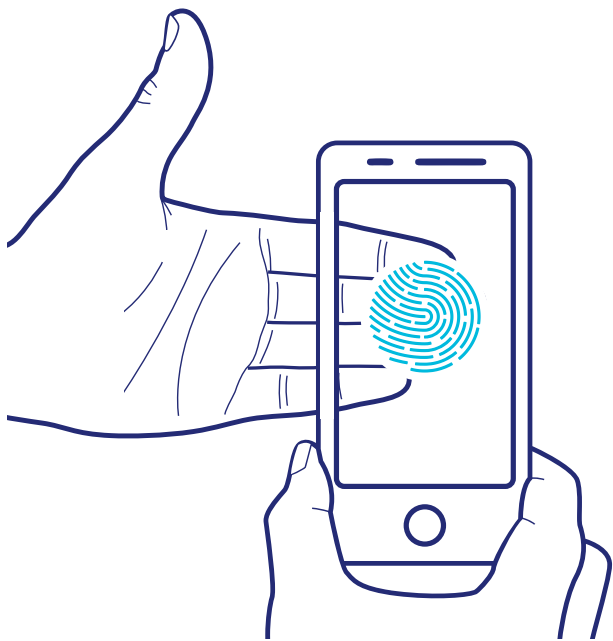**THALES**

Building a future we can all trust

Thales Trusted Digital ID

Contactless Fingerprint Checking
For onboarding and authentication

Telecom **Operators context**

Telecom Operators need to comply with stringent identity verification and KYC (Know Your Customer) regulations. Some countries even insist on fingerprint checks for customer onboarding.

If permitted by local regulations, such fingerprint checks can also be used by Telecom Operators to authenticate end users for access to security-sensitive services.

Telcom Operators also face increasing demands from users for a convenient yet secure solution for proving their identity, at every stage of the process.

Telecom Operators can meet these requirements by using our agile solution. Based on contactless fingerprint technology, this can be deployed on mobile apps compatible with mass market smartphones. End users are able to use this app to self enrol and authenticate remotely. Alternatively, sales agents can enrol end users at the POS (Point of Sale). Thanks to the high-quality fingerprints captured, our mobile app-based solution is able to perform instant matching.

Our solution addresses **two use cases**

End user onboarding

I   If required by local regulations, Thales' solution enables the end user's fingerprints to be captured with a mobile phone instead of a dedicated reader.

I   Can be used at the POS, or at home in self-service mode.

End user authentication

I   Captures the end user's fingerprints for authentication.

I   Whenever required, Thales' solution can perform instant matching with the fingerprints captured during onboarding.

I   Can be used at the POS, or at home in self-service mode.

Key benefits

Seamless process

- Passwordless
- Instant onboarding
- Instant authentication
- Anytime and anywhere
- Familiar mobile-centric user experience
- Integrates easily into legacy processes

No additional hardware investment

- Integrates into Telecom Operator's mobile app, on iOS or Android smartphones with rear-facing camera and flash
- Replaces dedicated fingerprint readers

Security

- Secure and encrypted storage: customer data is protected against fraud
- Meets local data privacy regulations
- More secure and convenient than traditional authentication methods, thanks to built-in liveness detection and other anti-spoofing features
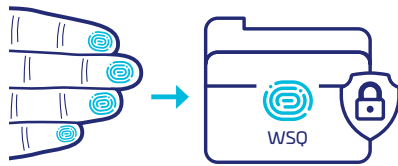
How does **contactless fingerprint checking work?**

User onboarding
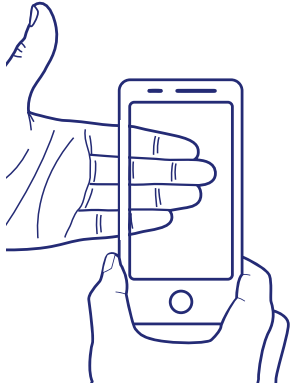
1

The user captures their fingerprints using the rear-facing camera on their smartphone.
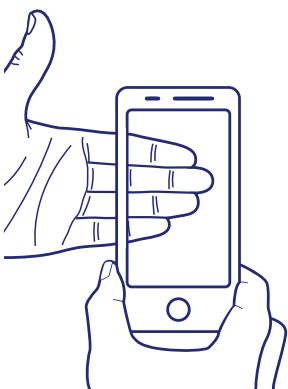
2

WSQ

The captured fingerprints are transformed into a biometric template, encrypted and stored securely on the server.
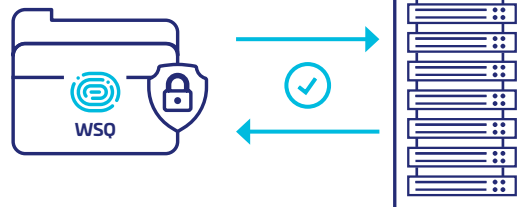
3

If a connection between the Telecom Operator and the government is already in place, the captured fingerprints can be compared to a government database.
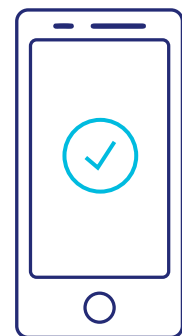
Authentication

4

WSQ

To authenticate, the user's biometric template is sent to the server hosting Thales biometric engine.

5

If authorised, the user is granted access.

Capture and authentication workflows are secured using anti-spoofing mechanisms such as liveness (PAD-1) detection. Compliant with local data protection regulations.

Requirements

- iOS 9.x or above for iPhone
- Android 5.1 or above
- 5MP Camera / LED flash

Export in multiple formats

- ANSI/NIST-ITL 1-2007
- ANSI/NIST-ITL – INTERPOL
- ISO/IEC19794-4, 2005
- ISO 19794-2 (Minutiae)
- RAW print images in greyscale (8-bit), output in JSON format
- WSQ print images in greyscale (8-bit), output in JSON format (customizable compression rate)
- PNG print images in greyscale (8-bit), output in JSON format
- NFIQ quality score available
- Other formats considered on request
- Downscale images to 500PPI for external database compatibility

Why Thales?

Thales biometric technologies

Thales has more than 200 biometric deployments in 80 countries, supporting strong biometric authentication and identification programmes for governments and businesses.

Acquiring Cogent Systems enabled Thales to leap ahead in the field of trusted digital identities and build on Cogent's 27 years of biometric technology expertise. Our comprehensive suite of biometric verification solutions can be adapted easily to suit varying requirements for security and flexibility.

Useful links

Thales Trusted Digital ID

Identity and Biometric Solutions

> Thalesgroup.com/mobile <