Technology & Security

Protecting Your Business:
Is your data secure?

Annual Technology Survey

STORAGE SOLUTIONS

8266

Frankly Speaking

A Spotlight On Technology

by Frank Minnella

This issue puts a spotlight on technology, with our annual software survey, and articles on electronic payment processing, the first electronic door lock installation and a number of other technology focused topics. But as we were going to press, I came across two stories that should remind everyone with a business that while technology such as property management and access control software can accelerate and enhance our business, we should never ignore the way technology can accelerate and enhance a criminal enterprise. For example, a recent (January 19, 2006) Reuters News Service reports out that, according to the FBI, *nearly nine out of 10 U.S. businesses suffered from a computer virus, spyware or other online attack in 2005 despite widespread use of security software.*

The data you store is at least as valuable as the property you store

Our opening article, "Protect Your Business," asks "Is your data safe?" Remember, if you have a property management system, you store a lot more than your customers' property. You store their data, and you need to make it at least as secure as their property. As we and many others have said in the past, you must control access to the information through the password levels of your property management system. Insist that your vendor show you how to do that, and secure any paper data that could compromise your customers. With a property theft, you renter will likely get the value of his goods back if he has insurance, but you may *never* get your reputation back after your facility is robbed. The same is true for data theft. Even if you secure your data, it's to your advantage if you take steps through your local association to educate your fellow operators about the dangers of identity theft. The entire self-storage industry may suffer even more from the first major data theft than it would from major property theft.

Meth Labs: They can cost you your business

We continue to read about the dangers of meth labs. If a meth lab is found in your facility, you may be thankful that nothing was blown up. Well, even if your facility doesn't blow up, if a meth lab is found at your facility, you can look forward to months of clean up and long term environmental damage that could put you out of business permanently. Even with DEA funds available to pay for the cleanup, the sight of the folks in yellow suits will damage you enough with the public, even if you are reimbursed for clean up costs. Moreover, according to a pamphlet produced by the Office of Community Oriented Policing Services of the Department of Justice, "residual contamination of the ground, water supplies, buildings and furniture may last for years." (Problem-Oriented Guides, No. 16) You obviously need to be proactive in keeping dangerous chemicals out of your facility.

To protect your business, and your customers from the danger of meth labs, the "Know Your Renter" programs promoted by the national and many state self-storage associations is a powerful deterrent to someone planning on setting up a lab at your business, but the "Know Your Renter" program can still harm you, if you don't take the precautions suggested above about securing the data you require from renters. Asking for that information may protect you from some dangerous people; failing to secure that information may make you vulnerable to an equally dangerous group. In addition to getting to know your renter, you may want to reconsider the "your lock, your key" door lock system as well. You should be the one determining the level of security at your facility. A well administered master key system, using an electronic key safe, may well prevent a criminal enterprise from setting up shop in your facility, while also providing the safe and fast access to a unit that can prevent an environmental disaster.

I've wound up talking about a number of things, but they all involve taking control of your operation: take control of your data, take control of your customers, and take control of your security. I'm certain that as you read each article in this issue, you'll find ways to enhance your control of your operation. If you want to learn more about any of these topics, data security, customer identity programs, and of course, high security lock systems, give Lock America a call. We want to know your concerns.

Till next time,

Frank

SELFSTORAGE Telegram...

SELFSTORAGE Telegram...

Protect Your Business

Don't Be Complacent
With Technology:
*Speed and Convenience
Can Bring You Down*

By Rich Morahan, Managing Editor

February 2005:
AP reports that the Federal Bureau of Investigations (FBI) switched off its current email system because of fears the system had been hacked into.

—Philadelphia Inquirer

March 2005:
The FBI admitted Saturday it accidentally gave classified documents back to the American translator who pleaded guilty to taking them from the U.S. prison camp at Guantanamo Bay, Cuba.

—Associated Press

November 2005:
... storage analysts say federal agencies are behind the curve when it comes to safeguarding digitized records stored elsewhere. Federal agencies are not encrypting their off-site data, said Jon Oltsik, a senior analyst at research firm Enterprise Strategy Group.

January 11, 2006:
(IDG NEWS SERVICE) - A computer tape from a Connecticut bank containing personal data on 90,000 customers was lost in transit recently, the bank reported today.

People's Bank, based in Bridgeport, Connecticut, is sending letters to the affected customers, it said in a statement. The tape contains information such as names, addresses, Social Security numbers and checking account numbers. It was bound for the TransUnion LLC credit reporting bureau, based in Woodlyn, Penn., via United Parcel Service of America Inc. (UPS), the bank said.

Is Your Data Secure?

What do these stories have to do with you? You just own a small or medium size business with no government secrets at risk. True. You have no government secrets at risk. All you have at risk are your customers' secrets, and yours. Modern self-storage facilities run on a mountain of information: customer phone numbers, addresses, credit card and bank information, license plate and driver's license numbers. As part of the laudable effort to "know your renter" to protect a facility's business and its other customers, most self storage facilities require proof of identity, phone numbers, and addresses, valuable data in the hands of a wrong person. They also encourage credit card, debit and electronic funds withdrawal as a means of payment. These methods are fast and convenient, improve the cash flow and help retain customers. They also retain a mountain of information. And if the FBI and other federal agencies, and major banks, are having trouble protecting their data, can you be sure that you are more secure? Maybe your data isn't worth stealing. Think again. Denny Hatch, producer of Denny Hatch's Business Common Sense (The Target Marketing Group) outlines three kinds of data:

- **Benign Data** cannot be used to inflict damage: name, address, phone, gender, age, home ownership, hobbies, purchase history, etc.

- **Sensitive Data** include trade secrets, proprietary marketing, manufacturing and financial information that, if made available to unauthorized people, could hurt you and aid your competitors. This should not be stored in PCs, BlackBerrys or laptops, but rather closely held in central files and released on a need-to-know basis. Secret Data are what can be devastating in terms of identity theft, financial loss and ruined credit: Social Security numbers, credit and debit card account numbers, PINs, bank account records, investments, mother's maiden name, health and illnesses.

Think about what's on your office computer. Is any of your customers' data "sensitive"? Should any of it be "secret"? You could even make the case that some of that benign data, such as the name, address and phone number of your customers, just might be sensitive. Is this information stored on your business computer in your property management system where your manager and anyone at a keyboard can access it? Is it password protected? Does your manager have access to it after he or she enters it? According to an article in the *Kansas City Star* (July 2, 2005), as many as 44 million American adults have been victimized by identity theft, an increase of 9 million new victims since 2003. A novice thief can probably do serious damage with a credit card or bank account number. An experienced identity thief could make a fortune from what's stored on many self storage facility computers

But you keep all the sensitive information on your own secure computer. And you keep all the paperwork for your business secure as well. Your manager takes each new rental agreement and files it in a locked cabinet. He only has access to just what he or she needs to run your facility. Your manager needs a certain amount of information. The question is how much? The question is have you thought about how much, and worked your property management software to carefully set access levels for your property management system? Have you protected your secure business computer against viruses, spyware and phishing? Do you know what "phishing" is?*

Technology allows a business easy and fast access to all its important data. But because access can be easy and fast, control and protection of that access are critical. Review your access levels on your property management system, take a look at the security of your paperwork. Technology can speed up your business. It can just as surely speed up dangerous access to it.

*Is you computer an open data
mine for an identity thief?*

Is Your Hardware Secure?

While it's important to avoid complacency about your computer system and your network, it's equally important to be vigilant about the technology you rely on for your physical security, such as your access control system, your cameras and your door alarms. Many times at trade shows I have had operators boast about their security systems, "state-of-the-art" gate control, cameras, door alarms, who then tell me that they don't bother providing or selling quality locks, because the technology will protect them. I always ask them, can you be sure that a thief doesn't already have a legally rented unit at your facility? If he does, and surveys have shown that this is often the case with self storage thieves, then your gate isn't giving you much protection. And cameras, well the finest cameras can produce a beautiful picture of someone wearing a hood. A door alarm might help, but let me ask you if you have ever had a "false alarm," and just how secure your wiring is. Consider the economics of investing in a high end access control system, camera and alarm system, and then capping the security chain off with the cheapest lock you can find. It's been the theme of Lock America for over 25 years that facility security is only a strong as its weakest link. Consider a recent article in the Wall Street Journal that quotes a victim of self-storage theft:

"Theft can be a big problem. Last year, when [name omitted] and her husband moved to Texas from Kansas, they stored many of their possessions at [facility name omitted] Self Storage in Wichita Falls, Texas. When Mrs. [name omitted] went to pick up the belongings, most were gone. The loss of family photos hurt the most; her daughter died in the late 1980s, and her son died earlier this year.

Facility owner [name omitted] says she isn't responsible, "no matter what happens." She says that Mr. and Mrs. [name omitted] stored their belongings after hours one weekend and wanted to complete the paperwork by mail. The[y] acknowledge that but say they were never told they needed more than a U-shaped bicycle lock. Since the thefts from the [name omitted]' and other units, [the facility] has required tenants to pay $10 for a heavy-duty lock."

(*Wall Street Journal,* August 3, 2005)

We can't be sure what the "heavy duty lock" might be, $10 doesn't buy a "heavy duty" lock, but the message is clear. The facility insists that they "weren't responsible," but as the Journal article and an article in the January 2006 *Mini Storage Messenger* both point out, these stories of "not my fault" will eventually negatively impact the image of the industry. All those fancy "bells and whistles" don't cover up a flimsy door lock, just as that flashy property management system doesn't cover up a data security hole. In this issue's Product Spotlight, we showcase the first successful "electronic lock" in a self-storage facility, but in this facility, unlike many of the other high tech sites, the operator has chosen to pair the high tech product with a cylinder door lock, for the renter's protection, for the owners and renter's piece of mind, and for those occasions when the power goes out. Every business is on the high tech power grid now, but you never know when that power can go out. Don't be caught relying too much on technology without a back up.

Is a cheap lock the final link in your high tech security chain?

Where to go to find out more:

To find out how to protect yourself online, go to:
http://onguardonline.gov/;
to get advice from the government on additional matters of fraud and identity theft, go to:
http://www.usdoj.gov/criminal/fraud/idtheft.html
* Phishing is the act of tricking someone into giving them confidential information or tricking them into doing something that they normally wouldn't do or shouldn't do. For example: sending an e-mail to a user falsely claiming to be an established legitimate enterprise in an attempt to scam the user into surrendering private information that will be used for identity theft.   www.michigan.gov/cybersecurity

LOCK TALK

ALL ABOUT DISK LOCKS
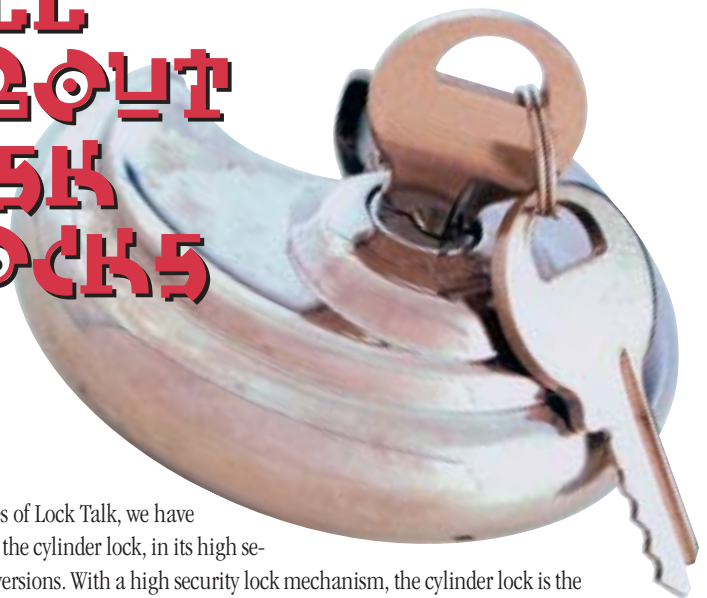
In previous issues of Lock Talk, we have discussed aspects of the cylinder lock, in its high security and tubular versions. With a high security lock mechanism, the cylinder lock is the highest level of mechanical door security available for self-storage. But what are the options when a cylinder system is impractical or too costly? Does a disk lock provide security comparable to a cylinder lock, and does it provide a significant advantage over a padlock?

First of all, a disk lock does not have the exposed shackle of a standard padlock, and certainly will deter a casual bolt cutter-wielding thief, probably sending him down the road to a less secure facility, or to the next unit with a padlock. To get the full advantage of a disk lock, it is important to require or sell or give them away for *every unit at your facility.*

An Alternative to Selling Locks:

The Deposit Method:
Here's another way to ensure that every unit at your facility has the level of security you want: provide a lock to your renter with his unit and charge a deposit and an administrative fee. If he returns the lock with all the keys, return the deposit minus and fee of five to seven dollars. You recoup the cost of the lock in two or three turnovers. Concerned about recycling a lock? Read a little further about restricted key blanks that can't be duplicated. With a restricted key, you can be assured that there are no stray keys out there that can open a lock at your facility.

As an operator, your goal is not to protect *an individual renter* from theft by offering a disk lock. Your goal is to protec*t your entire facility* from theft by *providing every unit the level of security that you choose.* When one unit at your facility is attacked, your renter may suffer financial loss, if he is foolish enough to ignore the information you provide about tenant insurance, but even if he has insurance, your facility gets into the papers as a crime site. *The renter may be covered, but you still lose.* He may lose the value of what he can store in a 10 x 10 unit, but you may lose the marketing edge of your entire enterprise. *That's why you want every unit to be as secure as your market requires.* And a facility with all disk locks is much more secure than one with just a few scattered about.

So a disk lock tops a padlock, but there's not much benefit to your business unless all your units have disk locks, to deter thieves from entering your facility at all. But even with its ability to discourage a bolt cutter, a disk lock does remain vulnerable in two ways: the latch is still exposed, and the lock body is exposed. Thieves can cut the latch around the disk lock, and can cut through the disk lock body or drill out the keyway. Fortunately for you, these methods take time and make noise. They are

beyond the casual thief who uses a bolt cutter, so we can certainly concede that disk locks provide a level of security much higher than padlock. With a cylinder lock, there is no slide bolt, but some self-storage thieves have been know to cut that slide bolt right around a disk lock, so the toughest disk lock in the world won't prevent that kind of attack. However, this type of attack is not that common. For those premium sites where the market demands the highest level of security, the cylinder lock remains the way to go. For a medium level of security a disk lock is often adequate, provided that all the units have them, to eliminate any easy marks for a thief. But all disk locks are not alike, and the rest of this issue's installment will examine the range of disk lock options to help you choose the right on for your market and environment.

Disk Locks: It's All About the Keyway
High Security Keyway

For the maximum security protection, you should consider a disk lock with a high security key and mechanism. With millions of usable key codes, a restricted numbered key and hand assembled mechanism, and a hardened steel front, this type of disk lock is virtually pick proof and highly drill resistant. With a numbered key, your facility can order replacement keys and avoid having to cut the lock off if a renter loses his key. Like all the disk locks we consider for this article, a high security disk lock should have a stainless steel laser-welded body with a hardened steel shackle. What separates this lock from the others we will consider is its unique key.

A lock operating with a unique non-duplicatable key and locking mechanism that works with a series of rotating disks is virtually pick proof and highly drill resistant.

A disk lock mechanism that goes beyond standard pin tumblers and relies on rotating disks, or a biaxial key with beveled pins and sidebars will be virtually pick proof and highly drill resistant. Combined with a stainless steel slide bolt, this security level is surpassed only by a high security cylinder lock system that uses the same unique type of key.

A Master Keyed System:
The Highest Level of Protection

With a high security key, even if the keys are numbered and registered for secure fast replacement from the manufacturer, a master key will ordinarily be needed for emergency entry. Self-storage leases ordinarily give the operator the right to enter a unit in an emergency. A master key simply makes this entry faster and less difficult. A restricted key ensures that there will be only the master key or keys that the operator authorizes. Most operators secure the key in an electronic "key safe," a keypad-accessed lock box that records when a key is removed, who removed it and for how long.

Tubular Keyway in a Disk Lock

A high security disk lock can be costly. Combined with a stainless steel slide bolt latch, the lock and latch combination can cost as much or more than a cylinder lock system. Because retrofitting a facility to a cylinder latch can also be costly and disruptive, upgrading to a high security disk lock may be the most cost-effective way to upgrade a facility's security. At a lower price and slightly lower security level, a tubular keyed disk lock provides disk lock security with less cost than a high security lock. Some tubular keyed disk locks have the same type of numbered key for easy replacement, and even come with a lock out feature. Similar to the cylinder lock with lockout feature, an overlock key turns the cylinder to a locked out position, disabling the lock until the key is again used to reset the lock to the tenant's key. No need for separate overlocks.
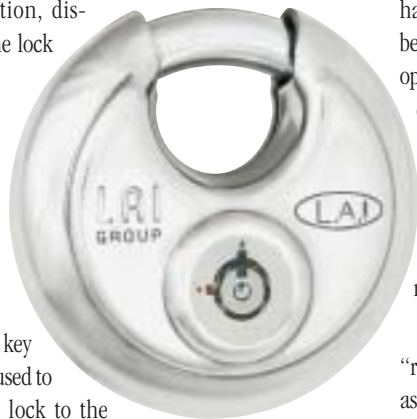
Overlock Key

Operating Key
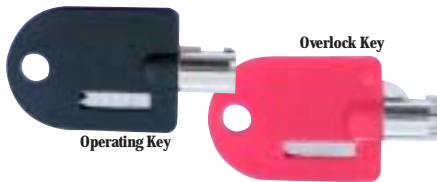
A tubular-keyed disk lock with numbered keys and overlock function provides a significant higher level of security than a padlock or an ordinary disk lock.

Tubular keyed disk locks are not usually available with hardened steel fronts, and since these types of keyways are often used on vending machines, there are picking tools available. Tubular lock thieves, however, usually concentrate on the sure thing of vending machines, so they pose only a minor threat to self-storage operations. The tubular keyed disk lock, with over 20,000 usable key codes, provides a much higher level of protection than a standard keyway in a disk lock.

Standard Keyways in a Disk Lock

The least expensive type of disk lock, and the least secure, is the disk lock with a standard keyway. However, unless the key in an economy disk lock is sturdy enough to do its job, this type of disk lock can cause problems in certain conditions. Why? Look at the illustration below.

[Use diagram from fall, 1997 issue]
I can't find the 97 issue.

The standard cut key, designed for a spring activated padlock, raises a series of pins to turn a cylinder that releases a spring to "pop up" the shackle. In a disk lock, the key must raise the pins and then push the shackle over, placing much more pressure on the key. The result? In many economy disk locks, the keys have a tendency to stick, bend or even break. Also, because the key remains in the disk lock when it is open, the key can bend or break if the lock is dropped on a hard surface.

Moreover, since the keyway is no different from the keyway in a standard padlock, this type of disk lock is no more trouble to a lock picker than a standard padlock. To him, it's no more than a round padlock.

Because the disk lock with standard key is just a "round padlock," it suffers from the same weakness as the standard padlock: not enough "usable key combinations." You have probably heard that a typical padlock has "over 1,000 key combinations." Let's do a little math. The typical self-storage padlock and economy disk lock has five pin tumblers with five possible cuts.

Mathematically, that provides 5 x 5 x 5 x 5 x 5, or 3,125 possible combinations. *The number of usable combinations, however, is much smaller.* Why? Look at the illustrations below:

The top key is cut 0,0,5,0,0, and the bottom one is cut 5,5,1,5,5. If the cuts line up this closely, even a beginner can pick a lock in a few seconds. And when you eliminate combinations such as these with too little variation between cuts, a five-pin tumbler lock will usually wind up with fewer than 750 *usable combinations.* And when you remember that that at least a dozen companies manufacture padlocks with the same kind of key, that means that all the available usable key combinations are shared by these same companies. So, a disk lock with a standard key may

resist cutting, but it will do no better than a padlock against even a novice lock picker or someone with a ring of padlock keys.

The Dimple-Keyed Disk Lock: A Sturdy Key that Fits the Lock

A high security key, such as the one described above, with its half moon shape, or a biaxial key with slots for sidebars, resists bending and breaking, and because of its superior engineering, does not often stick in the keyway. The same holds true for tubular keys, and for another medium security key, *the dimple cut key.* This key, which works by pushing up six or more pins from the side, has no cuts, and is more than 50% thicker than a standard cut key.

These types of keys resist bending and breaking, and, as an added bonus, are far superior to standard keys in harsh weather conditions. A padlock, unlike a disk lock, hangs straight down on a latch, and water drains off it easily. A disk lock may hang on a latch in such a way to attract moisture, ice and snow. With a thicker key, and thicker pins, a dimple-keyed disk lock is easier to open than the "round "padlock." A quick spray of alcohol in the keyway and on the key, and it usually opens. The same is true for high security and tubular keyways. The difference between the dimple key and the high security and tubular keyed disk locks is cost. For as little as two dollars more per lock than a standard disk lock, a dimple keyed disk lock provides over 2,000 usable key combinations and a sturdier key, with much greater resistance to bending, breaking and harsh weather than a standard keyed disk lock.
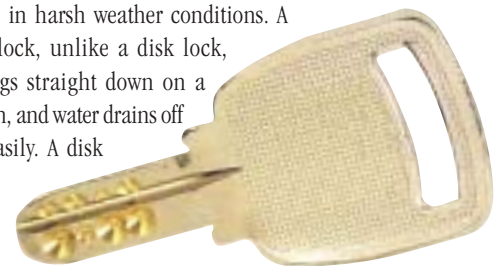
Disk Locks: Choosing the Right One for Your Market

There is no doubt that a disk lock is superior to a padlock in securing a self-storage door, but partial use of disk locks does little to raise the security level or crime deterrence of your facility. *For your business and reputation, you want to keep all crime out, and your facility is only as secure as your weakest door.* If you offer but don't require disk locks, you are protecting individual renters, but not protecting your reputation. And if you decide on a disk lock, test some samples from a lock manufacturer. A cheap lock with 500 usable key combinations with cheap keys that bend or break may save you a few dollars, but will most likely cost you customers in the long run. The disk lock is a significant step up from a padlock, but only if its key and mechanism deliver over 2,000 usable key codes with a heavy duty key that will stand up to rough handling. For severe

The chart below outlines the various features of these four kinds of disk locks:

Types of Disk Locks Based on the Keyway/Key Style: Size& Material:	High Security $2^3/_8$″ (70mm)-Stainless Steel with Hardened-Steel Shackle	Tubular $2^3/_8$″ (70mm)-Stainless Steel with Hardened-Steel Shackle	Dimple Cut Key $2^3/_8$″ (70mm)-Stainless Steel with Hardened-Steel Shackle	Standard Cut $2^3/_8$″ (70mm)-Stainless Steel with Hardened-Steel Shackle
Usable Key Combinations	Over 3 million	Over 20,000	Over 2500	750-1000
Drill Resistance	High	Medium	Medium	Medium
Pick Resistance	High	Medium	Medium	Low
Weather Resistance	High	Medium	High	Low
Resistance of keys to bending and breaking	High	High	High	Low
Additional Strengths:	Keys can be numbered and registered for easy replacement. Can be master-keyed for safe, secure and fast access.	Keys can be numbered and registered for easy replacement. Overlock feature is part of lock.	Dimple cut key resists sticking, bending or breaking.	Keys can be numbered and registered for easy replacement.
Weaknesses	None	Can be picked or drilled by skilled criminal	Can be picked or drilled by skilled criminal	Can be picked or drilled by casual criminal
Unit Cost for 96	$18- 20	$7-9	$5-7	$3-5

weather conditions, compare a dimple keyed lock with a standard-keyed model. For high security applications where cylinder lock may not be practical, consider a disk lock with a high security or tubular key. There are appropriate disk locks for every application. Try out a variety of options, to make sure that you make the right choice.

More questions? Just call the Telegram's toll free number, 800-662-8880, and talk to one of our experts. The more you know, the more secure you will be.

PRODUCT SPOTLIGHT:

Axcy's Electronic Door Locking System
Global Electronics Ltd.

Global Electronics Ltd. of Phoenix, AZ has been on the leading edge of electronic component design for more than ten years. In that time, they have designed components for The Space Station, Mars and Venus Probes and even the latest Airbus A380 escape slide chutes. Global has now turned its attention to the self-storage industry by designing a unique electronic roll up door locking system: *e-LocX.*

Meeting the Needs of the Owner as well as the Renter

The system has been configured to meet the needs of both the *facility* and the facility's renters.

For the *facility and its owners*, the e-LocX system provides a variety of features that enhance the value of the facility. For example, a long standing problem to allowing 24 hour access has been that it makes the site vulnerable if standard latch and padlocks are used, since once a thief with authorized access enters, all the other door locks are exposed and easy to cut.

The e-LocX system unlocks only that unit door that corresponds to the valid gate code entered at the entry gate. Most self-storage security software and gate keypad makers provide a feature that will not allow the gate to open when an invalid gate code or one for an overlocked unit is entered. Axcys' e-LocX electronic lock system goes a step further by unlocking *only those units* that have an authorized gate code. With this system, a renter who has been locked out but has tailgated into the facility still cannot open their door. Furthermore, since this feature is *automatic,* the manager is free from having to add and remove overlocks. *Lockout can be implemented entirely from the property management system* and the entire facility can be controlled simply by clicking on the graphics in Axcys Security Software.

Back view of electronic lock in locked position.

Screen shot of the e-Locx System showing open and closed units.
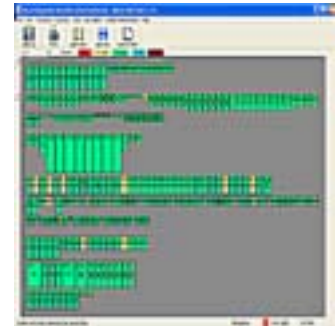
From the perspective of the renters, e-LocX provides their unit with the latest in alarming technology and the only high security electronic door lock in the self-storage industry. Although the renter still provides their own lock and key, even if the lock is cut, the electronic lock remains activated, so a burglar cannot get into the unit. The additional security of the electronic lock system provides a greater level of deterrent security for the entire facility, and its automated operation allows 24/7 rentability and access when necessary.

Used in conjunction with an automated kiosk such as the OpenTech INSOMNIAC© Kiosk, e-LocX allows units to be rented 24/7. After a renter completes the sign up process from the kiosk, the kiosk dispenses a lock, the management software assigns a code, and Axcys' Integrated Security Software activates the electronic lock, which the renter can immediately open with his assigned code.

An Opportunity to Reduce or Eliminate the need for On-site Managers

A major benefit beyond security for this technology includes reduced management time and manger-free sites. With this system, it becomes easy to implement the relatively new concept of a managed or semi-managed site surrounded by smaller satellite sites that encircle the super site and are 2-5 miles away.

These new uses are possible due to Global Electronics' product focus on self/site monitoring, automation, redundancy and communication with the outside world. The e-LocX System includes several components that enable the system to monitor and report on itself and the site. For example, power is continually monitored. If AC power goes out for any reason, a back up battery, which is part of the system, provides redundancy power immediately. The Axcys software is notified in less than a second and predefined commands are executed. These predefined commands, which the facility operator can define, include rules options such as unlocking the site, in an orderly, battery-conserving manner, while maintaining the alarm functions of e-LocX running!

Security features of e-LocX include a *"fail convenient"* mode where, if data is not received by the locks themselves, the locks automatically go to the unlocked position *and* an alarm goes off. If the power is cut to the locks or the lock controller, an alarm goes off. Furthermore, the system monitors the position of the gate. If the gate is opened – even partially - when it is not supposed to, an alarm goes off. The alarms can be programmed to perform a variety of functions, including sounding a siren, calling the police or notifying a monitoring company.

With this practical cost-effective electronic lock, an automated self-storage facility can provide manager-free operation while also providing security to the unit level. Combined with a high security locking system to provide power –free security back up, the industry at last has a fully automated, fully secure model of a self-storage facility.

Summary of features

Owner Perspective
- Automatic overlock can be initiated by property management system
- Tenant can be locked out of facility at gate.
- Door can also be secured by additional lock.
- Includes alarm functionality.System facilitates reduced management or manager-less operation.
- May be controlled via internet or direct dial service using PCAnywhere or VNC.
- Facilitates truly segregated security unit by unit or bldg by bldg.
- System facilitates 24 hour rentability.

Tenant Perspective
- High security lock.
- Each unit individually alarmed.
- Additional conventional lock.
- Enhanced security for entire facility.
- System facilitates 24 hour rentability.

Software features
- Each unit individually alarmed.
- Provides a graphical representation of the facility.
- Click to control software.
- Email and/or fax tenant or tenant's designee when gate code is used.
- Email and/or fax tenant when alarm goes off.
- Email and/or fax owner's designees when alarm goes off.

Additional features
- 24/7 operations monitoring.
- Models available for all makes of roll up doors.
- Retrofit models available.

For additional information about the e-LocX System, contact Tim Seyfarth of Global Electronics Ltd. at 602-437-8005 or email: sales@mail.global-electronics.com. See their ad on this page.

Lock America Cylinder Locks Teams Up with First Installed Electronic Door Locks

Rich Morahan, Managing Editor

The kiosk is popular way for customers to pay bills and even rent a unit, leaving the manager free for marketing, hands-on operations and customer service.

Storage Solutions of Mesa, AZ, which owns or manages over forty facilities across the southwest United States, recently opened a site at Fletcher Heights, outside Peoria, AZ that featured the first electronic unit door locks installed in a self-storage facility. In this issue's *Product Spotlight,* we focus on the electronic lock system's features. The electronic door unit locks are part of a complete electronic security system, which includes an InsomniacÆ 900 Kiosk, an electronic gate and door alarms tied to the SyrasoftÆ property management system and perimeter and lobby surveillance cameras. The doors are also secured with the Lock America EnforcerÆ cylinder system. *The Telegram* spoke to Dana Shelton, facility manager at Fletcher Heights, to get her and her renters' perspec-

tives on the system, and the array of security features. Dana has over 16 years experience in self-storage management, and moved from another Storage Solutions facility when Fletcher Heights opened in June of 2005.

We asked Dana about the security features at the facility. "Our customers love the security, and we can offer this higher level at the same price as the other facilities in our area, while realizing a premium for extended access"

Even though the facility features on-site management, the kiosk is popular way for customers to pay bills and even rent a unit, leaving the manger free for marketing, hands-on operations and customer service. The kiosk even dispenses Lock America's cylinder locks to new renters. Why does Storage Solu-

tions employ cylinder locks when the facility has an electronic security system? They want to avoid the issue of bailment. The tenant retains control of the lock, preventing unauthorized access even if the electronic lock is disabled.

The gate, door alarms and electronic locks of course rely on a stable electrical supply. If AC power goes out for any reason, a back-up battery that is part of the system provides immediate back-up power. The Axcys software that drives the system is notified in less than a second and predefined commands are executed. These predefined commands, which the facility operator can define, include provisions to unlock the site, in an orderly, battery-conserving manner, while maintaining the alarm functions of e-LocX in a power outage emergency. The cylinder lock system provides the kind of high security backup that will maintain the integrity of the site during an electrical downtime and also provides additional security should an unauthorized person obtain the door code but not the key. With a cylinder system in place, the unit would resist brute force entry.

In our next issue, *The Telegram* will present a full "Facility Spotlight" of Fletcher Heights, focusing on all that it offers to its renters, and how it shows us the face of the future of high end self-storage in a competitive market.

Storage Solutions is the trade name of AMSMC, which was incorporated in 1989 to operate company owned facilities. Since that time, the company has taken on a number of owned, third party managed clients and affiliate management contracts. Today it has under its banner over one million eight hundred thousand square feet of rentable storage space and ranks 30th in the US on square footage managed. For additional information, go to www.storage-solutions.com or call 480-844-3900.

With a Lock America cylinder lock in place, the tenant retains control of the unit, preventing unauthorized access, even if the electronic lock is disabled.

How to Use the Internet to Run Self-Storage More Efficiently

By Markus Hecker, Contributing Editor

When self-storage operators changed their systems from DOS to Windows©, a whole new set of features opened up to them. Better reporting and analysis, mapping of customers and the facility, revenue management, tracking of marketing and advertising, and emailing notices, to name a few, were new features available to an operator. As the environment for self-storage changes, more and more operators are now looking to the internet to provide additional new tools. Some operators may go through life-style changes and wish to monitor activities from afar. Busy schedules and travel often require remote access. Others have full-time jobs and run stores "on the side" or oversee a growing number of facilities. Management programs that can utilize the internet not only provide better access, but, if designed properly, they can better integrate with other systems and software.

Just as one Windows program differs from the next in reports and features, not all self-storage management programs utilize the internet the same way. As you shop for programs to use the web and better integrate with central offices, accounting, or call centers, it's buyer beware. Before taking a closer look at ways to integrate the web, and evaluate programs that do that, let's take inventory of the benefits of today's Windows programs.

Standalone Property Windows-Based Management Systems

Windows-based management programs are considered *rich clients* applications because they run on the computer at the self-storage facility. The store's PC holds all customer data, prints, lets users backup, and performs all calculations and tasks. Usually, these programs are user-friendly and offer the typical Windows tools such as "drag and drop," "un-do/re-do" and help specific to the screen you are working on.

Whenever software makers release new versions of their program, users have to load these upgrades on each PC.

Internet-based Property Management Systems
Communicating with a Central Database

As operators seek to share data with other users such as accountants and investors and offer services such as on-line payments to customers, some software developers use the internet to integrate transactions from other users into the application at the store. Some database types and the Windows XP operating system allow management programs to exchange data such as pricing, availability, or balances with other platforms such as a store's web site. These programs can export files with pricing/availability to web sites, import payments from web sites, send backups to central offices, and give absentee owners a glimpse of the day's deposits. Rich client management programs running at the store can now share data via the web yet keep their familiar look and feel.

However, sending files to and from stores, and from stores to a central office can be inefficient. 'Typical' Windows programs don't scale well: it's hard to summarize or combine data from multiple stores. It's cumbersome to browse through data from 50 stores if you have 50 different databases that don't easily combine to one. Therefore, exporting data to other programs for reporting or accounting is inefficient, too. When a management programs share data between stores, web sites, and call centers by exchanging files, it's possible for activities to conflict when they happen at the store and at the web site at the same time. For example, it's possible for a move-in into one and the same unit to occur on-line and at the site. An online payment by a past due customer may not update the application on site before it assigns a late fee.

In addition, updating programs installed separately at each location takes time, effort, and coordination. You have to load updates on every PC running or accessing the application. Unless the same version of the application runs on all PCs, sharing data may not be possible.

Running Your Property Management System as a *Thin Client* System on a Central Server

A few years ago, some property management developers introduced programs that ran on web servers and eliminated the need to install and maintain programs on individual PCs. Called *thin clients,* these web-based systems are easy to install because they keep applications only on a central server, not on each PC. Thin clients are easy to maintain because updates only occur on the central server, not on each machine accessing the application. However, users must have uninterrupted internet access to connect to and work with the application. Thin clients look and feel different from Windows programs. They make users work in a browser (like Internet Explorer) to pass data from their computer back and forth to the central server. Thin clients can give access to a large, diverse audience. For example, anyone can book an airline ticket on Expedia or Orbitz without much help. However, even a single-store storage operation is much more complex than buying a plane ticket, because operators and their staffs have different needs and expectations: there are store managers entering many transactions and printing various documents all the time; accountants, investors, and owners viewing and integrating store data into other programs; tenants paying bills online; and call cen-

ters helping customers with reservations, payments, and move-ins.

Smart Client Applications: Many Options and Many Benefits

To build on the strengths of thin clients systems and to satisfy the needs of each of these users' needs, Microsoft also offers what they call a smart client architecture.

With this system, each user has real-time access, managers find the speed and user-friendly look and feel of rich client applications, and accountants and owners can consolidate data from multiple stores and transfer data, not re-key it, quickly into other programs.

Smart clients combine the manageability benefits of thin clients with the benefits of rich clients. Smart clients offer the same security, ease of deployment, and transparent updates as thin clients, and smart client applications give storage operators the same user-friendly interface they may expect from a Windows program and take advantage of hardware and software resources at the store. Smart client architecture lets managers on site even work off-line.

Designing a smart client system, however, is no easy task for a software company. Programmers have to understand the storage business and know what features to offer to each group of users. The application has to seamlessly integrate payments and reservations from tenants, call centers, and managers on site without conflict or locking up.

The connected nature of smart clients systems allows users to better summarize data from different stores, analyze it, and integrate with other applications such as Adobe, Excel, Crystal and accounting programs. Integrating data quickly saves time and money and makes it easier to share reports, analysis with investors, area managers, and off-site owners. Better integration with other systems and services means, for example, tenants visiting your website can print driving directions from their location(s) to your store(s). Managers never have to worry about moving a tenant into the same unit that visitors to the store's web site just leased.

With smart client applications, on-site managers do not access the application through a web browser. Instead, their management software looks like a Windows program and includes features like drag-and-drop, sorting, topic-related on-screen help.

Compared to thin clients, smart client architecture lets managers operate at fast speeds. Store managers no longer have to wait for a response from the server before completing the next task. Printing even small documents like receipts, leases, and large batches of invoices is fast because the local PC processes all tasks.

Thin clients using web browsers make it hard to sort or search log lists of units and tenants. Completing multi-step tasks like move-ins using the browser's back/forward button is cumbersome; users can lose data they already entered when going back and forward. With smart client applications, on-site managers do not access the application through a web browser. Instead, their management software looks like a Windows program and includes features like drag-and-drop, sorting, topic-related on-screen help.

Smart clients applications designed with the storage industry in mind are easy to install and update. They combine the user-friendliness of rich clients with the deployment and manageability strength of thin clients.

The internet offers better integration with all segments of any self-storage operation, large or small. However, not all programs are designed to deal with the diverse requirements of different groups such as managers, accountants, investors, or absentee owners. Property Management programs come with different levels of sophistication to integrate systems and services. Smart client applications offer managers the same speed, reliability, and user-friendliness they expect from any rich client program. Yet smart clients integrate on-site activities with reservations and payments online together with call centers and central offices in real time. The internet is here, and Smart Clients applications harness its power in a way that makes sense for storage operators.

Types of Web Based Property Management Systems

Standalone Rich Clients	Thin Clients	Smart Clients
Features		
Programs installed on each computer. Each facility stores its own data. Remote access via PC Anywhere or Remote desktop possible.	Applications stored on central server. Browser-based interface.	Applications stored on central server and local client.
Benefits		
Familiar Windows© Interface. Limited, periodic file exchange with other platforms and some consolidation possible.	Better integration across platforms on a central server site: site, web site for online payments/reservations, call center.	Familiar Windows© Interface. Better integration across platforms on a central server: site, web site for online payments/reservations, call center. Stores can work offline. Database stored on-site operates fast. User friendly interface. Fast, reliable printing on-site.
Weaknesses		
Difficult to perform and coordinate activities in "real time." Data corruption, lock-ups common. Does not integrate well across multiple stores. Limited, cumbersome data consolidation. Updates must be performed on all computers.	Unreliable because thin clients require uninterrupted internet access. Browser-based interface not as user-friendly as windows applications. Sluggish, slow speed and limited ability to print on-site inhibit operations.	

Markus Hecker is Director of Marketing for SMD Software of Raleigh, NC and a Contributing Editor of The Self-Storage Telegram. SMD provides management software for the self-storage industry. For more information, you can contact Markus at 919-865-0781, by email at markus@smdsoftware.com *or go to www.smdsoftware.com. See SMD's ad on the back cover.*

Improve Your Cash Flow: Four Ways to Lower Your Payment Processing Costs_

By Rich Morahan, Managing Editor

No matter how well run and profitable your operation is, you can never bank your money too fast or too cheaply. The *Telegram* examined the issue of technology-assisted banking with Josh Goldman of Bargold Storage Systems, Long Island City, New York. Josh has developed a four-part attack on payment processing that any facility, large or small, can benefit from. Implementing any one of these options can:

- Save you money on check and payment processing;
- Save you time on "bank runs";
- Improve your receivables and cut down on collections;
- Provide customer service to attract and retain your customers.

Implementing a comprehensive payment processing system can maximize your profits, satisfy your customers and provide a major benefit to raise your facility above your competition.

Banks now offer many of the processes listed below as an added service. Be wary, however, of doing any of these methods directly with your own bank, since changing banks could some day turn out to be a complicated process. For this reason, Josh recommends working with a third party processor/clearing house.

Daily In-House Check Processing

Most customers still pay by check. Your goal is to get those checks processed and credited as soon as possible. Recording payments one at a time and making "bank runs" is non-productive time, for you or your manager. Josh solved that problem with a special in-house scanner that scans checks and eliminates the need to go to the bank. There is a cost for the scanner, but you can negotiate that cost with your check processing service. Payback will depend on the volume of checks processed.

The TellerScan 400ES is a two-sided countertop check scanner designed for Branch, Remote and Distributed Capture applications. The unit easily fits into any countertop or teller window area. These scanners can accelerate check clearance, improve customer service, and prepare the bank for electronic check processing.

Once the checks are scanned, a file is created automatically for import into your property management system to update the accounts of those who paid. The images of the checks are sent to the clearing house and funds are transferred to your account on the next business day by Automated Clearing House (ACH) deposit. You are then required to destroy the physical checks within 14 days.

Outsourced Lockbox Check Processing

If your operation reaches a certain volume (over 200 checks a day) outside lock box payment is a cost-effective option. This system scans checks, posts questionable transactions to a website for your resolution and approval, imports a file to your facility's property management system, processes the checks, and transfers the funds to your account on the next business day by Automated Clearing House (ACH) deposit.

Checks will be with us for the foreseeable future, but the two following check-free options, Automatic Monthly Debits and Online Payments, are as convenient and user friendly for your customers as they are convenient and cost-effective for you.

Automated Monthly Debits

Josh calls this method "the cheapest way to clear money." When he introduced this program to his renters, he thought that he would need some premium or incentive to get them to sign up, but he soon realized that the benefits to the renter in convenience and regular payments made this option attractive enough for renters without any incentives. The payment files are sent to the clearing house at the end of each month, and funds are transferred three business days later. As with the other options, a file is imported into Josh's property management system. Most of the popular self-storage property management systems can accommodate this type of information.

Once this system is in place, move outs of long time occupants will not be such a negative. The long time occupant was probably not on automatic debit; each new occupant, on the other hand, becomes a likely candidate for the program.

What About "Bounced Payments"?

For all three options, "bounced payments" can be resubmitted up to a date determined by the facility. This is extremely useful. Since your bank never gets a bounced check and the clearing house is the party notified, there are no bank fees associated with a bounced check. When they are resubmitted for collection (they can be represented up to two times) by the clearing house (this process can be automatic) a bounced check fee can still be charged to the customer. Therefore it is more profit for you as the operator.

Online Payments

"The wave of the future," although for a number of operators, the future is already here. With this option, the facility automatically generates and transmits email bills each month. There is an immediate payment option offered with the email, which can be a link either to the clearing house's secure site or a secure section of your own web site. Renters set up their billing information for their first payment, and then the information is retained. The payment file is uploaded to the clearing house and a file is imported to the facility's property management system daily. Funds are transferred the next business day.

Phone payment can be integrated into this system with an option that allows your operator to enter the information onto a form to transmit to the Clearing House directly on the above mentioned web sites.

The beauty of these options is that you can take advantage of all three separately—You can choose either in house or out sourced check processing, along with automated and email payment. Of course, if you have a Kiosk on site, that's gives you an additional form of electronic payment. Whatever your situation, if you want to get started slowly, you can implement one and then go from there.

Credit Card Payments?

What is your money worth? Credit card payments may seem like another easy way to get out form under checks and cash, but there's a cost to credit card billing, *a big cost.* Look at the chart below, which breaks down credit card transaction costs vs. ACH Debit:

Recurring Monthly Payment: The cost of processing a $100 payment		
American Express (non-swiped)	$3.50	3.50%
Visa or MasterCard (non-swiped)	$2.85	2.85%
ACH Debit (Check)	$0.65	Fixed
Payment by Phone:		
American Express (non-swiped)	$3.50	3.50%
Visa or MasterCard (non-swiped)	$2.85	2.85%
ACH Debit (Check)	$0.65	Fixed
Payment via Your Website:		
American Express (non-swiped)	$3.50	3.50%
Visa or MasterCard (non-swiped)	$2.85	2.85%
ACH Debit (Check)	$0.65	Fixed
Processing costs for 250 units at $100.00 per unit		
American Express (non-swiped)	3.50%	$875.00 per month
Visa or MasterCard (non-swiped)	2.85%	$721.00 per month
ACH Debit (Check)	Fixed	$162.50 per month

Looks like a no brainer to us.

"Selling" Your Payment System to Your Renters

The best time to introduce your payment options is when a renter signs the lease. Point out how automatic debit or online payment will save the cost of stamps and an envelope, and will protect against late payments and late fees. Point out that debits from a renter's checking account are *interest free*, as opposed to credit card payments (Almost everyone carries a balance on their credit card, and pays interest.). Josh's experience has been that these options are an easy sell, and every renter you sign up means money in your pocket. A "free lock" might be an inexpensive incentive that ensures that a renter will have a quality lock on the unit, which is also to your advantage.

You've Got to Collect Money, So Why Not Do It the Cheapest Way?

You have three ways to save money on your payment processing:

1. You can scan and process the checks yourself, cut the bank processing charges and keep your manager on site where he or she belongs, or if the volume warrants, you can outsource this function;
2. You can sign your renters up for automatic debit, and dramatically reduce your billing overhead;
3. You can bill your renters by email, and again dramatically reduce your billing overhead.

And There's More

- A SSA study from a few years back indicated that renters on automatic payment tend to stay a few more months on average than those who are billed each month.
- Renters on automatic payment must *choose* not to pay their bill, rather than "forget" to pay it. Just think of all the collection reminders you won't be making.
- Many of your renters will appreciate the convenience of automatic or email billing.
- Do not let the bank get the float on your money; instead get your cash faster.
- By setting up payment systems through a clearing house you are free to move to any bank that you want. Changing banks is as simple as changing the routing numbers of the ACH transfers. Bank where you want and where you get the best service.
- Eliminate charge backs (credit cards).

How to Get Started

If you have any questions or require additional information you can email Josh at Bargold@msn.com.

The companies he uses are:

Creative Cash Flow Solutions, Inc, Eric@ilovechecks.com, phone 631-229-0070, Eric Herman

- Automated ACH, daily Check Processing, Online payments, Credit Cards (if you still want to go this way, they have the best rates around) **KLIK, jwoldar@klik.com, Jay Woldar**

- Lockbox **Graphic Service Bureau**, mgustave@gsbprint.com, Mike Gustave

- Billing (Paper) and mailing house

You can also:

- Talk to your website provider and local merchants who have set up online bill paying options.

- Talk to your bank about automatic monthly debiting.

- Check with your local phone directory or Google© to learn about Check Clearing Houses.

Using automated payments is not the wave of the future, it is here. Efficiently capturing and processing monthly payments can significantly enhance your cash flow and increase the time your managers spend interacting with customers. Just because you take credit cards does not mean that it is the most efficient way to get your money. *It is actually the most expensive.* Plant the seeds to start converting (starting) people to automated debits and in a few years you will be saving a lot of money.

When Lightning Strikes, Are Your Cameras Safe?

Video Camera Installation Guide

Based on a guide published by Power & Systems Innovations, Inc., this article provides guidelines to protect your cameras and your operation from lightning induced and power surge damage. This article is not going to cover every possible situation. We urge you to contact a qualified installer or PSI at the telephone number at the end of this article for additional technical support.

Do NOT assume you are safe, as we all know where that most often will lead.

The Telegram spoke with John N. West, Sr., of Power & Systems Innovations, Inc., who has many years of experience in the technical repair of all types of electronic equipment and in the design and installation of video and other security equipment with one of the largest security companies in the world. Some of his consulting and seminar clients include government agencies such as the United States Secret Service Technical Division, US Postal Service, major utilities such as Progress Energy and OUC, commercial concerns such as Nestle, SunTrust Banks, L-3 and many of the largest security companies in the world including ADT, Diebold and Honeywell.

According to John, the basics required for a proper installation are :

- Single point grounding.
- A clean and stable AC power.
- The proper selection of power and component protection devices.
- The proper selection of cable and wire for the system.
- The proper installation of the cable and wire.
- The proper installation of both the head end equipment and cameras.

- The proper bonding and/or isolation of all system components.

Single point grounding.

The only source of a ground reference must be the AC power ground. This is a requirement of the NEC (National Electric Code) and means the head end equipment as well as any cameras must be grounded only to AC power ground at the head end.

DO NOT install equipment that will be connected together or networked with wire in a manner that will create multiple ground references. Doing so violates code and puts personnel in jeopardy of shock hazards. Any attempt to install "isolated" additional grounds will result in a ground loop (difference in ground potential), and improper grounding can create a life safety hazard.

If it is impossible to power the entire system from a single point ground, please contact PSI or a qualified installer for the options. The details of such an installation go beyond our scope here.

It is not proper to ground cameras, camera housings or point of use surge protectors separately, since doing so will cause ground loops. The AC Surge protection installed to protect the head end equipment must be "grounded" to the AC Power outlet (electrical panel ground) that provides power to the equipment.

Coax cable surge protection must NOT be grounded at the camera location. Again, the improper bonding and grounding will cause ground loops. The best installation is when the camera is "floated" or isolated from any possible ground source where it is installed, as shown in the illustration later in this article.

A clean and stable AC power.

There are a few rules that will improve any installation. The first is that ALL video equipment should be on the same power outlet or duplex receptacle.

Avoid using a power line that also powers inductive loads or outside circuits such as Inductive loads (motors, air conditioners, etc.), which can often cause significant power sags and surges. They are also a source of noise. You have probably noticed how using the same circuit for a fan and a TV will create interference on the TV. The same holds true of other motor loads and video security camera systems.

- Avoid any panel with an outside circuit, because such circuits can be the source of a back door lightning event. In this case, an impulse or surge enters the electrical system, not from the utility power source, but from a circuit that goes out of the panel to the outside.

Example: Site light poles powered by a panel often are exposed to both nearby lightning strikes (induced lightning surge into the wire from the panel to the light) and direct lightning strikes.

- Install a commercial grade (high performance) surge protected power strip. These are NOT the ones you find at discount computer and office supply houses. The strip should be in a metal housing and have multiple surge protection elements.

Low cost plastic surge protection power strips have been the source of fires and generally provide very poor surge protection.

- Power the video security equipment with a battery UPS (Uninterrupted Power Supply). A line interactive/standby UPS (not just a plain standby UPS) is the minimum protection level.

The best UPS is an on-line double conversion UPS. These are more costly, but also provide a much higher level of protection for the connected equipment. The on-line UPS should be considered for installations where the power requirements exceed 5 amps or more @ 120VAC.

When selecting a circuit to power the video security equipment, try to use a dedicated circuit, which is nothing more than an outlet connected to the circuit breaker panel. The term dedicated means that no other outlet is connected to this circuit breaker. This has been the standard for sensitive equipment such as ATMs for many years. This will avoid any other connected equipment becoming a source of system damage. It will also reduce the possibility of EMI and RFI system noise.

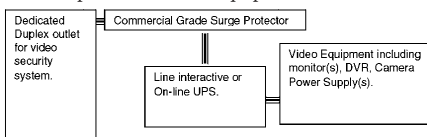## The proper selection of power and component protection devices.

Video security systems as well as all sensitive electronics are subject to power quality anomalies, such as sags, surges, impulses, noise and numerous other events that are outside the input power requirements for normal stable operation.

Sags occur when voltage is lower the than normal input voltage is supplied to the equipment.

Surges and swells occur when voltage increases. If you have ever seen lights dim when the air conditioning equipment starts you have seen the "sag." What you rarely see is the surge that follows when the equipment turns off.

Impulses are short-term over-voltage events. The most common source is from grid switching or fault clearing by the utility and lightning events. No single device can "cure" all power quality issues, but a line interactive (good solution) or on-line UPS (best solution) that is used in conjunction with a good quality surge protector will protect equipment from all but the most severe power quality anomaly.

An added layer of surge protection in front of the UPS will protect both the equipment and the UPS.

[diagram: Dedicated Duplex outlet for video security system. — Commercial Grade Surge Protector — Line interactive or On-line UPS. — Video Equipment including monitor(s), DVR, Camera Power Supply(s).]

This added layer is recommended, because UPS units are not high performance surge protectors as a stand-alone device.

Any surge protector used with a UPS must be connected ahead of the UPS. NEVER plug a surge protector into the output of a UPS. The operation of the UPS while on inverter can damage both the surge protector and the UPS. All UPS manufacturers recommend and clearly state that surge protectors are not to be connected to their UPS output.

When the ideal AC power source is not available,

electrical noise can often be present. When these conditions (electrical noise and other factors) dictate, it is necessary to provide noise filtration for the video security equipment. Standby and Line Interactive UPS do not provide adequate noise filtration. Their primary function is to provide power in event of short-term failure of the utility source. Most manufacturers will claim their products have noise filtration above 10 kHz. They do, but the most common noise issues with video equipment are far below that frequency. A good solution to noise issues is a high performance Isolation Power Conditioner.

The proper selection of cable and wire for the system.

Shielded wire is recommended for the AC power lines running to the cameras. The shield will reduce the possibility of induced (lightning) system damage. In the ideal 24-Volt AC power installation, the shield of the power conductor would be floated at the camera end (not connected to the camera or housing) and it would be grounded to the common AC power ground at the service entrance. Installation of the camera power wire in this manner will provide a "shield" that would drain to the AC power ground much of the energy induced by lightning.

The reduction in possible "induced" energy is dramatic and will often be enough to save equipment from damage when used in combination with high performance surge protection.

Double-shielded coax is the ideal coax installation for a video security system. Used in combination with high performance coax series surge protection devices it is possible to achieve significant reductions in induced lightning surge damage.

It is always better to transmit video signals via some means that do not involve copper wires, but non-copper options can be expensive. The cost of fiber optic video transmission as well as RF video transmission has become significantly lower in the past few years, so it would be worthwhile to consider these options. Transmission of video signals over twisted pair has now become popular and it is often competitive with coax installations. When coax runs could be very long, twisted pair can be a better option. The same principles of proper system installation should be followed when using twisted pair, including the use of shielded wire.

The proper installation of both the head end equipment and cameras.

In keeping with a single point ground system, the AC power ground must be the only ground reference for the video security equipment. That means the cameras, camera housings, and all associated equipment must only be grounded to the AC power ground. If multiple electrical systems are involved, special equip-

ment is required to isolate the additional ground reference(s).

For example:

A DVR, with monitor and four cameras are to be installed. One camera will be installed on a metal light pole, the second camera on the side of a metal building, a third camera on a metal fence at a gate and the fourth camera on a concrete or wooden pole.

The DVR and other head end equipment will be powered as recommended above and will only have a single point ground (the AC power ground). The camera installed on the metal light pole must be isolated.

Video Camera Isolation – Pole Mounted Cameras

The most cost-effective way to protect your equipment is to isolate the video camera from any potential ground where it is installed. Then install the proper high performance surge protection devices on both ends of the coax cable and at the camera power input.

This option can be easily accomplished at a very low cost. In addition to being the most cost effective solution, this option also provides very good isolation from direct lightning damage. The benefits are significantly reduced issues with lightning damage and improved installation reliability. If you have trouble understanding the issue, look at the illustrations below.

### Security cameras mounted to a light pole in a building parking lot.

Video security cameras are mounted to a metal light pole that has a ground reference either via the concrete support or a ground rod installed at the pole. The head end equipment is located inside the building some distance away from the light pole and the grounds are not common. The head end equipment is "electrically grounded" by the AC power system. The cameras are provided power by the head end equipment AC power.

In the first illustration at the top of the next page, an example of an improper installation, the camera is mounted directly (no isolation) to the metal pole by a metal bracket or strap. Lighting strikes the light pole and seeks any and all paths to dissipate energy. The camera and the connected coax become a low resistance path directly back to the head end equipment AC power ground. ZAP! You just lost the equipment.

Zapped Scenario—Improper Installation!

If, however, you have isolated the camera, the transfer of the energy is very difficult or impossible (ideal) and you don't have any "difference in ground potential," and no Ground Loop. See the illustration at the top of next column for "Properly Grounded" scenario:

Improper Installation

Properly Isolated Camera Mounting
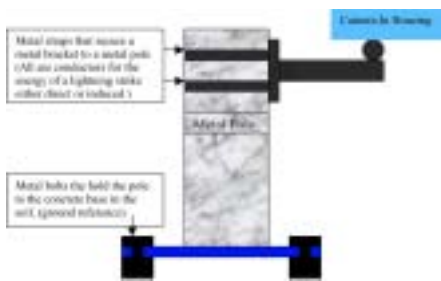
Properly Isolated Scenario—Correct Installation
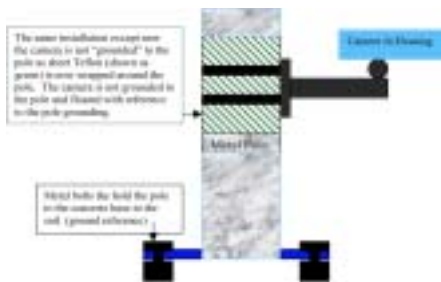
Will this installation technique help reduce damage from lightning? Yes, as proven in hundreds of installations. Will this installation technique stop *all* the damage from a direct lighting strike to the pole? No, but it has in a few cases

PSI customers have reported. In every case, the installation's reliability is vastly improved and costly lighting damage repairs are reduced significantly.

A direct lightning strike on the pole may damage the camera and as a result cause some energy to follow the coax and camera power lines back to the head end equipment (mostly induced energy). That is the reason for the installation of high performance surge protection devices. The energy level entering the video security system will be reduced because the camera is no longer electrically connected to the pole.

No one can predict what path lighting will take and no one can stop lighting. The best that can be done is to make the path you don't want the lightning to take the least attractive path.
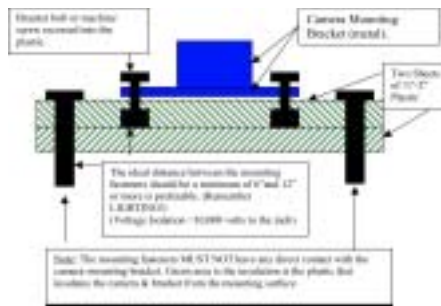
Video Camera Isolation

To avoid lighting damage from direct building strikes and difference in ground potential (ground loop) issues with cameras mounted to a building, follow the "isolation" procedure illustrated at the top of this page.

Security cameras mounted to a metal building

The illustration below shows a video security camera mounted to a metal building. The head end equipment is located in another building some distance away from the metal building and the grounds are not common. The head end equipment is "electrically grounded" by the AC power system. The cameras are provided power by the head end equipment AC power. The camera is *isolated* and mounted to the metal building by a metal bracket.

Lighting strikes the metal building and seeks any and all paths to dissipate energy.

Because the camera is isolated, the transfer of the energy is very difficult or impossible (ideal) and you don't have any "difference in ground potential" or Ground Loop.

Properly Isolated Camera Mounting

Never attach cameras directly to metal poles, wooden poles (wet wood is a very good electrical conductor), fences or any other conductive surface that will create a ground reference between the camera and the attachment point. Lightning will follow any conductive path available and as our experience has shown, that includes video security equipment.

For additional information, contact John N. West, Sr. at Power & Systems Innovations, Inc., 800-260-2259

This article is based on "Video Camera Installation Guide," © Power & Systems Innovations, Inc.

February

15 **Alabama Self-Storage Association: Conference & Trade Show;** Birmingham; go to www.alabamassa.org

15 **Texas Self Storage Association: Self Storage Academy,** Houston; call 888-259-4902; www.txssa.org

17 **New York Self-Storage Association: Grassroots Seminar,** Saratoga; contact 518-449-3333, Kathy@nycapcon.com, www.nysssa.org

21 **Texas Self Storage Association: Luncheon Meeting,** Dallas; call 888-259-4902; www.txssa.org

28- **Inside Self-Storage Conference and Expo:** Mandalay Bay, Las
Mar. 3 Vegas, call 480-990-1101, ext. 1405 to attend, ext. 1200 to exhibit, www.insideselfstorage.com/expo

March

1-3 **Self Storage Association of the UK:** Annual Conference; Prague, The Czech Republic; for more information, go to www.ssauk.com/conferences.php

15 **Texas Self Storage Association: Luncheon Meeting,** Austin; call 888-259-4902; www.txssa.org

21 **Pennsylvania Self Storage Association:** Regional Meeting, Harrisburg; contact 717-779-0804

21 **Texas Self Storage Association: Legal Seminar,** Dallas; call 888-259-4902; www.txssa.org

23 **Texas Self Storage Association: TMSA Board Meeting,** Austin; call 888-259-4902; www.txssa.org

29- **Self Storage Association: Spring Conference and Trade**
Apr. 2 Show; Chicago, for more information, go to www.selfstorage.org

30 **New Jersey Self-Storage Association: Annual Convention, Woodbridge**; contact 518-449-3333, Kathy@nycapcon.com, www.njsssa.org

April

6 **Connecticut Self-Storage Association: Grassroots Seminar,** Danbury; contact 518-449-3333, email: Kathy@nycapcon.com, www.ctsssa.org

18 **Texas Self Storage Association: Luncheon Meeting,** Dallas; call 888-259-4902; www.txssa.org

19 **Texas Self Storage Association: Legal Seminar,** Austin; call 888-259-4902; www.txssa.org

20 **New York Self-Storage Association:** Grassroots Seminar, Long Island; contact 518-449-3333, email: Kathy@nycapcon.com, www.nysssa.org

May

Arizona Mini Storage Association: Annual Conference and Trade Show; call 480-838-6780, amsa@azselfstorage.com

16 **Texas Self Storage Association: Self Storage Academy,** Kerrville; call 888-259-4902; www.txssa.org

17 **Texas Self Storage Association: Luncheon Meeting,** Austin; call 888-259-4902; www.txssa.org

18 **Connecticut Self-Storage Association: Annual Convention;** Mohegan Sun, contact 518-449-3333, Kathy@nycapcon.com, www.ctsssa.org

25 **Massachusetts Self-Storage Association: Grassroots Seminar,** Western Region; contact 518-449-3333, Kathy@nycapcon.com, www.masssa.org

25 **Texas Self Storage Association: TMSA Board Meeting,** Austin; call 888-259-4902; www.txssa.org

June

8 **New York Self-Storage Association: Grassroots Seminar,** Western Region, Batavia; contact 518-449-3333, Kathy@nycapcon.com, www.nysssa.org

15 **Massachusetts Self-Storage Association: Grassroots Seminar,** Eastern Region; contact 518-449-3333, Kathy@nycapcon.com, www.masssa.org

15/16 **Texas Self Storage Association: Developers Seminar,** Dallas; call 888-259-4902; www.txssa.org

20 **Texas Self Storage Association: Luncheon Meeting,** Dallas; call 888-259-4902; www.txssa.org

20 **Texas Self Storage Association: Self Storage Academy,** Waco; call 888-259-4902; www.txssa.org

July

6 **New Jersey Self-Storage Association: Grassroots Seminar;** contact 518-449-3333, Kathy@nycapcon.com, www.njsssa.org

18 **Texas Self Storage Association: Luncheon Meeting,** Dallas; call 888-259-4902; www.txssa.org

19 **Texas Self Storage Association: Luncheon Meeting,** Austin; call 888-259-4902; www.txssa.org

20 **New Jersey Self-Storage Association: Grassroots Seminar;** contact 518-449-3333, Kathy@nycapcon.com, www.njsssa.org

20 **Texas Self Storage Association: Leasing & Collections Seminar,** San Antonio; call 888-259-4902; www.txssa.org

27 **Texas Self Storage Association: TMSA Board Meeting,** Austin; call 888-259-4902; www.txssa.org

August

15   Texas Self Storage Association: Luncheon Meeting, Dallas; call 888-259-4902; www.txssa.org

September

7-9   Self Storage Association: Fall Conference and Trade Show; Las Vegas, for more information, go to www.selfstorage.org

14/15 New York Self-Storage Association: Annual Convention, Albany; contact 518-449-3333, Kathy@nycapcon.com, www.nysssa.org

19   Texas Self Storage Association: Luncheon Meeting, Dallas; call 888-259-4902; www.txssa.org

20   Texas Self Storage Association: Luncheon Meeting, Austin; call 888-259-4902; www.txssa.org

24   Texas Self Storage Association: TMSA Board Meeting, Austin; call 888-259-4902; www.txssa.org

18   Texas Self Storage Association: Annual Convention, Galveston; call 888-259-4902; www.txssa.org

October

10   Texas Self Storage Association: Self Storage Academy, Longview; call 888-259-4902; www.txssa.org

12   Connecticut Self-Storage Association: Grassroots Seminar, New Haven; contact 518-449-3333, Kathy@nycapcon.com, www.ctsssa.org

17   Texas Self Storage Association: Luncheon Meeting, Dallas; call 888-259-4902; www.txssa.org

19/20 Texas Self Storage Association: TMSA Board Meeting/Planning Session, Austin; call 888-259-4902; www.txssa.org

November

9   Massachusetts Self-Storage Association: Greater New England Conference and Trade Show, Framingham/Marlborough, MA; contact 800-268-0086 or 518-449-3333, email: Kathy@nycapcon.com, www.maselfstorage.org

9   Texas Self Storage Association: Self Storage Academy, Fort Worth; call 888-259-4902; www.txssa.org

15   Texas Self Storage Association: Luncheon Meeting, Austin; call 888-259-4902; www.txssa.org

21   Texas Self Storage Association: Luncheon Meeting, Dallas; call 888-259-4902; www.txssa.org

December

7   Texas Self Storage Association: TMSA Board Meeting, Austin; call 888-259-4902; www.txssa.org

8   New York Self-Storage Association: Grassroots Seminar, New York City; contact 518-449-3333, Kathy@nycapcon.com, www.nysssa.org

19   Texas Self Storage Association: Luncheon Meeting, Dallas; call 888-259-4902; www.txssa.org

Some dates may be tentative. Please call or email to confirm.

GETTING CONNECTED – AN EVALUATION OF INTERNET CONNECTION METHODS

By Steve Smith, Empower Software

As the self-storage industry matures it begins to look towards the usefulness of more advanced technologies to incorporate into its daily operations. The industry is motivated to explore these new technologies to economize their management, diversify their services, and broaden their accessibility. Any new technology must be economical, effective, and easy to implement if it is going to experience any longevity within this industry.

With the establishment of the internet as a viable media for conducting business, it is only natural that the self-storage industry would generate internet-based solutions that fulfill the needs and expectations of owners, managers, and customers alike. As with any technology, internet-based solutions have a variety of methods that are being implemented to determine which solution is most useful to this industry and promotes the growth and health of the industry.

Within the storage management software market only a few vendors offer an internet-based management package. The types of connection methods are terminal services and thin client applications. This evaluation will give you a general understanding of the server connection methods, performance and benefits as well as the licensing costs for each type.

Terminal Services

Terminal Services allows multiple users to login into a server while creating a separate user session for each login. When a user launches an application within terminal services, the client computer transmits and receives messages that would normally execute locally on the client computer. The launched application only runs on the server side. This feature eliminates the need to install the application on the client computer. From a user's perspective it looks very similar to using a remote connection software such as Symantec's PCAnywhere.

Terminal Services consists of three components:

- remote desktop for administration,
- remote assistance, and
- the terminal server.

The remote desktop for administration allows as many as two connections to remotely make changes to the server. The remote assistance feature allows the system administrator to invite another administrator to connect to the server to assist them from any internet connection. Included within these components is a presentation protocol called Remote Desktop Protocol (RDP). The RDP is the component that passes keystrokes and cursor movements back and forth from the client computer to the terminal server.

Performance

The overall performance of terminal services within a 32-bit environment has been improved within Windows Server 2003 compared to the Windows Server 2000 version. Microsoft recommends adding 21 MB RAM for each terminal services user above the 256 MB RAM recommended to run Windows Server 2003.

With each additional user session the workload on the server will increase.

Important Note: If you are running an application written in a 16-bit environment (older software packages) the total number of user sessions your CPU can support may be reduced by forty percent. In addition you will have to increase your server memory required by an additional fifty percent. If you going to use terminal services check with your software vendor to make sure their software is supported in a windows terminal services environment.

Benefits

The benefit of using Terminal Services is providing centralized server administration. All of the client computers will be connecting to the same terminal server so installing applications, implementing windows and virus updates are simple. Another benefit is the ability to add applications that were not originally designed for a true client/server environment.

Drawbacks

Terminal Services is not a good solution for an enterprise environment. True enterprise software takes into consideration location keys, layers of management, parameter, policy and security scopes to ease management and establish continuity between operations. There is a tremendous amount of overhead for even the simplest of tasks within Terminal Services.

Terminal Services OS Costs

Using terminal services requires the purchase of Microsoft Server 2003. Windows Server 2003 does include two licenses for terminal services; however each additional client computer will require a Client Access License and a Terminal Services Client Access License. (See Figure 1A)

Thin Client Applications

A thin client application uses an internet browser to connect into the server to access the data. This method allows for quick implementation on all of the client computers because all windows operating systems already include a browser preinstalled. While some packages rely solely on Microsoft's Internet Explorer, others allow other Internet browsers such as Netscape or Mozilla's Firefox.. The option to use other browsers is vital because continued security vulnerabilities plague Internet Explorer, and having the ability to choose another known secure internet browser such as Mozilla's Firefox, creates an advantage. There are two types of thin client applications used within storage management software – Application Service Provider and Web Based Data Warehousing Solutions.

Application Service Provider (ASP)

ASP providers require that all of your customer data is stored at a remote server farm that the provider maintains. This type of service is called an Application Service Provider (ASP). Using this technique provides a centralized repository of data that can be accessed from any Internet location. However, it is important to understand that the ASP requires a constant connection to the Internet. If the Internet connection is unavailable on either the client or host side, the software package is unable to continue to operate.

Internet Data Replication

There are other packages available that provide redundancy, enabling your business to continue if the internet connection is disrupted. These packages, called web-based data warehousing solutions, work with a transmitter applet that sends data to a remote server by transmitting data based on user defined intervals. If the Internet connection is disrupted, the management software will continue to operate normally. After the Internet connection is re-established the changes will automatically be sent to the server. True enterprise quality software incorporates distributed processing, data replication and message queues to establish fault tolerance, system redundancy and a high degree of performance.

Performance

The performance of thin client based applications is significantly higher than those packages using other server connection methods.

Benefits

The greatest benefit of the thin client based applications method is that it uses a mainstream Internet browser and all that is required is a computer with an Internet connection to view your data. Other benefits include reducing the operating system costs and improved server performance.

Drawbacks

When choosing a thin client application, make sure that your software vendor offers redundancy of data and allows you to continue to operate your business if your internet connection is disrupted.

Thin Client OS Costs – Application Service Provider (ASP)

No additional licensing fees are required. Web hosting and storage management software costs are not included within the cost breakdown.

Thin Client OS Costs – Web Based Data Warehousing Solutions

The operating systems cost includes a Red Hat Linux ES Standard License.

No additional licensing fees are required. Storage management software costs are not included within the cost breakdown (See Figure 1B).

Operating System Cost Breakdown

These costs are based on installing twenty new client workstations to connect to a remote server.

They do not include the price of the storage management software, the hardware or any additional networking costs required. The published price is the suggested retail price and the street price is what you should expect to pay.

Terminal Services Cost Breakdown (Figure 1A)			
Item	Description	Published Price	Street Price
2003 Windows Server	Operating System for Server Computer	$ 999.00	$ 729.00
2003 Windows Server - Client Access License (20)	Required to connect Windows Server 2003	$799.00	$ 589.00
2003 Windows Server Terminal Services Client Access License	Required to connect Windows Server 2003 Terminal Services	$2,899.00	$1,799.00
	Totals	$ 4,697.00	$ 3,117.00

Thin Client Cost Breakdown – Web Based Data Warehousing Solutions (Figure 1B) Storage management software costs are not included within the cost breakdown.			
Item	Description	Published Price	Street Price
Red Hat Linux ES Standard	Operating System Server for	$ 799.00	$ 599.00
	Totals	$ 799.00	$ 599.00

In summary, thin client connections out perform their costly Terminal Services counterpart. The key idea to remember in deciding on an internet solution that meets your storage company's requirements is that an ideal solution should not have a single point of failure. ASP solutions require an internet connection in order to handle the day to day business of your storage facility. Internet connections are often reported as having high uptime when in fact, inherent instabilities within the Internet or unexpected accidents cause connections to go down. Look to build redundancy into your system.

Steve Smith is Manager of Technical Services for Empower Software Technologies, Inc., which markets Storage Commander to the self-storage industry. For additional information, call of mail Steve at 951-672-6257, email steve@storagecommander.com.

TECHNOLOGY RESOURCES FOR SELF-STORAGE OPERATORS:

PROPERTY MANAGEMENT Systems,
ON-LINE TECHNOLOGY Providers,
RECORDS MANAGEMENT Software

Property Management Software Companies

Company Name Phone	Product Name Fax	Address e-mail / Web Address
Acorn Products/DCAL Computer Systems *800-328-3225*	**Unitroller** *918-335-0240*	**6505 E. Nowata Rd., Bartlesville, OK 74006** *info@dcalsys.com - www.dcalsys.com*

DCAL has been providing quality products and services for almost 20 years. Our goal is to provide our customers with excellent systems at the best possible prices. Our customers receive clear and concise technical support that ensures the smooth operation of their businesses. The Unikey PLC Access System offers you the best access control, with top of the line technology and excellent support at an affordable price. This system allows you to control multiple strategic access points, which brings you more security, higher rental revenues, and adds an enhanced image to attract customers. Unikey can support up to 12 keypads and 6 gates (or other points of access) making this system very flexible for many different types of facilities. A straightforward Windows application makes Unikey easy to learn and use. When used with a perimeter fence and a vertical lift gate, this system offers you much needed security and analysis of your site.

American Computer Software *800-527-9449*	**Management Plus** *608-221-9422*	**2829 Royal Ave., Madison, WI 53713** *hguillickson@acsoftware.com - www.acsoftware.com*
AndraTech Software Corporation *703-766-2700; 877-613-2700*	**Self-Storage Pro** *413-723-6890*	**P.O. Box 222904, Chantilly, VA 21053** *info@selfstoragepro.com - www.selfstoragepro.com*
Centershift, Inc. *877-927-4438; 801-303-1300*	**Store** *801-303-1350*	**2755 E. Cottonwood Pkwy, Ste. 450, Salt Lake City, UT 84121** *info@centershift.com - www.centershift.com*

Centershift's STORE product provides a web-based rental management and point-of-sale (POS) software solution for the self-storage industry. STORE provides owner/operators with better control of their business assets, improved efficiency at self-storage facilities and the corporate office, opportunities for increased profitability, and the best information security in the industry. Centershift has provided leadership, innovation, and vision to the self-storage industry by introducing these self storage industry firsts: real-time, consolidated, multi-site reporting; internet credit card and ACH (checking account) processing; call center integration; tenant insurance integration; web-based business-to-consumer ecommerce (on-line credit card payments, account management, unit availability, rent rates, and reservation or rent); centralized mail processing for tenant correspondence; on-line support and documentation; web-based training; centralized yield management and forecasting; self service kiosk integration; and fully integrated company & facility web site and web-site hosting.

DHS Worldwide *904-213-0448*	**Total Recall Self Storage** *904-213-1490*	**563 Blanding Blvd., Orange Park., FL 32073** *dhyman@dhsworldwide.com - www.dhsworldwide.com*
Dilloware LP *800-880-0887; 830-899-2117*	**The Billing Clerk** *830-899-2124*	**2825 FM 2722, New Braunfels, TX 78132** *sales@dilloware.com - www.dilloware.com*

*Dilloware has been providing Storage facilities since 1981 with **very easy-to-use, affordable billing software. The Billing Clerk**™ automatically bills and tracks monthly rents, insurance, etc, generates invoices, statements, late charges, past due notices, receipts, multiple reports and much, much more. Unit availability is easily accessed. History is maintained for as long as needed for an unlimited number of units and customers. There is a large notepad for information on each unit (comments, credit card numbers, access codes, contact person, etc.) Technical support is provided by the people who actually developed the program. No long hold times or waiting for call backs. The first year of support (up to 60 minutes) is included in the initial price of $679.95.*

DOMICO *800-688-6181*	**DOMICO** *510-644-3156*	**2608 Ninth Street, Berkeley, CA 94710** *sales@domico.com - www.domico.com*

DOMICO has been providing the very best management and accounting software to the self storage industry for over 20 years. Facility managers, property managers, and owners all rely on DOMICO's superior software and award-winning technical support to achieve their business objectives. Introducing eDOMICO: Web Based, Real Time Reservations, Rentals, Customer Payments. DOMICO has the most flexible, user-friendly, and cost-effective software available.

TECHNOLOGY RESOURCES CONTINUED:

Company Name	Product Name	Address
Phone	Fax	e-mail / Web Address

Empower Software Technologies, Inc.   **Storage Commander**   **27851 Bradley Rd., Suite 120, Sun City, CA 92586**
877-672-6257   *951-672-6258*   *Sales@storagecommander.com - www.storagecommander.com*

Storage Commander has emerged as one of the top selling management programs in the Self Storage industry. With its unique Point & Click user interface, unsurpassed suite of reports providing detailed visibility into all areas of facility operations and its unequaled collection of features such as; check scanners, driver license readers, fingerprint scanners, and internet connectivity, have positioned Storage Commander as the leading supplier of facility management software.

E-SoftSys   **Self Storage Manager**   **1717 Swede Road, Suite 112, Blue Bell, PA 19422**
610-277-7457   *610-278-4117*   *marty@e-softsys.com - www.selfstoragemanager.com*

E-SoftSys, a Microsoft Certified Partner, is the technology leader and total solutions provider for the self storage industry. We offer a complete suite of products and services: Self Storage Manager, a comprehensive manage software designed to streamline processes in large facilities with the convenience of a color coded site map and optional interfaces to Accounting systems and Gate Access equipments; Multi Facility Manager, a management tool to connect to and manage multiple facilities from Corporate Office; e-SSM, a web based multi-facility management software for centralizing operational control of all facilities and enabling customers to rent, reserve and pay online; Website design, development and search engine optimization services, interface company website with the management software.

Hi-Tech Smart Systems, Inc.   **RentPlus**   **328 Uluniu Street #204, Kailua HI 96734**
800-551-8324; 808-263-7775   *808-261-4447*   *info@hitechsoftware.com - www.hitechsoftware.com*

HI-TECH has been providing self storage software for over 20 years, with thousands of customers in more than 20 countries. RentPlus is now available in several formats to meet your unique requirements: Standard Edition for smaller facilities, Professional Edition, Server Edition, and now the new OnLine Edition. RentPlus automatically generates late charges and letters, and invoices, includes complete general ledger accounting, dozens of reports, audit tools, and multi-level security. Options include automatic credit card processing and security system interface. Software "Wizards" make complex tasks easy. Money back guarantee.

Integrity Software Systems   **Mini Storage Personal Accountant**   **3211 Continental Drive, Traverse City, MI 49686**
800-843-9566; 231-941-2322   *231-941-9544*   *info@integritysoftware.net - www.integritysoftware.com*

Mystic Systems Technology Corp. (MSTC) **Account Manager**   **8260 E. Raintree Dr. Suite 110, Scottsdale, AZ 85260**
800-289-6782;480-998-2753   *480-556-6250*   *sales@mysticsystems.com - www.mysticsystems.com*

PTI Integrated Systems   **TaskMaster**   **8271 E. Gelding Drive, Scottsdale, AZ 85260**
800-331-6224; 480-991-1259   *480-991-1395*   *sales@ptiaccess.com - www.ptiaccess.com*

Quayle Computer Concepts   **SWAMP**   **27682 Paseo Barona, San Juan Capistrano, CA 92675**
949-364-6314   *702-548-1389*   *info@quayles.com - www.quayles.com*

QuikStor Security & Software   **Express**   **13908 Ventura Blvd., Sherman Oaks, CA 91423**
800-321-1987   *818-501-5785*   *sales@quikstor.com - www.quikstor.com*

Sentinel Systems Corp.   **WinSen**   **1620 Kipling St., Lakewood, CO 80215**
800-456-9955   *303-242-2010*   *sales@sentinelsystems.com - www.sentinelsystems.com*

Lakewood, Colo.-based Sentinel Systems celebrates its 30th anniversary in 2005. Being in business for over 3 decades Sentinel Systems secured its place in history by developing their original Property Management Software over 23 years ago. Complimenting their Access Control Systems and Individual Door Alarm packages -they are able to offer their customers' complete integration. Their trademarked WinSen product line allows the user to have the finest Property Management and Access Security options available today. We are happy to announce that we now offer Online Payment option for your tenants. Through the years, it has grown from a handful of employees to a corporation with a full staff of development, support, production, administrative and sales-team members. Sentinel markets through industry publications, referrals and an unparalleled dealer network. The company ships to Self-Storage companies worldwide, and its installation dealers and distributors are employed across the globe. They have recently opened Sentinel's European office just outside of London and continue to have a jointly successful relationship with their Australian Distribution Partners, Intellistore, in Sydney. Simply put Sentinel products are reliable and they work. They take pride in everything they develop, manufacture, sell, distribute and support. A company that still put the customers first.

SMD Software Inc.   **SiteLink**   **3000 Highlands Blvd., Suite 120, Raleigh, NC 27604**
919-865-0789   *919-865-0795*   *markus@smdsoftware.com - www.smdsoftware.com*

SiteLink has emerged as one of the most popular, powerful programs for storage management. User-friendliness, complete audit trails, and accounting links make SiteLink a favorite with both single- and multi-store operators. SiteLink Reports ensure collections and operations to maximize revenue. Reports evaluate performance including aged receivables, marketing, and discounts. Management and Financial summaries seamlessly tie into supporting documents like A/R and payment summaries providing complete analysis and audit trails. Reports provide a water-tight financial picture including all entries

TECHNOLOGY RESOURCES CONTINUED:

for current and previous customers. SiteLink users achieve higher retention rates using the latest internet and electronic billing technology. The e-commerce processes payments electronically, offers invoicing by email, and on-line payments and reservations. SMD works closely with clients and delivers quality support. Responding to over 5,000 users' needs resulted in the most feature-rich, user-friendly software today. Industry-first features like the Revenue Manager use your experience to set guidelines for maximizing return based on occupancy, rates, and time. On-screen video and training reduces time to learn the program and identifies opportunities for improvement. Software has never been easier to learn.

Space Control Systems Inc. **95959**	**Space Control**	**206 Providence Mine Rd., Suite 118, Nevada City, CA**
800-455-9055; 530-265-3133	*530-265-6504*	*info@spacecontrol.com - www.spacecontrol.com*
StorMan Software Inc.	**StorMan Software**	**P.O. Box 390525 Cambridge, MA 02139**
617-254-3992;617-975-0272	*413-653-1995*	*sales@storman.com - www.storman.com*
Syrasoft LLC	**Storage Management System**	**P.O. Box 119, Camillus, NY 13031**
800-817-7706; 315-708-0341	*315-708-0819*	*sales@syrasoft.com - www.syrasoft.com*
Tredd's Software Solutions	**36 Melisko Lane, West Alexander, PA 15376**	
724-484-7220	*208-441-3516*	*info@tredd.com - www.tredd.com*

We have been developing our self-storage software for the past six years. When you purchase our software, we go the extra mile for our customers. All building graphics are drawn, rent amounts and unit sizes are entered, billing cycle settings are entered, and your business information is entered. You simply install the software and start clicking your way to adding customers, accepting payments, viewing reports, printing customer letters, and managing your self-storage business like never before. Tredd's Self Storage Software is Easy-To-Use and priced at just $395. Using a graphic interface with color-coded units, you can easily track your customers, accept payments, and view reports with just a few clicks of the mouse. Our software has been designed from ground up to be intuitive, yet powerful, for any size business.

Umbrella Systems Inc.	**P.O. Box 1808, Poulsbo, WA 98370**	
800-544-0652	*360-308-8407*	*sales@umbrellasoft.com - www.umbrellasoft.com*
Centershift, Inc. **84121**	**Store**	**2755 E. Cottonwood Parkway, Ste. 450, Salt Lake City, UT**
877-927-4438; 801-303-1300	*801-303-1350*	*info@centershift.com - www.centershift.com*
Online Self Storage Inc.	**Call MAXimizer, Online Trans.**	**3827 North Oracle Road, Tucson, AZ 85706**
877-301-4636; 520-407-7999	*520-407-9616*	*sales@onlineselfstorage.com www.onlineselfstorage.com*
Payment Service Network, Inc.	**Online Billing**	**2901 International Lane, Ste. 200, Madison, WI 53704**
877-390-7368	*608-442-5050*	*bhoffmann@paymentservicenetwork.com www.paymentservicenetwork.com*
QuikStor Security & Software	**Enterprise**	**13908 Ventura Blvd., Sherman Oaks, CA 91423**
800-321-1987	*818-501-5785*	*sales@quikstor.com - www.quikstor.com*
U-Haul International Inc.	**Web Self Storage**	**2727 N. Central Ave., Phoenix, AZ 85004**
877-626-4455	*602-277-5812*	*storagefeedback@fc.uhaul.com www.webselfstorage.net*
Andrews Software, Inc.	**One Andrews Circle, Cleveland, OH 44141**	
800-807-2093	*440-838-8781*	*sales@andrewssoftware.com - www.andrewssoftware.com*

A software development company for the records management and destruction industries. ASI bring proven solutions to an industry challenged by ever changing technology and management demands. Our products and services provide real answers to an industry with high expectations.

DHS Worldwide	**Total Recall Records Mgt.**	**563 Blanding Blvd., Orange Park., FL 32073**
904-213-0448	*904-213-1490*	*sales@dhsworldwide.com - www.dhsworldwide.com*
FileMan Records Management	**250 Nako Nako Drive, Mandeville, LA 70471**	
985-845-0559; 877-FILEMAN	*985-845-4523*	*fileman@fileman.com - www.fileman.com*

TECHNOLOGY RESOURCES CONTINUED:

Company Name	Product Name	Address
Phone	Fax	e-mail / Web Address

O'Neil Software, Inc. — **8 Mason, Irvine, CA 92618**

949-458-1234 — *949-206-6949* — *sales@oneilinc.com - www.oneilsoft.com*

Committed to leading the industry, the name O'Neil Software has become synonymous with accuracy, flexibility, experience and results in record storage. For over 20 years, our company has been the software and hardware solutioneers for over 800 record centers in more than 50 countries, ranging from start-ups to multi-nationals. O'Neil's solutions manage/track multiple types of data including traditional storage boxes, file folders, documents and tapes; from Deposit to Destruction, from Work Order to Invoice. Also known as industry pioneers for barcode tracking, portable printers, laser scanners and web technology. Consistently offers automation, enhancements and new features that improve ease of use not found anywhere else. Our flagship product, RS-SQL™, is the most cost-effective software solution on the market, ensuring record center productivity and profitability. Regional coverage includes the Americas, Europe, India/Middle East and AustralAsia.

Waterfall Enterprises LLC — **Records Center Manager** — **119 Cherokee Drive, Abita Springs, LA 70420**

877-207-8673 — *985-875-7478* — *records@water-fall.com - www.water-fall.com*

Industry News

PhoneSmart
Celebrates Fifth Anniversary

On Friday December 16, PhoneSmart celebrated its five year anniversary. On November 30, 2000, Tron Jordheim was handed the keys to his office and the phone room with four work stations and told to give it a go. He started by himself answering calls for 12 StorageMart stores. Today there are 25 sales reps at PhoneSmart. Between its call center, secret shopping, sales training, lead generating and marketing tracking services, PhoneSmart handles over 450 properties in 43 U.S. states and 4 Canadian provinces.

PhoneSmart will be closing the call center at 6:00 PM central time on Friday, December 16 to allow all employees to attend the celebration. All calls will be going to voicemail for the specific properties during this time. This is the first time PhoneSmart has ever closed the call center to have a celebration. And what a celebration it is going to be. The staff decided the best way to get everyone to attend was to "Roast" director Tron Jordheim and have some fun at his expense. The first thought was actually a dunk tank, so everyone could throw balls at Jordheim and dunk him in cold water. Since it was close to winter time Tron Jordheim thought a roast sounded warmer.

PhoneSmart is also using the roast as a fund raiser for The Rainbow House in Columbia, MO. (www.rainbowhousecolumbia.org), a shelter and service provider for children in difficult circumstances.

All of us reading this have been very fortunate. We have incomes, even though most of us would like to be able to move the decimal point on our pay checks over one space to the right. We have a place to call home, even if we don't have enough room for our stuff and need a storage unit to help get organized. PhoneSmart encourages you to go to the Rainbow House web site and make a contribution. It will make you feel better.

Five years is a big deal. Most new businesses never see a fifth year anniversary. There are always bumps and challenges in a new business. PhoneSmart rode them out and turned them into opportunities.

PhoneSmart director Tron Jordheim said, "It has been my privilege to lead PhoneSmart through its early years and to work with all the great team members and clients along the way. I will also be recognizing some of our long term employees at the roast. Ten of our 25 team members have been with us for more than 2 years. Six have been with us 3 years or more. Our lead supervisor, Dana Shields, will have her 5 year anniversary next week. This means we have a wealth of experience with which to serve you."

PhoneSmart adds Spanish Call Group

In order to meet the growing needs of Spanish speaking Self Storage users, PhoneSmart is adding a Spanish call group option for its call center customers.

This means that incoming calls from stores where Spanish is the prevalent language will ring straight to PhoneSmart's many Spanish speaking sales reps. The added convenience for callers will mean more rentals for PhoneSmart clients.

Tron Jordheim, PhoneSmart director said, "Better than a third of our sales reps speak Spanish, so the time is right for us to add this feature. We answer for many stores in Spanish speaking areas and we have seen how successful you can be with Spanish callers. The Spanish call group will be just one more way we help our clients rent more units."

More information is available at tron@phone-smart.info or call 866.639.1715.

Security Mortgage Group Arranges $9,300,000 in Self Storage and RV Park Financing in Pennsylvania, Florida, and Texas

Security Mortgage Group is pleased to have provided $9,300,000 in mortgage financing for four self storage facilities and an RV park in Pennsylvania, Florida, and Texas.

Anthony J. DiMarco arranged mortgage financing of $1,100,000 for the 203-unit 2nd Attic Self Storage facility. This property, located in Boyertown, Pennsylvania features a 10 year fixed rate and a 25 year amortization schedule.

Gerard D. DiMarco, Jr., arranged $3,100,000 in mortgage financing for the 859-unit Acorn Self Storage of Sebastian, Florida. This non-recourse loan was secured with a 10-year term and 25-year amortization schedule. Gerard then provided this repeat borrower with $1,600,000 in mortgage financing for the 607-unit Acorn Self Storage of Brevard facility located in Vero Beach, Florida.

Gerard D. DiMarco, Jr. also procured mortgage financing of $3,500,000 for the 196-unit Stor-Mor Storage Facility and the 184-site RV Ranch in the Dallas/Fort Worth, Texas area. The loan was funded with a long term fixed interest rate and a 30 year amortization.

Security Mortgage Group has nationwide experience in the financing of virtually all real estate product types including: industrial, multifamily, self storage, RV parks, retail, office, medical office, construction, and manufactured home communities. Security Mortgage Group has closed over $1,500,000,000 in commercial real estate property financing since 1990. For additional information, call 585-423-0230 or go to www.securitymortgage.net. See their ad on the inside cover of this issue.

News from Argus

Shannon Barnhill Sells Self Storage Facility in Theodore, AL

Shannon Barnhill, an agent of Omega Properties, Inc., an Argus Self Storage Sales Network broker affiliate, sold all day all night self storage located in Theodore, AL to an out of state buyer. The property sold on November 29, 2005 for $1,035,000 at an 8% cap rate. The property offers 36,705 rentable square feet on approximately 4.4 acres.

Argus Self Storage Sales Network Broker Affiliate Joseph Mendola Sells 7-Property Storage Portfolio in New Hampshire

Argus Broker Affiliate Joseph Mendola of The Norwood Group in Bedford, New Hampshire, represented the seller of a 7-property Eagle Self Storage portfolio. Two of the sites are approved for self storage development and the other five are operating facilities. The properties are located in six different towns throughout New Hampshire and together are comprised of 167,000 SF and 48 acres of land. The portfolio sold for $9,000,000 on November 17, 2005.

Argus Self Storage Sales Network Broker Affiliate Sells River Point Storage in Albany, Georgia

Dale C. Eisenman, CCIM of Midcoast Properties, Inc. represented the seller of River Point Storage located in Albany, GA in the sale to a private investor. This 36,890 RSF facility, situated on 3.36 acres, sold in November of 2005 for $1,500,000. This young property had been recently expanded and offered further onsite expansion opportunities. The listing broker, Dale C. Eisenman, CCIM, is a licensed broker in SC, NC and GA and specializes in representing self storage clients.

Based in Denver, Colorado, The Argus Self Storage Sales Network (ASSSN) was formed in 1994 to better assist owners and investors of self storage. Through the years, Argus has been able to assemble a network of real estate brokers experienced in self storage and income property investments. Now the largest self storage brokerage network in the United States, the ASSSN has 30 broker affiliates covering nearly 40 markets. These brokers are able to meet the needs of self storage investors and owners whether it is acting as a buyer's agent or listing and marketing a property. For more information call 800-55-store or visit www.selfstorage.com.

Marcus & Millichap Brokers Sale Of Colorado Self-Storage Portfolio For $19.5 Million

Marcus & Millichap

Real Estate Investment Brokerage Company

Marcus & Millichap Real Estate Investment Brokerage Company, the nation's largest real estate investment brokerage firm, has announced the sale of a seven-property, 2,903-unit self-storage portfolio in Colorado for $19.5 million. The sales price represents $6,655 per unit and $61.44 per square foot. The market capitalization rate was 7.2 percent.

Charles LeClaire, a senior investment associate in Marcus & Millichap's Denver office, represented the seller in the transaction, Bulgroup Properties, LLC. LeClaire also secured and represented the buyer, U-Store-It, a national REIT listed on the NYSE. "All seven facilities are well-maintained and offer stabilized income in extremely attractive locations," comments LeClaire.

Marcus & Millichap Brokers Sale Of Loveridge Self Storage For $12 Million

Marcus & Millichap Real Estate Investment Brokerage Company, the nation's largest real estate investment brokerage firm, has announced the sale of Loveridge Self Storage in Pittsburg, Calif., for $12 million. The sales price represents $81 per square foot with a pro forma market capitalization rate of 8.86 percent.

Marcus & Millichap self-storage investment specialists Charles LeClaire and Bobby Loeffler represented the seller in the transaction. They also secured the buyer. The seller was Silicon Valley Diversified. The buyer was Public Storage, the largest self-storage owner in the U.S. and a publicly-traded REIT. "It was a good opportunity for the seller to sell at this type of cap rate," comments LeClaire. "And it was a good opportunity for the buyer to buy a Class A property at less than $100 per square foot in an emerging growth market."

Marcus & Millichap Announces Sale Of Schoolhouse Self Storage in New Lenox, IL

Marcus & Millichap Real Estate Investment Brokerage Company, the nation's largest real estate investment brokerage firm, has announced the sale of the 294-unit Schoolhouse Self Storage in New Lenox, IL for $2.825 million. The sales price represents $72.65 per square foot. Sean Delaney of Marcus & Millichap's Chicago office and Charles "Chico" LeClaire of the Denver office represented the seller Scott Reiter. The agents also secured the buyer, A-American Self Storage based in Los Angeles, CA.

With more than 950 investment professionals in offices nationwide, Encino, Calif.-based Marcus & Millichap is the largest commercial real estate brokerage in the nation focusing exclusively on real estate investments. Founded in 1971, the firm has perfected a powerful system for marketing properties that combines product specialization; local market expertise; the industry's most comprehensive research and analysis capabilities; state-of-the-art technology; and established relationships with the largest pool of qualified investors nationally. - www.MarcusMillichap.com

Florida Self Storage Association Announces New President

The Florida Self Storage Association is pleased to announce that Michael Mele has stepped into the role of President of the Florida Self Storage Association. Mike is a Self-Storage specialist with Marcus & Millichap Real Estate Investment Brokerage Company of Florida. Since joining Marcus and Millichap in 1999 he has sold over sixty self-storage facilities, with a record year in 2004, selling 21 facilities worth over $83 million. He was Marcus & Millichap's #1 broker in Central Florida and ranked in the top 50 (out of over 900) nation wide. He is consistently ranked in the top 3 self-storage brokers company wide. He has worked with everyone from the REITs to "Mom

---

& Pops". Although he has sold Self Storage facilities up and down the east coast, most of his business is here in Florida. The Florida Self Storage Association is delighted to have Mike in this important role.

The Association is also pleased to announce that they have retained PDQ Management Solutions, operated by Linnea Appleby, to professionally manage the Florida Self Storage Association. PDQ Management Solutions provides consulting and management for storage operators and associations. Linnea has stepped down as the current President of the Association, ending her two year term a few months early in order to accept this new role.

For other exciting changes, news and a list of upcoming events, please visit their website at www.Floridassa.org.

SecurityInc announces the appointment of Timarron Partners, Incorporated and Mooncom as Representatives

SecurityInc, a leading manufacturer of electronic security equipment, has announced the appointment of two new manufacturers Reps. Mooncom will be responsible for the sales and support of SecurityInc products in the States of North Dakota, South Dakota, Minnesota and Northern Wisconsin. The company will be responsible for dealer and distributor training, product demonstrations, and system layout and design with the goal of assisting SecurityInc customers in selecting the appropriate access control and long range asset solution for their security and vehicle identification requirements.

Mooncom is a Manufacturers' Representative firm started in 1991 by Larry Moonen. Mooncom's goal has always been to provide the highest quality of support to their dealers and customers and to assist manufacturer's in attaining sales and market share in the territory. This is accomplished by offering unparalleled customer service including Quotation, Design, Demonstration, Programming, and Technical Support. SecurityInc compliments Mooncom's partner lines, providing a complete system solution for our dealers.

Timmaron Partners will be responsible for the sales and support of SecurityInc products in the States of Texas, Oklahoma, Arkansas and Louisiana. The company will be responsible for dealer and distributor training, product demonstrations, and system layout and design with the goal of assisting SecurityInc customers in selecting the appropriate access control and long range asset solution for their security and vehicle identification requirements.

Timarron Partners, Incorporated is a Manufacturers' Representative firm for several industry leading products in the commercial audio, video and security markets. Their team of professionals, which boasts a 165+ years experience in the Security Industry, has been dedicated to providing a high level of sales and technical support. For further information, visit www.tpireps.com or call 888-832-2995.

SecurityInc is a Milwaukee based manufacturer of electronic security systems. With a management and engineering team that has over 25 years of experience in the access control industry, SecurityInc excels at offering complete and effective solutions at a competitive price. For more information, visit www.securityinc.com or call 414-858-9413.

O'Neil Software Announces Latest Upgrade to RS-SQL, Version 2.08

Meeting change head-on. It's often a lot easier said than done. However, O'Neil Software doesn't just try to cope with change—they continue to embrace it. Case in point: the company recently announced their latest upgrade to their highly successful flagship record storage management product, RS-SQL, Version 2.08. This new release continues to lighten the load on record center staff, reducing the time and effort it takes to access information. Today, RS-SQL continues to set the industry standard in record storage management solutions. "Records management has changed and continues to do so at an accelerated pace," notes Ian Thomas, Vice President of Business Development at O'Neil Software. "No matter how carefully you plan, there will always be some unforeseen challenge or circumstance to change the picture and affect the movement of your business records.

Clearly, the more flexible your record storage management software, the greater the edge you can have over your competitors who can't adapt, which is why our customers are so passionate about our software. For O'Neil, meeting change head-on is a nonstop assignment."

Committed to leading the industry, the name O'Neil Software has become synonymous with accuracy, flexibility, experience and delivering results in record storage management for 25 years. Regional coverage includes the Americas, Europe, India/Middle East and Australasia. For more information, visit their website at www.oneilsoft.com.

The new Symbol MC50 Wireless Hand-Held

Metro Self Storage adds new store in Orland Park, Illinois

Metro Storage LLC recently signed a consulting and property management agreement with All Quality Storage LLC of Tinley Park, Illinois to provide consultation and to operate the facility upon completion. The state of the art 3-story 100,000 square foot climate controlled facility is located in Orland Park, Illinois and it is projected to open in late 2005 as a Metro Self Storage® location.

Operating under the trademarked Metro Self Storage® brand name, the Company currently provides property management services in Illinois, Georgia and Florida, and is soliciting multi-store portfolios nationwide or projects in development and existing operations in core markets.

Metro Storage LLC, located in Lake Bluff, Illinois, is a vertically integrated owner operator of a 20 store self storage portfolio. For additional information about property management services, please contact Brian Blankenship at (847) 604-5240 or visit www.metrostoragellc.com.

Minico Announces Publication Of 2006 Self-Storage Almanac

Denise Nunez, President, MiniCo Publishing, recently announced the release of the 2006 Self-Storage Almanac, the company's highly regarded annual publication. The Self-Storage Almanac is the self-storage industry's most comprehensive statistical reference guide. First published in 1992, the Self-Storage Almanac has become a highly respected resource for investors, developers, operators, financial institutions, real estate brokers and other business publications worldwide.

Commenting on the publication's evolution, Ms. Nunez stated, "As our industry has grown, so has the Almanac." She continued, "We continually work to improve our method for identifying and tracking the most important self-storage data that will be relevant to self-storage professionals and investors."

The 2006 Self-Storage Almanac offers detailed industry information, economic data and analysis by respected professional business writers. The annual reference guide is published each year by MiniCo, Inc., publisher of the self-storage industry's leading trade magazine, Mini-Storage Messenger.

For additional information or to purchase the 2006 Self-Storage Almanac, call 800-352-4636 or visit www.MiniStorageMessenger.com.

Minico, Inc. Announces New CFO

MiniCo, Inc. Chairman and CEO Hardy Good has announced the appointment of Mary Schick as the company's new chief financial officer. Ms. Schick will be responsible for operations, financial results and analysis for the company and cash management to include investments and banking relationships. In addition, she will oversee capital budgeting and the company's in-house accounting staff. Ms. Schick will also participate in the company's tactical and strategic business plan development as a member of the executive management team.

Ms. Schick has worked in the financial field for over 25 years and has a broad range of experience including strategic planning, new business development, mergers and acquisitions, risk management, capital financing and forecasting. Most recently, she served as chief financial officer for Phoenix Art Group, Inc., and has previously held the position of vice president, finance, at The Nexus Group, Inc. (d.b.a. RentWise); Modis Training Technologies, Inc.; and Protection One Alarm (formerly Metrol Security, Inc.). Ms. Schick is a certified public accountant and holds an M.B.A. from Keller Graduate School of Management and a bachelor's degree in accountancy from Arizona State University.

Since 1974, Phoenix-based MiniCo, Inc. has been a self-storage leader providing superior insurance programs, informative publications and valuable products and services created expressly for the self storage industry.

MiniCo, Inc. and TransUnion to Provide Storage Screening Services

MiniCo, Inc., a leading provider of innovative products to the self-storage industry, and TransUnion, a leading global information solutions company, today announced the introduction of Storage Screening™. The announcement was made at the Self Storage Association's Fall Conference and Trade Show in Las Vegas.

Storage Screening is a data screening solution that has been tailored to meet the specific needs of the self-storage industry. Through the offering, facility owners and managers can cross check applicants against multi-source databases to ensure they are legitimate, law-abiding and creditworthy. This allows self-storage businesses to protect themselves and their customers from the risks associated with unlawful and high-risk tenants.

"We believe in helping our customers make their businesses run more safely and profitably," said MiniCo Chairman and CEO Hardy Good. "It makes good sense for us to partner with a company like TransUnion given their years of experience in providing automated decision-making solutions."

With Storage Screening, self-storage managers and owners can verify applicants by referencing the following comprehensive information sources:

- Criminal databases for background checks
- Terrorist databases such as OFAC and FBI Most Wanted
- Sex offender databases
- Payment reporting and payment histories databases
- Credit reporting databases
- Other databases for identify verification and authentication

"We are pleased to be working with MiniCo to deliver these value-added services to this industry," said Michael Britti, executive vice president of TransUnion's Rental Screening Services division. "Through this offering, the self-storage industry can now better protect their businesses, assets and communities in which they operate."

About MiniCo, Inc.

Since 1974, Phoenix-based MiniCo, Inc. has been a self-storage leader providing superior specialty insurance programs, informative publications and valuable products and services created expressly for the self storage industry.

About TransUnion

TransUnion is a leading global information solutions company that customers trust as a business intelligence partner and commerce facilitator. TransUnion offers a broad range of financial products and services that enable customers to manage risk and capitalize on market opportunities. The company uses leading-edge technology coupled with extensive analytical capabilities to combat fraud and facilitate credit transactions between businesses and consumers across multiple markets. Founded in 1968, Chicago-based TransUnion employs 4,100 associates that support clients in more than 30 countries. Visit us at Transunion.com.

What's in a Name?

It's been in the works for at least a year, but as of October 1, 2005, it's now official: The Texas Mini Storage Association (TMSA) is now the Texas Self Storage Association (TSSA). "The main reason for the name change is that local building and zoning codes refer to our industry as "self storage" rather than" "mini storage," and we have determined that it is best for our association and our members' sake to go with the most recognized term," said TSSA Executive Director Ginny Sutton.

All printed materials will reflect the new name, and logo. Additionally, the TSSA web site has changed to www.txssa.org. You may contact TSSA at 888-259-4902, or info@txssa.org.

TSSA Announces Market Survey Release

Partnering with Self Storage Data Services, Inc., TSSA has produced a major Texas self-storage market survey. Now, for the first time, there is a single independently compiled study on the 25 major markets in Texas plus rural areas. The detailed market survey includes:

- Total number of existing facilities with locations plotted on a color-coded map
- Total number of self-storage units, with total net rentable square feet in each market
- Benchmark for the average monthly asking rental rates for ground level units and calculations of the rental premium for climate-controlled.
- Financial impact that physical unit vacancy and concessions/discounts have on revenue
- Economic occupancy level, market by market statewide
- Current ratio of the number of household per existing self-storage unit and the number of existing square feet of self-storage space per capita, and much more.

The TSSA Market Surveys are available for $100 to TSSA members, and $200 for non-members. For more information or to obtain a copy, contact TSSA at 888-259-4902.

Trachte Hires Regional Sales Manager

Trachte Building Systems is pleased to announce the addition of regional sales manager, Jeff Lean.

As a regional sales manager, Lean is responsible for assisting Canadian customers. Jeff brings over 25 years of sales experience, 18 of which are in real estate sales and development. Jeff is also knowledgeable in purchasing real estate property development, including overseeing all aspects of completion of projects, permits, and management.

Trachte is pleased to welcome Jeff to the sales team.

Trachte Building Systems, an employee-owned company and the leading manufacturer and supplier in the self-storage industry, markets a full-line of pre-engineered steel building systems. In addition, the company specializes in smaller buildings for commercial and industrial use. Subsidiaries of Trachte include Trac-Rite Door, a premier manufacturer of steel roll-up doors, and Fire Facilities Inc., the leading manufacturer of steel fire training towers. Trachte is devoted to providing superior products, uncompromised service, and unmatched industry knowledge throughout the entire customer experience. This devotion, along with over 100 years of manufacturing experience, has given the company a leading edge in the self-storage industry.

For more information about Trachte Building Systems and its products, please contact Trachte at 800-356-5824.

Across

1. Fall feast.
10. Acorn source.
13. Comes after "do."
14. Sort dress.
15. Hockey god of Boston.
16. City of Angels.
17. Largest continent.
18. "Free Trade" treaty.
19. Didn't walk.
20. "You know the _ _ _ _ _."
21. To carve a design in relief.
22. "Rough Rider" president.
24. Louise Ciccone, _ _ _ Madonna.
25. The _ _ _ _ have it.
27. Winter holiday.
30. Noise.
32. Measured in square feet or square meters.
33. Medical professional (abbrev.).
34. 32 down.
35. It's below the summit.
38. He took Vicksburg.
39. Roger Clemens or Roy Oswalt.
40. Allen, Robbins, and Tiny.
41. _ _ _ Tin-Tin.
42. Military investigation head (abbrev.).
43. High end type of camera.
45. Ancestor of "IT."
47. Can be black, red or soldiers.
50. Spanish for nothing.
52. Objective.
54. "Get a _ _ _ _."
56. The Nutmeg State (abbrev.).
57. Astounding!
60. Safe place to save wages.
61. Famous Chrysler power plant.
63. Placed a ballot.
64. Rome's river.
66. "__ The World Turns."
67. Paradise.
68. To tally up.
69. To own.
70. Not daughters.
71. British Special Forces (abbrev.).

Down

1. One way to have your bread.
2. Dry.
3. At hand.
4. Shows approval.
5. WW II grunt.
6. Hostel.
7. Pill pack.
8. Musical symbol.
9. Gram's husband.
11. Resident of coldest state.
12. Dorothy's and Toto's home.
19. To range freely.
25. UN Secretary General.
26. The top echelons.
27. What happens if you doze at the switch.
28. Warmth.
29. Event for judging wine.
31. To bring water to crops.
32. Roadside Aid.
35. Famous host Barker.
36. Famous actor Jet.
37. Cleopatra's pet.
38. He stole 27 across.
44. Not many of these left up north.
45. Twelve of these make a gross.
46. How you like your accounts.
48. Apaches, Navahos, Mohegans.
49. Thoroughbred dad.
51. Something wrong.
52. Is yours motorized?
53. Fuel source _ _ G (abbrev.)
55. Central, Golden Gate and MacArthur.
58. Enemies of Rockers in 60's London.
59. Pontiac muscle cars.
62. Barker and Kettle.
65. "_ _ Had To Be You."
68. The Volunteer State (abbrev.).

W I N T E R 2 0 0 6

ADVERTISERS INDEX & PRODUCT GUIDE

Here are the winners for our Summer 2005 Puzzle.
Thanks to all who entered and good
luck with this issue's puzzle.
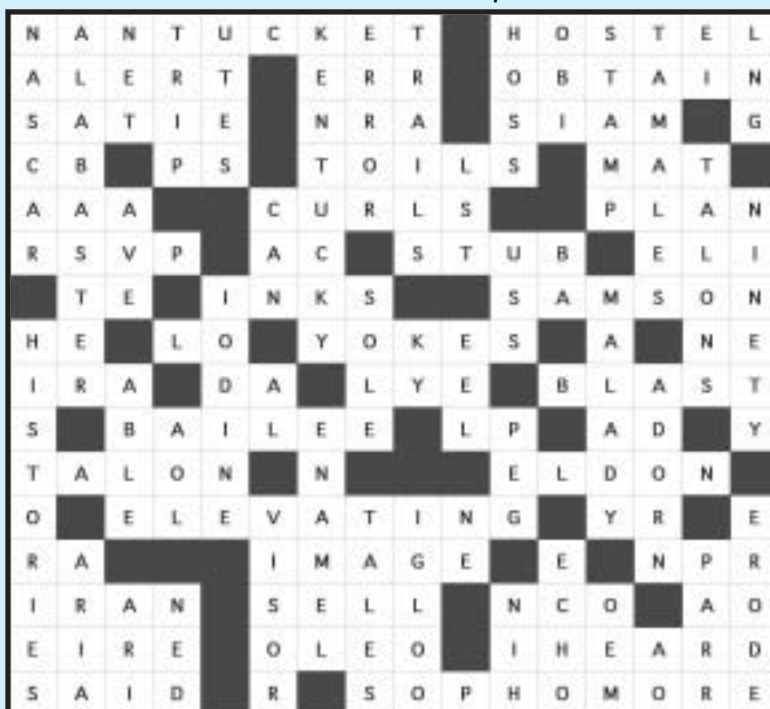
First Prize
Gift Certificate to Outback Steakhouse
and Two Bottles of Fine Wine
—•—
Rhonda Mercer • All U-Store

Second Through Fifth Prizes
Two Bottles of fine Wine
—•—
Mathew Latsha-Em • Stetson Hills Storage
Linda Bird • Mini Storage
Royal D. Steele • Quality Self Storage
Loren & Joyce Adams • Keyport Self-Storage

Sixth Through Tenth Prizes
A Bottle of Fine Wine
—•—
Tom Vrabec • Collateral Mortgage Capital
Jane Nelson • East Wenatchee Mini Storage
William Tast • U-Store-It
Courtney Ott • Mt. Morris Self Storage
Linda Kaster • Rufe Snow Depot