DELFT UNIVERSITY OF TECHNOLOGY CHOOSES INNOVATION, CHOOSES CARDSONLINE

Delft University of Technology (TUD) issued a tender for a new Card Management System(CMS) to handle multi functional DESFire cards and connect to the many facility systems on campus. Providing the best solution, ScreenCheck was assigned to implement the Card Management System "CardsOnline".

CardsOnline creates one central, full integrated system for enrolment, printing/encoding and issuing multi-purpose ID smartcards, offering full card control in one system.

THE CHALLENGE

To maintain the highest level of security, the TUD decided to introduce the MIFARE DESFire EV1 8k card to students and employees. This required the replacement of the obsolete CMS.

New CardsOnline 6.0 matched all the TUD require-ments and more: full integration with student and employee systems as well with client applications for (5)access control, payment, library and lockers providing a real one-card-solution.

The new CMS had to be able to create various applications on the DESFire card and encoded all specific data for these applications during the in-line print process. After printing/encoding all systems must be informed about the existence of the new card with its encoded identifiers, linked to the cardholder.

CLIENT PROFILE

- ☐ A Technology University with a leading global reputation

- ☐ A range of high-quality disciplines, courses and facilities in the engineering sciences

- ☐ A source of outstanding professional scientists and engineers

- ☐ A producer of excellent practical knowledge and an innovative partner

TUDelft
Delft University of Technology
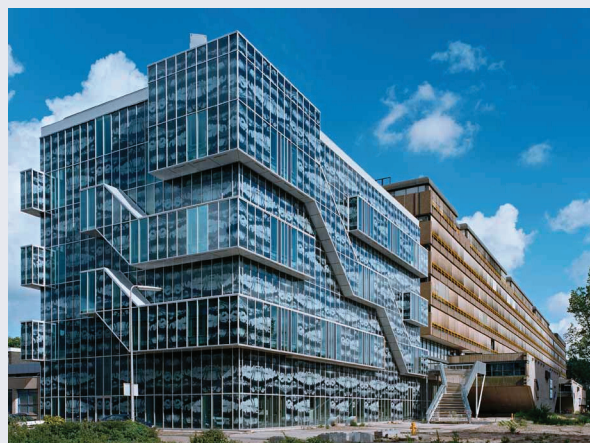
# CARDSONLINE: SMARTCARD MANAGEMENT SYSTEM, OFFERING ONE CARD FOR COMPLETE CONTROL

OUR SOLUTION

ScreenCheck implemented CardsOnline connecting with MDS (Master Data Services), the centralised data system. MDS is the generic, TUD hosted data platform holding all relevant source- and client apllication data. Integrated with MDS using webservices, CardsOnline, exchanges data. CardsOnline is printing and encoding all required data on the DESFire 8K EV card using both 3DES and AES encryption. In total the Delft University of Technology card can operate 11 different applications.

At seasonal peak (Jan/September) ScreenCheck takes over the bulk printing for new TUD cards. Card Production takes place at the ScreenCheck Card Production site in Zoetermeer. Access to the TUD CardsOnline systems, enables ScreenCheck to do remote printing/encoding, saves the TUD a lot of time and an access of printers. Also the special Library Card for all non TUD Library members is produced by ScreenCheck.

PROJECT DETAILS

Software:	**CardsOnline 6.0**
Server:	**Redhat Enterprice Linux distribution PHP/MYSQL/APACHE**
Card Printer:	**Polaroid P4500s printers with Omnikey encoders, Holokote: watermark graphic protection with TUD logo**
Card Type:	**MIFARE DESFire EV1 8k card, offset**
Card Amount:	**Approximately 35.000 Cards issued**
Note:	**A Keyboard Wedge Application that reads a student identification number for registration of Examination presence from the card**
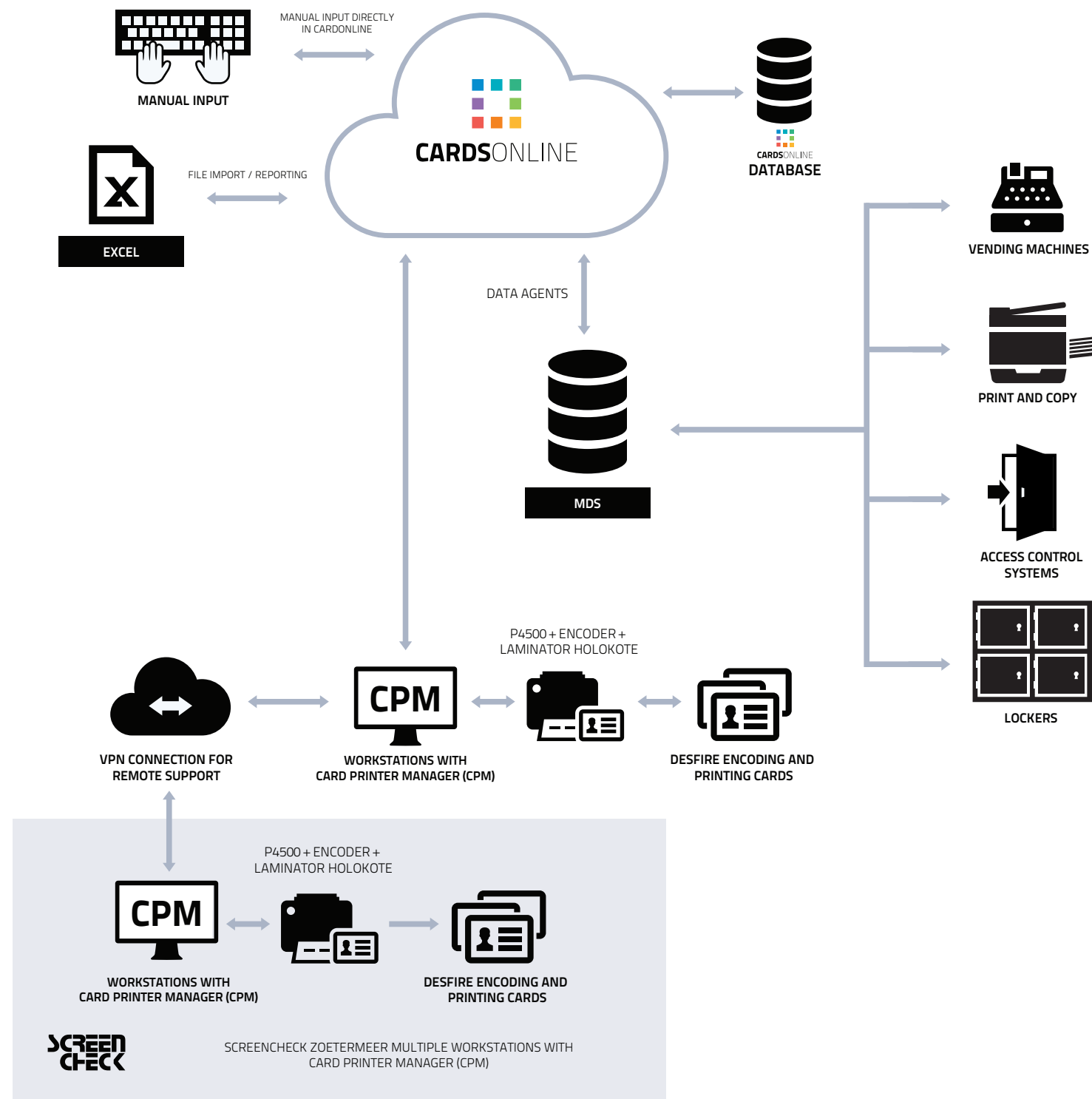
CardsOnline made it possible for Delft University of Technology to offer their students and employees one ID smartcard that can be used for identification, get access to the school and related buildings such as the Library and make payments for Catering, Follow-me printing, Copying and their Cash registers.

CONNECTED SYSTEMS

- Access Control Systems (online)
- Access Control Systems (offline)
- Copy and Print Systems (Multifunctionals)
- Examination Presence Registration System (TUD/ScreenCheck)
- Vending Machines
- Locker Systems
- Library Systems

MANUAL INPUT

MANUAL INPUT DIRECTLY IN CARDONLINE

EXCEL

FILE IMPORT / REPORTING

CARDSONLINE

CARDSONLINE DATABASE

DATA AGENTS

MDS

VENDING MACHINES

PRINT AND COPY

ACCESS CONTROL SYSTEMS

LOCKERS

P4500 + ENCODER + LAMINATOR HOLOKOTE

VPN CONNECTION FOR REMOTE SUPPORT

CPM

WORKSTATIONS WITH CARD PRINTER MANAGER (CPM)

DESFIRE ENCODING AND PRINTING CARDS

P4500 + ENCODER + LAMINATOR HOLOKOTE

CPM

WORKSTATIONS WITH CARD PRINTER MANAGER (CPM)

DESFIRE ENCODING AND PRINTING CARDS

SCREENCHECK ZOETERMEER MULTIPLE WORKSTATIONS WITH CARD PRINTER MANAGER (CPM)

CARDSONLINE

In response to the growing demand for integrated and more efficient campus card systems, CardsOnline offers an easy and cost effective solution. CardsOnline is the binding element between the systems (HR, Access Control, Payment and Print & Copy) related to the campus card, making production and managing of the card simple and fast.

Individual cards or batchwise printing and encoding is as easy as pushing a button. The CardsOnline inline printing and encoding process ensures flawless production of cards ready to use.

Advanced password protection ensures protection of both users and data in the entire system. Management of users is quick and easy by creating and assigning specific roles to certain access levels or features.

With CardsOnline organizations create a central application with all card related information and more. Photo's, fingerprints, personnel data, as well as certificates, signed documents and copies of ID cards.

- ☐ **Cloud solution**

- ☐ **Centralized data management**

- ☐ **Connects to existing databases**

- ☐ **Advanced user management system**

- ☐ **Design your own cards**

- ☐ **Import and export data**

- ☐ **Single or batch printing**

- ☐ **Manage cards at any point in the card life cycle**

CARDSONLINE

Reseller information