Pioneering the change at Northwestern University: Supporting your campus credential ecosystem

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Northwestern University Overview

- Background Information
- International Campus
- Organizational Structure
- Wildcard Uses & Devices
- Wildcard Funding
- New Wildcard Design
- Building Boom
- ColorID Support
**Background Information**

- Northwestern University is a private research university founded in 1851 made up of 12 schools and colleges.

- In 1853 the founders established a campus and developed the land near it, naming the surrounding town Evanston in honor of one of the university’s founders, John Evans.

- 20,955 students (Undergraduates 8,314; Postgraduates 12,641)

- 9,820 full-time employees for all campuses (Academic faculty 3,401)

- U.S. News & World Report consistently ranks the university’s undergraduate programs among the best in the country.

- Tenth largest university endowment in the United States, currently valued at $9.6 billion. Northwestern attracts over $650 million in sponsored research each year.

- Northwestern is a founding member of the Big Ten Conference and remains the only private university in the conference.
Based in Evanston, Illinois on the shore of Lake Michigan 12 miles north of downtown Chicago, with additional campuses in Chicago and Doha, Qatar.
Two campuses separated by 10 miles.

240-acre main campus in Evanston

25-acre campus in Chicago
International Campus

- Northwestern University in Qatar is located in Doha’s Education City, a sprawling 2,500-acre campus is a unique higher education environment with spectacular architecture and modern amenities. There are 220 students currently enrolled.
RANKINGS

#12 National University

#4 Materials Science
#7 Chemistry

#4 Business
#10 Education

#7 Industrial Engineering
#12 Biomedical Engineering

Source: U.S. News & World Report 2017
Organizational Structure

Board of Trustees

President

Sr. VP Business & Finance

VP for Auxiliary Support Services

Manager, Wildcard Program
   Art Monge

   Evanston Campus Staff

   Chicago Campus Staff
Wildcard Uses

- Athletics Sport Event Access
- ATM/Debit Transactions (U.S. Bank)
- Copier/Printing (PaperCut PM)
- Laundry (CBORD Odyssey PCS)
- Meal Plan/Cat Cash (CBORD Odyssey PCS)
- Parking (Amano McGann)
- Recreation Facilities Access
- Residence Hall and Building Access (Millennium)
- Student/Theatre Event Access - Ticket Discounts
- University Library Access & Resources
- University Shuttle Services
- Wildcard Advantage Merchant Discount Program
# Wildcard Devices

<table>
<thead>
<tr>
<th>Devices</th>
<th>Number</th>
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<tbody>
<tr>
<td>Micros POS</td>
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<tr>
<td>Parking Garage Readers</td>
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<tr>
<td>PaperCut Print Stations</td>
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<tr>
<td>Copiers</td>
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<tr>
<td>Door Readers</td>
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<td>Vending</td>
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<td>Laundry</td>
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<tr>
<td>Off Campus (Dial ups)</td>
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<tr>
<td><strong>Total</strong></td>
<td><strong>5,569</strong></td>
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</table>
• Revenue generated from U.S. Bank partnership

• $25 replacement ID card fee (All first-time issued ID cards are free to students, faculty, staff, and contractors.)

• Custom ID badge and passport photo services

• Spouse ID cards

• Central Administration

• $459,000 Institutional Budget (including salaries)
New Wildcard Design

Check Out the New Wildcard

We are very pleased to unveil our newly designed University Wildcard! The updated card reflects Northwestern’s brand and visual identity, and delivers enhanced security features. The new cards will be issued beginning August 1, 2016 to all incoming freshmen students, new students, and new faculty and staff.

Learn more:
- Upgrade Eligibility
- Types of Wildcards
- FAQs
- Contact + Image Requests
Welcome to our Building Boom

- Ryan Center for the Musical Arts
Ryan Center for the Musical Arts
Segal Visitors Center
Kellogg School of Management
Querrey Biomedical Research Center
Ryan Fieldhouse and Walter Athletic Facility
The New University Commons
ColorID Support

- Trusted partner for Northwestern since 2005
- Card Technology support and supply
- Printer Hardware selection and maintenance
- Software Solutions for process management
- CHOICE Technology Support Customer
CARD TECHNOLOGIES

1970
Magnetic
Stripe
Not Secure

Early 1990s
Low Frequency
Proximity
Easily Cloned

2003
HID iClass
13.56 MHz
Contactless Cards
Compromised Keys

2006
Mifare DESFire EV1

2012
iClass SE / SR with Secure Identity Object (SIO)

Latest Releases
DESFire EV2 SEOS
CARD MIGRATION TIMELINE

- 2005: University Deploys Indala – Match Medical Center
- 2008: University Starts Deploying Multiclass Readers
- 2010: iClass / Indala Combo Card is Issued
- 2016: iClass SR Card Card Design Refresh
- FUTURE STATE: Remove Indala
  - Disable Legacy iClass
  - Potential SEOS or iClass SE Transition
ELITE KEY PROGRAM

- Custom iClass Encryption Keys
- Managed by HID in their vault
- Additional layer of security
Campus Credential Unification Plan

Both Campuses unified under the Iclass Technology

Multi-Class Reader Indala/Iclass Elite Installed 2008 to Current (1423 Installed)

Readers can be programmed to read the original technology or the Iclass Technology

Multi-Class Reader Prox/Iclass Elite Installed 2008 to current (3776 installed)

Indala Reader (Chicago Campus) Installed Prior to 2008

Incompatible Technologies

Prox Readers (Evanston Campus) Installed Prior to 2008

Other readers exist on the Chicago Campus but all new installations and replacement will be Multi-Class readers (0 remain)

Other readers exist on the Evanston Campus but all new installations and replacement will be Multi-Class readers (238 remain)
Is Smart Card Technology Right for Your Campus?

General Campus Factors

• View of Security
• Current Systems in Place
  – Integrators
  – Access Control
• Funding Available
• Integrate other applications (Transit, POS, etc.)

Northwestern

• Medical Center already moved to Indala
• ColorID on-campus seminars to discuss available technologies
• Departments and/or schools can choose to fund their own portion of technology upgrades
Challenges Moving From Mag Stripe to Contactless Smart Cards

Challenges

• Existing Infrastructure
• Cost
  – More Expensive Cards
  – Reader Replacements
• Ever-Changing Technologies
• Campus Re-card or Gradual
• Workflow Challenges

Northwestern

• Large amounts of readers that need to be updated
• Technologies change during process of reader migration
• Issue getting credential information to all systems
Workflow Challenges

PROBLEM

• Northwestern was entering card information into systems manually, causing many errors
• Needed to streamline this process

ISSUE

• Typically card printer and ID software must be the same manufacturer to capture contactless numbers
• Northwestern using HID Fargo HDP5000 printers with Datacard ID Works Software.
Solution -- ColorID BRIDGE

- Allows Fargo HDP5000 printer equipped with a Contactless Reader to capture the iCLASS card number during printing.

- Inserts the iCLASS number into student database

- Process normally not available using ID Works Software with Fargo Printer

- Card info pushed to Millenium Access Control System.
Are the Added Expenses Worth the Risk?

• Can you afford not to move away from Mag Stripe and Prox?
• What happens if a breach or security incident occurs?
  – Negative Publicity
  – Student Security
  – Expenses
Questions?

Going strong since 1851.