the
news

Garden Centers Tackle Point-of-Sale Losses

Australian gardening center chain relies on March Networks Searchlight software to help identify suspicious transactions and reduce losses at the POS

Vietnam's PVcomBank acquires cutting-edge video surveillance

Guest safety a priority for five-star hotel in Milan

State-of-the art monitoring center a game changer for Canadian healthcare organization

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The Transformation of Physical Security

Recently, I was asked by a media publication to reflect on how the physical security industry has evolved over the past couple of decades. That's a long time in any industry, and especially one like ours that's so technology-driven.

It didn't take long to realize that during the past 20 years, I have personally witnessed several technology trends which have defined the industry. One of the most significant trends has been the evolution from analog to digital to IP video.

It was not that long ago that I would visit the headquarters of a leading financial institution or retailer and find teams of investigators sifting through mountains of VCR tapes looking for a specific event. It was like trying to find a needle in a haystack. Even if the right tape was located, it was quite common to discover that the branch or store manager had forgotten to switch out the tape and no video had been recorded for days. With the introduction of digital video recorders in the 1990s, the industry solved the tape management issue. However, hard drives were expensive and had limited capacity, and operating systems would regularly crash the system and cease recording. Often, this would not be discovered for several days or weeks.

Fast forward to 2016, and today those same security managers can access both live video and terabytes of recorded video from thousands of locations within seconds at the click of a mouse. Advanced analytics also indexes video and allows investigators to pinpoint specific events very quickly. As a result, investigations have been reduced from several days to just minutes. Truly a game changer!

Another key trend in the industry has been the emergence of software-based solutions. While physical security has historically been categorized as a hardware-based industry, customers are increasingly focused on ease of use and interoperability. With video now being ubiquitous and more organizations understanding the multiple benefits derived from video data, customers are now looking for open management platforms and the ability to integrate with third-party data to solve business problems. This can include traditional systems such as point-of-sale terminals, access control systems and alarm systems for security applications. It may also include data from passenger information, inventory management and vehicle tracking systems to improve tracking and compliance. The ability to leverage video to improve operations or gain better customer insight is an emerging trend that will drive the increased use of video in the coming years.

Looking ahead, I remain very bullish on the overall industry. Key technologies such as cloud storage and integrated video and data analytics are increasingly turning video into a core component of corporate strategy and IT infrastructure.

While hardware such as cameras and networked video recorders will continue to be commoditized, faster processors, better compression and higher capacity networks are all going to result in more opportunities for innovative solutions. With our deep roots in video networking, telecommunications and IT, March Networks will continue to establish itself as a leader in emerging technologies such as cybersecurity, data analytics and artificial intelligence. Core expertise in these areas, coupled with our ability to develop software solutions that solve today's business problems, will be the formula for succeeding in the future.

Peter Strom,
President and CEO,
March Networks

inside

Garden Centres Trim Losses with Searchlight

FLOWER POWER GARDEN CENTRES, an Australian retailer with 10 locations in the Sydney Metropolitan Area, took a major step toward managing its point-of-sale losses when it acquired a March Networks Searchlight™ for Retail software solution.

Searchlight integrates Flower Power's March Networks® video surveillance with transaction data from the retailer's point-of-sale

systems, allowing Audit and Loss Prevention Manager Joshua Nicol to review reports of potentially suspicious transactions and immediately click through to the corresponding video.

"The Searchlight reports point me in the direction I want to focus on and give me a great overview of the transactions that have occurred," said Nicol. "I can review refunds and voids, as well as sales under or over a certain amount, or identify training opportunities for cashiers handling certain types of transactions. Searchlight is an absolutely fantastic tool for identifying fraudulent patterns and trends."

Finding losses from theft and fraud is critical for retailers like Flower Power. According to the 2014-2015 Global Retail Theft Barometer study, shoplifting and employee theft cost Australian retailers US $2.44 billion, or just above one percent of sales. Globally, employee theft accounted for 39 percent of total losses and shoplifting 38 percent, with the remainder attributed to administrative or non-criminal losses. ▶

Flower Power Garden Centres was founded in 1958 by Nick Sammut, a penniless immigrant from Malta with a strong work ethic and a green thumb. Today, said Nicol, it's a thriving family enterprise selling a wide range of flowers, trees, ornamental plants, patio furniture, barbeques, "and pretty much anything and everything to do with the outdoors from a garden perspective."

Nicol was familiar with March Networks video surveillance technology prior to joining Flower Power in September 2015.

"I used March Networks for years at a previous employer — a large retail company. I found it easy to navigate and was impressed with its functionality, but the addition of Searchlight makes the March Networks system even more powerful because of the time it saves searching for video of refunds, voids and other transactions."

Flower Power Garden Centres is in the final stages of transitioning to March Networks 8000 Series Hybrid NVRs and March Networks IP cameras.

The hybrid capacity of the March Networks recorders is ideal because it allows the garden centre chain to transition to IP over time instead of forcing it into a costly upfront infrastructure upgrade.

"Searchlight is an absolutely fantastic tool for identifying fraudulent patterns and trends."

— **Joshua Nicol,** Audit and Loss Prevention Manager, Flower Power Garden Centres

The video solution runs on March Networks Command™ Enterprise video management software. The powerful software features advanced video search tools, including a motion histogram that highlights movement and a Visual Finder bar with thumbnail images that speed the user through the timeline to the required video evidence. Command also enables centralized user management and mass configuration, as well as real-time health monitoring that alerts system administrators to potential performance issues.

Managers of the individual garden centres can search for video recorded by cameras in their own stores, but Nicol alone has access to the Searchlight reports.

Staff from March Networks' Sydney office provided initial training, and Flower Power managers requiring a refresher tune into March Networks' online training videos.

"Ease-of-use is important — especially for the managers in our garden centres who aren't in the system every day," said Nicol. "The March Networks system is easy to jump into even if you haven't used it for a while."

Nicol can access video from any of the 10 garden centres in Sydney and its surrounding communities from Flower Power's Sydney head office, or while on the road or at home.

"I can review live or archived video from anywhere, anytime on my laptop using virtual private network access as long as I have a WiFi connection," he said. ▶

Command Enterprise software also allows users to access video on their smartphones or tablets with an optional March Networks Cloud service. Simple to set up and use, March Networks Cloud requires no transcoding hardware installation, router port forwarding, firewall changes or software downloads.

In addition to alerting Nicol to point-of-sale anomalies, the March Networks video solution also provides evidence for prosecution of thieves.

"We had several break-and-enters last year — three in our garden centres and another three in a wholesale location," he recalled. "In one instance, they came in at night — sometime between midnight and 5 am, had free range of the entire nursery and got away with several thousand dollars worth of merchandise. Fortunately, the video evidence we captured with our March Networks system helped with the police investigation and was instrumental in their arrest."

Video surveillance can play an important role in reducing the $2.44 billion in estimated annual losses from shoplifting and employee theft in Australia, but some solutions get the job done better than others.

Flower Power Garden Centres is happy with the choice it has made.

"I would definitely recommend March Networks technology for its reliability, ease-of-use and powerful Searchlight functionality, which takes so much of the legwork out of monitoring point-of-sale transactions," said Nicol. ▼

"I would definitely recommend March Networks technology for its reliability, ease of use and powerful Searchlight functionality, which takes so much of the legwork out of monitoring point-of-sale transactions."

— **Joshua Nicol,** Audit and Loss Prevention Manager, Flower Power Garden Centres

Unlocking Retail Insights
March Networks Combines Video and RFID Data

March Networks unveiled its newest Searchlight for Retail integration at this year's ASIS International Exhibition in Florida.

The integrated solution combines March Networks Searchlight software with high-performance fixed Radio Frequency Identification (RFID) technology from Zebra® Technologies.

The integrated solution enables organizations to enhance loss prevention capabilities and visually verify events using crystal-clear video to draw additional business insights.

"Every day we speak with retail leaders who are starting to treat video as a core component of their technology strategy," said Jeff Corrall, March Networks Integrations Business Development Manager. "Integrated video can provide an almost unlimited view of the business, capturing everything from point-of-sale engagement, to banking transactions, to what went out the back door."

By combining data from Zebra RFID-tagged items with high-definition surveillance video, March Networks Searchlight makes it possible for companies to quickly search for items by date, time, brand, product type, serial number or Electronic Product Code (EPC). They can then access the associated video with a single click to see exactly when and how an item entered or left a location. Users can conduct searches centrally from any networked location and simultaneously across multiple locations.

For example, an organization can discover in minutes the last time a specific, high-value item was present in a store or warehouse by searching on the product serial number and reviewing the recorded video. Similarly, it can use the same search capability to resolve more systemic — and potentially costly — issues, such as tracking the 10 or 12 items reported missing from inventory at the end of each month.

Retailers can also set up reports in the easy-to-use Searchlight software dashboard to analyze inventory flow over time and identify suspect incidents at a glance. In addition to RFID data and video, the software integrates point-of-sale (POS) transaction data and intelligent analytics — including people counting, queue length and dwell time — to provide comprehensive information retailers can use to improve the customer experience.

In the future, the tight integration of RFID, POS and video data will enable automated alerts in the Searchlight software. This will allow companies to proactively respond to anomalies such as high-value items being removed from a location without first being captured at the POS, or the need to replenish best-selling items on store shelves.

March Networks Searchlight enables organizations to set up reports in a user-friendly software dashboard so they can easily analyze inventory flow over time and identify suspect incidents. In addition to RFID data and video, the powerful software integrates POS receipt data, ATM/Teller transaction data and intelligent analytics — including people counting, queue length and dwell time analytics — to provide comprehensive information that organizations can use to improve customer service, marketing and operations. ▼

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New GURU App Feature Strengthens Cybersecurity

TO HELP SYSTEMS INTEGRATORS IMPROVE THE SECURITY of their video surveillance installations, March Networks has introduced a new Security Audit feature in the latest version of its free GURU Smartphone App.

The audit capability now available in GURU 2.3 automatically analyzes and rates how secure the configuration of installed March Networks recorders is against a list of potential vulnerabilities. It then provides guidance on how to make the configuration more secure, such as changing a password that's been left at the default setting or closing ports that don't need to be open.

Technicians can act on the recommendations to further harden the system, and email a report to themselves, a supervisor or a customer for future reference — all using their smartphone or tablet and a wireless connection to the recorder.

"The Security Audit provides technicians with a very quick and convenient way of assessing the security of the configuration by running through a checklist for them and offering fixes for possible errors," said Ru Wadasinghe, March Networks CIO and Vice President of Professional Services. "Video surveillance devices are like any other on the network — they can be hacked if they aren't securely configured, which can leave corporate networks and data vulnerable.

"Some vendors are providing integrators with guidelines to check recorders for configuration vulnerabilities, but as a leader in the video surveillance space, we wanted to go one step further."

A checklist on a piece of paper can easily get lost, dog-eared or left to collect dust on a shelf. It takes time for a technician to go through it at the customer's site and can be easily overlooked if they are in a hurry. GURU's new Security Audit automates the process and instantly identifies configuration vulnerabilities.

"We've all seen media reports about hackers using security systems to access an enterprise environment," said Wadasinghe. "The GURU Security Audit is one way to reassure the installer and customer that the system has been configured in a secure manner. It's a great addition to the many capabilities already available via the app and one we know our certified partners are going to use frequently."

The March Networks GURU Smartphone App runs on iPhones, iPads and Android devices and can be downloaded for free from the App Store or Google Play. It works in conjunction with the unique QR code present on the front panel of all March Networks 8000 Series Hybrid NVRs and RideSafe GT Hybrid Transit NVRs to help technicians easily access a recorder's serial number and warranty status, troubleshoot possible issues, process RMAs on the spot, and run valuable installation — and now security — audits.

"The recently introduced Installation Audit gives our partners and end users peace of mind knowing that the installation was performed properly," said Wadasinghe. "This new Security Audit does the same thing by supplying partners and customers with a secure configuration verification report emailed directly from the technician's GURU app." ▼

Hello Vietnam

PVCOMBANK, one of Vietnam's fastest growing and most progressive banks, has acquired a cutting-edge March Networks video surveillance system.

Established in 2013 through a merger of PetroVietnam Finance Corporation and WesternBank, the Hanoi-based financial institution is a joint stock commercial bank with 115 branches throughout the country. Shareholders include Petro Vietnam with a 52 percent stake and Morgan Stanley with a 6.7 percent strategic interest.

Prior to selecting the March Networks technology, PVcomBank had a variety of different video surveillance systems installed throughout its branch network. The bank wanted to upgrade to a high-performance solution it could eventually standardize on for all of its retail branches, ATMs and corporate offices, and centrally manage from its headquarters in Hanoi.

The enterprise-class March Networks system PVcomBank is now deploying consists of 8000 Series Hybrid NVRs, Command Enterprise video management software and hundreds of March Networks IP cameras, including MegaPX WDR MiniDomes Zs and MegaPX Indoor IR Domes.

PVcomBank relied on the advice of Intelligent Building Solutions (IBS), a security systems integrator and March Networks certified partner with offices in Hanoi, Ho Chi Minh City, Singapore and Phnom Penh.

"We wanted to upgrade to a high quality, enterprise system with central management and health monitoring," said Nguyen Manh Hai, PVcomBank. "IBS recommended March Networks because of its track record as a global leader in the delivery of video surveillance solutions to the financial sector."

More than 450 banks and credit unions worldwide rely on March Networks' intelligent IP video solutions to keep their customers and employees safe, and help reduce losses due to fraud, theft and liability claims. IBS, a supplier of security and building automation products, including video surveillance, access control and intrusion detection systems, began rolling out the March Networks system across PVcomBank's branch network in June 2015 and expects to complete the deployment by the end of 2016.

The hybrid capability of the March Networks 8000 Series NVRs is ideal because, in addition to approximately 250 new March Networks IP cameras, PVcomBank opted to continue using analog cameras from its previous video surveillance systems. Continuing to use its existing cameras with the March Networks system kept costs down and resulted in noticeably improved video quality from the analog cameras. ▶

> **"The March Networks system gives us the central management capability that we didn't have before. It's also reliable, user friendly and provides us with excellent quality video."**
>
> — **Nguyen Manh Hai**, PVcomBank

Access to video is restricted to the bank's security staff and used to obtain evidence of burglaries, fraud and other reported incidents.

Eight and 16-channel NVRs are equipped with 6 and 8 TB of onboard storage, respectively — sufficient for approximately 60 days of video retention.

The 8000 Series recorders are available in 4, 8, 16 and 32 channel models and can accommodate two simultaneous recording streams — one lower resolution stream for viewing online, and another full resolution, full frame rate version for investigation purposes.

Built for maximum reliability, they feature a secure Linux operating system to better protect against viruses and malware, and an internal battery backup for systematic shutdown in the event of power loss.

The 8000 Series recorders are also designed for easy maintenance with docking station architecture that keeps all cables securely connected to the back of the unit for faster, more convenient installation and servicing. Technicians can also take advantage of March Networks' industry-first GURU Smartphone Application to scan the QR code on any 8000 Series NVR to quickly find the recorder's serial number and warranty status, speed troubleshooting, link to video tutorials and use an installation audit feature to run automated reports on the video system's configuration complete with camera field-of-views.

The Command Enterprise video management software used by PVcomBank simplifies day-to-day system administration with centralized management and mass configuration tools, and provides real-time health monitoring that alerts administrators to performance issues.

ABOUT INTELLIGENT BUILDING SOLUTION

Established in 2006, Intelligent Building Solution Joint stock company (IBS) provides state-of-the-art video and automation solutions for buildings and industrial facilities, as well as top-notch services certified by world-class brands. With branches stretching throughout the country and offices in Singapore, Cambodia, Vietnam and Europe, IBS has implemented more than 200 successful projects locally and regionally, including key national landmarks such as the National Assembly House and the National Convention Center in Vietnam.

www.ibs.com.vn

A customizable user interface with motion histogram and thumbnail images allows investigators to quickly zero in on video evidence.

"We are very pleased with our March Networks video surveillance system," said Nguyen Manh Hai. "We worked closely with IBS, our security systems integrator, to select a system that would meet all of our needs. The March Networks system gives us the central management capability that we didn't have before. It's also reliable, user friendly and provides us with excellent quality video." ▼

Protecting Off-Premises ATMs: Is Your Bank Doing Enough?

By Daniel Caggiula

IF YOUR BANK OR CREDIT UNION OPERATES ATMS in remote locations like convenience stores or shopping malls, a bank heist earlier this year in Japan probably caught your attention.

According to news reports, fraudsters used 1,600 fake cards to withdraw money from multiple ATMs belonging to the same South African bank. In just a few hours, the coordinated attack – focused on ATMs in convenience stores — drained the bank of over $13 million.

While the magnitude of this fraud may be rare, it should give financial institutions pause to consider the level of security they have in place around their off-premises ATMs.

Off-premises ATMs can be easy targets for thieves because they usually don't have the same level of security or surveillance that banks have in their own branches.

Also, as U.S. banks and credit unions continue the transition to EMV or "chip" technology for bank cards, experts warn that self-serve ATMs and gas pumps are becoming more of a target for thieves. That's because criminals are rushing to make a buck while magnetic strip cards, seen as less secure, are still being accepted by these channels.

According to credit scoring agency FICO, from 2014 to 2015, compromised card data at non-bank ATMs rose over 500 percent. In a recent report about ATM skimming, the agency said criminal activity was highest in places like convenience stores.

So what should you do to protect yourself and your customers? Taking a multi-layered approach to security is best. ▶

1. Regularly inspect your ATMs

Make sure you're regularly inspecting all off-premises ATMs. Are they functioning properly? Do they appear to have been tampered with? Are they located in well lit, high traffic areas? It sounds simple, but taking the time to ensure all your remote ATMs are inspected in person can help prevent issues and detect suspicious activity sooner.

2. Deploy high-quality video surveillance

Ensure you have adequate video surveillance in place. This means surveillance cameras capturing the ATM machine and its surroundings, but also ATM cameras inside the machines that capture clear views of patrons' faces.

I recommend using an ATM camera with High Dynamic Range (HDR), a feature that merges multiple exposures into one image with the best balance of lighting possible. This is critical in ATM settings, where patrons' faces are often backlit with bright sunlight from behind.

Proper video surveillance not only helps address crimes like skimming and card trapping, but it can also help deter other types of fraud, such as the depositing of empty envelopes or counterfeit checks.

3. Use integrated video, transaction data and analytics

Regularly monitoring transaction data for suspicious activity is essential to thwarting ATM fraud like skimming or "cash-outs," where thieves drain the ATM of large amounts of cash through nefarious means.

By deploying a video surveillance solution that's integrated with ATM data and intelligent analytics, you can very quickly detect potentially fraudulent transactions, or even just suspicious activity, like loitering around machines.

Integrated video solutions allow you to very rapidly sort through all your transactions and find irregular activity, such as the same person making multiple transactions with different cards, or someone standing in front of an ATM for a period of time without making a transaction (a possible sign of someone installing a skimming device).

By configuring alerts, the system can automatically notify you when it detects this type of activity. ▼

Daniel Caggiula is
March Networks Market Product
Solutions Manager, Banking

Luxury Hospitality Group Selects Proven Video Solution

ONE OF ITALY'S GRANDEST HOTELS has upgraded to a state-of-the-art March Networks video surveillance system. Château Monfort, a five-star hotel located in the center of Milan, is part of Italy's luxury Planetaria Hotels chain. Planetaria Group operates four and five-star hotels in some of the country's most popular destinations.

Improving the performance and efficiency of video surveillance at Château Monfort was the primary reason the Planetaria Group turned to March Networks.

"Our video surveillance solution had to provide maximum safety for our guests, and deter any illegal activity," said Hotel Manager Stefano Risolé. "We were particularly concerned about security for some of the large events we host, where visitor numbers increase and the risk of theft is much higher.

"The reception desk is always open and our staff are always present and available, but we wanted the added assurance of a real-time monitoring and security system," noted Risolé. ▶

Château Monfort, a five-star hotel located in the center of Milan, is part of Italy's luxury Planetaria Hotels chain.

Château Monfort wanted to upgrade its older video surveillance system with a solution that enabled comprehensive monitoring of its premises 24/7. It was also important to have access to technical support in order to promptly resolve any performance issues.

The Planetaria Group knew it could count on March Networks, having already deployed the company's video technology at the Hotel Pulitzer, its five-star property in Rome.

A world leader in the business-to-business (B2B) security sector, with many years of experience in banking, retail and hospitality, March Networks was able to demonstrate how its intelligent video solution could meet the hotel's strategic challenges.

After evaluating various options, Château Monfort selected the March Networks Command Enterprise video management solution with server-based recording.

"It is essential for a prestigious hotel like ours to have the highest-quality video security system that is proven to be both reliable and easy to use," said Risolé. "Our choice was influenced by the need to protect the hotel's reputation. We needed a system that would be fool-proof. Human error can lead to mistakes, and we want to guard against this at all costs."

The March Networks system allows Château Monfort to investigate reported incidents of missing or damaged property while making sure that privacy is always respected. Authorized staff have access to live and recorded video as required, and can monitor the hotel remotely from any networked location. Equally important, the system is scalable, ensuring that Château Monfort will be able to take advantage of technology advances in the future.

"March Networks has expertise in the design and supply of products and solutions to meet the most demanding security requirements," said Paolo Romanò, March Networks Regional Sales Manager for Southern Europe. "Our focus on innovation and the development of cutting-edge products supported by great service has proven to be a winning formula and has been fundamental to our growth and customer satisfaction."

Installed by March Networks certified partner Hitech Madness in July 2015, Château Monfort's video surveillance solution includes 40 March Networks IP cameras, with models such as the MegaPX WDR MiniDome Z, and three Edge 4e Encoders to digitize video captured from existing analog cameras. It also includes a Dell server pre-configured with Command Recording Server software and internal RAID5 storage to ensure redundant data protection, even in the event of hard disk failure.

The solution is set to automatically overwrite recorded video after two days to comply with Italian privacy legislation.

Security staff and the hotel's director can access live and recorded video captured by surveillance cameras installed on every floor of the hotel via March Networks Command client software.

Château Monfort uses the Command client to display the various interface screens for configuration and video review. The software is very intuitive, with menus organized in a logical way to help less technical users configure the system in a few steps. User privileges and more complex camera and alarm configurations are also easy to set up using rules and conditions.

> "Using our March Networks video, we were recently able to identify the cause of damage to a valuable, ornamental statue located in one of our public areas."
>
> — Stefano Risolé, Manager, Château Montfort

System users are able to quickly search for recorded video by scanning thumbnail images and export video evidence together with explanatory notes for follow-up by law enforcement.

"Château Monfort has used March Networks products from the beginning, following specifications drawn up by the main contractor," said Gioele Colombi of Hitech Madness. "I have been very satisfied with the quality of the solutions and the excellent price performance ratio.

"Three years after the hotel opening, and with various upgrades since, the technical support provided by March Networks remains flawless. Technical and marketing support are always available and very professional. In the security sector, issues can occur, but with the approach taken by March Networks, resolutions are easy to find."

Hotel manager Stefano Risolé said the video evidence captured by the system has proven extremely useful on more than one occasion.

"Using our March Networks video, we were recently able to identify the cause of damage to a valuable, ornamental statue located in one of our public areas. More than that, the police have used the recorded video to investigate a theft that occurred in front of the hotel entrance."

Thanks to March Networks and Hitech Madness, Hotel Château Monfort is able to rely on a stable, scalable and high-quality video solution that provides comprehensive surveillance throughout the property. The image quality and ability to access the system remotely allow staff to constantly monitor the premises and guard against critical situations. ▼

Ontario Hospital Upgrades to State-of-the-Art Monitoring Centre

VIDEO SURVEILLANCE KEEPS PATIENTS, VISITORS AND STAFF SAFE

HAMILTON HEALTH SCIENCES, a March Networks customer since 2004, is the second largest healthcare organization in Ontario with seven hospitals and 11,000 employees serving 2.3 million residents in Hamilton and the surrounding area.

Keeping patients, staff and visitors safe, and protecting the organization's physical assets in so many locations is a demanding job, but a monitoring centre with a video wall and March Networks decode station software has been a game changer.
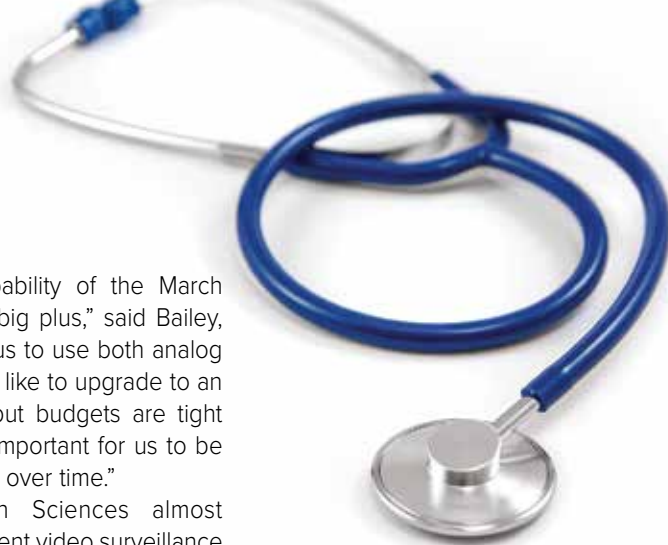
For years, security officers in each hospital or clinic monitored video locally on desktop computers. Now, video is monitored centrally in a purpose-built facility with three, 60-inch overhead monitors, a smartboard and four workstations for conducting investigations.

Housed in the brand new Ron Joyce Children's Healthcare Centre, the monitoring centre operates 24/7 with video feeds from surveillance cameras in a dozen or more locations across the healthcare organization's footprint.

"Security staff in their individual locations still have access to local video, but the central monitoring facility serves as the security department's nerve centre and gives us an extra set of eyes that we didn't have before," said security manager Derek Bailey.

"If there's an issue with someone acting out or posing a threat to staff, the call goes to the central monitoring facility. They'll dispatch officers on site and use live camera views to give them a heads up about what to expect. If the person causing a disturbance leaves the scene prior to the arrival of security, we can track them throughout the facility with our March Networks system and relay that information to our officers."

Hamilton Health Sciences recently transitioned to March Networks Command Enterprise video management software, which ties together one Command Enterprise server, 30 previous generation and new 8000 Series Hybrid NVRs and approximately 500 cameras. ▶

"The hybrid capability of the March Networks NVRs is a big plus," said Bailey, "because they allow us to use both analog and IP cameras. We'd like to upgrade to an all-IP system today, but budgets are tight in healthcare, so it's important for us to be able to transition to IP over time."

Hamilton Health Sciences almost ended up with a different video surveillance system at the new Ron Joyce Children's Healthcare Centre when consulting engineers specified a competitor's product, but Bailey and co-manager Darren Hayes were able to make a business case in favour of enterprise-wide uniformity with March Networks.

"We've always liked the fact that the March Networks system is backward compatible and very user friendly," said Bailey. "There isn't a huge learning curve for someone who is new to the system or someone who isn't particularly computer savvy. You can sit down in front of a March Networks system and pick it up very quickly. The graphical user interface is straightforward.

"I also like how we were able to migrate from the older Visual Intelligence video management system to Command Enterprise, with live monitoring, evidence manager and investigator functionality all accessible on one screen."

The March Networks Command software provides Bailey with extensive user management capabilities as well, allowing him to administer user credentials and audit what people are doing on the system.

"We're a big department with 80 security staff and other users at different levels throughout the organization, so it's important for us to manage the number of cameras people are able to access.

"For example, we have a volunteer association that runs all of our cafeterias," said Bailey. "We give them access to certain cameras in their area for process monitoring. They can see how busy they are and adjust staffing levels if necessary. The system allows us to limit their access to live video only."

Hamilton Health Sciences relies primarily on existing third-party surveillance cameras, but uses March Networks PTZ cameras in its parking garages. The cameras are used to capture video in main lobbies, hallways, clinics, registration desks and Emergency Department waiting areas.
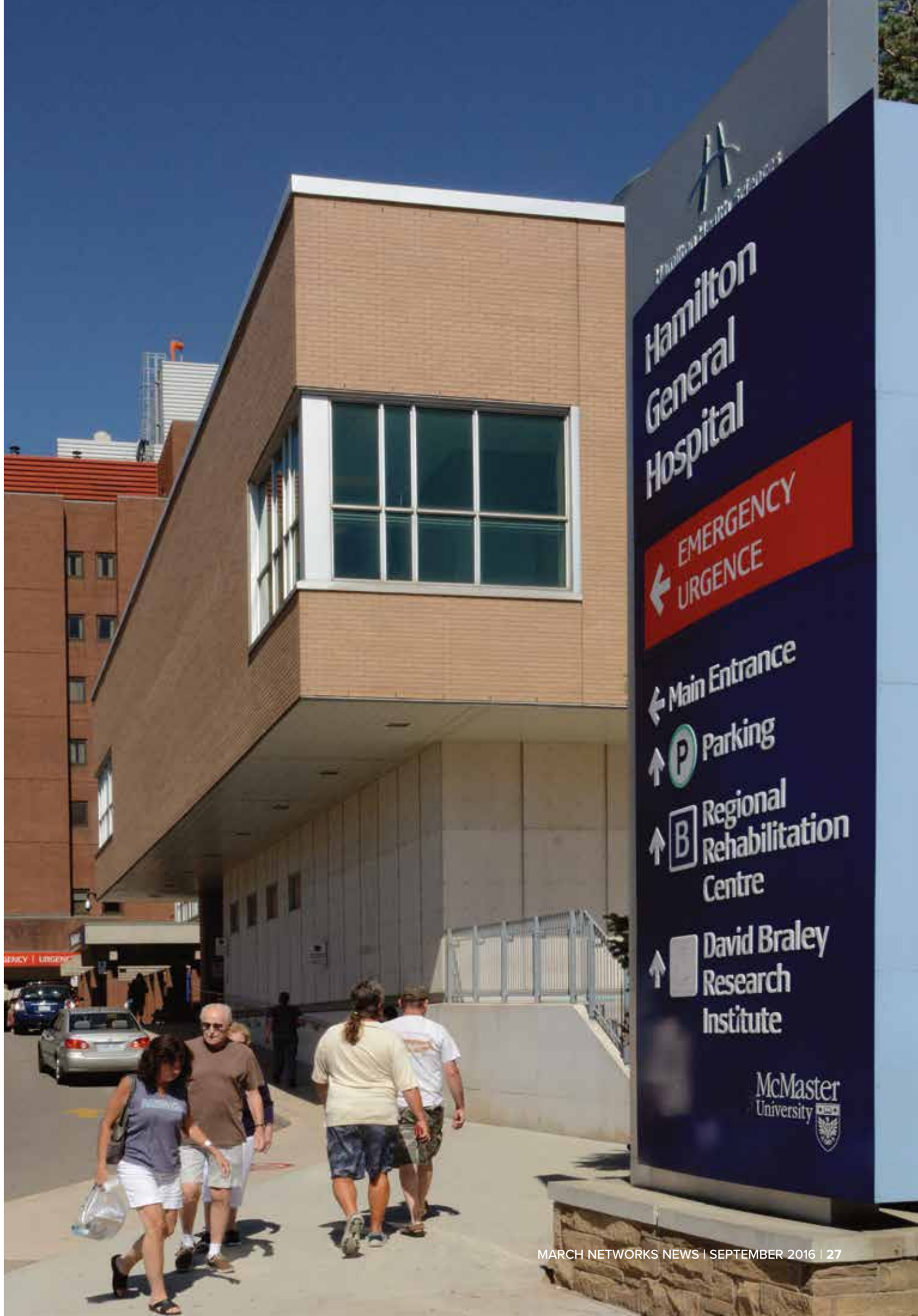
The system helps the healthcare organization manage the usual risks, including slip and falls, abandoned bags, threats to staff and thefts.

For example, shortly after the installation of the new video surveillance system at the Ron Joyce Children's Healthcare Centre, a Nintendo gaming system disappeared.

"We reviewed our recorded video and were able to see a member of the cleaning staff walking out with the item," said Bailey. "We brought the employee in for questioning and told him we knew he did it. He denied it at first, but confessed when we showed him the video. He told us he took the gaming system to a pawn shop, so we persuaded him to buy it back and return it, then terminated his employment."

Hamilton Health Sciences relies on Stokoe Communications, a March Networks certified partner in Hamilton, for service and support.

"We use them as our first tier support for all of our cameras and NVRs," said Bailey. "They're very responsive and great to deal with. We also contact March Networks tech support from time to time. They're a great bunch of people. I have nothing but great things to say about the level of service we get." ▼

"We've always liked the fact that the March Networks system is backward compatible and very user friendly. There isn't a huge learning curve for someone who is new to the system or someone who isn't particularly computer savvy."

— **Derek Bailey**
Security Manager,
Hamilton Health Sciences

Straight A's for Reliability

SCOTT MCCABE HAS SEEN TREMENDOUS CHANGES in video surveillance technology during the 20 years he has served as network manager at Sauk Rapids-Rice Public Schools in Sauk Rapids, Minnesota.

Years ago, when a camera at a school went out of focus, he'd have to drive to the school, get up on a ladder and physically adjust the lens. Today, with March Networks' Command Enterprise video management software and IP cameras, he can refocus a lens without getting up from his desk.
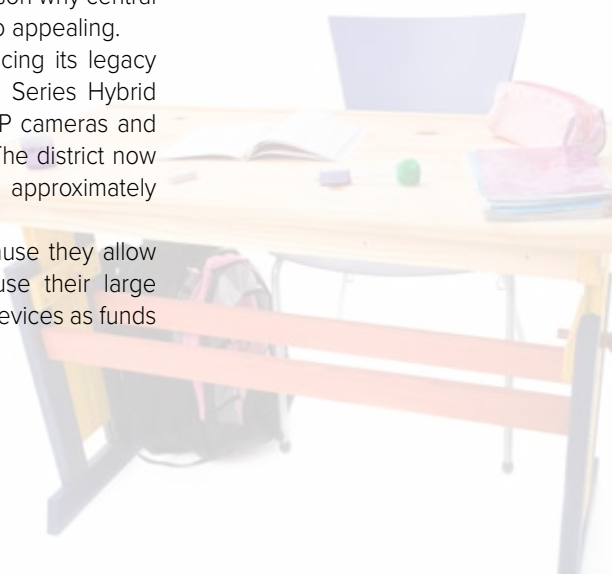
Sauk Rapids-Rice Public Schools was an early adopter of video surveillance, but McCabe had an issue with the first system the school district acquired when he discovered that he had to ship a recorder back to the manufacturer every time a hard drive failed.

"Going without video surveillance in a school for the seven to 10 days it would take to get the recorder back was unacceptable," said McCabe. "That was the main reason we switched to March Networks 10 years ago. With March Networks, I can replace a hard drive myself while the recorder is installed and have it up and running again in no time."

Sauk Rapids is located on the east bank of the Mississippi River, 68 miles northwest of Minneapolis. The school district serves approximately 4,000 students in the city and surrounding communities with one high school, one middle school, three elementary schools and one early childhood center. Its most distant school, Rice Elementary, is 14 miles north of the city — another reason why central management of the video surveillance system was so appealing.

Two years ago, the school district began replacing its legacy March Networks video recorders with newer 8000 Series Hybrid Network Video Recorders (NVRs), March Networks IP cameras and Command Enterprise video management software. The district now has 15 recorders, including seven 8516 NVRs, and approximately 240 analog and IP cameras.

The 16-channel hybrid recorders are ideal because they allow Sauk Rapids-Rice Public Schools to continue to use their large installed base of analog cameras and upgrade to IP devices as funds become available.

> "It helps a lot with parents when they say, 'My kid wouldn't do that.' We can bring them in and show them the video. We also supply video to our local police and for use in court."
>
> — **Scott McCabe**, Network Manager, Sauk Rapids-Rice Public Schools

"The analog cameras get the job done, but they're not as high-quality as I would like," said McCabe. "We'll eventually replace them with IP cameras, but it will take a few years."

McCabe has put a priority on installing March Networks IP cameras with infrared capability around the periphery of the school buildings to cover parking lots, the high school football field and other play areas.

"The IR cameras are very cool," said McCabe. "You can see a lot better at night."

Also high on his priority list was the installation of a March Networks MegaPX 360 Indoor Dome to capture an unobstructed 360-degree panorama of the lunchroom in the school district's middle school.

Unlike the pan-tilt-zoom (PTZ) cameras it replaced, the 360 Indoor Dome captures video from every corner of the lunchroom, eliminating blind spots and reducing the need to deploy multiple cameras.

"The other problem we had was that some of our staff would sometimes take control of a PTZ camera to focus on a table in the lunchroom and then forget to return it to the pre-set tour," said McCabe. "With the March Networks 360 dome, we don't have that problem anymore." ▶

The 5 megapixel 360 Indoor Dome camera features digital PTZ functionality with de-warping in the Command Client software, which allows users to view high-quality video from multiple angles at the same time.

Until a few years ago, McCabe was the primary user of the system. When video evidence was required, everyone turned to him. Now, with the user-friendly Command Client software installed, principals, assistant principals, authorized building maintenance staff, the school district's liaison officer and even school secretaries are pulling up video from their desktops.

The system helps staff manage the usual risks in a school environment, including vandalism, fights, trip-and-falls, thefts and fender benders in the parking lots.

"It helps a lot with parents when they say, 'My kid wouldn't do that.' We can bring them in and show them the video. We also supply video to our local police and for use in court."

In the elementary schools, video surveillance also plays an important role in documenting the arrival and departure of children.

"In divorce situations, there's often a failure to communicate," said McCabe. "One parent doesn't know that the other parent is picking up a child. We have cameras on all the doors, so we can go back and pull the video if needed."

In the event of a more serious incident, officers with the Sauk Rapids Police Department can pinpoint the location of an armed intruder, follow the individual's progress and safely direct first responders by pulling up video from a workstation in any of the schools, or from the police department itself.

Aside from central management capability and intuitive user software, McCabe gives straight A's for March Networks' reliability.

"I haven't had any problems with my March Networks recorders and cameras. We'll lose a hard drive occasionally, but that's not March Networks' fault. If a hard drive does go bad, the Command software sends me an alert and I just pop another one in."

If additional support is required, March Networks certified partner Marco Technologies, is just across the river in St. Cloud — less than 10 miles away. "They've been our March Networks supplier for years and they do a great job," said McCabe.

If Marco technicians are called on to service an 8000 Series Hybrid NVR, they can scan a QR code on the front of the recorder with the free March Networks' GURU Smartphone App to speed troubleshooting, confirm warranty status, execute a Return Material Authorization request, transmit installation audit and security reports, and even watch a tutorial on how to perform a repair.

MARCO TECHNOLOGIES

Marco Technologies is a March Networks certified partner and technology services company specializing in delivering voice, data and video services to a broad range of customers. Established in 1973 and based in St. Cloud, Minnesota, Marco is one of the top five technology providers in the U.S. with core offices in Minnesota, Wisconsin, North and South Dakota, Iowa, Illinois, Nebraska and Missouri. Sales inquiries can be directed to Jeremy Kirt, 320.259.3024, 800.892.8548, jeremyk@marconet.com

Together with the unique March Networks docking station architecture that makes it easy to service a recorder while leaving all the cabling in place, the GURU app makes servicing a breeze and reduces the school district's cost of ownership

"One of the things I like about March Networks is their focus on innovation and out of the box thinking," said McCabe. "With their 8000 Series Hybrid recorders, their extensive lineup of IP cameras and Command Enterprise software, we've come a long way from our earliest adoption of video surveillance." ▼

AN ESTIMATED 75% OF SCHOOLS IN THE UNITED STATES USED SECURITY CAMERAS IN 2013/2014 COMPARED WITH 61% IN 2009/2010 AND JUST 19% IN 1999/2000.

— National Center for Education Statistics

Understanding the LEDs on Your March Networks NVR

QUESTION

We recently completed an installation of March Networks 8000 Series NVRs and would like more information about how we can use the LED lights on the front panel of the recorders to help diagnose recorder issues. Can you help?

ANSWER

As a video surveillance technician or installer, you've probably had the unpleasant experience of trying to troubleshoot an issue on a device where, despite your best efforts, you just couldn't determine what was wrong. It's stressful for both you and your customer, since every minute counts when it comes to malfunctioning cameras or recorders.

That's why March Networks' Hybrid Network Video Recorders (NVRs) have front panel LED lights to help technicians diagnose recorder issues. Whether it's a disconnected camera or a hard drive that needs replacing, the front panel LED lights will be the first sign that something requires attention.

By understanding what the LEDs mean, you'll save time troubleshooting issues onsite, and also ensure your customers' recorders remain in optimal health.

Here's a quick primer on how to read the LEDs on your March Networks 8000 Series NVR:

THE BASICS

Looking at your recorder, you'll see it has four LEDs on the front panel.

The first is the Unit LED, which indicates the status of the recorder's hardware.

The next is the Operation LED, which indicates the status of the recorder's software and operating system, and the general functioning of the NVR.

The third light is the Recording LED, which shows if the unit is properly recording.

The last is the Export LED, which indicates the status of an attempt to export video to an external media device like a USB. The Export LED is usually off if you're not waiting to export, and there's no USB or external hard drive connected to the recorder.

GREEN MEANS GOOD

The color of each LED and whether the light is solid, flashing, or off provides you with information about the recorder.

Properly functioning NVRs should, for the most part, display a solid green light on the Unit, Operation and Recording LEDs.

A solid or flashing blue light on the Unit, Operation or Export LED does not necessarily indicate a problem, but rather that the recorder is loading, booting up or down, or detecting something. Let's take a closer look at what each LED means.

UNIT LED

As mentioned, a solid green Unit LED means the unit's software and hardware are operating correctly. A flashing green light is a sign that the recorder has lost power (or someone has intentionally removed the power) and it's preparing to shut down.

A solid blue Unit LED light means the operating system is loaded, but the unit's software application is still loading. A flashing blue light means the unit is booting up after losing power or following a reboot.

Blue Unit LEDs should ultimately turn green. If the Unit LED remains blue, it could be a sign that a hard drive is defective, or something else is wrong. Try rebooting the recorder.

A red Unit LED means a critical error has occurred and the NVR had to reboot. In this case, a technician should examine the hardware. Certified partners can try using the LED filter tool in our GURU Smartphone App to troubleshoot the issue.

OPERATION LED

A solid green Operation LED means the unit is powered and running properly. A flashing green LED means the operating system is available, but the software is still loading.

A blue light means a non-critical, system level problem has occurred, such as a camera disconnection. Log-in to the recorder's client software to check that your cameras are connected, or acknowledge any alerts, and again, use GURU to help troubleshoot the issue.

Not acknowledging an alert results in the Operation LED staying blue. This is certain to cause confusion, so it's best to regularly check your alerts, deal with any outstanding issues and then acknowledge the alert using the administrative tools.

If the Operation LED turns red, it's a sign that a critical error has occurred. This could be a failing hard drive, a disconnected encoder or software that's failed to start after a reboot. Again, login to your client software to review your alerts and troubleshoot with GURU.

RECORDING LED

A green Recording LED means the NVR is actively recording or configured to record.

A red LED means a system-level problem has occurred that is affecting recording or will affect future recording. This could be a hard drive issue, but again, login to your client software to learn more.

If the Recording LED light is off entirely, it means your system is starting up, or is not configured to record.

EXPORT LED

As mentioned, the Export LED light will remain off until such time as you are exporting video. Once you have inserted an external media device such as a USB, you should see a solid blue light, which means the recorder has detected the device. If the video is exporting properly, the light will begin to flash green to show the media transfer is in progress. You should see a solid green light once the transfer is complete.

A flashing blue light could be a sign of several things, including:
- The recorder is still preparing the media for export
- No external device has been detected, but media is waiting to be exported
- The external media device is full and a new one is needed

If you see a red Export LED, it means your media export has failed and you should try a second time. Again, login to your client software to retrieve information on errors. A failed export could occur because of file size (your USB is full or your file size is too large for the device), a bad hard drive, or you removed the USB before it finished transferring the files. You can explore possible faults with GURU, which includes more detailed information on each LED, as well as helpful tips and troubleshooting advice.

Now that you know what your NVR's LEDs are telling you, you'll be better equipped to address issues like hard drive failures, or camera disconnections, which are simple to fix, but can create larger headaches if not addressed in a timely manner.

Keep this Tech Tip for future reference, or consult the user guide of your 8000 Series Hybrid NVR for further information. ▼

Who's New

DIVANI APARICIO

March Networks welcomes Divani Aparicio as Regional Sales Manager for Mexico. Prior to joining March Networks, Divani served as an account manager for Robert Bosch Inc.'s Mexico operations and as a sales engineer with Anixter Inc. He is a graduate of the Mechatronics Engineering program at the Benemérita Universidad Autonoma de Puebla and has diplomas in Information Security and Product Management from the Polytechnic Universidad del Valle de México and Tecnologico de Monterrey, respectively. Divani has a passion for robotics and enjoys swimming and films in his free time.

JOSEPH HIRTH

Joseph Hirth is March Networks' new Regional Sales Manager for Transit in the U.S. Southeastern Gulf states, including Tennessee and Arkansas. He has more than 10 years of experience in the transportation industry, most recently as a senior sales consultant with RouteMatch Software, where he played a key role in enterprise transit software and hardware deployments providing real-time route, scheduling, and passenger information systems for transit authorities. Joseph has a Business Administration and Economics degree from Georgia Southern University and enjoys spending time with his family, playing golf and water sports.

AARON JOHNSON

Aaron Johnson joins the March Networks sales team as Regional Account Manager for the U.S. West Region, encompassing California, Nevada, Arizona and New Mexico. Aaron has more than 22 years of sales experience and 10 years of experience in video surveillance — most recently with California-based video surveillance vendor DTT, where he served as an award-winning senior sales manager and national account manager. Based in Los Angeles, he enjoys golf, RV camping and wine tasting.
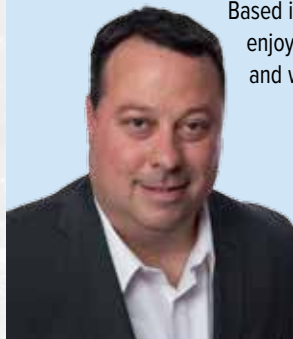
BRANDON KENNEY

Brandon Kenney joins March Networks as Regional Account Manager for the Rockies. He has several years of experience in sales and business development — most recently with the Westcon Group of Louisville, Colorado, where he served as inside business development manager for Check Point Software Technologies' cybersecurity products. A graduate of the University of Colorado with a Bachelor's degree in Psychology and Sociology, Brandon is based in Broomfield, Colorado. In his spare time, he enjoys a variety of indoor and outdoor sports, including hiking in the mountains with his dog Rado.
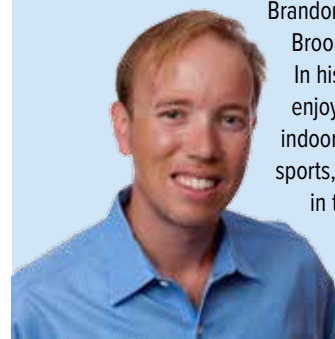
KELLY KING

March Networks welcomes Kelly King as Regional Account Manager for the U.S. Southeast Region, which includes Texas, Oklahoma, Arkansas and Louisiana. Prior to joining March Networks, Kelly served as an inside sales representative with security systems vendor Avigilon, She is based in Dallas, has a Bachelor of Arts degree in Theater with a minor in Marketing from the University of North Texas, and enjoys traveling, visiting museums, cooking, TV and playing sports.

KEVIN RABINOWITZ

Kevin Rabinowitz joins March Networks' sales team as a Regional Account Manager serving the video surveillance needs of convenience store chains and regional banks in the Eastern U.S. With his former employer, AT&T, Kevin was a recipient of an Outstanding Customer Service Award for "always willing to go the extra mile." He has a Bachelor of Arts degree in Broadcast Communication from Lynn University in Boca Raton, Florida, plays golf and softball and enjoys volunteering with a number of charitable organizations in Atlanta, Georgia, where he lives.
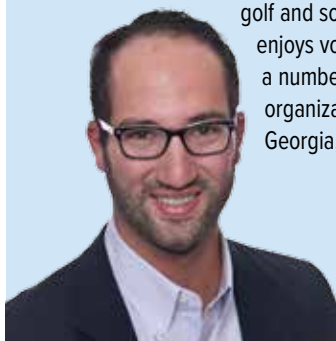
STEVE ROBERTS

March Networks welcomes Steve Roberts as Regional Sales Manager for Western Canada. Prior to joining March Networks, he served as a security solutions representative with Chubb Edwards of Burnaby, British Columbia, selling video surveillance, access control and intrusion alarm systems. Steve attended Jackson State University in Jackson, Mississippi, on a full golf scholarship and earned a Bachelor of Business Administration degree with a major in Marketing. An avid golfer, he is a member of the Canadian Professional Golf Association with a designation as a Class A professional.

WILLIAM SMALL

William Small is March Networks' new Regional Account Manager for the Mid-Atlantic Region, encompassing the District of Columbia, Virginia, Maryland, Delaware, West Virginia and the Carolinas. He has close to 20 years of experience in the security industry, serving in a number of roles with ADT/Tyco in the U.S. Southeast. A U.S. Navy veteran, he attended Wesleyan College in Rocky Mount, North Carolina. William is based in Wake Forest, North Carolina, and enjoys fishing, golf and spending time on the beach with his wife and daughters.

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