

Antwerp Port Authority

Secure Electronic Invoicing Solution



"We need a reliable partner to generate added value for our business and for our customers.. SafeNet, with its security expertise and leading technology, is the best choice to ensure the authenticity of our invoices and bring peace of mind to us and all our customers."

-Jan Goosens
Manager Software Development
Antwerp Port Authority

Customer Profile

- Antwerp Port Authority manages the 4th largest port in the world, including docks, berths, locks, and bridges.

Business Challenges

- Establish and maintain a secure and trusted e-Invoicing solution
- Protect electronic invoices from being altered in transit
- Comply with European legislative mandates
- Integrate with existing technology partners

Solution

- Electronic invoice solution based on digital signatures that ensures authenticity and integrity of invoices
- SafeNet Luna SA HSM for secure storage of signatures and cryptographic keys
- Adobe LiveCycle Manager
- GlobalSign Certified Document Services (CDS)

Business Challenge

The European Directive on Invoicing (EC/115/2001) requires member states, including Belgium, to implement electronic invoicing into their local value-added tax (VAT) legislation to improve and streamline cross-border invoicing. The VAT rules require suppliers to guarantee the authenticity of origin and the integrity of the content for the invoices they create. Authenticity of origin ensures that the message content was actually created by the person or legal entity that signed it, while integrity assures that no changes have been made to the content of the invoice during transit.

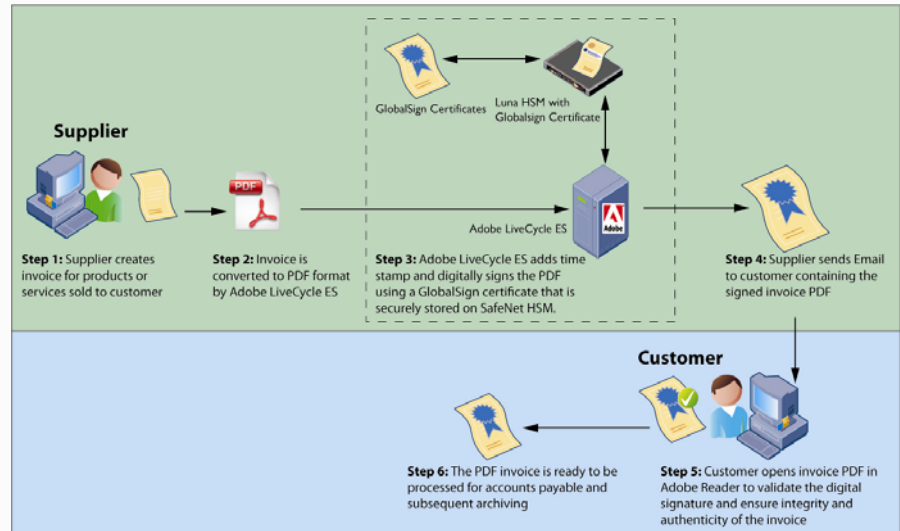
Solution

In order to comply with the VAT law, Antwerp Port Authority implemented an advanced e-invoice solution based on digital signatures. Antwerp Port Authority leveraged its multi-partner investment in Adobe's LiveCycle Enterprise Suite (ES) and GlobalSign's DocumentSign digital certificates by selecting SafeNet's hardware security modules (HSMs) for storage of digital signatures and protection of cryptographic keys.

After Adobe LiveCycle ES converts an invoice into a PDF/A (Archive)-compliant document, digital signatures are applied using a digital certificate to ensure the authenticity and integrity of the PDF. A secure, embedded time stamp locks down the exact time of signature creation, which meets a key VAT requirement for archival and storage. The Certified Document Service (CDS) digital certificates are provided by GlobalSign, a trusted Certificate Authority that delivers high-assurance digital identities to organizations and users worldwide. The Adobe PDF Reader automatically verifies all of the embedded information and visually highlights the authenticity and integrity of the document, allowing the recipient to easily detect whether the document has been altered after being certified.

The PDF invoices are digitally signed with a secure private signing key, which requires a cryptographic hardware security module (HSM) capable of performing certificate authority management tasks. The SafeNet Luna SA HSM stores the keys within the secure confines of the appliance throughout the key life cycle. The integrity of both cryptographic keys and digital certificates is vital to the integrity of the overall security system—if the keys or digital certificates are compromised, the entire system is rendered obsolete. The SafeNet solution allows Antwerp Port Authority to secure digitally-certified invoices and to cryptographically bind the identity of the certifying party to the invoice.





Applying Security to the Automated PDF Work Flow for e-invoicing and e-archiving

Benefits

The SafeNet, Adobe, and GlobalSign joint solution allows the Antwerp Port Authority to leverage their IT investments and apply a compliant security solution that guarantees the authenticity and integrity of electronic invoices. All parties recognize the need to reduce their carbon footprint throughout the supply chain, as well as leverage the financial savings to reduce billing costs. By applying digital signature and encryption technologies within a PKI network environment, Antwerp Port Authority quickly brought digital invoicing processes online, thereby streamlining workflow, lowering costs, and meeting mandatory European directives for compliance. For the party relying on the e-invoice, the secure Adobe PDF Reader allows for easy consulting and archiving. Viewing and validating the e-invoices is also automated thanks to the out-of-the-box integrated trust solution between Adobe Reader and the Adobe Certified Document Services platform.

About Antwerp Port Authority

The Antwerp Port Authority manages Europe's second biggest port, which offers an ideal gateway to Europe. More than 200 forwarding companies based in Antwerp help to secure shipping contracts across multiple market sectors, including steel, fruit, coffee, and tobacco. Numerous companies handle more than 16,000 seagoing ships and 65,000 barges that call at the port annually.

About SafeNet

SafeNet is a global leader in information security. Founded 25 years ago, the company provides complete security utilizing its encryption technologies to protect communications, intellectual property and digital identities, and offers a full spectrum of products including hardware, software, and chips. UBS, Nokia, Fujitsu, Hitachi, Bank of America, Adobe, Cisco Systems, Microsoft, Samsung, Texas Instruments, the U.S. Departments of Defense and Homeland Security, the U.S. Treasury and scores of other customers entrust their security needs to SafeNet. In 2007, SafeNet was taken private by Vector Capital. For more information, visit www.safenet-inc.com/HSM

