

TOPPAN SECURITY GOLD™ SDK

A software development kit for a mobile ID application

Easily build a mobile identity application for governments

The TOPPAN Security gold™ SDK is a tool kit for partners to easily create a sophisticated mobile identity application for governments and their citizens. TOPPAN Security's gold citizen app is the citizen-facing side of the gold mobile identity solution—today's market-leading mobile ID solution.



No Coding Expertise Required

The gold SDK does not require advanced coding expertise or software development skills. All workflows—from mobile ID provisioning to revocation—are already written into the software. The SDK is delivered along with a sample app that features all the functionalities, saving valuable time and extensive development costs.

Support Every Step of the Way

Partners receive a piece of code, documentation, training and technical support to manage the gold SDK and build applications for governments and citizens. This way, partners can develop the innovative mobile app autonomously when implementing gold in government projects.

Built-in Mobile App Security

The gold SDK incorporates advanced security mechanisms, avoiding the need for external protection frameworks to secure app workflows. Cryptography ensures that the provisioning, storage and verification of the mobile ID are secured at all times. An independent security evaluation of the gold SDK provides peace of mind for the developer.

Focus on Citizens' End-user Experience

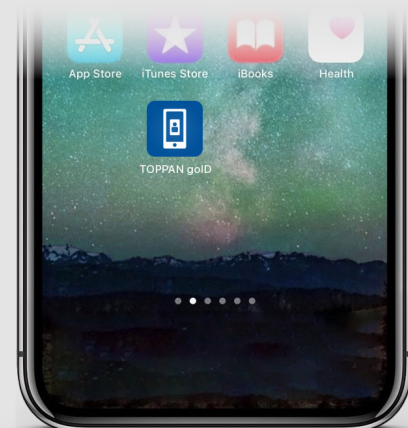
Because the security of the gold SDK is ensured, partners and government agencies can instead focus on the design and architecture of the citizens' mobile app. Together, they can customize the mobile app to the local language and create a unique and optimized end-user experience that meets local requirements.

Mobile ID App Functionalities

- Push notifications
- Distance verification
- Customized app design
- Automated data updates
- Online and offline verification
- Over-the-air ID provisioning

Proven App Stability

Partners receive a high-quality SDK, which has been tested extensively among all major brands of mobile phones and OS versions to prevent crashing.



Specifications

SDK Security

Code Obfuscation Protection

The code is fully protected using the best tools available on the market.

Tamper Detection

The code features various tamper detection methods (such as root detection) and checks for known malicious applications.

Reverse Engineering Protection

The code includes integrity checks and secures the SDK by protecting against reverse analytics.

Analysis Protection

The code is protected against static and dynamic analysis using the most up-to-date methods available.

gold Security*

End-to-end Protection

Mobile IDs are delivered ciphered from the issuer to the mobile app.

Data Integrity Protection

Mobile IDs are signed by the issuer for authenticity to ensure that any modification can be detected.

Cloning Protection

Mobile IDs are stored encrypted, using a combination of keys—including some that can't be extracted from the mobile device.

Data Collection Minimization

Only the necessary information—no more than needed—is returned to the verifier device.

Data Privacy Protection

Mobile ID data is stored ciphered and is released only after user consent to authorized verifier devices.

* Cryptographic Keys that are used in every step AES128, RSA2048 and ECCDH

SUPPORTED SDK LAUNCH

Documentation	Embedded gold SDK development guide
Versioning Strategies	Regular updates to the gold SDK
Publishing	Publication procedures for iOS® and Android™
Support	Global technical support team

GENERAL REQUIREMENTS FOR THE MOBILE APP FOR CITIZENS

Feature Requirements	BLE feature	Chip needs to be compatible with BLE 4.2
Minimum Supported Phone OS	iOS 10	Android 5
Programming Language	Swift (Apple)	RX Java (Android)

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