IDplug Mobile

Enabling smart-card use on mobile

Integrating hardware cryptographic modules into mobile device has always been a challenge. Developers needed to know complex protocols to integrate and manage secure element exchanges. IDplug Mobile simplifies this process by providing easy-to-use interfaces, allowing integrators to leverage the secure elements embedded in citizen and corporate identity documents.

Security on mobile devices

Smart cards are the most secure way to perform cryptographic operations, protecting personal identity, controlling access, and securing data. Today, both national identity documents and corporate badges incorporate smart card technology.

To support government and private entites in their digital transformation, enabling smart card usage on mobile devices unlocks new possibilities — allowing citizens and employees to securely perform authentication and transactions directly f rom their smartphones.

Such usage was limited in the past due to the lack of standardized interface and applications. and to solve this problem, IN Groupe addresses this challenge with IDplug Mobile, a standard middleware for mobile devices offering APIs that seamlessly connect mobile applications with physical identity documents.

Developers no longer need deep expertise in secure hardware elements or cryptographic protocols.

IDplug Mobile

With IDplug Mobile smart card middleware for Android and IOS, IN Groupe delivers twoor three-factor authentication, encryption and digital signature within mobile environments for governments, large corporations or banks to facilitate the deployment of:

- Online services
- Out-Of-Band (OOB) authentication
- Bring Your Own Device (BYOD) schemes while mastering the security policy.

To offer flexible ways to interface mobile applications with the secure elements, IDplug Mobile is available through native API for native applications and with a javascript WebConnector API for Web applications.

Key Benefits

Java compliant

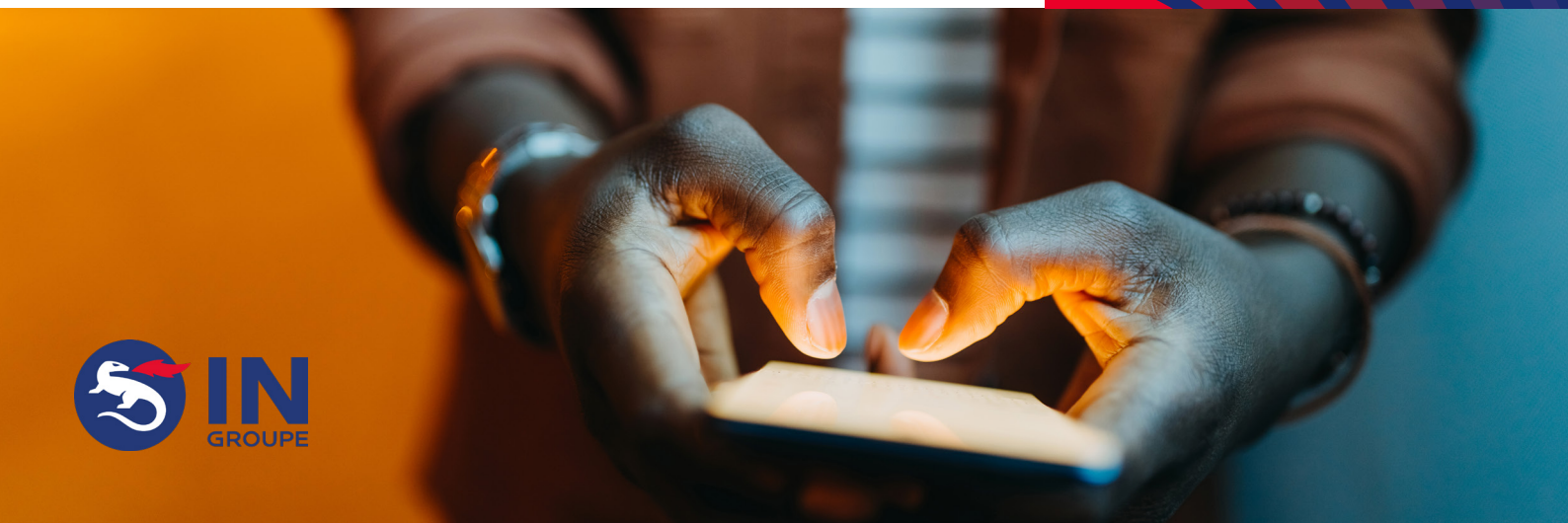
IDplug Android middleware is compliant with Java cryptography architecture (JCA).

Multiple interfaces

IDplug mobile supports NFC, USB, microSD, Bluetooth, tablets, Android and iOS.

Software Development Kit

IN Groupe provides an SDK and samples to interface Android and iOS middlewares through native API or JS API for mobile applications.



IN GROUPE

Ideal to secure mobile applications

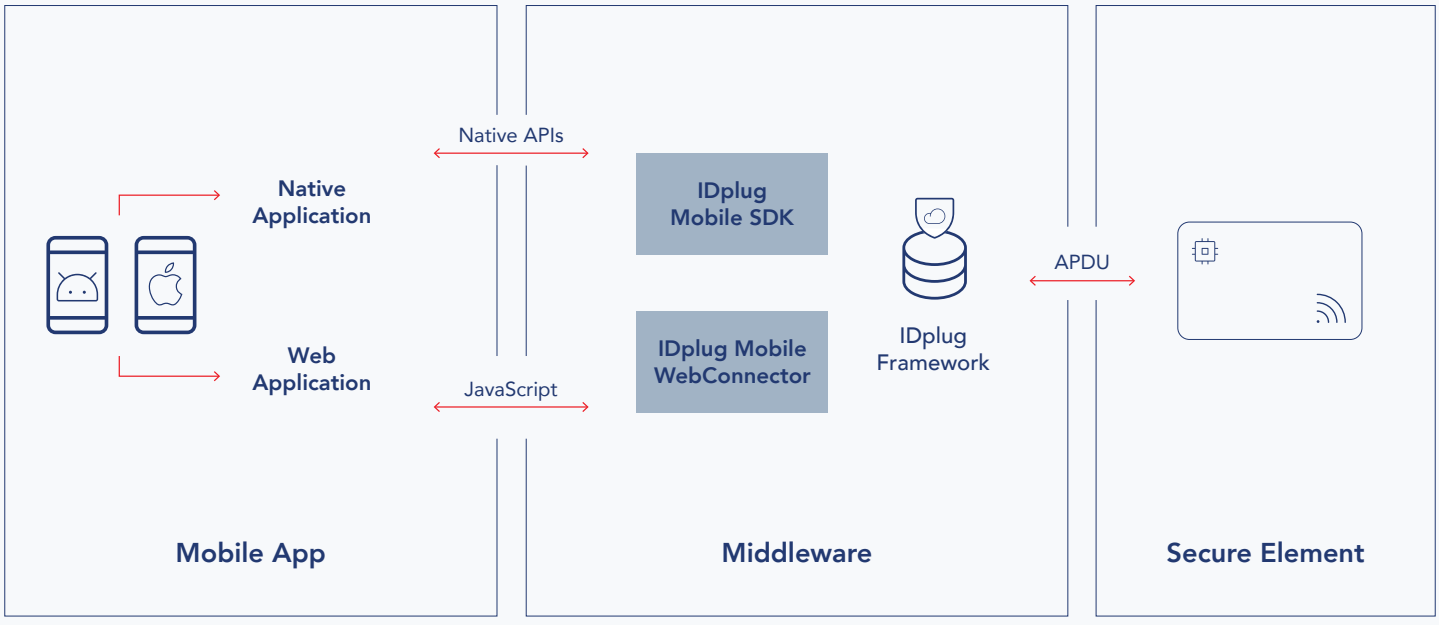
IDplug Android and iOS middleware are delivered as an SDK in order to integrate native APIs (Java for Android, and Swift for iOS) into the mobile applications that want to read smart cards and use their cryptographic functionalities.

Interfacing through IDplug Android and iOS WebConnectors allows integration into mobile web applications. Similar interfaces are available on both operating systems using IDplug WebConnector on computers.

CUTTING-EDGE TECHNOLOGY

- RSA and ECC algorithms for authentication and signature
- PACE secure messaging
- AES and DES/TDES
- Fingerprint, face and iris match-on-card
- Windows 10 and 11, Ubuntu 22.04 and 24.04 LTS, MacOS 12.x 10.13 High sierra, up to Android 13/14 and iOS 17/18
- PKCS#11, Microsoft Minidrivers, MacOS CryptoTokenKit
- IDplug Manager UI Application

IDplug mobile architecture overview



April 2026
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