**Statement of Need:** Evidence/property rooms are at the soul of Law Enforcement in the United States. The entire purpose of Evidence/Property rooms is to handle evidence collected from criminal activity in such a way that the evidence can be used in court to convict perpetrators of the crime. To become admissible as evidence during trial, law enforcement must be able to prove that the chain of custody was never broken from seizure until the day in court.

As part of the chain of custody, law enforcement must be able to show that access to the Evidence/Property room is controlled in such a way as to remove any potential of taint to the evidence stored therein. Today the police department’s evidence/property rooms are secured with only a simple lock and key, a proximity card or PIN code which cannot restrict the user to an authorized person. Furthermore, the key, card or PIN can easily be compromised via theft, copying, shared with others or lost.

Going forward, biometric technology can provide law enforcement with 100% accountability. This unique type of technology guarantees, only authorized personal will have access to the evidence/property room. Records and reports form an accurate/accountable audit trail of access and egress to the evidence/property room. The system’s reports will also track how long an officer or evidence custodian was in the room. The biometric system described above will ensure law enforcement personnel are protected from fraudulent claims of tampering with the evidence and the chain of custody is strengthened when cases comes to trial.

**Current Situation:** Most police department’s evidence/property rooms implement one of the following; a lock and key, a proximity or magnetic stripe card reader [card(s)] to access the room.The use of traditional key locks or even cards means that the PD cannot guarantee that only authorized persons have been granted access to or exit from the evidence/property room. The key locks or cards can be easily compromised because the key or card can be shared, stolen, lost or copied. Granted in some locations, the PD will have evidence custodians who work shifts and 24 hour video surveillance. But, it is not unheard of for a lawbreaker wearing a mask or carrying what appears to be proper ID to gain access. Evidence custodians do their best to ensure that the logs are filed and information is recorded, however there are cases where logs have been lost or misfiled. Evidence custodians are human and a lot pressure is placed upon them with this current system.

To summarize the shortfalls within the existing system, 100% accountability is not possible. The current system will not be able to quickly supply a list of persons that access the evidence/property room and along with the time of access and exit and the length of time the officer or officers were in the evidence/property room. These shortfalls increase the chance of tainting “the chain of custody” or as George Little (Director of ICJS) put it creating “Fruits of a poison tree” scenario. George little was an evidence custodian for 14 years and gave FaceKey Corporation first hand insight in property/evidence room shortfalls.

An example of the current shortfalls in the current system is the following case in Southeast Texas. **“500 guns went missing from a TX police evidence room in ‘illegal firearms trafficking scheme’”** (Grits for Breakfast.blogspot.com). The articles link is attached below. New safeguards must be put in place to stop the tampering of evidence rooms.

**Proposal:** The only way to ensure 100% accountability and authenticity of a person is a biometric access control system. The proposed system will allow for the following advantages: tie in with the current video surveillance system, ensure 100% accountability for entry and egress to the evidence/property room, and add a safeguard to the chain of custody.

The biometric access control solution ensures accountability amongst law enforcement officers. The system restricts access to authorized personal and records their entry and exit to provide an accurate audit trail. The audit trail or electronic log will provide who and how long a person was in the property/evidence room. The system will provide the levels of accountability required to reduce the possibility to taint the chain of custody.

The system will consist of two biometric access control units will be used: one for access and the other for egress. The configuration of two biometric access control units will eliminate tailgating because the door cannot be opened unless the person was granted access into the room. Proximity cards are not necessary, but can be incorporated with the biometric access control units if desired.( FaceKey realizes that departments have invested significant sums into proximity cards). This two unit system allows law enforcement to track down to the second how long the person was in the evidence/property room and records that information. The security surveillance system can be triggered by our system as well.

With properly designed reports, law enforcement management will be able to compare the information on the reports with the video to be more effective.

**Outcome:** Results of the proposed system will be the following: Increae the level of accountability, provide tools to restrict access/egress via a biometric access control system, utilize anti-tailgating, and strengthen and support existing video surveillance. The system will reduce opportunities to taint evidence, reduce missing evidence and improve the ability of the law enforcement to produce evidence with as pristine chain of custody that will be admissible in court.

The end effect of a biometric access control system, supported by already existing video surveillance, as proposed above will safeguard the chain of custody more securely than is currently possible. This level of security for the chain of custody will further ensure that when a case comes to trial; criminal evidence will be admissible and in keeping with our American principles, a fair trial can take place. Moreover such a system will be a constant reminder to those that run evidence/property rooms that they are responsible for the chain of custody and that the level of accountability has been increased.

**Cost of Pilot for Proof of Concept:** The cost of the proposed biometric access control system, for proof of concept, to outfit one door to an evidence/property is $9,000. The system will consist of two FaceKey access control units (AC-06) and software. The hardware, software, installation, setup and training including warranty of hardware and support for one year for a pilot project within a two hour drive of San Antonio, TX. This cost does not include a video surveillance system and assumes that the law enforcement has a network and will provide a network drop, power and a PC to run the system on.

**Future R&D:** After research of various methods of handling evidence and discussions with officers that have personally worked with evidence, FaceKey has created a design for a RDFID tagging system to further safeguard evidence from the time it is received, through changes to custody, trial and ultimately returned to its owner or destroyed. This system will be an addendum to the biometric access control system as detailed above. Procedurally, tagging the evidence and recording a biometric signature each time the custody of the evidence is changed will provide complete chronological documentation in order to withstand legal challenges to the authenticity of the evidence.

Adding the RDFID tagging power will further strengthen the chain of custody documentation to establish that the evidence is in fact related to the defendant.

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