

FINOS

Fintech
Open Source
Foundation

2022 Q4 - All Community Call

FINOS Team

Virtually held on October 26th 2022 at 3pm BST / 10am EST

<https://www.finos.org/hosted-events/2022-10-26-finos-all-community-call-q4-2022>

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Today's Agenda

11:05

State of the Foundation (20 mins)

- **State of the Foundation** - Gabriele Columbro (Executive Director)
- **State of the Community** - James McLeod (Director of Community)

11:30

FINOS Community and FINOS Team Updates (30 mins)

- Get engaged and help scale the FINOS community
- FINOS Project and SIG Updates
 - KDB+
 - Morphir and LCR
 - Tech Gateway, London
 - FINOS Technical Steering Committee
 - Compliance Horizon Scanning
 - FINOS Security Update
- Save the Dates & Get Involved with FINOS

11:55

Q/A - Add your questions in the Q/A panel (5 mins)

12:00

FINOS All Community Call - Close

Calls to Action

Browse the [FINOS Landscape](#) and join a [FINOS Project or SIG](#).

Star and join the [FINOS Community Repo](#).

Write to the [Community Mailing List](#) or join [FINOS Office Hours](#) if you don't know where to start!

Sign up for the [FINOS Newsletter](#) if you haven't already.

Questions and Answers

Grizz, before we start ...

FINOS Community Swag Draw
Live on the FINOS All Community Call
Registered People Only

**Remember to post your questions in the Zoom
Q&A panel or email help@finos.org**

State of the Foundation

Gabriele Columbro,
Executive Director, FINOS

FINOS
By the #s

63
MEMBERS

47
OSS
PROJECTS/
SIGs

PLATINUM

 **accenture**

BMO 

citi

GitHub

Goldman Sachs

J.P.Morgan

Morgan Stanley



**WELLINGTON
MANAGEMENT**

GOLD

 **SOCIETE GENERALE** 



Fannie Mae

Google

HSBC 

intel



IHS Markit



NatWest

NOMURA



redhat

REFINITIV 



SYMPHONY



SUSE



Tradeweb



MEND



SILVER



controlplane



Point 72



BNY MELLON



Adaptive

CANONICAL



databricks



CloudBees

Codethink



Cosaic



GitLab

<epam>



Glue42



genesis
Code Less, Do More™

Luxoft
A DXC Technology Company



MIRANTIS

REGnosys
THE REGULATORY
TECHNOLOGY PLATFORM

SCOTT LOGIC
ALTOGETHER SMARTER



Synechron
Digital. Business Consulting. Technology.

ASSOCIATE



air
Alliance for
Innovative
Regulation



AlmaLinux

CRTA | ACTR
CANADIAN REGULATORY TECHNOLOGY ASSOCIATION
ASSOCIATION CANADIENNE DE TECHNOLOGIE REGLEMENTAIRE



EDM Council



**InterWork
Alliance**



ISDA
Safe,
Efficient
Markets

ISLA

INTERNATIONAL
SECURITIES LENDING
ASSOCIATION

mojaloop
foundation

Open:UK

Mifos

ESOP

**THE DIGITAL DOLLAR
PROJECT**

RegTech

FINOS 2022 Q3 Highlights

MEMBERS

14 new members joined FINOS in 2022

PLATINUM

WELLINGTON
MANAGEMENT

GOLD



SILVER



ASSOCIATE

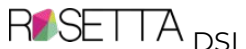


PROJECTS

We continue to see an organic influx of proposed / contributed projects:



ISDA, ICMA and ISLA Appoint FINOS for CDM (Common Domain Model) Repository



Vuu: The Realtime View Server



N/A

FINOS "Pilot" Technical Steering Committee now operates in the open on a public backlog. See detailed update later in the deck.

COMMUNITY & TEAM

Contributor Strength at **30.2% YoY**

OSFF London brought together 318 attendees in person (see [final report](#)), a **217% YoY attendees** growth.

FINOS Tech Gateway London DEI event had 330+ registrations, with participation of **Goldman Sachs** on **Legend, GitHub, Red Hat, EPAM, Google** and **FINOS**

FINOS runs **Morgan Stanley, Mend** and **The Linux Foundation** [open source supply chain security](#) and [OpenSSF webinar](#).

Jane Gavronsky and **Julia Ritter** represent FINOS at ING hackathon in NYC.

Making **inroads in the fintech community** presenting at [fintech devcon](#) and attending [Boston Fintech Week](#)

Let's start with the big one: we won the CDM RFP!

waterstechnology.com/data-management/7949501/finos-will-host-common-domain-model-for-isda-isla-and-icma?utm_medium=email&_hsimi=22226486...

DATA MANAGEMENT

Finos will host common domain model for Isda, Isla and Icma

The non-profit will provide a neutral, open-source repository to help the trade associations govern and maintain the CDM.

Josephine Gallagher
Rebecca Natale

09 Aug 2022



The Fintech Open Source Foundation (Finos) has been selected to provide an open-source repository for the common domain model (CDM), a single digital representation of trade products, events, and actions across a trade lifecycle.

"Following a request for proposal earlier this year, the International Swaps and Derivatives Association (Isda), the International Capital Market Association (Icma), and the International Securities Lending Association (Isla) have been

FINADIUM
Securities Finance Monitor

Research Securities Finance Monitor Consulting Events and Podcasts About Data

WT: Finos will host common domain model for industry associations

August 11, 2022 Finadium Editorial Team



The Fintech Open Source Foundation (FINOS) has been selected to provide an open-source repository for the common domain model (CDM), a single digital representation of trade products, events, and actions across a trade lifecycle.



Fintech Open-Source Foundation (FINOS) Chosen to Support Community Around Common Domain Model from ISLA, ISDA, ICMA

ISDA Safe, Efficient Markets

Books Committees Events Membership Opinions Protocols
Infrastructure Legal Margin News Public Policy Research Risk & Capital

Search

News > Press Releases > [ISDA, ICMA and ISLA Appoint FINOS for CDM Repository](#)

Press Releases

ISDA, ICMA and ISLA Appoint FINOS for CDM Repository

Tags: Common Domain Model, Digitization



September 8, 2022

ISDA, the International Capital Market Association (ICMA) and the International Securities Lending Association (ISLA) have announced the appointment of FINOS to provide a repository, with a view to fostering the growth of an open-source community for the Common Domain Model (CDM).

FINO

2022 Q3: PR Report

**FINTECH
FUTURES** NORTH
AMERICAN
EDITION

Banking Tech Awards USA 2022 Winner: FINOS – Leadership

FinTech

What the FinTech? | S.3 Episode 14 | How team work makes the dream work

5th October 2022



In this episode of the *What the Fintech?* podcast, Gabriele Columbro, founder and executive director of **FINOS**, the Fintech Open Source Foundation, joins us to discuss how open source approaches can revolutionise financial services.

THE FINTECH TIMES

Newly-Formed Linux Foundation Europe Closes in on the Challenges of Open Source

waterstechnology

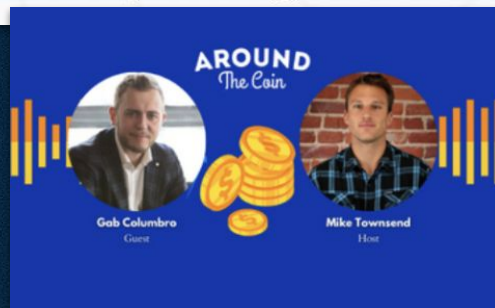
FDC3 updates interop standard with 2.0 rollout as adoption grows



7 Layers: FINOS Touts Fintech's Open Source Future

7 Layers (25:20) | Dan Meyer | July 6, 2022

"This is an industry that historically has been much less interoperable than its highly interconnected nature would require," FINOS Executive Director Gabriele Columbro said.



FDC3 Agent Certification Program

Status Update

Accomplishments

- ✓ 1.2 Conformance tests designed
- ✓ FDC3 1.2 Conformance Test Suite written by Scott Logic
- ✓ Tested against Finsemble
- ✓ Demonstrated at the FDC3 Standards Working Group

Next Activities

- Tidy-up of Test Suite documentation, usability
- FDC3 2.0 Compatibility of the conformance tests
- FDC3 Maintainers to sign-off on conformance tests
- Finish up Legal and Website Work around Badges
- Certifying the desktop agents including the OSS

FDC3 Agent Certification program

What is it: FINOS hosted formal badging program to certify product / platform implementations against the FDC3 Desktop Agent Standard.

Target audience: Fintech vendors hosting an app ecosystem, financial institutions (e.g. single dealer portals), any platform “running” FDC3 apps

Status: Approved by the Governing Board, free for 1 year since launch (at OSFF).

Call to action: Start [self-testing](#) (tests are OSS) and reach out to rob.moffat@finos.org to get certified around OSFF.

Open Source security HAS to remain top of mind.



Cyber Resilience Act

The proposal for a regulation on cybersecurity requirements for products with digital elements, known as the Cyber Resilience Act, bolsters cybersecurity rules to ensure more secure hardware and software products.



Hardware and software products are increasingly subject to successful cyberattacks, leading to an estimated global annual cost of cybercrime of €5.5 trillion by 2021.

Exclusive: Senate panel leaders push legislation to tackle issues raised by the sweeping log4j vulnerability



(R-Ohio), left, and Gary Peters (D-Mich.) confer during a Senate Committee on Homeland Security and Governmental Affairs hearing last year. (Drew Angerer/Getty Images)

Linux Foundation Europe
was launched in Sep '22

Collaborate Locally, Innovate Globally



ERICSSON

Platinum


accenture



**LONDON
STOCK
EXCHANGE**

Gold



Silver



Associate



BANK OF ENGLAND



OpenForum
Europe





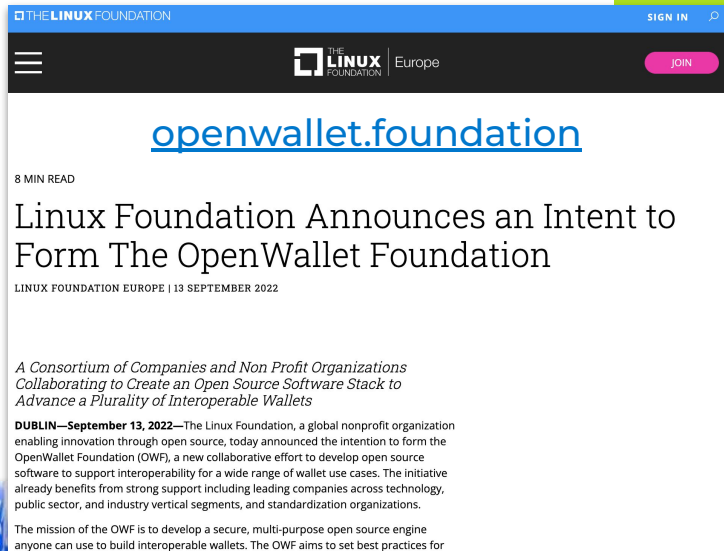
Unique cross-border landscape
Europe is the only region a supranational sovereign entity drives shared goals as well as rules of the road for European wide collaboration.

The intersection of social and OSS
EU and European nations are leader in promoting open source and vision of digital commons to achieve ambitious Europe-wide policy goals.

Local priorities, global challenges
The European ecosystem of OSS adopters and contributors, and their priorities, is unique. But many OSS challenges are global, e.g. sustainability.

Why Linux Foundation Europe?



THE **LINUX** FOUNDATION

SIGN IN

THE **LINUX** FOUNDATION Europe

JOIN

openwallet.foundation

8 MIN READ

Linux Foundation Announces an Intent to Form The OpenWallet Foundation

LINUX FOUNDATION EUROPE | 13 SEPTEMBER 2022

A Consortium of Companies and Non Profit Organizations Collaborating to Create an Open Source Software Stack to Advance a Plurality of Interoperable Wallets

DUBLIN—September 13, 2022—The Linux Foundation, a global nonprofit organization enabling innovation through open source, today announced the intention to form the OpenWallet Foundation (OWF), a new collaborative effort to develop open source software to support interoperability for a wide range of wallet use cases. The initiative already benefits from strong support including leading companies across technology, public sector, and industry vertical segments, and standardization organizations.

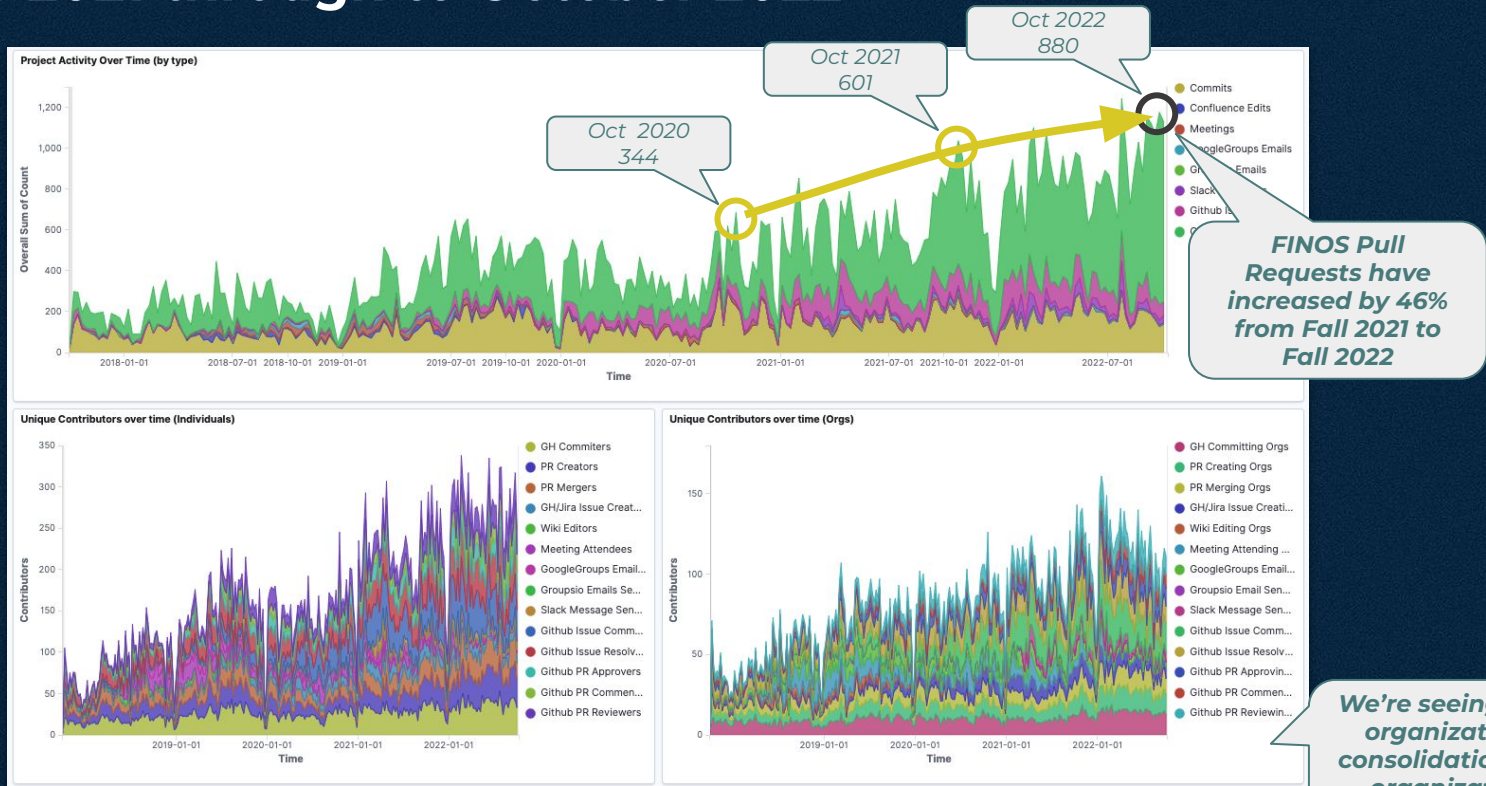
The mission of the OWF is to develop a secure, multi-purpose open source engine anyone can use to build interoperable wallets. The OWF aims to set best practices for

State of the Community

James McLeod

Director of Community, FINOS

FINOS Autumn / Fall pull requests increase by 46% from October 2021 through to October 2022



We're seeing some organizational consolidation from organizations serious about OSS

Keep an eye on our [COMMUNITY DASHBOARD](#) now on [LFX](#) (and with [trends](#))

Recognising 22Q4 Community Achievements

- Successful [Tech Gateway Event](#) by FINOS, Zngly and FINOS Members
- [CFI](#), [Electron FDC3](#) and [Morphir](#) close to achieving OpenSSF badge
- [FINOS DevOps SIG](#) kicks off Backstage.io in banking discussion
- [Waltz](#) releases [v1.44](#) with attestation diagram & gridview support
- [TimeBase CE, KDB+ and Perspective](#) on FINOS Resource Centre
- Adrian Hammond from Red Hat promoted to CFI Maintainer **100**
- FINOS and Synechron Support ING Technology Hackathon, NYC
- NatWest joins [FINOS & Scott Logic meetup](#)
- FINOS at LF Open Source Summit, Dublin



Get engaged & help scale the FINOS Community

Stuff you should know, consider
engaging with and where your
participation is required

The FINOS Community Needs You!

- Does your bank have a Cloud Center of Excellence? Point them to [Compliant Financial Infrastructure](#) to start collaborating on CDMC and CIS complaint Infrastructure as Code.
- Does your bank automate and run using DevOps or SRE? The [FINOS DevOps SIG](#) invites your DevOps Center of Excellence to collaborate on common tools, pipelines and practices.
- Join the [FINOS InnerSource SIG](#) if you're practicing or new to InnerSource. A recommended SIG for the banking OSPO.
- [Open Source Readiness](#) is recruiting a new SIG lead to join Peter Smulovics from Morgan Stanley. Apply on [OSR GitHub Issue 63](#).
- Contact james@finos.org for more information.

Special requests from the Currency Reference Data and Financial Objects

[Currency Reference Data](#) are expanding their community. Join the project to create a currency data standard using [Legend](#).

Get Involved with [Product Control Common Template](#)

- We need more banking participants to test sample data and help construct a common template data model using Legend Studio.

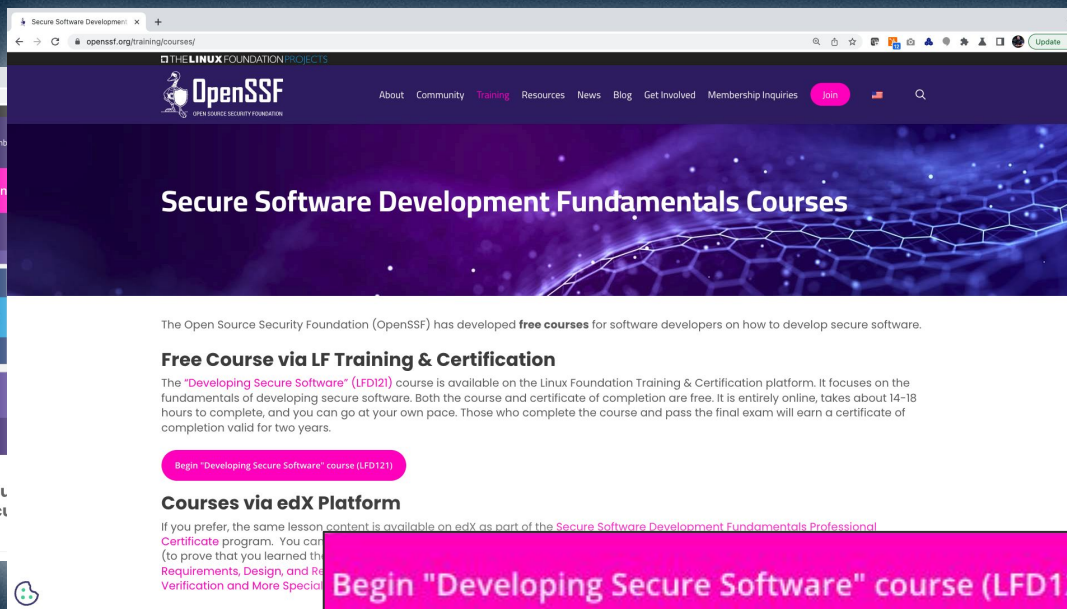
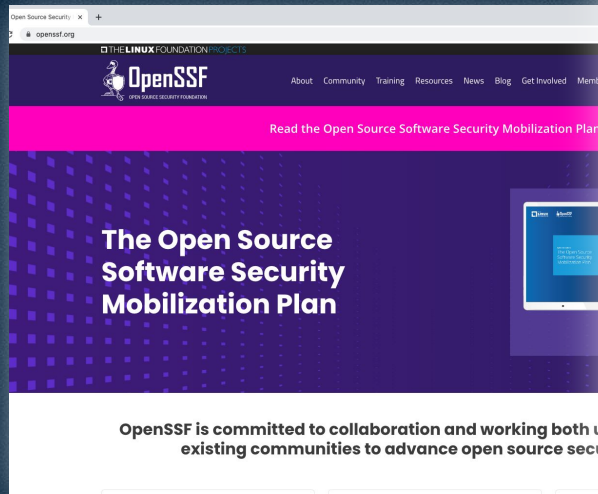
Get Involved with [Structured Products](#)

- We need participants who can review the Knock-In event function to accelerate the build and support the ISDA Common Domain Model.

Contact help@finos.org for more information.

The Open Source Security Foundation has developed FREE courses for software developers on how to develop secure software

openssf.org



Begin "Developing Secure Software" course (LFD121)

[FINOS Community - Get Your FREE "Developing Secure Software" Qualification!](#)

FINOS Project and SIG Updates

FINOS Team and the FINOS Community

KDB+ Project

<https://github.com/finos/kdb>

- KX representation on recent calls.
- New CEO looking at mutually-beneficial ways to engage.

<https://github.com/finos/qPython>

- Code scanning set up with help from Mao from FINOS:
 - <https://github.com/maoo/security-scanning#python>
 - Found a potential vulnerability in a GitHub action!

<https://github.com/jshinonome/vscode-q>

- Author of VS Code plugin for kdb users integrated FINOS Perspective.
 - [Industry Discussion : Timebase CE, KDB+ and Front End Development with Perspective](#)

Proposed FINOS Project : ML Ops

proposal

- Extracts from kdb+ often a starting point for Data Science projects in banks.
- A place to converge on requirements / best practices for ML pipelines.
- Potential synergies with DevOps, Open RegTech, and Compliant Financial Infrastructure.



Morphir and LCR

<https://github.com/finos/morphir>



2022 H1 Achievements

+92% contributor strength increase, FINOS Meetups and Tech Sprints, ~2M new lines of code, ~3310 Commits

Morphir 2022

- New Morphir project meeting every 2 weeks from [Thursday 3rd December 2022](#)
- Capital One collaboration on Morphir Scala - <https://github.com/finos/morphir-scala>
- REGnosys / Rosetta Tech Sprint.
- Collaboration with Databricks on Spark execution.
- **Contribution of the U.S. Liquidity Coverage Ratio (LCR) to FINOS Open Regtech.**

Morphir Opportunities

Great collaboration opportunity for anyone interested in programming languages and their direct application to solving business challenges. See [Morphir Open GitHub Issues](#).

FINOS Tech Gateway, London

A day program of DEI events organised by FINOS and FINOS DEI SIG members in London on September 22nd across NatWest, ING and Rich Mix.

Bringing together under-represented groups with City of London banks and FINOS tech opportunities.

Sponsored by **FINOS, NatWest, Red Hat, Goldman Sachs and Zngly.**

334 Registrations across **4 London Day Events**

46% Total Female Registrations

115 London DEI Registrations for **NatWest & ING**



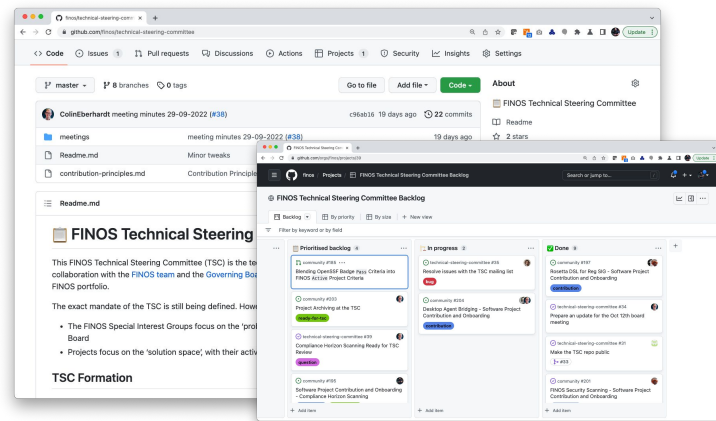
FINOS Technical Steering Committee



- Pilot project, adding technical decision making to support FINOS and GB
- Operating since May 2022
- 13 initial members

Progress

- Initial focus on contribution pipeline
- TSC repo now public <https://github.com/finos/technical-steering-committee>
- Published our [contribution principles](#)
- Applied to
 - Rosetta DSL
 - Vuu
 - Desktop Agent Bridge
- Future activities detailed in our project [board](#)



Compliance Horizon Scanning

Being reviewed by FINOS TSC - <https://github.com/finos/community/issues/195>
Contribution available at - <https://github.com/synechron-finlabs/horizon-scanning-core>



FINOS

Digital Compliance Journey



Regulatory Horizon Scanning

Determine relevant regulatory obligations and obtain necessary documentation



Business Impact Analysis

Categorize & mapping new and changing regulatory obligations to internal policies



Controls Implementation

Combine horizon scanning with change management workflow



Monitoring and Remediation

Allow lineage between requirements, policy, and procedures

What is Horizon Scanning?

Continuous subscriptions and data ingestion from prime identified regulatory agencies across operating geographies.

Enables extraction of multiple categories of data, such as notices, regulations, or news feeds, per user requirements.

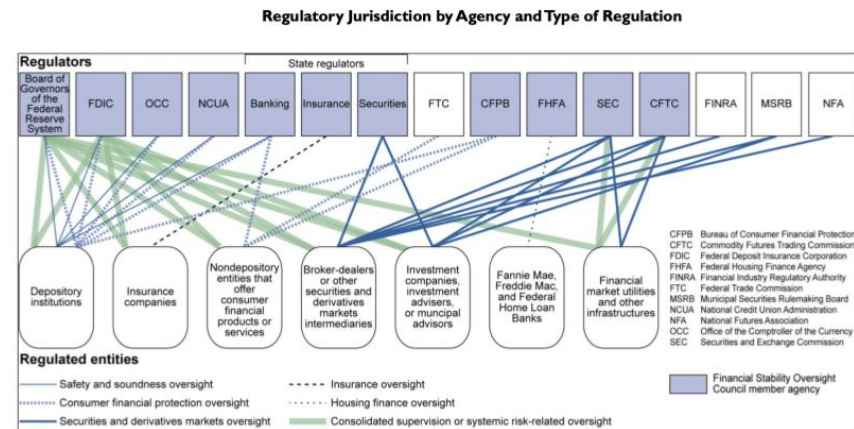
Supports RSS feeds as well as custom data scanning formats.

Automated scheduled jobs continuously feed the latest data with no human intervention.

Data Science and analytics tools enable the automatic ingestion, analysis, and categorization of new and changing rules and regulations.

We are planning to add more agencies and a variety of topics.

```
python main.py --agency finra --month 6 --output agency.json
```



Source: Government Accountability Office (GAO), *Financial Regulation*, GAO-16-175, February 2016

Agencies	Topics
ESMA	News, Consultation & Press Release
FINRA	Notices, Rules & News Feeds
PRA	News, Publications & Prudential Regulations

FINOS Security Update

FINOS Security Scanning

- An additional tool in the [FINOS Security tooling landscape](#)
- Enables
 - CVE scanning of dependencies, using [OWASP Dependency check](#) and similar tools
 - Static code analysis with [Semgrep](#)
- Easy to use and maintain - run it local with one command
- Proactive (daily, scheduled) and reactive (on code changes) scans
- Git-based - no need for external dashboards
- Consistent across 6 supported languages - more will be supported soon
- Monitored by FINOS Staff
- Blog post available on finos.org/blog/introducing-finoss-security-scanning
- Checkout github.com/finos/security-scanning

OpenSSF Best Practices program

- The Passing Badge is needed in order to apply for [Project Activation](#)
- Consumers can easily assess project's security, quality and compliance



FINOS
SECURITY
SCANNING



Save the Dates &
Get Involved with FINOS

Save The Dates / Promote internally

See full list of upcoming events at finos.org/events and [FINOS Community Calendar](#)

FINOS BANKS OSPO VIRTUAL ROUNDTABLE

FINOS MEMBER BANKS ONLY

27 October 2022
2PM BST / 9AM ET

Invite Requests to james.mcleod@finos.org



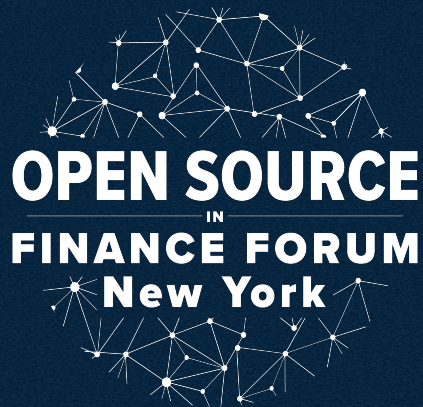
THE **LINUX** FOUNDATION
MEMBER SUMMIT

8-10 November 2022
Olympic Valley, Lake Tahoe (CA)
Gab will be keynoting

[Complimentary for all FINOS GB Members](#)

More Information

- [FINOS Events](https://finos.org/hosted-events) (finos.org/hosted-events)
- [FINOS Community Events](https://finos.org/featured-events) (finos.org/featured-events)
- [LF Events](https://events.linuxfoundation.org/) (events.linuxfoundation.org/)
- [LF Training](https://training.linuxfoundation.org/) (training.linuxfoundation.org/)



**WEDNESDAY
DECEMBER 7**

**THURSDAY
DECEMBER 8**

**6PM-8PM
Member Executive
Reception**

**9AM-7PM
Main Conference
(164 talks submitted)**

osff@finos.org
For Your Member Code

OSFF Projects Expo

We are planning a **Project Expo** at OSFF in December, to show how FINOS projects are being applied to solve real business problems.

This is a very important tool for demonstrating the “art of the possible” and encouraging greater adoption and contribution.

**Do you or your organization have a implementation that uses a
FINOS project?**

Can you share it with the community?

We are still adding participants to our showcase.

Contact info@finos.org if you have an idea for a demo at OSFF

Calls to action: Marketing

Overarching asks

- **Engage on a personal basis with FINOS social posts** - as industry leaders a simple click/tweet/reshare will massively amplify FINOS reach and visibility through instant validation
- **Keep your firm up to date** by driving your employees to [sign up for FINOS Updates](#) and to [member-only updates](#)
- **Propose internal personnel** (e.g. contributors, technology leadership, female / URM workforce) **for co-marketing and podcast** (e.g. blog post, speaking at FINOS events, meetups), topics: Access to Talent, Collaboration Breeds Creativity, Shape the Industry Future, Reduce Costs, Speed to Market, Create Opportunity, Future Ready Compliance

Open Source in Finance Forum New York - Attendance

- **What:** Get 10+ employees across your organization [registered for OSFF](#) **by the end of October**. Free for Platinum Members.
- **Why:** OSFF is a major value-driver for FINOS Members, to learn about open source trends, expand engagement in projects within your firm and meet other Community members to initiate collaborations
- **Who:** Technologists in your firm and in your network, legal and compliance / reg teams, from execs to individual contributors.

State of OSS in FSI 2022 (to be released in December)

- **What:** [Share this link to the 2021 State of OS in Finance Services Download](#) (amplify FINOS posts or create your own)
- **Why:** We will continue to analyze as much year over year responses to survey questions to track where and how open source is impacting financial services, as well as looking to identify opportunities and challenges we all face. 2021 was a baseline.
- **Who:** You. Every area from developer teams, to business decision makers, compliance, to business development should understand where we are as an ecosystem, in order to push forward and thrive with open source in FSI.

Q&A and AOB

Finally ...

- Watch the [FINOS Community Repository](#)
- Raise a [FINOS Community Recognition](#)
- Find a Project / SIG on the [FINOS Landscape](#)
- Join a [FINOS Project or SIG Meeting](#)