Overview

Alfa-Bank is one of the largest Russian private banks by total capital, credit portfolio, and deposits. Its strategic priorities include a focus on asset quality and reliability combined with the industry’s best customer service, technological excellence, efficiency, and business integration.

Challenge

With the bank serving 22 million customers, the load on its IT systems is substantial, and so is the cost of any downtime. Internal estimates show that unplanned outage to a business-critical system can cost up to $200,000 USD per hour. For example, when the money transfer system is down, the bank has to forfeit transfer fees, compensate customers and risk reputation losses. Longer downtime can result in lawsuits and penalties, with losses potentially running into millions of dollars.

System performance testing is an essential function: it is one of the key business continuity assurance processes. With a large number of business-critical systems, meticulous enterprise load testing helps minimize performance related risks.

The IT Department at Alfa-Bank makes at least 300 modifications to IT systems each quarter as part of a growing trend. Significant effort has to go into load testing when business critical systems are being maintained. A total of 75 business applications play a major role in the bank’s day-to-day operations. Due to their critical nature, they are supported and tested centrally. The bank also extensively outsources performance testing to appropriately licensed external service providers. Competitive tendering is used to secure engagement with cost effective and reliable third parties.

“We’ve never shied from changing service providers and have never grown attached to them. People change, but solutions supporting the testing processes have to be consistent to ensure knowledge transfer and transparency of processes for management,” says Anton Isanin, head of Performance Department, Alfa-Bank.

At a Glance

- **Industry**: Financial Services
- **Location**: Moscow, Russia
- **Challenge**: Improve quality management processes during development of business-critical systems.

Critical Success Factors

- Created an integrated workspace for teams of testers
- Standardized enterprise load testing processes
- Minimized the risk of system downtime during updates
The bank had performance testing systems in place, and although well structured, they were previously based on different software products and were not centralized, giving rise to numerous potential problems. Information about ongoing operations was reflected in disparate systems, with each team accumulating its own expertise while relying on its own test results and test development practices. From time to time the bank also experienced problems associated with the licensing of solutions running on disparate platforms, while knowledge transfer posed a major challenge whenever teams of testers changed.

An integrated enterprise load testing solution would put an end to these problems through unification of processes and solutions used. By managing resources and analyzing data in a centralized way the bank wanted to avoid operational errors while contributing to more productive and efficient workflows.

Solution
The volume of tasks performed by testers is constantly growing while the available resources stay the same. Therefore, higher efficiency and more effective work practices are required, which is exactly where the solution for centralized management of the testers’ work comes in. “We had no illusions. We knew what type of solution was needed and had very clear requirements: Micro Focus LoadRunner Enterprise is perfectly aligned with the bank’s current needs,” says Isanin. Because this load testing solution is based on the proven Micro Focus LoadRunner Professional, the bank’s experts were already very familiar with the solution. LoadRunner Enterprise optimizes the workflows of a tester, while a user-friendly interface makes product testing much faster compared to other similar tools.

The Bank was convinced that LoadRunner Enterprise could deliver better performance by appreciably reducing the labor intensity of work processes. Another important consideration was the numerous Micro Focus products already being used to manage application quality. It is also fairly easy to find professionals experienced in LoadRunner Professional and LoadRunner Enterprise, which was another factor the bank took into consideration.

“Most importantly, the system would significantly improve the work performance of employees, which is why the bank team readily welcomed the new solution,” says Andrey Kutukov, director of Software Solutions, Micro Focus Russia.

The scale of the project determined a phased approach to the implementation. The enterprise load testing solution was first tested on two business-critical systems. It is now being scaled up as more systems are migrated to LoadRunner Enterprise. Over 20 systems have been connected thus far.

The integrated performance testing platform will, in the future be expanded to cover all business-critical applications. Under the agreement, Alfa-Bank has the right to connect an unlimited number of LoadRunner Enterprise licenses over a three-year period. The team therefore does not have to worry about the need to reactively procure additional licenses or be impacted by functionality limitations.

Results
“Implementation of the integrated system for testing business-critical applications has ensured transparency of processes. We can see who is running what type of tests and are able to control and plan usage of hardware, which translates into more effective work management,” says Isanin.

Until recently, computing resources were allocated via email, while now the resources are displayed in real time. Previously a dedicated manager was required to control each system along with a relevant team of external service providers, now one manager can easily handle several projects at once. This is exactly why full automation of enterprise load testing processes was needed. LoadRunner Enterprise has become a part of the wider Application Lifecycle Management (ALM) system being built by Alfa-Bank. It is already being integrated with other Micro Focus products for infrastructure monitoring.

There are also plans to integrate LoadRunner Enterprise with Jenkins—an open source set of development process support tools—which will enable developers to automatically initiate load testing of applications that are created and evaluate test results.

This approach opens the way for wider application of DevOps procedures based on integration of the system development and operation units. When this integration is performed in conjunction with a joint environment for managing performance testing processes, this significantly reduces the lead time from specification of requirements to commercial deployment. Implementation of LoadRunner Enterprise is an important step in this direction. Moreover, this approach becomes feasible owing to centralization of services.

“Indeed, this approach is the future, although it is too soon to discuss using DevOps at our bank. So far it is limited to only one team working on the Alfa-Click online bank project,” says Isanin.

According to internal (and fairly conservative) estimates, investments in the project will pay back in two years, which is seen as a quite...
satisfactory result. Isanin believes that it makes sense to launch a centralized system for managing performance testing processes when a company has more than five business-critical systems. To make the solution cost-effective, there has to be a constant demand for application testing services. If such a need exists, the project is justified: more volume of work is performed at a lower cost.

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ANTON ISANIN
Head of Performance Department
Alfa-Bank