

Tracking Trends

Taking the time to reflect on where our industry is at — and what is likely to happen in the future — is important for all organizations, including March Networks®. While much of this happens daily in the regular course of business, our company also makes a point of stepping back each year to assess our overall performance, finalize our strategic plans for the year to come, and communicate our key objectives to all employees.

Understanding market trends, and their potential to influence or disrupt the industry, is critical to that planning. Below are just some of our predictions for trends to watch for the rest of this year and into 2020.

Finding the potential in analysis technologies

No one will be surprised to see artificial intelligence (A.I.), computer vision and similar content analytics listed as a major trend shaping the physical security industry. Solutions employing A.I. (performing a task that would normally require human intelligence) and / or computer vision (extracting, analyzing and understanding information extracted from digital images or video) are everywhere. And most would agree our industry has only scratched the surface in terms of their potential.

While many companies are focused on the efficacy of these analysis technologies, there's been less discussion about how to best leverage them in real-world applications. Ensuring the accuracy of these products is certainly a must, as no one wants to repeat the cycle we saw with security analytics a decade ago, when their promise initially fell far short of expectations.

With A.I., computer vision and similar content analytics, it will be interesting to watch the companies that move beyond proving viability for security purposes to deliver true business applications to the market. Right now, we're seeing organizations working hard to develop content analytics that perform in an effective, efficient and accurate manner. Many of these organizations are true A.I. and/or computer vision companies, and they are spending a lot of money developing very advanced algorithms. However there's still work to be done identifying the real benefit of these analytics for customers as part of comprehensive business intelligence solutions. Until that happens, and customers understand how those benefits apply to them directly, adoption will continue to be lower than all the marketing hype would suggest.

Anticipating cloud uptake

Another trend that will continue this year is the push toward centralized cloud storage, particularly in enterprise organizations. Expect to see more hybrid solutions on offer, incorporating both on-premise storage and cloud storage for the retention of critical data for longer periods.

Despite the buzz around cloud solutions the last few years, uptake has not been significant to date for several reasons. A majority of cloud solutions in the physical security space are pure cloud solutions as opposed to hybrid solutions, and many organizations have yet to embrace the costs and understand the benefits.

Most corporations considering a cloud solution today are focused on leveraging cloud storage as a backup to on-premise storage in the case of a hard drive failure, or for archiving video for an extended period. But that's only the starting point for the power of centralized data. The real benefits will be clear when organizations start applying cloud-based analytics to enhance business intelligence and improve operations including inventory management, marketing and



customer service. Expect this to be a growing theme this year and into 2020.

Access to affordable bandwidth will also help with cloud adoption. While bandwidth remains an issue for some organizations, it's becoming less of a barrier as enterprise customers continue to update their networks and capacity.

The influence of GDPR

Data protection will remain another key focus, especially following Europe's General Data Protection Regulation (GDPR), which came into effect on May 25, 2018.

The GDPR has impacted not only European organizations but most organizations doing business in Europe. Whether you're a bank based in Dubai or a retailer headquartered in the U.S., more than likely you're touching European soil at some point, and therefore you must follow GDPR legislation. It's now clear that the regulation is casting a much wider net than some anticipated. Expect to see a stream of announcements from manufacturers through this year as they continue to enhance and offer new features to customers to support GDPR compliance, or play catch up in some instances.

In addition, we will certainly see other jurisdictions issuing their own versions of data protection legislation. California, for example, passed a similar Consumer Privacy Act in June 2018. Often considered a bellwether state, California's Act likely signals the start of more data privacy legislation to come across the U.S.

New software entrants

A final industry shift to track is the entry of new companies in the physical security space. As I noted earlier, there are a number of startup companies focused on A.I., computer vision and similar analytics appearing in our market. While the majority of them likely won't make it as standalone companies, many of them will be acquired by larger organizations looking to



enter the video-based business intelligence space and/or accelerate market penetration. Because data analytics are becoming such a significant component of today's 'big data' solutions, watch for a number of large, enterprise software companies to start focusing on the security industry. This shift will create a huge disruption in our industry and cause further consolidation.

These are the trends we are tracking, following what I would describe as a pivotal past 12 months. We are experiencing a moment ripe with opportunity for companies with a clear vision and the ability to correctly anticipate and execute on future market.

Peter Strom,

President and CEO, March Networks

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Safety was the main reason WCCO Belting initially acquired a March Networks system, but the custom rubber products manufacturer soon realized it could use the technology for other, equally important priorities.





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Proven reliability and positive partnerships tip the scales in March Networks' favor at Interra Credit Union.



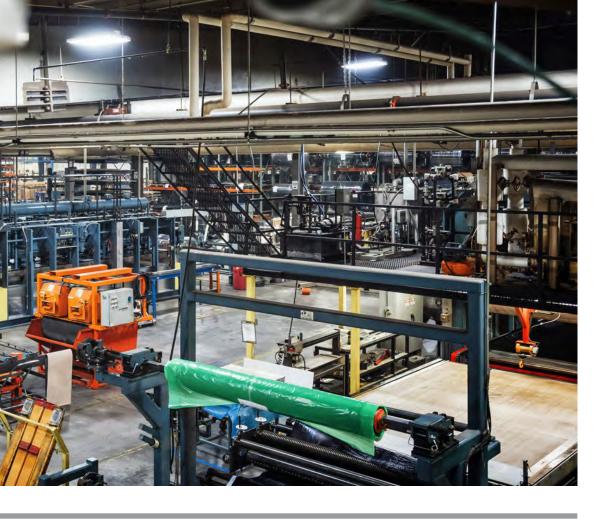
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New hosted platform provides unmatched video network visibility, health monitoring, SLA performance management and more.



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One of Qatar's top banks deploys our business intelligence software and integrated analytics to improve customer service and operations.



"The video
quality with the
IP cameras is
unbelievable.
You can see
the difference
between the
analog and IP
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Video integrated with analytics, RFID and point-of-sale data is helping cannabis operators run their business more successfully.

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U.S. Manufacturer Uses Video to Boost Safety and Productivity

Two of the most important priorities in a manufacturing environment are safety and productivity. Failure to follow safe work practices around machinery on a factory floor can result in serious injury, while poor productivity can erode profits and ultimately threaten the viability of the business.

T WCCO BELTING, a Wahpeton, North Dakotabased manufacturer of custom rubber products for agriculture and light-industrial conveyor equipment, a March Networks video surveillance solution plays a key role in enhancing both safety and productivity.

"Recently, for example, we had a minor safety incident on one of our machines that was captured by the March Networks system," said Michael Marsh, Senior Technology Administrator. "The video not only allowed us to determine the cause of the incident, it also helped us create a proprietary piece of equipment to ensure that the accident would never happen again."

Safety was the main reason WCCO Belting acquired a March Networks system in 2015, but the company soon discovered it could use the technology for other equally important priorities. >





"We found that we could use the video solution for time studies, to be more effective and efficient," said Marsh. WCCO engineers use the video to monitor work processes and then tweak them to speed production, while ensuring optimum quality.

The company selected Marco Technologies as its security system integrator in 2015, and acquired March Networks 8000 Series Hybrid NVRs shortly thereafter. Two years later, when WCCO Belting decided to also equip a second production facility in Arlington, Texas, it upgraded to a March Networks Command™ Recording Software (CRS) solution in North Dakota and moved the 8000 Series Hybrid NVRs to its Texas facility.

At the same time, the company deployed March Networks Command Enterprise video management software to tie all the video from its geographically-dispersed facilities together, said Marsh. The Command Enterprise Software enables WCCO Belting "to oversee everything and manage the entire system from a single point of entry."

In addition, approximately 50 March Networks IP cameras — including indoor domes with wide dynamic range and outdoor IR bullet cameras — provide crystal clear video of activity on the company's factory floors, loading docks and parking lots.





"We had a minor safety incident on one of our machines that was captured by the March Networks system. The video not only allowed us to determine the cause of the incident, it also helped us create a proprietary piece of equipment to ensure that the accident would never happen again."

— Michael Marsh
 Senior Technology Administrator, WCCO Belting

Marsh cites ease of use and outstanding support as the main reasons for selecting the video solution.

"The March Networks technology is easy to implement, easy to use and easy to navigate. Support has also been great. When we ran into some early issues, they responded quickly to help resolve the problem.

"More recently, when we decided to expand the system to include our second location, it was Marco that recommended the March Networks CRS solution and the redeployment of our NVRs to Texas. It was really plug and play. That was the winning piece for us. We didn't have to uproot a lot of the architecture already in place."

A system that was easy to rollout was important because WCCO Belting's IT department does the physical camera install themselves, while partnering with Marco Technologies for remote configuration.

"It's one of the reasons we like March Networks, because we're a hands-on IT department," explained Marsh. "We like to make sure we're always on top of things and that we understand the equipment we're working with. If we can't install it ourselves and need someone to come in and do it for us, it just creates future costs."

Aside from the IT department, which has administrative access to the system, authorized supervisors and managers at WCCO Belting are able to audit video for safety and security purposes. Temporary access is also provided to engineering staff for time studies.

Marsh and several supervisors also have access to video through March Networks' Command Mobile app on their smartphones. Available as a free download from the Apple Store and Google Play, Command Mobile runs on iPhones, iPads and Android devices.

Remote, after-hours access to video proved valuable during the previously mentioned safety incident, for example, "by allowing managers to pull up video from home and use it to make decisions quickly," said Marsh.

The video solution has also proven useful to local law enforcement, as some of the ME4 Bullet cameras covering the employee parking lot at the North Dakota facility also have a clear view of North 9th St., a busy artery in the town of 8,000.

"One day, I was called to the front desk and met by two police officers and three sheriffs," recalled Marsh. "They wanted to come to my office but didn't say why. I was never so nervous in my life. Once in my office, they explained that they wanted to see if we had any recorded video to help them solve a hit and run a block and a half down the road. We did, and the video resolution was so good that we were able to quickly track the offending vehicle.

"We've had two law enforcement visits since then, so now when they show up, I know I'm not in trouble," joked Marsh.

A family-owned business, WCCO Belting was founded in 1954 by Ed Shorma, a Korean War veteran who mortgaged the family car and borrowed \$1,500 to buy a shoe repair shop.

Propelled by Shorma's strong work ethic and talent for ingenuity, the business grew and evolved as a manufacturer of rubber belting solutions, leading to Shorma's recognition as Small Business Person of the Year by U.S. President Ronald Reagan in 1982.

WCCO Belting is currently led by president and CEO, Tom Shorma, Ed's son, and has 270 employees — 200 in North Dakota and 70 in Texas. The company's rubber product solutions are sought after worldwide, and exported to customers in more than 20 countries. The company won North Dakota's Exporter of the Year award in 2003, and in 2010 and 2016 it was the recipient of the Presidential "E" Award and "E-Star" award for its export promotion efforts. ◆



the challenge

WCCO Belting, a U.S. manufacturer of rubber belting solutions for agriculture and light-industrial conveyor equipment, originally required an enterprise solution to monitor and record video for safety and security purposes at its main manufacturing facility in Wahpeton, North Dakota, and later at a second plant in Arlington, Texas.

the solution

March Networks certified partner Marco Technologies recommended an upgrade to a March Networks Command Recording Software solution at WCCO Belting's North Dakota location and suggested redeploying the 8000 Series Hybrid NVRs to the company's Texas facility. At the same time, WCCO Belting also purchased new March Networks IP cameras to ensure high quality video capture.

the result

WCCO Belting staff are able to centrally manage the widely dispersed video solution and have an overview of factory floors, loading areas and parking lots in both North Dakota and Texas to ensure the safety of its employees. The company's engineers also use the system to perform time studies necessary for enhancing productivity and complying with the company's commitment to lean manufacturing.



Michael Marsh shows off the interior mechanics of one of WCCO Beltings' dome cameras from March Networks.

MARCO TECHNOLOGIES

Marco Technologies is one of the top five technology providers in the U.S., serving customers nationally with offices in Minnesota, Wisconsin, North Dakota, South Dakota, Iowa, Illinois, Nebraska, Michigan, Missouri and Pennsylvania. Marco Technologies helps organizations of all sizes make the most of their voice, data, video and print technology. For more information, visit <u>marconet.com</u>.



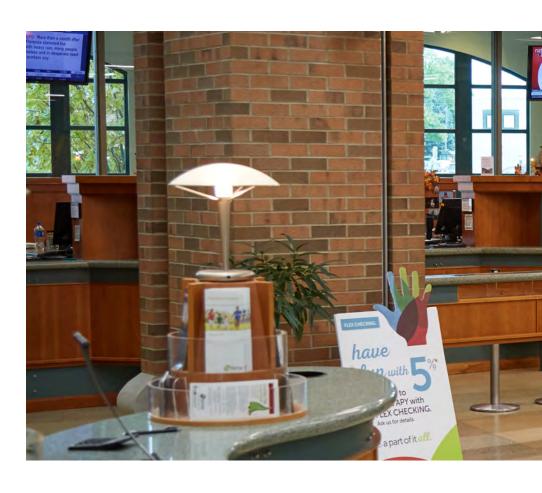


Credit Union Chooses Tried and True Video Solution

When Interra Credit Union decided it was time for a major upgrade of its video surveillance system last year, Joel Richard, Vice President of Retail Operations and Brook Germann, Assistant Vice President of Facilities and Loss Prevention, turned to their security systems integrator Convergint Technologies for options.

he credit union, based in Goshen, 140 miles north of Indianapolis, Indiana, had a legacy March Networks video surveillance system that was installed in 2006, as well as several third-party systems acquired through mergers with other area financial institutions. Very little was done to upgrade the system during the ensuing 11 years, but in 2017 the credit union's board and executive management team backed Richard and his team and their reinvestment in the system.

"We went through a budgeting process and spent a lot of time deciding what we needed," said Richard. "We knew we wanted to improve our surveillance coverage and camera quality. We also wanted to be on one unified system."



Interra Credit Union looked at competitive solutions, but ended up deciding to continue with March Networks.

"We asked Convergint Technologies to show us some options, but the positive experience we had with March Networks weighed heavily in its favor," said Germann, a retired law enforcement officer who joined the credit union in December 2017.

"Reliability was key for us. We used March Networks' 4000 Series recorders for more than a decade and had very few problems with them."

"We also liked the new technology we saw from March Networks," added Richard, "and we already had a good relationship with them and with Convergint Technologies."

Interra Credit Union operates 15 retail banking branches, a training center, a mortgage operations office, and remote ATMs in the local hospital and college training center — all of which are now equipped with state-of-the-art 8000 Series Hybrid NVRs and March Networks IP cameras. Command Enterprise video management software speeds configuration, firmware updates and device settings. The powerful software also transmits real-time health alerts to administrators and features a client interface designed to help users quickly zero in on video evidence.

The 8000 Series Hybrid NVRs incorporate an embedded Linux operating system customized to remove unnecessary background services and eliminate frequent system updates. The recorders support simultaneous low bit-rate recording for live video viewing and full resolution recording for investigation purposes. They also feature internal backup batteries that enable a systematic shutdown in the event of an unexpected loss of power.

In addition, the 8000 Series are available with March Networks'

innovative "dock and lock" design. which keeps all camera cables securely connected to the back of the unit for quick and easy installation and maintenance. To further speed service calls and optimize availability, technicians can scan a QR code on each recorder chassis with their March Networks GURU Smartphone App. The app enables them to initiate a Return Material Authorization (RMA), view product warranty information, review and change an IP address, diagnose a problem, run a configuration security audit, view video tutorials and more all using any smartphone or tablet.

As part of its upgrade process, Interra Credit Union seized the opportunity to transition to high-definition IP video, selecting March Networks ME4 Series IP cameras and integrated Oncam 360° cameras. The 360° cameras are installed at employee entrances, where they also provide coverage of >

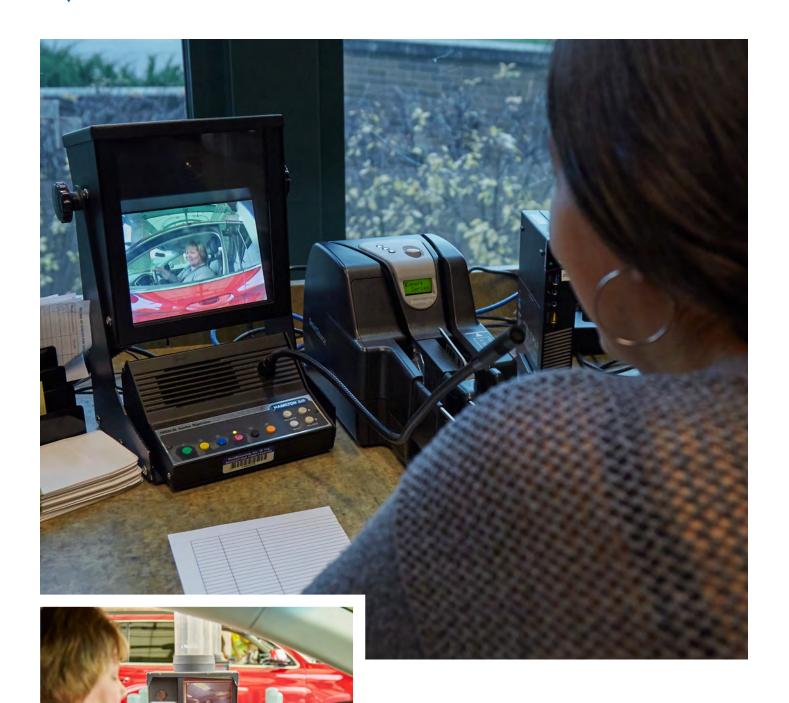


"The retail team uses the system to review video of cash handling practices, trip and fall incidents, and accidents in the credit union's parking lots."

Joel Richard
 VP of Retail Operations, Interra Credit Union



Joel Richard, VP of Retail Operations (left), and Brook Germann, AVP of Facilities and Loss Prevention



CONVERGINT TECHNOLOGIES

Convergint Technologies is a global, service-based systems integrator whose top priority is service in every way — service to customers, colleagues, and community. Delivering value through unparalleled customer service and operational excellence has been foundational at Convergint. The company's promise, and its number one objective, is to be its customers' best service provider. www.convergint.com

the credit union's drive-thrus, and in office locations where multiple cameras would otherwise be required.

"We didn't completely retire our analog cameras," noted Germann. "We repurposed them for use in some less sensitive locations, and installed IP cameras to cover our teller stations, lobbies and other areas where we needed higher resolution video."

The March Networks video surveillance system is used by the credit union's retail team, its fraud department and audit team, as well as by its senior executives.

"The retail team," said Richard, "uses the system to review video of cash handling practices, trip and fall incidents, and accidents in the credit union's parking lots. We also pay attention to lobby traffic to make sure we have enough staff to serve our members."

The intelligent video solution has already enabled Richard and his team to quickly identify and address improper cash handling issues and provide local law enforcement with the clear video evidence required to investigate cases of bank card fraud.

"Just recently," said Germann, "there was a case of someone using a stolen debit card at one of our ATMs. The same individual had also used the card at several other institutions locally. We pulled the video, supplied it to the police department. The person was arrested and is now facing fraud charges."

Aside from the far superior video quality made possible by the acquisition of IP cameras, the March Networks system upgrade provides Interra Credit Union with a health monitoring capability that extends to locations not previously equipped with March Networks technology.

"The March Networks health monitoring functionality has been huge for us," said Germann. "Before, managers were doing audits of the system once a month, but we could be down up to 30 days if we had a hard drive or a camera go down. Now, we're instantly notified via email and we can go into the system to get details on exactly what the issue is so we can address it immediately."

The credit union's decision to remain with March Networks was also based on the opportunity to grow its capabilities in the future by taking advantage of the company's Searchlight for Banking software. Searchlight integrates surveillance video with ATM/teller transaction data and optional analytics to provide a wide range of security, operational and business analysis reporting.

"Going forward, our goal is to be more selective about the video we look at and Searchlight does a great job of linking surveillance video with transaction data and flagging high risk transactions," said Richard. "Searchlight would also alert us to potential instances of ATM fraud such as skimming and cashout schemes, so it's definitely something we're looking at."

"After serving 22 years in law enforcement," said Germann, "I know how important a reliable video surveillance system is when it comes to solving crimes. With this upgrade, we're much better equipped to keep our employees and members safe while also protecting our assets from losses due to fraud."

the challenge

Interra Credit Union of Goshen, Indiana, had a video surveillance system consisting predominantly of March Networks legacy recorders and analog cameras installed in 2006, as well as several third-party video devices acquired through mergers with other financial institutions. After a decade in service, it was clearly time for an upgrade and the adoption of a more efficient and uniform enterprise-wide system.

the solution

After evaluating several vendor offerings in collaboration with systems integrator Convergint Technologies, Interra Credit Union decided to rollout a newgeneration March Networks intelligent video solution. The offering checked all of Interra's requirements and the credit union had always had a positive experience with its legacy March Networks systems, especially in terms of system reliability.

the result

March Networks 8000 Series Hybrid NVRs, IP cameras and Command Enterprise video management software provide Interra Credit Union with crystal clear images, enterprise-wide health monitoring and the opportunity to take advantage of advanced functionality, including March Networks Searchlight™ for Banking software, down the road.



Introducing March Networks

Insight

New hosted platform provides unmatched video network visibility, health monitoring, SLA performance management and more

very business needs a video surveillance solution that is easy to use, manage and maintain. Most importantly, it has to work reliably at all times, so critical video evidence is always available.

For businesses with a single location and a handful of surveillance cameras, maintaining the 'health' of your video network may not be too challenging. Managing a system installed in multiple locations, however, can be a much more daunting task. Most organizations hire dedicated

staff or a trusted systems integrator to stay on top of potential issues, such as failing hard drives or disconnected cameras, and to manage required software updates.

The resources needed to keep your video network running reliably and securely can add up quickly. And even with people dedicated to the effort, it's still almost impossible to keep track of things like the configuration and warranty status of every device, or to confirm that a needed repair happened — and actually solved the problem.

That's why we developed March Networks Insight, a new hosted platform that provides customers with unmatched video network visibility, asset control, optimum system health and service level agreement (SLA) performance management.

With Insight, organizations can leave the health and maintenance of their video solution in the hands of experienced staff working in March Networks' secure Network Operations Center (NOC). Customers enjoy complete, end-to-end support — from system monitoring, performance

optimization and issue diagnosis, to remote resolution where possible, eliminating costly truck rolls. When onsite service is required, our NOC team generates a service ticket for you or your systems integrator, along with valuable information on the likely issue, for faster, more efficient resolution.

and Scan

That complete, end-to-end support is just one of multiple benefits enabled by this industry-first, cloud-based service. Insight offers unique features and reporting capabilities that save customers time and costs, including:

- Easy, self-service access to the cloud-based management platform via a web browser, enabling customers and/or their systems integrator to securely access critical video network information, create customized views, and generate and track their own service tickets
- Comprehensive health reporting, for at-a-glance views of your video network's health, problematic areas and more
- Closed-loop field service workflows so you know that escalated issues have been successfully resolved
- SLA reporting on items including outstanding service tickets and time to resolution, validating that SLA agreements are being met
- Scheduled software upgrades, ensuring timely updates to protect your network from possible security vulnerabilities and enable feature enhancements
- Inventory and product warranty reporting, providing you with an invaluable audit of your entire

video network, including device configuration, model number, firmware version and warranty status

• Optional, third-party device health monitoring and management employing Simple Network Management Protocol (SNMP) scanning tools, leaving you worry-free even when it comes to your non-March Networks devices

Manage and Resolve

Notify and

Dispatch

- Optional Field of View (FOV)
 reports, so you or your systems
 integrator can move quickly to
 fix any camera FOV that's been
 changed or obstructed
- Geographical and network topology views, for a more intuitive overview of your video deployment, as well as the ability to quickly spot trends by region or area

For end user customers, Insight leverages the expertise of our NOC team, leaving you free to focus on your business while ensuring your video solution is always performing optimally.

For March Networks certified partners, Insight delivers the tools you need serve your customers more efficiently. It eliminates unnecessary and costly truck rolls, and lets you easily document product warranty status, software version and other information. The service is also a perfect opportunity to build your recurring revenue stream, working in partnership with our proven professional services team.

With flexible 1, 3 or 5-year service terms, and monthly, quarterly or annual invoicing options, March Networks Insight is ideal for any organization looking for an easier, more convenient way to manage their intelligent video network. To learn more, visit marchnetworks.com

SECURITY INSIGHTS

March Networks takes a 360° approach to the security of our products and services. March Networks Insight is no exception. Here's how you know your data will always be protected and secure.

- Our NOC incorporates state-ofthe art physical access controls and restrictions, including a retinal scanner and 24/7 video monitoring
- The NOC has its own, dedicated firewall, blocking access to nonauthorized users
- The NOC runs on a dedicated network that separates NOC data from the rest of our corporate network traffic
- We protect and segregate NOC customer data at multiple levels using sophisticated visibility rules, so it is accessible only to users authorized to see it. Two-factor authentication is also in place.
- We run background checks on every NOC employee, and mandate regular training so they are always current on cybersecurity best-practices
- We enforce security and management controls, and regularly conduct cybersecurity audits and penetration tests
- We backup NOC data systematically and frequently, and have an established disaster recovery process in place to mitigate power and system downtime, including redundant power sources



Qatari Bank Adds Business Intelligence

ARLIER this year, we were proud to share that one of Qatar's top banks is using March Networks business intelligence software and integrated analytics to improve customer service and operations. The bank is one of six Qatari financial institutions currently using March Networks systems for advanced video surveillance and fraud prevention.

Already a March Networks customer, the bank has our end-to-end video recording and management solution deployed in all of its Qatari retail banking branches, hundreds of ATMs, and multiple corporate facilities. It is expanding that solution with Searchlight for Banking software to deliver an enhanced customer experience and strengthen its fraud investigation capabilities.

March Networks Searchlight for Banking combines surveillance video with ATM/teller transaction data and analytics to deliver powerful fraudfighting tools, such as the ability to rapidly detect suspicious transactions and potential cases of ATM skimming. The software also helps banks evaluate and improve customer service using dwell time, queue length and people counting analytics.

The bank started using March Networks several years ago to ensure compliance with CCTV legislation first introduced by the Qatari Ministry of Interior (MOI) in 2011. The law mandates that all banks equip their locations with IP video surveillance, record at a minimum 3 megapixel resolution and 20 frames per second, and ensure 120 days of video storage. The bank, which was using an analog video surveillance system at the time, needed an enterprise-class video solution that could meet the MOI regulation. It was also looking for a solution that offered remote video management, system health monitoring, and the ability to scale easily to accommodate future growth.

When the project went to tender, only the March Networks solution performed to all of the bank's criteria, said its group safety and security manager.

"With the March Networks system, we are able to fully comply with the law. The usability and health monitoring features of the Command Enterprise video management software are also excellent, enabling us to investigate and resolve potential system issues before they become critical."

According to ISC Group Gulf, a leading systems integrator in Qatar with a specialized focus and expertise in the banking sector, the March Networks solution is the best choice for banks in the region.

"March Networks products have proven highly reliable and are able to meet — and often exceed - the parameters set by the Qatar Ministry of Interior regulations, as our organization has seen in our work with most of the country's major financial brands," said Cristian Ivan Nicolae, Project Manager, ISC Group Gulf. "In addition, March Networks offers the sole CCTV products in Qatar purpose-built for banking environments, which means you are getting a secure, highlyprofessional solution that is easy to scale in complexity."

"We are proud of our long-standing partnership with this Qatari bank. It is a leader in the use of innovative video technologies, and clearly understands the value intelligent video offers to its organization," said Trevor Sinden, Director, Middle East and Africa Sales, March Networks. "We are also fortunate to be working with ISC Group Gulf, a systems integrator with a deep understanding of the video requirements of Qatari banks." •

Video Upgrade Delivers Impressive Access and Search Capabilities to Community Bank

IME COMMUNITY BANK has called Brooklyn home for more than 150 years. Founded in 1864 when a gallon of milk cost just 25 cents and rent on a one-bedroom apartment was \$40 month, today the financial institution serves the New York borough and surrounding metropolitan area with 29 retail banking branches and 24-hour ATMs.

The bank has always been committed to the highest security standards. That's why, in the latter half of 2017, it took stock of its security systems and found them in need of a dedicated upgrade.

The existing video security system lacked sufficient onboard storage to satisfy the bank's archiving requirements, and there weren't enough cameras to provide optimal surveillance coverage. In addition, when the bank opened two new branches, Security Director David Panetta couldn't get the existing ATM transaction integration software to work.

Panetta also wasn't satisfied with the bank's

alarm and access control systems. It was clearly time for a complete overhaul and a new security system integrator that could provide an allencompassing solution.

Dime Community Bank turned to national systems integrator NAVCO, and by April 2018 it had new alarm and access control systems. All 29 branches, as well as its head office and two other office facilities, were also equipped with an industry-leading March Networks intelligent video solution.

The bank now relies on March Networks 8532 Hybrid NVRs, multiple March Networks IP camera models and Command Enterprise video management software to secure its assets and keep employees and customers safe. It also acquired March Networks Searchlight for Banking software, which integrates surveillance video with business data including ATM/teller transactions, to help resolve customer inquiries quickly and support faster, more effective fraud investigations.

"The video quality with the IP cameras is unbelievable. You can see the difference right away."

- David Panetta

Security Director, Dime Community Bank



"I recommended standardizing on March Networks because I've had a good track record with its products over the years," said Bill Webster, NAVCO's Vice President of National Accounts. "I lead with March Networks for all of my banking clients."

The hybrid capability of March Networks' 32-channel video recorder is ideal for Dime Community Bank because it allows the financial institution to continue using existing analog cameras along with its new March Networks IP cameras for improved coverage within its branches. To achieve its desired 100 days of archived video, the recorders are loaded with two 6TB hard drives. Next year, Panetta hopes to go 100 percent IP with March Networks cameras, and to increase onboard storage to 22TB per recorder.

"The video quality with the IP cameras is unbelievable," said Panetta. "You can see the difference between the analog and IP cameras right away, and I never thought the analog was that bad."

Dime Community Bank managers have access to video from their own branch and are finding the system easy to use, said Panetta.

"Recently, for example, one of our branch managers in the Bronx called me about a customer who questioned a deposit on her statement, because she didn't remember making it. I was on the road, but walked the manager through using the March Networks software on the phone. I told her to open Searchlight, put in the transaction date, scroll down to the transaction in question and click on the link to the video. It was the first time she did it and she said, 'Oh wow, there it is.'



"The video clearly showed the customer making the deposit. She had just forgotten. Our manager had no trouble navigating the system and was very impressed when I told her she could also do it with teller transactions."

Panetta, who can also access video remotely from his home computer, uses the March Networks solution to check on a branch if he receives an alarm at night.

"I had an alarm go off a few weekends ago, and when I checked the video, everything looked fine. However, there was a tablecloth on a table under an air conditioning vent that was swaying back and forth in the breeze, and must have triggered the motion detection alarm. I called the cleaning company later that night and had them remove the tablecloth." >

"I recommended standardizing on March Networks because I've had a good track record with its products over the years. I lead with March Networks for all of my banking clients."

> - Bill Webster Vice President of National Accounts, NAVCO



A third-party monitoring company that conducts virtual tours of all the bank's branches every night also has remote access to the March Networks video solution.

"Instead of having a roving guard tour that would only be able to cover to a handful of branches, I'm getting all of our branches checked at least 10 times every night," said Panetta.

"The remote monitoring company goes into the system, pulls up video from a specific site and does a quick check, paying special attention to the ATM lobbies, the safe deposit areas and the cash dispensing machines. If they see a homeless person camping out in one of our ATM lobbies, they'll call the NYPD to have the person removed. I get a daily report every morning, and pull still shots of anyone who was reported loitering, so I have a record of who was there."

Being able to access video from 29 branches spread across Brooklyn, the Bronx and Nassau and Suffolk counties on Long Island is especially handy given New York's infamous traffic congestion.

"Every once in a while," said Panetta, "I say I'm going to run over to a branch to do something, and then I catch myself and say, wait a minute, I can just look at the video."

The March Networks installation went very smoothly, he added, and the support from both NAVCO and March Networks has been exemplary.

"I'm extremely pleased with both NAVCO and March Networks," he said. "NAVCO has been very attentive to our requirements and they're always available when I need them. I have the cell phone numbers for several of their techs and I have a great relationship with them. I was away one weekend and had a problem with one of my sites at 10 pm on a Saturday night, but the tech figured out what the problem was and took five minutes to resolve it."

NAVCO

NAVCO is a trusted authority on security systems integration for several industries with complex security needs. From banks and financial services to retail, grocery, convenience stores and beyond, NAVCO creates custom enterprise security solutions that meet the challenges and exceed expectations. The company specializes in providing electronic security integration services across the U.S. and maintains a team of experts in all of the country's major metropolitan centers. It has been a March Networks-certified solution provider for more than 15 years. www.navco.com

the challenge

Dime Community Bank, a financial institution with 29 branches serving Brooklyn, the Bronx and surrounding counties, had an aging video surveillance system with analog cameras, insufficient storage and less than ideal video surveillance coverage. Its ATM transaction integration software was also not working in new locations. It was clearly time for an upgrade.

the solution

NAVCO, the bank's systems integrator, recommended a March Networks video solution with 8532 Hybrid NVRs, IP cameras, Command Enterprise video management software and March Networks Searchlight for Banking software to enable advanced search and investigation capabilities using integrated ATM and teller transaction data.

the result

Upgrading to a March Networks video solution has provided Dime Community Bank with increased surveillance coverage in its retail branches and corporate offices, exceptional video quality and the ability to store more than 100 days of video in each location. The bank also appreciates its user-friendly Searchlight software, which has enabled branch managers and the security team to quickly resolve fraud investigations and customer inquiries.



David Panetta, Security Director



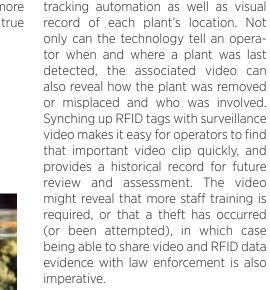


In Cultivation Facilities

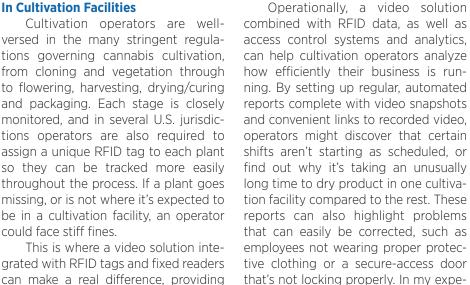


What cannabis operators are realoperations.

Here are just a few examples of how video combined with fixed RFID data, point-of-sale (POS) transaction data and analytics is being used for more than physical security to deliver a true competitive advantage.



could face stiff fines.



In Transit

challenge.

This is the stage in the seed-to-sale process where video is most often overlooked. Keeping an eye on inventory as it moves from a cultivation facility to one or more dispensaries is a smart security precaution, which can also save cannabis operators considerable time and frustration.

rience, once an operator understands

the power of their video solution, they

immediately think of other applications

that could help them solve a particular

Imagine that you get a call from a dispensary saying that they didn't receive all the inventory expected. Not only can you review recorded video of the product being loaded onto a truck at your cultivation center, you now have the ability to see the inventory in transit and as it was unloaded at the dispensary location. Maybe too much





product was left at a different location, or — worst case scenario — there's been a theft somewhere along the line. With video, you can visually verify what's occurred and provide evidence to help resolve the incident.

Some video solutions will go a step further and integrate the video system with vehicle data, such as GPS location or speed. Called geofencing, this search capability makes it easy for operators to see information on the transport route from start to finish. If there's a question about a vehicle accidentally crossing into a U.S. state where cannabis sale is still illegal, for example, a system with a geofencing search tool can help an operator quickly determine if a boundary was actually crossed. If you are considering adding video to transit vehicles, a last tip is not to underestimate the wear and tear the system will undergo in a mobile environment. Operators should look for ruggedized video recorders and cameras built to withstand dust, vibration and other factors. They should also be able to download video from the recorder remotely when a vehicle comes into range of a wireless hotspot, which reduces the need for manual intervention and keeps vehicles in service.

Finally, operators should be able to manage the mobile video surveillance system with the same software being used for the 'fixed' video systems in their facilities, and ideally the solution should provide constant system health monitoring complete with alerts, so operators can address any potential issues (e.g. a failing hard drive) before video is lost.

At the Dispensary

The applications for video at retail dispensaries are varied and perhaps the most exciting.

Here's where video can really help dispensary operators assess and improve the customer experience they are providing. Using video and analytics like people counting, queue length monitoring or dwell time, operators can quickly call up charts and graphs to see how long their customers waited in line, if they spent more time in front of a certain marketing or educational display, or if they left the dispensary without making a purchase. They can set up automated reports that include snapshot images of different areas of the dispensary, or images from different locations, to check for things like store presentation and cleanliness, stocked shelves and correct signage.

All of this information helps operators quickly identify areas for improvement in their dispensaries. It enables them to gauge the success of promotional displays, compare customer service and conversion trends at one or multiple locations, and recognize where more employee training is needed. Ultimately it helps them make the adjustments necessary to improve sales, using the surveillance video they are already collecting for security and compliance.

When it comes to inventory security, video integrated with POS data can help dispensary operators cut losses significantly. It enables them to setup alerts triggered by unusual or suspect transactions, such as voids over a set amount, and investigate incidents faster by tying receipt data to the recorded video. Operators can use their video system to run searches on a wide variety of data, including bank card number, employee number, transaction data and time etc. across multiple locations simultaneously. And again, they can easily review the associated video to see exactly what happened.

A Triple Threat

Video can provide cannabis operators with a unique view of their business, especially when it's used in combination with other types of data. An excellent tool to help enhance security and required in many regions for compliance, it also provides operators with a great tool to gather valuable business insights.

Rather than take a 'set it and forget it' approach to your video surveillance, I encourage you to imagine how a video-based business intelligence solution could help your cannabis business. Turn your surveillance investment into a triple threat by using video and data to drive significantly better loss prevention, operations and performance success.

Jeff Corrall is responsible for March Networks' strategic partnerships and integrations.

tech tip

A New, More Secure Way to View Video Remotely

By Ken Kreterfield, Director of Sales Engineering, March Networks

Question:

We have people within our organization that need to view video from our March Networks system remotely, but our IT team doesn't want us port forwarding for security reasons. What other option is there?

Answer:

Viewing video surveillance remotely is an important security requirement for most businesses, but lately, this need for remote access is coming into conflict with IT policies that aim to limit network exposure to the Internet.

Specifically, increased cybersecurity rules have IT departments clamping down on the practice of port forwarding, the typical method used to access an NVR over the Internet.

In most IP video surveillance networks, a business network's firewall is configured to allow inbound connections to the NVR. For example, if I want to login from home to see the surveillance cameras installed in my store, I need to communicate with my NVR. In order to do this, I must know the NVR's public IP address as well as the "ports"

it uses to communicate. Those ports must be open on my business firewall and forwarded to my NVR, so I can have access (Diagram 1).

The flipside of this, however, is that these open ports expose the NVR to the Internet, potentially making it more vulnerable to cyberattack. This, obviously, does not sit well with many IT departments, which are tasked with reducing exposure to cyber threats and closing every possible loophole.

That's why some video manufacturers, including March Networks, are adopting a new networking method known as Network Address Translator (NAT) traversal.

In video surveillance applications, NAT traversal allows users to connect to their recorders securely from any location without a VPN, direct connectivity, or the need for port forwarding. It does this by establishing direct, peer-to-peer (P2P) communications between the client device (your smartphone, tablet or home computer) and your recorder.

With NAT traversal, the communication is outbound from the NVR to the management server, so it never exposes the NVR to the Internet without a secure, authenticated connection.

So when I want to use my home computer or tablet to see my business surveillance, I make the request and if my NVR is registered to the March Networks Command Enterprise Server, I can access the video through NAT traversal (Diagram 2).

I like to think of it as a separate, private highway for my video and data communications. The communication remains secure because March Networks Command Enterprise acts as a gatekeeper, and only allows those with Command authorizations to pass through.

In other words, you can't drive on the private highway unless you've been invited.

It's a more secure way to view video remotely; all communications between the NVRs and Command are controlled and March Networks' video and data transport is fully encrypted.

In addition to that, NAT traversal also uses encryption, making this an inherently secure way to view video remotely.

You can take advantage of this new capability by upgrading to March Networks' latest recorder, mobile app and enterprise software releases.

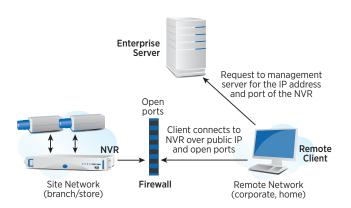


Diagram 1: Remote video surveillance access with port forwarding

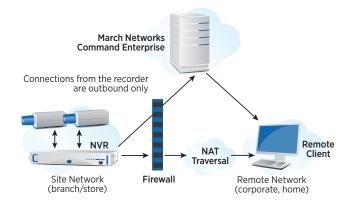


Diagram 2: Remote video surveillance access with NAT Traversal

Celebrating a New Brand Identity

Our company wrapped up a very successful 2018 with the launch of a new brand identity, marking March Networks' 18-year evolution from a video networking pioneer to a leader in video-based business intelligence.

The updated March Networks brand — which includes a new logo, color palette, corporate typeface and design — aligns with our mission to advance the true value of video. It also reflects our enduring commitment to developing exceptional technology solutions that provide clarity, simplicity and unparalleled reliability to our customers.

Today, you will see our new look front and center on our recently relaunched corporate website, as well as on our partner portal, social media networks and in updated sales tools and collateral. We will continue to roll out the brand this year across our global sales offices, R&D facilities and at tradeshows and events.

Here's the story behind our newly minted logo:

Our Diamond

The March Networks diamond represents our reputation for delivering exceptional, highly reliable solutions and has been with us from the beginning. The word 'diamond' is derived from the Greek word adámas meaning unbreakable, which we think — and many of our customers agree — describes our video recording platforms perfectly. And the blue color garners a level of high regard, as blue diamonds are a valuable and coveted find.

Clarity and Simplicity

A clear and simple design was a no-brainer for our new logo, because it's what we deliver every day. Video evidence and business insights that are clear and easy to understand, so our customers realize extensive benefits from their technology investment.

What's in a Name?

When our company was founded in 2000, many people in the security industry asked us why March Networks? Today, in the age of IoT, heightened cybersecurity concerns and IP video networking, the answer is obvious. We don't like to brag, but let's just say 'networking' has always been entrenched in our corporate DNA.

A New Typeface

Our new logo uses a Gotham typeface. Often described as a nononsense, architectural typeface, we love its fresh, assertive style. The sansserif design was inspired by the triedand-true typeface used on storefront signs in mid-20th century Manhattan. Similarly, we draw inspiration for our product innovations based on proven technology foundations.



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Managing Editor:

Erica Miskew

Feature Writers:

Norman Tollinsky Jackie Lawrence

Graphic Design:

Tamara Maliepaard

Contributors:

Hamdan Al-Buhaisi Hicham Arrouch

Jerry Brown

Jeff Corrall

Peter Hillier

Ken Kreterfield

Francesca Leclerc

Cristian Ivan Nicolae

Jim Pralle

Trevor Sinden

Tanya Stiefel

Jeff Strout

Angelo Tebano

Bill Webster

Photography:

WCCO Belting
J. Alan Paul Photography

Interra Credit Union Bryan Chris Photography

Dime Community Bank Rob Tannenbaum Photography

March Networks

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

www.marchnetworks.com

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Find Bank Efficiencies with Intelligent Video

Today's banks are working hard to deliver on extremely high customer expectations. The new generation of tech-savvy consumers is demanding more diverse payment options and faster, more personalized services. You've invested in technologies to keep pace with Internetand mobile banking, but how has this impacted your brick and mortar branches?

With more than 600+ financial customers worldwide, March Networks understands the business of banking. We work closely with our customers to deliver powerful video surveillance solutions that help improve fraud detection and investigation capabilities, and also enhance branch productivity and performance.

Let March Networks help you enhance productivity, prevent fraud and improve efficiencies in your bank. Visit us online to learn more.

marchnetworks.com/banking

About March Networks

March Networks is the No. 1 supplier of video surveillance systems to banks and credit unions in the Americas, with 600+ financial customers worldwide. Our Financial Solutions include enterprise-class hybrid NVRs, high-definition IP cameras, video analytics, fraud detection and investigation applications, and exceptional video management and health monitoring.

600+

banks and credit unions trust our financial solutions

No. 1

hardware NVR supplier in the Americas and top 10 globally

206,000+

video surveillance systems installed worldwide