SOFTWARE Isomorphic[™]

The most advanced technology for building RIA applications

Sofico case study



Achieving technological leadership by building configurable Rich Internet Applications for automotive financing, leasing & fleet management on Isomorphic's SmartClient platform.

"Our customers' change cycle is usually 10-30 years for a solution like ours. They need a serious partner that will support them, and remain relevant for a long time to come with state-of-the-art technology."

Walter Maes, Development Manager, Sofico

Selecting Technology for Tomorrow

Sofico (http://www.sofico.be), founded in 1988, has global offices and is based in Belgium. With its Miles product line, Sofico is the leading automotive leasing, financing, and fleet and mobility management software provider. In 2011, when Miles' Graphical User Interface technology (Powerbuilder based) started to show typical signs of aging (lack of usability and configurability, decreased platform compliancy & support), Sofico decided it was time to take a leap forward to the latest technologies.

For Sofico's customers, investing in new software is a huge commitment made for the long haul. Sofico therefore aims to be a long-term partner for its customers. Success depends on selecting the best technologies on which to build Miles – not just for today – but for decades to come.

Extensive research by Sofico architects, followed by a successful Proof of Concept identified Smart GWT (Google Web Toolkit) - developed by Isomorphic Software - as the optimal technology for creating the next Miles User Interface. Key decision factors were: The breadth and depth of configurable UI components; a Java & HTML5/Ajax based technology; a proven enterprise scale architecture (e.g. ability to eliminate redundant server round trips); and a fully i18n-compliant solution.

Isomorphic Software – a private, profitable company - has a long history of making the right technology and architecture decisions. The platform includes comprehensive documentation, Isomorphic consultants are knowledgeable and professional, and there is a very capable support organization that ensures any bugs or technical issues are addressed aggressively. This provided Sofico confidence that Isomorphic would be a sustainable, long-term partner.

Leveraging Mature, Proven Architecture

The current Powerbuilder based Miles Rich Desktop Application is installed on users' desktops. Despite being an aging technology, this has obvious performance and interactivity benefits. The next generation - Miles RIA - would have to perform just as fast whilst providing a smarter, more productive user experience through configurable and context sensitive screens and flows.

Challenge

- Become undisputed technology leader with a sophisticated, customizable & internationalized Rich Internet Application
- Deliver configurable interface with a user centric experience
- Browser & device independence, without plugins
- No disruption to existing JEE server-side architecture

Solution

- Rebuild the legacy Miles Rich Desktop Application leveraging Java & HTML5/Ajax based user interface technology
- Include UI configurability in the Miles application

Why SmartClient?

- Flexible architecture with a zero-install Ajax/HTML5 Client engine
- Feature rich, with the industry's largest array of highly configurable widgets and components
- Mature solution, tuned for enterprise applications
- Leverage available cross-browser application-oriented APIs

Results

- Clear technological leadership in the market
- Highly interactive UI
- Customizable screens and business processes
 working across browsers
- Clear market dominance



Miles RIA delivers on usability & configurability

A layer of complexity came through Sofico's phased approach to this project. They did not want to disrupt the existing JEE server architecture and RDA workflows as they needed to support the legacy RDA while moving to the next generation Miles RIA. Since Smart GWT handles much of the processing on the client side, the architecture was very well suited to Sofico's phased approach. Data-intensive applications are not an issue as Smart GWT can load data on-demand and perform most common operations such as sorting and filtering client-side within the browser. In addition, data aware components re-use cached data, ensuring optimal performance.

Smart GWT also makes integration with complex data types and structures possible with its data bound components, and complex data relationships are easy to manage. Out of the box, Smart GWT provided critical components and functionality for Miles RIA: Multi-column dropdown lists, grid filtering on multiple attributes, search result pagination and more. This allowed Sofico Developers to very quickly create a streamlined user experience targeted at helping fleet managers process vehicles efficiently. On the few occasions where Sofico Developers needed features not already in Smart GWT, the features were added quickly via Isomorphic's Feature Sponsorship Program.

Ultimately, the new user experience of Miles RIA was well received. Some Sofico customers were keen to put Miles RIA in production before all Miles modules were available in Miles RIA. Sofico supplied a hybrid solution, where Miles RDA and Miles RIA work seamlessly together. The user logs in once and depending on the accessed object Miles opens the appropriate RIA or RDA screen.

Providing power without compromise

While the requirements of Sofico's customers overlap considerably, each implementation involves at least 20% custom configuration and unique functionality to completely meet their customer's business needs. Sofico wanted to make this configuration as easy as possible, and Smart GWT was able to deliver.

There are many UI elements (e.g. flexible grids with spreadsheet-like behavior) available in SmartClient. These make it possible to quickly build or edit highly interactive screens containing complex widgets and business logic to fulfill even the most demanding requirements.

Within Miles, Sofico customers can now easily configure things like screen layout, which fields appear, their position and tab sequence, edit info bubbles and multi-column dropdowns, and add dynamic attributes.

Thanks to Smart GWT, Sofico was also able to meet another key objective of the technology overhaul: Cross- browser compliance. Application-oriented APIs give Smart GWT the flexibility to internally use the optimal approach for each browser.

This meant that Sofico did not need to introduce any costly hacks or workarounds to have Miles RIA function properly and consistently in Internet Explorer, Chrome, Firefox, or any other commonly used browser.

As a result, Sofico now feels that from a technological standpoint, they are far ahead of the competition.

Visit http://smartclient.com/product/showcase.jsp to see how others leveraged the SmartClient platform.



Learn More at www.SmartClient.com



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