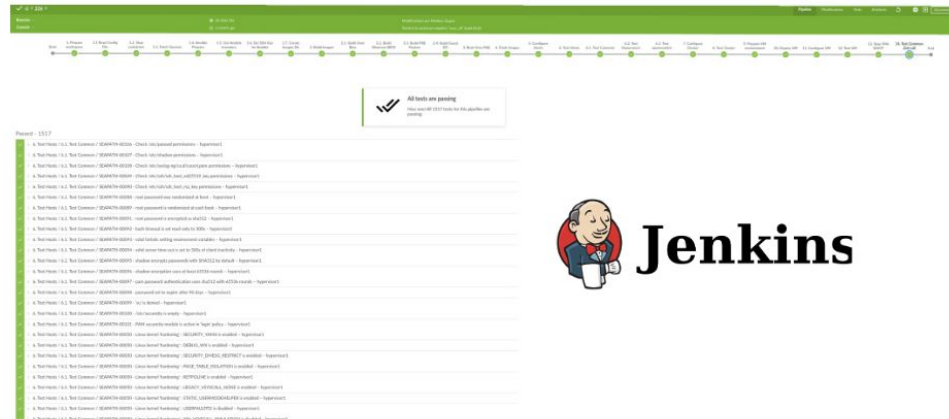- Custom virtual machine configuration

How we meet industrial requirements

2/3

- Continuous integration

- Daily build / test (about 1h)

- Monitor functional / Cybersecurity tests (1500+ tests)

- Have an open and documented technical governance, including:
  - A LICENSE file in every code repository, with the license chosen an OSI-approved license. [✔]
  - A README file welcoming new community members to the project and explaining why the project is useful and how to get started.[✔]
  - A CONTRIBUTING file explaining to other developers and your community of users how to contribute to the project. The file should explain what types of contributions are needed and how the process works.[✔]
  - A CODEOWNERS or COMMITTERS file to define individuals or teams that are responsible for code in a repository; document current project owners and current and emeritus committers. [✔]
  - A CODE_OF_CONDUCT file that sets the ground rules for participants' behavior associated and helps to facilitate a friendly, welcoming environment. [✔]
  - A RELEASE file that provides documentation on the release methodology, cadence, criteria, etc.[--]
  - A GOVERNANCE file that documents the project's technical governance.[✔]
  - A SUPPORT file to let users and developers know about ways to get help with your project.[✔]
- Complete and approve the Technical Charter.[✔]
- Have achieved and maintained a Core Infrastructure Initiative Best Practices Badge at the 'Passing' level [✔]
- Have had a successful license scan with any critical issues remedied.[✔]

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- An overview of the project's architecture and features defined.[✓]
- A project roadmap defined, which should address the following questions.[✓]
  - What use cases are possible now?
    i. Deploy a standalone secure version of SEAPATH
    ii. Deploy a cluster (High Availability infrastructure) secure version of SEAPATH
    iii. Deploy and manage virtual machine with Ansible on the SEAPATH Platform
    iv. Deploy a CI to buid, test the images and deploy them on x86_64 intel Hardware
  - What does the next year look like in terms of additional features and use cases covered?
    i. Build a SandBox that is easy to use (without any security features)
    ii. Enhance the project issue tracking system
    iii. Enhance the documentation to make it easier to go onboard
    iv. Work on real time performance configuration for critical real time application

- Community and contributor growth assessment
  - The current number of contributors and committers, and the number of different organizations contributing to the project
    - i. Contributor : GE (code contribution) , Advantech (advices on hardware) , Schneider (participation to TSC meeting)
    - ii. Committers : SFL/RTE/Alliander
  - Demonstrate a sustained flow of commits / merged contributions [✓]
  - A credible plan for developing a thriving user community, in particular expanding the number of committers and contributors?
    - i. First focus is to make the onboarding process easier by flattening the learning curve
  - Outline of the plan for the project to complete the requirements for Adopted Stage
    - i. Having a functional sandbox
    - ii. Having a process/tutorial that make it possible to deploy a 3 machines SEAPATH cluster/virtualcluster and put VM on top of it in less than 2 hours (including configuration)
- Receive the affirmative majority vote of the TAC. [ ]

SEAPATH annual review

OpenLEADR annual review
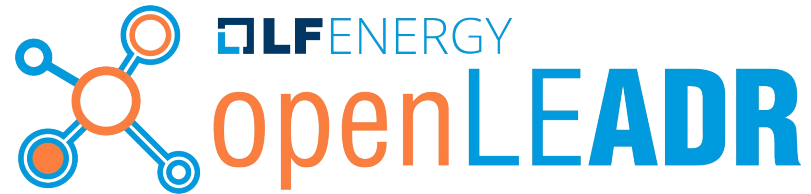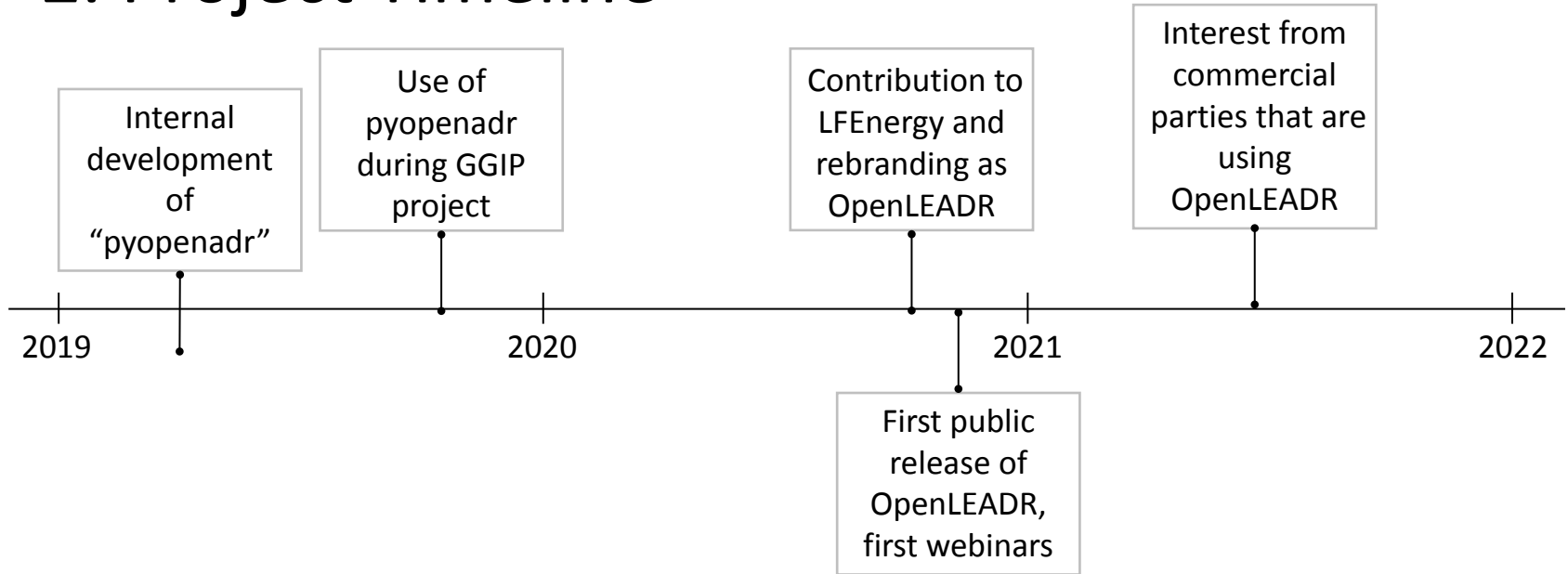
Project Review 2021

Overview

1. Purpose

2. Timeline

3. Adoption and community participation

4. Technical status and developments

5. Organizational developments

6. Outlook

1. Project Purpose: a developer's toolkit

- OpenLEADR wants to build an easy to use entry into developing OpenADR applications (clients and servers)

- We build a Python module that other developers can easily integrate with their existing software systems to start communicating OpenADR to other entities

- We try to make it as easy as possible to build clients and servers that are compliant with the OpenADR specification, but we don't build an out-of-the-box solution that tries to cater to everyone's applications.

2. Project Timeline

Internal development of "pyopenadr"

Use of pyopenadr during GGIP project

Contribution to LFEnergy and rebranding as OpenLEADR

Interest from commercial parties that are using OpenLEADR

First public release of OpenLEADR, first webinars

2019   2020   2021   2022

3. Adoption and community participation

- 2000 installations per month from the Python Package Index

- 64 GitHub stars, 23 GitHub forks

- >100 questions, issues, contributions and integration reports via GitHub issues

- Many questions regarding OpenADR protocol itself, questions around TLS itself, and integrations with other protocols

4. Technical Status and Developments

- First half of 2021 saw 24 point-releases containing community suggestions, fixes, and feature additions

- Next planned developments are larger additions:
  - Support for XMPP transport mechanism
  - Support for HTTP "push" mode

- Time constraints on Stan (single maintainer) have slowed down development during second half of 2021

5. Organizational Developments

- TSC now consists of Stan Janssen, Paul Klapwijk, Lonneke Driessen (ElaadNL), Rolf Bienert (OpenADR Alliance), John Mertic (LFEnergy)

- Rish Ghatikar (EPRI) has left EPRI

- Main discussion of 2021 was around the fit of OpenLEADR within LFEnergy. 1:1 protocol implementation was a concern for LFEnergy, even though OpenADR Alliance was on board. The project charter was finally signed in the summer.

- TSC has not been attended by LFEnergy for a few months now

6. Outlook

- Development of other transport modes in OpenLEADR

- Cooperation with OpenADR Alliance to create "how-to" guides, that make it easier for people to get started using OpenADR in general, and OpenLEADR specifically

- Gauge interest from would-be maintainers to help with development and maintenance

Project Review Cycle

Project	Current Level	Initially Accepted	Last Review Date	Next Review Date
~~OpenEEmeter~~	~~Incubation~~	~~June 4, 2019~~		~~October 12, 2021~~
~~EM2~~	~~Early Adoption~~	~~June 4, 2019~~		~~October 12, 2021~~
~~GXF~~	~~Early Adoption~~	~~February 4, 2020~~		~~October 12, 2021~~
~~SEAPATH~~	~~Incubation~~	~~October 6, 2020~~		~~November 23, 2021~~
~~OpenLEADR~~	~~Incubation~~	~~September 15, 2020~~		~~November 23, 2021~~
Hyphae	**Incubation**	**December 8, 2020**		**December 14, 2021**
FledgePOWER	Incubation	February 11, 2021		February 15, 2022
SOGNO	Early Adoption	October 27, 2020	March 16, 2021	March 8, 2022
Shapeshifter	Incubation	April 6, 2021		March 29, 2022
Grid Capacity Map	Incubation	April 27, 2021		April 19, 2022
OperatorFabric	Early Adoption	April 30, 2019	July 20, 2021	July 12, 2022
CoMPAS	Incubation	May 5, 2020	June 29, 2021	July 12, 2022
PowSyBl	Early Adoption	April 30, 2019	August 31, 2021	August 23, 2022
OpenSTEF	Incubation	September 21, 2021		September 13, 2022
EVerest	Sandbox	October 12, 2021		November 15, 2022
Green Data Hub	Incubation	October 12, 2021		October 25, 2022
FlexMeasures	Incubation	November 2, 2021		November 15, 2022

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Outreach Updates

- LF Energy Webinar Series
- TFiR videos
- Recent press articles
- Upcoming events

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Next TAC Meeting

The next meeting of the LF Energy TAC is scheduled for 14 December 2021 at 8:00 am US Pacific Time/11:00 am US Eastern Time/5:00 pm Central European Time.

Agenda will include:

- Recap of last TAC meeting/Governing Board updates
- Hyphae annual review

DISCUSSION: January 4th TAC meeting - cancel due to holidays?

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Thank you!