



Case Study



Royal Cyber Inc.
Individualized E-business Solution

» Client's Introduction

Creation of a Load/Performance testing bed which can be used on a quarterly basis to make sure the application can sustain heavy loads.

» Client's Background

The Office of the Comptroller of the Currency (OCC) charters, regulates, and supervises all national banks. It also supervises the federal branches and agencies of foreign banks. Headquartered in Washington, D.C., the OCC has four district offices plus an office in London to supervise the international activities of national banks.

In regulating national banks, the OCC has the power to:

- ✚ **Examine the banks.**
- ✚ **Approve or deny applications for new charters, branches, capital, or other changes in corporate or banking structure.**
- ✚ **Take supervisory actions against banks that do not comply with laws and regulations or that otherwise engage in unsound banking practices. The agency can remove officers and directors, negotiate agreements to change banking practices, and issue cease and desist orders as well as civil money penalties.**
- ✚ **Issue rules and regulations governing bank investments, lending, and other practices.**

» Solutions

A successful simulation of the actual workload was performed and key methods and areas of code were figured out where fine tuning needed to be done in order to remove the bottlenecks and improve the overall performance of the application.

» Business Case

In order to implement the business processes successfully for the OCC day to day operations, managers and strategists need to request resources from different banks and create different projects and tasks on which they can deploy the requested resources for creation and implementation of policies. An interesting fact, of the above defined activities each of them have high load at different periods of times of the year hence making the load testing difficult. Because of this difficulty in measuring the load on the application's different functions, strategists were facing a lot of performance related issues and weren't able to directly find the root-cause of the performance bottlenecks.

» Solution

Rational Performance Tester was used in order to simulate the load variation per quarter. The main tasks performed were:

- Installation
- Configuration
- Setting up of test bed i.e. creation of different schedules and tests, pertaining to different policies which will be implemented in different quarters of the year
- Provision of expertise in implementation of test scripts in RPT. (Note: There were 12 major scenarios which were to be implemented in RPT for load testing, using a total load of 60 banks and 216000 records manipulation)
- Major technical issues included the inconsistent behavior of the application initially, which turned out to be because of some authentication issues at the application security level