



Fujitsu SAP Practice Our Capability Offering – PalmSecure bioLock

Securing your SAP environment through class leading biometric identity management

What is the Fujitsu Difference?

Fujitsu Limited is the leading Japanese Information and Communication Technology (ICT) Company offering a full range of technology products, solutions and services. Approximately 156,000 Fujitsu people support customers in more than 100 countries. Established in 1935, the organisation had an annual turnover of approximately US\$41 billion in fiscal year 2016.

Fujitsu Australia Limited is a wholly owned subsidiary of Fujitsu Limited (Japan) with a local turnover of approximately A\$1bn per annum. We are a full service provider of sustainable, end-to-end ICT solutions with over 300 customers and over 4,000 highly skilled professionals across all states and territories including regional centres. As a full service provider of information technology and communications solutions, Fujitsu partners with its customers to consult, design, build, operate and support business solutions. Fujitsu is recognised as one of the largest ICT companies in the Australian and New Zealand Marketplace.

Fujitsu has been a trusted SAP Global Partner for over 40 years. We have successfully helped thousands of customers worldwide to simplify, innovate and grow. Our expertise with SAP solutions, combined with our in-depth industry and technology experience helps empower our customers to achieve their business objectives and take the lead over their competitors.

Most recently, our SAP Practice has extended its footprint by introducing specialised solutions throughout the SAP landscape. Our vision is to harness our current capabilities, IP and industry knowledge, to become a recognized and trusted industry leader. We are committed to working with our customers to create measurable value add that is aligned with their strategic direction and business objectives. Supported by our Global Delivery Centres, not only can our SAP Practice deliver specialist SAP solutions, we own multiple state of the art tools and applications with SAP integration capabilities to truly transform an organisation's end-to-end business process in a digital and operationally connected world.

What does success look like?

Fujitsu has been recognised for its credentials in architecture, innovation and implementation with over 20 SAP 'awards of excellence' received locally and globally.

- Telstra – Best run SAP EAM Implementation Award, 2013
- Pinnacle Award for Innovation, SAP HANA, 2012
- Ausgrid – Best SAP Upgrade Award, 2011
- Best Business Intelligence – Channel Partner, 2010
- Best ERP – Channel Partner, 2010
- Best ERP Implementation Award, 2009

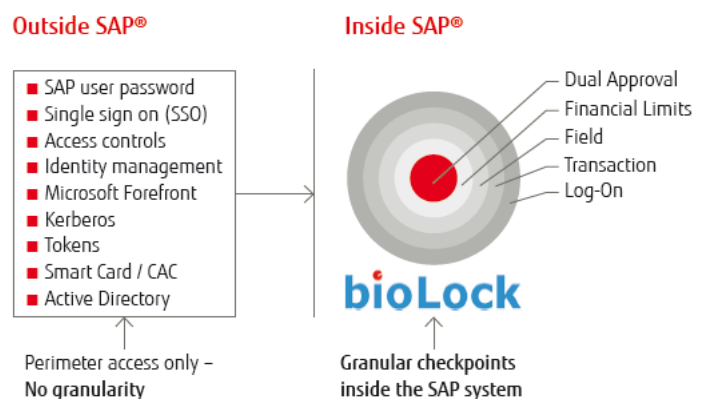
- Best All-in-One Implementation, 2006
- Excellence Award for Innovation, 2005
- Best SCM Implementation, 2005

What is Fujitsu PalmSecure bioLock?

Fujitsu has developed a contactless palm vein pattern authentication technology called Fujitsu PalmSecure. Fujitsu PalmSecure technology uses the complex vein pattern in the palm of your hand to ensure the safety of your information. More than five million reference points of the vein pattern are captured by the highly accurate PalmSecure sensor. The capturing and matching process is contactless – the sensor's surface is never touched, for hygienic reasons. Your palm vein pattern remains the same for your entire lifetime and is different on your left and right hands. Vein recognition technology is secure, because the authentication data is inside your body in your circulatory system, making it very difficult to forge compared to other technologies such as facial recognition or fingerprint scanning.

Together with bioLock from our partner realtime AG, PalmSecure enables palm vein based bio-authentication on your SAP Netweaver based applications. Very simply, bio-authentication enforces the rule that 'you are who you say you are' when accessing the SAP applications and prevents fraud scenarios such as stolen user IDs and passwords. The solution complements, reinforces and resides on top of existing SAP security, enabling customers to easily enable biometric authentication. Biometric authentication can be activated at any level of the SAP application, for example:

- At logon to the system to provide perimeter access control
- At transaction level to record the 'real' user executing the process
- At process level such as workflow approval, to enforce critical business rules through bio authentication



The combination of bioLock software and Fujitsu PalmSecure not only controls what happens within SAP at the moment of log on, but also what goes on after the user is in the system. SAP users can easily make dramatic security improvements by implementing re-authentication at granular levels which become user-specific checkpoints. When those re-authentications are based on biometric identity management instead of passwords or devices, the results are indisputable audit trails and accountability. bioLock protects the entire SAP system against unauthorized activity by monitored users. This applies to any SAP function that is chosen for monitoring.

With PalmSecure and bioLock, Fujitsu offers a full end-to-end solution incorporating the hardware, software, implementation and support services to enable customers to easily embrace Biometric Identity Management as part of your digital transformation strategy.

What are the features & benefits of PalmSecure bioLock?

Fujitsu PalmSecure bioLock features

Highest security level

- Data underneath your skin –hidden inside your body
- Highly complex vein pattern–more than 5 million reference points
- Encryption of vein templates via EAS, unique encryption key for every project/ customer
- Lowest false acceptance rate (FAR): < 0.00008 and false rejection rate (FRR):~ 0.01 compared with other biometric technologies

Control and monitoring

- The verification performed uses palm vein biometrics, as opposed to relying on passwords which are easily compromised. Although passwords do continue to be used because they are required by SAP, they are only the first step in verifying a user's identity and are followed up with the second factor biometric authentication which is indisputable. The biometric verification is done after the password log-on, (as opposed to before with typical Single Sign-On systems) thus protecting this process internally within SAP
- The biometric sample that is taken at the moment of signing on is compared to a stored "reference template", which is the template originally stored for that user at the time of their enrolment into the system. This original enrolment was done under very controlled conditions, and the reference template is therefore considered to be authoritative. It makes sense therefore to store that reference template very securely. In the case of bioLock, the reference template is stored within SAP, behind a biometrically secured "firewall", and not in an application residing outside SAP (as is customary with single sign-on systems)
- Some systems capture biometric images and store them, whereas bioLock never stores any actual images. Instead, the relevant data points are extracted by the palm vein scanner, converted to numerical values using Fujitsu algorithms and encrypted before being sent to SAP for comparison with reference templates

- Logging of activities, including errors and violations, are securely logged in a tamper-proof way that is accessible to third-party audit tools on a "read-only" basis

Fujitsu PalmSecure BioLock benefits

- No data theft–no latent biometric images left behind
- Contactless PalmSecure scanner is hygienic and practical for users
- SAP certification of bioLock software since 2002
- Wide range of use cases, including:
 - **Financial Fraud:** With bioLock the risk of insider fraud can be mitigated, by controlling activities such as requisitions, purchase orders, wire transfers, journal entries and more. This is done with the multi-level control checkpoints including maximum field values, dual authentication or outright blocking of features.
 - **Inventory Shrinkage:** The ability of employees to release inventory, ship goods, create customers, writeoff goods and issue credits can be prevented or controlled by requiring biometric authentication at every step in the supply chain
 - **Time & Attendance:** The bioLock system can use its biometric identification capability to indisputably determine the identity of an employee clocking in or out of work. This eliminates payroll fraud opportunities such as "buddy punching" or abuse of clock-in passwords, resulting in significant payroll cost savings. Data is seamlessly integrated with SAP payroll.
 - **Point of Sale (POS):** In a retail environment, it is possible to control every cash register transaction by requiring biometric authentication, thus reducing inventory shrinkage. Despite employees' sharing of devices, identity management is assured.
 - **Access to sensitive information:** By requiring biometric log-on and/or re-authentication, access to viewing or changing sensitive information can be controlled and monitored. Sensitive data might include customer records or Personally Identifiable Information (PII), health care records, HR or personnel data and detailed financial data
 - **Access Logging:** If desired, bioLock can be used to simply monitor and log specified activities within SAP, without preventing activities or alerting employees to the fact that monitoring is on-going

A business use case at a glance to boost accountability through Biometric Identity Management

This business use case outlines the primary focus of a security program, which is to establish a perimeter excluding anyone who is not authorized. This may mean only your active employees, or may be extended to include specific customers, certain vendors or also contract workers. In SAP some 'users' are actually generic accounts such as SAP and DDIC, which are not actually individual users. Using such a generic account in combination with powerful profiles such as SAP_ALL can result in a 'backdoor' which can penetrate your perimeter. These generic accounts cannot be easily tied back to a physical employee that can be held accountable.

Typically, IDs are created more often than they are deleted. No administrator wants to accidentally delete an ID without being 100% sure the ID is no longer active – and how can you be 100% sure?

Improve SAP perimeter security

What was the business challenge?

- Unresolved fraud incidents
- Violations of segregation of duties despite use of single sign-on (SSO) and governance, risk & compliance (GRC)
- High cost of IT support, password resets

What was the solution?

- Attain true identity management
- Eliminate non-authorized users, former employees or other 'ghost workers'
- Provide robust audit trail of all accesses to SAP
- Achieve 100% SAP perimeter access control

What was the result?

- Greatly reduced risk of fraud
- Simplified audit process through automated reports on all SAP accesses
- Greatly increased security by eliminating all unauthorised access

What PalmSecure bioLock solutions have we implemented for our customers?

Fujitsu has designed and implemented numerous solutions for our customers across Australia and New Zealand. Below is a snapshot of key cases where Fujitsu has worked with our customers to solve their business challenges.

Optimised SAP access at a logistics depot

What was the business challenge?

- Excessive training requirements to enable users with limited computer literacy or SAP proficiency to interact with systems easily
- Lack of audit control over SAP data access
- Desire to reduce IT operational costs at depots and plants

What was the solution?

- Simplification of SAP applications to show only task relevant information
- Shop floor kiosks are installed with Fujitsu palm vein sensor embedded in the factories and depots to deliver SAP EAM functions – SAP Plant Maintenance, Production Planning and shop floor processes
- Implement biometric logon based on biometric identity management instead of user ID / password

- PalmSecure bioLock is implemented to control and monitor the transactions in SAP system, providing a fully compliant audit reporting capability

What was the result?

- Reduced operational costs and user downtime due to no longer requiring frequent password resets
- Reduced training costs and increased user efficiency through simplified SAP applications accessed through a kiosk
- Reduced risk of fraud through biometrically controlled access to information, providing accurate audit trails which enforces accountability and prevents password sharing / fraudulent access

What else can we offer?

■ Strategic, tactical and operational consulting

Our highly skilled and experienced consultants can work with you to develop a robust vision and business plan to transform your organisation.

■ Roadmap, platform and product assessment

Determine how to convert a strategic vision and objective into reality can be an overwhelming task. Whether it be assisting with roadmap creation, evaluating your documented journey, platform, or product assessment, we will work with you to achieve organisational success.

■ Proof of concept

Before you embark on your organisational journey it is a great idea to verify the concept upfront. Our specialised consultants can work with you to co-innovate solutions and take you on a 'test drive'.

■ Competency build and health check services

Fujitsu's SAP System Inspection Service can help to detect negative trends at an early stage, provide detailed analysis of bottlenecks and provide recommendations on proactive steps to improve your system performance and safeguard the economic efficiency of your SAP landscape. The SAP System Inspection Service is an ideal complement to standard tools such as SAP EarlyWatch, providing analysis across the entire SAP IT infrastructure.

■ Process digitalisation solutions centred on Fujitsu RunMyProcess

This is a great way to eliminate paper and streamline processes through digitalisation. The Fujitsu RunMyProcess application can help you to automate the information flow between different departments, partners, vendors and customers. Our solutions enable you to design and run workflows that connect a wide variety of different business functions. Fujitsu RunMyProcess empowers organisations to build business applications for anyone, anywhere, on any device and deliver them through a custom enterprise process store.

For further information, visit

Visit <https://www.runmyprocess.com/en/>

■ **IoT solutions based on Edgware**

Fujitsu has an end-to-end capability around Internet of Things (IoT) via the Fujitsu Edgware management platform. The platform turns real-time events and raw data into meaningful and valuable information to assist in complex decision making. Edgware provides the link between data collection in the field, from any sensor input to your enterprise systems.

For further information, visit

<http://www.fujitsu.com/au/solutions/business-technology/internet-of-things/edgware/>