

# DigitalPersona® SDK

One Touch® I.D.



*DigitalPersona SDKs provide the tools for developers to create a new generation of commercial and internal use applications delivering the convenience, security and biometric assurance of fingerprint authentication. From time and attendance, process control, point of sale to business applications, the DigitalPersona SDKs allow developers to quickly integrate fingerprint authentication into their software and hardware designs.*

**Easy, fast way to integrate fingerprint biometrics into identification applications for commercial and internal uses:**

- Identify users fast and accurately.
- Works for large-scale fingerprint deployments.
- Eliminate PINs, names and passwords.
- A finger touch is all it takes.
- Streamline business processes.



digitalPersona®

## Identification Software Development Kit

The One Touch I.D. SDK continues in the tradition of DigitalPersona SDKs in providing solid, proven tools for developers to incorporate into mission-critical applications. The One Touch I.D. SDK extends the functionality of the DigitalPersona Gold, Gold CE and Platinum SDKs with the ability to perform high-speed searches on a large-scale collection of enrolled fingerprints.

One Touch I.D. technology enables users to simply touch a fingerprint reader to obtain a result rather than having to enter a user name or PIN, as required in verification. Identification is fast and more convenient with fingerprint systems when compared to verification-only methods.

Developers who have created applications using the DigitalPersona Gold or Platinum SDKs can improve their offerings with the addition of identification capabilities. In addition, the One Touch I.D. SDK incorporates a licensing process, which is flexible and convenient. This process enables you to establish expiration dates to limit the validity of enrolled fingerprints, if needed. Once an enrolled fingerprint is licensed for use with identification, it can be stored in any number of databases or computers and retrieved from locations all over the world.

## Identification of Large-Scale Data Sets

Fingerprint authentication provides a highly accurate method of verifying that the person gaining access to applications, processes or property is who they say they are. The next step to increase the convenience of fingerprint applications is to increase the number of individuals that can gain access to applications or resources, while ensuring the security and accuracy of that larger set of individuals are maintained.

Identification enables users to quickly gain access to resources without having to first input or show their identity – they are identified through their fingerprint. Touching a fingerprint reader and then gaining access to a set of applications and resources, with identification credentials automatically provided to the necessary application is the convenience feature of identification.

The DigitalPersona One Touch I.D. Software Development Kit enables developers of fingerprint enabled applications and services to build in identification of large sets of users.

Along with the capability to perform instant identification, the One Touch I.D. product has a number of other features designed into the product which enable the developer to design in checks and balances within their application to prevent fraud, misplaced users and ease of use for users.

## One Touch I.D. Accuracy and Performance

The strength and power of the One Touch I.D. product is the accuracy and speed of identification. Having a product that is fast, but approves anyone who touches the reader is poor, as is having a product that is accurate and takes seconds to verify a user's fingerprint. The One Touch I.D. product was designed with speed and accuracy so that it can identify a finger out of a data set of 2,000 enrolled templates in less than two tenths of a second with an accuracy rate that is the best in the industry.

## Markets for Identification

The accuracy and speed of identification is realized in applications where there is the possibility of having groups of users lined up in order to gain access to a shared resource, such as:

- Manufacturing or workplace entrances
- Retail check-out locations
- Learning locations and classrooms
- Entitlement and voting systems
- Meal program verification
- Time and attendance locations
- Kiosk facilities
- Physical access applications
- Hospitality and theme park entrances
- Reward systems

## Proven Technology

DigitalPersona is the trusted leader in fingerprint biometrics. DigitalPersona's proven fingerprint authentication technology can be found in custom applications around the world. Examples include banking applications in Mexico, point of sale terminals in US retail chains and restaurants, and health care industries.

### One Touch I.D. Feature Set

- Fast, accurate identification of a user's finger.
- Convenience – users only have to touch a fingerprint reader to enable products or applications. No more user IDs, PINS, or identification numbers.
- Two-finger identification - this can be added to an application to increase security.
- Fingerprint database clean-up - enables Developers to eliminate redundant fingerprint templates and eliminate fraudulent users within data sets.
- DigitalPersona Gold Template operation - uses Gold fingerprint templates in BTF (Basic Template Format) or XTF (eXtended Template Format), which can be created from the DigitalPersona Gold Gold CE, and Platinum SDK products.
- Windows Operating System support - identification function can be used with Vista, XP Pro, 2000, or Server 2003 systems.
- Template expiration - enables identification templates to be limited to 1-year or 3-year lives. In addition, templates can be licensed for unlimited lives.
- Identify random registration (also called enrollment) templates – search all enrolled templates and connect a finger and user to an unknown enrolled template.
- Scalable Identification – data sets can be searched simultaneously to enlarge the total data set capacity for identification.
- Flexible licensing system – licensing can operate with a diverse set of applications, products, or customer deployment scenarios.

### Development Environment

The DigitalPersona One Touch I.D. SDK:

- Supports Visual Studio 6.0 and later.
- Requires programming knowledge of C and C++.
- Requires DigitalPersona Gold, Gold CE or Platinum SDKs in order to generate fingerprint templates.

### Supported Fingerprint Enrollment Templates

- DigitalPersona Gold
- DigitalPersona Gold CE
- DigitalPersona Platinum (through the template conversion utility)

### Enrollment Template Data Sets Sizes

- Proven speed and accuracy at 2,000 fingerprint enrollments.
- Single data set size can be as large as 20,000 fingerprint enrollments.
- Multiple data sets can be identified simultaneously in multi-processor or multi-threaded environments.

### System Requirements

Operating Systems:

Microsoft® Windows® XP Professional, Microsoft Windows 2000 SP4, Microsoft Windows Server® 2003, or Microsoft Windows Vista™. (You must be Administrator.)

Computer:

- X86-based processor or better.
- CD-ROM drive (for software installation).
- The minimum amount of RAM required to run your Microsoft Windows operating system.
- At least 21MB of available hard-disk space.
- USB Port.



**DigitalPersona, Inc.**  
720 Bay Road  
Redwood City, CA 94063 USA

Tel: +1 650.474.4000  
Fax: +1 650.298.8313  
E-Mail: [info@digitalpersona.com](mailto:info@digitalpersona.com)  
Web: [www.digitalpersona.com](http://www.digitalpersona.com)

© 2007 DigitalPersona, Inc. All rights reserved. DigitalPersona, the DigitalPersona logo, and One Touch are trademarks of DigitalPersona, Inc. registered in the U.S. and other countries. All other brand and product names are trademarks or registered trademarks of their respective owners. MC-063-070907