x-trade® Powered by VA Smalltalk™

Based in Kaiserslautern, Germany, maxess systemhaus gmbh was founded in 1995 and provides a comprehensive IT solution set for managing retail operations. One key component of this solution set is the merchandise management system x-trade, which supports and controls all inventory-related planning, logistics and accounting tasks of a retail company based on its value- and quantity-related inventory flow data. The x-trade Enterprise Resource Planning (ERP) system is designed to minimize costs through efficient but flexible processing of business tasks and activities. It is written 100% in the VA Smalltalk integrated development environment (IDE).

VA Smalltalk enables software developers to create highly portable, scalable, multi-tier business applications using object-oriented technology. Its applications fit easily into existing infrastructures and support the latest web application, database and operating system technologies.

VA Smalltalk: The Clear Choice

“Our primary goal was to develop a completely object-oriented ERP-System that would be flexible and easy to maintain” explains Florian Bernauer, CEO, maxess systemhaus. “Smalltalk was the language of choice as it incorporated all principles of object-orientation and was much more stable than the alternatives. This has proven to be a good choice.”

Bernauer continues, “VA Smalltalk provides an easy-to-use Smalltalk IDE, plus strong support of relational databases (especially IBM® DB2). We process a very large volume of data for retail operations, and VA Smalltalk’s memory management with automated garbage collection was a very attractive buying feature for us.”

“The first proof-of-concept prototype showed great stability and performance, and this is still a main advantage of VA Smalltalk,” offers Bernauer. “Another early issue was that we had to build up a completely new team of developers, most of them with little or no professional experience. VA Smalltalk was easy to learn and allowed high productivity after a comparatively short training phase.”

VA Smalltalk: In the Critical Path

maxess customers like coop eG, and cooperation partners of EDEKA and REWE, have recognized significant reductions in data administration costs using the x-trade system to maximize interconnectivity and processing efficiencies.
Robust and scalable, each x-trade system implementation is used by up to 200 users at one time, connecting up to 750 branches and 3,500 suppliers, and managing as many as 200,000 articles. Some grocery retail customers handle as much as 2 billion Euros (USD 2.9 billion) in annual business using the VA Smalltalk-based x-trade system.

**Flexibility and Quality Are Key to Customer Retention**

maxess guarantees to its customers that every single code change within the application will be present in all future releases of x-trade—without additional cost.

“We would not be able to make this promise, if we did not have a versioning system as powerful as ENVY in VA Smalltalk,” says Werner Schirp, Head of Software Development. “Many client change requests are extremely urgent. With the versioning and configuration map management available in VA Smalltalk, we are able to deliver even complex changes within days, sometimes even within hours.”

“The fully integrated and intuitive version management provided by ENVY within VA Smalltalk has an immeasurable impact on the quality of the software we deliver.”

*Werner Schirp, Head of Software Development, maxess systemhaus gmbh*

Schirp continues, “Smalltalk code is extremely straightforward to maintain, as it is easy to read and allows good encapsulation of reusable algorithms. Therefore the number of bugs remains low, even when the time pressure is high.”

“We also find the flexible layout capability of VA Smalltalk’s reports extremely useful,” says Schirp. “With the reports completely written in Smalltalk, report layouts can easily be adapted to specific data. Even the most complex client specifications have been met without technical limitations.”

**Easy Maintenance Provides Ongoing Value**

maxess also makes use of many features offered by Server Smalltalk (SST). A big part of the x-trade system runs in headless images on application servers. Schirp indicates that, “With VA Smalltalk, we manage to keep the code base for server and client applications identical, which makes maintenance a lot easier.”

**High Productivity: ROI for VA Smalltalk**

maxess offers the whole range of ERP server functionality as Web Services to allow their customers an easy integration into a server-oriented architecture.

“With the Web Services support offered by VA Smalltalk, the transition from methods to services was a question of days rather than months,” says Bernauer.

Seaside support in VA Smalltalk has also provided early productivity gains. Bernauer explains, “Our first Seaside Web Client is already under development and the first prototype received great feedback from our customers. With the complex business logic that we have developed during the last decade, it is a big advantage that we can immediately address the same code from the Web Client without modification or re-coding.”

**Instantiations® and VA Smalltalk**

VA Smalltalk, which is 100% compatible with IBM VisualAge® Smalltalk, has thousands of active users worldwide. Instantiations continues to advance VA Smalltalk with active product engineering, ongoing research and development, and expert Professional Services and Technical Support. For more information on Instantiations’ VA Smalltalk product line, visit http://www.instantiations.com/VAST.