

North American Bank

Enabling Front-Office Fixed Income Analytics through Flexible API Integration

With operations across more than 30 countries and over 90,000 employees, North American Bank is one of the world's largest and most systemically important financial institutions. The bank provides a full suite of banking, investment and capital markets services across North America, Europe and Asia-Pacific.

To maintain its leadership in financial risk management, the bank partnered with SS&C Algorithmics to modernize its front-office analytics and ensure model consistency across risk and trading systems.

THE CHALLENGE

North American Bank's fixed income trading desks required a unified way to price and manage complex instruments—including bonds, interest rate swaps, cross-currency swaps and inflation-linked notes—using the same validated models as its enterprise Market Risk platform, already powered by SS&C Algorithmics.

The bank's in-house pricing environment consisted of multiple, disconnected systems with inconsistent data formats, resulting in inefficiencies and slower decision-making. Traders needed sub-second pricing and scenario updates to respond to market changes, while regulatory teams required consistent risk models to support model governance and FRTB compliance.

To address these challenges, the bank sought a modern, flexible front-office pricing framework that could integrate directly with its existing risk infrastructure and deliver both performance and consistency.

THE SOLUTION

The bank's front-office technology team developed a suite of custom applications using SS&C Algorithmics RiskWatch APIs and analytics libraries as the foundation for real-time pricing and risk management. The new system enables traders to value a wide range of instruments, from vanilla bonds to structured products, using the same validated models applied within the Market Risk environment.

Through deep API integration, the solution connects seamlessly with live market data feeds and internal pricing sources, supporting sub-second updates and real-time sensitivity analysis. It provides a unified environment where front-office users can perform ad hoc "what-if" analyses, test new instruments and instantly view the effects on portfolio exposures.

By embedding the Algorithmics pricing libraries directly into the front-office systems, the bank established a consistent data and model framework spanning pricing, risk and finance. This cohesive architecture eliminates redundant systems, reduces latency and simplifies governance by ensuring model consistency across all analytical layers.

BUSINESS
IMPACT



Faster pricing
through real-time
analytics that cut
response times
by up to 50%.



**Greater
consistency** with
validated models
aligned across front
office and risk.



**Operational
efficiency** from
unified APIs
eliminating six
legacy systems.



Rapid scalability
enabling new
products to be
added within
a single day.

ENTERPRISE IMPACT AND CAPABILITIES

By integrating Algorithmics pricing libraries into its front-office environment, North American Bank achieved true consistency between trading, risk and finance. The result is a high-performance, scalable architecture that supports global operations and future product expansion.

Capabilities delivered

Scalable architecture for rapid product onboarding

Real-time pricing and risk analytics

API-driven integration with external data and systems

Consistent models across front office and market risk

Improved governance and regulatory compliance

With the success of its fixed income rollout, North American Bank plans to expand the platform to include FX and credit derivatives, extend risk measures to incorporate incremental and liquidity-adjusted metrics and deploy the framework across additional trading regions to standardize analytics globally.

Discover what we can do for you at ssctech.com

