



Real-Time, Multi-Channel, Multi-Factor Authentication for Identity Verification and Transaction Authentication

Boloro's ATM-like Authentication Process Secures Logins & Activity Using A Separate Channel, With a User-Friendly, Instantaneous Approach that Avoids the Internet and Operating System, Eliminating Fraud Without Exposing Personal Data; Ideal for GDPR Compliance

Globally Patented. Private & Confidential.



Boloro's Unique Approach To Authentication Secures the Login and Avoids The Internet

- Boloro is a globally patented, device agnostic, multi-factor authentication and payment service platform that makes any login, payment and / or other transaction immediate, user-friendly, secure and fraud-free without disclosing any information of the account or customer outside of the Issuer's domain.
- Boloro completely separates the traditional Authentication Device & Communication Medium from the Transaction Device and Communication Medium, offering an impregnable extra layer of security in connecting any Service Provider and Customer, ensuring complete, end-to-end identity and transaction validation and security. Boloro also provides a comprehensive authentication audit trail in milliseconds for each transaction.
- Boloro literally puts security in the hands of the Customer because only the Customer has the registered subscription, physical handset and knowledge of its PIN / Password, eliminating fraud, disputes and charge backs.

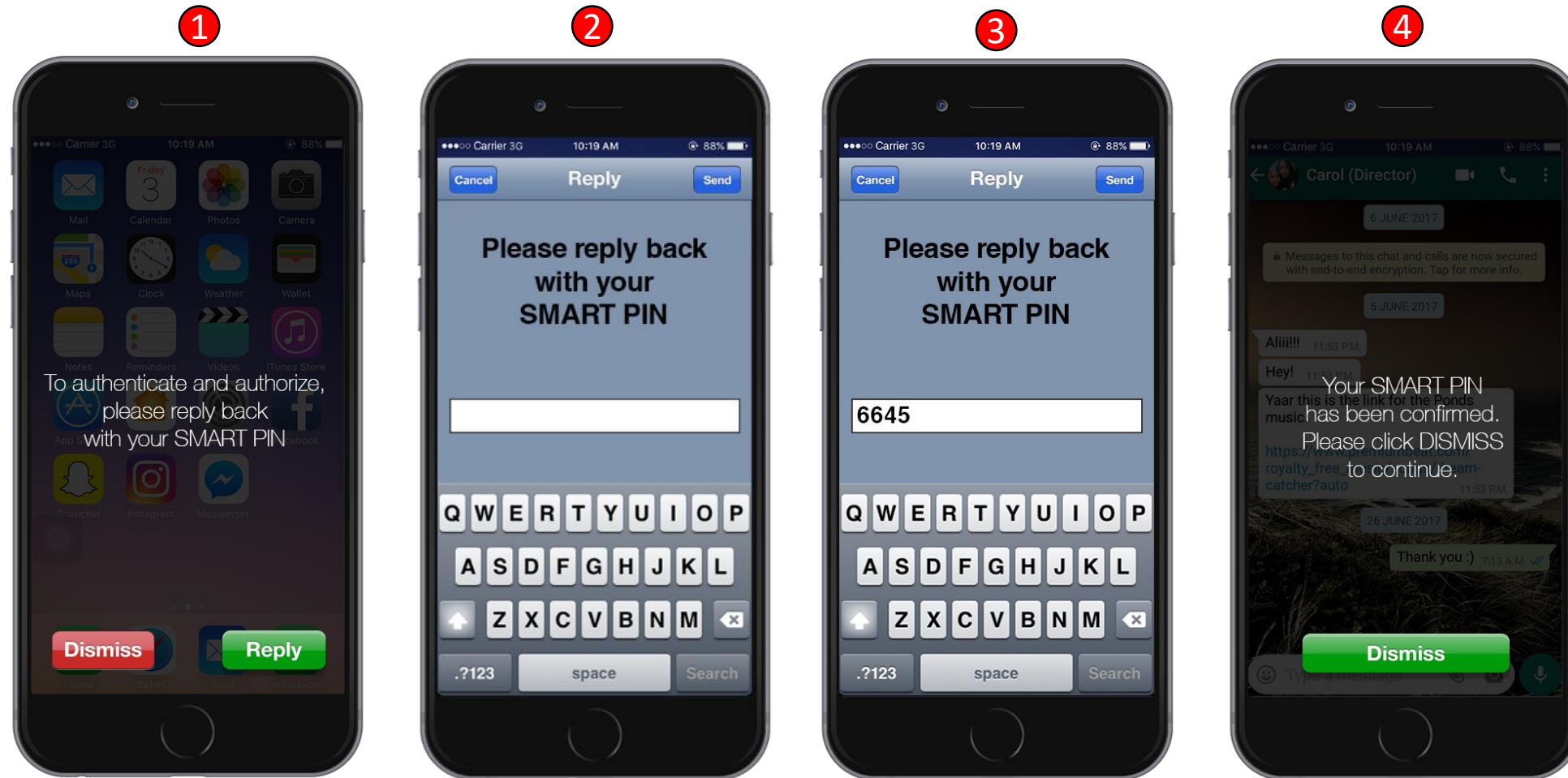


Boloro's Real-Time Multi-Channel + Multi-Factor Authentication = Ultimate in Security

- Patented process provides true Real-Time, Multi-Channel and Multi-Factor Authentication, separating Authentication from the Internet using a mobile carrier's secure signaling channel.
- Works with all smartphones and feature phones.
- Integrates seamlessly with existing apps. Users never leave their App. Authentication overlays onto the App screen, and once PIN / Password is entered, the overlay disappears.
- Provides customers with ATM-like ability to authenticate using their SMART PIN / PASSWORD (what you know) on their own handset (what you have) over the secure signaling channel of the mobile network.
- Boloro's authentication messaging never touches the Internet or the Operating System, meaning the authentication process isn't exposed to malware that may be sniffing, snooping or hacking.



Real-Time, Secure, User-Friendly Experience



With Boloro, security is literally in your hands, eliminating fraud by allowing users to instantly validate each transaction before it is processed.

Boloro's Unique Authentication Features

- **Secure Authentication**
 - Protects from Internet vulnerabilities
- **Multi-Channel**
 - Separate channel for Authentication
 - Uses signaling channel for Authentication
- **Multi-Factor**
 - Phone number
 - Custom memorized PIN or Password
 - Validates handset data points
 - Additional mobile data points
- **Real-Time**
 - Authentication is via a 'live' USSD session
 - User responds to PIN in session
- **No App to Download**
 - Works with feature phones and smartphones
- **Authentication Cannot be Compromised**
 - Authentication request never touches Handset OS
 - Interacts with firmware of handset
 - Authentication request is via flash message
 - Message and PIN are not stored on device
- **Authentication Message Overlays**
 - Authentication message overlays on app or calls
 - User never leaves app or all
- **Seamless Integration**
 - Local hosting or SAAS model
 - Easy integration into transaction workflow
 - Adaptable APIs
 - Custom development offered if needed
- **Comprehensive Authentication Audit Trail**
 - Millisecond data point capture of process
 - Origination to completion across all touch points

Comprehensive Authentication Audit Dataset

- Boloro's authentication system provides a complete audit trail:
 - Millisecond data point capture of the entire process
 - Audit trail from origination to completion across all touch points with timestamp and transaction ID tokenization
 - Enterprise initiates Authentication from its server via Boloro's software
 - Process checks for customer in the system
 - Validation of enterprise rules for the customer
 - Platform sends PIN / Password Request to customer for authentication
 - PIN / Password Origination Data
 - Verification of PIN / Password at Hardware / Host Security Module (HSM)
 - Completion of authentication and document Dataset
 - Trigger action (transaction occurs instantaneously after authentication is made)

About Boloro Global

- Boloro is owned and operated by Boloro Global Limited, a Delaware corporation, headquartered in New York City, USA.
- Boloro is emerging worldwide as a true real-time, multi-factor & multi-channel authentication and mobile payments platform, securing logins, as well as value and non-value transactions, with uniform deployment on all types of handsets.
- Boloro is an associate member of the GSMA (global association of mobile carriers), and member of the FIDO (Fast Identity Online) Alliance and DIACC (Digital ID & Authentication Council of Canada), participating in the Innovation Expert Committee of DIACC.
- Boloro's offerings are already patented across 82 countries, including the USA, providing authentication and authorization of mobile payments and other transactions.
- Boloro's technology can be white-labeled, with cloud-based or locally-hosted deployments, giving licensees complete control over the entire process.





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Real-Time, Multi-Factor & Multi-Channel Authentication



Associate
Member



DIAACC
MEMBER

fido
alliance
member

