

THE SWEET SMELL OF SUCCESS

AISG Helps the Perfume Center of America Exude a Wide Breath of Security

Similar to the delicate notes forming a bouquet for an opulent scent, American Integrated Security Group takes on a project at the Perfume Center of America utilizing an array of sophisticated network technologies that blossom into a finely balanced integrated system. On full display in and around its confines at the new corporate facility of wholesale distributor, Perfume Center of America, are the workings of a secure operation, made possible by security systems integrator, American Integrated Security Group (AISG), College Point, NY, incorporating emerging ideas in electronics and networking.

Leaving behind its Plainview, NY headquarters, Perfume Center of America is now occupying the new facility situated a little further east on Long Island in Ronkonkoma, NY. The newly constructed massive building spans close to 200,000 square feet and is three stories high.

The Perfume Center of America headquarters sets the standard for modern construction and boasts Long Island's second-largest, privately owned commercial solar installation, saving the company some two-thirds of the building's energy costs. Equally as up to date, cost effective and green, is the extensive integrated communications and security system installed by AISG.

The new Long Island Perfume Center of America site is a huge warehouse and distribution facility, located on 11 acres. The main facility houses about 100 employees in 20,000 SF of office space

and combined 170,000 square foot warehouse and a 2,000 square foot retail store. Perfume Center of America is the primary location for storage and distribution of the company's merchandise. It also brings together the company's three other Long Island office locations into one space.

"You don't make the building you need today," said Perfume of America, president and CEO, Kanak Golia. "You make the building for the coming years."

The Client Requirements

One paramount requirement to meet Golia's vision is utilizing the best security, surveillance and protection systems on the market. Hearing the sophistication of the specifications required by

Golia, a mutual associate recommends AISG for the project. Based upon the system integrator's stellar reputation and expertise in network electronic technology, Golia sets up an initial meeting with AISG President, Levy Acs.

Acs presents scalable plans for future proofing the new facility in

an integrated model that embodies a framework to enhance customer communication, streamline operations, reduce risk and ultimately offer a return on investment. AISG assembles a team of technology specialists, who collaborate with IT Director, Clarice Chigbo, to create a shared vision for 21st century security at the facility.

The distributor's online sales are booming and AISG knows the network infrastructure design is the key to keeping phones, computers and the security operating efficiently. Additionally, the



The elaborate conveyor system operation is under constant watch.

client wants AISG to integrate systems wherever possible, especially the access control, video management and cameras.

One very special requirement is that the system needs a six month video recording capability/retention period. AISG is held to a strict budget that requires price considerations for a brand new building with no security or network in place. AISG designs the complete integrated system as economically as possible including all the latest technology that will be incorporated. The specs are agreed upon to do: phones, data, communications, inside and outside IP cameras, access control, and alarm systems.

The Work gets Underway

The project starts in the summer of 2015 with setting up whatever infrastructure is required to hold up the cables. Utilizing the utmost attention to security, network infrastructure and protection, AISG begins installing over 1100 network cables for security devices, data, phones and Wi-Fi, with some 4100 feet of fiber being run back to main server. Each discipline is a different color: blue for network, green for phone, black for Wi-Fi, etc. Everything is Cat 5, phones are IP and outside speakers are IP.

Three months into the project, Rexx Latifi joins AISG as VP Sales Engineering and takes over the lead on the project, directing roughly 16 to 20 AISG technicians who are onsite every day. Latifi is tasked with running the existing install and the many upgrades and add ons that Golia has since requested since the project's initial proposal.

The job ramps up as megapixel IP cameras are installed outside the building and similar cameras are blanketed all over the interior; biometric readers and IP based outdoor fingerprint terminals are being integrated with Avigilon Access Control Manager and wireless locking solutions, as well as with video surveillance. The original install includes:

- 546 high res megapixel cameras.
- Up to a 64 door access system; 40 doors on the access control system at present.
- 9 intercom stations with 10 interior intercom master stations.
- 7 Network Video Recorders.
- 10 extra 20 ft. bay raid storage units.



Network infrastructure goes in.

- Two separate burglar alarm systems – DMP and Honeywell for complete redundancy.

"The complete infrastructure for the whole network was done by AISG," said Latifi. "All the voice, data, wireless access points and roughly a couple of thousand network and voice drops for speakers, and WAPs are installed."

All the peripheral detector devices are installed by AISG as well as IP speakers, and WAPs on the network side. Within the fiber infrastructure over 200 fusion splices are done on the property.

On the security side, AISG achieves a couple of firsts as far as protection goes. The client is very high on security, according to Latifi. "Based on the client's experience with security issues in the past, we designed a redundant alarm system to accommodate the customer's intrusion alert requirements," he said. "There are actually two separate alarm systems reporting which is something I've never seen before."

The two intrusion alarm systems are:

- 100 plus zone Honeywell Vista Commercial Burglar Alarm System.
- 100 plus zone DMP Commercial Burglar Alarm System.

The security alarm protection is basically two separate systems that way if there is failure on one, there is another side backing it up. One is standard hardwired POTS line and one is IP network. There are two alarms systems going back to two different central stations, going through two different ISPs.

If the network goes down or someone tampers with the network, the other system takes over and when one fails the other is going to alert. There are 29 redundant photo beams shooting across the ceiling so if someone cuts through the ceiling it will be detected.

"Every alarm point on the burglar alarm system actually has two devices or it's a single pole double throw so that way both alarm systems can pick up every alarm point," Latifi said.

One alarm system goes back to the AISG central station and the opposite one goes to a different central station. Both alarm systems are coming off of two different ISP carriers. Avigilon video analytics is being used in this project by AISG for alarm management at its state of the art central station.

"If we ever lose one ISP, we always have the backup ISP so that way there is also redundancy on how they communicate back to central station," said Latifi.

Cameras Play a Pivotal Role

Video cameras perform important functions in this integrated system at the Perfume Center o

America. Presently, there are close to 50 outdoor 1080P IP cameras up and running. Some of them have analytics on them. "We are using analytics to do central station monitoring of the video after hours," said Latifi. "With the analytics we have talk down speakers on the property where our central station operator can communicate with the perpetrator who is on the property after hours."

The perimeter detection system at this point is specified to be controlled by the cameras. Software and intrusion line of site detects the perimeter. If the camera detects movement within the screen area, it will send an alert.

The perimeter of the property has the latest AXIS Communications PTZ cameras with a 4 camera ring on top. Any one walking on the property after hours will be tracked by the PTZ without the system having to be manually operated.

"The cameras track movement and from there once they get into the zoned alarmed spaces on the analytics those alarms will notify central station there is an alarm," said Latifi. "From there, the central station operator can talk down to whoever is on the property via the IP speakers that we have on the outside of the property."

The bulk of the cameras are on the interior of the property. Everything is 1080P plus; with an additional eight 4K cameras from leading IP video camera manufacturers including Vivotek, Panasonic, AXIS and Sony. There are over 450 cameras on the interior covering shipping, receiving, stock, offices, and more.

"Each door that has access control has a camera to go along with it, each access control portal has video coverage so we can link fingerprint reads back to video clips," said Latifi.

An Inclusive Collaboration

The Perfume Center of America boasts an interior command station operating during business hours in the daytime and a guard booth that is an exact replica of the building itself for after hours. "We worked with their gate contractor, RFC, who installed the high security gates," said Latifi, "and those gates also have pedestals with dual truck and vehicle entrance readers and Aiphone video intercoms on both entrances."

Analytics are used at the gates for after hours. There is a trip wire across the gate and license plate cameras at each gate. Each gate gets a license plate camera, each gate gets an analytic camera for the fence line and gate, and each gate also has a pedestal with a low reader and high reader, and a low Aiphone and high Aiphone with cameras on them.

Throughout the project AISG is in contact with many trades and the general contractor, Kulka,

LLC. Even though AISG is contracted by the owner, Latifi has had to coordinate with the electrical contractors and other contracted trades. Challenges are met head on along the way.

"While AISG works directly with the client, it's still a Kulka project and we worked in conjunction with Kulka," Latifi said. "The coordination is difficult at times and on top of that the client moved into the building with AISG trying to finish."

AISG Solution Includes Cutting Edge Perks

The entire security system is an integrated through the Avigilon Access Control Manager/Enterprise and Avigilon Control Center software. The integrated video and the access control allow the use of a single GUI (graphical user interface) or separate ones.

Describing it as "a pretty cool system," according to Latifi, all the access control is all being done via biometric fingerprint readers. The sleek small profile Suprema BioLite Net, an IP-based fingerprint terminal with time attendance and access control capability is being used on 22 doors at the location.

Golia founded Perfume Center of America in Manhattan, NY, in 1993, selling perfumes out of the back of his car. In 2002, he moved the operation to Long Island where the company's reputation for a large inventory with prompt delivery of quality products is well recognized. The Perfume Center of America is a customer oriented wholesale distributor, and according to Golia, the largest wholesaler of perfume and perfume related goods. With more than 20 years of experience in the wholesale perfume industry, The Perfume Center of America leads the industry with selection, pricing, order fulfillment and overall client satisfaction. Steady growth in the company is spurred on by the recent launch an online retail operation, Perfume Worldwide.



Move in day and the security work must continue.

Now the Perfume Center is going one step beyond. The new facility, thanks to the work of AISG, will allow customers to follow their sale online *live*. The Perfume Center's most advanced, pioneering and cutting edge service to date, is designed to improve the customer experience. The video system is being designed to be able follow a sale through its processes to shipping.

Every conveyor system has multiple cameras on them that can basically read labels on products as products are going through the conveyors. From the picking and into the shipping end of the system there are high res views of an order's progress. "To give you an idea, there are shipping stations alongside



The bulk of the cameras is on the interior of the property.

the conveyor system," said Latifi, "so there is a conveyor system and on each side there are two shipping desks. Each of the shipping desks has three cameras on them and the conveyor that is in front of them has two cameras on it. In a 7 ft. by 7 ft. area you have eight cameras in a very small space. Everything is covered from multiple angles, giving you multiple views of the desk areas, multiple views of product entering a leaving an area and multiple views of boxing, etc."

Innovations and System Expansion Continue

Additions to the overall security requirements continue throughout install for AISG and the job is constantly being elongated. While the initial phase of the install is completed, Golia is already adding extensions to the existing structure which requires more work from AISG.

They underestimated their growth in the Internet portion of the company, so much so that they are building a 20,000-square-foot extension on the building, according to Jack H. Kulka, professional engineer and principal of Kulka LLC, the Hauppauge-based construction management firm overseeing the project.

Pleased with what he has already seen, Golia is now having AISG put in a perimeter fiber system as

well as a TV distribution system. "There is a whole new phase we are doing with them on the perimeter with fiber technology from OptaSense," said Latifi. "We are one of a very few security systems contractors in the country integrating a system like this as an additional layer of protection."

The Perfume Center of America television distribution system is add on engineered by Latifi for pushing the workstation to multiple monitors across the property. The TV distribution system uses HDMI over copper Cat 6, HDMI distribution amps, and infrared emitters whereby individual TVs have no cable boxes and everything is distributed via one full system.

"There are roughly 8 to 12 cable boxes and five multi monitor work stations that will be pushed out across they system. Viewable on 16 monitors, operators can pick and choose what they want up on their screens. That is done through an IP tvm," said Latifi.

"There is no analog anywhere on this project," he continued, "everything is networked. The client also has full use of the Avigilon ACC Mobile app for the video side to operate cameras and there is VPN in place for authorized users."

Perfume Center is made secure utilizing the latest equipment and methods available and then with the use of IP, taps into possibilities beyond protection. AISG collaboration technologies enable Perfume Center of America to seamlessly connect with colleagues all over the world via high-definition audio and video.

Developing a progressive technology-infused facility, AISG takes a proactive mindset toward security and network electronic technology.

Applications

- Video Surveillance
- Access Control
- Time & Attendance
- Remote Monitoring
- Perimeter Protection
- Intrusion Detection
- Network Infrastructure

Equipment Vendors

- Honeywell
- Avigilon
- Axis Communications
- Aiphone
- DMP
- OptaSense
- Vivotek
- Suprema
- Sony