Physical Security Solutions

31 MAY 2018 UPDATE

Jason Eldridge
Manager
Where we started

- From 1965 to 2000, SFU had only one system for tracking keys:
Introduction of Technology

- In 1999 IT Services began the development of the Key Control System (KCS) database which was purpose built for SFU needs.
Challenges with KCS

- While significant thought went into the initial design, the application was built using the OMNIS database system which has not been supported for years.

- The initial development was done without anyone who had both a technical understanding of keys and access control needs as well as databases. Access Control staff provided their ideas to a developer but without having technical backgrounds there were not able to fully articulate their requirements.

- IT Services put KCS on the backburner once it was released in 2000 with very minor modifications until 2014/2015 when we were first able to get some minor changes.
Limitations of KCS

- While KCS allowed the paper cards to be tracked digitally and finally allowed for exporting of some data it was limited to the Burnaby campus and limited how data could be presented.
- Like any system, KCS suffered one critical issue which was garbage in, garbage out.
The future...

- In the fall of 2012 discussions began to try and replace KCS with a Microsoft SQL database which could leverage data at the next level.

- A technical needs summary was presented a number of times and finally in late 2017 work started of the Access Control Management System (ACMS).
Avoiding repeating the past

- SFU had never completed a full audit of the 55,000+ known door keys in Burnaby prior to 2017.
- Processes were put into place to not only track audited keys but also address keys that have been phased out over the years.
- Based on initial feedback from the audit and historical data in KCS we know deposits failed to provide the incentive needed.
Updated procedures to support SFU Policy AD 1.04

- Procedures were updated April 2017 to support the formal policy on keys
- SFU Policy AD 1.04 was established in 1969 and states:
  - “2.5 Once issued to an individual, the custody and control of a University key and/or access card is the sole responsibility of the individual.”
  - “2.8 Departments responsible for authorizing the release of keys and/or access cards to an individual must inform the issuing office when the department is aware that the individual is leaving the University or is no longer permitted use of the keys/cards. Departmental signing authorities are responsible to endeavour to ensure that all keys are returned to security by staff whose employment has concluded or whose access permissions no longer allow use of issued keys/cards.”
The collection of deposits from staff and faculty was eliminated due to a number of factors including:

- Failing to encourage people to return keys (as seen by the over 20,000 keys which were reported lost)
- Feedback from the community
- Feedback from SFU’s Internal Audit team
- Provincial Acts related to employee’s

Deposits still exist for students and non-payroll key holders unless a department requests these to be waived.
Key Audit Summary

- As of May 2018 we have 55,542 tracked door keys in Burnaby
  - 22,268 are marked lost
    - Over 2,000 keys which have not been returned are related to locks which have been changed – while the key no longer works on a door, it is still a security risk. ALL door keys that are not required by the holder must be returned.
  - 24,028 are marked issued but of these only 11,528 have been audited in 2017/2018
  - Over 8,000 keys are held in Access Control for issuing
The Phase 1 product is expected to be released this summer for the Burnaby Campus with base functionality to replace KCS along with a few key features including:

- Signing Authority Management Module - a module to replace our MS Access database and align signing authorities to roles related to keys and cards
- Signing Authority Reporting System - empowers signing authorities to query the database and obtain reports related to personnel in their departments and keys related to spaces occupied by their department
- Point Of Sale Module - eliminates time consuming administrative processes which will allow for reinvested resources to better support client needs
Access Control Management System (ACMS)
Access Control Management System (ACMS) Phase 2

- Timeline not yet determined but additional features expected will include:
  - Addition of Surrey & Vancouver
  - Online ordering of keys
  - Online ordering of cards
  - Online management of access rights profiles for cardholders
Access Control Management System (ACMS) Phase 2 continued

- Additional features continued:
  - Online locksmith work orders
  - Online payment portal
  - Leverage HazMat data
  - Manage unique challenges related to former staff such as professor emeritus and adjunct professors
Other Projects

- Physical Security Solutions working with IT Services is evaluating a number of tools and applications with an outside consulting firm to determine the best products for all campuses including:
  - Electronic Access Control
  - Cameras
  - Intrusion Alarms
  - Panic Alarms
  - Mass Notification
  - Display Boards
The future of electronic access control

- We are working on a number of projects including:
  - Standardizing the type of card / fob used across all campuses
  - Streamlining data requirements and leveraging data in other systems including HR, payroll and the Student Information System (SIMS)
  - Power Over Ethernet locks - reducing the costs to put offices on access control
  - Bluetooth enabled locks - use your phone to gain access!
How can you help

- Volunteer to be an early tester for ACMS
- Help ensure a full key audit is completed for your area
- Review card holder reports when received and provide feedback to Access Control advising when cards need to be renewed or disabled
- Advise Access Control anytime a staff member is leaving to confirm if any keys or cards need to be returned
- Consider rekeying spaces which are considered at risk due to outstanding keys
- Consider investing in electronic access control to reduce the need for physical keys
Upon request we can:

- Extract reports from our key database
- Extract reports from our electronic access control database
- Conduct physical security reviews of your areas
- Coordinate installation of alarms, cameras and electronic access control
- Coordinate rekeying of spaces
Forms

- Card / Fob / Door Key Requisition
- Locksmith Work Order
- Signing Authority Update
- Excluded Space Request
- PSS Photo ID
KEEP CALM AND ASK QUESTIONS