

CLS is the world's leading provider of FX settlement services. With over 70 of the world's most important financial institutions and more than 25,000 third-party participants using their services, CLS settles USD5.5 trillion of payments on an average day.

CHALLENGE

To meet growing demands for foreign exchange settlement services, CLS needed to quickly scale the capacity of their settlement system from 2 million trades to 25 million trades per day within 5 years. Facing a series of complex decisions, the architecture and development teams wanted to be sure they were making the best use of the existing system and architectural components while achieving the right trade-offs between conflicting objectives—cost, scalability, and performance requirements.

- ▶ Meet constraints for worldwide services
- ▶ Complete settlement processing within a specified time window
- ▶ Avoid outstanding transactions at the end of day
- ▶ Manage costs for operators and clients

SOLUTION

By creating a digital twin of the end-to-end settlement service in X-ACT, which included matching, pre-settlement, settlement, client management, and external exchanges, CLS was able to quickly test and economically explore hundreds of scenarios that would otherwise be complex and expensive to test on a real system. By performing sensitivity analysis, the CLS team was able to identify new ways to streamline the current settlement system and build a re-architecture plan that would meet the business' long-term speed, volume, security, and adaptability requirements.

- ▶ Achieve better workload distribution
- ▶ Sunset over-engineered processes
- ▶ Identify the best-fit architecture
- ▶ Plan and manage the transition program

“We used X-ACT to determine the limits of our implementation and build a new architecture that reduced time to deliver world FX activities securely and with expandable adaptability.”

–CTO, CLS



RESULTS

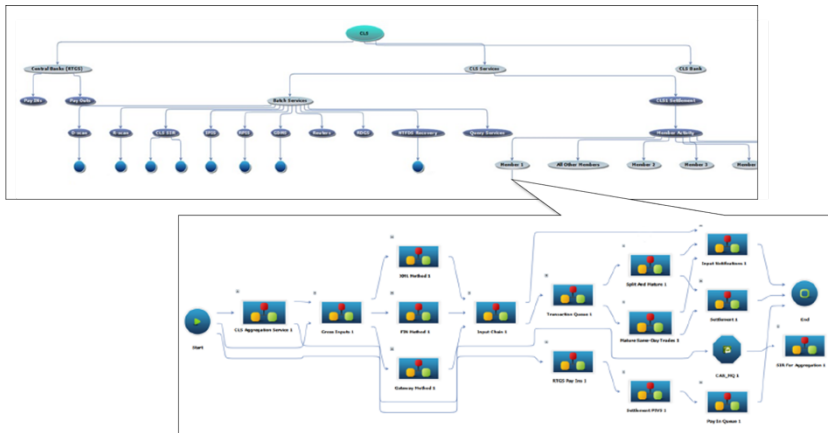
X-ACT effectively guided re-architecture and optimization decisions. Based on these results, CLS was able to continuously meet business cost, performance, and throughput targets.

- ▶ Reduce leftover and lost cycles by 100%
- ▶ Compress transaction processing window through parallelism
- ▶ 10% saving in development costs, equalling €6m saved before development started

CLIENT CASE STUDY: CLS

CREATE END-TO-END MODEL

CLS FX World Settlement, Clearing and Notifications and Central Banks Monitoring

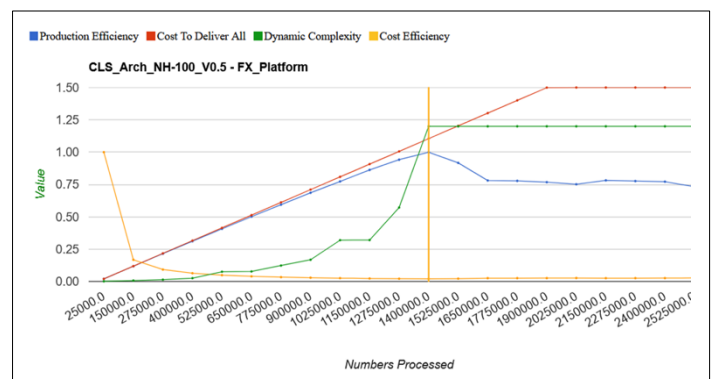


With X-ACT, CLS was able to select and build an architecture that used the same resources as the legacy settlement system but delivered 10 times more transactions with better end-to-end service time.

Libraries of 10,000+ pre-built models and assets accelerated time to value and helped executives benchmark their plans against best-of-breed industry solutions.

VALIDATE BENEFITS

Using X-ACT advanced modeling and what-if capabilities, CLS validated whether the proposed innovations would deliver the promised short-term and long-term cost, quality, and volume advantages. Visualization graphs exposed the conditions under which the cost of production might exceed revenue. This helped CLS effectively communicate in business terms the anticipated outcome of planned changes.



GRS	Dycom Score	Rarefication Index	Business Trajectory
●	100.0	49.5	CLS Process 1
●	100.0	46.8	CLS2
●	13.9	45.5	Initial PayIn Schedule
●	13.9	45.5	Revised PayIn Schedule
●	0.0	45.5	NTFDS_Recov
●	0.0	33.3	GDMS
●	0.0	58.7	SIR Reports
●	0.0	23.0	SIR Apply Side

MANAGE RISKS

X-ACT metrics and color-coded dashboards helped users expose and remediate risk across the business and IT domains to ensure target plans yielded the promised results in terms of time to market, operating costs, service levels, and transaction volumes.