

The ABIS® 7 System

Multi-Biometric Identity Management for Civilian Agencies

Eliminate Identity Fraud and Duplicates

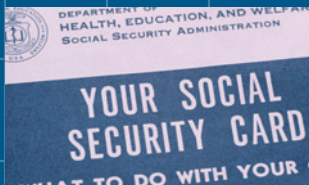
Passports and Visas



Driver's Licenses



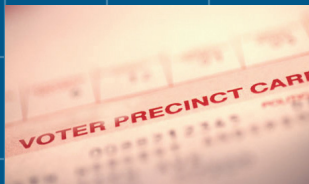
Benefit Entitlement Cards



Employee IDs



Voter Registrations



Mug Shot Systems

Detect Wanted Persons in Watchlists

- Population Registration
- Visa Application Screening
- Border Crossing Points
- Counter-Terrorism
- Criminal Investigations

The ABIS® 7 System

Implementing large-scale government-sponsored civilian identification programs is a highly complex project. Selecting the right technology partner and a solution with the flexibility to scale based on future growth requirements are of key importance. The ABIS® 7 System combines L-1's dedicated top-rated multi-modal algorithms to ensure one identity per person, regardless of the biometric required – fingerprint, face or iris. Agencies issuing secure identity documentation for high volume programs such as passports, driver's licenses or national ID cards can select hardware and customize their workflows to meet their specific needs and protect their investment over time.

Select the Top-Rated Multi-Biometric Algorithms

ABIS® 7 Fingerprint Matching

ABIS® 7 uses L-1's BioEngine® fingerprint technology that incorporates new and more accurate high-speed filters for fingerprint identification in increasingly larger populations. Tests conducted by the U.S. government place BioEngine® version 7 among the leading fingerprint technologies – the result of more than 10 years of continued improvement in fingerprint matching technique

ABIS® 7 Face Recognition

The incorporated Facelt® technology combines multiple top-performing face-recognition algorithms, each analyzing different attributes of the human face. The result is that the Facelt® Generation 9 is a multi-pass security solution that significantly improves search and hit rates to become the top performer in the industry. Each layer adds to the overall results of identifying and verifying individuals – even between twins.

ABIS® 7 Iris Recognition

Iris matching technology delivers what some consider to be the most accurate biometric for secure identification. Coupled with great

accuracy, iris matching operates at high speed making it ideal for duplicate detection in very large populations. L-1's Daugman technology has continually demonstrated top tier performance in government tests. The Daugman 10 algorithm is capable of performing optimally in any environmental condition providing unparalleled power and flexibility to iris applications such as iris on the move, iris at a distance and iris recognition from mobile devices.

Multimodal Operation

Multimodal solutions deliver unparalleled accuracy and assurance of 100% population coverage through multi-biometric operations. Available options include parallel searches of face, fingerprint and/or iris galleries, with automatic fusion of face, fingerprint and iris searches into a single result. Multimodal searches offer several potential benefits including higher accuracy, improved "lights out" automation and more economical hardware configurations.

Quality Control

ABIS® 7 has built-in image quality controls for fingerprint, face and iris biometrics to reduce failure-to-enroll rates, ensure better biometric performance and meet ISO standards for biometric image dimensions and quality.

Proven Biometric Performance

According to the test results reported in the most important industry tests, L-1 Identity solutions repeatedly was among the top performer. The 2006 Face Recognition Vendor Test (FRVT), Iris Challenge Evaluation (ICE) as well as NIST tests on fingerprint performance, L-1 Identity Solutions was the best all-around performer. L-1's face recognition algorithms performed best in most of the tests, the iris algorithm submissions were two of the top three performers, the fingerprint technology is placed among the top tier of competing algorithms. Top tier performance was also achieved in the latest 2010 NIST Multiple-Biometric Evaluation (MBE). The MBE tests were performed on databases with a size larger than a million images and L-1's algorithms ranked under the top three.

Sources:

Phillips, P. Jonathon; Scruggs, W. Todd; O'Toole, Alice J.; Flynn, Kevin W.J.; Flynn, Patrick J.; Bowyer, Kevin W.; Schott, Cathy L.; Sharpe, Matthew: FRVT 2006 and ICE 2006 Large-Scale Results, NISTIR 7408, March 2007
Grother, Patrick J.; Quinn, George W./Phillips, P. Jonathon: Report on the Evaluation of 2D Still-Image Face Recognition Algorithms; Multiple-Biometric Evaluation (MBE) 2010; NIST Interagency Report 7790, June 2010
Grother, Patrick J.: Limits of Face Recognition for Law Enforcement, Information Technology Laboratory, National Institute of Standards and Technology, October 2010
http://biometrics.nist.gov/cs_links/PFT/tables2f_040510.pdf

Increase Your Options

Easy Implementation

ABIS® 7 provides all the necessary components to process biometric identities, from identity business workflow management to historical identity record-keeping to biometric identity identification and verification. The ABIS® 7 System components are based on a modern standards-based Web Services architecture that provides fast and flexible integration with existing applications and services in your IT Service Oriented Architecture.

Manageable Workflows

The ABIS® 7 Workflow Manager automates all involved business processes, based on industry standards as well as on major customer requirements. For the first time, ABIS® 7 runs on the jBPM engine, supported by jBoss (subsidiary of Red Hat). All Business Process Definitions (Workflow Definitions) can be displayed and easily modified by means of graphic editors. The introduction of the jBPM engine offers the customer greatest flexibility and options, such as:

- Adjusting all Business Process Definitions to their own, individual requirements
- Gaining access to a large community of experts, services and consultants in order to maintain the system optimally
- Addition of customer information significant for their business process

Identity Record Management

The ABIS® 7 Identity Manager provides identity record-keeping services. All known individuals and their history of identity applications are recorded in this registry. Each such "encounter" record contains the permanent record of that application, including the biometric samples taken at that time, demographic data, and images of any identity documents submitted with the application as proof of identity. The ABIS® 7 Identity Manager leverages the industry

leading L-1 Identity Solutions' quality algorithms to select a composite best set of biometrics created from multiple encounters that enriches the data to be searched. The ABIS® 7 Identity Manager services include adding new persons, adding new encounters to existing persons, archiving older encounter records and supplying records selected by policy for inclusion in the ABIS® 7 Search Engine's biometric galleries.

Commodity Hardware

The ABIS® 7 System uses only commodity hardware for the best possible price-performance. Select an established commercial database in accordance with database preferences and administration skills.

Protect Your Investment

Scalability

The ABIS® 7 System has been designed to handle high volumes of biometric data throughput over large identity databases. Biometric engines can be added incrementally to increase record capacity and search throughput, and to reduce response time.

Built-in Fault Tolerance

The ABIS® 7 System can be deployed in redundant configurations. This allows operation to continue without interruption while failed search servers are replaced. Combined with a clustered database and workflow servers, the ABIS® 7 System can be configured for near-continuous operation.

Simplified Expansions

The ABIS® 7 system architecture allows expansion packages ("assemblies") to be prefabricated offline and attached to the operational system with no downtime. Adding more search core components allows you to expand the database size, increase search volume and reduce search response time as business needs evolve.

Real-World Experience

Worldwide ID Programs Using L-1 Biometrics

- India National ID Program - UID
- Angola Electoral Commission
- Jordan National Biometric System
- Mexico National Voter Registration
- Mexico States of Nueva Leon and Sinaloa
- Panama Voter Registration
- Philippines Alien Registration Card
- Serbia National ID Card
- United Arab Emirates Immigration System
- Canada Province of Ontario DMV
- USA States of Connecticut, Delaware, Florida, Georgia and Nebraska DMVs
- USA Department of State Visa Issuance



Commitment to Customer Success

Our first-class Professional Services organization can provide experienced implementation services:

- Training in software installation, integration development and troubleshooting
- On-site installation and acceptance testing
- Integration of the ABIS® 7 System into existing business applications
- Design and/or implementation of business-specific identity applications

Consider relying upon the experience of our professionals in large-scale biometric projects as a solid risk management strategy.

System Integrator Support

We provide Systems Integrators with timely and professional proposals for optimum use of the ABIS® 7 System infrastructure and biometric technologies. Our specialists consider customer requirements for search throughput, search response time, level of redundancy required, size and growth of database and size and types of images to be stored.

Our proposals include detailed hardware requirements for System Integrator fulfillment. Systems Integrators can leverage the unmatched biometric performance and flexibility of the ABIS® 7 System within their business applications.

5705 W. Old Shakopee Rd.
Suite 100
Bloomington, MN 55437
USA
Telephone +1-952-932-0888
Facsimile +1-952-932-7181

www.L1id.com