The Berlin Campuscard System

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An Alliance of Universities
The Campuscard Alliance

110 000 Students
Overview

• Mifare DESfire EV1 cards
• 25 mm TRW strip
• Photo and barcode for library use

Phase 1a
2016
• Electronic Student IDs

Phase 1b
2017
• Integrated electronic IDs for university libraries

Phase 2
2017
• Electronic employee IDs
• Electronic visitor IDs

Phase 3
2019
• Integrated electronic ticket for public transport
The Process

- QR-code – received
  (electronic or postal delivery)

- Card - received
  Through the terminal
  (20 terminals in Berlin)

- Card - validated
  Through TRW kiosk
  (30 kiosks in Berlin)
System Components

- **Mifare DESfire EV1 4K 70pF cards**
  - Blank with the university layout and deployed cafeteria application

- **Card Print Terminals**
  - Self service terminals with integrated photo station and card printer

- **TRW-Kiosks**
  - Self service kiosks with integrated TRW-printer

- **Card Management Software and WebGUI**
  - Universal solution for different data sources
The KMS2

- KMS 2 Core
- KMS Database
- KMS WebGUI
- KMS Auth with Sibboleth
- WebGUI for Admins
- WebGUI for Students (in Development)
What's inside?

Data Source

HIS-SOS

SAP-CM

Talend Open Studio

Data transformation

Tomcat based PostGreSQL

KMS 2
RFID Identification in the Libraries

Card

Barcode
RFID

Reader (Elatec TWN4)

Library System
The Innovation

Campuscard
• Library ID from home HEI in Chip

RFID Identification in the Home Library
• Intelligent RFID readers with communication through keyboard buffer
• No modification need for library systems

TouchON Terminal in the Foreign Library
• Card is registered at foreign HEI
• Data of the student transferred from home to foreign library
• Student can use his home card at the foreign library
How does this work?

- **Campuscard issuing process**
  - 6 Folders (one for each HEI)
  - Library ID coded into HEI folder

- **Home Library (Phase A)**
  - Elatec TWN4 readers
  - AES Key is in the reader

- **Foreign Library (Phase B)**
  - TouchOn terminal for coding
  - TWN4 readers see the student as a normal user
Schedule - Extensions

Now

Student IDs GEN1

Testing

Student IDs GEN1+
- Electronic identification in the libraries

2017 Q4

Employee IDs GEN1

2018

Student and Employee IDs GEN2
- eTicket
- Compatibility to “foreign” libraries in the alliance
Thank you

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