

DigitalPersona® SDK

One Touch® for Linux

DigitalPersona SDKs provide the tools for developers to create a new generation of commercial and internal 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 biometrics into applications for commercial and internal uses:

- **Authenticate users reliably and conveniently.**
- **Simplify and enhance security.**
- **Streamline business processes.**
- **Address compliancy concerns.**
- **Reduce password management costs.**

The DigitalPersona One Touch for Linux Software Development Kit (SDK) enables integrators and developers to quickly add the power of fingerprint-based authentication to their Linux-based applications. DigitalPersona offers powerful SDKs which feature the highest performing and most accurate fingerprint authentication algorithms in the industry.

Easy to Use Toolkits

In only a few hours, developers easily integrate fingerprint authentication into their application and have access to a full range of authentication services for their PC, embedded computer, POS terminal or server solution. Sample code is included to illustrate the capturing of a fingerprint, extracting a fingerprint template and matching fingerprint templates. Simple architecture diagrams, programming workflow illustrations and detailed documentation enable fast integration of powerful fingerprint biometrics into customer-friendly applications.

Unlimited programmer support is available for free through DigitalPersona's staff of Support Programmers who will work with you to answer questions and guide you through a stress-free deployment.

Programming Options

The DigitalPersona One Touch for Linux SDK supports a range of C and C++ development environments. The flexibility of the One Touch for Linux SDK enables developers to embed fingerprint-based authentication in a limitless number of different application front ends.

Fingerprint Recognition Engine

The DigitalPersona® Fingerprint Recognition Engine provides the basic functionalities of fingerprint feature extraction, enrollment and matching. The DigitalPersona Engine combined with DigitalPersona U.are.U® Fingerprint Readers, offers the industry's most accurate

fingerprint recognition, lowest false accept and false reject rates (FAR/FRR) coupled with fast execution time.

Security and Privacy

DigitalPersona has given much consideration to security and user privacy issues. Fingerprint data is encrypted everywhere along the data path offering protection from tampering and maintaining the user's privacy.

Supported Fingerprint Readers

The One Touch for Linux SDK supports the standalone DigitalPersona U.are.U 4000B Reader and the U.are.U 4000B Module designed for integration with OEM equipment.

Proven Technology

DigitalPersona is the leading provider of fingerprint authentication solutions with the world's greatest number of biometrically-enabled developer applications. DigitalPersona's award-winning technology is used worldwide by over 90 million people in the most diverse and challenging environments.

DigitalPersona SDKs and proven fingerprint authentication technology can be found in custom applications including banking, healthcare solutions and point-of-sale terminals in retail chains and restaurants.



One Touch for Linux

System Requirements

Operating System

- Novel Linux Desktop 9 SP3, with kernel version 2.6.5-7.244-default/smp
- Novell Linux Point of Service SP2 with kernel version 2.6.5 -7.201-SLRS
- Novell Linux Point of Service SP3 with kernel version 2.6.5 -7.155.29-SLRS
- SUSE Linux Enterprise Desktop 10 SP1 with kernel version 2.6.16.46-0.12-default/smp
- Slackware 11 with kernel version 2.6.18.
- Slackware 11 with kernel version 2.4.33.3
- Slackware 12 with kernel version 2.6.21.5
- Red Hat Linux WS V3 kernel 2.4.21-50.EL/smp

Hardware

Pentium-class processor (or better), CD-ROM drive, USB Port

Development Environment

Depends on distribution.

Programming Interface

C and C++

User Interface

Developer creates own custom user interface.

Fingerprint Registration

Developer creates own custom application.

Database

Developer may use their own database.

Fingerprint Readers

Supports DigitalPersona U.are.U 4000B Reader and U.are.U 4000B Module

Template Interoperability

Template format compatible with:

- DigitalPersona One Touch I.D. SDK (fast identification)
- DigitalPersona Gold and Gold CE SDKs

Security

- Fingerprint templates are encrypted by the engine.
- The fingerprint reader sets up an encrypted link with the driver to securely transfer the image.

Performance

Tested by third parties, the SDK offers highly accurate recognition and fast execution time. Please request a white paper for detailed results.

Application Deployment

DigitalPersona Fingerprint Recognition Software (Runtime Engine) are supplied with the SDK and freely distributable. U.are.U Readers are not included with SDK purchase.

Source Code

Kernel mode driver source code is available in the product to support customer manipulation of other Linux distributions that utilize the 2.6 kernel.

