

Retail Decisions Embeds Systinet Server for a Secure SOA Infrastructure with Fraud Detection

Industry: Financial Services

Products Used

- ▶ Systinet Server for C++
- ▶ ReD LiveProcessor™

Challenge

Retail Decisions' products are used to predict and prevent payment card fraud and process high volumes of electronic check transactions. As market conditions change—regulatory compliance, new on-line processes and subsequent necessary updates to security against fraud—so do the demands made by customers and prospects.

Retail Decisions (ReD) recognized that incorporating Web services functionality in LiveProcessor™, ReD's electronic payment processing solution, would provide clients with a "no code," standards-compliant mechanism for quickly integrating with other systems. LiveProcessor accepts orders, provides security for proprietary transaction information, completes credit card or electronic check authorization in multiple currencies and settles the transaction—all in real-time. The software offers flexible APIs for integration with 3rd-party payment and billing applications.

Existing customers and new prospects were already asking ReD to add Web services support into LiveProcessor and other products. ReD was challenged with finding a Web services enablement solution that supported stringent security requirements and interacted seamlessly with Microsoft .NET while having no impact on its high-volume transaction processing times.

Results

After careful evaluation of all options, including open source software, Retail Decisions selected Systinet Server. They chose Systinet Server because it was the only commercial product that provided native C++ support, offered the necessary security infrastructure and could seamlessly interoperate with .NET and other SOAP implementations.



The Retail Decisions Group (ReD) is an international electronic payment transaction services business that provides fraud prevention and enterprise-wide payment processing to the retail, finance, telecommunications and e-commerce sectors.

With installations at companies such as Bloomingdale's, Macy's, Tesco, Wal-Mart, Texaco, Shell, Asda, Comet, Travelocity, T-Mobile and Virgin Mobile, ReD LiveProcessor completes an estimated 32 transactions per second; 24/7, 365 days per year. The company currently protects over 50,000 points of sale globally. In 2004 it saved its clients £200 million in card fraud worldwide.

Systinet Server was over two times faster than other products and provided full support for the hardware/software accelerators and security systems ReD used. ReD also felt that Systinet was a partner that could provide ongoing support for emerging Web services standards, especially regarding security.

Systinet Server was embedded into LiveProcessor to provide all of its Web services functionality.

“[Systinet Server] makes LiveProcessor even easier to use and allows merchants to quickly see a return on their investment, particularly as we can integrate with Microsoft .NET technology. We selected Systinet because we believe that their proven technology will help maximize the functionality of our premiere payment engine.”

—Carl Clump, CEO, Retail Decisions

Embedding Web Services Into ReD LiveProcessor

When Retail Decisions embarked on the project of providing Web services APIs for its LiveProcessor payment processing solution,

a few unique challenges surfaced: to support stringent security; retain transaction performance; and provide seamless interoperability with other Web services implementations such as Microsoft .NET.

Designed to run within the client's data center or payment processing infrastructure, LiveProcessor provides a single, unified payment processing gateway that supports Visa, MasterCard and American Express protocols, as well as electronic check processing, foreign currency settlement and multiple bank interfaces.

“LiveProcessor is a payment solution allowing merchants, such as e-tailers or traditional brick and mortar retailers, to process credit card or check payments in real-time,” said Matt Wixson, CTO at Retail Decisions. “The LiveProcessor server software is installed on a Unix (Linux, HP-UX, Sun Solaris, or IBM AIX) host, at the merchant site and includes APIs and interfaces needed to connect to the host. The APIs and interfaces bundled with LiveProcessor allow the server to accept and process payments from a wider range of operating systems and platforms, including Windows and mainframes. Although APIs remain a viable option for payment processing, there is increased support for XML in the back office, where enterprise applications need to interface with LiveProcessor. We needed to introduce a Web services interface to facilitate integration with these back office applications.”

Systinet Server Selected

After careful evaluation of all products and vendors, Retail Decisions selected Systinet Server for the following reasons:

- ▶ **Embedding Web Services Support**—Systinet offered a mature, commercial Web services platform for C/ C++. Systinet Server for C++ provides native platform support for Solaris, HP/UX, Windows, Linux and other operating environments—all the systems ReD supported. It could also be deployed standalone, or as a server-side extension within a Web server. A comprehensive porting guide made it easy for ReD to configure the environment to suit specific requirements.
- ▶ **Superior Performance**—In independent tests, ReD determined that Systinet Server provided the best performance and scalability of any solution they considered. Systinet Server for C/C++ was over two times faster than any other product. Systinet Server also showed near-linear scalability as the number for concurrent users increased, a key criterion for ReD.
- ▶ **Seamless Interoperability**—Systinet had worked directly with Microsoft to ensure Systinet Server provided seamless interoperability with .NET. Systinet's active involvement with the Web Services Interoperability (WS-I) consortium and with SOAPBuilders showed the company's ongoing commitment to maintaining excellent interoperability with other SOAP solutions.
- ▶ **Easy to Embed & Customize**—Systinet Server's modularity and open APIs made it very easy for ReD to embed Web services support into LiveProcessor.
- ▶ **A Proven Solution**—Venture backed by investors Warburg Pincus, Systinet had numerous reference accounts and case studies, including market-leading ISVs. ReD felt that Systinet was a well-managed company that could provide the ongoing advice and counsel they needed in a partner.
- ▶ **Flexible Business Terms**—Using Systinet Server was very cost-effective and Systinet's approach to licensing Systinet Server for ISVs matched ReD's commercial model well.
- ▶ **OEM Partner Program**—Systinet offered a dedicated, tiered partner program designed to offer integrated support, product assurance, technical and marketing assistance.

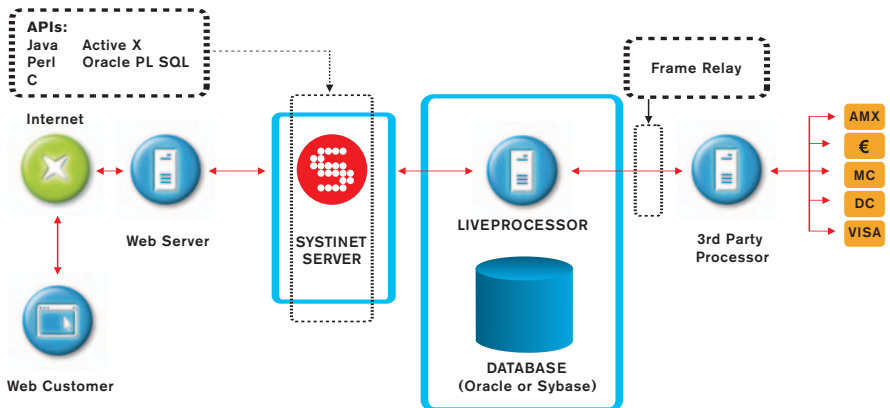


Figure 1: Retail Decisions' LiveProcessor is a payment processing gateway that uses Systinet Server for a secure SOA infrastructure.

During the evaluation period, ReD performed testing in the following areas:

- ▶ Support for all ReD XML data types and messages
- ▶ HTTPS (Open SSL) support with both client and server certificate validation
- ▶ Performance benchmarking
- ▶ Scalability testing with concurrent connections

Business Results & Benefits

Retail Decisions reported excellent results from using Systinet Server. Systinet was "very responsive to our support requests during evaluation and design-in and that has continued after we launched LiveProcessor," reported Diep Nguyen, Project Leader, ReD. "We also like that Systinet has listened carefully to our future requirements and has incorporated our requests in product development plans."

Systinet Server allowed ReD to get to market quickly with a mature, standards-compliant solution. The task of ongoing standards support was effectively 'outsourced' to Systinet.

About Systinet

Systinet provides the leading foundation for SOA governance and lifecycle management. Founded in 2000, Systinet's award-winning, proven and standards-based products enable IT organizations to rapidly leverage existing technology investments, provide interoperability between heterogeneous systems and better align business processes with IT. Customers receive the benefits of a simpler, faster, standards-based way to dramatically improve IT responsiveness and technology asset reuse, while maximizing the ROI for SOA. Systinet's customer base of over 150 Global 2000 clients includes Amazon.com, BMC Software, Interwoven, JP Morgan, Motorola, Defense Information Systems Agency (DISA) and SAIC. Headquartered in Burlington, MA, Systinet is a privately held company with over 100 employees.

To find out how Systinet can help your business, visit <http://www.systinet.com>, call **1.781.362.1300**, or email us at sales@systinet.com.

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