

# CryptoNext

## Post Quantum Cryptography Remediation



### Vertical

Cybersecurity

### Founders

Florent Grosmaître (CEO)  
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### AVP Investment

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<https://www.cryptonext-security.com/>

### Company Description

Quantum computers are capable of breaking public-key cryptosystems in seconds. Next generation post-quantum cryptography is out there. Our mission is ultimate post-quantum remediation. Cryptonext provides optimal end-to-end post-quantum cybersecurity remediation tools and solutions for IT/OT infrastructures & applications to enable governments, enterprises & organizations to deliver long-term, trusted services of undisputed quality.

CryptoNext Security is a pioneer in post-quantum cryptography. Founded in 2019 as a start-up after 20 years+ of founders academic research at the Sorbonne University (SU), INRIA and CNRS in Paris

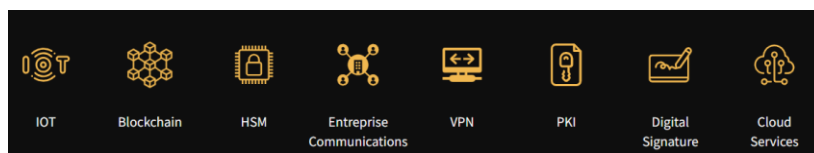
### Differentiation

Comprehensive, hi-performance, agile software tool suite is designed to secure critical data, applications and systems long-term

### Target Segment

Governments, Enterprises  
Organizations

### Use Cases & Selected Partners



### Market Solutions & Use Cases

#### Messaging Applications

Popular secured messaging apps used by consumers are now widely used in the Enterprise space. User transparent end-to-end Post-Quantum authentication and secured communications through an additional layer of quantum resistant cryptography along with Enterprise groups features are required.

[See NATO Use Case](#)

#### Virtual Private Network

Create a full chain of trusted communications: quantum safe VPN with quantum safe authentication.

[See Banque de France Use Case](#)

#### Digital Certificates Solutions

IT/OT teams use PKI for authentication and encryption, while digital certificates and signatures are vulnerable to quantum-enabled attacks. Use crypto-agility to upgrade critical assets and ensures interoperability with long term "quantum resistant" certificates, backward compatible with current formats.

[See Major Certificate Provider Use Case](#)

#### Digital Signature Solutions

Integrity of digitally signed contracts is not anymore guarantee, including the signature date. Solution is to add a quantum resistant time stamp.

[See Leading European Bank Use Case](#)

#### HSM Equipment & Solutions

Upgrade your HSM with a hybrid quantum resistant cryptographic integration of Cryptonext software for a transparent use through PKCS#11 API, while keeping HSM's certification.

[See Thales Use Case](#)

#### Internet Of Things & Embedded System

From defense to automotive or medical IoT, systems rely on the root public key for software/firmware future-proof code signing and over-the-air updates. We enable quantum-safe algorithms to run on resource-constrained devices.

[See Defense Industry Use Case](#)

#### Public Key Infrastructure

PKI is a fundamental infrastructure for many use cases that needs to be upgraded with PQC due to the quantum threat. It can be implemented with simple configuration with or without HSM.

[See Top-Tier Commercial Bank Use Case](#)

#### Mobile Communications

Enabling quantum-resistant voice, message or video calls with secured smartphones brings user transparent end-to-end PQ authentication and secured communications through an additional layer of quantum-resistant cryptography.

[See French MOU Use Case](#)

#### Quantum Computing Infrastructure

PQC brings authentication required to secure QKD (Quantum Key Distribution) network backbones.

[See Orange Paris QCI Use Case](#)

#### Blockchain

Blockchains use RSA or Elliptic curves algorithms for public key cryptography. Work on code structure and PQC signature schemes upgrade and bring crypto-agility, something no blockchain should be without.



THALES

