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.**
- **Eliminate PINs, names and passwords.**
- **A finger touch is all it takes.**
- **Streamline business processes.**

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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 fingerprint biometrics into mission-critical applications. The One Touch I.D. SDK extends the functionality of the DigitalPersona One Touch for Windows, One Touch for Linux, Gold, Gold CE and Platinum SDKs with the ability to perform high-speed searches on a medium-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 One Touch for Windows, Gold or Platinum SDKs can improve their offerings with the addition of identification capabilities. Furthermore, there are no usage or license fees – no fees for licensing the runtime engine and no per-template license fees. Once a fingerprint is enrolled, it can be stored in any number of databases or computers and retrieved from locations all over the world, without any license charges applying.

Why Identification?

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 allows developers of fingerprint enabled applications to extend them through the identification of medium-size 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 not a good solution, 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.
- Fast, efficient application development - Now with a .NET programming interface.
- Two-finger identification - this can be added to an application to increase security.
- Identification extensibility with OR/AND matching.
- Windows Operating System support - identification function can be used with XP Professional and Vista.
- License-free – no template licensing required.
- One Touch for Windows 1.4.0 RTE components included as an install option. With 1.4.0 RTE option installed, sample code runs out of the box.

Development Environment

The DigitalPersona One Touch I.D. SDK:

- Supports Microsoft® Visual Studio® 2005 or later.
- Requires programming knowledge of .NET.
- One of the following SDKs are required in order to acquire images and create fingerprint templates:
    - o One Touch for Windows SDK
    - o One Touch for Linux SDK
    - o DigitalPersona Gold SDK
    - o DigitalPersona Gold CE SDK
    - o DigitalPersona Platinum SDK
- The One Touch for Windows SDK is required to build and run the sample code included with the One Touch I.D. SDK.

Supported Fingerprint Enrollment Templates

- One Touch for Windows
- One Touch for Linux
- DigitalPersona Gold
- DigitalPersona Gold CE
- DigitalPersona Platinum (through the template conversion utility)

Enrollment Template Data Set Size Requirements

- Approximately 40 KB of RAM required for each fingerprint template.
- Additional 12 MB of RAM for each identification set.

System Requirements

System Software:

- One of the following operating systems - Microsoft Windows XP (32/64-bit), Microsoft Windows XP Embedded (32-bit), Microsoft Windows Vista (32/64-bit), Microsoft Server 2003/2008 (32/64-bit).
- Microsoft .NET framework v2.0 or later.

Computer:

- X86-based processor or better.
- CD-ROM drive (for software installation).
- At least 21MB of available hard-disk space.
- USB Port.

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