Genomics Institute of the Novartis Research Foundation (GNF) Case Study

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Challenge

To protect its sensitive research technology and critical intellectual assets, GNF has deployed the Avigilon High Definition (HD) surveillance system, keeping the facility running safely and securely while maintaining an open and collaborative campus environment.

Solution

GNF installed 12 Avigilon Analog Encoders to support its existing 48 analog cameras located at all facility and laboratory entrances and in the three-tier parking garage. GNF also installed one Avigilon 2 MP IP camera mounted in the shipping and receiving area to monitor the north side of the facility. With five monitors located in the security command center, and several others at the main reception area, GNF created a hybrid analog/digital system that is managed using Avigilon Control Center software with HD Stream Management.

Benefits

The Avigilon HD surveillance system easily and inexpensively integrates into GNF's existing infrastructure. GNF can integrate new cameras for a third of the cost of the previous system. GNF has been able to achieve faster identification and response times due to Avigilon's superior image quality and a 75% reduction in the time required for video review and playback. The Avigilon HD surveillance system also consumes less space and power. Finally, GNF has enjoyed outstanding support from the Avigilon team throughout deployment.

- *Reduced investigation time*
- *Preserved legacy investments*
- *66% cost savings on new cameras*

Novartis Research Arm Offers Safe Campus Environment for Worldwide Drug Discovery Collaboration

The Genomics Institute of the Novartis Research Foundation (GNF), a research arm of the multi-national healthcare products company Novartis, was founded in 1999 to better understand the underlying mechanisms of human illness and help prevent and cure diseases such as the flu, malaria, and cancer. To this end, GNF researchers rely on a state-of-the-art technology infrastructure to pursue innovative drug discovery research. To protect its sensitive research technology and critical intellectual assets, GNF has deployed the Avigilon High Definition (HD) surveillance system to help keep the facility running safely and securely.

Upgrading Surveillance for Greater Protection

With 600 employees located at its 260,000 square foot facility in San Diego, California, GNF offers a campus environment where scientists, dignitaries, and corporate leaders from around the world come to collaborate on important scientific research. "Our biggest security challenge is to deliver overall physical and intellectual protection in an open, university campus environment," explains Scott Freeman, security coordinator at GNF. "We provide every safety check we can – from access control to surveillance – to keep our facility safe and secure."

GNF's first step to improving overall security was to replace its old, analog-based surveillance system with an HD system from Avigilon. "Our previous system was cumbersome compared to Avigilon," notes Freeman. "Avigilon has given us enhanced functionality, ease of video retrieval, and vastly improved video quality, making it an extremely worthwhile investment."

Leveraging its existing 48 analog surveillance cameras that are located at all building and laboratory entrances and in the facility's three-tier parking garage, GNF has installed 12 Avigilon Analog Encoders, each supporting four analog cameras, and one Avigilon 2 MP IP camera mounted in the shipping and receiving area to monitor the north side of the facility. With five monitors located in the security command center, and several others at the main reception area, Freeman created a hybrid analog/digital system which is managed using Avigilon Control Center software with HD Stream Management.

Avigilon Beats the Competition

Security officers at GNF have been very impressed with Avigilon's advanced features including video playback, thumbnail search, and data management capabilities, along with its simple user interface that makes the system easy and effective to use. "We looked at other solutions from several different vendors, but found that most of the choices were third party companies offering an assembled solution at a very high price," explains Freeman. "Avigilon offers the full package – servers, storage, cameras, and software – from start to finish, with exceptional functionality and performance."

Easy to Integrate

According to Freeman, the Avigilon HD surveillance system was incredibly easy to install and integrate into GNF's existing IT infrastructure, in large part due to the unmatched functionality of the Avigilon Control Center network video management software. "Other solutions fall short of the Avigilon software in many ways," states Freeman. "With Avigilon Control Center software, I can literally take a camera from Avigilon, plug it into the network, and Avigilon Control Center software automatically recognizes the camera, configures it, and adds it to my list so I can immediately view it on the monitor." GNF has also been able to reduce 70 percent of the space required to house the old analog system. "It was a very neat, orderly, and clean install."

The Avigilon Control Center Advantage

Avigilon Control Center network video management software, the first open performance platform designed to manage HD video, has proven valuable in several other ways as well. For instance, it enables Freeman to view recorded data while continuing to maintain full situational awareness. With the previous system, GNF often had to interrupt surveillance viewing of an area to retrieve or record video for investigative purposes. With Avigilon, GNF never has to lose coverage of an area when playing back or retrieving video. "If I am monitoring the parking garage and I notice a suspicious vehicle, I can easily switch to a recorded view of the incident, play it back and export the footage if necessary, while at no time losing live coverage," explains Freeman. In addition, the amount of time spent on video retrieval has been reduced from 30 to three minutes since deploying the Avigilon HD surveillance system.

Avigilon also offers excellent search capabilities, including the advanced thumbnail search functionality that comes with Avigilon Control Center 3.8. "I can tell Avigilon Control Center that I want to review footage of an event triggered during a specific period of time or ask it to display the thumbnail pictures of an event to narrow down the details of a possible incident," notes Freeman. "All I I have to do is point and click on a thumbnail and Avigilon does the rest of the work for me."

Freeman has been very impressed with the Avigilon HD surveillance system functionality, particularly because he made sure to meet Avigilon's network specifications and installed the most powerful system he could afford. "The Avigilon sales rep worked with me to add more memory to our system and as a result, the speed at which I can view and export live data increased dramatically," says Freeman.

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Superior Image Quality

Since deploying the Avigilon HD surveillance system, GNF has noticed a dramatic improvement in image quality. In particular, GNF has been impressed with the level of detail it can now capture, compared to the previous analog-based system. "We would have been hard pressed to catch a license plate with our old system, but with Avigilon, we can read a license plate from more than 200 feet away," says Freeman. "We can even read temporary name tags that visitors wear around their necks, allowing for easier identification, which is very impressive."

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In addition, lighting is no longer an issue. In the past, lighting presented many challenges, particularly in the parking garage where big, bright overhead lights sometimes caused trouble because the auto-iris functionality of the previous surveillance system could not adjust properly. "With Avigilon, I can reduce or increase the amount of light in a picture to enhance its quality with the simple click of a button," states Freeman.
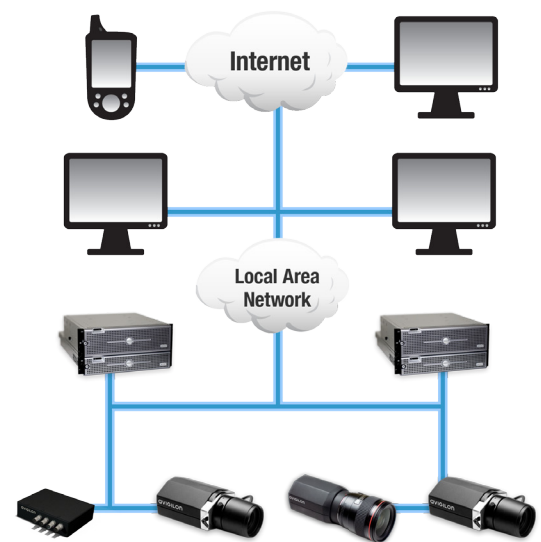
Excellent Customer Support

While GNF has been very impressed with Avigilon's performance, the team has been equally pleased with Avigilon's service and support, particularly when they faced a performance challenge as a result of incorrect information provided by the previous vendor. "We were given incorrect information about our PTZ cameras that made the Avigilon deployment a challenge," explains Freeman. "But Avigilon never gave up, going so far as to duplicate our entire system configuration at their head office to get to the root of the problem." In fact, the Avigilon team was able to resolve the issue in less than three minutes with the correct information. "Avigilon's support is outstanding."

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Improved Surveillance Equals Cost Savings

Not only has GNF enjoyed significant performance gains since deploying the Avigilon HD surveillance system, it has also seen significant cost savings. "We looked at other similar solutions that were double the upfront investment, not to mention much more expensive to deploy and maintain," notes Freeman. Avigilon also delivers a stronger return on investment than GNF's previous surveillance system, which was difficult and expensive to expand. "With Avigilon, I can integrate new cameras for a third of the cost of the previous system."

GNF has realized other cost savings as well. For instance, the Avigilon HD surveillance system takes up less space and power than the previous system. In addition, GNF will enjoy HR-related savings. For example, GNF is looking at adding a new building, which may be monitored using Avigilon's remote surveillance features. "If we do use Avigilon's remote features, we would be able to save the cost of hiring a new guard – a savings of at least 10 percent of our HR budget," explains Freeman. With better image clarity, security officers are now able to work more efficiently as well. "The less time my security officers have to worry about interpreting unclear video, the more time they can spend on other critical security issues."

Better Evidence for Faster Response

With their old analog-based surveillance system, GNF security officers were often unsure of what they were looking at, spending too much time playing back and reviewing footage. "Because of Avigilon's exceptional image quality and fast video playback, we have cut the time required to playback and review footage by 75 percent," says Freeman. GNF security officers are now better equipped to identify detailed images. "If I ever need to provide evidence to law enforcement officials, I am extremely confident that it will meet or surpass their needs."

State-of-the-Art Surveillance for Cutting Edge Facility

With its Avigilon HD surveillance system in place, GNF not only boasts a state-of-the-art research facility, it also has a cutting-edge surveillance system that delivers outstanding and superior functionality to help keep the facility safe and secure. "By deploying the most advanced HD surveillance system available, we have demonstrated to staff and the public that we are committed to delivering superior, performance-driven security," concludes Freeman. This was made clear recently when GNF faced a possible sit-in by animal activists protesting the use of research animals. "The incident never occurred, but the FBI was assured that if we ever did face a security breach, we have the right surveillance solution in place to quickly and accurately capture the best evidence possible."

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