

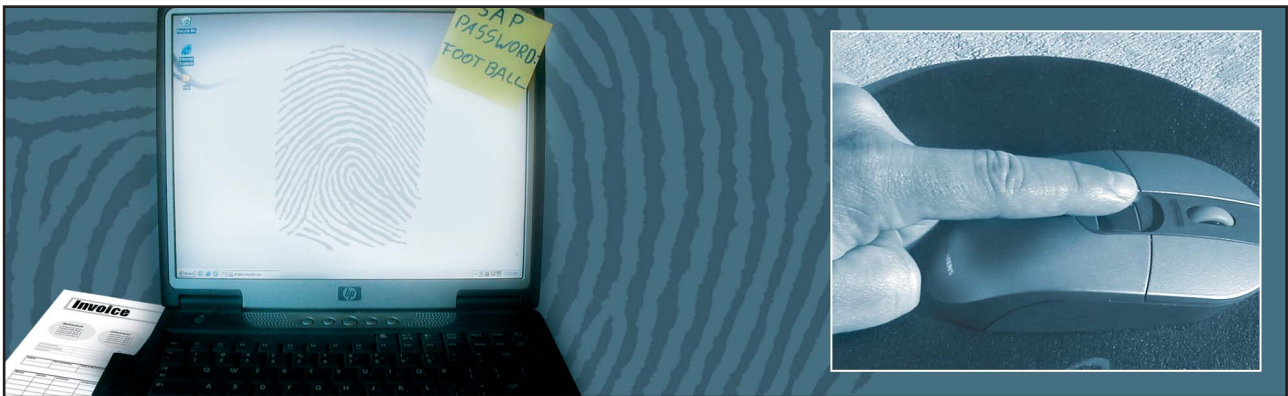


RFID AND BIOMETRICS SOLVE ACCOUNTING REQUIREMENTS

SAP'S AUTO-ID INFRASTRUCTURE: FRAMEWORK FOR FUTURE SARBANES-OXLEY COMPLIANCE*

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Sarbanes-Oxley has cast a dark cloud on corporations preparing their financial statements. They must constantly be referring back to the rules to make sure everything is being done correctly and legally. This may be good news for society, but for the company it means extra time and money verifying that information being presented is valid. The struggle is to find a way to implement a system that efficiently gets this done.



SAP has created an Auto ID Infrastructure, AII, which helps companies better track their inventories. Instead of simply using manual inspection, which can only go as fast as the workers, AII uses wireless data, global positioning systems, and electronic tagging for even more throughput and at a much faster pace. According to SAP, RFID (Radio Frequency Identification) devices can be embedded into just about everything, from computers and mainframes to cars and trucks. This makes it possible to easily track and record the details of anything that could be needed.

THE BENEFITS OF RFID

RFID is a wireless technology created to transmit information to a user quickly and safely. Since this can be in the form of tags or smart cards, more information can be sent at one time and when used with a computer program, can

be immediately input into the system without the need of a person physically scanning it in. This creates a more efficient way of tracking inventory since there is less risk of human error.

RFID can be used in more places than just in inventory and shipping venues. It can also be used as a security device for companies' computer systems; specifically the accounting departments. With Sarbanes-Oxley on the forefront of accountants' minds, it can help to put them at ease. Since RFID is able to hold several kilobytes of information, names, passwords, and other descriptive information can be stored on one ID tag, such as Infineon's my-D Products. This would be used to sign on to a computer system and grant access to certain areas of a financial statement. It creates a security that when used with SAP, makes it possible for companies to track who gets onto their system, when,

where, and what they worked on. It also makes it easier for employees to log on to their workstations, as well as others', without having to remember different passwords.

THE NEED FOR BETTER SECURITY

Passwords make a dangerous security feature. In fact, it is very easy for passwords to be stolen; electronically, visually, or physically. There are a number of people who will keep them written down right next to their computer, making it easy for someone else to use. To prevent a third party from easily finding one password and using it to access all information available to that user, many people create more than one password for their various workstations or programs. Sometimes people are forced to create dozens. Passwords have been in use since 1963 – basically



since the use of the first computers – and it is finally time for people to move away from this insecure and outdated technology.

WHY BIOMETRICS IS THE ANSWER

Radio Frequency Identification can ease this problem but offers no identity management at all. There are 3 ways to protect any physical or system access: 1. What you know – passwords, PINs and codes. 2. What you have – smart cards, RFID, tokens or keys. 3. Who you are – Biometrics. Biometrics is the most secure way since it is nearly impossible to spoof modern biometric technology, while it is easy to sniff somebody's password or steal smart cards or RFID identification. Biometrics would be the best way to keep an accounting and any enterprise system most secure and make the uniquely identified 'intruder' accountable. Not only will biometrics tremendously increase the security, it also increases productivity and convenience. It takes a fraction of a second to put a finger on the sensor, while it sometimes takes minutes to find that 8 digit password on a piece of paper and type it into the computer.

Biometrics has become about as hot a topic these days as the Sarbanes-Oxley Act. You can't seem to turn around without overhearing a conversation or debate about the necessity of it in different enterprises – and rightfully so. But what is biometrics and how does it fit in with SAP's vision for the future of their Auto ID Infrastructure?

At the most basic level, biometric technology is an automated way to recognize a person by identifying certain physiological features, such as a fingerprint, handprint, retina, iris, or even one's voice. This technology has found its most productive and popular venue to be that of high security. Although it is not unbeatable, biometrics has proven

to provide a greater level of security, because it ensures that the person entering the system is who they say they are and there is no room for doubt.

To create an almost unbeatable system, both RFID and biometrics should be used. A person would need to have the transponder, such as a fob or smart card, and then have to verify their identity through biometrics. SAP has partnered with realtime North America, creators of bioLock – the first NetWeaver certified biometric identity management system for any part within SAP. The bioLock system can protect not only the logon, but also any transaction or Info Type – basically any mouse click in the SAP System. Every level can be protected with a smart card or biometrics, or with a combination of both. This eases the minds of auditors because there is now physical evidence of who accessed the information or who was denied entry when trying to access critical data. All information is kept in a log file and can be exported into different formats or emailed to the auditor.

With SAP's Auto ID Infrastructure, using both biometrics and RFID technology would be a giant step in security measures. They can be used together to physically verify who is checking in and tracking the inventory. There's more than that though. It can also provide protection for things that need to be kept safe, such as pharmaceuticals. At Purdue Pharma, SAP is being used with RFID tags on each bottle of OxyContin and Paledone to control supply chain management. They are also using biometrics to control who has access to these drugs.

Both biometrics and Radio Frequency Identification are needed to preserve the accuracy in accounting, in both financial statements and managerial settings. It may cost some extra money to take the necessary steps toward this goal; but

What is the Sarbanes-Oxley Act?

* The Sarbanes-Oxley Act of 2002 is considered to be one of the most significant changes to federal securities laws in the United States. Sarbanes-Oxley followed a wave of well-publicized corporate financial scandals which included Enron, Arthur Andersen, and WorldCom. Congress passed the Sarbanes-Oxley Act in large part to protect investors by improving the accuracy and reliability of corporate disclosures made pursuant to the securities laws. One of the most significant provisions within Sarbanes Oxley are the criminal and civil penalties that place executive management and the board of directors in the "hot seat". Specifically, under Section 404 of the Sarbanes Oxley Act, executives need to certify and demonstrate that:

- Files containing accounting information have not been compromised, and
- All significant technical controls, including security authorizations and critical configuration files have not been compromised.

Definition by Network Intelligence

they are required. Sarbanes-Oxley was created to make sure people were being held accountable for their actions. Now it is essential for the companies to step up to the plate and implement biometrics so they can finally make people accountable and fulfill the originally idea of the Sarbanes-Oxley Act!

SAP has made a movie about Sarbanes-Oxley as well as the unique biometric identity management system, bioLock.

Both movies can be viewed at:
www.net-security.org/article.php?id=826
 or
www.realtimenorthamerica.com/saptv.shtml.

Professor Paul Foote at Cal State Fullerton has built a biometric research center around biometrics and the only SAP certified biometric solution – bioLock. (www.bioLock.us) Email: pfoote@fullerton.edu or info@bioLock.us