



**HITACHI**  
Inspire the Next

# DIGITAL AUTHENTICATION FOR MICROSOFT WINDOWS® PCS

**Hitachi's VeinID Solution** for use in a Microsoft Windows® environment is based on a USB scanner and associated software.



Hitachi Digital Security  
Authorized Distributor

**SIMPLE TO USE, QUICK AND EASY TO REGISTER AND AUTHENTICATE WITH EXCELLENT LEVELS OF ACCURACY, THE SCANNER PROVIDES A NUMBER OF OPTIONS FOR DEVELOPERS AND SYSTEMS.**

**SYSTEMS CAN BE UPGRADED AND NEW APPLICATIONS CAN BE BUILT TO TAKE ADVANTAGE OF HITACHI'S PRIVACY COMPLIANT VeinID AUTHENTICATION TECHNOLOGY USING EITHER A BioAPI<sup>1</sup> SDK OR A BACK OFFICE AUTHENTICATION ENGINE FOR HIGH SPEED ONE-TO-MANY MATCHING.**

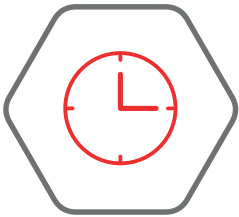


<sup>1</sup> BioAPI subset of ISO/IEC 19784-1 with proprietary extensions.



## IDENTITY MANAGEMENT – SINGLE SIGN ON

The combined package enables organisations to implement cost effective identity management, giving users simple access to applications without the need for multiple passwords, and without compromising security.



## TIME AND ATTENDANCE

An easy-to-use, fast and accurate system to record employees hours of working and site security. Suitable for organisations employing just a few people, up to large scale businesses – manages all your time & attendance and security and software requirements in one integrated security management system.



## PHYSICAL AND LOGICAL ACCESS CONTROLS

Adding biometric identification to a smart card solution enables proof that the identity of the card holder matches the unique VeinID template of that person.

This strengthens access control security by requiring two-factor authentication. Allowing identification of who is entering rooms within the building and to control access to computers and files is an essential element for all financial institutions.

Can be integrated into building and premises access control systems enabling people to open doors and even alert authorities for physical access control to restricted areas e.g:

- Vaults containing high value bearer bonds, bullion, cryptographic keys.
- Data centres.
- Secure payments areas.

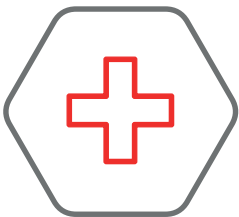
## BENEFITS



A straightforward and cost-effective option for the integration of VeinID technology into PC client and networked applications. It provides increased levels of safety and security around user access control, identity management and transaction verification.



Integration using the FVAE<sup>2</sup> provides excellent capability for processing transactions at high speed with a “finger only” authentication option.



The process of scanning a finger is a near contact-less operation meaning that the solution is very hygienic and simple to use.



Users form their opinions quickly when presented with new technology and the simple and fast registration process, taking less than 2 seconds per finger scan, means that the all important first impressions can be very positive.



No need for specialised environmental conditions for normal operation. Authentication time is typically less than 2 seconds meaning that VeinID can be easily incorporated into many business processes or operations. Users quickly see the simplicity and benefits.

<sup>2</sup> FVAE = Finger Vein Authentication Engine.

# SYSTEM ARCHITECTURE

## ACCESS CAN BE TAILORED TO:

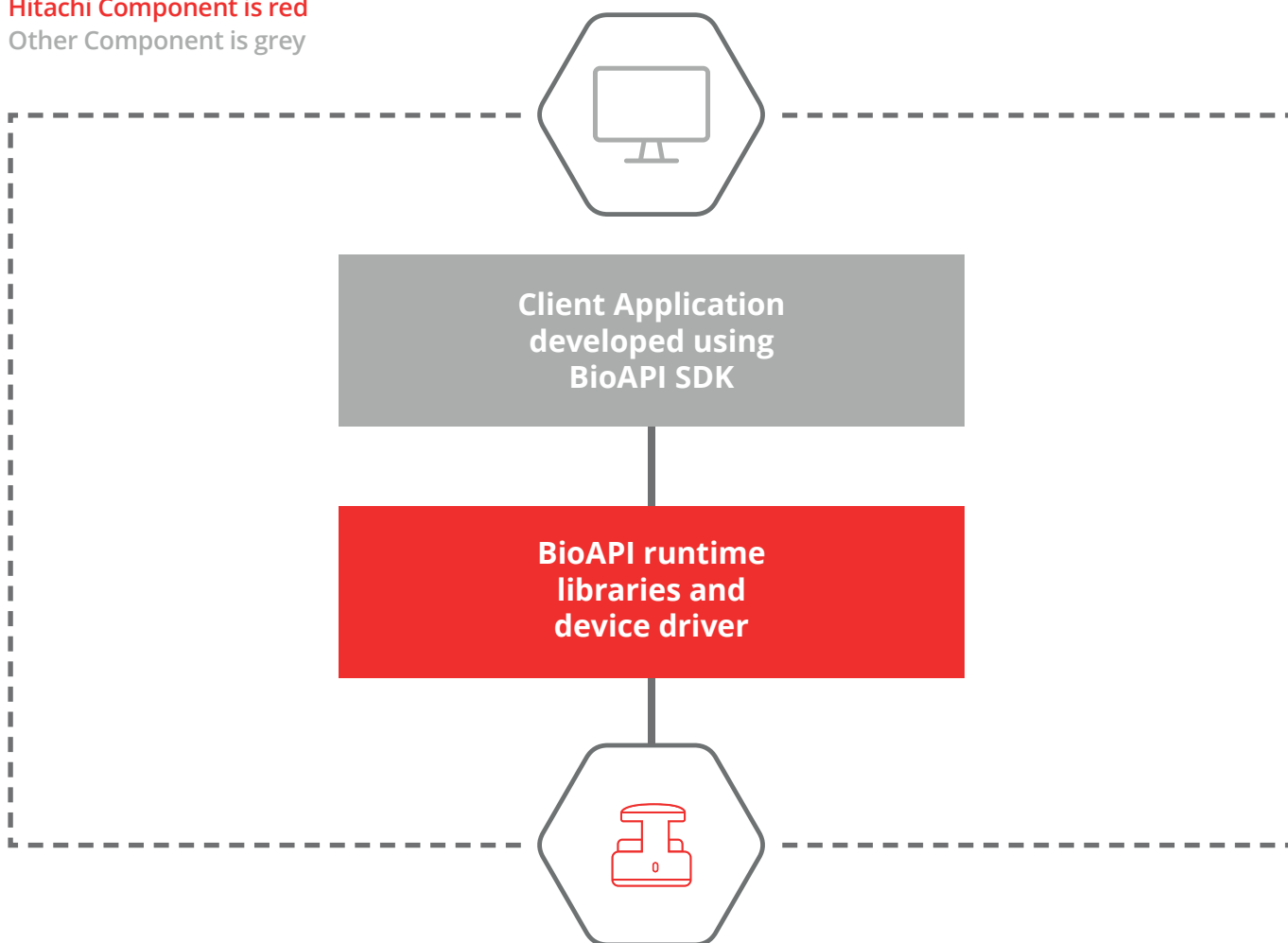
- Mandatory control - four eyes, two fingers (based on 2 people).
- Discretionary control - admin can alter subordinates.
- Rule based.
- Organisation based - an independent security policy from the implementation.
- Responsibility based - a policy based on the responsibilities assigned to a business role.
- Role based control - a policy based on job title.
- Time based - temporary access provided, and shift patterns can be incorporated to ensure staff can only access during their shift.

## SOFTWARE OPTIONS:

- BioAPI SDK.
- FVAE server side fast matching library with:
  - 10,000 matches/core/sec.
  - Thread safe processing.
  - Multiple enrolment sets with up to 100k templates per set.

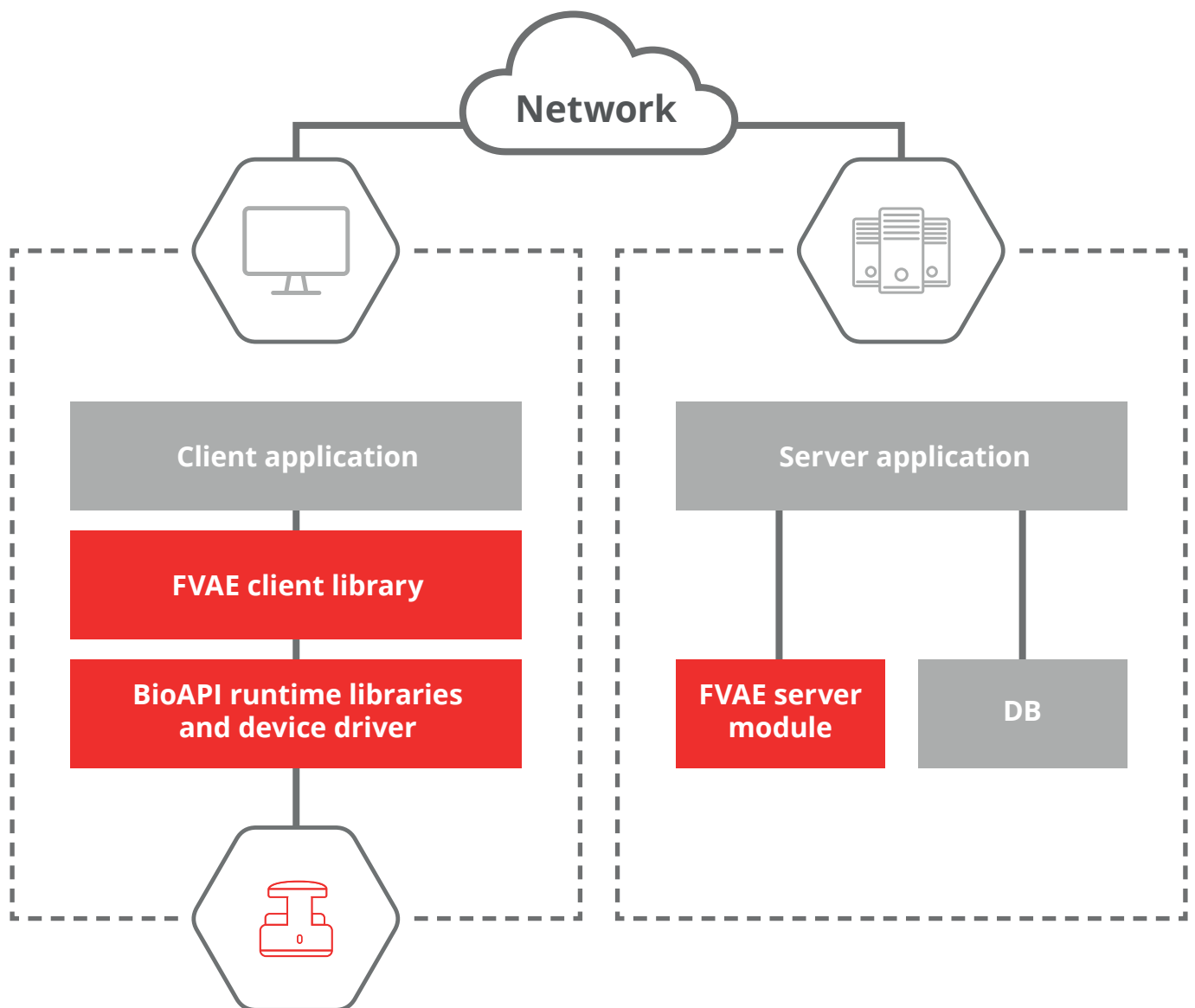
## KEY:

Hitachi Component is red  
Other Component is grey



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Hitachi Component is red  
Other Component is grey



## TECHNICAL DATA

ITEM	FVID SCANNER
Model Number	SH-H4368-S0255
Use Case	Desktop
Connectivity	USB 2.0
Data Transfer Speed	High Speed Mode: 480 Mbps Full Speed Mode: 12 Mbps
Lighting Conditions	Avoid direct sunlight (under 4,000 Lx)
Image Capture/Processing	Near infrared LED with CMOS sensor
PKI Support and Biometric Matching	No PKI, matching in PC or Server
Verification Time (Approx) <sup>3</sup>	Less than 2 seconds <sup>3</sup>
Operating Conditions: Temperature	5 - 35 °C
Operating Conditions: Humidity	20-80% (non condensing)
Power	DC 5.0V +/- 5% <500 mA (via USB)
Cable	1.8m USB Type A/mini-B
Size (mm) H x W x D	59 x 82 x 74
Weight (g)	96g
User Interface Features	Coloured LED, Buzzer
Standards	FCC Part 15B, ICES, CE, RoHS, REACH
Physical Security	Kensington Slot
Interoperability	BioAPI (subset)

## CLIENT O/S SUPPORT

SUPPORT OS		SP/UPDATE
32-bit	Microsoft Windows®7 Starter/Home Premium/Professional/Ultimate/Enterprise	SP1
	Microsoft Windows®8.1/8.1 Pro/8.1 Enterprise	Update
	Microsoft Windows®10/Home/Pro/Enterprise	Anniversary Update (Ver.1607)
64-bit	Microsoft Windows®7/Home Premium/Professional/Ultimate/Enterprise	SP1
	Microsoft Windows®8.1/8.1 Pro/8.1 Enterprise	Update
	Microsoft Windows®10/Home/Pro/Enterprise	Anniversary Update (Ver.1607)

<sup>3</sup> For one to one verification.



## FURTHER INFORMATION

Please contact Hitachi Europe Limited for further information about Hitachi's finger vein technology, applications and devices.

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