



## WEB-key® Software Development Kit

**FEATURE RICH SDK PROVIDES CONVENIENT,  
SECURE AUTHENTICATION FOR ANY APPLICATION**

### Key Benefits

#### Communication

*Transactions completed in a  
single communication event*

*Triple encryption*

- SSL encryption
- Elliptical curve and other encryption options with public/private key pairs
- Fingerprint template and image encryption with data hashing

*Intelligent or thin clients*

*Intuitive graphical interface for enrollment, verification and identification functions*

*Supports many browsers including Internet Explorer, Firefox and Mozilla*

*.NET, Java and COM application server plug-in's*

#### Fingerprint Functionality

*Unique 41 level fingerprint image quality assurance filter facilitates low false match and false non-match rates*

*Verification, alias prevention and identification modes*

*NIST-validated, AFIS-grade VST fingerprint algorithms*

*Intelligent Image Indexing™*

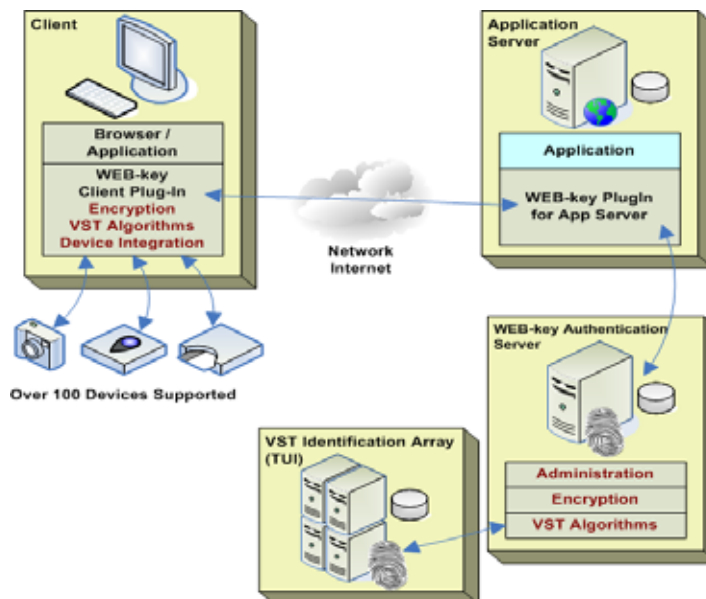
*Storage and transmission of fingerprint imagery optional with WSQ image compression at the client or on the server*

### PRODUCT OVERVIEW

BIO-key's WEB-key is an advanced development and operating environment that facilitates rapid and scalable, biometric-based identification system development and on-going operations and administration. It enables developers and integrators to quickly and easily build scalable biometric identification systems with little or no technical support, regardless of prior biometric experience.

### FEATURES

The WEB-key software is organized as a set of flexible services, administrative tools and program interfaces that can be deployed to closely reflect the application's business logic and needs, including transaction level authentication.



**WEB-key offers complete reader interoperability, supporting devices from every major fingerprint reader manufacturer.** With this capability, users ENROLL ONCE on any of the supported readers, and can subsequently use readers from more than 15 reader manufacturers to establish identity.

WEB-key incorporates complex biometric and database functionality, accessed via intelligent wizards and through easy-to-use programming environments, that can contain (or reflect) specific customer-driven business rules.

Comprising several components and services that are modular in design to enable their use on separate control servers, WEB-key is ideal for systems that scale to very large sizes or that are highly distributed.

WEB-key takes advantage of BIO-key's **Vector Segment Technology™ (VST™)**, an advanced set of fingerprint algorithms and functions, and also BIO-key's **True User Identification® (TUI™)**, a scalable Intelligent Image Indexing technology for large and very large system identification applications.

The WEB-key Plug-in resides on the web and/or application server and can be published across the enterprise to allow access from practically any software platform. The WEB-key Client Libraries and Administrator are also included to enable application access and control configuration and security settings.

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## Device Support

Over 100 fingerprint-enabled devices incorporating over 30 fingerprint sensors

- Full device interoperability (Enroll on device A and match or search using device B)
- Stand-alone device support, keyboards, mice, laptop computers, point-of-sale devices, access control units and handheld devices
- multifactor: Smart cards, proximity/RFID cards

## Interfaces

Oracle, SQL, MS Access, Sybase, ODBC and proprietary databases

Oracle Fusion Middleware, Oracle Application Server, Oracle Single Sign On

CA ETrust and Siteminder

Microsoft IIS

Apache, TomCat, JBOSS and more

WebSphere, WebLogic and more

## Applications

Financial/E-Commerce

Healthcare

Government

Education

Education

Transportation

Loyalty/Membership

Application Service Providers

Corporate Intranets/  
Extranets

## Protect User Privacy and Identity

A user's identity cannot be stolen, lost or transferred because WEB-key does not store user IDs or passwords nor does it cache passwords or other identity data, ensuring the highest level of security. WEB-key can store each user's fingerprint as a mathematical template, avoiding the need to store a user's fingerprint image on any computer or in any database. This proprietary mathematical template cannot be reverse-engineered by an intruder in an attempt to reproduce the fingerprint.

## Resist Hackers

All WEB-key communications between the client and the server are triple-encrypted to prevent someone from intercepting information over the network or Internet.

## Passwords Optional

Passwords continue to be problematic for enterprise authentication. By deploying WEB-key, your application leverages strong authentication, while eliminating the need for users to reset and record passwords, access codes, IDs and PINs that can be easily compromised. With WEB-key, the only code a user needs is a fingertip.

## Intuitive Graphical Interface

WEB-key enrollment and Identification wizards are respected as the easiest to use in the industry for capturing the highest quality data. For example, the enrollment wizard provides real-time user feedback on finger position, instructing the user what action to take when the finger is not correctly placed on the reader.



## SPEED, ACCURACY, SCALABILITY

WEB-key is unique, capable of accommodating large and very large civilian or customer populations while not compromising on system speed or accuracy.

## Millions of Matches per Second

Leveraging BIO-key's Intelligent Image Indexing™ Technology, WEB-key delivers blistering speeds on commercial hardware, operating systems and database software. More than 6 million fingerprint matches per second have been achieved running on as few as ten (10) commercial (COTS) servers.

## Better Than 99% Accurate with Just Two Fingers

Leveraging BIO-key's VST, WEB-key delivers industry-leading accuracy rates. The National Institute of Standards and Technology (NIST), using test databases totaling more than 11 million people, validated VST performance in more than 3.3 trillion match operations. The largest test database collected by the US Department of Homeland Security via the US-VISIT program yielded a true match rate of 99.33% for VST using a two finger match set!

## Scale Infinitely

WEB-key's Service Oriented Architecture (SOA) and BIO-key's TUI technology deliver an extensible development framework capable of managing hundreds of millions of fingerprints for alias prevention, verification and identification purposes.