Solving Terminal Revocation in EAC by Augmenting Terminal Authentication

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What is the problem?

Revocation of integrated terminals in the EAC.

«Due to the inexactitude of date in MRTD, a terminal can fake its authentication even after its expiration date in his certificate.» [CV09]

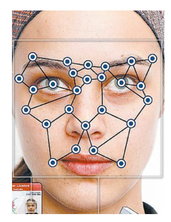
«[...] a stolen reader can be used to perform Terminal Authentication [...]» [BfSidI09]

Why is it important?

Privacy threat: illegitimate access to all MRTDs data

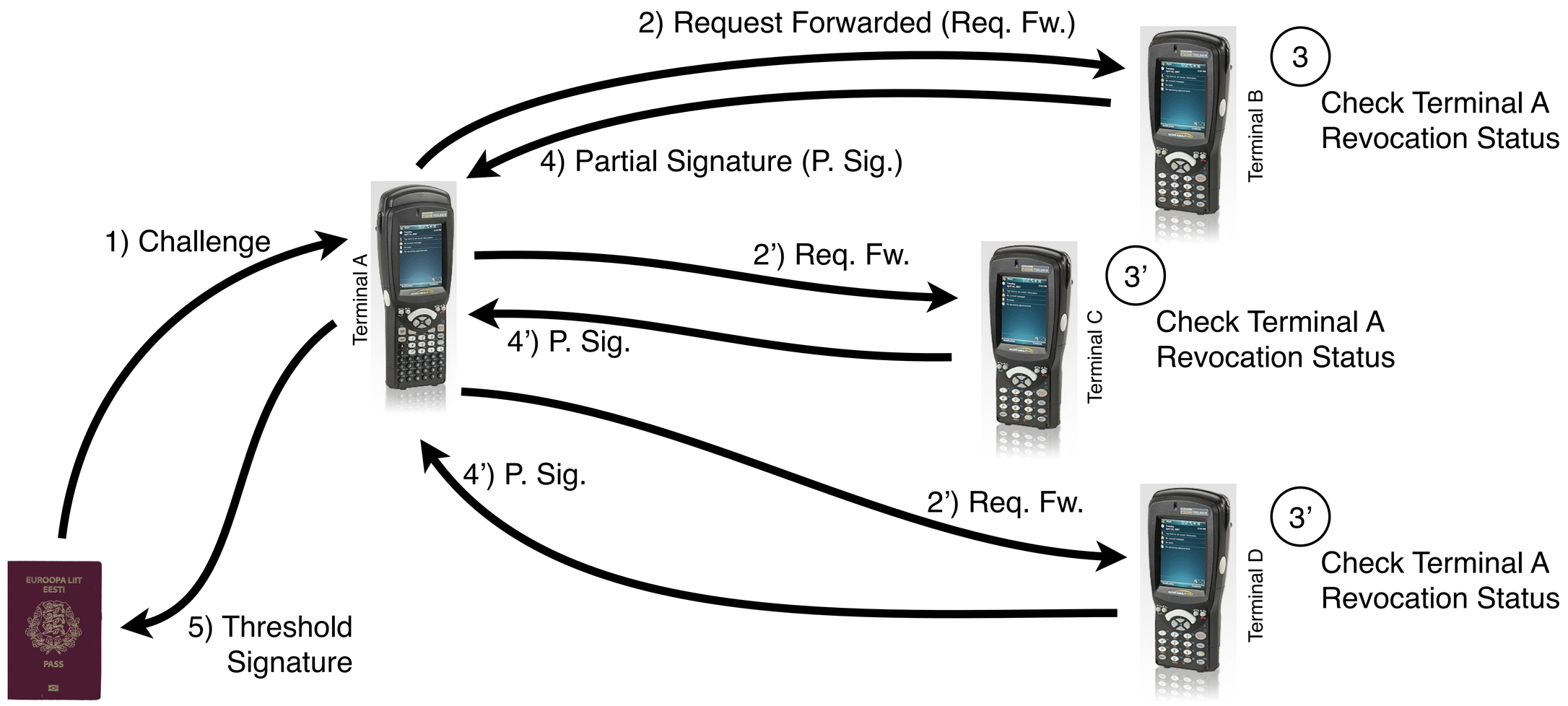
Targeting threat: remote attack against individuals or groups

Mass collection of biometrics into a database in order for the attacker to train themselves and select closest match for cloned ID.



How do we solve it?

We augment Terminal Authentication by **enforcing terminal collaboration** for a complete authentication, with a threshold (RSA) signature.



References

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[Cha13a] Rafik Chaabouni. Solving Terminal Revocation in EAC by Augmenting Terminal Authentication (short paper version). In Arslan Brömme and Christoph Busch, editors, BIOSIG, volume 212 of LNI. GI, 2013.

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This work has been supported:
from research theme IUT2-1 and European Regional Development Fund through the Estonian Center of Excellence in Computer Science, EXCS ;
and by the Tiger University Program of the Information Technology Foundation for Education

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