



OPCITO TECHNOLOGIES

Accelerated data exchange and authentication using ReactJS and JWT

About The Customer

The customer is a leading business and data analytics service provider. These services enable businesses to understand various business operations, customer needs, and future requirements and help them build online reputation and reviews.

Business Challenge

The customer's application can be divided into the UI and API parts. The UI part uses Rails, a server-side web application framework written in Ruby, which communicates with the API side through a communication layer and uses a system with a basic authentication layer with an additional layer for security. The existing system with the additional checks resulted in increased time to process the request by end-user through the API as the requests and responses had to pass through the additional checks, and the Ruby interface was slowing the performance. As a result, any update or change to the existing system was tiresome for the development team because of the additional layer. This was impacting the setup and development time.

How Opcito Helped

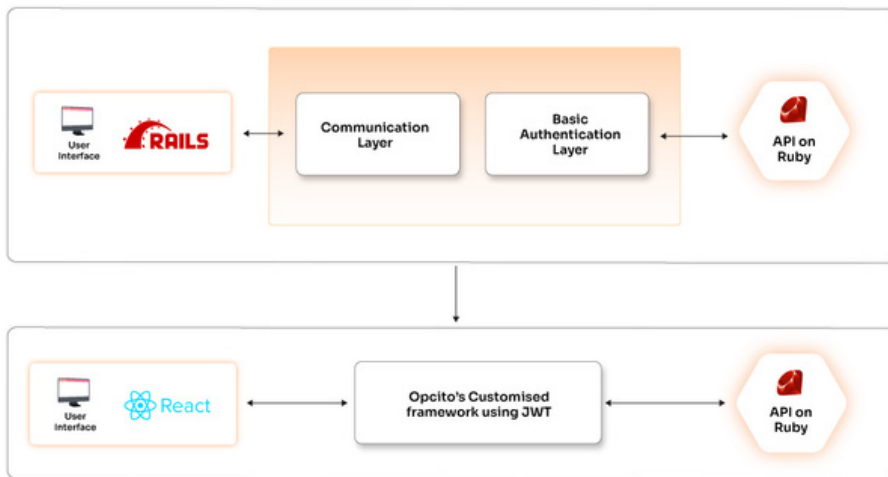
After carefully studying the existing system with rails, Opcito suggested an alternative solution using a customized framework in ReactJS to replace the rails interface. Opcito development team decided to leverage React's JavaScript library for building user interfaces that replaced the Rails framework so that the components and customized services written for each component are reused, and communication is done directly with the API through the services. Plus, React has a virtual DOM for every DOM object. And making changes to virtual DOM takes much less time than actual DOM. This helped increase the code modularity, and a single change can be reflected by modifying the respective part of the code instead of making changes throughout the framework. In addition, the Opcito team re-architected the communication framework using JWT authentication, which replaced the basic authentication layer. This approach reduced response and loading time as the UI is now directly communicating with API instead of communicating with the communication layer, which shortened the development cycle.



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Technologies, Tools, and Platforms used

REACTJS

JSON WEB TOKEN

Benefits

TIME SAVING	Reduced response time from 15 seconds to 3 seconds and shortened the development cycle
UI	Improved the user experience
SECURITY	Enhanced the security with JWT framework
SPEED	Improved release/delivery and loading time.

About Opcito

At Opcito, we believe in designing transformational solutions for our customers, start-ups, and enterprises, with our ability to unify quality, reliability, and cost-effectiveness at any scale. Our core work culture focuses on adding material value to your products by leveraging best practices in DevOps, like continuous integration, continuous delivery, and automation, coupled with disruptive technologies like containers, serverless computing, and microservice-based architectures. We also believe in high standards for quality with a zero-bug policy and zero downtime deployment approach.