Summary and closing



Status

- Quantum computers will be able to break current public key encryption
- Accurate crypto inventory & mitigation strategies are required
- Long term data needs to be protected now
- Failure to migrate leaves applications and data at risk of compromise
- This crypto migration will be the hardest we've ever done



What can/should you do now?

Now is the time to plan, prepare, and budget for an effective transition to quantum-resistant (QR) algorithms

- Determine the value of your data, its shelf life, and how long it will take to migrate to postquantum cryptography.
- Start testing with algorithms identified for standardization
- Plan your migration to post-quantum cryptography
- Do not adopt PQC in production systems until recommended
- Get help and expertise



Crypto Agility

- Know your regulatory compliance requirements
- Know what crypto you use and where
- Do not hardcode algorithms, make it configurable
- Consider that increased size of signatures and keys for data storage, fields with limited sizes, bandwidth, etc.
- Consider that a change in algorithms might slow down your application or systems
- Keep updating your crypto libraries, start phasing our software that is no longer supported
- Implement a Certificate Lifecyle Management (CLM) system
- Use a Key Management System (KMS)



Shall we do this again?



PQC Conference

- Follow-up conference in Europe
- After the summer of 2023
 - Exact date to be confirmed
- This event will be longer, it might even span multiple days, with several tracks, technical and non-technical speakers
- Tracks might cover:
 - Government
 - Hardware
 - Hardware Security Modules (HSMs)
 - Constraint devices (IoT)



Call for presentations

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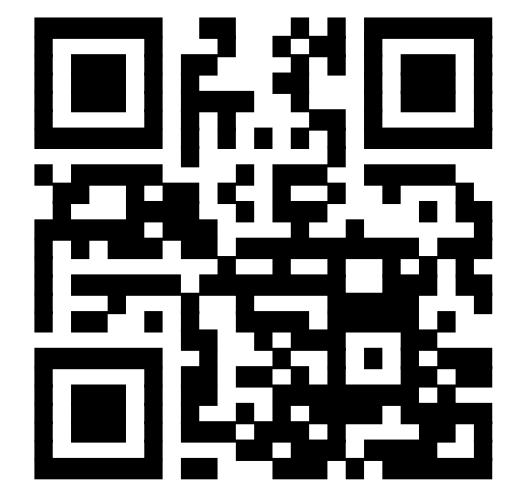


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Thank you and we hope to see you next time!

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