



NEWSLETTER

SEPTEMBER 2011

Dear valued Customer/Partner,

The production of hybrid cards with multiple RFID encodings poses a number of problems. vps took on this challenge and developed the 'RFID Encoder Box' which, together with the *IDExpert*[®] software, allows for both visual personalization and inline encoding of multiple RFID encodings in only one step of the workflow.

This solution was first deployed for the production of multifunctional employee cards in the RWE Group. It can be further developed and tailored to meet future projects and challenges.

Moreover, this newsletter gives you some information about topics like our participation in the LEGIC Partner Seminar in Switzerland, and a new satisfied vps customer: the Swedish company NIBE Energy Systems, who uses an *IDExpert*[®] SmartACT system for the creation and management of employee cards for physical and logical access control.

With best wishes,
the vps team

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Hybrid Card Production with *IDExpert*[®] Software using the RWE Group as an Example

Executing multiple RFID encodings for hybrid cards along with visual personalization in one step of the workflow presents a significant challenge for both the software and the hardware. vps was able to meet this challenge with its newly developed 'RFID Encoder Box' and its *IDExpert*[®] software.

Client:

RWE, the German power giant, has used vps card production and management systems for many years to produce its own 'RWE Service Card', a multi-application ID card based on LEGIC technology. As new locations should be added, the service card should also include MIFARE DESFire technology, resulting in a hybrid card instead of two separate cards.

Challenge:

The key challenge for vps was to perform two different RFID encodings (LEGIC and MIFARE) as well as visual personalization (card printing) in only one step of the workflow (inline encoding, as it is called). According to RWE, it was the first time in the world that this has been implemented in an ID card management system.

Requirements:

- One card should continue to be used for all locations
- The existing ID card management system should be used for the personalization of the RWE Service Card

- The inline encoding should be performed using the existing *EDIsure*[®] XID printers
- Complete master card handling and key management for LEGIC and MIFARE DESFire

Problems:

A traditional solution to this problem, i.e. to build two separate RFID encoders into the card printer, one for LEGIC and one for MIFARE, would result in the following problems that would affect smooth operation:

- Very difficult coordination of the antennas due to mutual interference (they share the same frequency range!)
- The exact antenna position is always going to vary, depending on the antenna design, the manufacturer of the blank cards, the batch supplied, the card position, etc.
- No stock of spare units possible

All this has led to the development of a new concept.

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Hybrid Card Production with *IDExpert*[®] Software using the RWE Group as an Example (continued from page 1)

Solution:

The solution is to use only one antenna instead of two (or more) for ID card encoding! As both RFID technologies share the same frequency range, this innovative approach allows for automated 'switching' between the antenna and the actual encoding modules.

vps has brought this solution to market in the form of a compact 'RFID Encoder Box' (desktop housing), which can be used with different card printers (in conjunction with *IDExpert*[®]-based software).

With this solution, RWE has produced several thousand hybrid cards at various locations since the beginning of 2011 and confirmed its reliability. This makes the introduction of additional production sites much easier.

Benefits:

- The 'RFID Encoder Box' allows for inline encoding of hybrid cards
- A variety of different RFID encodings can be combined
- Operation is very reliable, there is no dependence on the card supplier or card position
- It can be easily built into various card printers
- The 'RFID Encoder Box' can be expanded to include other hybrid card combinations and can be combined with other RFID technologies



EDIsecure[®] XID 580ie Retransfer Printer with 'RFID Encoder Box' (to the right)

vps takes part in LEGIC Partner Seminar in Switzerland

Once again this year, vps is attending the LEGIC Partner Seminar which takes place in Davos on 7-9 September. This networking event offers LEGIC partners the opportunity to discuss current issues regarding products and markets, and to obtain detailed information about LEGIC products.

The Swiss enterprise LEGIC Identysystems AG is the leading provider of contactless ID technology and smart card systems for access control and other identification applications operating at the world-wide standard frequency of 13.56 MHz. The LEGIC principle is a modern RFID method, based on contactless identification and contactless exchange of information.

vps uses LEGIC technology as a system integrator in its *IDExpert*[®] systems and can therefore benefit from new knowledge and new contacts with regard to LEGIC products. In our next Newsletter, we will give details of the LEGIC Partner Seminar and provide you with the latest information regarding all matters concerning LEGIC technology and LEGIC products.

Another Satisfied Customer: NIBE Energy Systems

Customer:

NIBE Energy Systems is the market leader for domestic heating products in the Nordic countries and Poland. Customers are the RMI sector (Renovation, Maintenance, Improvement) and the new housing market.

NIBE Energy Systems is part of NIBE Industrier AB, a European leader and one of the most expansive companies in the heating industry. NIBE is listed on the Stockholm Stock Exchange and has its office in Markaryd, Sweden. NIBE Industrier AB comprises 3 business areas: NIBE Energy Systems, NIBE Element and NIBE Stoves.

NIBE Industrier AB employs 12.000 people.

Challenge:

New multi-functional employee cards should be introduced across NIBE Energy Systems, which could be used for both physical and logical access control and for time recording.

Access control should be contactless via RFID, and access to IT systems should be via single sign-on. In addition, PKI (Public Key Infrastructure) should be implemented. The goal was to increase security in all areas. The previous hybrid cards should continue to be used for authentication. ID cards should be managed easily and centrally.

Solution:

vps implemented an *IDExpert®* SmartACT system at NIBE Energy Systems.

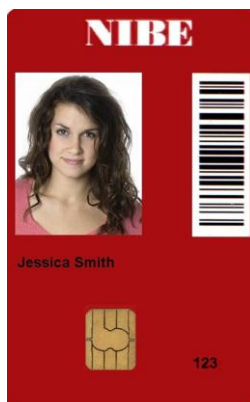
IDExpert® SmartACT is a standardized and easy to use web-based ID management system that allows the management of all credentials throughout their life cycle. It allows companies, corporations, government agencies, schools, universities and other organizations to easily create identities and effortlessly issue and manage credentials.

NIBE can now create, issue and manage multi-functional employee cards with digital certificates using our convenient and easy-to-use identity management system. NIBE staff can use the cards for access, single sign-on and time recording. Thus, only one card is required for all applications. Additionally, the certificates and keys that can be used for electronic signatures and for the encryption of documents are also stored on the employee cards.

IDExpert® SmartACT also allows the synchronization of RFID information with access control, time recording and canteen payment system. The management of the cards is easy and time-saving and takes place at a central point in the company.

Benefits:

- Introduction of multifunctional employee cards
- Can be used for both physical and logical access control
- ID Card uses RFID technology
- Access to IT systems via single sign-on
- PKI for increased security in all areas
- Central and easy management of ID cards



The new multi-functional NIBE employee card

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