

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, 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 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 can easily integrate fingerprint authentication into their application and gain access to a full range of authentication services for their PC, embedded computer, POS terminal or server solution. Sample code is included to help programmers quickly understand how to capture a fingerprint, extract a fingerprint template and match fingerprint templates. Detailed documentation and workflow diagrams enable fast integration of powerful fingerprint biometrics into customer-friendly applications.

DigitalPersona's technical support engineers are available to work with you to answer questions and guide you through a stress-free implementation.

Programming Options

The DigitalPersona One Touch for Linux SDK supports C and C++ as well as Java language interfaces. The flexibility of the One Touch for Linux SDK enables developers to embed fingerprint-based authentication in a wide variety of 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 and DigitalPersona U.are.U 4500 Readers and Modules, 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 has been used worldwide by over 100 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 and Civil ID solutions, as well as point-of-sale systems in retail chains and restaurants.



System Requirements**One Touch for Linux v.1.6.1**

Operating System	<ul style="list-style-type: none"> • Ubuntu 10.04 LTS - 2.6.32-27-generic (both 32-bit 64-bit) • OpenSUSE 11.3 - 2.6.34.7-0.7-desktop (32-bit) and 2.6.34.7-0.5-desktop (64-bit) • Fedora 14 - 2.6.35.10-74.fc14.i686 (32-bit) and 2.6.35.10-74.fc14.x86_64 (64-bit) • Support for the Linux kernels from 2.6.32 through 2.6.37
Hardware	Pentium-class processor (or better), CD-ROM drive, USB Port
Programming Interface	C, C++ and Java
User Interface	Developer creates own custom user interface.
Fingerprint Registration	Developer creates own custom application.
Database	Developer may use a database of their choice.
Fingerprint Readers	<ul style="list-style-type: none"> • DigitalPersona U.are.U 4000B Reader and Module • DigitalPersona U.are.U 4500 Reader and Module
Template Interoperability	<p>Template format compatible with:</p> <ul style="list-style-type: none"> • DigitalPersona One Touch for Windows SDK, all previous editions • DigitalPersona One Touch for Linux SDK, all distributions • DigitalPersona One Touch I.D. SDK (fast identification) • DigitalPersona Gold and Gold CE SDKs
Security	<ul style="list-style-type: none"> • Fingerprint templates are encrypted by the engine. • The fingerprint reader sets up an encrypted link with the driver to securely transfer the image.
Application Deployment	DigitalPersona Fingerprint Recognition Software (Runtime Engine) is supplied with the SDK and freely distributable. U.are.U Readers are not included with SDK purchase.
Source Code	<ul style="list-style-type: none"> • Kernel mode driver source code is provided to enable customers to port to other Linux distributions that utilize the 2.6 kernel. • All language wrappers are included as source to help developers design, and debug their applications.