



Solution Brief

Deliver secure digital identities and Remote Qualified Electronic Signatures

eIDAS certified QES with integrated PKI - Powered by Cryptomathic and Nexus

Digital signatures to save costs and make processes smoother

Corporate and public institutions are facing the challenge to digitalize and accelerate their business process to ensure their future existence and growth within the market of operation. This also applies to the process of handling document signatures in any B2B or B2C relationship.

Qualified Electronic Signatures (QES) can replace paper-based processes while providing juridically valid evidence in high-value business processes and legal transactions. This can lead to significantly smoother processes – for example document and transaction approvals or contracting with consumers or B2B parties – and to environment-friendly paperless implementation.

Secure and scalable solution for **Qualified Electronic Signatures**

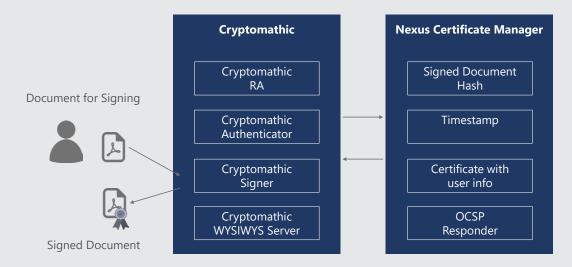
The QES solution from Cryptomathic and Nexus helps to implement secure digital signatures, while saving IT costs and maintenance by avoiding client signing software and physical smart cards. This end-to-end solution provides a simple and cost-efficient remote signing service with user-friendly processes for signing documents or transactions. All the necessary services are implemented in the cloud or in the central IT of the organization. Accountability and non-repudiation is provided by means of strong security mechanisms. Users have sole control on their signature by means of strong two-factor authentication (2FA) and rely on the principle "what you see is what you sign" (WYSIWYS). The QES solution is compliant with the European Signature Regulation, eIDAS.

Solution benefits

- ✓ Offer the complete digital customer journey with legally binding consent through remote Qualified Electronic Signatures
- ✓ Protect sensitive transactions with authenticity, integrity, and non-repudiation capabilities
- ✓ **Improve the user experience** by simplifying the signing process for documents and transactions
- ✓ Reduce initial and operational costs in contract or transaction signing with no need for additional hardware simply use the existing 2FA mechanisms to let users sign
- ✓ **Demonstrate non-repudiation** with WYSIWYS functionality
- ✓ Comply with Swiss and EU regulations; ZertES, GwV and eIDAS
- ✓ **Go green** with an environmentally friendly solution that allows end users to electronically sign banking documents and reduce paper consumption for all parties

How the solution works

The complete solution integrates Cryptomathic and Nexus products to provide a comprehensive remote signing solution to our clients. The high-level architecture is illustrated below.



The client's signing application integrates only with the Cryptomathic software. Whenever activating a user signature, Cryptomathic Signer connects to Nexus Certificate Manager to generate a one-time signing key and certificate for the user and to add timestamp and OCSP response to the QES for the sake of long-time validation. The integration between Cryptomathic and Nexus is transparent to the clients' signing application.

Cryptomathic Signer

Cryptomathic Signer is a remote signing solution, incorporating Cryptomathic's eIDAS certified Qualified Signature Creation Device (QSCD), which helps organizations provide large scale, legally binding digital signature services to clients and end-users. Used by banks and government departments processing millions of transactions each month across Europe, the solution combines strong security with user convenience by using "what you see is what you sign" (WYSIWYS) technology that provides non-repudation and enhances consumer trust.

Nexus Certificate Manager

Nexus Certificate Manager is a flexible and high-security certificate authority (CA) platform, accompanied by OCSP Responder and Timestamp Server, which issues, manages, and validates digital certificates, which are the basis for electronic signatures. Certificate Manager supports a large variety of interfaces, policies and certificate formats, including certificates for QES. Certificate Manager is certified according to the international Common Criteria for Information Technology Security Evaluation (CC).



Learn more at cryptomathic.com/signer



Learn more at nexusgroup.com

About Cryptomathic

Cryptomathic is a global provider of secure server solutions to businesses across a wide range of industry sectors, including banking and government. Cryptomathic is the world's most experienced player in remote signing and WYSIWYS.

We are the technology providers of many nation-wide central signing deployments and are very active in the finance industry as well, enabling eBanking portals with digital signature technology. At the leading edge of security provision within its key markets, Cryptomathic closely supports its global customer base with many multinationals as longstanding clients.

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About Nexus

Swedish-owned Nexus Group is an innovative and rapidly growing identity and security company. It secures society by enabling trusted identities for people and things in the physical and digital world. Most of its technology is integrated into the Nexus Smart ID solution, which provides standardized and easy-to-use modules that enable organizations to issue and manage physical and digital IDs, manage physical and digital access, enable electronic signatures, and issue and manage public key infrastructure (PKI) certificates. The Smart ID solution is most commonly used for corporate IDs, citizen IDs, and IoT (internet of things) security. Nexus has 300 employees across 17 offices in Europe, India and the US, as well as a global partner network.

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