1Kosmos BlockID Verify

Use identity-based biometric authentication with flexible levels of identity assurance

The Business Challenge

Organizations have accelerated their digital transformation due to the pandemic and shifting market demands. Unfortunately, this move to an online environment has increased identity-related cyber-attacks and fraudulent activities. This has a global impact on internal and external identities in government and private sectors. As a result, organizations are scrambling to adopt stringent measures to improve security and protect privacy. These issues directly result from an inability to verify and secure identities at scale. Traditional IAM and CIAM strategies can not verify real people in a meaningful way in the digital world.

Organizations have always needed to verify identity, but the need for digital identity-proofing has become clear. Securely verifying identities with an assurance level that meets your business requirements adds a new security level to your enterprise. In addition, when done properly, it creates a better user experience for your workforce, customers, and citizens.

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The 1Kosmos BlockID Verify Advantage

1Kosmos BlockID Verify enables organizations to digitally transform the account enrollment and onboarding process for workforce, customers, and citizens. It is a revolutionary identity verification system that uses advanced biometrics, document scanning, and several important compliance standards to give your organization streamlined and secure identity verification.

With 1Kosmos BlockID Verify, users will self-enroll their identity using any combination of government IDs, telco, and banking credentials. The advantage of 1Kosmos BlockID Verify is the flexibility of identity assurance levels it can support. Organizations can choose the identity assurance their business needs right up to and including KYC, NIST 800 63-3 standards for Identity Assurance Level 2 (IAL2), and Authentication Assurance Level 2 (AAL2).

Once verified, the worker, customer, or citizen will use their digital identity for account login or transaction approval rather than a username and password. This not only provides users with a positive experience, but the organization also benefits from a high level of certainty for who is at the other end of the digital connection.
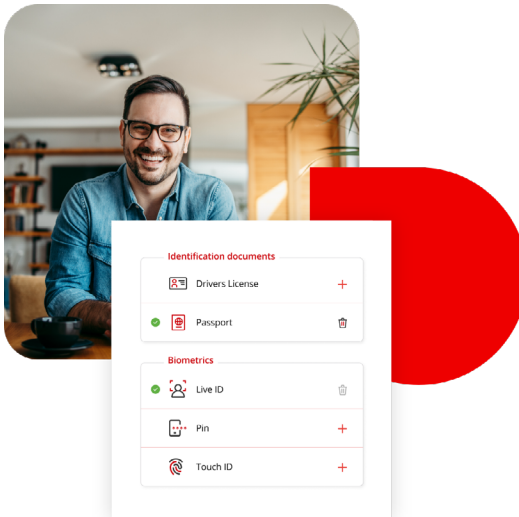
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Identity Verification

1Kosmos BlockID Verify enables users to perform self-service identity proofing by matching their live facial biometrics to identity documents they scan. The process takes minutes to complete and delivers a proofed and validated identity. In addition, organizations can build identity verification workflows with flexible levels of identity assurance. So depending on the business need, organizations can match the identity verification level to the assurance requirement. 1Kosmos BlockID Verify is certified to deliver an identity assurance level to meet the Know Your Customer (KYC) and Know Your Business (KYB) standards. For example, this level of identity verification is required for higher levels of risk, as is the case for Anti-Money Laundering (AML) and Customer Due Diligence (CDD) requirements.

To deliver flexible levels of identity assurance, 1Kosmos BlockID Verify guides the users through a web or mobile onboarding journey. As the process starts, users can use various types of IDs like driver's licenses and passports. In addition, 1Kosmos can also leverage non-physical IDs, such as a telco account and banking credentials, to further improve identity assurance. For additional use cases, we can also verify a user's social security number (SSN) against the SSA or verify if a user is indeed a physician by validating their NPIN (National Physician Information Number). As the documents and accounts are enrolled, the location and phone number are verified against the issuing authority. We then validate the user's LiveID scan against the picture extracted from the document. Once the identity is validated, their biometrics are enrolled, and the data is encrypted with the user's private key and stored in the 1Kosmos private and permissioned blockchain.

LiveID

1Kosmos BlockID verify performs a liveness verification when capturing the user's picture and gesture and then leverages AI to validate the identity record upon access attempt. The process is certified (by the Kantara Initiative) to NIST Identity Assurance Level 2 and compliant with Identity Assurance 3, as per the NIST 800-63-3 digital identity guidelines.
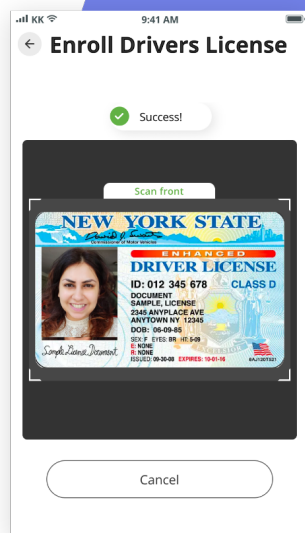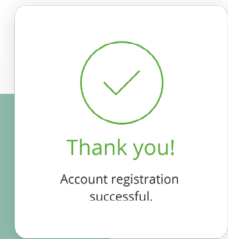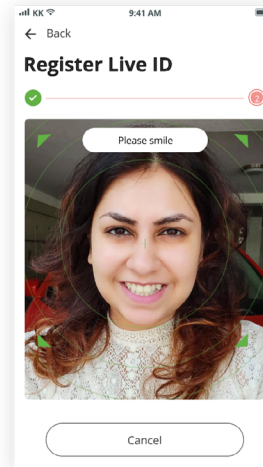

Document Verification

1Kosmos Block ID Verify can verify documents for 205 countries, and our identity proofing complies with NIST 800-63 guidelines. In the United States, Drivers License verification is completed via AAMVA. Passport validation is achieved through the US Department of State.

Blockchain Backend

To manage identity attributes and user privacy 1Kosmos BlockID Verify utilizes a W3C Decentralized Identifier standard - a private and permissioned blockchain distributed ledger. The 1Kosmos BlockID backend eliminates the central storage database of usernames and passwords and removes any risk of lost, borrowed, or stolen credentials. This backend is immutable, highly secure, and designed to support rapid transaction execution that often cannot be achieved when using a public blockchain. Each user's

Distributed Ledger

Verifiable Credentials

Privacy Layer on Ethereum
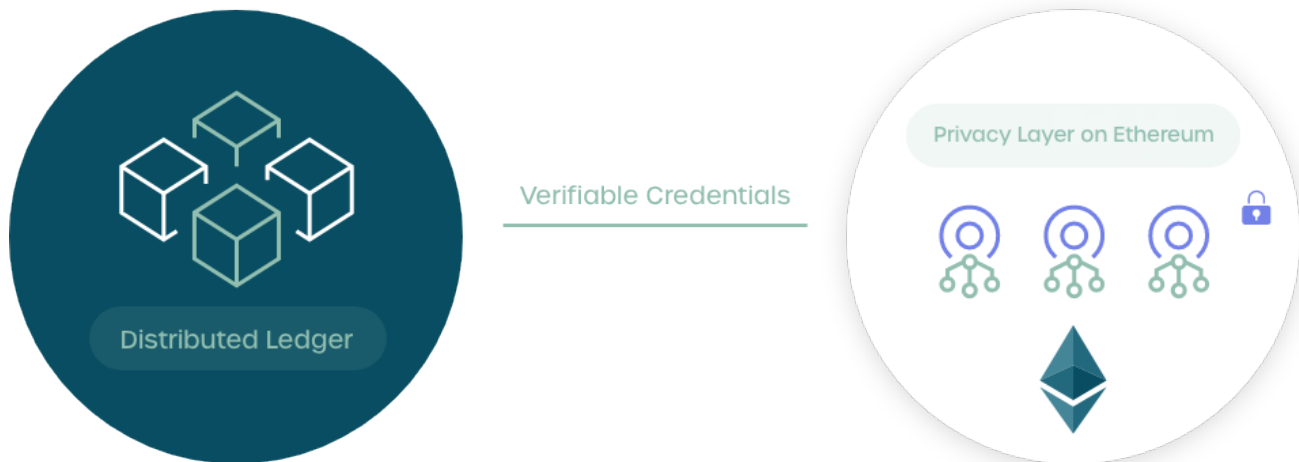
information is encrypted using their own unique cryptographic key pairs, with their private key stored securely on their mobile device. Once users enroll their attributes and biometrics with 1Kosmos BlockID Verify, the data is pushed to the 1Kosmos BlockID private and permissioned blockchain network. A smart contract inside the blockchain is triggered and executed, and once validated, the user's data is stored inside the blockchain. The clear benefit of the blockchain approach is eliminating a single identity repository, so hackers will not be able to access a "honey pot" of identity data that traditional CIAM vendors support.

Mobile App

The 1Kosmos BlockID mobile app can be white-labeled, so you can easily customize the look and feel to fit in with your brand identity and improve the customer or citizen experience.

Alternatively, by implementing our mobile SDK, you can integrate functionality into your existing app or service. This approach allows you to eliminate silos created when managing multiple apps and services.
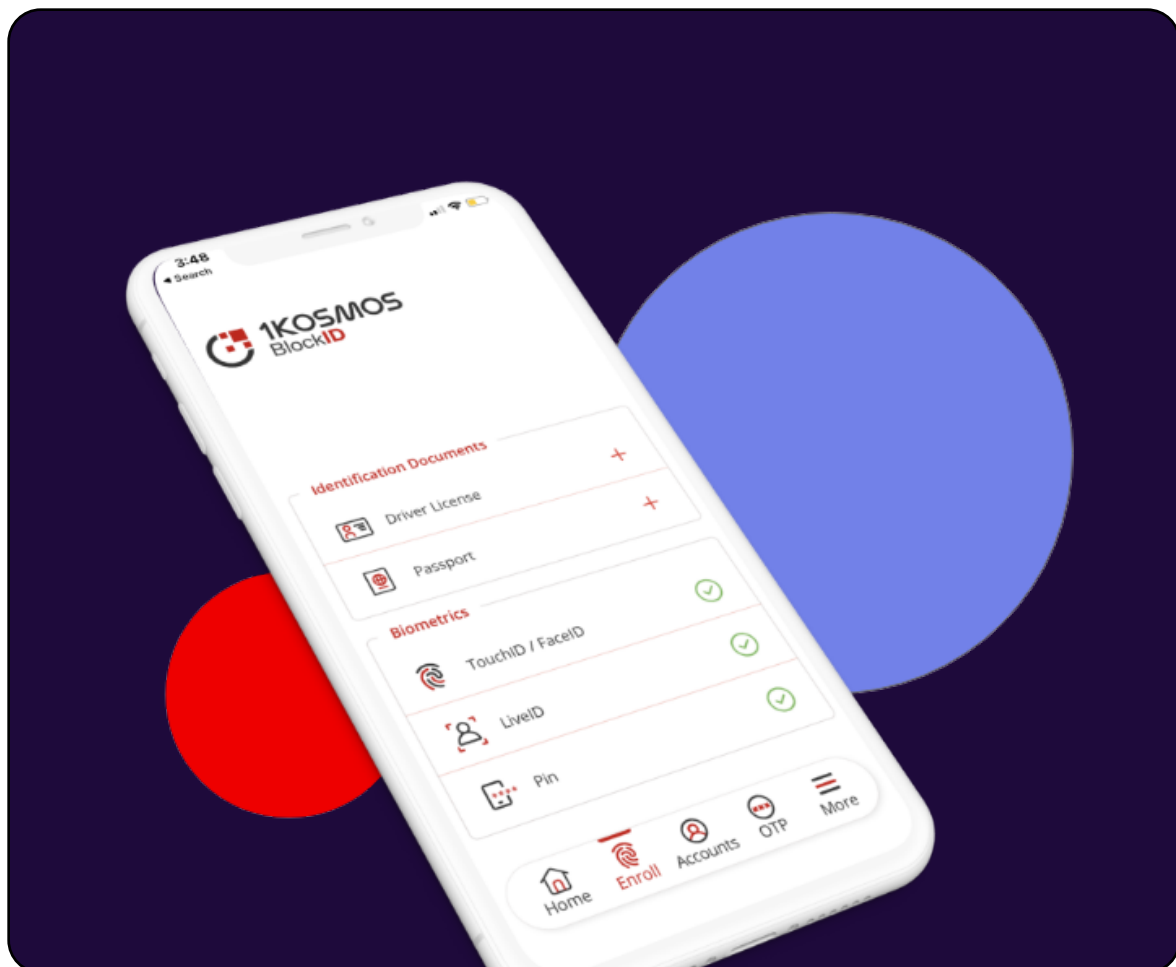
SDK, API and Integrations

1Kosmos BlockID Customer provides out-of-the-box integration into 50 target systems, including desktops (Windows and macOS), mobile devices (iOS and Android) to help ensure a consistent customer or citizen login experience.

1Kosmos BlockID Customer also comes with a developer-friendly SDK and APIs that comply with the strictest GDPR, SOC2, and ISO 27001 certification standards for handling and retention of sensitive data, so you can securely connect to almost anything you need for customer or citizen engagement. 1Kosmos can also integrate into commercial or government systems via industry authentication standards such as OAuth, OIDC, SAML and FIDO and also offers legacy support via RADIUS.
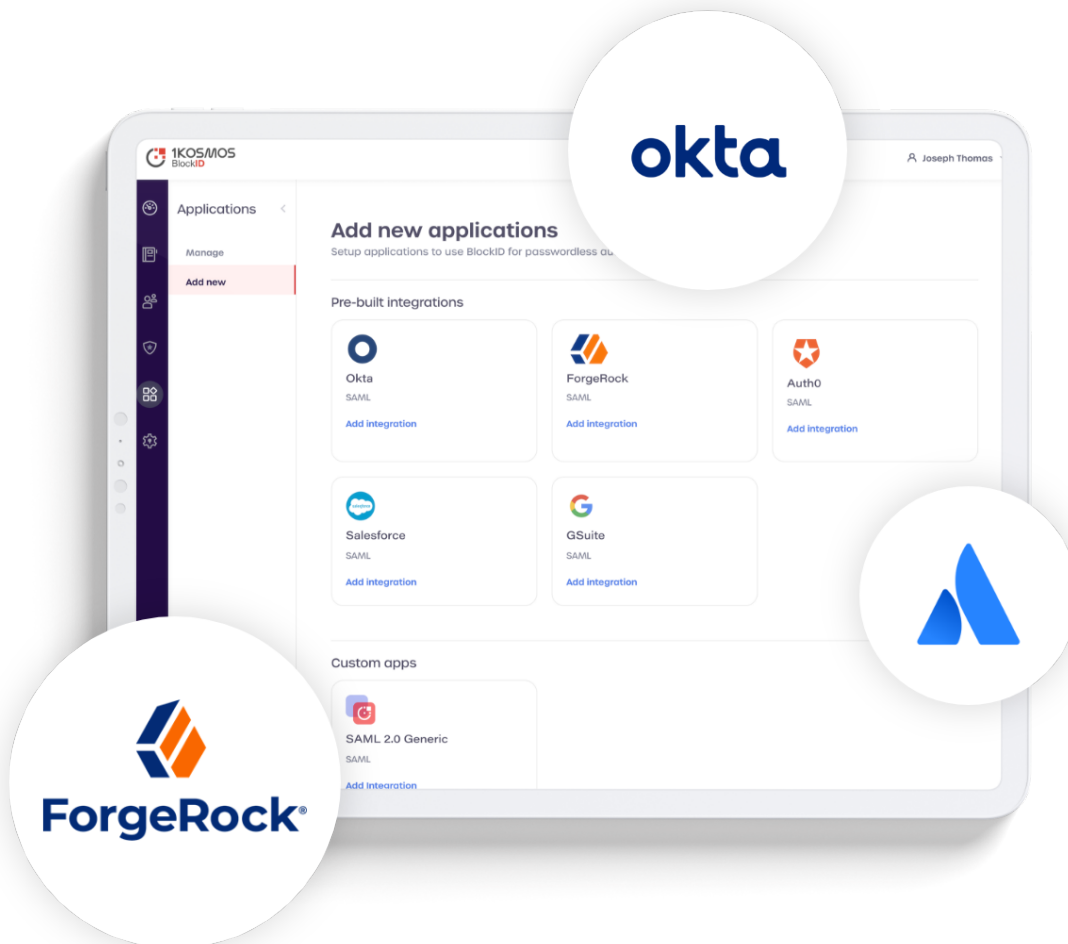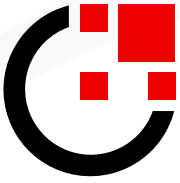
About 1Kosmos

1Kosmos BlockID is a distributed digital identity platform supporting both business-to-employee and business-to-consumer services that easily integrates with existing operating systems, applications, and IT security infrastructure to perform strong, verified identity-based authentication – eliminating the need for passwords, one-time codes, and more. By simplifying identity infrastructure, 1Kosmos drives both cost savings and user convenience while securing businesses and individuals from the harm and inconvenience of identity fraud. The company is headquartered in Somerset, New Jersey.

For more information, visit www.1kosmos.com or follow @1KosmosBlockID on Twitter.