

TSP Ardaco Calls on Entrust to Provide Remote Cloud-based QSCD Mobile Solution

Challenge

To meet the growing demand for document signing services with the highest trust level possible meeting the European legal standards, Ardaco was looking for a way to expand its QSign digital signing solution to let users electronically sign documents as a service without the need for smart cards or other similar less user-friendly hardware devices. Ardaco was also looking to ensure its QSign service is compliant with eIDAS, the EU regulation on electronic signatures, to facilitate the company's expansion plans in Europe.

Based in Slovakia and operating around the world, the company also wanted to expand the service beyond its existing users in the legal profession to new customers in the financial and telecommunications industries and the public sector.

Solution

Ardaco developed its QSign brand, a portfolio of products and services for the creation and validation of qualified electronic signatures. QSign covers client applications, web portal systems, and server systems for processing electronic documents signed with electronic signatures as well as securely converting between paper and electronic documents. Now, the new Ardaco QSign Mobile service offers a remote signing service using mobile phones. Ardaco also has become a Qualified Trust Service Provider (QTSP) to facilitate this launch.

To help improve its security and alignment with eIDAS, the solution leverages the Entrust Remote Qualified Signature Creation Devices (QSCDs) that include high-performance nShield® hardware security modules (HSMs) bundled with Entrust Signature Activation Modules (SAMs). As such, the solution from Entrust helps Ardaco to provide secure and legally binding¹ digital signatures in the EU without the need for signers to handle any certificate or hardware devices themselves.

This case study does not constitute legal advice. The legal status of electronic signatures may vary by jurisdiction. Questions related to the enforceability and admissibility of electronic signatures should be discussed with legal counsel.







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Results

The QSign Mobile service allows Ardaco to provide its customers with high assurance digital signing services that enable:

- Citizens to have simple and comfortable access to e-government services through connection with other Ardaco applications and services
- Lawyers and their employees to communicate with courts and government services electronically
- Banks to bring their clients an easy way to authorize their applications, accounts, and documents
- The simplification of the complicated logistics associated with securely signed documents
- A friendlier user experience for the signers by removing the need for them to handle special hardware for their signing credentials, thereby reducing the costs, time, and efforts required to use the solution.

PARTNER PROFILE

Ardaco is a software vendor company offering its own developed products and services in the field of information security. Its business is oriented to two major fields: communication security and document security. The company provides comprehensive and technologically advanced data and communication security solutions, which have gained credibility with government institutions and businesses worldwide.

Objectives

Ardaco implemented this enhancement to its QSign portfolio to:

- Offer an eIDAS-compliant solution for remote qualified signatures
- Expand its service to include mobile signing capabilities
- Penetrate new customer segments
- Scale its solutions to a larger number of customers
- Ensure compliant conversion of paper documents to electronic versions
- Become a Qualified Trust Service Provider (QTSP)

Technology

- Entrust Signature Activation Module
- Entrust nShield XC eIDAS HSM used



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Entrust provided prompt and excellent support, as well as clear product descriptions and the technical information we required. Additionally, the time required to integrate the products into our solution was several times shorter than other solutions we considered. The license and pricing conditions were clear from the beginning, with no additional increases for other components needed to implement a fully functional solution. The end result is the first solution in the region that enables organizations to authorize documents at scale in a way that is fast, easy, and safe. Thanks to Ardaco and Entrust, our services can bring ease of use and save money for our customers.

Tomas Kucharik, CEO, Ardaco

THE TRANSFORMATION

To help expand its remote signing service capabilities, Ardaco reviewed several solutions before selecting the Entrust Remote Qualified Signature Creation Device (QSCD), which is a combination of the Entrust Signature Activation Module (SAM), together with an Entrust nShield Hardware Security Module (HSM) to form an elDAS-compliant platform.

On the server side, the solution is deployed in a trusted data center environment, helping to meet security requirements. It consists of dedicated servers and QSCDs in a private cloud, architected to meet existing privacy and availability requirements, with scope for further scaling and expansion as needed. The client-side components are deployed via the users' mobile devices and the solution is configured to meet legal information security, privacy, and compliance requirements through auditing, authorization, and authentication.



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The Entrust advantage

In a remote signing deployment, the signatures are generated in a specific module called a Type 2 Qualified Signature Creation Device (QSCD). This version of an Entrust QSCD consists of one or more Entrust nShield HSMs bundled with one or more Entrust Signature Activation Modules (SAMs). The SAM is a security endpoint that receives the signer's authentication data, the signer's signing key, and the data to sign. Once it has verified and authorized all elements, the SAM "activates" the signature of the data with the HSM. The design of the Entrust SAM is based on the Trustworthy Systems Supporting Server Signing (TW4S) architecture described in the CEN EN 419 241 standards. The cryptographic module used with the Entrust SAM module is an Entrust nShield HSM that is Common Criteria EAL4+ certified. Additionally, Entrust has passed the Common Criteria EAL4+ evaluation for its SAM.

Through its professional team and solutions, Entrust helped Ardaco to bring this project to fruition by delivering:

- Deep expertise in public key infrastructure (PKI), digital signing, and HSM solutions
- A one-stop-shop for both the fully certified SAM and HSM, which together form the eIDAS Remote Qualified Signature Creation Device (QSCD)
- Global 24/7 customer support
- A global company presence 150+ countries with 2,500+ employees focused on enabling trusted identities, payments, and data protection





