ALTOROS™

Insurance   Front-End Development   Replatforming

Enabling Feature-Wise Migration of Insurance Apps with Zero Downtime

A service provider for the insurance industry turned to Altoros to facilitate the enablement of end-user deployments on the new technology stack, while the core team could focus on research and development.

1,000 +
supported deployments

520
insurance enterprises

100+
ecosystem products

The Customer

Based in the USA, the company assists global P&C insurers in digitization and business automation. The provider has a suite of products covering everything from claims to analytics. The provider is widely recognized in the industry with multiple awards by Gartner and Forrester.

The Need

The company is heavily investing in innovating its products and developing proprietary frameworks that underlie end-user implementations. This way, 1,000+ deployments across 520+ insurance organizations have to be maintained and updated on a regular basis. Consolidating all the efforts around upgrading and supporting existing implementations would eventually slow down innovation crucial to the competitive edge.

As major proprietary frameworks were rewritten from older versions of Angular to React, the provider relied on front-end development expertise at Altoros to facilitate replatforming initiatives for the clientele (insurance companies).

The Challenges

Under the project, the team at Altoros had to address the following issues:

- As long as the suite of products utilized proprietary technologies, extensive training and subsequent examination were obligatory;
- For the sake of uninterrupted operations and user experience, it was important to ensure feature- and performance-wise migration to React;
- Insurance deals with sensitive data, so security was of high priority;
- It was also crucial to prevent any data loss, duplicates, etc., during replatforming.

The Solution

Stage 1. Prior to working on real-life tasks, front-end engineers at Altoros completed month-long training required by the customer. The developers gained experience with a metadata- driven UI framework and a custom API, as well as successfully passed the examination.

Stage 2. Then, the team at Altoros was assigned to assist two major players on the Canadian insurance market in system migration and customization on React.The engineers started off with building an insured-facing account (personal data, profile and password management). Developers at Altoros delivered a bunch of multipage web forms responsible for authorization, the creation / processing of an insurance application / claim, documentation, etc. The web forms had intricate business logic, as different output was required depending on the data submitted by an insured.

Stage 3. For the sake of a feature-wise migration, the team abided by the acceptance criteria in place. To optimize performance, the engineers applied memoization, rewrote HTML functions into CSS styles, as well as terminated invalid requests and empty responses.

Stage 4. The developers configured the proprietary framework to execute different data validation scenarios, encrypted requests to the back end, and added methods that blocked users from unauthorized actions. The team also performed regular code reviews and collaborated with in-house back-end engineers to fix bugs. This helped to both strengthen security and prevent data loss.

The Outcome

In partnership with Altoros, the customer migrated existing product deployments—utilized by leading insurance companies—to a new technology stack, ensuring resilience and keeping up with front-end trends. In the meantime, the in-house team was able to focus on innovation and further development of the core proprietary frameworks. The delivered security measures, performance optimizations, and data validation techniques ensured the deployments are in line with the industry regulations.

Brief results of the collaboration

- The customer migrated existing deployments of its products—used by major insurance providers—to a new React-based stack. This move favored system resilience, timely modernization, and alignment with the trends in front-end development.

- The in-house engineering team was able to invest their efforts into innovation and evolution of core proprietary technologies, products, and services. This helped the organization to cultivate its competitive edge and maintain leading positions on the market.

- Thanks to the performance optimizations and feature-wise migration, the company ensured zero downtime for customer-facing apps.

- The delivered security measures and data validation ensured that the systems remained compliant with industry requirements.

Technology stack

Programming languages	Java, JavaScript
Frameworks and tools	React, Angular, Proprietary toolkit (under NDA), JSON5, CSS

Java   JS   React   Angular