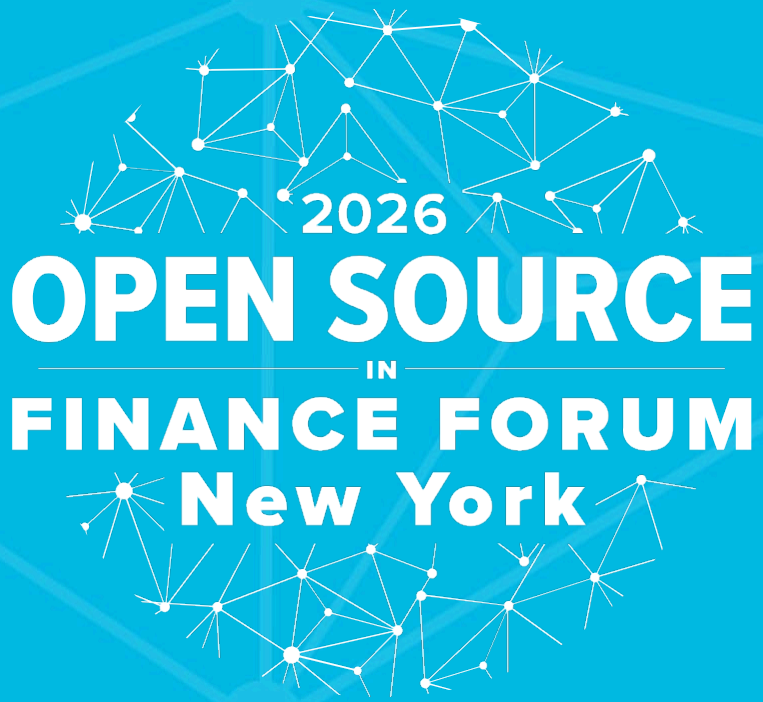


OSFF NEW YORK 2026

Regulation as Code

Reporting pipelines for financial services that teams can run and review

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Live application: https://rac.saisravancherukuri.com/
Git Repo: https://github.com/regulationascode

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Authors



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Regulation as Code overview

Overview
Share, test and review

Prototype
One synthetic timing path

Local ownership
Institution decisions stay local

Open ecosystem
References rather than integration

CI and AI
Checks with human review

Measured pilot
Measure before claiming value

A public rule becomes a repeatable local check

Regulation as Code shares generic rule references and tests while institutions retain their own data, mappings and authority.

Open	Reuse public sources and generic code.
Executable	Run a defined, human-selected rule branch.
Auditable	Expose assumptions and test results for review.

The prototype demonstrates one narrow reporting path. A measured institution-led pilot is the next step.

One rule change crosses teams

Illustrative situation: a public rule changes. What must the institution update?

Interpretation

Choose applicability and reporting branch.

Local mapping

Connect the rule to local fields and calendars.

Evidence

Connect tests and approvals to the release record.

Institution decisions under local control

Public rule to institution-owned release

01 PUBLIC SOURCE

Public source

Cite the regulator's rule and version.

Reuse shared code, generic references, and tests.

02 LOCAL DECISIONS

Local decision

Legal and compliance choose applicability and branch.

Reporting and data map local fields.

03 ENGINEERING + CI

Test and review

Engineering maintains repeatable CI checks.

A person reviews each code change before merging.

04 RELEASE OWNER

Release record

Authorize release.
Keep local evidence.

Data, policy, mappings and approvals stay local.

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The prototype shares rules, runs tests and records results

01 · OPEN

Share the generic work

Public sources, reusable rule references and tests; institution data and policy stay local.

02 · EXECUTABLE

Run a defined path

Turn a selected rule branch into repeatable checks against synthetic events.

03 · AUDITABLE

Show the evidence

Expose source, assumptions, test result and change review; do not overstate assurance.

The prototype shows a limited engine test. It does not make legal decisions or control production.

Related models and open-source projects

SHARED MODEL

FINOS CDM

(Common Domain Model)

Shared product, trade and lifecycle vocabulary.

EXECUTABLE INTERPRETATION

ISDA DRR

(Digital Regulatory Reporting)

Industry reporting logic expressed using CDM.

REFERENCE EXECUTION

FINOS Labs ORR

(open-source regulatory reporting)

A separate reporting reference using DRR and CDM sample data.

Reference projects only. No CDM or DRR runtime integration.

Sources: cdm.finos.org · isda.org/isda-digital-regulatory-reporting · github.com/finos-labs/opensource-reg-reporting

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Example reporting dates for a synthetic swap

SYNTHETIC INTEREST RATE SWAP **A swap is a contract in which parties agree to exchange specified cash flows.**

4 NOV 2026

Assumed event date. A person selects the reporting branch. The example uses weekdays only.

DEMO BRANCH

Facility executes the swap

Section 45.3(a)

5 NOV 2026

End of next business day

Dealer / major participant / clearer

Section 45.3(b)(1)

5 NOV 2026

End of next business day

Other reporting counterparty

Section 45.3(b)(2)

6 NOV 2026

End of second business day

Source: eCFR, Title 17, Section 45.3. Synthetic example; assumed branch; weekdays only.
Legal holidays, payload checks and swap data repository filing are outside this example.

One changed date changes the timing result

STATIC SYNTHETIC EXAMPLE

Selected branch: Section 45.3(b)(1)

Event: 4 Nov 2026 Deadline: end of 5 Nov 2026

ON-TIME SCENARIO

5 NOV 2026

Report date meets the deadline.
Expected timing result: PASS

LATE SCENARIO

6 NOV 2026

Report date exceeds the deadline.
Expected timing result: FAIL

Evidence preview: source, selected branch, dates and timing result.

Weekdays only. No holiday or payload checks. No filing or compliance determination.

Trace one rule change from source to release

IMPLEMENTED IN THIS PROTOTYPE

Runs today

Public rule source
Selected synthetic branch
Weekday timing and evidence

Conceptual mapping, portable tests and workflow definition included.

QUESTION FOR A PILOT

Next pilot question

Connect approved interpretation and local mapping to tests, review and release.

Release manifest and authenticated governance controls remain unbuilt.

Pilot question: can an institution trace one local change back to the public rule?

A bounded institution-led pilot

Start with one reporting rule

01 Scope	Select one rule and approve the branch.
02 Ownership	Name the local team and decision owners.
03 Tests	Agree fixtures, mappings and calendar checks.
04 Release	Define review, approval and the release record.

Private data, credentials and local policy remain inside the institution.

A GitHub Actions workflow is included for the fork

Continuous integration (CI): repeatable checks on proposed changes

SET UP

Install locked dependencies

VALIDATE + TEST

Check catalog and test cases

BUILD

Typecheck and build

Read only permission. No secrets. No deployment.

Workflow definition included. Live run not verified.

People make legal and release decisions

TODAY

No AI in the prototype

The current timing path is explicit code with deterministic synthetic tests.

FUTURE ASSISTANCE

Draft, cite, explain

Could draft summaries with source links, suggest tests or explain changes for review.

HUMAN AUTHORITY

Decide and release

People decide what the rule means and whether it applies. They approve local mappings and authorize release.

AI can suggest. People retain policy, legal judgment and release authority.

Establish a comparable baseline first

Staff time	Hours by role for one comparable change.
Review cycles	Rounds needed to reach an approved change.
Evidence time	Time to assemble the release record.
Rework	Corrections after review or testing.

Value hypotheses only. No measured savings have been demonstrated.

Illustrative staff capacity

HYPOTHETICAL ANNUAL CAPACITY

144

staff-hours per year
Assumed 10% reduction

THE EXAMPLE

12 changes × 120 staff-hours = 1,440 hours
At $180 per hour: $259,200 modeled labor value

144 hours priced at $180 per hour: $25,920

5% / 10% / 15% assumed reductions:
$12,960 / $25,920 / $38,880 of capacity value

YEAR-ONE NET VALUE MODEL

Capacity value + documented outside spend avoided minus one time setup and annual maintenance

Hypothetical inputs. Capacity becomes cash only when spending, overtime or hiring falls.

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One rule. A measured pilot.

Select one rule and name an institution led pilot team.

Agree a baseline and decide what better evidence would look like.

LIVE APPLICATION

rac.saisravancherukuri.com

SCAN FOR WEBSITE

BROWSE THE ORGANIZATION

github.com/regulationascode

SCAN FOR PROJECT REPOSITORY