Integration of QRM Tool with the existing IT infrastructure

Client's Case:

The risk governance group and Asset liability management (ALM) group at a major bank was well-equipped to keep track of its various key risk indicators. However, the changing regulations and dynamic markets posed new challenges to keep their system up-to-date. The group wanted to strengthen the timeliness, tracking and coverage of its market and credit risk capabilities. The group did a thorough analysis and identified a number of areas for potential improvement. Then they decided to use market leading tools to do risk modeling, and risk reporting (liquidity, financial and market). In addition, the bank wanted to shorten the time-to-integrate and reduce implementation costs for the new tool.

QRM (Quantitative Risk Modeler) is a functionally rich and flexible ALM tool able to model complex trade-able products, generate forecasts, calculate funds prices (including option costs), and calculate market values. QRM is used for calculating key indicators for Enterprise Risk, Market Risk (Interest rate risk, Currency risk, etc.) and Liquidity Risk.

Solution:

Foray was commissioned by the bank to integrate the QRM tool with its existing IT infrastructure. We did initial analysis, identified the various inputs to the QRM, mapped those inputs to different data points in internal data sources, defined the data flow channels, created a rule based data transformation system to import data from various sources in the form of flat files, wrote procedures to do scheduled data uploads into QRM tool to do the liquidity analysis, and calculate risk indicators. We also wrote custom report generation procedures to get various custom reports.

Business rules were identified with each data point, and applied before loading data into QRM. These rules were written in an internal Java based internal application, that performs the data mapping that QRM needs for reporting. The mapping rules and business rules are defined by ALM department and logic is implemented in the internal Application.

Thus Foray helped the bank to integrate QRM with their intensive data sets to get the daily risk management reports that the business needed to make better strategic decisions.

Technologies : Core Java 7, QRM, Unix shell scripts, Python, DB2, SQL Server, Jenkins, Eclipse, Linux

Feedback from Client:

"We have always been delighted with the efficient, professional service provided by Foray, and we trust them to deliver a top-quality offering for building IT Solutions."

