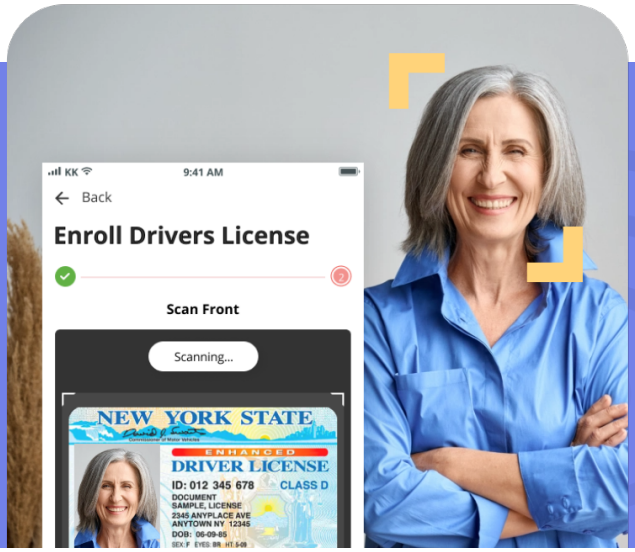
Datasheet

1Kosmos Identity Proofing

Deliver the highest degree of identity assurance to support identity-based biometric authentication and a passwordless experience



The Business Challenge

Organizations are pushing toward a passwordless environment.

Organizations must rethink how they currently manage identity and access requirements to securely deliver this capability and move to an identity based access approach. This shift will require users to prove who they are without usernames, passwords, and one-time codes. This transformation will require organizations to digitally verify and secure identities at scale, as traditional IAM and CIAM strategies can not identity-proof real people in a meaningful way in the digital world. Organizations have always needed to verify identities, but the need for automated digital identity-proofing has become clear in today's shift to a digital-first expectation.

Both data types are encrypted with the user's private key and stored in the 1Kosmos private and permissioned blockchain.

The 1Kosmos Identity Proofing Advantage

1Kosmos Identity Proofing capabilities will guide the users through a mobile-first identity enrollment journey. As the process starts, users can enroll various types of IDs like driver's licenses, national identity documents, and passports. 1Kosmos BlockID can also leverage non-physical IDs, such as a telco account and banking credentials, to improve identity assurance. For additional use cases, 1Kosmos BlockID can also verify a user's social security number (SSN) against the SSA or verify if a user is 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. 1Kosmos BlockID then validates the user's LiveID scan against the picture extracted from the document. Once the identity is validated, their biometrics and IDs are enrolled. Both data types are encrypted with the user's private key and stored in the 1Kosmos private and permissioned blockchain.

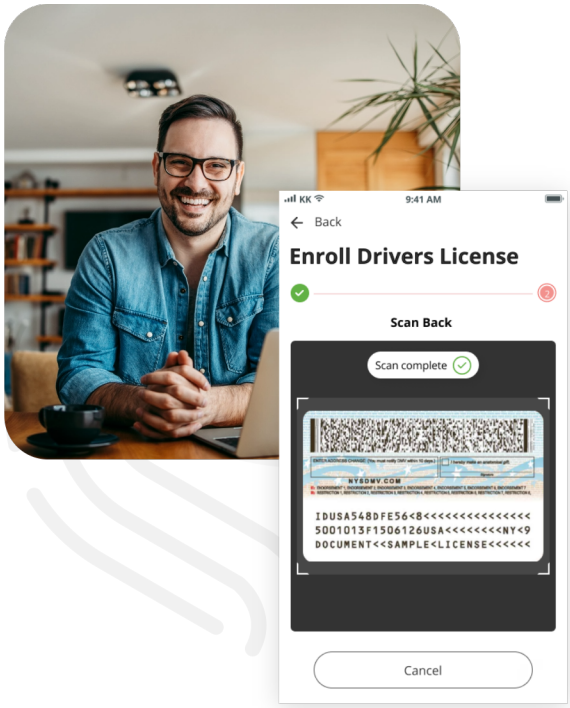
Government Issued IDs

1Kosmos Block ID identity proofing will utilize a user's driver's license, passport, or National ID to validate a user's identity. With the user's consent, 1Kosmos BlockID will extract the content from the ID and verify the document's validity. 1Kosmos BlockID supports document verification for 205 countries. The extracted data, including the picture, is used to verify the user's identity and is encrypted with the user's private key and stored in the 1Kosmos private and permissioned blockchain protecting the user's data and privacy.

Our identity proofing technology can:

- read barcodes defined by PDF 417 standard that has data encapsulated in it
- read the data stored in an MRZ code on both passports and National ID's
- read and extract the secure data located in passport RFID chips

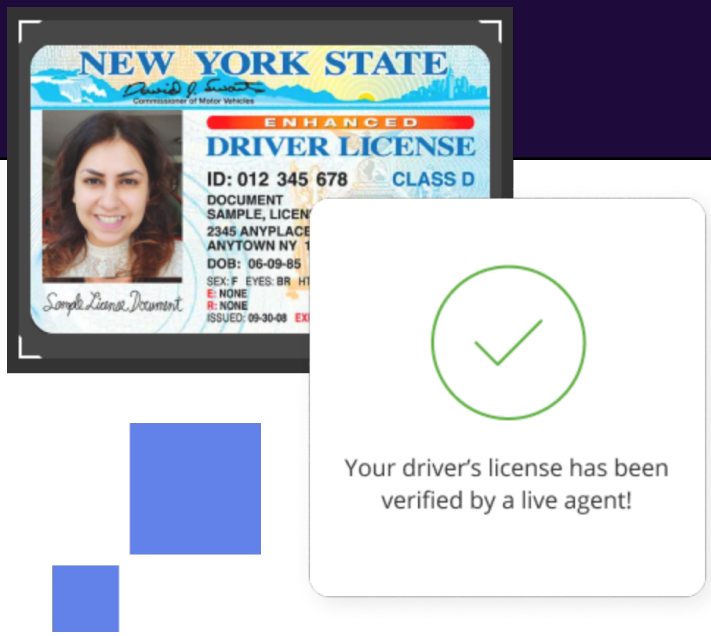
As Government-issued IDs are updated, users can delete their expired ID and enroll the new ID.



Document Verification

Identity proofing is only as sound as the ID used. 1Kosmos BlockID Identity proofing technology captures the information in the ID and looks to ensure the ID is valid. For instance, 1Kosmos Block ID checks for common characteristics of the entered document to identify if a photocopy is used. The RFID chip in a passport is another example, where if the chip can not be read, then the data is not validated.

In cases where a visual check of the data is required, 1Kosmos Block ID will work with third parties to validate the captured data and the ID document. Or, if organizations would prefer, 1Kosmos Block ID can activate an API to verify the data from the Country Signer Certificate Authority (CSCA) or from an issuing authority such as AAMVA for US drivers licenses, to validate the document and the data.



Drivers License

To validate the driver's license, the user is instructed to put the ID on a flat surface with a darker background so that 1Kosmos Block ID can easily detect the contrast between the back and front of the driver's license. This also helps detect fraudulent documents or documents that are printed on a piece of paper. 1Kosmos Block ID compares the data extracted from the back of the driver's license PDF 417 with the data captured from the OCR scan of the front to validate the data, and the picture captured is used to validate the LiveID biometric scan. All of the data is encrypted with the user's private key and stored in the 1Kosmos private and permissioned blockchain and can be shared at the user's discretion if requested.

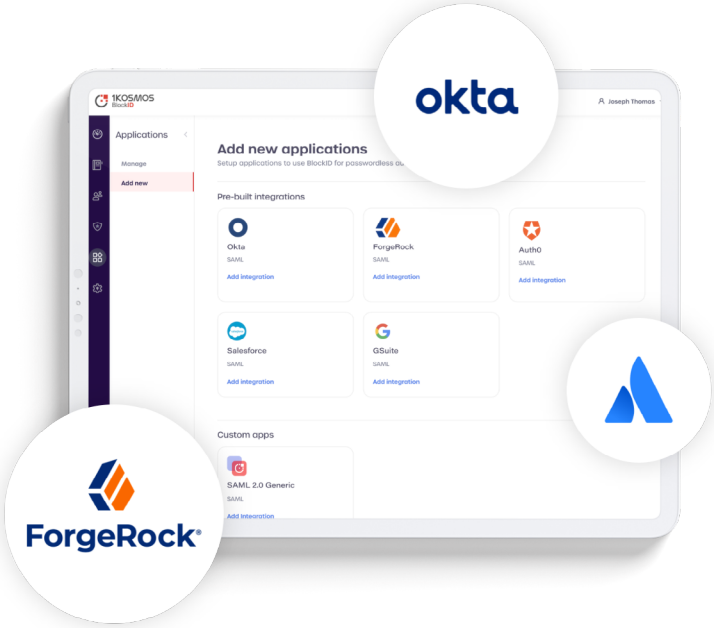
Passport

1Kosmos BlockID can verify identity through three areas of the passport to validate the data and document. First, an OCR scan of the passport data page is done, with all of the information in a human-readable format. Second, 1Kosmos BlockID reads and captures the MRZ code containing an encoded version of the identity data. And Finally, 1Kosmos BlockID can read and compare the data on the NFC chip if the mobile device supports NFC and this level of verification is needed.

These three data points will triangulate all of the identity data that increases the identity assurance level of the user. All of the data is encrypted with the user's private key and stored in the 1Kosmos private and permissioned blockchain and can be shared at the user's discretion if requested.

Identity Proofing SDK

Our Identity Proofing functionality is available through our SDK and is easily integrated into any custom app. So no matter if you are using the BlockID app or a custom integration, you can implement a mobile-first automated identity proofing workflow.



Compliance

1Kosmos 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.

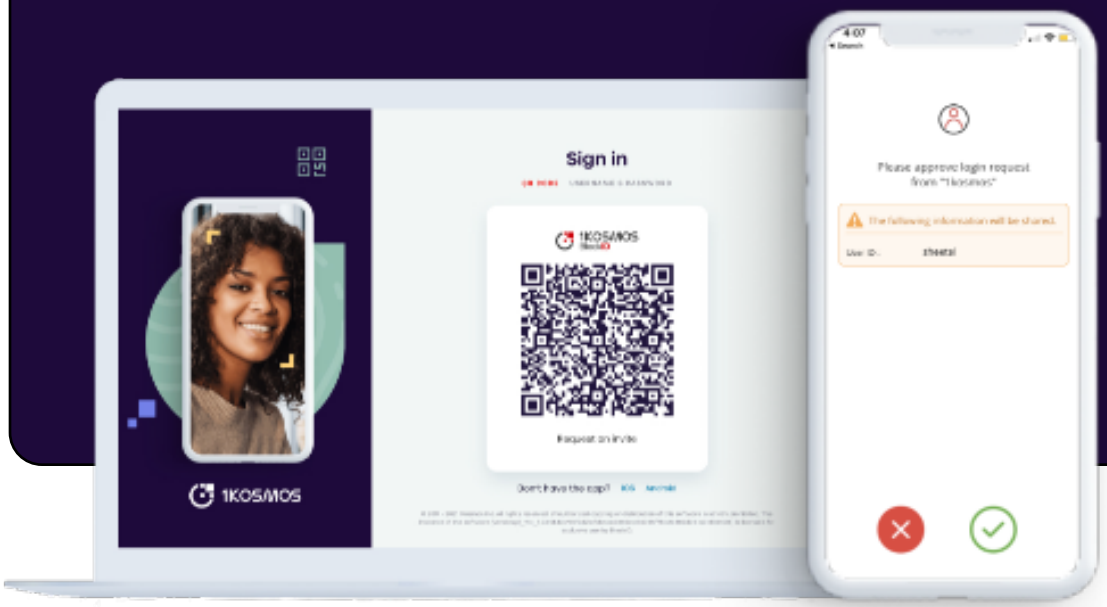
Level 3

Level 2

kantara INITIATIVE APPROVED

Web-to-Mobile Handoff

For identity onboarding sessions that are done on a laptop or desktop, the user's session can be transferred to their mobile for image capturing. Once the documents and LiveID are enrolled, the session is returned to the originating browser. This allows the capturing of high-quality imagery which is not possible via the low-resolution cameras on desktops and laptops.



About 1Kosmos

©2024 1Kosmos Inc., 1Kosmos enables remote identity verification and passwordless multi-factor authentication for workers, customers and residents to securely transact with digital services. By unifying identity proofing, credential verification and strong authentication, the 1Kosmos platform prevents identity impersonation, account takeover and fraud while delivering frictionless user experiences and preserving the privacy of users' personal information. 1Kosmos performs millions of authentications daily for government agencies and some of the largest banks, telecommunications, higher education and healthcare organizations in the world.

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