

# Cracking the Codes: Redefining Authentication



For years, two-factor authentication (2FA) has been the go-to security measure for protecting digital identities—but its flaws are becoming harder to ignore. From phishing and SIM-swapping to frustrating user experiences, traditional 2FA is increasingly vulnerable and outdated. It's clear: relying on text messages or app-generated codes is no longer enough.

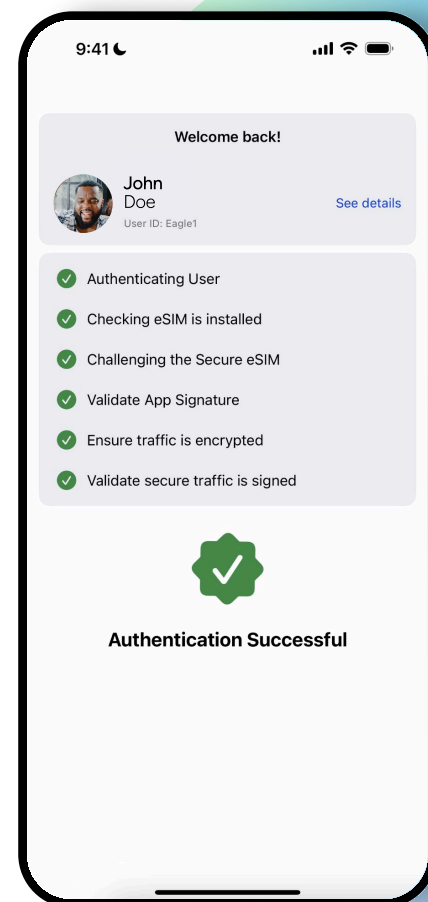
That's where ESIMple Identity comes in. By turning the eSIM into a programmable, persistent identity layer, ESIMple Identity is redefining how authentication works on a global scale. Through its Telecom-as-a-Service platform, ESIMple Identity allows any business to embed secure, hardware-bound authentication directly into their apps—without the fragility of passwords or codes. It's not just a better version of 2FA; it's an entirely new foundation for trust, built into the network itself.

## Intelligent, secure eSIM authentication

eSIM authentication enhances security by embedding identity directly into the hardware and telecom layer, eliminating reliance on user actions and vulnerable methods like SMS or email. With ESIMple Identity's Telecom-as-a-Service platform and modern APIs, businesses can easily deploy eSIM solutions and global network connectivity, enabling future-proof security that scales effortlessly. This streamlined approach simplifies identity management, providing customers with a faster, frictionless experience through a unified API that works seamlessly across borders and carriers.

### ESIMple Identity customers realize significant capabilities including:

- Ability to mint and install eSIM in client apps on a global level
- A private and secure closed-loop network on a global level with support for data sovereignty
- Authenticate via the eSIM using the same security used to protect the telecom identity
- Ability to put private keys on the SIM card itself and invoke them for various authentication and encryption needs





- Ability to enrich their authentication calls with telecom identifiers and retrieve network-level positioning/location
- Ability to use the eSIM for authentication even if the user is connected to Wi-Fi or is using a different cellular connection as the primary
- Ability for private routing at the edge into bank's private infrastructure
- Ability to restrict programmatically who calls/messages certain groups of users (e.g., a dispatcher to mobile workers can communicate with their boss but not between them)
- Ability to remove/hide phone numbers and rely exclusively on bank IDs as their identity
- Secured custom Caller ID (mutual authentication between a bank and a customer, for instance)

## Unified API + identity abstraction across borders and carriers

ESIMple Identity stands out as the solution for global eSIM authentication by integrating telecom infrastructure, identity intelligence, and eSIM provisioning into a single, programmable platform. Unlike traditional telecom providers, ESIMple Identity simplifies the complexity of managing multiple carriers, offering a unified API that enables brands to seamlessly embed mobile connectivity and real-time authentication into their apps worldwide. Through its Telecom-as-a-Service model, ESIMple Identity turns eSIM into more than just a mobile service—it's a persistent, hardware-bound identity layer that ensures device integrity, location, and SIM status in real time. This makes ESIMple Identity ideal for secure user onboarding, fraud prevention, and global-scale authentication—without relying on vulnerable 2FA methods like SMS or app-based codes.