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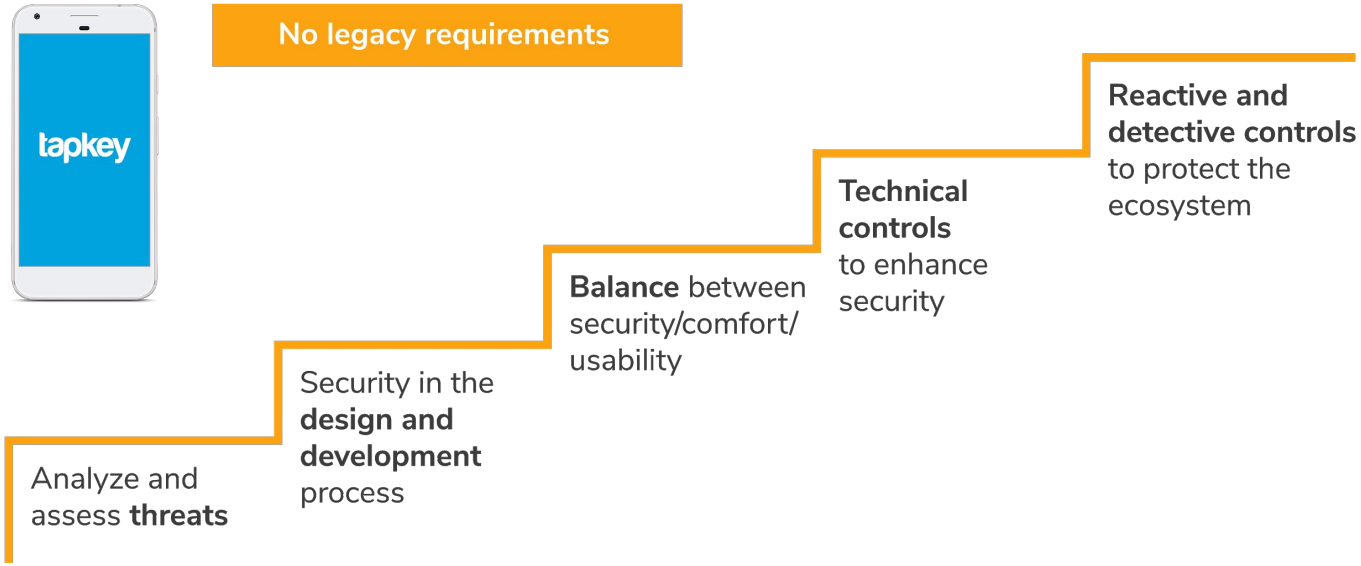
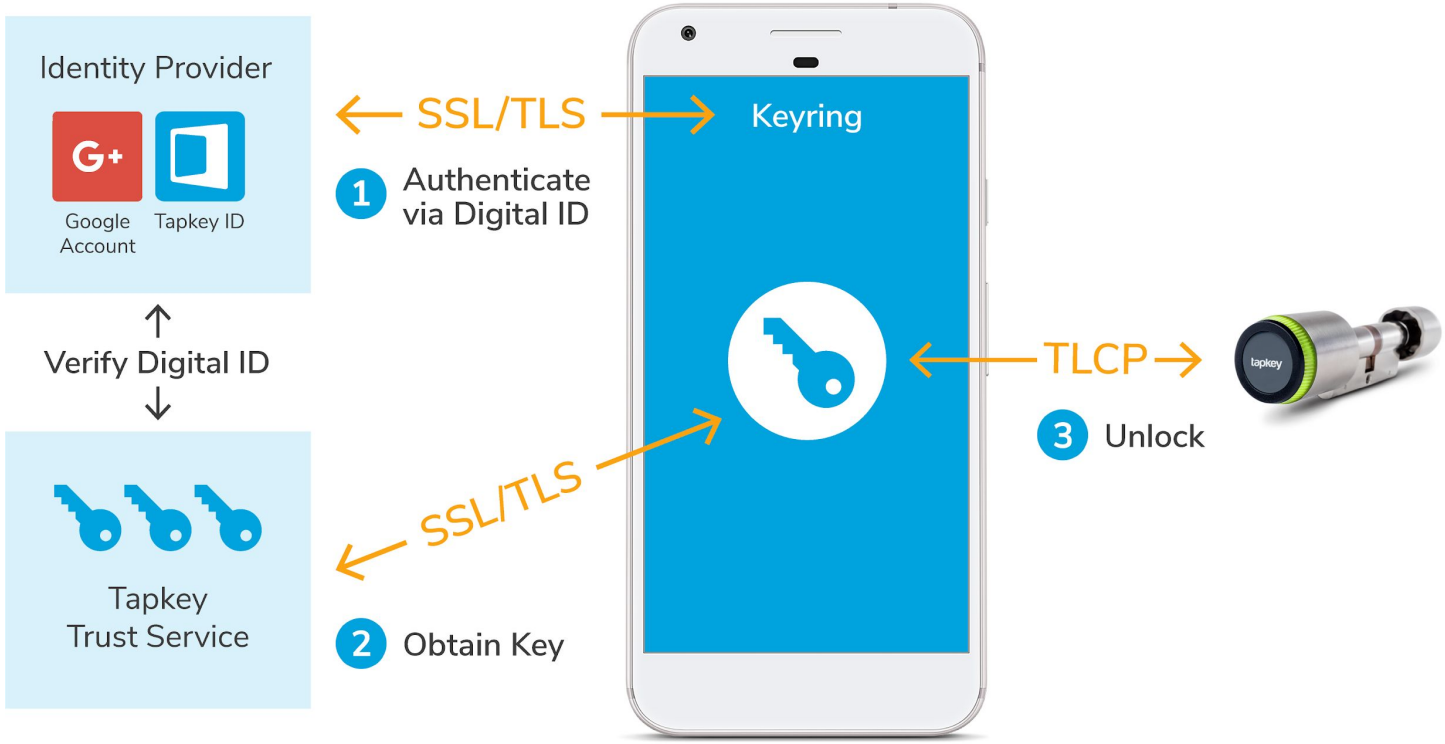
Tapkey Security Overview

SECURITY BY DESIGN APPROACH



→ Goal: increase the effective security in practice

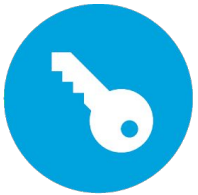
SMARTPHONE ACCESS



SECURITY-FEATURES (SELECTION)

Delegated Authentication

TLCP Tapkey Lock Control Protocol



Key management

Backend infrastructure

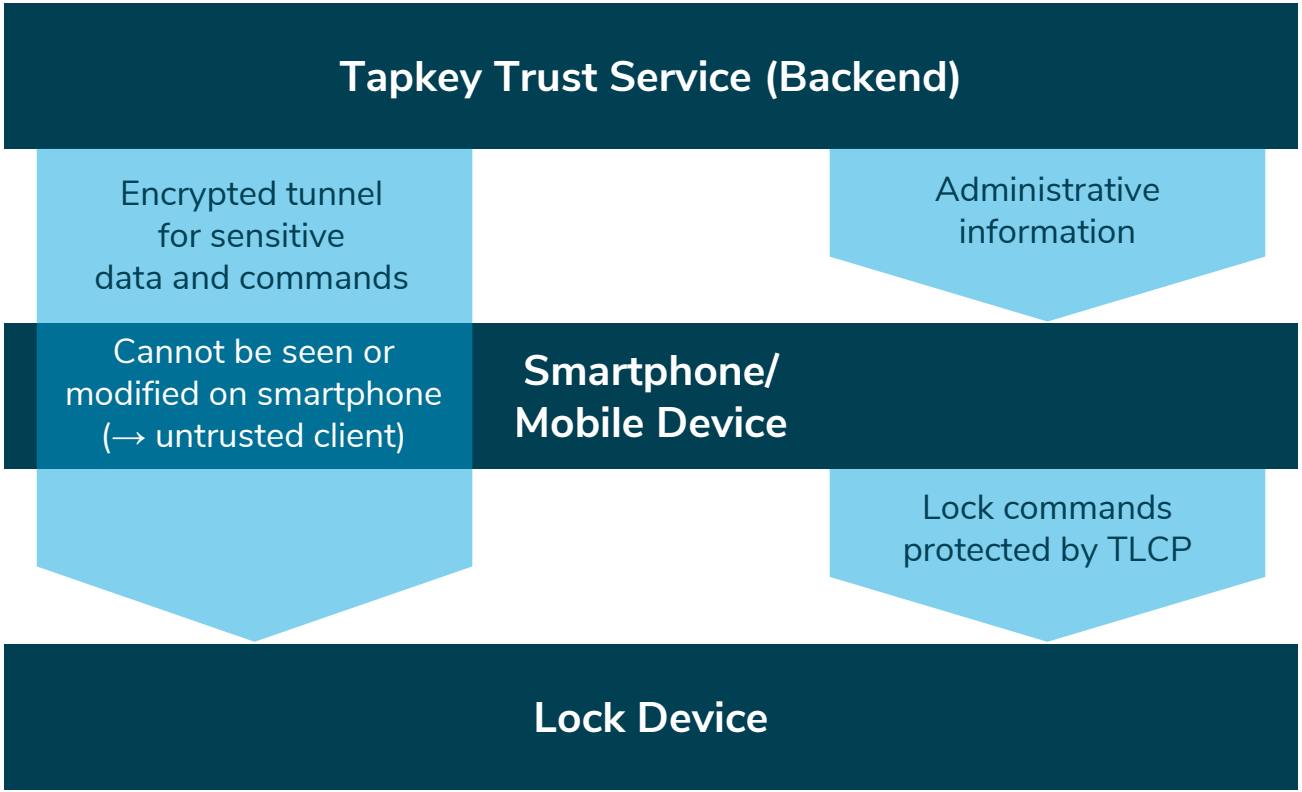
Experienced partners for high physical security

Tapkey Platform

DELEGATED AUTHENTICATION

- Authentication via OAuth 2.0
  - Google Account, Tapkey ID, etc.
- Simple user experience
  - reduced complexity = higher security
- Established Identity-Providers
  - high effort to protect against misuse
- No additional passwords!
  - Use of existing infrastructure, e.g. smartphone/fingerprint
- Usage of additional security features
  - 2-factor-authentication, etc.

TLCP (TAPKEY LOCK CONTROL PROTOCOL)



KEY MANAGEMENT

- Key on smartphone protected by:
  - Individual keys for each device
  - No reuse of keys
  - Limited validity (expiration of keys)
  - Usage of OS/software protection mechanisms
  - Extensive revocation mechanisms
- No „need“ for TPM/Secure Element on device
  - Very limited availability/usability on existing devices
  - Security ↔Comfort/Usability
- Usage of highly secure smartcards for hardware tokens

BACKEND-INFRASTRUCTURE

- Highly scalable and secure cloud infrastructure
- Hosting in data centers with high security standards
- Implementation of state-of-the-art protection measures against attacks
- Secure operational processes
- Monitoring for early detection of problems

EXPERIENCED PARTNERS

- Partners with decades of experience in physical security

For example:

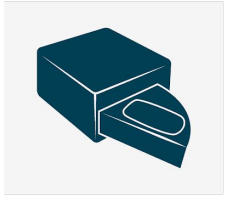
- DOM: ENiQ Pro (electro-mechanical door lock)
- Witte Automotive: automotive lock systems

SECURITY-ECOSYSTEM FOR PARTNERS

Platform security features

WITTE DIGITAL beyond mobility

Secure firmware updates



data mobile Hard- & Softwaredesign

DOM

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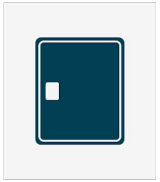
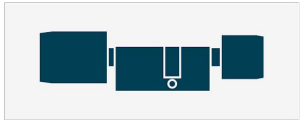
Interoperability via interfaces





Simple Integration of Tapkey SDK

EMKA Beschlagteile

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More questions?

Contact us at security@tapkey.com