CUSTOMER CASE STUDY

> “We have made the process of designating the quality status of inventoried materials much more robust. Users have to be biometrically credentialed using FUJITSU PalmSecure™ and authenticated in order to authorize changes in status.”

Albasri Hussain
Quality Assurance and Compliance Manager
Al Ezzel Operation and Maintenance Company

Al Ezzel wanted to find a secure method of authenticating SAP users to eliminate unauthorized access so deployed FUJITSU PalmSecure™ for biometric recognition.

At a glance

Country: Bahrain
Industry: Energy
Founded: 2008
Website: engie.com

Challenge

Al Ezzel must ensure the integrity of quality inspection for incoming goods in the Materials Management module (MM), and improve Work Clearance Management (WCM) processes in the Plant Maintenance module (PM). It must also assure adherence to authorized safety roles. However, it lacked the ability to authenticate individual users of its SAP platform.

Solution

The company deployed valantic bioLock™ for use with SAP® ERP - powered by Fujitsu PalmSecure under the supervision of Fujitsu India in cooperation with partner INTAGLIO.

Benefit

- Access to specific SAP ERP data restricted to designated users with appropriate roles
- Safety documents limited to credentialed users according to designated roles, preventing any tampering with records
- Tight control of materials inventory quality prevents opportunities for fraud
- Circumventing procedures or segregation of roles by password sharing is now impossible
- Improved security due to rigorous signon and re-authentication checkpoints throughout sessions

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Customer

The Al Ezzel Operation and Maintenance Company (AEOM) operates the 950 mW Al Ezzel power plant supplying energy to The Kingdom of Bahrain. AEOM is owned by Engie, a French multinational electric utility company. The organization, a component of the Euro Stoxx 50 stock market index, was formed in 2008 by the merger of Gaz de France and Suez and traces its origins to the Universal Suez Canal Company, which was founded in 1858 to construct the Suez Canal.

Products and services

- FUJITSU PalmSecure™
- valantic bioLock™ for use with SAP® ERP - powered by Fujitsu PalmSecure

Enhancing quality control

AEOM operates two power plants in the Kingdom of Bahrain and depends upon SAP ERP as its enterprise software for plant maintenance, materials management, and financial accounting and controlling. However, two key areas of functionality were identified for immediate improvement.

Firstly, the quality control evaluation process for received materials was deemed insufficient. The ability of employees to designate materials as defective or write-off allowed the potential for human error. Any designation of useable materials as scrap would be an opportunity for fraud and therefore required traceability to the accountable party.

Secondly, the control over documents related to plant safety was a target for improvement. The process of monitoring and controlling plant safety is grouped under Work Clearance Management within Plant Maintenance. Multiple roles are assigned within AEOM, including safety controllers, issuers, acceptors and designees. The integrity of the plant safety monitoring process was limited by the inability to segregate these roles.

Introducing a robust biometric ID platform

AEOM has now deployed FUJITSU PalmSecure™ in tandem with valantic bioLock™, which makes dramatic security improvements by implementing rigorous sign-on and re-authentication checkpoints throughout a given session. bioLock, positively authenticates the identity and security level of the user at log on, then, once in SAP, it ensures the user has the correct security level and approval to continue to conduct transactions within a given area of the system.

FUJITSU PalmSecure™ enables palm vein detection based on the absorption of infrared rays (heat rays), which encounter venous blood in the veins of the palm. The sensor transmits near-infrared rays toward the surface of the hand, with the oxygen-reduced blood in the veins absorbing the infrared rays. A camera in the sensor takes a picture of the vein pattern, encrypts it and then a special algorithm transforms it into a biometric template, which is then saved. This means that there is no actual biometric image stored, locally or centrally, just an encrypted "template". There is no central storage of any private biometric data.

Palm vein recognition is practically impervious to environmental influences, is hygienic and contactless, only works with living tissue, and according to the present state of technology, cannot be manipulated. There is also considerably higher accuracy and security than with fingerprints or iris recognition.

The FUJITSU PalmSecure™ readers and valantic bioLock™ software were installed at shared PC terminals strategically located in the plant. These are easily accessible when needed, but require the user of controlled SAP ERP functions to authenticate biometrically every time. Additionally, every action is logged in the background for user traceability.

"We have made the process of designating the quality status of inventoried materials much more robust," explains Albasri Hussain, Quality Assurance and Compliance Manager, Al Ezzel. "Users have to be biometrically credentialed using FUJITSU PalmSecure™ and authenticated in order to authorize changes in status."

Secure and exact user access

AEOM now enjoys vastly improved quality control because access to documents is biometrically restricted to only designated users. Therefore, the designation of a batch of material as defective is now tied to the exact employee that executed the action, while tamper-proof audit trails allow for after-the-fact forensic fact-finding.

"We have raised the integrity of the monitoring process by introducing FUJITSU PalmSecure™ palm vein biometric authentication," adds Karthik Sriramakavacham, Head of Electrical Maintenance (RO), Al Ezzel. "All actions are now traceable and can only be performed by authorized parties."

In addition, Work Clearance Management ensures that access to safety documents is biometrically restricted and no longer available using only password access. Distinct roles such as issuer or acceptor are tied to biometrically activated authorizations and the segregation of roles is biometrically enforced.

FUJITSU PalmSecure™ delivers an age-independent, highly-individualized vein structure identification methodology, which is impervious to dirt, moisture and superficial injuries to the hand. It is extremely precise and forgery-proof with an error rate of 0.00001 percent. This ensures user privacy and all system accesses and attempted violations are logged.

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IN COLLABORATION WITH valantic

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