

Securitization System for Global Investment Bank

Client

Top 10 global investment bank

Business Area

Credit Risk Management

Asset Classes

Loans

Technology Set

Oracle, J2EE, Spring, Hibernate, Weblogic

Integration

Paragon, internal security providers

User Profile

Front office and middle office (15+ users)

Geography

Germany, UK, US

Relationships Status

Ongoing ODC, T&M

Services Provided

Full cycle: Business analysis, Development, QA/Testing, Maintenance with Production support.

Team Size

10 members

Duration

5+ years

Summary

System is used by Securitization team of a leading global investment bank for replenishing Collateralized loan obligations (CLO) with assets and day-to-day servicing of already securitized assets.

Business Challenge

The main business challenge was to streamline CLO replenishment process and make the system a single source of structured loan products for the Bank.

Main business challenges are:

- To provide timely and accurate loan facility data for ongoing servicing, monitoring and replenishment processes,
- To improve coordination of hedging workflow between Portfolio Management and Securitization teams,
- To provide ability of CLO portfolio monitoring to identify asset utilization excesses,
- To detect and monitor Business and Credit Events related to secured assets,
- To provide ability to share assets across the Bank as well as avoidance of over-hedging of already secured portions.

Luxoft Delivered Solution

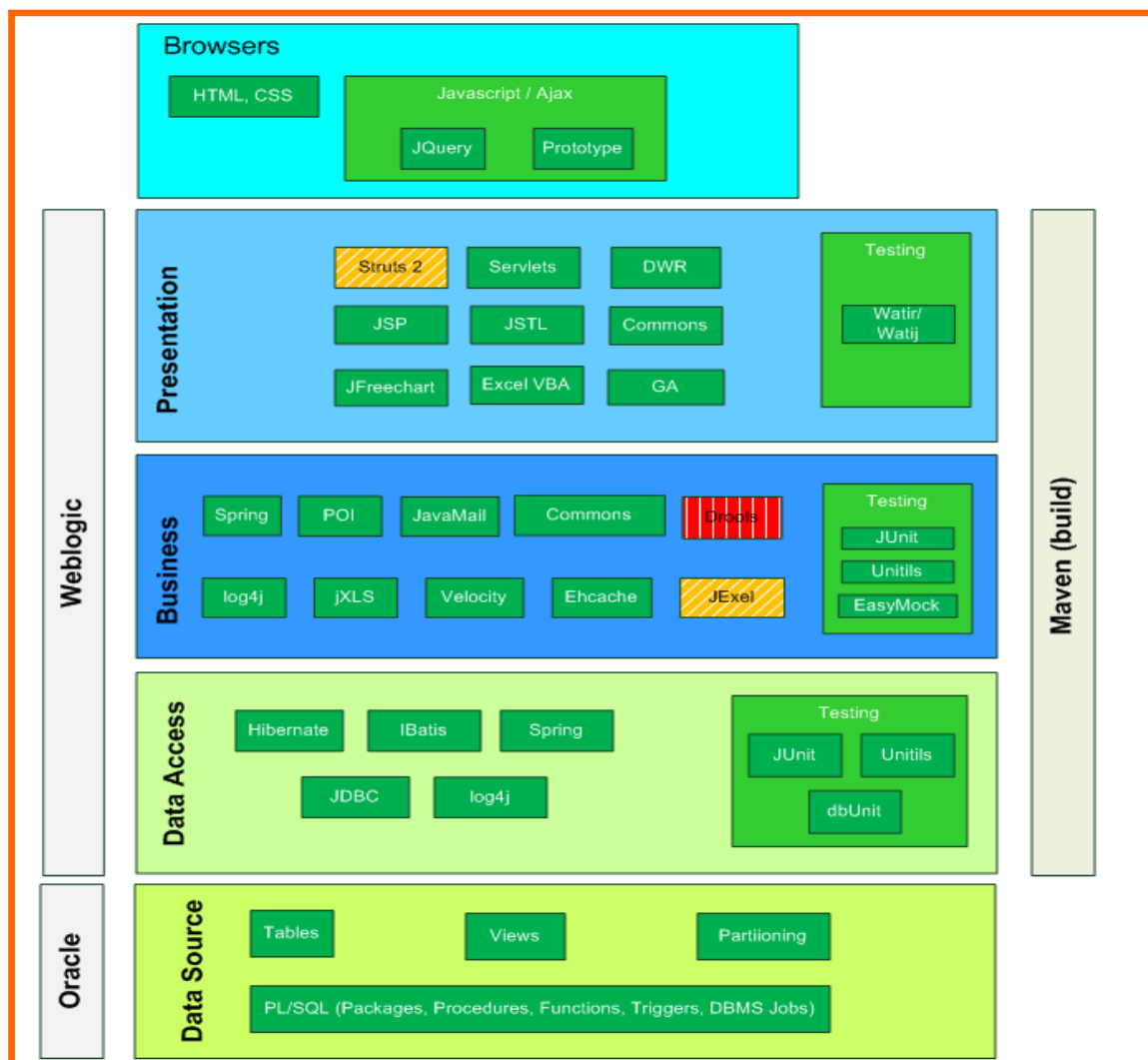
Starting from a small support team Luxoft was able to take over the existing system and build up a comprehensive yet flexible solution to address quickly changing business needs. Luxoft has established proper communication and development processes required for the projects of this magnitude.

System is designed using the "classical" J2EE enterprise three-tier architecture with the thin HTML client.

Presentation layer is implemented using Struts 2 framework based on Servlet technology. JQuery Javascript library is widely used for the creation of dynamic user interface with the Ajax support.

Business and Data layers are implemented with the Spring, Hibernate and iBatis Java technology stack. Database procedures are intensively used for the performance optimization. A self-written flexible framework for Excel parsing and generation is created based on jXLS and POI libraries.

The system is deployed in Oracle Weblogic application server and Oracle 10 database.



System provides several key features that cover the most critical business needs:

- **Replenished Portfolio Servicing** allows performing front-to-back replenishment process including replenishment data preparation and upload of new pool of assets to be securitized into the system. Replenishment data preparation process is rule-based assets selection which is specific for each CLO tranche aiming to CLO portfolio optimization.
- **Daily Allocation process** is core of the Securitization system to correct and/or re-distribute CLO Reference amounts between CLO portfolios on a daily basis to address assets amortization, FX-rate fluctuations and asset reference amounts that exceed total limit amount of the asset. Daily allocation algorithm was specifically proposed and implemented for this purpose.
- **SEC-specific Reportset Creation** functionality allows the Securitization business to use a reportset for replenishment that refers to one close-of-business date for all relevant booking systems. The approach to define reportsets for replenishment provides the Securitization business with the opportunity to perform intra-month replenishment using datapool data.
- **Asset Monitoring and Servicing** system's main purpose is to monitor changes in the securitized portfolio between today and yesterday. Data is fed into system from external source systems on a daily basis, reflecting daily asset/counterparty information changes happen in the real world. Changes in substantial data lead to business events, which need to be considered by users since they might result into changes in current securitized portfolio and further replenishment processes. Asset Monitoring helps the Servicing team to identify potential Events, i.e. potential problem cases.
- **CLO Axe List** system for monitoring hedging plans against assets via CLO recommended by Portfolio Managers; it is for planning and disposition purpose.

Benefits

Luxoft has delivered fully functional and extensible System which implemented all the client needs, in accordance with the schedule. The System took all the burden of picking assets to be securitized and their servicing. The features substantially reduce the operational costs and as a result the business profitability is much increased.

Customer Feedback

The detailed feedback is provided upon the specific request.is provided upon the specific request.