OVD KINEGRAM
a KURZ company

Strengthening eKYC Excellence and Global Reach

Salt Group's Success Story Extending its eKYC Platform With MOBILE CHIP SDK From OVD Kinegram

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THE CHALLENGE

Secure Identity Verification in Highly Regulated Environments

The world of remote digital onboarding and electronic Know Your Customer (eKYC) processes is governed by rigorous standards. Companies providing online identity verification solutions face constantly evolving security requirements, technical challenges, and regulatory constraints.

Salt Group is a leading provider of authentication and identity cybersecurity solutions based in Australia and the United Kingdom (UK), with customers in the UK, New Zealand, Europe, and Asia. SALT solutions secure high assurance digital transactions, and their customers include banks, financial services organizations and governments who operate under strict regulatory mandates. The company was looking to enhance the security provided by their flagship eKYC product, by expanding their existing digital verification solution to include an integrated advanced NFC ePassport chip verification solution.

The existing solution delivered biometric matching, passive liveness detection and ID document capture through Optical Character Recognition (OCR). To meet additional jurisdictions and strengthen document authentication, Salt Group expanded the eIDV stack to include eMRTD chip verification:

- → Elevating identity authentication with a highly secure NFC chip verification add-on
- → Meeting stringent international compliance and security standards
- → Offering frictionless, reliable identity checks for customers operating internationally
- → Integrating the solution into the existing software environment without compromising stability or performance

Building on previous experience with mobile device NFC and contactless smartcards, the company initially pursued internal development of a chip verification solution until the prototype stage. However, the much faster deployment of a fully developed product alongside the maintenance burden of an in-house solution prompted the strategic decision to work with an external solution provider. Salt Group ultimately selected OVD Kinegram and the MOBILE CHIP SDK.

"OVD Kinegram supplies the chip verification component in Salt's eIDV platform. Their eMRTD and ICAO depth gives us a robust, well-supported chip read for NFC ePassports, allowing Salt to focus on orchestrating the rest – capture, biometric matching, liveness – into one reliable, scalable user experience."

Pedram Ghovonlou,
CTO Salt Group

THE SOLUTION

Augmenting Salt's Orchestration Layer With Chip Verification

After a make or buy evaluation, Salt Group integrated OVD Kinegram's MOBILE CHIP SDK to supply the eMRTD chip reading and cryptographic validation step inside Salt's identity orchestration platform. Salt's stack continues to handle capture, UX, biometric match and passive liveness, risk and policy decisioning, auditing, and deployment options (on-prem/private cloud).

Salt Group's choice to partner with OVD Kinegram and expand their existing solution with the MOBILE CHIP SDK followed a thorough evaluation of available providers and solutions, and was driven by these key reasons:

- → proven track record in secure chip-based identity verification compliant with ICAO 9303[1]
- → strong security, flexibility, and reliability of the solution and its components
- → expertise in protecting identities on a global level

Smooth Technical Integration and Customized Adaptation

The implementation and technical integration of the MOBILE CHIP SDK was notably efficient and smooth. At the heart of the MOBILE CHIP SDK is the DocVal (Document Validation) Server, which is integrated directly into the customer environment and runs on premise, while not storing any data. This offers maximum security for customers with strict compliance requirements.

To verify an ePassport, the solution accesses the chip, reads and verifies the data, and clone-checks the chip, then passes the information on to the customer server.

Even after extensive testing and the initial launch, Salt Group identified new requirements for this process, stemming from feedback by one of their end customers. This prompted targeted adjustments to the already deployed SDK, which were quickly implemented. The changes address direct operational needs of the end customer, and also lay the groundwork for further improved functionality that will benefit future use cases.

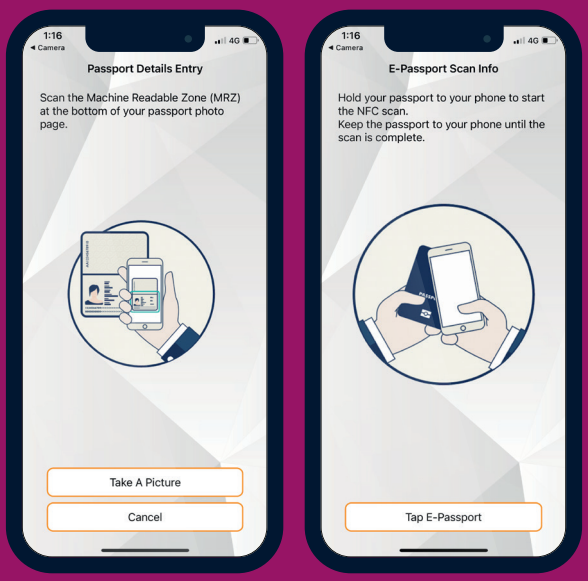
Maximized Security and Reliability of Data Verification

Establishing secure communication between the trusted DocVal Server and the ePassport, MOBILE CHIP SDK constitutes an end-to-end solution for reliable remote identity verification. Critically for Salt Group and their clients in banking and finance, the chip-based process includes extracting the document holder's photograph for verification, delivering strong biometry- and cryptography-based trust in the verification results. Equally important is the fact that all data remain under full control of the customer.

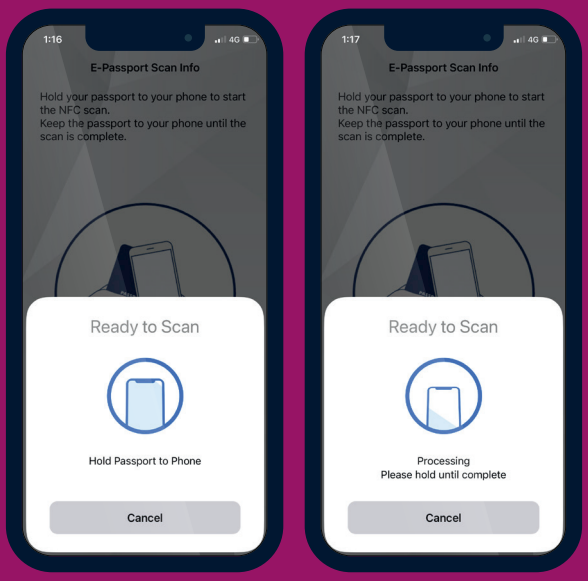
[1] ICAO 9303 = Series of standards published by the International Civil Aviation Organization (ICAO) that define specifications for protecting and verifying eMRTDs

MOBILE CHIP SDK Integrated Into Salt's eKYC Platform

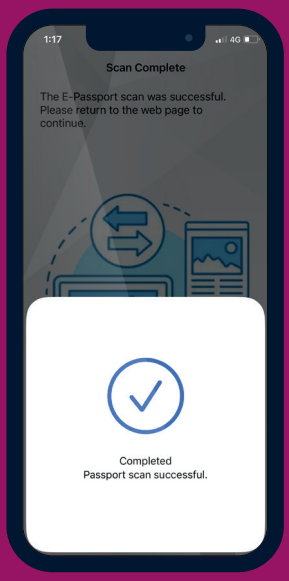
Initialization of passport scanning and verification in Salt's eKYC solution.



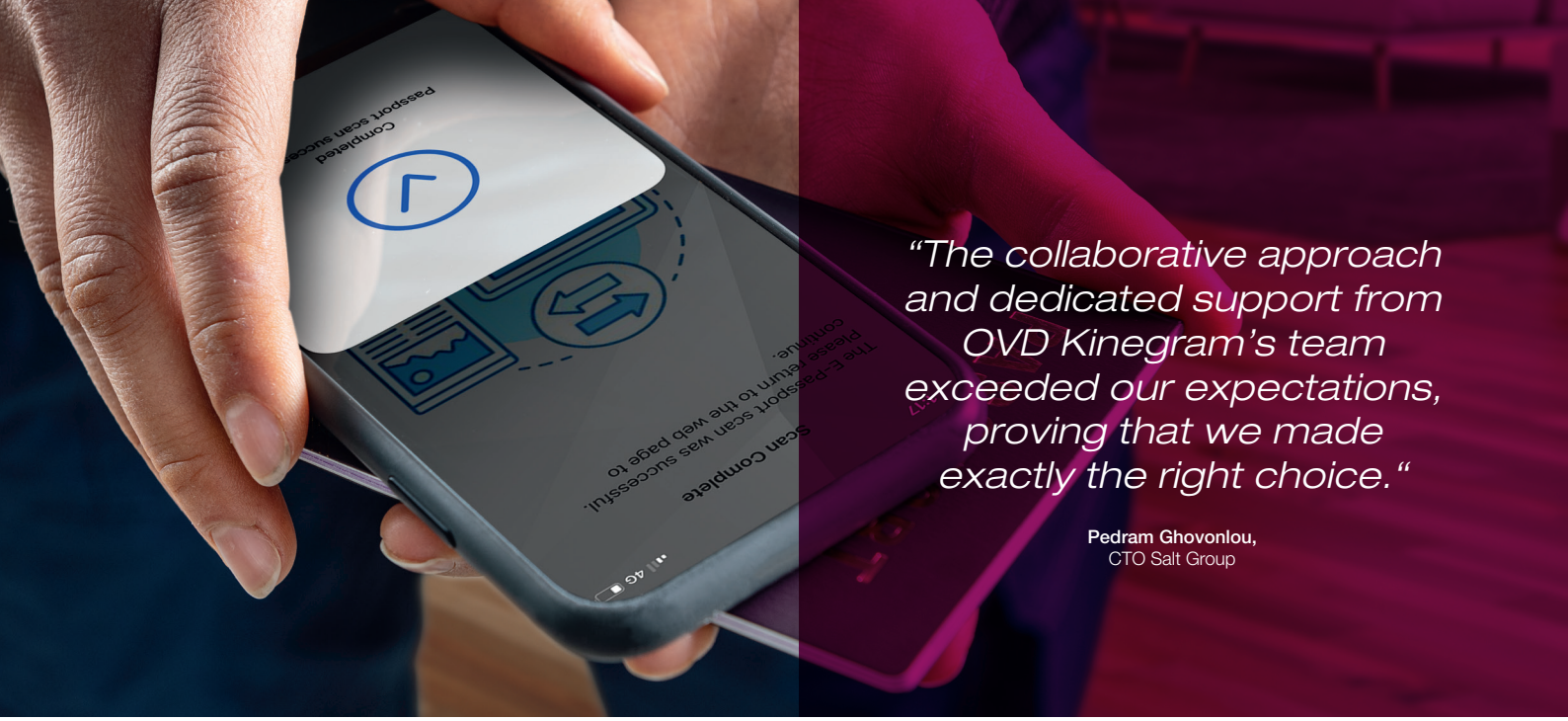
The user is guided through the passport scan.



Screen notifications during scanning of the passport and verifying the chip in the background.



Successful completion of passport scan and chip verification. The Salt eKYC process continues.



"The collaborative approach and dedicated support from OVD Kinegram's team exceeded our expectations, proving that we made exactly the right choice."

Pedram Ghovonlou,
CTO Salt Group

THE RESULTS

Salt Group increased document authenticity assurance by adding chip-level verification as a complementary signal to their biometric and document-analysis pipeline – improving trust while preserving a low-friction user journey. Salt Group transformed their existing solution into a comprehensive, globally compliant identity verification solution. Reading and securely verifying biometric data directly from the chip of electronic passports or identity cards offered a competitive edge to Salt Group: it significantly enhanced security as well as trust in the data integrity, reduced fraud risks, and strengthened the global customer offering.

Strategic Advantages and Expanded Market Opportunities

Integrating the MOBILE CHIP SDK into Salt Group's existing solution has delivered clear and immediate benefits:

- ✓ Enhanced data security and verification accuracy, significantly reducing fraud risk
- ✓ Rapid time-to-market, enabling Salt Group to stay competitive and responsive
- ✓ Expanded geographic reach, opening up new jurisdictions and markets
- ✓ Strengthened compliance and increased customer satisfaction

Trust-Based, Results-Oriented Partnership

The project's success was driven by the technology partnership between Salt Group and OVD Kinegram, and the deep mutual understanding of deliverables and requirements. The ability to offer a cryptographically verified trust chain all the way to the ePassport itself helps Salt Group to offer strong security and strategic benefits to their end customers, most notably, the secure remote verification of identities from practically anywhere in the world.

Within Salt's verification flow, reading the eMRTD's chip yields the chip-resident facial image (DG2) – the same photo that's printed in the passport, but stored digitally on the chip and cryptographically attested via the ePassport PKI (document-signer to country certificate). Unlike a standard DVS data check – which confirms identity fields against issuer records but does not validate the chip's PKI or the integrity of the facial image – the DG2 image proves provenance and tamper-resistance. Because it's extracted at native digital resolution directly from the chip (not a camera shot of a worn or faded print), it avoids wear-and-tear artifacts and compression noise, yielding cleaner features and more accurate biometric matching without adding friction.

"We are very happy with the results. OVD Kinegram delivers both state-of-the-art technology as well as a serviceable, collaborative mindset. That made all the difference."

Pedram Ghovonlou,
CTO Salt Group

THE OUTLOOK

Further Innovations and Synergies

The partnership between Salt Group and OVD Kinegram positions the former well for further innovation. With the MOBILE CHIP SDK successfully integrated, Salt Group's platform now supports ePassport chip verification in addition to traditional eIDV methods, enabling opportunities to deploy the solution in other products, for example in telecommunications or the authorization of high-value transactions by way of advanced Multi-Factor Authentication. Leveraging the flexible, secure, and reliable technology further will contribute to the company's leadership position in identity verification.

Stefan Gabriel, Head of Digital Solutions at OVD Kinegram, affirms: "We highly value Salt Group's forward-thinking approach and expertise. It's been really inspiring to work closely with their team, and we are looking forward to supporting their future innovations in identity and authentication solutions."

Learn more about the MOBILE CHIP SDK and how it can elevate your eKYC or onboarding solution with secure, chip-based verification! Contact us for a personalized consultation!

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Stefan Gabriel is the Head of Digital Solutions at OVD Kinegram AG. With over a decade of experience in designing, developing, and implementing IT systems and digital products, he drives the company's efforts in identifying and delivering cutting-edge solutions. His work focuses on enhancing secure digital identity verification and ensuring reliable, user-friendly document authenticity checks. His passion lies in creating innovative, robust digital solutions that keep pace with the ever-evolving tech landscape. Stefan regularly shares his knowledge and expertise through presentations, workshops, and articles.

ABOUT OVD KINEGRAM

OVD Kinegram is a global leader in protecting identities. Known for the KINEGRAM® security feature in physical identity documents, we have expanded our expertise into the digital sphere. With kinegram.digital we provide future-proof digital solutions for the verification of digital security features in identity documents such as ID cards, passports, residence permit cards, and driver's licenses. We empower enterprises and governments with unparalleled digital identity solutions.

Our SDKs and integration-ready products enable fast, mobile scanning and data capture for multiple data formats. They also facilitate identity document checks for secure and trustworthy identity verification. Police officers trust our modular, tailored solutions for smart and efficient law enforcement. We help institutions and organizations to streamline their digital onboarding processes and comply with the strictest KYC regulations. OVD Kinegram AG is a Swiss subsidiary of the German KURZ Group.

Further information is available on www.kinegram.digital.

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