

Case Study

CertEurope



CertEurope's trust centre renewed with Nexus software



“Working with Nexus has provided us a very strong and evolving technical platform.”

Mr Stéphane Drai,
CEO CertEurope

After several years of business growth, the leading trust centre provider in France, CertEurope, realised that its deployed PKI solution no longer met its needs. Market demands had changed and the need for its PKI infrastructure to fulfil new technical and security requirements became apparent. A decision was made to once again evaluate the market offering and to replace the entire PKI platform with a more scalable and more flexible solution.

About CertEurope

CertEurope is the leading certificate service provider in France (Prestataire de Services de Certification, PSCe) and provides trust services and solutions for secure electronic processes and information management. The foundation for this security – confidentiality, authenticity and integrity – is provided by the digital identities (certificates). CertEurope's solutions support paperless, legally-binding processes for some of the largest companies and administrations in France and other European countries.

An efficient PKI infrastructure is the core technical layer that provides secure processes for certificate issuance and lifecycle management. CertEurope has recently been approved as complying with the ETSI TS101 456 (NF Z74-400) certificate policy, which ensures services of the highest quality in the company's core processes. On 1 April 2009, CertEurope received its certificate of conformity from LSTI and became the first certificate service provider in France to issue *qualified certificates*.

The challenges

When CertEurope started its activities some years back, a competitor's PKI solution was installed and successfully operated to supply CertEurope's solutions to the market. Over the years, the business grew and it became obvious that the chosen PKI platform was no longer sufficient to satisfy new market expectations and growing demand. CertEurope was facing challenges in terms of performance and administration processes. The deployed PKI solution was not up to the task of managing multiple clients with different certificate classes and issuing processes. What's more, higher demands in terms of cryptographic algorithms and smart card and smart USB token types had to be addressed.





Nexus products in service:

Nexus Origo Certificate Manager

Nexus Origo handles certificate issuance and lifecycle management. The scalable high-availability architecture supports the smooth 24/7 operation that is crucial to trust centre services.

Nexus Origo's multi-client capability and flexibility with regard to the definition of roles, policies and certificate classes were essential parameters for CertEurope's choice.

Nexus Servant OCSP Responder

Nexus Servant provides certificate revocation status information over the Internet for relying parties who want to verify signatures and certificates.

The modern OCSP technology provides a better alternative to certificate revocation lists (CRLs). Compared to the regularly issued, bulky CRLs, Nexus Servant achieves much better bandwidth use and highly current revocation information.

The solution

CertEurope decided to replace its PKI platform. A new solution was required to support its core business and processes for the coming years. After an extensive market evaluation, CertEurope chose the Nexus PKI platform: Nexus Origo Certificate Manager.

Nexus Origo is a mature product, already used by several trust service providers in different parts of the world. With its proven flexibility, scalability and support for multiple client domains, Nexus Origo complies with essentially all of CertEurope's specifications and requirements straight out of the box.

Implementation

A new PKI infrastructure had to be built for the trust provider, a task that consisted of several activities. The project groundwork was laid with the installation of the Nexus software. Some specific developments were also implemented, such as web services for enrolment and customised PIN management processes. New hardware security modules (HSMs) were installed for compliance with French legislation on digital signatures, with Nexus Professional Services developing support for these new HSMs.

Nexus consultants, together with the CertEurope professional team, managed to finish the entire project in less than two months.

Today, CertEurope can offer one of the most sophisticated solutions on the market, covering managed PKI services, mutualised CAs, qualified certificates, signature solutions, archiving platforms, global dematerialisation solutions and more.

Customer's voice

Mr Stéphane Draï, CEO of CertEurope, is convinced that his company has chosen the best solution for both the present and the future: "Our key objective is to protect our long-term investments and to make sure that we can easily adapt and respond to both our business needs and regulatory demands. We operate in a fast changing environment with more and more regulations; an environment where the critical solutions we propose have to be highly secure. Working with Nexus has provided us a very strong and evolving technical platform."

With constant updates, further developments, training and the option of customised solutions, Nexus aims to support CertEurope in meeting current and future challenges.

