



“If ULC hadn’t already existed, we would have had to program it ourselves.”

Claudio Hintermann, CEO Abacus Research

The Swiss software house Abacus Research has thoroughly redeveloped its ERP system using Canoo Engineering’s RIA Framework, UltraLightClient (ULC), making it fit for operation over the internet.

■ Each month over 35,000 Swiss companies generate around 700,000 payslips and run about 170,000 accounts using Abacus’ ERP software. This makes the eastern Swiss business the undisputed market leader in business management software for small and medium sized organizations. Everything started in 1984. Back then Claudio Hintermann and Eliano Ramelli developed the first version of a financial package. A few months later Abacus was established, and in subsequent years software was developed into a complete ERP solution. The business now employs around 200 staff, three quarters of whom work in development and support.

As an organization that always keeps its eye on customer needs, Abacus realized early that the trend in ERP systems was towards web based applications. No wonder, as such internet based solutions provide business users with a great range of important benefits. For instance, time consuming client-side implementation is normally unnecessary – branch locations are simply connected, while maintenance costs are substantially reduced due to the centralized installation.

Abacus decided to dress its ERP system in a modern internet outfit and to distribute it in the form of a Rich Internet Application (RIA). In the process, it evaluated a number of web technologies. All Ajax based frameworks were out of the running quite quickly according to Claudio Hintermann, Abacus CEO: “It soon became clear that these did not meet our requirements, since Ajax demands very high bandwidth as well as using various programming languages, which in the case of powerful applica-

tions such as ours would inevitably lead to higher complexity.”

ULC immediately impressed

Abacus sought an RIA toolkit with a unified programming model that would safeguard their investment in the long term and keep maintenance costs down – criteria that only Java based solutions could meet. At first Abacus decided in favour of an RIA system from an American producer. However it was quickly established, according to Hintermann, that it would not support the implementation of the required functionality. Thanks to the recommendation of a staff member they finally hit upon UltraLightClient (ULC), the core of the RIA Suite from the Basel based company Canoo Engineering. The concept won them over immediately, as Hintermann added: “It was obvious straightaway that ULC is optimized to business application requirements and that it clearly distinguishes itself from the

ULC in Abacus in brief:

The challenge: Abacus was looking for a web technology to make its ERP system internet-ready. The requirements included a unified programming model as well as simple maintenance for the application to be developed.

The solution: Abacus comprehensively redesigned its ERP system using Canoo Engineering’s ULC and today provides it in the form of an RIA. Thanks to server side programming as well as ULC’s uniform Java basis it was possible to implement the project with a minimum of complexity.

“Thanks to the totally homogeneous programming model, ULC requires less complexity and thus the application source code is easily maintained and enhanced.”

other available RIA toolkits.”

An unbeatable argument for Hintermann is that ULC is based exclusively on Java: “With its totally homogeneous programming model the technology requires less complexity and thus the application source code is easily maintained and enhanced. Furthermore developers can work significantly more efficiently with Java as the only programming language.” An additional great ULC benefit for Hintermann is the purely server-sided programming: “This reduces development effort, thus leading to time savings and furthermore has the advantage that updates and enhancements can be realized far more rapidly than using architectures with distributed code.”

A mammoth task

Over a period of about three years Abacus thoroughly redeveloped its entire ERP system with the aid of ULC – a mammoth task which, thanks to ULC, was accomplished rapidly. Right on time for the company’s 25th anniversary in the spring of 2010 Abacus presented the latest generation of its business software, bearing the name Abacus vi, where “vi” stands for “version internet”.

Abacus vi provides all the functions available in the previous version of the program, but offers a decisive advantage: the software can be run location-independently on any computer with an internet connection. This relieves business users of laborious client deployments, while updates can be centrally imported – quickly and without complication.

Whether using Windows, Mac or Linux machines – users always have a free choice of workstation thanks to ULC. And the ERP application feels like a locally installed program. It possesses a highly interactive user interface and invariably responds without visible delays. This is made possible using the lazy downloading provided by ULC. In other words the only data transferred on the network is the user’s currently required data. This reduces data traffic to a minimum and Abacus vi runs smoothly and efficiently on high load networks and low performance computers.

Benefits of ULC at a glance

- up to 50% reductions in development costs
- provides business functionality on the web without tradeoffs
- reduced operational costs thanks to server-side maintenance and unified technology
- maximum security thanks to standard conformity
- simple and rapid development thanks to uniform Java basis
- robust and scalable architecture
- no need for laborious client deployment
- enables highly interactive and user friendly interfaces
- no need for browser adaptation
- optimal user productivity due to rapid response times
- reduced project risk thanks to mature and proven technology
- rapid and impressive prototypes

ULC enables SaaS offers

As RIAs, business software can be operated today not just conventionally in an enterprise network or on single platforms, but also in an SaaS (software as a service) model. This means that ERP software is provided by external Abacus partners based on powerful infrastructures for a usage dependent fee to customer organizations via online access. This allows users to save infrastructure, operational and licence costs.

Hintermann is convinced that Abacus vi’s capability to provide such a range of functionality and an all-out user-oriented interface has been made possible only by ULC. As he summarizes in conclusion: “If ULC had not existed we would have had to program it ourselves.”

Contact

Canoo Engineering AG
Kirschgartenstrasse 5
4051 Basel
Switzerland
+41 61 228 94 44
info@canoo.com