ID ISSUANCE SOFTWARE SPINS A WEB: PRODUCT SURVEY AND CASE STUDY

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What we will talk about:

- What are web-, browser-, cloud-based solutions for issuing ID cards?
- Stephanie talks about changes at UCONN
- A little history
- Survey of web-, browser-, cloud-based products
WEB-BASED CARD ISSUANCE

• Web-based is a broad term
• Usually means application is accessed through a browser
  – Not a desktop application
• Web server and application may be on-prem or in the cloud
UCONN AND NEW ID SOFTWARE

Stephanie Kernozicky, Director of the Card Office
Why a new printing solution?
- Regional campuses
- New card technology

Research/evaluation process
- NACCU conference
- CBORD conference
- University visits
- RFP
• Reasons for decision
  – Top reason - card technology compatibility
    • Compatible with multiple technologies on one card
    • Doesn't require static CSN
  – *Neither solution was purely cloud-based*
  – Console allows us to release print jobs easily, also not dependent on PC Connection/drivers/etc.
  – Noise, size, print time
  – Support
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VOTE FOR A NEW CARD DESIGN

Your Name
UConn ID
Professional

UConn
CARD ISSUANCE

A little history
Current ID Production

- Printers connected to individual workstations
- Desktop application
- On-premise card system database
- Remote and onsite support
• Recommended and supported by CBORD and Blackboard
• Rock solid software
• Version 6.5 released in 2007
• No more upgrades
• Runs in Windows 10
• “The reports of (its) death are greatly exaggerated”
ID WORKS

• Live connections to databases supported
  – Native and ODBC
  – Read from many, write to one

• Prints to any printer through Windows drivers
  – Mag stripe encoding is a printing function
  – Smart card reading and writing are harder
    • Usually requires Datacard printer
CBORD AND ID WORKS

- CBORD provides CardLink interface for ID Works
- ID Works provides card design and templates
- CardLink manages:
  - Database connections
  - Hardware support
  - Smart card reading and writing in the printer
  - Supports multiple “media types”
    - Mag stripe ISO number
    - Pre-programmed access control number in chip
    - CSN of smart card
BLACKBOARD AND ID WORKS

• Blackboard connected ID Works to their DBs
  – One ID number for each cardholder in all card technologies
  – Introduced FeliCa encoding in 2009
    • Same number as mag stripe
  – Introduced MIFARE encoding module
    • Followed FeliCa encoding model
    • Developed to support SAM in printer for security
CLOUD-BASED CARD ISSUANCE SOLUTIONS

Big changes in the world of card printing
Promise of Web-Based Printing

- Eliminate the printer PC, enroll cardholders with devices via web interface
- Manage from anywhere
- Eliminate software install and maintenance
- Auto print queueing, load balancing
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MIT – BEFORE
COLORID
APPLE STORE MODEL

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FARGO CONNECT CONSOLE

- Android OS
- Network device
- Printers connect via USB or ethernet
- Up to 6 printers per Console
- Printer status, consumables, settings, updates
• Direct access to tech support
• Monitor printers from remote locations
• Apply firmware to entire fleet
• Reduce service calls
ENTRUST DATACARD TRUCREDENTAL

Workflows
- Pre-built workflows for enrollment, issuance & data management
- Drag-and-drop, configurable workflows

Smartcard
- Pre-built smartcard encoding support
- Configure chip data through user interface

Integration
- Pre-built integration with enterprise technologies
- Centralized data management with high security and scalability

Scalable, distributed solution

Browser-based Software
An internet connection is not required to operate TruCredential
TRUCREDENTIAL vs. HID FARGO CONNECT

• TruCredential
  – Browser access from any device on your network
  – Standalone or integrated

• HID Fargo Connect
  – Requires integration for interface software
  – Uses console for local printers

• Both are still adding features and improvements
SOFTWARE BUSINESS MODELS

• TruCredential is available from many ID sources
  – Standalone version, connect like ID Works
  – Fully integrated versions from CBORD, Blackboard
• Fargo Connect available from select HID partners
  – Fully integrated with CBORD WebManager
    • Purchase from other than CBORD
  – Integrated with HID SAFE
  – Not a standalone application
  – May be available from PACS mfrs. (Lenel, etc.)

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• TruCredential supported by Blackboard
  – Custom integration
  – Blackboard MIFARE, DESFire encoding
  – Blackboard printer encoding devices
• Fully web-based - hosted or on-prem
• Atrium integration
• Awarded Washington State driver license issuance in 2014
• Emphasis on government ID issuance
• No inline encoding or reading support yet
• Services-based APIs support REST protocol (SOAP adapters available)
• Screencheck
• Browser-based
• University of Arizona presentation – Tuesday 11 am
• Popular in Europe for years
• Multiple database support
  – Read from many, write to many
• Web-based product coming soon
• ~Hybrid - network license model
  – License and application data are on central server
  – Concurrent user model
• Contactless encoding
  – Supports encoders, then printers
  – Many printers
• Print Server and Dispatcher modules
PACS BADGING MODULES

• PACS = Physical Access Control System
  – Lenel
  – C-CURE
  – Many others

• Often limited external database support

• Changes in versions, printer support happen slowly
  – PACS products support cameras, building automation

• Often can support mobile ID issuance
• New hybrid and hosted software is noticed by IT
• Security assessments are routine
• Compliance
  - Security
  - Privacy
  - WCAG or Web Content Accessibility Guidelines
  - ADA
• ID issuance products record issuance event data
  – Reporting not typically built into the applications
• Reports run on data in DB by 3rd party applications
  – Card system reports built on demand
  – Many new products for visualizing data
• Need to run real-time reports at card issuance
  – Specific to a cardholder
    • Last issued, when, by whom, what circumstances?
WEB-BASED SELF-SERVICE PHOTO UPLOAD

- Great add-on for ID software
  - Fargo Connect, Tru Credential support mobile photo capture, but not self-service
- Many universities have built their own
- One card system providers offer self-service photo upload
- CloudCard
  - Fully cloud-based
- MyPhoto
  - On-prem or cloud hosted
ADVANTAGES OF WEB-BASED

• Open a browser anywhere to print
  – PC
  – Mobile devices
  – No USB keys to lose or break

• IT likes the idea
  – No need to update individual workstations
  – They ask about hosting solution in their new cloud service

• Card offices like the idea
  – Browsers are free, right?
DISADVANTAGES OF BROWSER-BASED

- Hardware is hard to support
  - Printers are OK for printing and mag encoding
  - Windows 10 updates at will (Microsoft’s, that is)
- Need to install and maintain a web server
- Networks are monitored by university IT
  - Hardware is particularly monitored by IT
- Desktop application is local and fast
  - Browser-based application is not local
- Licensing is not always cheaper than desktop software licenses
QUESTIONS?

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naccu
Connecting Campus Identification & Transaction System Professionals

26th Annual Conference
Hartford CT April 7-10 2019