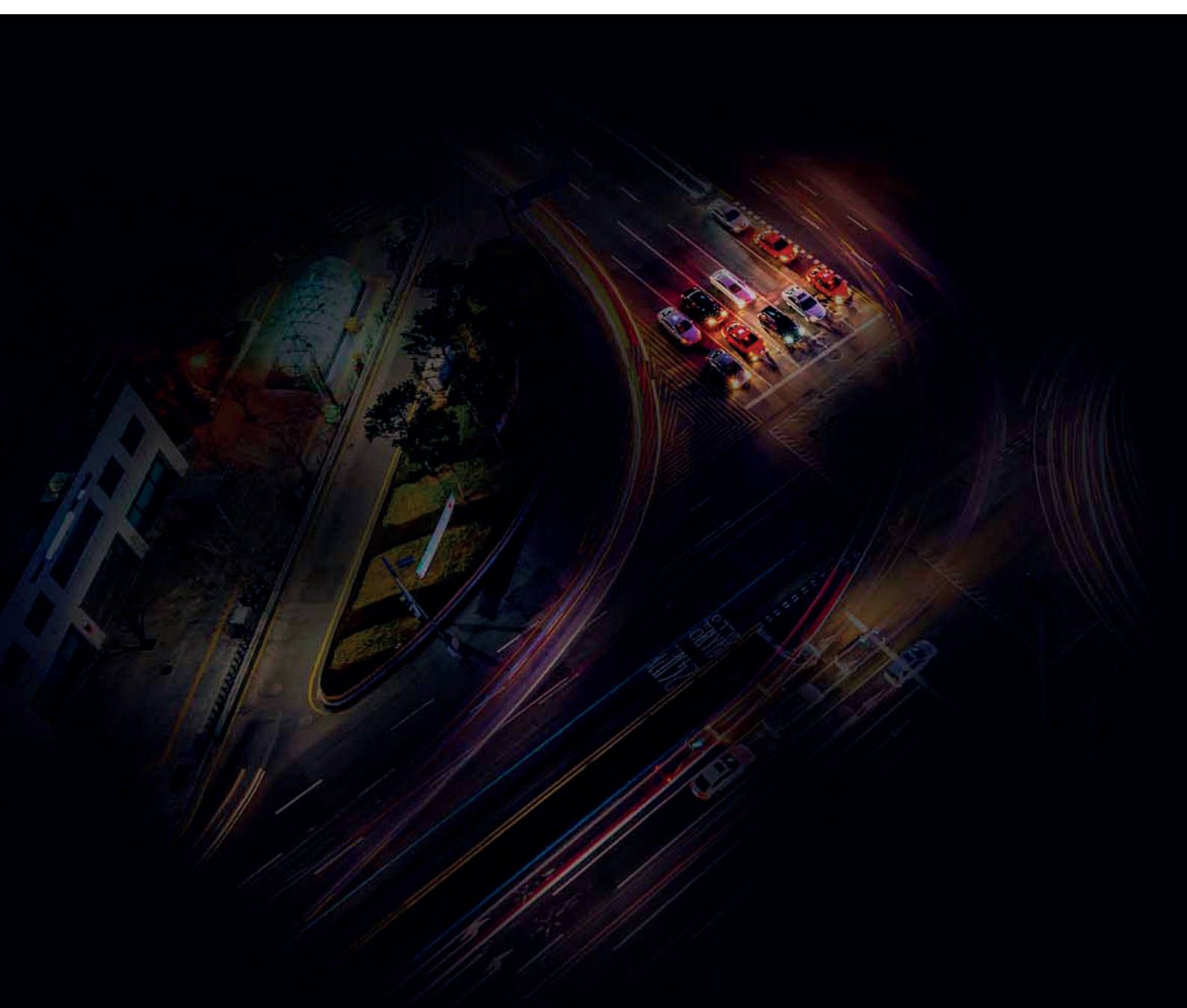


FINGER VEIN SERVER FOR RETAIL BANKS

The Finger Vein Server (FVS) is the heart of Hitachi's VeinID biometric solution for retail banking. A modular Client-Server system designed to support high availability and large volume transaction processing, it takes care of all aspects of management of biometric banking transactions for Branch and Automated Teller Machine (ATM).



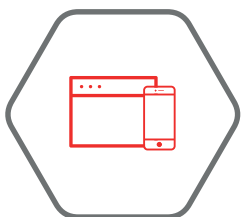
HITACHI'S DIGITAL SECURITY PORTFOLIO INCLUDES A COMPREHENSIVE BIOMETRIC SOLUTION FOR RETAIL BANKING. BASED ON HARDWARE, SOFTWARE AND RELATED SERVICES, BANKS ARE ABLE TO DEPLOY BEST OF BREED VeinID TECHNOLOGY TO DRIVE OPERATIONAL IMPROVEMENTS, INCREASE EFFICIENCY AND CONTRIBUTE SIGNIFICANTLY TO DIGITAL SECURITY.

USING THE UNIQUE PATTERNS OF BLOOD VESSELS INSIDE THE FINGER FOR THE AUTHENTICATION AND VERIFICATION OF IDENTITY OF BOTH CUSTOMERS AND STAFF, VeinID IS A SECURE, SIMPLE TO USE AND EXTREMELY FAST AND EFFICIENT SOLUTION. THE COMBINATION OF ACCURACY, SECURITY AND SPEED OF OPERATION MAKE IT PARTICULARLY WELL SUITED FOR AUTHENTICATION OF FINANCIAL TRANSACTIONS.

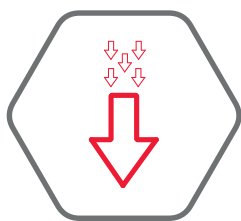




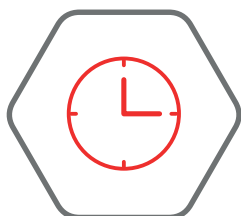
Increase the level of security of transactions via strong authentication – peace of mind for customers and improved controls within the bank.



Offer a better transaction package to customers based on a more secure process.



Simplify the customer experience, speed up the time taken to process transactions, no need to remember PIN codes, new possibilities for card-less transactions.



Improvement of the internal processes within the bank – reach digitalisation targets, reduce the costs and complexities of paper handling, free up time for staff to consult with customers and drive sales.

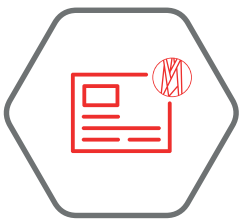


Promotion of the bank as an innovative and modern institution.

VeinID HAS BEEN SUCCESSFULLY USED TO AUTHENTICATE TRANSACTIONS AT ATMS AND IS COMPATIBLE WITH MACHINES FROM THE MAIN MANUFACTURERS INCLUDING WINCOR NIXDORF, NCR AND DIEBOLD.

Based on biometric authentication, users can make secure cash withdrawals, deposits and other local transactions such as withdrawals of social benefits and pensions, without using cards or PIN codes.

VeinID can also be used as an additional security feature for traditional card and PIN based EMV transactions. Encrypted biometric templates are stored safely inside the bank's secure environment in a central server or on a suitable smart card.



BIOMETRIC BRANCHES

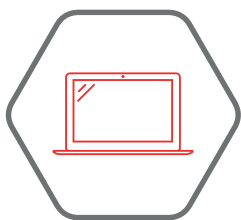
The use of VeinID in a bank branch allows for both the verification of customer's identity and for the authorisation of transactions. Opening new accounts, withdrawal of savings, transfers between accounts, and the signing of various types of agreements can all be protected using VeinID solutions. Biometric templates are stored on a secure bank server or on a smart card.



AUTHENTICATING DIGITAL SIGNATURES (BIOMETRIC PKI)

VeinID BioPKI is used instead of traditional smart card and PIN codes for authenticating digital signatures. It is compatible with Public Key Infrastructure (PKI) platforms and provides back office certificate management, key storage and signature creation processes. It allows for digital signing without using smart cards, PINs or passwords and can be used for authenticating both the bank's staff and customers in all transactions where digital signatures are needed.

Used to replace the handwritten signature of the customer, it can validate loan agreements, bank transfers, account opening etc. A key tool for enabling paperless operations, it reduces costs of paper document processing and plays a central role in helping to deliver the bank's digital transformation agenda.



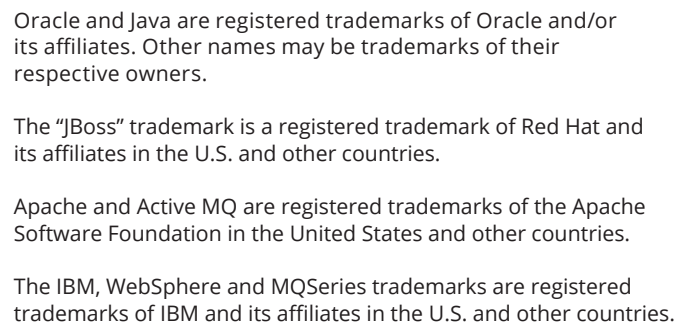
MOBILE ADVISOR

Used with a laptop PC, this solution allows the bank to extend the services on offer in the traditional branch environment to all customers who are either acquired or serviced outside of the normal bank branch.



INTERNAL SECURITY

Significantly increase internal security and control access to critical information. VeinID solutions can protect workstations from unauthorised access, provide secure domain logon, integrate with Single Sign On systems and can be used to manage transaction level authentication of bank staff. When used with physical access control systems, it can guarantee the safety of strategic resources that need special protection such as server rooms, secure offices, safety deposit boxes etc.



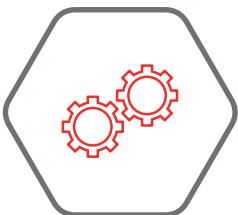
FINGER VEIN SERVER (FVS) IS A CENTRAL SYSTEM FOR MANAGING ALL ASPECTS OF VeinID PROCESSING AND IS RESPONSIBLE FOR:



The security of transactions and related audit trails and reporting.



The registration and authentication of customers and staff.



The servicing, monitoring and management of biometric readers including security key management.

FVS can be integrated with banking systems via Web Services APIs and supports authentication of self-service and over-the-counter transactions. There are client components for installation onto ATMs, VTMs, bank branches, information kiosks and Web applications. Biometric templates are stored securely in an encrypted database and optional modules for VeinID monitor and content management can be added. It supports connections from VeinID devices inside the bank's secure network as well as connections via the internet (via a special Finger Vein Proxy Server).

FURTHER INFORMATION

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

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