



CASE STUDY

Global Finance and Insurance Firm We took the risk out of Risk Modeling

Problem

This global finance and insurance firm faced major data center expansion and infrastructure upgrades to accommodate its growing batch computing requirements. It also needed a way to control a multi-account environment and provide access, audit, and management capabilities through a unified security framework.

Goal

Meet the Federal Reserve regulatory requirements by increasing application performance and modeling.

Solution

2nd Watch provided a Risk Modeling solution on AWS, allowing the firm to run over 120,000 cores in hours instead of months to meet regulatory requirements and timelines.

About the Business

This global F&I firm felt the effects of staggering losses and government bailouts, with the US government holding more than 90% of the company at one point. However, the company's subsidiaries have steadily provided general property/casualty insurance, life insurance and retirement services, financial services, and residential mortgage guaranty insurance to commercial, institutional, and individual customers in the US and around the world. Today the US Treasury does not own any shares of the company.



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The Business Challenges

As a result of the financial crisis of the last decade and the government bailout, new regulations required the company to meet government-mandated compliance deadlines. Therefore, the company must run risk modeling to show the effects on their operations depending on certain economic changes.

The company conducts financial risk modeling using the Monte Carlo Method, a statistical sampling technique that approximates solutions to quantitative problems, to simulate sources of uncertainty that affect the value of their various risk portfolios. Running on premise, these monthly batch jobs would take up to three weeks to run, tying up expensive computing resources and limiting the ability to run other jobs. The company was faced with a major data center expansion and infrastructure upgrades to accommodate the growing batch computing requirements necessary to process all the scheduled jobs as well as what was required to run adequate risk modeling scenarios.

2nd Watch Solution

Rather than investing in another data center or co-location contract, the company began exploring running batch jobs using High Performance Computing (HPC) on the public cloud to meet this growing demand. The company avoided the traditional provision of technology by leveraging the 2nd Watch Risk Modeling solution on AWS and capitalizing on the elasticity of the public cloud, enabling workloads to spin up thousands of cores in hours and days versus weeks and months. The hybrid solution has increased the visibility for the business and provided data to meet the Federal Reserve regulatory requirements and make different business decisions.

The fully managed 2nd Watch Risk Modeling solution provides security logs by Alert Logic, orchestration by Cycle Computing and scalable infrastructure by AWS. 2nd Watch is also supporting additional workloads for the company with similar solutions that require end of month, quarter, and annual reporting for its clients.



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The Business Benefits

The insurance firm is now able to run upwards of 120,000 cores while validating liquidity with no CAPEX investment. The company has gained weeks and months by leveraging the 2nd Watch batch computing solution. Additionally, the company has gained valuable agility to rerun the modeling application if it times out or there is an error, while still meeting regulatory and client-agreed upon timelines. The valuable gain in flexibility, security and elasticity from the new environment has saved the company from having to invest in additional datacenters or colocation facilities.