



Essential Integrations: ABIS, SDK & Biometric Devices

Format: Presentation

Date: 13th March, 2025

Duration: 45 mins (Incl. Q&A)

Target Audience: Countries, System Integrators, Device Providers

Targeted Expertise/Roles: Suitable for All

Max. no. of Participants: 25

Pre-requisites: Pre-registration for the session, Review pre-read material

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Objective:

Biometrics plays a crucial role in digital identity systems, providing a secure and reliable method for authentication and deduplication. MOSIP, as an open-source foundational identity platform, adopts a modular and vendor-neutral approach to biometrics, ensuring flexibility and interoperability. The Secure Biometric Interface (SBI) standardizes communication between biometric devices and the MOSIP system, ensuring secure and consistent data capture. Additionally, MOSIP defines separate API specifications for its core biometric components, including the ABIS (Automated Biometric Identification System) for deduplication and the SDK integrations for biometric processing.

This session will provide a foundational understanding of biometrics in MOSIP, how MOSIP ensures responsible and secure collection and usage of biometrics, followed by an in-depth exploration of key API specifications, available tools, and support resources. It will primarily focus on **SBI, ABIS, and Bio SDK**, covering essential components such as sample codes and mock applications.

Pre-Read Links for Participants:

The MOSIP **Secure Biometric Interface (SBI)** outlines the technical and compliance standards required for biometric devices to be compatible with the MOSIP platform. It ensures devices meet specific capabilities, including biometric data capture, signing, and key protection, with no possibility for data injection.

Read more here: <https://docs.mosip.io/1.1.5/biometrics/mosip-device-service-specification>



The **Automated Biometric Identification System (ABIS)** in MOSIP performs de-duplication of biometric data to ensure a unique identity for each resident. MOSIP supports integration with multiple ABIS providers, allowing flexibility for different biometric modalities (e.g., fingerprint or iris).

Read more here:

<https://docs.mosip.io/1.1.5/biometrics/automated-biometric-identification-system-abis>

The **Biometric SDK** in MOSIP facilitates biometric data processing for 1:1 authentication and quality checks, handling fingerprint, iris, and face modalities. Key functions include **quality checking, biometric matching, feature extraction, segmentation, and conversion.**

Read more here: <https://docs.mosip.io/1.1.5/biometrics/biometric-sdk>

Also read:

- <https://docs.mosip.io/1.1.5/biometrics/cbeff-xml> - CBEFF format for biometric data exchange.
- <https://docs.mosip.io/1.1.5/biometrics/biometric-specification> - Biometrics images for various modalities are represented and exchanged as per this document
- <https://docs.mosip.io/compliance-tool-kit> - Compliance Tool Kit by MOSIP

In order to facilitate active participation and valuable understanding during the session, participants are encouraged to review the following links to familiarize themselves with MOSIP.

<https://docs.mosip.io/1.1.5/biometrics>

Additional Resources:

Delve into MOSIP's [documentation](#) to learn about its use cases, modules, case studies, and major technological advancements.

We encourage participants to review the pre-read material to enhance their understanding and maximize the value of the session. Engaging with these resources in advance will help you better navigate the sessions and gain the most benefit.

Thank you, and we look forward to your participation in the session!