What is the CDM?

The Common Domain Model (CDM) is a standardized, machine-readable, and machine-executable model that represents financial products, trades in those products, and the lifecycle events of those trades.

How does it work?

The CDM provides a common data representation and standardized modeling framework for transaction events, and covers Derivatives, Securities Lending, and Bond and Repo transactions. Lifecycle events are available as code in multiple languages for easy implementation across technologies.

For Derivatives: When a derivatives trade is captured using the CDM, the relevant data is automatically standardized according to the CDM data model this data is then used to trigger smart contracts that automatically generate and validate collateral movements based on predefined rules and conditions, such as margin calls and collateral substitutions. These smart contracts can be executed on a distributed ledger, providing a transparent and immutable record of all collateral management activities.

For Securities Lending: CDM standardizes each step of the securities lending lifecycle, such as onboarding, contractual negotiations, collateral management, and corporate actions, allowing for quick construction of product and event models, by utilizing components from the CDM for derivatives transactions and augmenting them as needed for securities lending purposes.

For Bonds & Repos: ICMA's CDM project for repo and bonds provides a clear and digital representation of repo and bond transactions in the form of code. This representation is built upon legal definitions from widely accepted industry documents such as the Global Master Repurchase Agreement (GMRA) and the ERCC Guide to Best Practice in the European Repo Market, ensuring consistency and accuracy in the representation of repo and bond transactions across different participants and platforms and serving as a standardized industry model for firms seeking to enter the repo market.

What are the benefits?

Development of the Common Domain Model in the financial industry promotes transparency, efficiency, and innovation, and can bring significant benefits to market participants and regulators.

For Derivatives: The CDM streamlines onboarding and enhances interoperability, decreases post-trade operational risks, settlement fails and Treasury Market Practices Group (TMPG) fees

optimizing collateral and decreasing ECS negotiation time and resources. CDM helps regulatory goals meet with hierarchical representation across trades, portfolios, and events enabling enhanced risk management and trade processing capabilities.

For Securities Lending: CDM adoption enables the easier construction of smart contracts, faster connection to and support of a distributed ledger, and ultimately the ability for firms to innovate and compete on products rather than infrastructure or data storage.

For Bonds & Repos: The implementation of the CDM, as a 'common language' creates greater internal efficiencies for firms' various processes by enabling IT applications to 'speak to each other', facilitate onboarding and improve interoperability between market infrastructures, including trading venues, order/execution management systems, CSDs, CCPs, and trade repositories, enhance consistency of regulatory reporting, and lay a common foundation for developing new technologies such as distributed ledger and cloud services.

Legend

FINOS staged a pilot program for submitting changes to the CDM model using its open data modeling collaboration platform. Goldman Sachs as part of the Legend Studio Pilot developed a number of extensions to the CDM which resulted in a model for future collaboration.

Read more about the Legend Case Study

Digital Regulatory Reporting

ISDA and Regnosys released the Digital Regulatory Reporting (DRR) with BNP Paribas, an initiative that translates the amended rules into machine-executable open-source code that will allow firms to report their activity more efficiently, while also providing regulators with data that is more consistent and accurate.

Watch this video to learn more about DRR

Resources

Github Repository

Common Domain Model Resource Center

Library of content where you can watch, browse, and read all things CDM-related

Further Reading

Using CDM

- CDM Documentation
- CDM Design Principles
  - Composability and Modularization