科PARASOFT。

CASE STUDY

Northbridge Financial Scales API Testing to Increase Productivity & Deliver ROI

OVERVIEW

Northbridge Financial Corporation is a leading insurance group based in Canada that specializes in providing commercial property and casualty insurance solutions for Canadian businesses. Northbridge provides a wide range of insurance products and services to businesses, including consumer and business services insurance, manufacturing insurance, construction and contractors insurance, health and social service insurance, and more. Their offerings cater to various sectors and industries, aiming to protect businesses and individuals from financial risks and uncertainties.

As a big name in the Canadian financial and insurance space, the company partners with a lot of brokers. As such, the company's application development heavily relies on third-party APIs, which means they must perform comprehensive API testing to validate correct interactions with the applications.

Northbridge

a FAIRFAX company

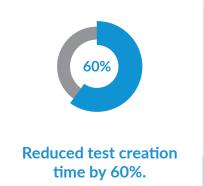
Industry: Financial & Insurance

Company Size: 1,650

Location: Toronto, Canada

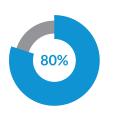
Solution: SOAtest, Virtualize, CTP

KEY RESULTS





Reduced API test execution time by 90%.



Increased API test coverage by 80%.

THE CHALLENGE

Mapping out and implementing a DevOps strategy has never been an easy journey for any organization and that was the case for Northbridge Financial. The company needed to automate its API testing processes for improved agility and productivity. They once relied on C# libraries for API testing, but the process needed automation developers that have the skillset to code for API testing using open source libraries. As a result, it was dependent on few to write API tests. The code written was not scalable to use in other projects. Every project needed to be rewritten from scratch. Hence they were looking





for more scalable approach that allows everyone to contribute in understanding and automating API tests. They needed a framework that would not only automate this process but also assist in identifying the right tasks for automation in a way that would help them prioritize certain key features and establish effective monitoring and metrics.

In addition, having a solution that could integrate seamlessly into their existing ecosystem, including their Azure DevOps code repository and CI/CD pipeline, also posed another challenge. Another issue was cultural resistance that affected the team members, as adopting DevOps required a shift in mindset and collaboration among team members accustomed to working in silos. Overcoming these challenges was crucial to optimizing their testing practices and achieving successful automation and improved software delivery.

THE APPROACH

The first step taken by the organization was to work with the engineers at Parasoft to identify all the crucial areas within their environment that could help them test their APIs for a connection between

their software and the broker's system. Since the broker was also building its platform at the same time as Northbridge Financial, they leveraged Parasoft's service virtualization solution to eliminate testing delays with a realistic simulation of the third-party API.

By eliminating testing delays caused by environment outages, the teams were able to execute automation tests, performance tests, unit tests, and quality assurance (QA) tests consistently. As a result, development and test teams experienced reduced costs and were able to meet their schedule targets effectively.



THE SOLUTION

The organization utilized Parasoft SOAtest, an AI-powered API testing solution, to test their APIs. With Parasoft SOAtest, the company was able to reach its quality and coverage goals.

They also leveraged Parasoft Virtualize to simulate third-party APIs that were either unavailable or unstable, making it possible to continue testing without interruption. Parasoft Virtualize provided the capability they needed to create realistic simulations, while Parasoft CTP enabled them to create the right environment to test every service without worrying about downtimes and verify the API services with the right test data.

"Our test creation time also reduced drastically because once the team was trained on doing testing, it was very easy and quick to create test cases in Parasoft."

-Pushpinder Malhotra, Senior QA Automation Manager at Northbridge Financial

THE RESULTS

Choosing Parasoft resulted in significant positive outcomes for Northbridge Financial Corporation. The company achieved the following results:

- » Reduced test creation time by 60%.
- » Increased API test coverage by 80%
- » Reduced test execution time in the CI/CD pipeline by 90%.

In addition, Northbridge Financial increased testing efficiency by 40% and reduced testing costs and delays by 30%.

By leveraging Parasoft's capabilities, the company was able to overcome its challenges, improve efficiency, and enhance the quality of its software delivery.

"We really saw a lot of benefits from using these solutions. We collect the proper metrics to measure our areas of improvement. The time it takes to create and execute the API test scripts versus create UI scripts is much lower. Parasoft gives us the benefits of faster, more reliable software delivery."

 Pushpinder Malhotra, Senior QA Automation Manager at Northbridge Financial



TAKE THE NEXT STEP

Reach your software quality goals with an effective automated testing strategy. <u>Talk to our</u> experts to learn how Parasoft can help.

ABOUT PARASOFT

Parasoft helps organizations continuously deliver quality software with its marketproven, 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.