LF ENERGY

TAC Meeting

19 April 2022

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Agenda

Opening (25 Minutes)

- **Landscape updates**
- **TAC Sponsors for projects**
- **Summary of last TAC meeting & Updates from the Board Meeting**

TAC Business (45 Minutes)

- Shapeshifter Annual Review

Outreach Updates (15 Minutes)

Closing and Next Meeting (5 Minutes)

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
Art Pope	Google	Membership Entitlement

LF Energy Hosted Project and Working Group 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
CoMPAS	Frederic Fouseret, RTE & Sander Jansen, Alliander (TAC Representative)
FledgePOWER	Akli Rahmoun, RTE
Hyphae	Asimenia Korompili, RWTH Aachen University
openLEADR	Lonneke Driessen & Stan Janssen, OpenADR
SEAPATH	Eloi Bail, Savoir-faire Linux
Grid Capacity Map	Per Lysemose Hansen, Energinet
Shapeshifter	Jelle Wijnja, Alliander
OpenSTEF	Frank Kreuwel, Alliander
EVerest	Marco Möller, PIONIX
OpenGEH	Martin F. Hansen, Energinet
FlexMeasures	Nicolas Höning, Seita Energy Flexibility B.V.
OCPP Cloud Connector	**Rebecca Wolkoff, Chargenet**
Full Architecture WG (FAWG)	Benoît Jeanson, RTE
Carbon Data Specification Consortium (CDSC)	TBD

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%

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	
Carbon Data Specification Consortium	Standards	
EVerest	Incubation	
FledgePOWER	Incubation	Benoît Jeanson
FlexMeasures	Incubation	
Full Architecture Working Group (FAWG)	Working Group	
Grid Capacity Map	Incubation	
GXF	Early Adoption	Jonas van den Bogaard
Hyphae	Incubation	Antonello Monti
OpenEEmeter	Incubation	Carmen Best
OpenGEH	Incubation	
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

LF ENERGY

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

Agenda

<u>Opening (25 Minutes)</u>

- Landscape updates
- TAC Sponsors for projects
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<u>TAC Business (45 Minutes)</u>

- **Shapeshifter Annual Review**
- **LFX Security Presentation**

<u>Outreach Updates (15 Minutes)</u>

<u>Closing and Next Meeting (5 Minutes)</u>

Shapeshifter Annual Review

The Power of Together

LFE TAC Annual Review Shapeshifter

19-4-2022

Content

- Introduction

- Use cases & Community Building

- Release Shapeshifter 3.0 (1-5-2022)

- Committers Growth

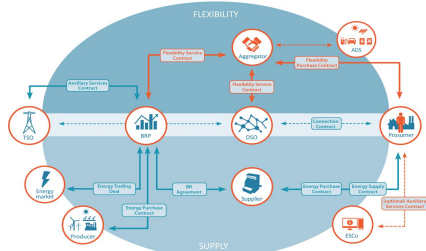- LFE Incubation Stage Requirements

Introduction

Shapeshifter is a subset of the USEF model, developed in collaboration with DSOs and aggregators

USEF was founded in 2014 with the common goal of developing a smart energy system that benefits all participants

USEF has developed a framework, role model and reference implementation for trading and financial settlement of flexibility

USEF has been put into practice by Dutch DSOs. And in other European countries USEF has also been used and/or implemented as a reference

Update on framework in January 2020 based on learning experiences from implementations and in collaboration with DSOs and aggregators.
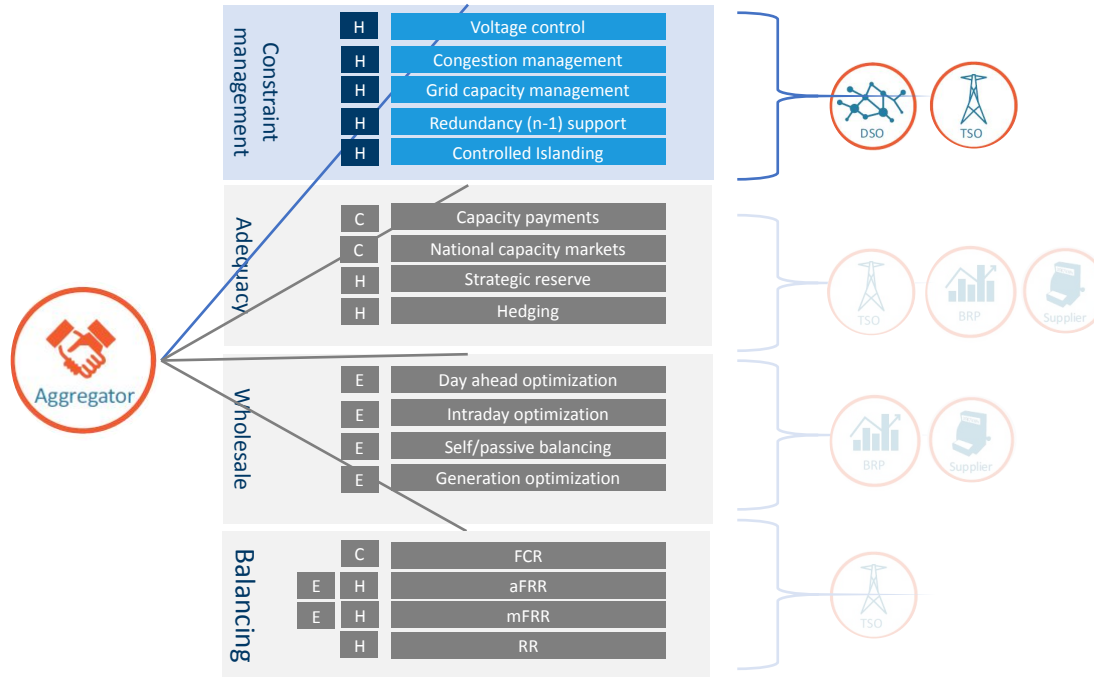
USEF Flex Trading Protocol (UFTP) is a subset of USEF and specifically aimed at flexible trading between the Aggregator and DSO or TSO.

Introduction

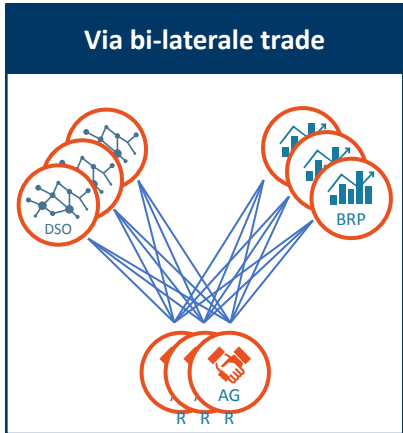Shapeshifters main focus: the constraint management value chain

Introduction

Shapeshifter supports bi-lateral trade and trading via a platform
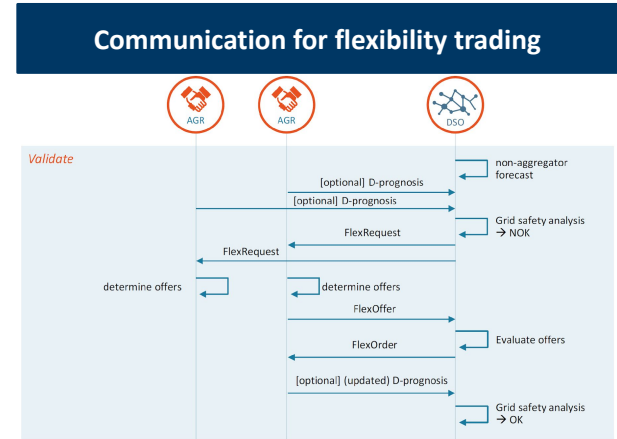

Via bi-laterale trade

Current Dutch implementations make use of bilateral trade, without the intervention of a platform.

If relevant, the Aggregator should make agreements with the program responsible party (BRP)

Trade via platform

Dutch example: for new congestion areas, trading platform GOPACS will be used in combination with Shapeshifter to support long-term capacity limit contracts

GOPACS takes care of the TSO/DSO coordination and coordination within the portfolios of the BRPs

Communication for flexibility trading
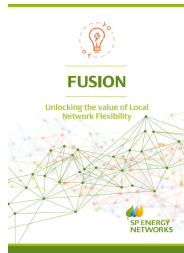
Use cases & Community Building

Currently implemented in FUSION, integration with GOPACS in 2022, community building via the Flexibility Suite

FUSION – implementation Shapeshifter

Shapeshifter is implemented in UK for congestion management in a demonstration project.

This resulted, among other things, in the change request to support verification of delivery based on metering data from sub-meters.

This led to a change request, was approved at monthly TSC and submitted for peer review via a pull request via Github.

FUSION
Unlocking the value of Local Network Flexibility
SP ENERGY NETWORKS

GOPACS – implementation Shapeshifter

Change required to existing Shapeshifter protocol to support capacity limit contracts

Shapeshifter currently supports long term contracts based on obligation to bid and not based on capacity limit.

Change required in Shapeshifter. This will be developed by GOPACS DevOps team and submitted as a pull request.

GOPACS
het platform om congestie in het net te verminderen.

Linux Foundation Energy

Community building with the Flexibility Suite with LFE projects that make an additional contribution to flex

To increase the community, a communication campaign is started with, among other things, a press release, video and webinar

LF ENERGY FlexMeasures

LF ENERGY SHAPESHIFTER

FLEXMETER
Revenue-Grade Demand Flexibility

This additional functionality is also made available open source

Release Shapeshifter 3.0 (1-5-2022)

Change request are brought in via pull request, TSC is reviewing

- 🟡 Solve discrepancies in library, XSD and specifications + change "UFTP" to "Shapeshifter"
- 🟢 Solve discrepancies in OrderReference
- 🟢 Base64 issue
- 🟡 Include versioning
- 🔴 ~~Change Request Capacity limit contracts~~
- 🟡 Change Request Sub Metering
- 🟡 Change Request ServiceType

🟢 Finished
🟡 Not finished yet, but will be in
🔴 time
⚫ Not finished, will cause delay
Unknown

Committers Growth

Last year we welcomed two new committers to the project

Shapeshifter Committers 2021

Name	Company Name	Company Type
Jelle Wijnja	Alliander	DSO
Robben Riksen	GOPACS	DSO
Hugo van der Zwaag	Zwaag	Freelance
Robert Steegh	Enexis	DSO
Jorian Gauw	Stedin	DSO

Shapeshifter Committers 2022

Name	Company Name	Company Type
Jelle Wijnja	Alliander	DSO
Robben Riksen	GOPACS	DSO
Hugo van der Zwaag	Zwaag	Freelance
Robert Steegh	Enexis	DSO
Jorian Gauw	Stedin	DSO
Daniel Wich	Enexis	DSO
Edward Ross	Gridimp	Smart Energy

LFE Incubation Stage Requirements (1/2)

- Have an open and documented technical governance, including:
  - A <u>LICENSE</u> file in every code repository, with the license chosen an <u>OSI-approved license</u>.
  - A <u>README</u> file welcoming new community members to the project and explaining why the project is useful and how to get started.
  - A <u>CONTRIBUTING</u> 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 <u>COMMITTERS</u> file to define individuals or teams that are responsible for code in a repository; document current project owners and current and emeritus committers.
  - A <u>CODE_OF_CONDUCT</u> file that sets the ground rules for participants' behavior associated and helps to facilitate a friendly, welcoming environment. By default projects should leverage the <u>Linux Foundation Code of Conduct</u> unless an alternate Code of Conduct is approved prior.
  - A <u>RELEASE</u> file that provides documentation on the release methodology, cadence, criteria, etc.
  - A <u>GOVERNANCE</u> file that documents the project's technical governance.
  - A <u>SUPPORT</u> file to let users and developers know about ways to get help with your project.
- 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 <u>OpenSSF Best Practices Badge</u> at the <u>'Passing' level</u>.

LFE Incubation Stage Requirements (2/2)

- Have had a successful license scan with any critical issues remedied.
- Have a defined project mission and scope
- 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?
  - What does the next year look like in terms of additional features and use cases covered?
- Community and contributor growth assessment
  - The current number of contributors and committers, and the number of different organizations contributing to the project.
  - 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?
  - Outline of the plan for the project to complete the requirements for Adopted Stage
- Receive the affirmative majority vote of the TAC.

Project Review Cycle

Project	Current Level	Initially Accepted	Last Review Date	Next Review Date
~~Shapeshifter~~	~~Incubation~~	~~April 6, 2021~~		~~April 19, 2022~~
Grid Capacity Map	**Incubation**	**April 27, 2021**		**May 10, 2022**
OperatorFabric	Early Adoption	April 30, 2019	July 20, 2021	June 21, 2022?
CoMPAS	Incubation	May 5, 2020	June 29, 2021	July 12, 2022
PowSyBl	Early Adoption	April 30, 2019	August 31, 2021	August 23, 2022
OpenEEmeter	Incubation	June 4, 2019	October 12, 2021	September 13, 2022
OpenSTEF	Incubation	September 21, 2021		September 13, 2022
GXF	Early Adoption	February 4, 2020	October 12, 2021	October 4, 2022
OpenGEH	Incubation	October 12, 2021		October 4, 2022
OpenLEADR	Incubation	September 15, 2020	November 23, 2021	October 25, 2022
SEAPATH	Incubation	October 6, 2020	November 23, 2021	October 25, 2022
EVerest	Incubation	October 12, 2021		November 15, 2022
FlexMeasures	Incubation	November 2, 2021		November 15, 2022
Hyphae	Incubation	December 8, 2020	December 14, 2021	December 6, 2022
Full Architecture Working Group (FAWG)	Working Group		January 25, 2022	January 17, 2023
Data Architecture Working Group (DAWG)	Working Group		January 25, 2022	January 17, 2023
FledgePOWER	Incubation	February 11, 2021	February 15, 2022	February 28, 2023
SOGNO	Early Adoption	October 27, 2020	March 8, 2022	March 21, 2023

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The Power of Together

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Outreach Updates

- TODO Group Hosting Open Source Program Office BoF and Happy Hour at KubeCon Valencia: Tuesday, May 17 16:00 - 18:00
  - Advanced registration required: here.
- TFiR videos
  - https://www.tfir.io/?s=lf+energy
- Recent press articles
  - https://www.lfenergy.org/news/media-coverage/
- We want your project news!
  - Doesn't need to be anything huge!
  - Examples of news:
    - New releases (example https://github.com/powsybl/pypowsybl/releases)
    - New features added
    - New maintainers/organizations involved
    - Upcoming plans

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Next TAC Meeting

The next meeting of the LF Energy TAC is scheduled for 10 May 2022 at 8:00 am US Pacific Time/11:00 am US Eastern Time/5:00 pm Central European Time.

NOTE: New meeting invite for series titled 'LF Energy TAC meeting (2022)' from 'LF Energy (LFE) - Meetings <meetings@lfx.linuxfoundation.org>'. Register for meeting at https://zoom-lfx.platform.linuxfoundation.org/meeting/98588947265 Please remove all other meeting invites.

Agenda will include:

- Recap of last TAC meeting/Governing Board updates
- Grid Capacity Map Annual Review
- LFX Security Presentation

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