



CASE STUDY

Large Retail & Commercial
Bank Delivers Features
40% More Efficiently
With Service Virtualization

OVERVIEW

Like many large banks, the significant branch of a leading financial service organization that provides banking, mortgage, insurance, and many other services runs a considerable computing load on mainframes while aggressively migrating apps and services to the cloud. Mobile is also a large focus for the bank to provide great experiences for their customers.

This very diverse and dynamic application environment creates huge challenges to their quality at speed goals. In response, the large retail and commercial bank built a service virtualization team of QA and Development specialists, some of whom had solved similar challenges at other major banks.

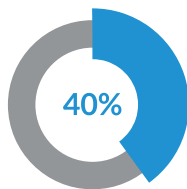
Industry:
Financial

Company Size:
25,000

Location:
London, England

Solution:
Virtualize

KEY RESULTS



40% more efficient in
feature delivery.



Completed +6 million
transactions in
8 months.



Virtualized +100
services and thousands
of datasets.

THE CHALLENGES

Speed is key for the retail and commercial bank, but there were many impediments to achieving their CI/CD and DevOps goals. One of the key challenges was the lack of mainframe availability and high cost of using that environment for testing new applications dependent on those critical services. They also needed to run performance tests without impacting the production environment.

Additionally, the bank has a large number of new APIs under development with one key set tied to their expanding implementation of Salesforce. Getting early access to these APIs is just not possible without virtualization and waiting for them to be available is not a good option.

Another area of challenge relates to the bank's priority for an aggressive AWS migration which adds more complexity and strain on their infrastructure.

The team surveyed all product development teams across the organization to quantify the challenges they needed to solve. They related any downtime or delays to the following:

- » Lack of data availability
- » Outages
- » Incomplete APIs
- » Environments that are inaccessible

The team found that the average downtime and delay was about five days per month per dev team, which was deemed much too high and needed to be reduced drastically across product teams.

THE APPROACH

To address their ability to test complex scenarios, they knew they needed to bring in a data and service virtualization solution to plug these gaps and bring stability to their environments. One of the key goals was to allow product teams to be able to test their applications in isolation, much earlier in the development cycle. They knew if they could do this, they could enable the teams to deliver features to customers much faster.

When the retail and commercial bank attempted to use the same tools and methods that had been used at another large bank, they discovered it was not going to provide the flexibility, speed, and scale they needed, which led to a broader search for tools and solutions.

THE SOLUTION

After an in-depth evaluation, the bank selected the Parasoft service virtualization solution for proof of concept. It was a smashing success and was rolled out to the team to use during production.

The team's lead engineer didn't waste any time providing value to the product teams at the retail and commercial bank. They started with a mortgage product team and in just a few days they were able to start testing with custom data during development much earlier in the release cycle than previous releases.

In this first feature release, they found nine early-stage defects that wouldn't have been found until much later in the pipeline or even in production. It was deemed an immediate success.

"Stopping those defects from getting into production saved the impact from the customers and protects the reputation of the bank as well."

—Lead engineer at the large retail and commercial bank

Since that first product team, the large bank has been able to implement service virtualization across more than 20 large product teams with over 100 users in under eight months. They have taken a consultative approach with a federated model that gives teams all the help and support they want without creating a central bottleneck. News of success quickly spread such that teams began to share virtual services and datasets organically.

The large retail and commercial bank implemented service virtualization across more than 20 large product teams with over 100 users in under eight months.

"We've given our teams the tools and the capabilities by using the Parasoft service virtualization solution to do these tasks autonomously and reuse the catalog of services they've created. They're sharing these services amongst themselves."

—Lead engineer at the large retail and commercial bank



THE RESULTS

By using service virtualization, the large bank eliminated the dependency on waiting for APIs to be developed before writing automation scripts.

They also identified and eliminated defects during development. The results?

- » Faster development
- » Reduced cost of testing the applications

The organization also found significant immeasurable value in protecting the bank's reputation by delivering high quality applications to customers.

“With Parasoft, we’re able to achieve the goal to create virtualized services from the specifications and generate synthetic data to inject into the services. Before the teams even start development, we have a virtual version of what the API is going to be. From that, we can already start writing tests for it.”

—Lead engineer at the large retail and commercial bank

The bank has done an in-depth analysis of features delivered with Parasoft Virtualize in play and those without service virtualization. The teams leveraging service virtualization are 40% more efficient in feature delivery from start to customer delivery.

These results exceeded original expectations by a considerable amount and have gotten the attention of executives across the company.

Other results include over six million transactions completed in eight months with a recent peak week of 1 million transactions in a single week. They have virtualized over 100 services and thousands of datasets.

The teams leveraging service virtualization are 40% more efficient in feature delivery from start to customer delivery.

TAKE THE NEXT STEP

[Read the QA Financial report](#) to learn how much service virtualization can accelerate your software delivery.

ABOUT PARASOFT

Parasoft helps organizations continuously deliver quality software with its market-proven, integrated suite of automated software testing tools. Supporting the embedded, enterprise, and IoT markets, Parasoft's technologies reduce the time, effort, and cost of delivering secure, reliable, and compliant software by integrating everything from deep code analysis and unit testing to web UI and API testing, plus service virtualization and complete code coverage, into the delivery pipeline. Bringing all this together, Parasoft's award-winning reporting and analytics dashboard delivers a centralized view of quality enabling organizations to deliver with confidence and succeed in today's most strategic ecosystems and development initiatives—security, safety-critical, Agile, DevOps, and continuous testing.