DigitalPersona® U.are.U® SDK
for Windows

DigitalPersona SDKs provide 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 to process control, point of sale and business applications, DigitalPersona SDKs allow developers to quickly integrate fingerprint authentication into their software and hardware designs.

Use DigitalPersona fingerprint biometrics to:

• Authenticate users reliably and conveniently.

• Prevent fraud.

• Simplify and enhance security.

• Streamline business processes.

• Address compliancy.

The DigitalPersona U.are.U Software Development Kit (SDK) for Windows enables integrators and developers to quickly add the power of fingerprint-based authentication to their Microsoft® Windows®-based applications. DigitalPersona offers powerful SDKs which feature accurate, high performing fingerprint authentication algorithms.

Easy to Use Toolkits

In only a few hours, developers can 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.

Programming Options

The U.are.U SDK for Windows supports C, C++, C#, Java, .NET, ActiveX/COM and JPOS/OPOS language interfaces. In addition, User Interface (UI) features, such as enrollment and customizable verification dialog boxes, eliminate having to create these modules.

Fingerprint Recognition Engine

The DigitalPersona FingerJet™ biometric engine provides MINEX-certified feature extraction, as well as enrollment and matching.

The DigitalPersona FingerJet engine, combined with DigitalPersona U.are.U Fingerprint Readers, offers accurate fingerprint recognition, low false accept and false reject rates (FAR/FRR) coupled with fast execution time.

Supported Fingerprint Readers

The U.are.U SDK for Windows supports the standalone DigitalPersona U.are.U 4500 Reader, the U.are.U 4500 Module designed for integration with OEM equipment and the ergonomic U.are.U Fingerprint Keyboard.

Standards Support

The U.are.U SDK for Windows fully embraces image, template and compression standards. In addition, the DigitalPersona FingerJet biometric engine now features a MINEX-certified extractor. This new direction provides developers with the flexibility to make unfettered choices of matching algorithms and the ability to comply with a growing customer requirement for standards support.

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.

Proven Technology

DigitalPersona is a 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 150 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

Operating System	Microsoft Windows XP/Vista/Win 7 (32/64), XP Embedded (32-bit), Windows Server 2003/2008 (32/64-bit), Windows RDP, Citrix/Terminal Services (local driver), .NET and Java

Citrix XenApp Server using the following clients:

- XenApp Services Site
- Web client
- Windows Terminal Services including Remote Desktop Connection

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

Development Environment

Visual Studio 2008, Visual Studio 2010

Programming Languages

C, C++, C#, Java, VB .NET, Active X/COM and JPOS/OPOS

User Interface

Customizable user interface.

Fingerprint Registration

Developer creates own custom application.

Database

Developer may use a database of their choice.

Fingerprint Readers

- DigitalPersona U.are.U 4500 Reader, U.are.U 4500 Module and U.are.U 5100 Module
- DigitalPersona U.are.U Fingerprint Keyboard

Template Interoperability

Template format compatible with:
- 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
- ISO/IEC 19794-2:2005, Biometric data interchange format
- ANSI/INCITS 378-2004 Finger minutiae data format

Fingerprint Image

- DigitalPersona Fingerprint Image Format
- ISO 19794-4:2005, Fingerprint Image Standard
- ANSI/INCITS 381-2004. Finger Image Based Interchange Format

Biometric Engine

FingerJet
- MINEX certified extraction engine

Image Compression/Quality

- WSQ/NFIQ (support for Aware and NIST libraries)

Security

- 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 FingerJet Fingerprint Recognition Software (Runtime Engine) is supplied with the SDK and freely distributable. U.are.U hardware is not included with SDK.