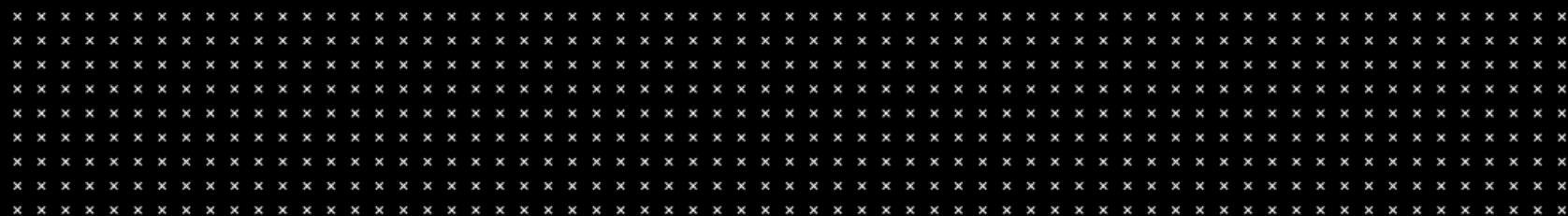


# ***PKI Well Revised: Common Mistakes Which Lead to Huge Compromise of Identity***



October 21st, 2020,  
SecTor Conference Session



**CQURE**



# **PKI Well Revised: Common Mistakes Which Lead to Huge Compromise of Identity**



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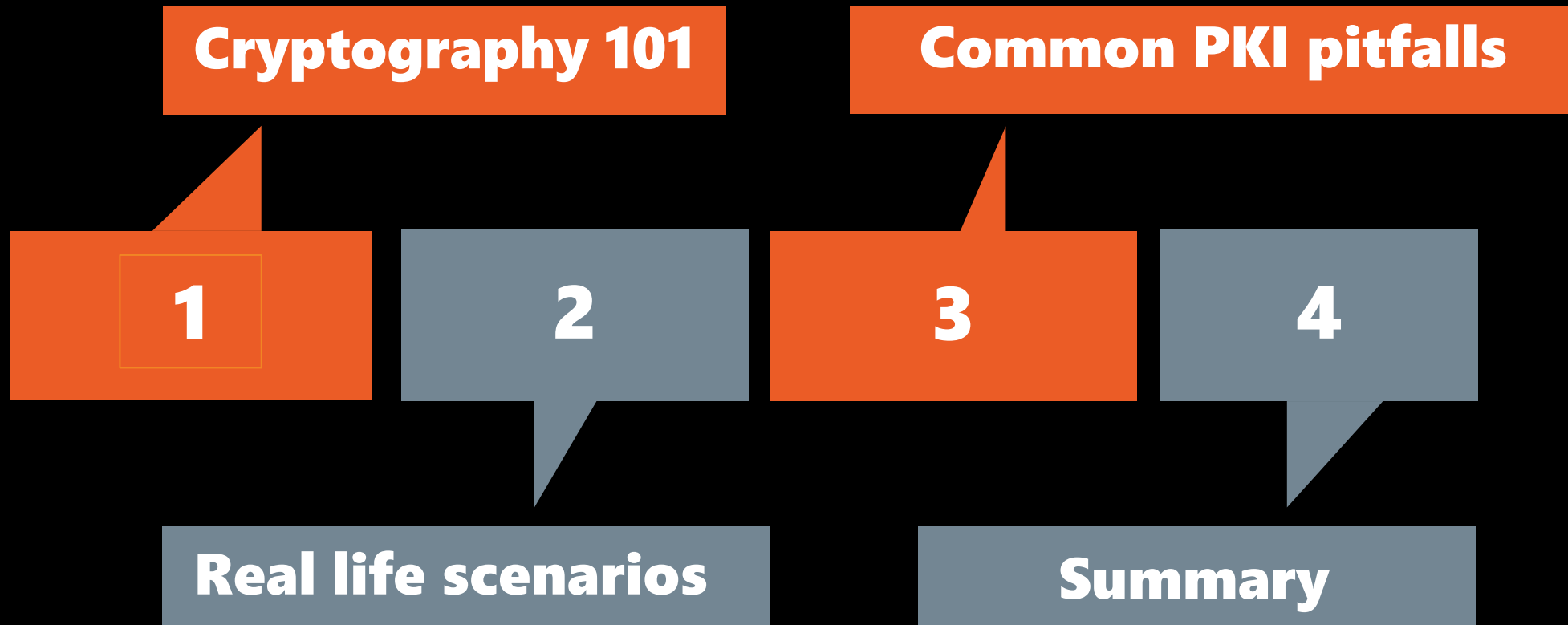


Kamil

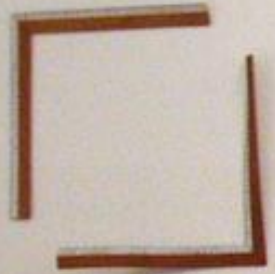
Piotr



# Agenda











**DANGER**  
**UNSAFE MINE**  
**STAY OUT**  
**STAY ALIVE**

**All that glitters is not gold**

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# Cryptography 101

## Basic concepts

- Encoding
- Encrypting
- Hashing
- Signing



# Public Key Infrastructure 101

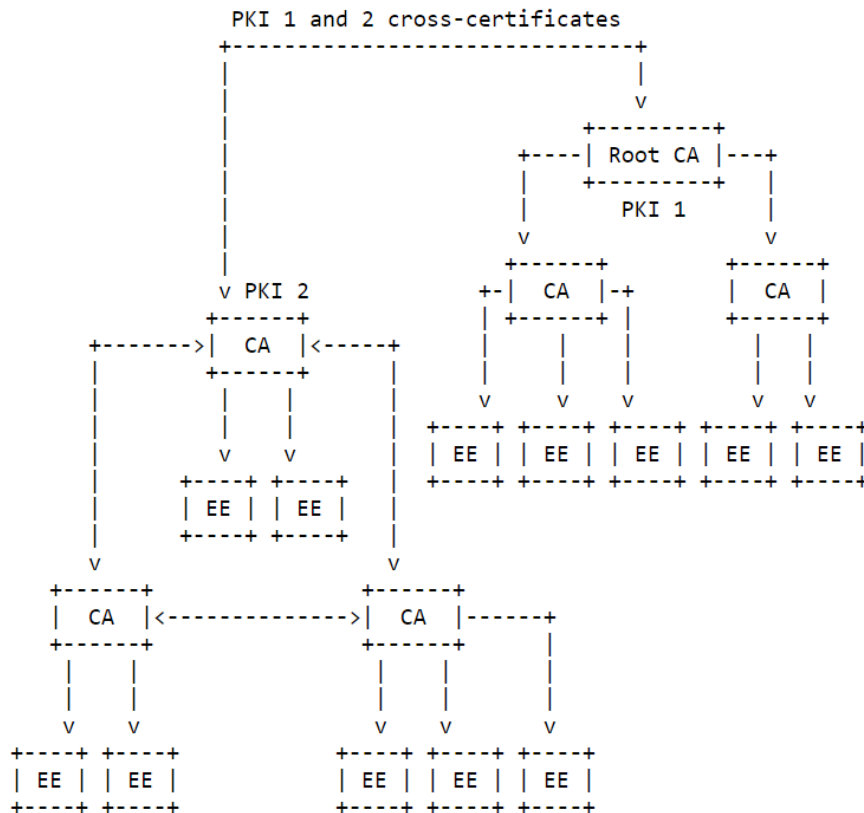
## Basic concepts

- Certificate X.509
  - Private/Public Key
  - EKU/Application Policy
- Certificate Signing Request
- Certification Authority
  - Validation procedures/CPS
  - CRL/OCSP/CT
  - Certificate Trust

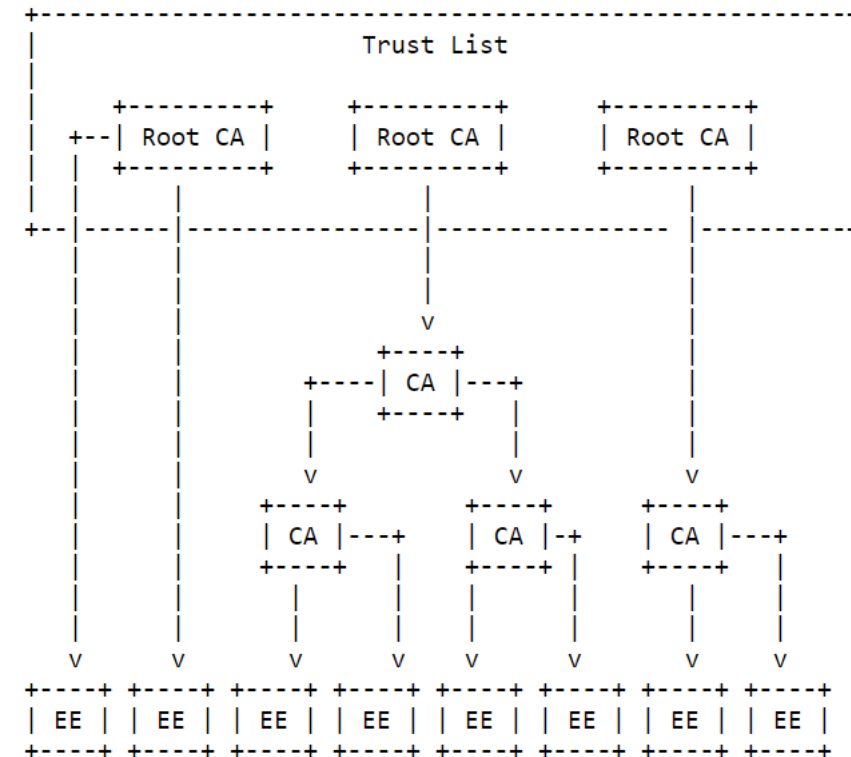


# Multi organization trust

Cross certification



Trust list



# PKI real life scenarios

## Usage

- Server authentication
- Client authentication
- Smartcard logon
- Windows Hello for Business
- Secure E-Mail
- Other



# **Live Hacking:** **Common Pitfalls** **of PKI**



# Common Mistakes

## Points of interest

- Software key storage provider
- Multi purpose certificates
- CSR automatic approval
- Template permissions
- Unconstrained cross certification



# Q&A



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cybersecurity solutions & tools:**

**<https://cqureacademy.com/blog>**





A photograph of three people (two men and one woman) sitting around a wooden table in a meeting. They are looking at laptops. The man on the right has a laptop with the 'CQURE' logo on the lid. The background is a white brick wall.

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***Thank you!***



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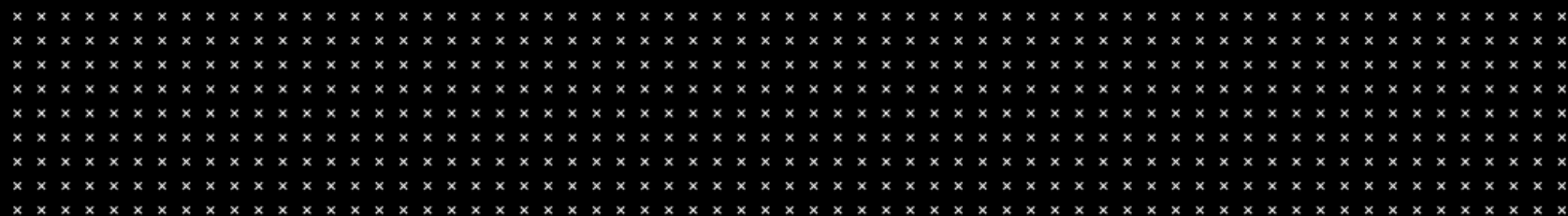
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