Secure signing and sharing of electronic documents using Utimaco HSMs

The motivation: carrying out everyday transactions much faster and in a more secure way

EIUS is a trust service provider offering services for signing, sharing and validating electronic documents for all types of organizations and individuals – whether it be startup entrepreneurs, municipalities or large enterprises.

Imagine the following scenarios: A local administration office requests you to submit a form for your child entering school. Filling, signing and posting the form takes at least fifteen minutes of your precious time. Alternatively, imagine a situation when your apartment rental contract needs to be extended. In this scenario, you have to set some time aside to meet with the landlord in person to sign a renewed contract.

There are many similar situations where we spend substantial amount of time on activities that could be performed more quickly and reliably with the help of e-documents. Imagine you could carry out any transaction electronically and in a way that not only more secure than using traditional services, but also much faster!
The challenge: promote and increase trust in the use of e-documents

Currently, the use of e-documents inside a company is very common, but as soon as we cross the borders of organizations, legacy solutions based on paper and physical presence are the more common method. Thus, a large part of transactions requiring a higher level of trust, such as contract signing or exchange of sensitive information, is performed in a 19th century manner. From day one, it has been the goal of EIUS to change this. As a result of this drive, we came up with a secure, reliable and legally accepted solution that is challenging the old conventions.

The eIDAS Regulation allows us to perform transactions related to electronic signatures, qualified delivery and validation services in a secure, reliable and legally accepted manner. EIUS’ software solution has always been powerful, but there was a need for a reliable partner to build up a robust system that would give end-customers peace of mind. Securing critical documents and connections against the threat of malicious attacks or intrusion requires proven, multi-layer protection. We have chosen Utimaco to help us implement the most sensitive parts of our system – the storage, management and use of cryptographic key material.

The solution: The EIUS VEP.si for secure signing, verification & transfer of documents using a Utimaco HSM

Since EIUS was founded, we have securely delivered millions of electronic documents – judicial decisions, contracts and many others. We are continuously developing new services and have recently undergone the eIDAS certification process. In addition to this, our goal has always been to prioritize efficiency and provide agile solutions that cater to many different scenarios. We believe that EIUS VEP.si is a great representation of that.

EIUS VEP.si provides reliable solutions for signing, verifying and transferring documents seamlessly to any institution that requires identity and trust check.
Certificates for our qualified trust services are stored in FIPS-certified Hardware Security Modules (HSMs) manufactured by Utimaco. An HSM generates, stores and protects cryptographic keys as well as secures digital signatures and encrypts the contents to protect authenticity and privacy of the documents.

The implementation: a fast & straightforward integration of the Utimaco CryptoServer

Using the standard capabilities of the Utimaco CryptoServer Se Gen2, EIUS implemented qualified electronic timestamps and signatures as well as stamp validation services and a multi-platform signing tool. The implementation was fast and straightforward.

The CryptoServer Se Gen2 was integrated into existing EIUS applications relying on the JCA/JCE cryptographic framework by replacing the existing security provider with the Utimaco CryptoServer provider. Replacing the provider did not require any changes to the code base, thus the security of EIUS applications was significantly increased without any development effort.

About EIUS d.o.o.

EIUS d.o.o. is a leading Slovenian trust service provider of Qualified electronic registered delivery services and other eIDAS and electronic documents related trust services – timestamp services, e-Contracts and Qualified validation of electronic signatures and seals.

For more information, visit http://www.eius.si/

About Utimaco

Utimaco is a leading manufacturer of HSMs that provide the Root of Trust to all industries, from financial services and payment to the automotive industry, cloud services and the public sector. We keep cryptographic keys and digital identities safe to protect critical digital infrastructures and high value data assets. Our products enable innovation and support the creation of new business by helping to secure critical business data and transactions.

Founded in 1983, Utimaco HSMs today are deployed across more than 80 countries in more than 1,000 installations. Utimaco employs a total of 200 people, with sales offices in Germany, the US, the UK and Singapore.

For more information, visit https://hsm.utimaco.com