Le Crédit Lyonnais
Leading French bank uses Adobe® LiveCycle® ES solutions to aggressively improve document generation and management

Keeping up with demand
With more than 2,064 branches, Le Crédit Lyonnais (LCL) serves over six million individual clients, 315,000 professional clients, and 27,000 businesses. Recently, the bank began overhauling the system it uses to publish and print documents such as business statements and checkbook requests for its agency clients. "We have a centralized server that enables us to generate PDF documents for our agency, back office, and online clients. This system was perfect for publishing formal documents given to clients, whose presentation quality must be impeccable. But the system had become outdated, which meant we needed to consider overhauling it," says Nicolas Raffy, head of LCL's multi-channel platform.

When LCL decided to modernize its publishing architecture, it had to tackle a major challenge: how could the company improve the performance of the solution while making it fully capable of responding to future trade expectations? LCL adopted Adobe LiveCycle Enterprise Suite (ES) solutions to address those concerns.

Systematic migration
LCL publishes approximately four million documents for its clients every month. Documents are generated from 400 distinct models and more than 15,000 collaborators use the system regularly. "Our priority was to modernize our architecture while preserving service continuity. We eventually also wanted to expand its functions to better address business needs," Raffy says.

For LCL, the new solution had to enable migration from the old structure to the new one in a way that would be transparent for users. The printing service was shared and used by a host of applications. To preserve service continuity, the solution had to enable taking over the existing document base without affecting the functionality of applications that require document generation. "There are many programs that use this centralized platform to generate quality impressions, so we wanted to avoid having to rewrite all the bank applications that access the server," Raffy adds.

Seeking stability and flexibility
Adobe LiveCycle ES solutions were chosen because of their performance, stability, and continuity. LCL set up a prototype-based architecture to assess the program's capabilities under real conditions. With a weekly production of nearly one million documents, the solution needed to meet volume management and execution speed expectations. The Adobe solution surpassed LCL's expectations, proving to be more efficient in document production and superior in document printing times.

The bank also needed to be able to take over the document base without completely overhauling third-party applications using the service. "We were also very attentive to the continuity of the Adobe solution and its ability to manage PDF documents. We wanted a solution that could integrate the latest applications of PDF technology, supported by a publisher," says Bruno de Zan, head of LCL's trade software suite platform.

LCL wanted a true software suite—comprised of a multitude of components designed to improve the company's productivity. "LiveCycle ES offers a progressive and flexible architecture. We knew we could extend its functions by integrating new modules that would meet our future needs," said Raffy. Following an assessment of the proof of concept to test the program's behavior under real conditions, LCL integrated LiveCycle ES as a central component of its new technological architecture.
Adobe LiveCycle ES solutions give LCL a flexible and scalable system to meet present and future business demands. With LiveCycle ES software, LCL can rapidly develop and deploy new document templates and better manage existing ones for improved productivity, better document processing, and superior services to customers.

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Head of multi-channel platform, Le Crédit Lyonnais

Providing service continuity
LCL set up a development studio to oversee the design of the new architecture and the migration of existing models. “Adobe came in at the start of the project to help re-write our document base while our development studio received training,” says Raffy.

Building on these knowledge transfers, LCL’s development studio set up and optimized the service. “We initially reworked some models to improve their performance levels and reduce document queuing and printing times. We were able to cut our document base by batches to further simplify document template management and increase productivity,” explains Aurélien Rebray, LCL’s LiveCycle expert.

LiveCycle was also able to keep up with the load build-up, increasing overall performance in the production process. For LCL, this was a major benefit that enabled it to plan for growing document production needs. “It enabled us to optimize our document base management process,” Rebray says. “Some documents may contain 10 or more pages and take longer to generate. We had to be prepared for overly complex documents that would hinder performance. Using Adobe solutions, we limit document time-to-print requests to no more than 10 seconds. This is the upper limit, with the average ranging from 0 to 1.5 seconds.”

The migration process was progressive, as LCL worked to gradually turn over the print models from the old platform to the new one as they were optimized. “We worked with Adobe to develop an abstraction layer that enabled us to leverage LiveCycle by making the applications think they were communicating with the old architecture, which provided for a smooth migration process,” Rebray says. The two architectures worked in parallel for several months to migrate LCL’s 400 document models. “The goal wasn’t to produce more commercial documents, but to deliver reliable production while maintaining service continuity and improving performance levels. Once these goals were met, we moved to phase two of the project and generated dynamic contractual documents and guaranties,” explains Raffy.

Streamlined contracts and document generation
With the old system, LCL advisors had to fill out contracts and documents by hand. With the Adobe solution and the new platform, dynamic forms automatically bring up contractual clauses enabling the advisors to fill out the forms more quickly. “This is a basic business need that could be quickly and easily addressed by extending the functions of our architecture. Now we have the latitude, the skill, and the technology to do it. Improving our offer was only logical; it’s one of the reasons that initially led us to choose LiveCycle ES,” explains Raffy.
Leveraging Adobe LiveCycle ES solutions, LCL publishes approximately four million documents for its clients every month, from 400 distinct models, with more than 15,000 collaborators using its system regularly.

LCL modernized its platform by integrating new modules of LiveCycle ES including LiveCycle Forms ES and LiveCycle Reader Extensions ES. The development studio created a prototype for the main users of this new system. “The advisors can fill out the dynamic forms and print the results to give to clients. So the solution had to be very user-friendly, it had to be reactive so clauses would immediately appear following the fields filled by the advisor, and it had to be fast to minimize print times as well as offer complete stability,” adds Rebray.

An eye toward the future
According to Rebray, one attractive attribute of LiveCycle ES is its ability to increase performance while being highly stable. LCL now has architecture capable of meeting ever-changing business needs and document generation requests. “One of the major benefits involves development times. LiveCycle features a visual development environment, which helps our teams significantly increase document model development times,” de Zan says.

Other benefits for LCL include the reliability of the architecture—it is capable of fully responding to load build-ups while offering very good document base processing and access times—and the ease with which the system can be maintained. “We are currently working to optimize the organization around the solution to improve our document model management. Our document base is presented in a directory, so we are working to design a repository to manage these documents and upgrade them for easier access and use. We will be able to meet new business needs and expectations because of the scalability and flexibility of the system,” Raffy says.

For more information
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