Banking services, welfare provision, network security, access control, time and attendance management or medical record maintenance are all examples where personal identification is critical. With MorphoKit™ by IDEMIA, all these transactions - and more - can easily benefit from a layer of outstanding biometric technology.

Originally designed for fingerprint-based systems, MorphoKit™ by IDEMIA has been enriched with our world-renowned algorithms for 2D facial and iris recognition. **Fingerprint, Face and Iris:** MorphoKit™ by IDEMIA now gives access to three biometric modalities acknowledged worldwide for their high levels of accuracy and performance.

User enrollment and matching procedures are so simple to implement that system developers can learn in minutes how to enhance client security and identification systems with the power of biometrics.

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Operating Systems:
- Windows 7, 8/8.1, 10 (32 and 64 bits), Server,
- Linux,
- Android 4, 5 and 6 releases (1)

Interfaces:
- Native C/C++,
- .NET wrapper,
- Java wrapper

Development Environments:
- Visual Studio,
- MSDN,
- Eclipse

Coding Languages:
- .NET (C#, C++, .NET, J#),
- COM (C, C++)

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(1) Fingerprint and face biometrics only

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MorphoKit
BY IDEMIA

Multi-biometric SDK from the World leader in biometric technologies

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IDEMIA
KEY FEATURES

- Fingerprint Image Quality Optimization during acquisition and pre-processing: automatic finger positioning control, live quality check, quality threshold tuning, consolidated enrollment over multiple images
- Image Compression/Decompression: WSQ algorithm from FBI/NIST
- MINEX and FIPS 201 certified Feature Extractor and Matcher
- Feature Extraction: generation of ISO 19794-2, ANSI/INCITS 378 standard templates and proprietary ones
- Management of User Records including de-duplication check
- One-to-One Authentication
- One-to-Many Identification up to 1:50,000 users
- CBEFF exchange format generation
- Fake Finger Detection interface

COMPATIBLE DEVICES:
MSO 300, MSO 1300 and FINGER VP Desktop Series, MorphoWave™ Desktop and Compact by IDEMIA, MorphoTablet™ 2 by IDEMIA and RapID 2

TYPICAL USE CASES:

- 1:N identification of a live portrait capture against portraits stored in a database
- Comparison between a live portrait capture and a photo extracted from an ID document by a document reader (including IDEMIA’s B5000 and DESKO’s Pента scanners)

Fingerprint

Enrollment, coding, 1:1 Authentication
Identification up to 1:5,000 users(1)
Identification up to 1:10,000 users(1)
Identification up to 1:20,000 users(1)
Identification up to 1:50,000 users(1)

Face

One-to-One Authentication
One-to-Many Identification up to 1:50,000 users

Iris

Iris image coding
One-to-One Authentication
One-to-Many Identification up to 1:50,000 users

Typical use cases:

- 1:N identification between irises captured by Morpho IAD™ by IDEMIA (Iris At a Distance) or equivalent device providing iris images, against a watch list of iris images
- Comparison between irises captured by Morpho IAD™ by IDEMIA or equivalent device providing iris images, and iris images stored in an ID document

Licensing model

The following licenses are required to activate the features of MorphoKit™ by IDEMIA:

<table>
<thead>
<tr>
<th>Feature</th>
<th>Fingerprint</th>
<th>Face</th>
<th>Iris</th>
</tr>
</thead>
<tbody>
<tr>
<td>Enrollment, coding, 1:1 Authentication</td>
<td>VERIF</td>
<td>VERIF_FACE</td>
<td>VERIF_IRIS</td>
</tr>
<tr>
<td>Identification up to 1:5,000 users(1)</td>
<td>IDENTLITE</td>
<td>IDENTLITE_FACE</td>
<td>IDENTLITE_IRIS</td>
</tr>
<tr>
<td>Identification up to 1:10,000 users(1)</td>
<td>IDENT10K</td>
<td>IDENT10K_FACE</td>
<td>IDENT10K_IRIS</td>
</tr>
<tr>
<td>Identification up to 1:20,000 users(1)</td>
<td>IDENTPLUS</td>
<td>IDENTPLUS_FACE</td>
<td>IDENTPLUS_IRIS</td>
</tr>
<tr>
<td>Identification up to 1:50,000 users(1)</td>
<td>IDENT50K</td>
<td>IDENT50K_FACE</td>
<td>IDENT50K_IRIS</td>
</tr>
</tbody>
</table>

(1) Up to 10 fingers, 1 portrait or 2 irises per user