SmartSuite

Framework / Risk Management / Other

Open FAIR – The Open Group Risk Taxonomy (O-RT) Version 3.1 and Risk Analysis (O-RA) Version 2.1 Standards

Open FAIR is The Open Group's pair of standards for quantitative information risk analysis: the Risk Taxonomy (O-RT) Version 3.1 and the Risk Analysis (O-RA) Version 2.1, published May 2025.

What it is

Open FAIR is The Open Group's standard for quantitative information risk analysis, built on Factor Analysis of Information Risk (FAIR). It consists of two companion technical standards: the Risk Taxonomy Standard (O-RT), which provides a standard definition and taxonomy for information security risk and information on how to use it, and the Risk Analysis Standard (O-RA), which describes the process necessary for risk analysts to perform effective information security risk analysis. Together they let practitioners express risk in consistent, economic terms and quantify risk within other security standards and frameworks.

The Open Group Security Forum publishes and maintains the standards. The current editions, O-RT Version 3.1 (document C251) and O-RA Version 2.1 (document C250), were published on May 22, 2025 and supersede Version 3.0.1 and Version 2.0.1 of November 2021. The standards are voluntary and vendor-neutral, and The Open Group runs the Open FAIR Certification for People program for risk analysts, supported by the O-RA Process Guide, the O-RT Example Guide, the Mathematics for Open FAIR Guide, a NIST Cybersecurity Framework cookbook, and a risk analysis tool.

At a glance

PUBLISHER The Open Group	TYPE Standard	VERSION O-RT Version 3.1 (C251) and O-RA Version 2.1 (C250)
EFFECTIVE May 22, 2025	DOMAIN Risk Management	FAMILY Other
REGION International	ADOPTION MODEL Voluntary	IMPLEMENTATION COMPLEXITY Medium

Source: https://www.opengroup.org/open-fair

Why it matters

- **A shared definition of risk** The taxonomy fixes what risk, loss event frequency, loss magnitude, threat, vulnerability, and related terms mean, so analyses from different teams can be compared.
- **Quantified, decision-ready results** Analyses produce ranges of probable loss in financial terms rather than ordinal scores, supporting decisions on controls, insurance, and risk appetite.
- **A repeatable process** O-RA defines the steps an analyst follows, from scoping and data collection to modeling and results, so analyses are consistent and reviewable.
- **Works with existing frameworks** Open FAIR is designed to quantify risk within other standards and frameworks, including the NIST Cybersecurity Framework, for which The Open Group publishes a cookbook.

How SmartSuite supports Open FAIR

Risk Scenario Library
Hold assets, threat communities, loss events, and the O-RT factor estimates for every scenario in one structured record set.

Ownership, Cadence, and Accountability
Assign scenario owners and analysts, schedule re-analysis, and route results to risk committees through approval workflows.

Evidence Collection and Audit Trail
Attach data sources, calibration notes, and expert estimates to each factor with timestamps and reviewers.

Analysis and Exposure Tracking
Record loss exposure distributions and most-likely values, compare scenarios, and track exposure over time.

Risk and Control Alignment
Link scenarios to ISO/IEC 27001, NIST SP 800-53, and CIS controls and to the qualitative risk register so quantified and qualitative views stay consistent.

Executive Risk Reporting
Report loss exposure, control return on investment, and risk appetite comparisons to executives and the board.

Common framework mappings

- NIST SP 800-30 Rev. 1
- ISO 27005:2022
- ISO 31000:2018
- ISO 31010:2009
- NIST CSF 2.0
- NIST SP 800-39
- COSO ERM 2017
- ISO 27001:2022
- NIST 800-53 Rev.5
- CIS Controls v8.1

Official resources

Open FAIR at The Open Group
The Open Group's Open FAIR page describing the taxonomy and analysis standards, certification, and supporting guides.

opengroup.org/open-fair

Risk Taxonomy (O-RT), Version 3.1 (C251)
The publications entry for the current Risk Taxonomy Standard, published May 22, 2025, superseding Version 3.0.1.

publications.opengroup.org/c251

Risk Analysis (O-RA), Version 2.1 (C250)
The publications entry for the current Risk Analysis Standard, published May 22, 2025, superseding Version 2.0.1.

publications.opengroup.org/c250

Open FAIR Certification for People
The Open Group's certification program for risk analysts based on the O-RT and O-RA standards.

opengroup.org/certifications/openfair

Frequently asked questions

What is Open FAIR?
Open FAIR is The Open Group's standard for quantitative information risk analysis, based on Factor Analysis of Information Risk. It consists of the Risk Taxonomy Standard (O-RT), which defines risk and its factors, and the Risk Analysis Standard (O-RA), which describes the process analysts follow.

What are the current versions?
O-RT Version 3.1 (document C251) and O-RA Version 2.1 (document C250), both published by The Open Group on May 22, 2025. They supersede O-RT Version 3.0.1 and O-RA Version 2.0.1 of November 2021.

How does Open FAIR define risk?
Risk is the probable frequency and probable magnitude of future loss. Loss event frequency derives from threat event frequency and vulnerability, and loss magnitude combines primary loss with secondary risk, so each factor can be estimated and combined.

How does Open FAIR relate to NIST SP 800-30 and ISO 31000?
Those documents describe risk assessment processes but leave the analysis method open. Open FAIR supplies a taxonomy and quantitative method that fits inside them, and The Open Group publishes a cookbook for applying it to the NIST Cybersecurity Framework.

Is there an Open FAIR certification?

Yes. The Open FAIR Certification for People program, run by The Open Group, validates risk analysts' knowledge of the O-RT and O-RA standards.

Who publishes Open FAIR and is it free?

The Open Group Security Forum publishes and maintains the standards. They are downloaded from The Open Group's publications site under its licence terms, and supporting guides and a risk analysis tool are also available there.

How does SmartSuite support Open FAIR?

SmartSuite stores each scenario's factor estimates as ranges with their sources, holds loss exposure results with assumptions and dates, links scenarios to controls and the risk register, and reports exposure and control value to executives.

License included / downloadable: No The O-RT and O-RA standards are published by The Open Group under its licence terms and are downloaded from its publications site with registration; their text is not included with the platform.

Full framework page and mappings: smartsuite.com/frameworks/open-fair-risk-taxonomy-and-risk-analysis-standards