Case Study
www.levi9.com

PKI – Remote Security Platform

Business Benefits Delivered

Reduction of the time to market

- Using our proven development process we were able to deliver the desired quality application on time

Infrastructure and technology platform expertise

- Levi9 Development Team has had the expertise the customer needed and was not able to find elsewhere.
- Controlled research environment was set up to support the development process

Cost savings

- The whole project has been developed and implemented in one of the Levi9 Nearshore Development Centers
- Use of a collaboration platform for Project Management and document exchange saved the communication and travel costs

Customer Satifation

- Above mentioned benefits delivered resulted in customer satisfaction.

The Client

Our client is specialized in the development of easy to use, but highly trusted security solutions for e-business environments. With her products it caters governmental, financial, healthcare and retail market segments as well as medium and small enterprises, nationally and internationally.

The clients' team has expertise in many diverse fields including Internet infrastructure, Internet security, penetration testing, security audits, training, network security, development of security policies and implementing Public Key Infrastructures (PKI's). Being one of the first involved in the deployment and operational management of PKI infrastructures our client is one of the most experienced in this field.

Business Challenges

Customers experiences in the PKI domain combined with the focus on the development of an easy to use, but highly trusted security products resulted in the development of a Remote Security Platform (RSP). With RSP our client offers a stepping-stone and a migration path to future structured PKI's, while enabling companies to provide multiple levels of authentication power to match the required verification needs and to provide top quality identification and authentication services today.

RSP had to be developed following strict requirements set by the innovation team resulting from market demands:

- ease of use for end-user
- independent of end-user discipline
- cost-effective
- low impact on organization and infrastructure
- open- and standards based, compatible with existing infrastructures
- migration path to qualified certificates

Solution

To meet the clients requirements and build a platform independent solution, ANSI C was chosen for programming language. Almost all platforms, namely Linux, Sun Solaris, HP UX, IBM AIX support ANSI C. Only the libraries containing no-proprietary code were used, to minimize the portability issues. The solution required proprietary protocol to be developed. Levi9 was actively involved in this project from the analysis through design, development and research, implementation and production support. The project was split into several phases:

Proof of Concept

The POC required building a working server fulfilling the main functionalities and a Windows based client prototype. The client was build in C++. The Client has used the POC application as demo during the sales pitches.

Core System Development

During this phase the Windows client was further enhanced. To meet the scalability and reliability requirements as well as future functional and performance requirements, the platform was spilt into following services:

- Key Generation Service
- Certificate Assembly Service
- Persistence Service
- Main Orchestration Service

To meet the requirement for database independent solution, DB Abstract Layer was developed for the implementation of the Persistence Service.

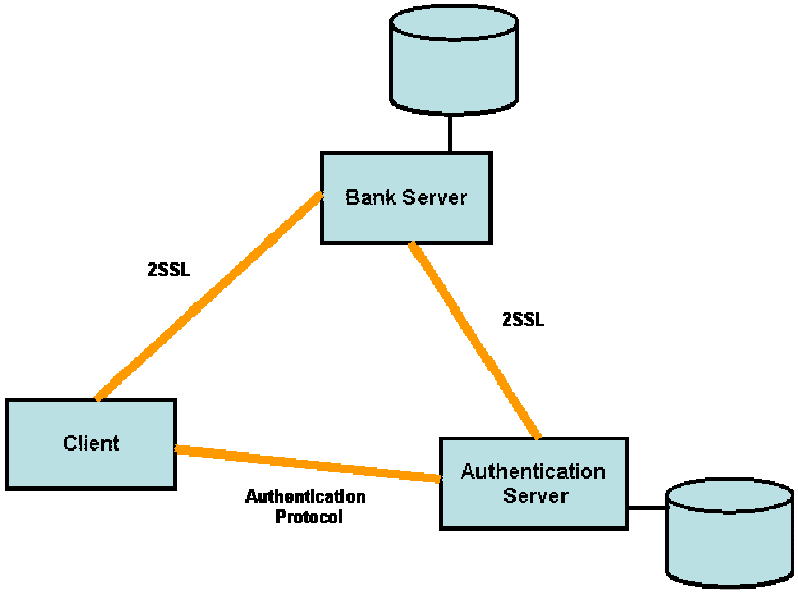
Usability Enhancements

Some end-user tasks had to be automated to meet the desired level of the system usability. During this phase Levi9 has performed research to see weather it was possible to intercept certain Windows OS native call (crypto API), to meet these requirements.

Porting to the HP Non Stop platform

The whole system is to be ported onto the HP Non Stop platform.

The first 3 phases are delivered and accepted by the customer. The 4th phase is currently underway. After the second phase, the product when into production. At that moment Levi9 took over the 3rd level maintenance activities.



Who we are

Levi9 Global Sourcing was founded in 2001 and has grown to a full blown IT group with offices with development centres in Hungary, Serbia and Romania and sales offices in Belgium, Germany, United Kingdom and the Netherlands.

Levi9 Global Sourcing is all about people and processes. The quality off our team members are the quality that we deliver.

The Levi9 Global Sourcing Near-shore Delivery Services model combines the quality, responsiveness and flexibility normally associated with domestic outsourcers with the cost-savings of an "offshore" development facility, located nearby in Eastern Europe, Nearby in terms of physical distance, languages, EU administration advantages and European culture.