

# PHYSICAL SECURITY IN SCHOOLS



# Who we are...



- Founded in 1986 with 3 employees
- Currently 65+ employees
  - ▣ Sales
  - ▣ Engineering
  - ▣ Information Services
  - ▣ Production
  - ▣ Service
  - ▣ Administration
- Class A Contractor



# Security Types



- Access Control
- Surveillance Cameras
- Intrusion Detection
- Mass Notification

# Access Control



- Card Reader System
- Control Access by Time and Clearance
- Provides Audit Trail
- Card Reader Advantages
  - No keys to manage
  - Audit trail available
  - Control Access by time of day
  - Easily Managed on the Network
  - Control Multiple Buildings

# Card Reader Locations



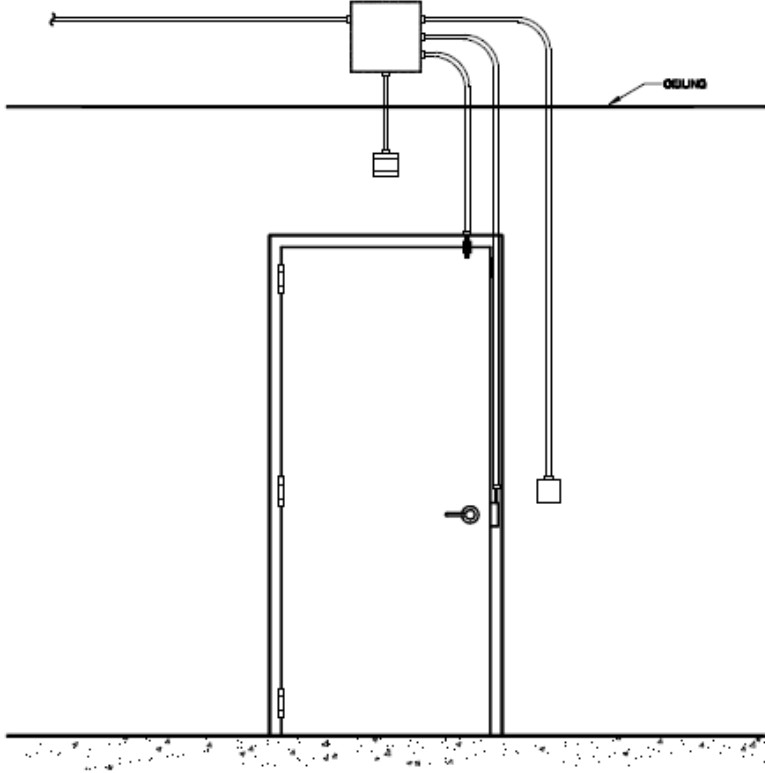
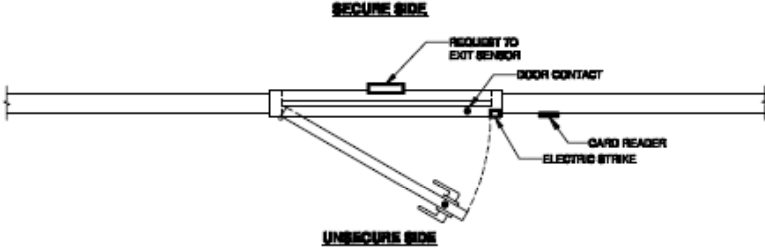
- ❑ All entrances and exits
- ❑ IT closets
- ❑ Storage rooms for TV's ect
- ❑ Nurses office
- ❑ Guidance office
- ❑ Chemistry classes
- ❑ Tech class rooms
- ❑ Concession Storage

# Locking Hardware



- ❑ Electronic Strike
- ❑ Electromagnetic Lock
- ❑ Electric Vertical Rods
- ❑ Electric Lever

# Standard Single Door



# Access Control Example



- Every Monday night a Boy Scout group uses the common room from 7pm-9pm
  - ▣ The school can administer a card that only work on Monday from 6:30-9:30.
- The Boy Scout group loses the card
  - ▣ The school can quickly disable the card preventing unauthorized access to the school.

# Surveillance Cameras



- ❑ Cameras, Digital Video Recorder, Network Video Recorder
- ❑ Visual Evidence of Events
- ❑ Provide Images of People Entering and Exiting
- ❑ Deters Crime

# CCTV



- What is Analog CCTV?
  - ▣ Traditional CCTV systems have been analog cameras that transmit to a Digital Video Recorder (DVR) via Coax cables.
  - ▣ The Digital Video recorder converts the analog signal to digital and records on a hard drive.
- What is IP Video?
  - ▣ IP cameras are network addressable and transmit digital signals from the camera.
  - ▣ Video can be recorded on Commercial Off the Shelf (COTS) servers running video management software.

# Video Surveillance Design



- Regardless of transmission Camera placement is very important.
  - ▣ Due to the high resolution of some IP cameras camera placement can be affected by system type
- System type must be defined early on for cable layout
  - ▣ Not only are cable type affected by system choice but so is its layout

# Camera Locations



- Entry and Exits
  - ▣ Provide a visual of everyone entering and exiting
- Trouble areas
  - ▣ Halls
  - ▣ Cafeteria
- Front Desk Sign-in
  - ▣ Video documentation of everyone signing in
- Parking Lot
  - ▣ Difficult to get lots of detail but can be useful

# IP Camera Benefits



- Scalability

- Adding additional cameras is like adding a computer on your network.
- The 17<sup>th</sup> camera will not cost you \$10,000

- Cost

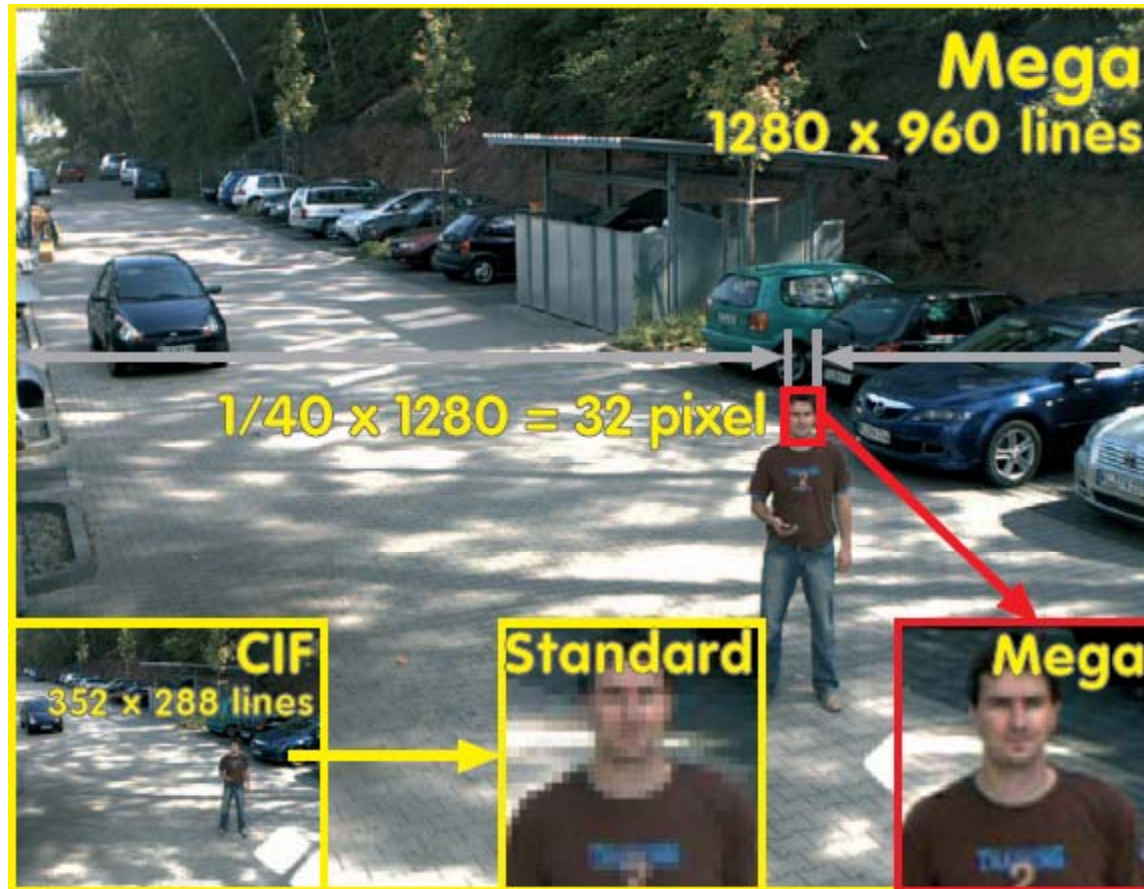
- Servers can be procured and maintained by schools' IT department

- Integration

- Most of the IP camera systems will readily integrate with access control and other systems.

# IP Camera Benefits

- Resolution



# Intrusion Detection



- Door Contacts, Keypads and Motion Detectors
- Monitored
- Provides an Alert to Monitoring Center for Alarms
- Forced and held open alarms

# Mass Notification



- Loud Speakers
- LED Displays
- Email
- Text Message

# INTEGRATION



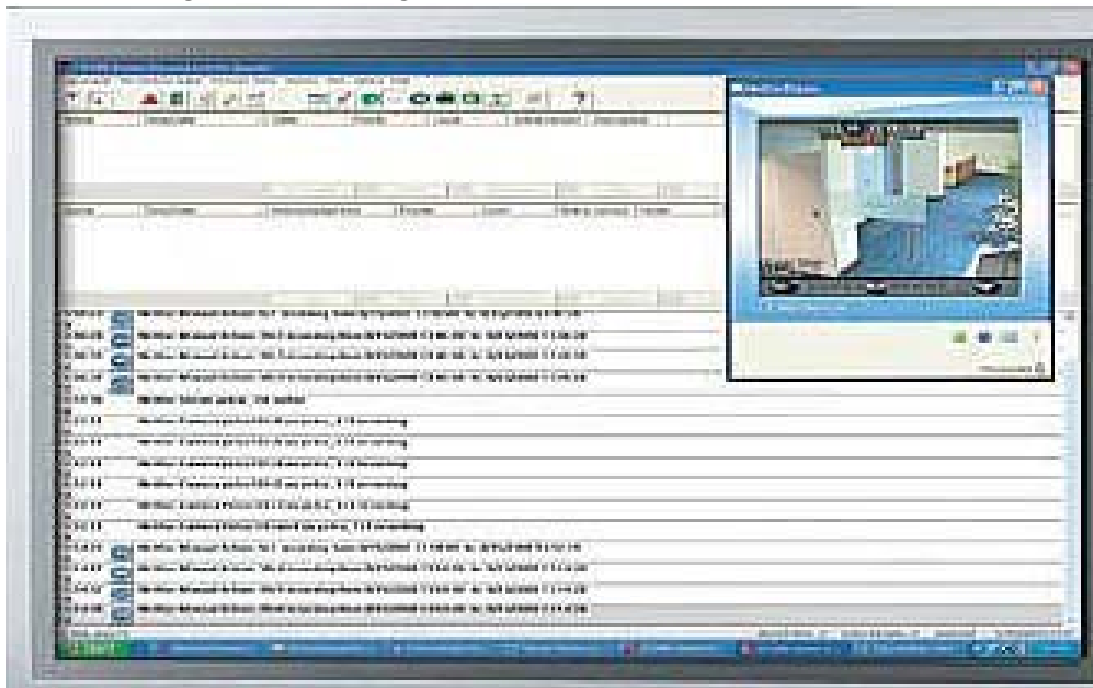
# Integration



- Many of today's systems are connected to the network
  - ▣ This allows many of the systems to be easily integrated
  - ▣ Integration can be provided by the systems integrator for little to no cost
  - ▣ All affected departments should have input into the design

# Access Control/CCTV Integration

- Link access events to associated camera views
- Accessing video for specific events does not involve searching through hours of video



# Access Control/Intrusion Integration



- Access Control alarm points can be sent to Intrusion Systems
- Forced Door
- Held Open

# STANDARDIZATION



# Standardization



- More Integration

- When security systems are standardized across the county additional systems can be easily added to the network and integrated
- Give access to facility managers or superintendents to schools across throughout the district.

# Standardization



## □ Training

- Today's facility managers are asked to know more and more software systems. By standardizing to one system facility managers only need to learn one system for the entire school district instead of a separate one for each school
- Easier Transition During Personal Turnover

# Standardization



- Service

- By having one system the school district can more easily maintain an inventory of spare parts.

# Standardization



## □ Lower Costs

- Since many systems require software license, the school district can many times share one license across the district.
- Your operators will only need to learn one system, they will not have to spend valuable time in training classes learning multiple systems.

# Closing



- If you need help, please ask
  - ▣ Systems Integrators like myself are more than happy work with you to design well thought-out electronic security systems. We can provide:
    - Design to budget services
    - Specification Review and Assistance

# Contact Information

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