NEWS MARCH NETWORKS

MARCH networks
An Infinova Company

SEPTEMBER 2014

PAGE 4

Compass Group relies on intelligent video for foodservice excellence

PAGE 8
Bankomat AB selects March Networks for ATM security

PAGE 10
Grocery retailer keeps pace with surveillance technology

Security tips for banks /14

Louisiana FCU /18

Norway's Carlsen Fritzoe /26

Delivering on Our Commitment to Quality and Performance

In this edition of March Networks News, we take our readers on a truly global tour. We begin in the United States, where you will read about Compass Group, one of the largest hospitality and foodservice management providers in the world. Compass Group is taking video beyond traditional loss prevention and security applications by incorporating operational intelligence and compliance into their daily use of the product.

We then introduce you to Coborn's, a Minnesota-based grocery chain with 118 locations, which has been using March Networks video solutions for more than 10 years. The retailer is now in the process of upgrading to the Command video management platform, taking advantage of our improved user interface and backward compatibility with its existing March Networks hybrid recorders.

Two financial institutions featured in this edition are also discovering the advantages of IP video. The Louisiana Federal Credit Union has replaced an older analog camera system with our line of high-resolution IP cameras, all managed by our server-based Command Enterprise platform. The VMS solution is extremely scalable, and combined with the browser-based interface, eliminates the need to maintain client software in the field. In Lubbock, Texas, FirstBank & Trust has rolled out our 8000 Series Hybrid NVRs and IP cameras across its five branches. The community bank is leveraging the system to enhance security as well as to ensure that employees are following the appropriate process for accessing its vaults.

Flying across the Atlantic and into the heart of Scandinavia, you'll read how Sweden's leading ATM provider, Bankomat AB, is using March Networks hybrid video recorders (including our compact, four-channel 8704 Hybrid NVR) and enterprise software to protect customers and improve customer service. We then move to Norway, where the nation's leading building supply company is using March Networks to monitor store operations.

We finish the tour in Bogota, Colombia, where we recently held a banking seminar with attendees from Colombia, Peru and Ecuador. Latin America continues to represent a key market for March Networks and we are very pleased to be ranked as the enterprise solutions leader in the region.

When reviewing this edition of our corporate magazine, and after reading the many comments from our customers, I can't help but look back with some pride to when we launched the first generation of our 4000 Series DVRs in 2003.

I am proud that we have stayed true to the objectives we set out to achieve at that time. Our primary goal was to deliver the most reliable and highest-quality product in the industry, augmented by enterprise-class software that allowed our customers to proactively manage their DVR network and detect potential issues before they impacted operations. We combined that with a commitment to never leaving our customers behind, but instead to protecting their investments in March Networks.

Today, our product portfolio represents all of those principles and more. Our open Command VMS software now incorporates an impressive suite of video intelligence applications that help our customers not only enhance security, but also improve performance and, ultimately, profitability. Our new 8000 Series Hybrid NVR platform has set a new standard for high performance and reliability. All of our current products work seamlessly with our previous-generation products, as confirmed by our customers. And we continue to be first to market with innovations, such as our widely-recognized docking station design and our GURU smartphone application, which save our customers and partners significant time and resources.

More and more, we're witnessing how price competition and new entrants to our industry are driving commoditization, and forcing some to sacrifice quality to remain competitive. I am pleased to say that at March Networks we continue to take the opposite approach. Our focus on quality has never been stronger and I think that shows in the breadth and depth of our customer base worldwide.

Peter Strom
President
and CEO,
March Networks

contents

COVER STORY

Foodservice Giant Selects March Networks

Compass Group relies on video surveillance for loss prevention and operational oversight.

8

Standardized Solution for 2,200 Swedish ATMs

Bankomat AB opts for March Networks hybrid NVRs.

10

Ten Years and Counting

Mid-West grocery retailer hails painless evolution of video surveillance system.

14

Security Tips for Banks

High quality video a must, urges former FBI Director.

18

Louisiana Credit Union

Server-based VMS solution offers flexibility.

22

Build My Financial Solution Tool

A quick and easy way to design a video surveillance system.

24

FirstBank & Trust

Texas bank selects browser-based video security.

26

Norwegian Building Supply Retailer

March Networks selected for quality, reliability, ease of use.

28

St. Louis Health Center

Video surveillance system sets standard for Veterans Affairs.

32

360° IP Cameras

A primer on the newest and coolest cameras on the market.

Foodservice Giant Relies on Video Surveillance for Loss Prevention and Operational Oversight

Seven Million Meals and Counting

Compass Group North America is a leading foodservice management company with annual sales over $12 billion and more than 200,000 associates. Its operating companies, including Morrison Healthcare, Bon Appétit Management, Levy Restaurants and Wolfgang Puck Catering, serve more than seven million meals a day in schools, hospitals, senior living communities, corporate campuses and sporting venues across the U.S. and Canada.

Headquartered in Charlotte, North Carolina, Compass Group North America has the privilege of serving such prestigious clients as Microsoft, IBM, United Technologies Corp., SAP, Louisiana State University, Texas A&M University and the District of Columbia Public Schools. In addition, Compass Group provides catering to special events such as the US Open and the Academy Awards®.

The group's success in the foodservice business relies on getting a lot of things right — from procurement and logistics to the preparation of nutritious, palate-pleasing food. Dedicated, trustworthy associates and satisfied customers are critical, but so too are loss prevention and an effective means of operational oversight.

Compass Group North America began deploying March Networks video surveillance systems in 2008 and currently has them installed in some 300 foodservice sites.

Chris McDonald, Senior Vice-President of Loss Prevention, joined the group in April 2012 by which time its loss prevention strategy was "pretty much already in place," he said. "I was familiar with several different video surveillance systems, but had never dealt with March Networks and wasn't familiar with its technology. However, it didn't take me long to become a big fan. We've had really good success with it."

Compass Group has a mix of 8000 Series and 4000 C hybrid networked video recorders and uses both analog and IP cameras to cover cash registers, food storage areas and back doors. Loss prevention staff in Atlanta rely on a third-party exception reporting system to alert them to potentially suspicious point-of-sale (POS) transactions and use the March Networks video surveillance system to view the associated video.

Performance metrics are also tracked to alert management to potential issues.

"For example, if we see that we're buying more food than we're producing, we'll start watching video," said McDonald.

Unusual sales patterns are also cause for concern, prompting loss prevention staff to pay special attention to no-sales, voids and other potentially suspicious POS transactions flagged by the exception reporting system. Using video surveillance to view the actual transactions can provide McDonald's team with the evidence they need to take action against a dishonest cashier.

Video also allows the loss prevention team to monitor compliance with company policies for

"We're very happy with the reliability of our March Networks technology and excited about how it can continue to contribute to our success, not only as a loss prevention tool, but as a means of ensuring the quality food service our customers have come to expect from us."

— **Chris McDonald,** Compass Group North America

cashier accountability. As is the case in most retail environments, cashiers have their own cash drawers or unique log-ins which allow management to identify the cashier responsible for every transaction. Sharing log-ins defeats the purpose, but can be easily detected using video.

The same applies to the company's policy of always requiring two people present for cash counting during the completion of a shift, but as McDonald has discovered, having two people in the same room isn't always sufficient.

Video illustrating any lapses helps to improve compliance and is used by Compass Group for training purposes.

Traditionally, Compass Group has used video surveillance almost exclusively as a loss prevention tool, said McDonald. "We'd install cameras over the cash registers, the safe and the freezer door to make sure no one was stealing cash or inventory. There hasn't been a big focus on using video surveillance for operational oversight, but that's a direction we're moving in, especially with our Morrison Healthcare division.

"We're installing more cameras to provide us with an overview of the retail operation, the food preparation and dining areas and will be doing more video audits. Managers will be able to see, for example, if the salad bar is presentable after 12:30 in the afternoon and if the lettuce bowl is full — things like that, so even if they're offsite for the day, they'll be able to check in remotely on their laptops and see how things are going."

Installing video surveillance systems in its foodservice locations can be complicated given the fact that Compass Group is typically operating under someone else's roof, explains McDonald.

There is also a wide range of scenarios — from seven day per week, public facing operations in a hospital, for example, to five day per week corporate cafés in restricted access campuses.

"Multiple permissions are invariably required to install video surveillance in one of our foodservice locations," said McDonald. "We have to consult with HR, security and legal if we're capturing video of their employees. Then we have to go to IT because we have to pull cable. We try to demonstrate what we expect in terms of ROI and reduced number of incidents. We also sell them on the customer service benefit."

This year alone, according to McDonald, 30 additional Compass Group sites have been equipped with March Networks video surveillance systems. For these and other more recent deployments, Compass Group is acquiring March Networks 8000 Series Hybrid NVRs, which come in 4-, 8-, 16- and 32-channel configurations and allow for the transition from 100 percent analog to 100 percent IP cameras.

Also underway is a transition from March Networks Visual Intelligence software to the company's new browser-based Command Enterprise video management system, which can support up to 10,000 video recorders and 128,000 video channels in multisite applications.

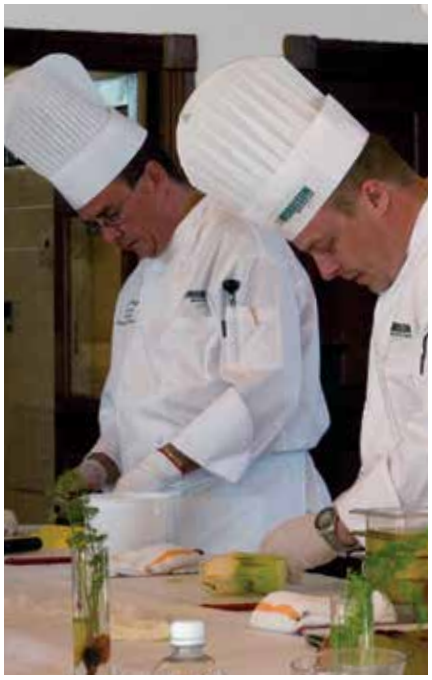
"With Command, we don't need software loaded on each computer terminal, so it's a lot more convenient," said McDonald. "We don't have to get IT involved as much or worry about updating software."

Compass Group recently transitioned to March Networks Managed Services for tier one telephone support and monitoring of system performance.

The March Networks Managed Services team makes sure that the recorders and cameras are operating properly and dispatch system integrators if onsite maintenance is required.

"I don't have any issues at all with the technical support we have received," said McDonald. "I've never had a question March Networks technicians couldn't answer or a problem they couldn't solve.

"We're very happy with the reliability of our March Networks technology and excited about how it can continue to contribute to our success, not only as a loss prevention tool, but as a means of ensuring the quality food service our customers have come to expect from us."



Compass Group North America

Compass Group North America (**compass-usa.com**) is a leading foodservice management and support services company with more than 200,000 associates and operations in all 50 states and multiple Canadian provinces and territories. Headquartered in Charlotte, North Carolina, Compass Group North America serves seven million meals a day in hospitals, senior citizen residences, schools, arenas, museums and remote work sites. Its parent company, UK-based Compass Group PLC operates in more than 48 countries with 500,000 associates.

Swedish Bank Consortium Selects March Networks for ATM Security

Bankomat AB Centralizes Management of 2,200 ATMs for Danske Bank, Handelsbanken, Nordea, SEB and Swedbank

BANKOMAT AB, a Swedish company co-owned by five of the country's major banks, is in the midst of a large-scale rollout of March Networks video surveillance systems.

Ownership of some 2,200 ATMs throughout Sweden was transferred to Bankomat in 2010 as a result of a landmark agreement by five financial institutions: Danske Bank, Handelsbanken, Nordea, SEB and Swedbank.

The unique model offers greater efficiencies for ATM oversight at a time when ATM usage and cash transactions are steadily declining, explained Bankomat Security Chief Peter Svahn.

Additional efficiencies have been achieved by contracting out the management of Bankomat's video surveillance systems to Stanley Security and its security operations center in Stockholm.

Stanley not only sells and installs the March Networks video surveillance systems, but also oversees their performance, services them as required and retrieves video at Bankomat's request, said Anders Gustafsson, Stanley's Stockholm-based Vertical Segment Manager for banking.

Bankomat currently has 140 ATMs equipped with March Networks hybrid network video recorders (NVRs), including new 8704 Hybrid NVRs, and has plans to roll out another 200 recorders this year.

The 8704 Hybrid NVR was designed for space-constrained locations and is easily installed within an ATM.

The recorder's optimized H.264 compression — unique to March Networks — delivers detailed HD video and sharp

Bankomat AB

Bankomat AB (**bankomat.se**) is a Swedish company jointly owned by Danske Bank, Handelsbanken, Nordea, SEB and Swedbank. Established in 2010, the Stockholm-based company owns and manages 2,200 ATMs throughout Sweden.

analog images without impacting video storage resources.

It features an internal backup battery guarantying a systematic shutdown in the event of a power failure, a variety of security features and up to 2 TB of onboard storage.

Acquiring 2,200 ATMs from five banks wasn't without its challenges. Many of the ATMs didn't have any video surveillance and those that did came with a variety of different vendor platforms, including a number of March Networks systems.

The decision to standardize on March Networks made sense, said Gustafsson.

"March Networks is a preferred vendor in the banking market because of the functionality of its systems, their ease of use and reliability. It's not often that we have to replace a March Networks recorder."

The ATMs are equipped with between two and four cameras. Many of the sites have older analog cameras, but a transition to IP technology is in the works, said Svahn.

"IP cameras give us much better quality," he said. "Everything is moving to IP, so there's no reason I see to work with analog equipment."

March Networks has its own line of IP cameras, and also ensures that its video management software and recorders integrate with hundreds of third-party edge devices.

VIDEO RETRIEVAL

Bankomat relies on Stanley Security to retrieve video. Customers questioning a transaction on their statement first contact their own bank.

"The bank, in turn, contacts us and, if we have a video surveillance system installed at the ATM where the transaction was made, we give Stanley the date and time, and they send us the video clip," said Svahn.

ATM fraud still occurs, but is much less of a problem than years ago, he said.

"What we see more of now are cash traps — metal plates that are installed over the cash dispensers that prevent customers from seeing or collecting their money. When the customer leaves the ATM, the crooks remove the plate and collect the cash."

Stanley uses March Networks' Enterprise Service Manager (ESM) software for centralized control of all recorder programming. The ESM manages user permissions and recorder configurations. It also monitors network performance and the health status of recorders, hard drives and cameras, allowing for the prompt dispatch of technicians in the event of a system failure.

Once on the scene, Stanley technicians can use their smartphone to scan the QR code on the 8704 recorder's front panel to troubleshoot any issues, pull up the recorder's warranty status and access instructional videos to help them perform any necessary service.

Rounding out the security at each ATM is Stanley's Pacom access control system that allows security operations personnel to remotely unlock ATM service doors for authorized armored car staff.

Integration with the March Networks system allows Stanley security guards to pull up video at a location to keep an eye on the scene and alert law enforcement in the event of a holdup or unauthorized access.

"Being able to remotely manage access control and the health status of the video surveillance systems appealed to Bankomat and helped us win the business," said Gustafsson. "It's much more efficient than dispatching staff, saves time and improves security."

Developing a standardized security system for 2,200 ATMs from five financial institutions was no small challenge, but Bankomat is pleased with the progress it has made to date and is confident that it's well on the way to developing an efficient and reliable security system for a unique financial services model. ▼

"March Networks is a preferred vendor in the banking market because of the functionality of its systems, their ease of use and reliability."

— Anders Gustafsson, Stanley Security

STANLEY SECURITY

Stanley Security, a division of Stanley Black & Decker, is a provider of integrated security solutions defining the future of the security industry. Stanley delivers a comprehensive suite of security products, software and integrated systems and is one of the world's largest and most comprehensive security providers offering intrusion, fire, access control and video surveillance systems.

www.stanleysecuiritysolutions.com

Everything Works With Everything

Mid-West Food Retailer's Video Surveillance System Evolves Over Decade-Long Relationship with March Networks

Coborn's Inc., a grocery retailer based in St. Cloud, Minnesota, recently celebrated a video surveillance milestone – having just replaced the last of the March Networks video recorders it purchased a decade ago with a March Networks 8000 Series Hybrid NVR.

The mid-West grocery retailer has consistently upgraded and expanded its systems during that 10-year span and now has more than two hundred March Networks hybrid recorders, including new 8000 Series units and a growing Command Enterprise server-based deployment in North Dakota.

Interoperability and centralized management of different recorder models and cameras maximizes Coborn's investment in video surveillance infrastructure.

Coborn's Inc.

Coborn's Inc. is a grocery retailer operating under the Coborn's, Cash-Wise and Save-a-Lot banners. Based in St. Cloud, Minnesota, 65 miles (105 kilometres) northwest of Minneapolis, the company operates 48 full-serve grocery stores, 36 liquor stores and 34 convenience stores, for a total of 118 locations in Minnesota, North Dakota, South Dakota, Iowa, Wisconsin and Illinois.
www.coborns.com

"That's one of the things I like about being a March Networks customer," said Scott Mineart, Coborn's loss control project manager. "I don't have to forklift out everything I have in order to introduce new technology. Everything works with everything. That compatibility weighs heavily in our decision-making process."

Coborn's has been able to take advantage of advances in technology at its own pace without having to incur the expense of prematurely replacing equipment.

The company operates 48 full-serve grocery stores under the Coborn's, Cash-Wise and Save-a-Lot banners. It also operates 36 liquor stores and 34 convenience stores for a total of 118 locations in six states: Minnesota, North Dakota, South Dakota, Iowa, Wisconsin and Illinois.

One of the most significant changes Mineart has seen over the years relates to use of the video surveillance system. Though originally acquired as a loss prevention tool, it's now widely used by Coborn's operations management to keep an eye on merchandising, store presentation, cleanliness and customer traffic.

"Loss prevention is a minority user now," said Mineart.

Always looking to the future, Coborn's is currently in the midst of a conversion to March Networks Command Enterprise video management software.

The original plan was to just deploy the browser-based solution at Coborn's locations in North Dakota's booming Bakken oil fields, said Mineart.

"We weren't going to deploy it enterprise-wide for a couple of years, but we had a lot of good feedback from corporate users on the interface, so we decided to jump ahead. ▶

"I don't have to forklift out everything I have in order to introduce new technology. Everything works with everything."

— Scott Mineart
Coborn's Inc.

photography David Sweeter

MARCO, INC.

Marco Inc. is an IT, voice and video service provider based in St. Cloud, Minnesota. A March Networks Certified Solution Provider, Marco serves customers in the health care, education, retail and financial sectors from offices in Minnesota, Wisconsin, South Dakota, North Dakota and Iowa. **www.marconet.com**

"One of the best things about Command is that I don't have to worry anymore about updates across hundreds and hundreds of clients," he noted.

Command Enterprise runs on commercial-off-the-shelf servers and supports both recorders and server-based systems in multiple-location deployments.

The video management system also allows users to access live or archived video from any location on an iPhone, iPad, Blackberry, Android or Windows Mobile device using March Networks Cloud.

Concurrent with the upgrade to Command, Coborn's is deploying a new chain-wide exception reporting system that is being integrated with the Command software, so investigators viewing exception reports with no-sales, refunds and voids will be able to click through to the corresponding video of a point-of-sale transaction.

The grocery retailer has relied on March Networks Certified Solution Provider Marco Inc. for its security needs since 2003 when it first transitioned to digital video surveillance.

"We installed two 4210 DVRs at one of their Cash-Wise stores and ran them side-by-side with their VCRs," recalled Marco sales consultant Jason Becker. "We had a cable coming back to the DVR and put a splitter on it so it recorded to VHS and to the DVR from the same camera. They showed their execs how much better the video was and that convinced them to go digital."

Cameras

The company still has a "huge" deployment of analog cameras, but has also been deploying an assortment of March Networks IP cameras, including MegaPX MicroDomes, MegaPX WDR MiniDomes, and the new MegaPX 360 Indoor Dome, which it has installed in cash counting rooms and on sales floors.

The 360 Indoor Dome captures 360-degree or 180-degree panoramic views in five megapixel resolution, eliminating blind spots and the need to deploy multiple cameras to capture the same scene from every angle.

Camera counts are also increasing. A full-size Coborn's or Cash-Wise store can now have anywhere from 50 to 90 cameras.

"Initially, we had a two-to-one cash register to camera ratio," said Mineart. "Now, the standard is one-to-one. We've also been adding megapixel cameras to the parking lots, and sales floor, so all that has resulted in an increase in the number of cameras."

From Coborn's head office in St. Cloud, Minnesota, loss prevention staff are able to review video from 118 locations, including 48 full-service grocery stores.

The alarm integration capability of the March Networks systems also comes in handy.

"Most of our full-service grocery stores are open 24 hours, so burglar alarms are not an issue, but we have a lot of local alarms," said Mineart.

At night, when customer traffic is down and staffing levels are reduced, alarms at the front entrance alert employees via the public address system that a customer has entered the store. Other alarms alert staff to customers at the service desk.

"We can check the alarm history at a glance and the video is right there," said Mineart.

Coborn's isn't a typical customer, said Becker. "Scott is very hands on. He likes to talk to the March Networks engineers and pick their brains. He experiments with the system and finds all kinds of ways to get the most out of it. Just recently, he inquired about using a four-channel encoder to run a refrigeration alarm through the March Networks system and email management when a unit is down. He comes up with these solutions and implements them. He's very forward thinking."

Coborn's loss prevention staff make a point of staying on top of the video surveillance market.

The company has inherited other video surveillance systems through acquisitions and does testing of competing products from other vendors, but has stuck with March Networks systems because of their high performance, backward compatibility and proven reliability.

"March Networks isn't the least expensive solution out there, but when I have a recorder that's been in service for a decade and I haven't had to forklift it out three times, that counts for a lot," said Mineart. ▼

Former FBI Director Offers Bank Security Tips

Recommendations Include Contingency Planning, High Quality Video

The following is an interview with Louis E. Grever, who retired in 2012 from the Federal Bureau of Investigation following a career of 24 years, most recently as Executive Assistant Director with the agency's science and technology branch.

March Networks: *What do statistics tell us about the incidence of bank robberies and the losses banks and credit unions incur as a result of them?*

Louis Grever: Bank robberies account for only 1.5 percent of all robberies in the United States and the number of bank robberies is down in comparison with historical data, but they are still a significant threat. In 2011, there were 5,014 bank robberies in the U.S. resulting in losses of just over $38 million — $8 million of which was recovered by law enforcement. *(Source: Bank Crime Statistics, FBI, Jan-Dec 2011)*

March Networks: *Over and above the financial losses, bank robberies can also pose a threat to bank employees and customers. What percentage of bank robberies turn violent?*

Louis Grever: For 2011, the most recent year for which we have comprehensive statistics, injuries to customers and employees occurred in only 1.7 percent of bank robberies, accounting for 88 people. Hostages — mostly bank employees — were taken in 30 incidents. Thirteen deaths were reported as a result of bank robberies that year. Of the 13, ten were perpetrators and three were law enforcement officers. Weapons were threatened in close to half of bank robberies and displayed in about a quarter of them, so financial institutions need to have policies, procedures and protocols in place to prevent potentially violent incidents from spinning out of control.

March Networks: *What can financial institutions do to address the threat?*

Louis Grever: Contingency planning and compliance with policies, procedures and protocols are critical. For some banks, policies relating to employee behavior in robbery situations are just talking points in a slide show or an employee manual when the employee is first hired. That's not enough. It's important for banks to review, refine and reinforce their policies so everyone knows what to do in an incident. The conscientious financial institutions go one step further by staging simulated robberies for training purposes.

March Networks: *What should employees do in the event of a robbery?*

Louis Grever: First and foremost, financial institutions need to impress upon their employees the importance of avoiding heroics. In a bank robbery, you never know who you're dealing with, so it's important to avoid the potential for violence. You don't want any of your employees to put their lives or the lives of your customers at risk. It's just not worth it. The objective in any bank robbery is to get the incident over with as quickly as possible.

The best and most productive thing an employee can do is to be a good witness. Employees and customers should never pursue a robber because when law enforcement officers arrive on the scene, they can't distinguish between a robber and an employee in hot pursuit.

March Networks: *What do we know about how bank robbers operate?*

Louis Grever: Broadly speaking, there are two different types of bank robbers. There are the career offenders and the opportunists.

Career offenders will conduct detailed target assessments. They'll case a branch in advance, take note of the physical layout and camera positions, and plan their escape

routes. They'll often work in groups and are more likely to display a weapon. They'll avoid showing any nervousness and will generally walk out of a branch, coolly, calmly and collected to avoid attracting attention.

Opportunists, on the other hand, tend to conduct limited target assessments. They tend to work alone and exhibit a higher degree of anxiety, which can make them even more dangerous if things don't go smoothly.

But the one behavior that is common to both career and opportunity criminals is they avoid 'hard targets'. The trick is to appear 'hard' to potential thieves, but inviting to your customers.

March Networks: *How important is video surveillance technology as a deterrent and as a means of identifying and apprehending bank robbers?*

Louis Grever: Video surveillance is extremely important. I can't tell you how many times I have sat in court at the prosecution table and cringed when we had to show a grainy video clip of the accused to a jury. It's not enough just to have a video surveillance system. To identify a suspect and successfully prosecute a bank robber, it's important to have high-quality video evidence.

You can't just install a video surveillance system and forget about it. You have to check to make sure it's operating properly, that you have high enough resolution and that the cameras are both properly positioned and unobstructed. A video surveillance system that proactively alerts you to performance problems is ideal. Otherwise, your system can be down and you wouldn't know about it. Video surveillance systems are improving and getting more sophisticated all the time, so it's important to stay on top of the technology.

March Networks: *What else can financial institutions do to deter robberies and assist in obtaining a conviction?*

Louis Grever: Aside from seeing crystal clear video, juries today are partial to DNA evidence, so it's important to secure the scene of the crime as soon as possible, to lock the bank's door to prevent re-entry and to preserve any evidence such as fingerprints or notes the robber may have passed to a teller.

A branch manager should also be prepared to calmly and professionally reassure and instruct employees and customers following an incident.

Last but not least, there should be a protocol in place to immediately inform law enforcement officers once a robber has left a branch and the coast is clear. Otherwise, valuable time can be lost if police think a robber is still inside and posing a threat to employees and customers.

Robbers will avoid a branch that's perceived as a hard target, so anything you can do to create that perception will make your branch less vulnerable.

I also advise going one step further by establishing a working group with your local law enforcement and competing financial institutions to make your entire community a hard target. Sharing information about trends in criminal activity, thieves working in your area and the latest advances in security technologies will go a long way toward reducing the financial losses and other risks posed by bank robberies. ▼

"I can't tell you how many times I have sat in court at the prosecution table and cringed when we had to show a grainy video clip of the accused to a jury."

10 Ways Smartphones Can Take a Bite out of Your Profits

by Doug Montgomery

Most retailers are quick to take advantage of newer technologies such as smartphones and tablets to help improve customer service, inventory and marketing. For example, who would have imagined a restaurant server taking your order on a small mobile device even a decade ago, or confirming in seconds if your medium-sized shirt is available in another store? Unfortunately, as our technology gets smarter, criminals are also finding creative ways to take advantage of it.

While the vast majority of consumers and employees are honest, it only takes a few to start making a significant dent in your profits. The following examples illustrate how internal theft can occur when employees use smartphones to orchestrate a crime. This type of internal theft is most likely to occur during high-traffic times when other employees are busy with customers or at the end of the day when managers may be rushing to get home.

1 Perfect timing for a theft. Using a smartphone, an employee can easily alert criminal partners when the ideal situation exists to commit a robbery. Maybe the manager has just opened the safe to make a night deposit, for example, or has just closed the store or restaurant for the evening. All the employee needs to do is text an outside accomplice to alert them to the ideal opportunity for a robbery.

2 Would you like (free!) fries with that? Another smartphone strategy involves friends or accomplices texting an employee to ask for freebies to be included in their order. This is common in a quick service restaurant environment and especially at the drive-thru window. It can snowball into a major problem if the retailer doesn't act quickly. As one employee continues to get away with it, others will be more likely to adopt a similar practice with their friends.

3 Special orders on the side. Theft can also occur when a cashier doesn't ring in the order using the main point-of-sale (POS) system, but instead uses a smartphone to tally up the cost. This type of theft occurs most often at the end of the night when an employee is closing down a register and an order can be given verbally to the kitchen. This theft is not detectable using exceptions and transaction-based reporting methods. In this case, managers will need to rely on their video surveillance to prove a crime took place.

4 Out of sight, out of mind. Mobile phones can be used as a container for criminals to hide stolen cash. Bills can be hidden in a slide phone, or even tucked into the back of a phone case serving as a convenient, hidden compartment.

5 Bad math. Another method of fraud involves employees who are under-ringing items and keeping a tally on their phone so they know the exact amount they can pocket at the end of the night. A $3 drink is entered at $1, and the employee steals the difference. The phone is used as a calculator, tallying the fraudulent transactions.

6 Cooking up a little something special. Two or more employees can use texting to secretly communicate with each other and come up with mutually beneficial "deals." In one case, the waiter and chef were colluding to provide extras to customers, who then tipped generously. The waiter and chef split the profits.

7 Labor drain. One of the most common ways phones can rob retailers is through employee misuse during working hours or theft of time. Employees who are talking, texting, gaming or surfing the Web when they should be working are a drain on their employer's bottom line.

8 Inappropriate share. The cell phone is a conduit for photos and video — but not everything is appropriate to share at work. If an employee is showing or distributing questionable content in the workplace, this can be considered harassment, which can be a major cost to an employer if it escalates to a labor dispute or lawsuit.

9 Data breach. Many employees have access to confidential company information, such as internal memos, financial records, or even the location of a safe. The cell phone can be used to share this information, and the results can be costly for the employer.

10 High cost of convenience. Mini adaptors that allow smartphones or tablets to process credit card payments can also be used to commit theft. Fraudsters hack the technology so their phone steals data from a credit card's magnetic strip. In some cases an employee will simply use the phone to snap a picture of the card number and security code to use at a later time.

Keeping Your Loss Prevention Strategy Up to Date

Retailers can protect their assets with an up-to-date loss prevention strategy that includes a strong mobile device policy. The policy should clearly outline when and where phone or tablet use is acceptable at work, if at all. Some retailers simply advise employees to leave the devices at home. If mobile devices are not allowed at work, storage lockers should be provided so employees can keep them locked up.

Stop Shrink Faster

Retailers can use intelligent video surveillance to detect fraud sooner, stop it faster and ensure that their loss prevention policies are being followed. Clear video evidence can also play a critical role in successful prosecutions. ▼

Doug Montgomery is March Networks' Manager of Customer ROI.

Louisiana FCU Selects Server-Based VMS Solution

High Quality Images Provide Law Enforcement with Evidence Required to Safeguard Credit Union Assets

Sharing video clips is a great way to inform neighboring financial institutions about thieves and fraudsters active in an area, but if you're in the market for a new video surveillance system, it's also useful for seeing who has the best quality video.

Arneadra Zeno, Risk Management Officer with the Louisiana Federal Credit Union (FCU) in LaPlace, Louisiana, didn't have to get up from her desk to rate the video surveillance systems of banks and credit unions in the Greater New Orleans area. The evidence was right in front of her on her computer monitor.

Louisiana FCU

Louisiana FCU (**www.louisianafcu.org**) was established in 1935 by employees of a Shell oil refinery in Norco, Louisiana. Based in LaPlace, 30 miles northwest of New Orleans, Louisiana Federal Credit Union serves 28,000 members from four branches in the communities of LaPlace, Norco, Hammond and Gramercy, Louisiana.

"I see a lot of robbery alert videos from financial institutions and one in particular caught my eye because the quality of the video was so sharp," said Zeno, who was looking to upgrade Louisiana FCU's aging system. "I called the director of security for the financial institution in question and they told me they had purchased a March Networks video surveillance system from NAVCO."

Louisiana FCU, which serves 28,000 members from four branches in LaPlace, Norco, Hammond and Gramercy, had been coping with an older, outdated proprietary system for several years.

"It was difficult extracting video and sharing it with law enforcement or anyone else because they needed special software to view it," said Zeno. "On top of that, we had very low-end analog cameras and the quality of the video was horrible."

> "The ease of use and the much improved quality of the video are exactly what I was looking for."
>
> **— Arneadra Zeno**
> Risk Management Officer
> Louisiana Federal Credit Union

Zeno and IT director Anthony Landreneau sat down with NAVCO's Frank Favalora in New Orleans and were very impressed by the options that NAVCO and March Networks could offer.

"At the time, we weren't sure what we wanted," said Landreneau. "We just knew we wanted something better than what we had. The quality of the video from the IP cameras we were shown compared with the quality we were used to from our analog cameras was like night and day. We were also impressed with the ease of use and the ease of maintenance. There was really no reason to look at anything else."

Louisiana FCU chose a server-based solution using March Networks Command Enterprise video management system (VMS) software.

"Appliance-based systems using networked video recorders are still the norm for many financial institutions, but that may be because they don't have the IT resources in the field necessary for managing server-based systems," said Landreneau. That wasn't a problem at the Louisiana Federal Credit Union. ▶

There are several advantages to a server-based system, according to Landreneau.

"There's a lot more flexibility from an IT perspective, as well as from a security perspective. We can buy a very inexpensive server off the shelf and grow the system exponentially with the latest equipment available."

Landreneau's team had the internal IT resources required for a server-based deployment.

"Like any server in production, they require a little more effort to maintain, but it's worth it," said Landreneau. "There are patches that have to be applied and there's the whole issue of cyber security because the last thing you want is to have a Windows server exposed to the Internet without proper patching and firewalling in place. That would be a show-stopper for a lot of organizations.

"When we were doing the research on the servers, we looked at things down to the level of IOPS (input/output operations per second), the rewrites of the hard drives and how to configure the hard drives for failover. We required a system that could have multiple hard drive failures and still continue to run. That's a job for a Microsoft certified professional or an experienced hardware person," said Landreneau.

"There's a lot more flexibility from an IT perspective, as well as from a security perspective. We can buy a very inexpensive server off the shelf and grow the system exponentially with the latest equipment available."

— Anthony Landreneau
IT Director
Louisiana Federal Credit Union

Louisiana FCU has servers in each of its six locations — four branches, a mortgage center and a training facility. Several dozen IP cameras have been deployed along with a number of March Networks encoders for the credit union's remaining analog devices. The system also covers ATMs and drive-up services at all four branch locations.

Quality video is attained by the combination of top-of-the-line technology products installed by expertly-trained integration experts. As one of March Networks' leading reseller partners, NAVCO technicians undergo certification courses to guarantee that the systems are properly installed.

Dedicated storage servers are able to accommodate between 14 and 20 TB of video at each location.

Both Zeno and the credit union's operations manager are able to view live video from a selection of cameras, but the system is mainly used for reviewing video

of reported events such as slip and falls or suspicious transactions. The operations manager uses the system to keep an eye on customer traffic to ensure the branches are properly staffed and customer service standards are being met.

Command's browser-based client interface frees IT staff from having to maintain client software in the field and allows Zeno and other senior management to check on the branch locations from home during hurricane season.

Command Enterprise also allows for Microsoft Active Directory integration, centralized system management and health monitoring, and remote access to video from smartphones and tablets via March Networks Cloud.

Both the IT and risk management departments at Louisiana Federal Credit Union are pleased with their state-of-the-art video surveillance system.

"The ease of use and the much improved quality of the video are exactly what I was looking for," said Zeno. "With the sharper images from our IP cameras and the ability to easily share video clips with law enforcement and other financial institutions, we're much better able to protect our members and employees, capture evidence law enforcement can use and safeguard the credit union's assets." ▼

NAVCO

NAVCO (**www.navco.com**) is a security systems integrator specializing in the design and installation of security systems for businesses and organizations in the financial, retail and industrial sectors. NAVCO designs, installs and services access control, video surveillance and alarm systems from offices across the United States.

Solution Builder Unveiled for Financial Institutions

Online Tool Offers High-Level Recommendation Tailored to End User Needs

A new ***Build My Financial Solution*** tool on the March Networks website offers security directors, fraud investigators, and other banking professionals a high-level understanding of what an intelligent video surveillance solution would look like for their financial institution.

"The tool allows financial institutions with different footprints, requirements and physical environments to determine what the best solution is to fulfill their physical security needs," said Debi Sumner, March Networks Product Marketing Manager for Banking Solutions. "There is such a wide variety of financial institutions – from credit unions and community banks with a handful of locations, to large national and international banks with hundreds even thousands of branches, so each deployment has to be tailored to accommodate an institution's unique needs."

The tool enables users to identify the type of financial institution they are working in or with (e.g., international bank, credit union, community bank, etc.), the number of branches, the average number of tellers per branch and the number of cameras per location. It also asks if the respondent is using or planning to use IP cameras and if they require coverage of remote ATMs, drive-thru locations and cash vaults.

In seconds, the tool delivers a recommended solution, including video management software, intelligent video applications, video recorders and cameras.

The tool is available at http://www.marchnetworks.com/solutions/financial/build-your-solution.aspx

"For example, if the financial institution indicates it is using or plans to use IP cameras, the tool will recommend one of our hybrid NVRs that accommodates both analog and IP cameras," said Sumner. "With a hybrid NVR, a bank or credit union can transition from all-analog to a mix of analog and IP, and ultimately to an all-IP camera deployment as budgets allow without having to invest in new recorders." For remote ATMs and drive-thru locations, the tool recommends March Networks' compact, four-channel hybrid NVR — a recording platform specifically designed for space-constrained locations, including installation inside an ATM.

For complete unobstructed coverage of cash vaults, it recommends a March Networks 360-degree camera and a single MegaPX indoor dome camera.

If respondents indicate an interest in integrating their video with their ATM/teller transaction data, the tool recommends March Networks' Searchlight application, which speeds investigations and alerts security staff to potential fraudulent incidents.

Respondents can choose to have the recommendation emailed to them, request a quote, contact a March Networks sales representative in their area, download a brochure or navigate through the March Networks website to get additional product information and read about March Networks video surveillance deployments at banks and credit unions around the world.

"We don't expect anyone to send us a purchase order based on the tool alone," said Sumner. "That's not the intent. It's simply a first step … a way to get a better understanding of all the components required for a solution." ▼

Texas Bank Deploys State-of-the-Art Video Surveillance

Preconfigured Camera Matrix Helps Internal Auditor Manage Compliance with Bank Policies

UNTIL last year, FirstBank & Trust of Lubbock, Texas, relied on three different video surveillance systems to protect its customers and employees, and safeguard bank assets. There was limited capacity for newer, high-definition IP cameras, insufficient storage and an inability to synchronously view video from all five bank branches.

"Because the systems we had were older, they were lacking in a lot of respects," said Bill Waller, Executive Vice-President and Chief Operating Officer. "We wanted more modern technology and more functionality."

FirstBank & Trust evaluated several video surveillance systems proposed by its Texas-based security systems integrator, Smith Hamilton.

"We narrowed it down to two systems and chose March Networks because of its ease of use and increased functionality," said Waller.

FirstBank & Trust was founded in 1996 with a portable building in a parking lot and $10 million in assets. Today, there are five branches, $650 million in assets and more than 150 employees. Three branches are located in Lubbock, a city of approximately 240,000 people situated in the Texas panhandle, and one each in the nearby communities of Wilson and Tahoka.

Smith Hamilton equipped FirstBank & Trust's branches with March Networks 8000 Series Hybrid NVRs, and March Networks MegaPX MicroDome and MegaPX WDR MiniDome IP cameras. The video management software is March Networks Command and its browser-based client interface. A new six-lane drive-up and two new branches — one in Lubbock and one in nearby Snyder — are also being equipped with March Networks recorders and cameras.

The hybrid recorders accommodate a mix of analog and IP cameras, allowing FirstBank & Trust to continue to use its older analog cameras while selectively upgrading to IP cameras where higher-definition video is required. Currently, IP devices account for 75 per cent of the bank's cameras.

Storage was also an issue, as the bank's previous systems limited it to between 30 and 35 days of archived video.

"We needed 120 days as a minimum and the ability to bump that up if necessary," said Waller.

Using 3 or 4 TB drives in the 8000 Series' four hard drive slots, FirstBank & Trust can store up to 12 or 16 TB of video per recorder depending on the size of the branch and the camera count.

The 8000 Series recorders are available in 4, 8, 16 and 32-channel configurations, feature an internal battery backup capability to ensure a systematic shutdown in the event of a power disruption, and an innovative docking station design to allow for quick and easy installation and removal for service without having to disconnect all of the camera cabling.

By scanning a QR code on the front panel of each 8000 Series NVR, Smith Hamilton technicians are able to check a recorder's warranty status, process a return merchandise authorization, troubleshoot a recorder and access in-field diagnostic support, including instructional videos — all of which limits system downtime and speeds up service calls.

The Command video management software allows FirstBank & Trust system administrators at the bank's headquarters to easily configure and manage the recorders and cameras, assign user privileges, and monitor the performance of the system. And because the Command client is browser-based, IT staff don't have to install software on multiple computers in the field — one less thing for them to worry about.

To date, access to video has been limited to Waller, the IT department and the bank's internal auditor, but there are plans to also provide branch managers and teller supervisors with the necessary privileges to review video.

One of the most innovative applications of the March Networks video surveillance system at FirstBank & Trust is a camera matrix that allows the internal auditor to view live video of the vaults at each branch simultaneously.

"She clicks on the pre-configured camera view in the morning and is able to watch the tellers as they come and go to make sure they're complying with our dual control policy," said Waller. "Instead of just asking the tellers if they are complying with the bank's policies, she can watch them to make sure they are. That's one of the things we like best about the March Networks system."

Aside from ensuring compliance with internal audit policies, the video surveillance system mitigates the usual risks faced by all financial institutions, including bank robberies and liability claims.

"We're very pleased with the March Networks system," said Waller. "It does a lot more than our previous systems and has the features and functionality we were looking for." ▼

"We're very pleased with the March Networks system. It does a lot more than our previous systems and has the features and functionality we were looking for."

– Bill Waller
Executive Vice-President and
Chief Operating Officer,
FirstBank & Trust

FirstBank & Trust

FirstBank & Trust (**www.firstbanklubbock.com**) is a community bank serving the city of Lubbock, Texas, and surrounding area. Established in 1996, the bank operates five branches, has $650 million in assets and prides itself on its "Touch your heart customer service."

SMITH HAMILTON

Smith Hamilton is a security systems integrator and March Networks certified provider serving financial institutions across the U.S. The company has offices in Houston, Dallas/Fort Worth, Lubbock, Amarillo, San Antonio, Waco and Midland/Odessa in Texas, as well as sales and service branches in Lafayette, Louisiana and Oklahoma City. Smith Hamilton sells and services ATMs, cash recyclers, safes and vaults, as well as pneumatic tube, alarm and video surveillance systems.

smithhamiltoninc.com

Norwegian Building Supply Retailer Deploys Enterprise-wide Video for Loss Prevention

March Networks Chosen for Quality, Reliability and Ease-of-Use

When homeowners in Norway decide it's time to renovate, remodel and update their living space, they turn to one of the country's leading building supply retailers, Carlsen Fritzoe AS, which operates 15 building supply superstores from the southern tip of the country north to Oslo.

Similarly, when Norwegian enterprises — be they retailers, financial institutions or companies in the country's booming offshore oil industry — need a reliable, high-performance video surveillance solution, they know they can rely on Focus Security AS, a March Networks Certified Solution provider and one of Norway's premier security system integrators.

Carlsen Fritzroe turned to Focus Security for a March Networks video surveillance solution in 2013 following several disappointing experiences with other systems.

"In fact, they had three different video surveillance systems," said Focus Security president Bjarte Hatlenes. "They had an old analog system that provided grainy images which weren't of much use, and an IP-based system from a well-known manufacturer that wasn't able to provide the technical support they required."

Focus Security recommended March Networks' Command Professional video management software, a single server-based solution able to support as many as 128 surveillance cameras. The software runs on a Cisco router and records video from March Networks MegaPX WDR NanoDome and Infinova V6202 cameras.

The MegaPX WDR NanoDome is a five megapixel fixed indoor/outdoor IP camera that combines high-definition video resolution with powerful Wide Dynamic Range for excellent image quality in all lighting conditions. The camera's ability to stream in parallel to an internal microSDHC card or NAS device ensures redundant recording in the event of a network outage or server failure, while its built-in Shadow Archiving feature — unique to March Networks — provides seamless access to redundant video by forming a "shadow" on the central recording server of all the data available on the camera and NAS devices.

Carlsen Fritzoe AS

Carlsen Fritzoe AS is a leading building supply retailer with 15 superstores in Norway. The company, established in 2006 through a merger of Treschow-Fritzoe AS and H. Carlsen, has 400 employees and reports annual sales of 175 million Euros.

www.carlsenfritzoe.no

> "The March Networks system meets all of our needs today and provides us with the opportunity to take advantage of even more powerful theft and fraud prevention technologies in the future." — **Erik Lorang Ilestad,** Carlsen-Fritzoe

Focus Security installed the cameras to capture video from both interior and exterior locations identified as high-risk areas for theft and fraud.

"We're very happy with the March Networks solution," said Erik Lorang Ilestad of Carlsen Fritzoe. "The image quality is excellent, support is just a phone call away and the browser-based interface is very user-friendly."

March Networks Command software acquired by Carlsen Fritzoe is one of the only VMS solutions that supports complete surveillance system configuration and administration — in addition to live and archived video access — via its browser-based client interface.

Both Carlsen Fritzoe and Focus Security are based in Sandefjord, a city of 45,000 people located 122 kilometers south of Oslo, Norway's capital.

Focus Security was established in 2000 and has been a March Networks Certified Solution Provider since 2001.

"We have developed a reputation for delivering high-quality security products and solutions, including CCTV, access control, alarm and perimeter protection," said Hatlenes. "Our focus on innovative technology, superior products and exceptional service has proven to be a winning formula and is responsible our growing base of satisfied customers."

Carlsen Fritzoe was established in December 2006 through a merger of Treschow-Fritzoe AS, which was founded in 1835, and H. Carlsen, founded in 1903. The company has more than 400 employees, sales of 175 million Euros and is still managed by descendants of the Treschow-Fritzoe and Carlsen families.

"Having a high-quality, reliable and easy-to-use video security system is a must for any retailer," said Erik Lorang Ilestad. "The March Networks system meets all of our needs today and provides us with the opportunity to take advantage of even more powerful theft and fraud prevention technologies in the future." ▼

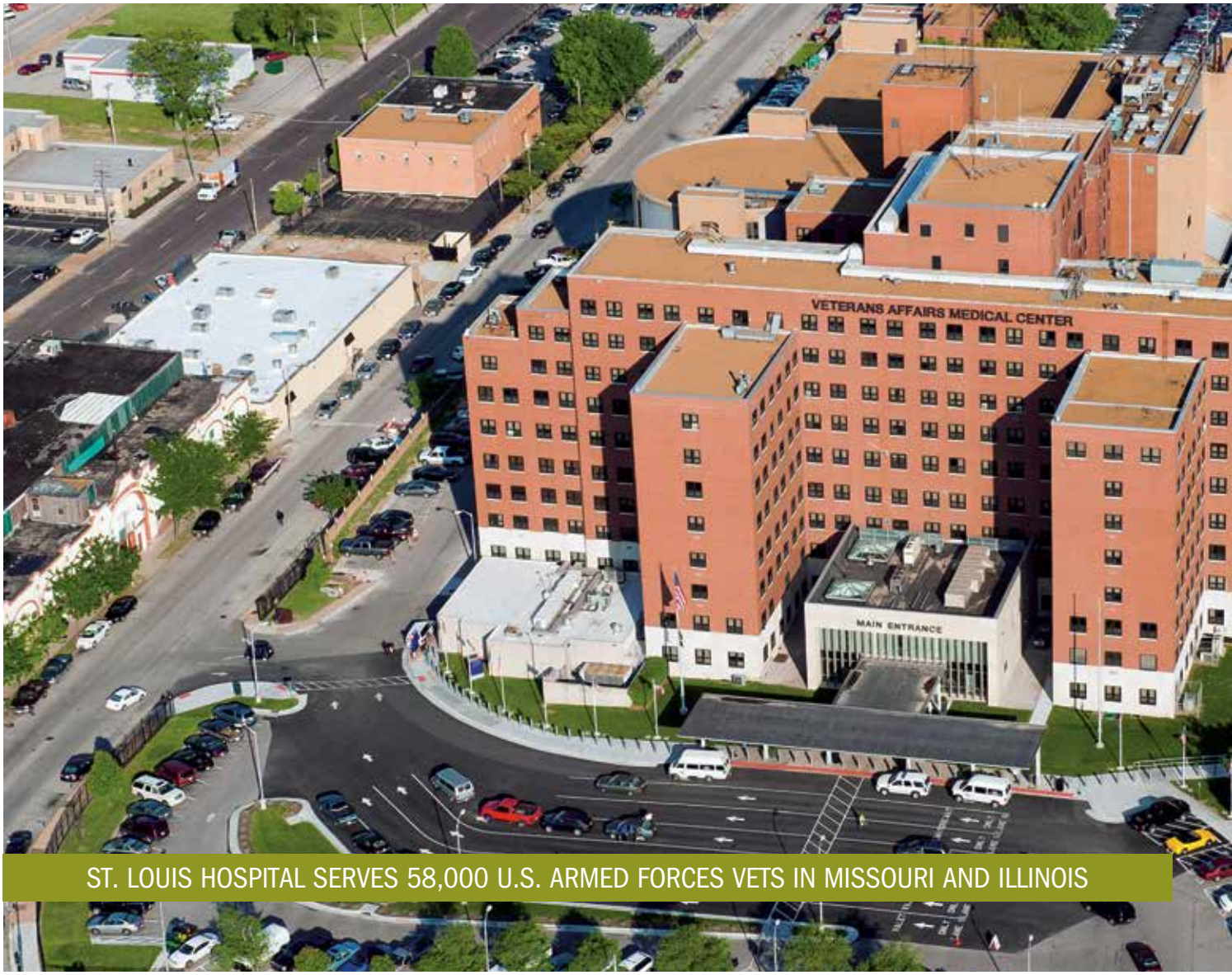
FOCUS SECURITY

Focus Security, a March Networks Certified Solution Provider based in Sandefjord, Norway, serves the security needs of a broad range of customers and specializes in CCTV, access control, alarm and perimeter protection.

www.focussecurity.no

photography Jon Erik Andersen

Video Surveillance System Sets Standard for Veterans Affairs Health Care Centers



ST. LOUIS HOSPITAL SERVES 58,000 U.S. ARMED FORCES VETS IN MISSOURI AND ILLINOIS

A new March Networks video surveillance system at the Veterans Affairs (VA) St. Louis Health Care System will serve as a "state-of-the-art standard" for U.S. Department of Veterans Affairs medical centers across the country, according to health care center Deputy Chief Jeffrey Brown.

The decision to upgrade video surveillance at the VA St. Louis Health Care System was made during a major reconstruction and renovation of the two-site health care center, said Brown, who is in charge of equipment and security programs for the St. Louis, Missouri, health care organization.

The John Cochran Division, located in midtown St. Louis, provides inpatient and ambulatory care services, while the Jefferson Barracks Division 15 miles away in St. Louis County provides psychiatric and spinal cord injury treatment, rehabilitation services and geriatric health care. A multi-building campus overlooking the Mississippi River, the Jefferson Barracks site also includes a nursing home care unit and a rehabilitation domiciliary program for homeless veterans.

The two sites serve more than 58,000 U.S. armed forces veterans and their families in east central Missouri and southwestern Illinois.

> "If I have an incident, I can use the March Networks software to quickly pull up the recorded video, download it, burn it to a DVD and attach it to the report as evidence. It's so much easier to use than the system we had before."
>
> **— Deputy Chief Jeffrey Brown**
> VA St. Louis Health Care System

The John Cochran Division had a video surveillance system with approximately 90 analog cameras for a dozen or so years and had only recently acquired a single March Networks video recorder to try out when the decision was made to go state-of-the-art at the Jefferson Barracks site.

"PASS Security has been our primary security system integrator for some time, so when we started on the Jefferson Barracks project, they recommended that we go with a March Networks system," said Brown. "Kendall Addison of PASS Security explained all the features and benefits and assured us that it would be a superior system, but it didn't take much to convince us because we already had that one March Networks recorder and we could see it was a better quality system than what we had."

A 24/7 monitoring center designed by PASS Security for the Jefferson Barracks site includes a video wall with four large flat screen monitors and a March Networks Decode Station running Site Manager software for video wall management.

Six March Networks 8000 Series Hybrid Network Video Recorders (NVRs) were acquired for Jefferson Barracks along with a number of March Networks MegaPX WDR Micro Domes and MegaPX WDR Mini Dome Z IP cameras.

"Once all that was installed, we decided to order another six March Networks 8000 Series recorders for the John Cochran site in order to standardize on one system," said Brown.

At the John Cochran Division, which is located in a high crime area, cameras are installed in the lobby, the pharmacy and the methadone distribution center, as well as on all the floors in front of the elevators. There are also cameras around the exterior of the building and some wireless cameras covering the parking lots.

"Other than the patient wards, everything is pretty much covered," said Brown. "No matter where you go, sooner or later you're going to enter the field of view of a camera."

Among the main risks being managed are vandalism, drug diversion and car theft.

In one incident, video evidence from the March Networks system was able to demonstrate that a police officer who used pepper spray on a suspect was justified in doing so. In another incident, police were able to capture images of a car thief from a series of cameras.

photo Dan Dreyfus

photo Dan Dreyfus

VA St. Louis Health Care System

The VA St. Louis Health Care System (**www.stlouis.va.gov**) is a Veterans Affairs health care organization serving more than 58,000 veterans and their families in east central Missouri and southwestern Illinois. There are two locations: the John Cochran Division in midtown St. Louis and the Jefferson Barracks Division in St. Louis County. Together, they offer a broad spectrum of inpatient and ambulatory care services, including psychiatric and spinal cord injury treatment, rehabilitation and a domiciliary program for homeless veterans.

The hybrid recorders allow the VA St. Louis Health Care System to make use of its legacy analog cameras, but "lately we've been transitioning to IP cameras, which give us ten times better quality," said Brown.

The 32-channel recorders accommodate a combination of IP and analog cameras or up to 32 IP cameras.

Aside from the improved video quality, Brown likes the ease of use of the March Networks system.

"If I have an incident, I can use the March Networks software to quickly pull up the recorded video, download it, burn it to a DVD and attach it to the report as evidence," he said. "It's so much easier to use than the system we had before."

Each 8000 Series recorder is equipped with four 3 TB hard drives, for total onboard storage of 12 TB — more than enough for 90 days of storage.

Brown is happy with the performance of the March Networks video surveillance system and has already recommended it to several other Veterans Affairs health care centers. He is also impressed with the service he has received from March Networks certified provider PASS Security and technician Kathy Estrada.

"She's a definite asset to me," said Brown. "She can answer any question I have about the technology."

When all of the construction is complete, the VA St. Louis Health Care System will have 20 or more March Networks recorders and more than 300 analog and IP cameras. ▼

photo Dan Dreyfus

PASS SECURITY

PASS Security is a long-standing March Networks certified provider serving commercial and residential customers in Greater St. Louis and surrounding areas with a full range of security systems, including video surveillance, access control and burglar alarms.

www.passsecurity.com

When Should You Install a 360° IP Camera?

By Jeff Corrall and Nathan Dinning

QUESTION: 360-degree IP cameras are suddenly everywhere and generating a ton of marketing buzz. In what kinds of physical environments are they best deployed?

ANSWER: Aside from being very cool technology, the latest and greatest 360-degree cameras have decidedly practical applications in retail, banking and commercial/industrial environments. One well-selected, strategically located 360 camera can give you a complete overview of a location, while reducing your camera count and saving you money.

If you're in retail or banking, for example, and looking to upgrade from analog to IP video, a 360 camera is a great option for capturing daily activity at your site, especially when used as a complement to other high-definition IP cameras dedicated to capturing bill denominations and similar transaction details.

A 360 camera can also be an excellent alternative to a standard pan-tilt-zoom (PTZ) camera in a retail store, for example. Think about it. When a PTZ is pointing in one direction, that's the only video you're capturing at that precise moment. With a 360-degree camera, on the other hand, you're recording everything all the time, so nothing is ever missed.

However, you still have to do your homework because not all 360s are alike and some will suit your needs better than others.

All De-Warping is Not Alike!

The fish-eye image captured by a 360 camera has to be de-warped, and this is where it pays to do your research. Some manufacturers do the de-warping on the camera itself, enabling you to choose two 180-degree views, four separate views or a warped 360-degree view. Unfortunately, you can't do a digital PTZ within these views and, once you've made your choice, you have to live with it because that's all that's been recorded. (See image A) Other 360 cameras record the 360 view and do the de-warping in the software client, putting you in the driver's seat. You can choose to look at 360 or 180-degree panoramic views, as well as multiple views in a grid, perform a digital PTZ to zoom in on any part of the scene and change the view at any time. You're never locked in. (See image B)

When and Where to Use a 360

A 360 camera is extremely useful and can take the place of multiple cameras to capture scene overviews, but it isn't meant for every type of application. Make sure you're clear on the quality of the images you need and the coverage you'll get based on the size of your location and your ceiling height. While every application is different, here are some general guidelines to help:

Image A: A view from a 360 camera with dewarping done on the camera.

Image B: A view from a competitive 360 camera with dewarping done on the camera.

- **Mounting Height:** 8 to 14 feet / 2.4 to 4.3 meters is ideal, but again, it really depends on what you are trying to capture. We have customers using our 360 cameras in warehouse environments, for example, mounted at much higher heights. In these cases, the customer is looking for an overview of activity rather than recognizable details.
- **Coverage:** extending in an outward radius with the camera at the center:
  - Up to 10 feet / 3 meters you can expect to capture detailed images that will allow you to identify a person, for example, or see details in a shirt someone is wearing.
  - At 10 to 20 feet / 3 to 6 meters you'll still be able to recognize a person and capture all activity in your scene, however some detail will be less clear.
  - At 20 to 50 feet / 6 to 15 meters, you will be able to clearly follow a person from the time they enter the location until they leave. Distinguishing details becomes more difficult the further the person or object is from the camera. If you do need detailed images captured at these distances, it's probably best to consider complementary camera options.
- **Very Dark or Bright Environments:** if either of these conditions apply, you'll want to select a camera with wide dynamic range capability for the best results.

The 360-degree camera has come a long way in just the last few years. You can now buy multi-megapixel domes that will give you exceptional image quality in an inconspicuous form factor. A 360 camera helps you reduce your camera counts in many instances, while increasing your coverage or complementing your coverage in a multi-camera deployment. Either way, it's important to understand your requirements, the area you're trying to cover and the pros and cons of the different kinds of 360 cameras on the market.

Learn more about the MegaPX 360 Indoor Dome visit www.marchnetworks.com

Jeff Corrall is a March Networks Edge Devices Product Manager and Nathan Dinning is Manager, Customer Solutions and Integrations.

Who's New?

Dan Trujillo has joined March Networks as a Regional Sales Manager for the Transit Solutions Division. Dan comes to March Networks from Clever Devices, a transit CAD/AVL company where he was a Regional Sales Manager responsible for increasing sales to large transit agencies. He has more than 10 years of regional sales experience in the public transit industry, is based in the Los Angeles area and serves customers in 14 Western states, as well as British Columbia and Alberta, Canada. Dan has a Bachelor's degree from Whittier College.

Eric Chudleigh has been appointed Regional Key Account Manager for Canada. Prior to joining March Networks, he was a National Account Executive specializing in financial and strategic sales with Chubb Edwards. Eric has more than 25 years of experience in the security industry, focusing on video surveillance systems, access control, intrusion alarms and related security services. Based in the Toronto area, he is an avid sports fan, and enjoys fishing and the great outdoors.

Donna Reid has joined March Networks as Director of Marketing. Prior to joining the company, she was Director, Business Marketing, with Canada Post. Donna has over 15 years of experience developing marketing plans, executing campaigns and supporting sales teams. In her new role, she has responsibility for marketing communications, events, digital marketing, public relations, branding, advertising, marketing campaigns and demand generation. Based in Ottawa, Donna has a Bachelor of Commerce degree from Carleton University and spends her spare time on her bike, working out, or on the golf course.

Karl Pardoe has joined March Networks as Regional Sales Manager for the U.K. and Ireland. Karl comes to the company with over 20 years of experience in the electronic security and CCTV industry serving the banking, finance and retail sectors. He has held senior roles within some of the industry's most well known organizations, including ADT, Stanley Security (formerly Niscayah) and Tyco (formerly Sensormatic), where he managed a number of the U.K.'s largest retail accounts, primarily in the multimedia sector. In his new role, Karl is responsible for working with partners and customers to specify and deliver projects based on March Networks solutions.

Lisa Miller has joined March Networks as Channel Marketing Manager, North America. Lisa has 15 years of marketing experience and five years of experience in the physical security industry. Prior to joining March Networks, she developed programs and events to educate PSA Security Network members about the industry and more than 150 manufacturers' product lines. Based in Colorado, Lisa has a Bachelor's degree in Marketing from the University of Colorado and a Master's degree in Business Administration with an emphasis on e-Business from Regis University.

Paul J. Harrison has been appointed Regional Sales Manager for Australia and New Zealand. Paul is a results orientated, hands on construction and business development professional with many years of experience in security and related industries. His broad experience includes retail, commercial, health care, government, industry, hospitality and gaming markets. He has managed teams and been responsible for the design and implementation of complex integrated systems valued in the millions of dollars. Paul's experience includes large projects for Thai Airways and Star City Casino in Sydney.

Doug Montgomery has joined March Networks as Manager of Customer ROI. Doug has over 30 years of experience helping retailers increase their sales and improve operational efficiency. With professional experience in Business Operations, IT, and Marketing, Doug brings a wealth of knowledge and expertise to his new role. He has experience working with a variety of retail clients, including international corporations and franchise units spanning the restaurant, C-Store, and retail banking sectors. Doug is the former owner of a successful consulting company that specializes in improving business operations and loss prevention through the use of remote access cameras.

Left to right are Lina Bonilla, Efecty S.A.; Ronald Acero, Banco Colpatria; Daniel Espinoza, Scotiabank; and Wilfredo Meneses, ATH, at a two-day March Networks workshop for customers and system integrators in Bogota April 23 and 24.

March Networks Hosts Bogota Workshop

End Users and System Integrators from Colombia, Ecuador and Peru Attend Invitation-Only Event

March Networks showcased its video surveillance solution portfolio for customers and system integrators in the Andean region at an invitation-only event in Bogota, Colombia, April 23rd and 24th.

"It was an excellent opportunity for customers and March Networks certified providers from Colombia and several other Andean region countries, including Peru and Ecuador, to share experiences and success stories," said Ingrid Velasco, March Networks' Regional Sales Manager for Colombia.

The first day of the event attracted 28 customers representing a variety of industries and organizations. Day two was dedicated to system integrators and attracted more than 50 representatives of current and prospective March Networks certified providers.

The March Networks Colombia team covered the same topics both days, but the approach was tailored to each group. Customers and system integrators learned about the March Networks Command video management system, the company's Searchlight intelligent software applications for retail and banking, the industry-first GURU smartphone app and March Networks Cloud mobile solution. Participants were also introduced to the March Networks IP camera portfolio, including the company's new 360-degree camera.

"The workshop was well received and succeeded in bringing customers and security system integrators up to date on the latest advances in video surveillance technology and March Networks' portfolio of products and solutions," said John Cruz, March Networks' Regional Sales Manager for Colombia and Ecuador. "The event was also an excellent opportunity for these leading professionals to network with colleagues and discuss what they are seeing in the industry."

Left to right are Jeimmy Gomez, and Camilo Jimenez, I3NET, and Christian Albuja of Righttek, at a two-day March Networks workshop for customers and system integrators in Bogota April 23 and 24.

March Networks News is published biannually by March Networks Corporation. To subscribe eNews, please visit us online at http://www.marchnetworks.com/company/corporate-magazine/default.aspx. To comment on the magazine, or to unsubscribe, please send an email to **newsletter@marchnetworks.com** or call us at **613.591.8181**.

Managing Editor:
Norm Tollinsky

Graphic Design:
Tamara Maliepaard

Contributors:
Jon Erik Andersen
Jon Paul Bergman
Jeff Corrall
Nathan Dinning
Dan Dreyfus
Glenn Good
Erica Miskew
Giacomo Monari
Doug Montgomery
Johan Olson
James Pralle
Michela Severgnini
Debi Sumner
David Sweeter
David Thompson
Ingrid Velasco

March Networks
303 Terry Fox Drive
Suite 200, Ottawa, ON
K2K 3J1 • 613.591.8181

North America 1 800 563 5564
Latin America ..... +5255 5259 9511
Europe ..... +39 0362 17935
Asia Pacific ..... +61 1300 089 419
Middle East and Africa ..... +971 4 399 5525

www.marchnetworks.com

© 2014. March Networks, An Infinova Company. All rights reserved. Information in this document is subject to change without notice. MARCH NETWORKS, March Networks Command, March Networks Searchlight, Shadow Archive and the MARCH NETWORKS logo are trademarks of March Networks Corporation. Infinova is a trademark of Infinova Corporation. All other trademarks are the property of their respective owners.
Printed in Canada. 060-3214-00-A

WHY 450+ OF THE WORLD'S LEADING BANKS

BANK ON US.

Protecting assets, preventing loss and catching bad guys are what March Networks does best. We combine the highest quality video with powerful fraud investigation and case management tools to create the world's most trusted surveillance solutions for financial institutions.

With over 120,000 systems installed, we're the #1 provider of video surveillance solutions to financial institutions in the Americas. Find out how we help our customers.

SEE MORE *at marchnetworks.com*

MARCH® networks

An Infinova Company