



Gateway Enhancement for Large Acquiring Processor

Adapting to the pace of innovation

An acquirer processor providing an integrated suite of payment applications and systems for merchants to manage commerce in diverse environments was facing challenges in managing disparate acquiring systems working in silos, and needed a system upgrade to meet the deadline for EMV compliance.

Apart from the urgency to meet EMV mandate deadlines, the processor needed to provide merchants with the latest technology services in order to stay ahead in the highly competitive payment acquiring business. The organization wanted to enhance their front end processor, payment gateway, virtual terminal applications, SDKs, and simulated POS and middleware application for EMV compliance, as well as initiate other feature upgrades and integration with multiple back end processors for smoother business operations.

Solution Highlights

The payment gateway and other applications for acquiring side payment processing were enhanced to handle the chip transactions sent to the various back end payment processors, which included message formatting, communication interface and transaction processing workflow for three of the top ten US based acquiring processors as well as the acquirer's own processing system. Since transactions were sent to different processors and networks, business and technical analysis was done for change implementation maintaining the existing system architecture and code design, interface and message specifications for the back end processors to be supported for both authorization and batch settlement processing. Based on the business and technical analysis, a roadmap was created for optimally implementing the changes and meeting project time, cost, quality and compliance objectives.

The virtual terminal and its Windows application were enhanced to support contact and contactless chip transactions for all major card networks – Visa, MasterCard, Discover and AMEX. A semi-integrated solution was developed to reduce the liability of merchant EMV compliance. The solution established the communication between the POS devices and virtual terminal. The project required extensive collaboration with different external parties for gathering the requirements of the different systems and applications. Agile project management practice combined with effective project governance helped manage and implement dynamic business requirements for the varied components and their interfaces.

Value Delivered

The customer was able to meet the EMV compliance deadline enhancing their front end processor, gateway, virtual terminal and other components for chip enablement. The semi-integrated solution that was developed reduced certification testing time and effort at the merchant end. RS Software's experience managing payment gateways and switches for acquirers as well as card schemes that endowed deep knowledge in message formats and interface specifications, exception management, security, performance and scalability factors, certification needs, et al. helped the customer meet the stringent time and quality goals of the project.

A framework developed for testing the payment gateway using SOAP UI expedited the customer's payment gateway testing timeframe and reduced testing effort by 80%. The vast domain knowledge curated over the years helped RS Software optimize the implementation roadmap for business scenarios and message types for all the target back-end processors and networks, nullifying the acquirer's SME involvement.

About RS Software

RS Software is a leader in providing vertically integrated solutions for highly complex, mission-critical payments environments. Today the company serves a client list that includes leading global payment brands within the electronic payments ecosystem including acquirers, issuers, payment networks, and other financial institutions. RS Software's exclusive focus on the payment industry forms the basis for its proprietary processes and methodologies that improves time to market for its clients. The company's global delivery model and knowledge transfer disciplines ensure that its cross-culture experience enables maximum value to the customer from start to finish.