## TOKENOVATE



## Operationalising CDM.

An introduction to Tokenovate's post-trade lifecycle automation management platform.

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# A post-trade lifecycle automation platform for derivatives and SFTs.

Tokenovate is a next-generation post-trade lifecycle automation platform for derivatives and SFTs.

Our unified, data-agnostic, and automated solution ensures seamless transaction processing across all asset classes, products, and market infrastructures — no matter what you trade or where your assets are held.

By embedding CDM directly into our technology stack, we harness the power of blockchain, smart contracts, and tokenisation to drive automation, interoperability, and efficiency across capital markets.



# Three key industry problems in the post-trade lifecycle

## Siloed Unstructured Data – Traditional Assets

Legacy manual definitions, certificates and processes result in inconsistent and siloed data, impeding efficient collateral allocation.

## **Non-Conformant Digital Assets**

The rise of native and digital twin asset tokenisation has revolutionised issuance and distribution, but disrupts collateral allocation, asset servicing, and trading functions.

## Lack of Digital First Lifecycle Management

Traditional asset workflows demand costly maintenance of outdated infrastructure, amounting to £20 billion annually.\* While digital workflows promise efficiency, they still fall short of meeting regulated market standards and legal requirements.

\* Sources: BoE, PWC, Cobalt 2022

# Three transformative solutions delivering operational efficiency, revenue growth and profitability

#### **Unified Data**

Complete, standardised, and verified trade and instrument data.

Provides transparency, integrity, and interoperability, streamlining trade operations

## **Unified Rights**

Automation of lifecycle and product workflows and events.

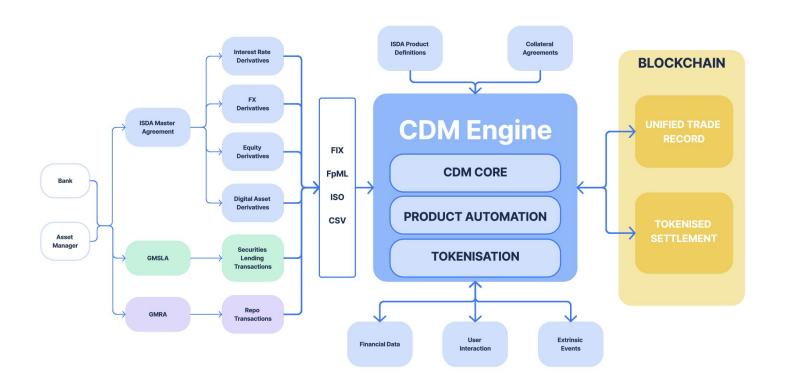
Eliminates inefficiencies with automation, enabling scalable, smart-contract workflows

### **Unified Settlements**

Digital asset creation, transfer, and settlement.

Offers real-time, frictionless settlement and collateral mobility.

## Operationalising CDM for automation of post-trade workflows



## A scalable and secure technology stack

#### Java-based CDM Distribution:

Utilises a Java distribution of CDM with custom function implementations to meet specific business requirements. Functions and extensions
are specified in Rosetta DSL.

#### Kotlin Event Handling:

 Leverages Kotlin to manage both extrinsic CDM business events and intrinsic trade events, ensuring seamless integration and processing within the overall trade workflow.

#### Containerisation & Orchestration:

Containerised deployment on Kubernetes on AWS to ensures scalability, high availability, and efficient resource management.

#### Event-Driven Architecture:

o Employs Kafka for broadcasting events across services, facilitating robust, asynchronous communication and real-time data propagation.

#### Diverse Data Storage:

- Stores data across multiple platforms:
  - Postgres Databases: For relational data.
  - NoSQL Databases: For flexible, high-speed data storage.
  - Data Lake: For large-scale, unstructured data analytics.

#### Private UTXO Blockchain Recording:

Records CDM data on a private UTXO blockchain using Merkle Trees to ensure data integrity, secure traceability, and verifiable audit trails.

## Tokenovate platform demo sample

CDM and Data, Rights and Settlement in lifecycle management.

https://www.youtube.com/watch?v=VlSp36GbXMg

## Summary

- Post-trade workflow automation for derivatives and securities financing, powered by:
  - ✓ CDM data
  - ✓ CDM rights management
  - ✓ Digital asset record creation, issuance and settlement
- Platform approach lowers the implementation hurdle fast and low cost access
- Unlock efficiencies in operation workflows and increase return on capital used in collateral management

## Thank you.



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