knomi®

Mobile Biometric Authentication Framework

Knomi® is a mobile biometric authentication solution comprised of a family of biometric matching and liveness detection algorithms that use face and voice to enable secure and convenient multifactor authentication without passwords.

Knomi for Mobile Onboarding

Knomi can be used for identity proofing as part of a mobile onboarding solution, with advanced security checks that authenticate driver's licenses and passports, and spoof-resistant biometric facial matching between the live and printed images.

- Biometric facial match to ID
- Document verification
- Browser-based capture
- Liveness detection

Knomi for Mobile Authentication

Knomi enables passwordless multifactor authentication using face- and voice-based biometrics and liveness detection. It is available in either a device-centric or server-centric implementation.

- Multimodal biometrics using NIST-tested face and voice matching algorithms
- Device-centric, or server-centric options
- Paired with market-leading liveness detection algorithms
- Easily configurable for different use cases

Knomi for Liveness Detection

Knomi's advanced presentation attack detection algorithms are essential for onboarding and authentication. They detect not only victim impersonation spoofs, but also identity concealment spoofs that impact the ability to use the facial images for other biometric identity proofing functions useful for onboarding such as watch list checks and duplicate prevention.

- Purely passive approach – no user experience impact
- Solutions for onboarding, authentication, ID doc verification, kiosks
- Device- or server-based architecture
- Browser-based option for rapid onboarding

FEATURES

NIST-tested algorithms

Highly configurable UX and security features

Robust presentation attack detection

Multimodal performance

Identity proofing and document authentication

Device- or server-centric architecture IAM integrations

IAM integrations

iOS, Android, Windows, Linux support

Mobile banking

Banks can incorporate Knomi into their apps to make mobile onboarding and login more secure and convenient for their customers.

Enterprise security

Government agencies can use Knomi to make logical and physical access control more secure for employees and contractors.

Government

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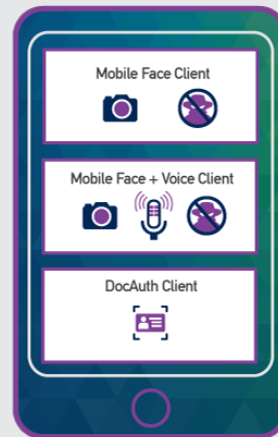
Architecture support: device- and server-centric, and browser-based

Three architectures are supported: Device-Centric, Server-Centric with Mobile SDK, and Server-Centric with Web. Knomi D offers software that performs all functions on the device. Knomi S moves functions to the server, including biometric template creation, matching and storage. Knomi Web enables facial capture and liveness detection via any browser. Knomi DocAuth can be implemented to support server centric with mobile SDKs and server centric with web architecture.
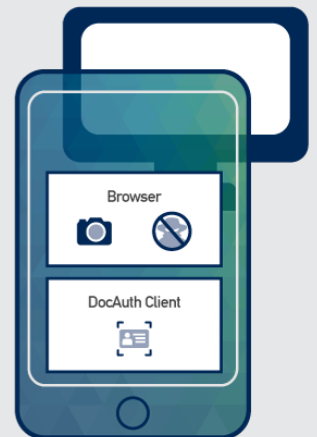

Knomi D
Device-Centric

- Mobile Face Authenticator
- Mobile Face

Knomi S
Server-Centric

- Mobile Face Client
- Mobile Face + Voice Client
- DocAuth Client
- Face Authentication Services
- Voice Authentication Services
- DocAuth Services

Knomi Platform

Knomi Web
Browser-Based

- Browser
- DocAuth Client
- Face Authentication Services
- Voice Authentication Services
- DocAuth Services

Knomi Platform

knomi®

"Hello Knomi, please verify my identity."

www.aware.com/knomi
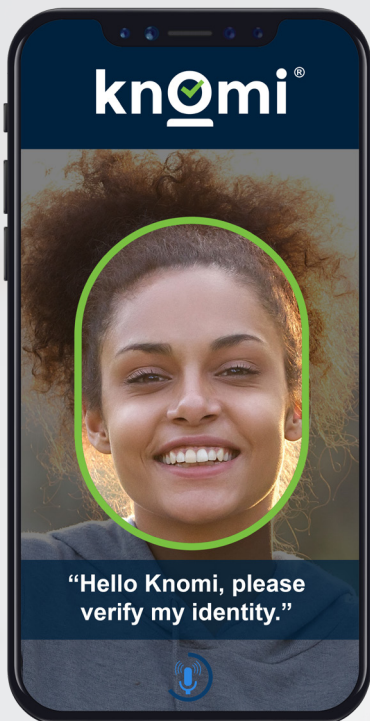
Knomi DocAuth

Document authentication and facial matching for identity proofing upon mobile onboarding

1
- ✓ Capture images of front and back of ID
- ✓ Extract face, text, and barcode data
- ✓ Capture live facial image

2
- ✓ Perform document authenticity checks
- ✓ Perform facial spoof detection analysis
- ✓ Perform biometric facial matching

3
- ✓ Report results
- ✓ Forward face image for further checks
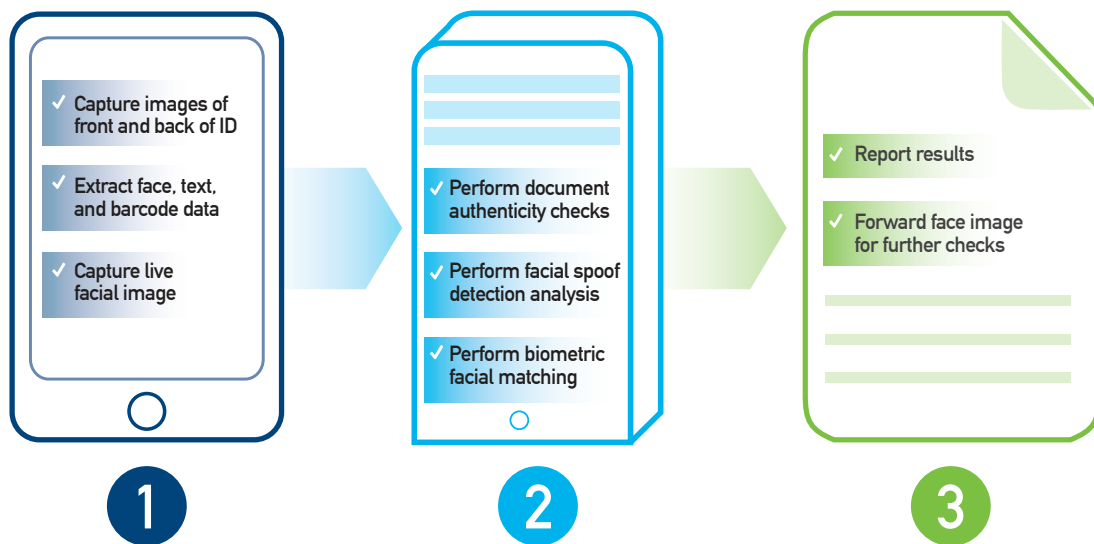
Knomi includes a solution for document authentication and facial matching, which is ideal for biometric identity proofing as part of a mobile onboarding process using a government-issued credential such as a driver's license or passport. Knomi DocAuth can be implemented in either a server-centric or browser-based architecture.

- Assisted capture of credential (front and back)
- OCR-powered capture of printed and bar-encoded data
- Detection of document security features (white light)
- Automated capture of printed facial image and live facial image
- NIST-tested facial recognition algorithms
- Robust, multi-algorithm face spoof detection for authentication and identity proofing (paper, digital, video, 2D/3D masks)
- Comparison of printed to bar-encoded data
- NFC reading of e-passport chip data
- Server-centric or browser-based architecture

Knomi Platform

Integration with market leading identity and access management platforms

Knomi Platform is the component of the Knomi mobile biometric authentication framework that can be integrated with identity servers to quickly enable them with passwordless multifactor authentication (MFA) using biometrics on a mobile device.

For organizations using an identity and access management (IAM) platform to implement secure access control, SSO, and federation for employees or customers, adding Knomi enables users to login to assets normally accessible by PC or browser with a username and password by instead biometrically authenticating on their mobile device in passwordless fashion. Knomi Platform has been integrated with several leading identity and access management products. Any enterprise can integrate Knomi to enhance their identity platform with passwordless multifactor authentication using out-of-band mobile biometrics, making login to their online assets more secure and convenient for their employees.
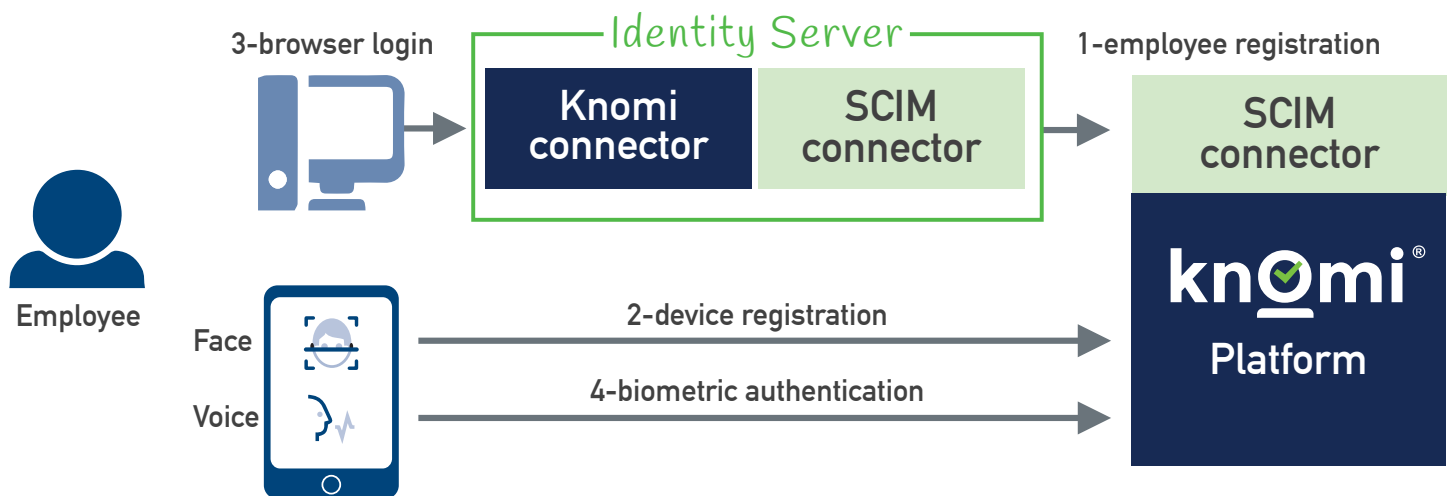
Out of band multifactor authentication using mobile biometrics

Aware is a leading global provider of software products and solutions for biometric identification and authentication. They are used for variety of applications including financial services, enterprise security, border management, and law enforcement. Aware is a publicly held company (NASDAQ: AWRE) based in Bedford, Massachusetts.