Exploratorium Museum

Comprehensive Security System Secures Perimeter, People and Assets

When Exploratorium moved locations in San Francisco to an open, urban campus in the city, the museum started planning for and installing an integrated video and access control system using unified solutions from Tyco Security Products brands Software House and American Dynamics to lay the groundwork for its comprehensive security plan.

Access Control, Video, Location-Based Tracking and Intrusion. UNIFIED.

CASE SUMMARY

Location:
San Francisco, CA

System Installed:
Software House
C•CURE 9000
iSTAR Controllers
American Dynamics
Illustra 625 IP PTZ Dome
Illustra 610 HD IP Mini-Domes
VideoEdge VMS with victor Unified Client

Introduction

More than four years ago, Exploratorium, an interactive-based, not-for-profit museum and self-named 21st Century learning laboratory began its journey of moving locations to San Francisco's historic waterfront on Piers 15 and 17. Founded by physicist and educator Frank Oppenheimer in 1969, the Exploratorium resided in the Palace of Fine Arts until January 2, 2013. On April 17, 2013, the Exploratorium reopened at Pier 15 on San Francisco's Embarcadero. The historic interior and exterior of the pier, which had gone neglected for decades, had to be renovated extensively prior to the move.

Exploratorium's previous home, though less than three miles to the West, was in a more suburban-feeling neighborhood, off the beaten path from the city's busy, waterfront shopping and dining district. The museum's new $300-million-dollar home, spanning nine acres, opened itself up for more exposure, more space and a greater audience--but, with those positives came more security risks that Exploratorium needed to address before opening its doors to the public.

Challenges

Some of Exploratorium's biggest challenges included securing ticketed and non-ticketed exhibits, as well as restroom entries and restricted areas. With the museum's 330,000-square-feet of indoor space and 1.5 acres of public outdoor space, there is a lot of area to secure and more than double the museum's previous square footage.

"When we started designing the building, we started thinking about security pretty early on," said Jennifer Fragomeni, director of facilities and operations at Exploratorium. "We have a lot more foot traffic going by and a more urban feel, so we knew we would require a different kind of security than we had previously, but we weren't exactly sure what we would need."

After working through the museum's low voltage contractor, Exploratorium found security consulting firm, Security By Design Inc., who ultimately helped them choose the right components and system requirements, and helped them select systems integrator Johnson Controls. In addition to perimeter security throughout the museum campus, Exploratorium needed reliable and easy to use systems. With 400 full-time employees, as well as another 100 seasonal workers, interns and contractors, turnover can be high and the museum wanted to simplify badge management and access.

Another consideration for Exploratorium was maintaining a high level of security without making visitors feel uncomfortable. "We were very conscious of not wanting people to feel 'watched' in our space," said Fragomeni. "It's very important to us to have a campus that feels open and inviting, and not too intimidating. At the same time, however, this is a very large area with a lot of small children, so we have to have audit trails of any areas where incidents may occur."

Solution

With the help of Security By Design, Exploratorium decided that Software House's C•CURE 9000 access control system, along with American Dynamics *victor* unified management system would meet the museum's needs for a comprehensive, intuitive interface that could handle access and surveillance seamlessly. Card readers and iSTAR control panels from Software House along with VideoEdge VMS and Illustra IP cameras

from American Dynamics rounded out the integrated solution.

To meet the museum's needs for discreet, high-level security, approximately 120 American Dynamics cameras — a mixture of Illustra 600 Series interior and exterior mini-domes and VideoEdge SpeedDome PTZs — were placed throughout the campus, including restroom entries, cash-handling areas and outdoor exhibits. Seventy-five access control panels and 100 card readers provide unassuming access control at specific areas, including the IT control room, and HR and accounting offices. "It was really important for the museum to maintain security, but make sure everyone is happy," said Eric Reither, VP and senior consultant at Security By Design Inc. "There are so many areas to secure and so many individual security needs, that it was important to address everything without making it all too complicated."

With surveillance, Exploratorium was most interested in having its full-time, around-the-clock security team keep tabs on a few particular zones, including the perimeter. Pier 15 includes a docking area, on which the museum has hosted a long list of maritime visitors in the months since it opened, along with a restaurant, cafe, retail store, visiting artwork, ticketing area, and ticketed and non-ticketed exhibit areas. Security staff stays on the lookout for vandalism, as well as theft or problems in the cash-handling areas. Shop staff can use wireless panic buttons integrated with C•CURE 9000 to alert security of an incident and location. In addition, glass break sensors integrated with the security solution immediately notify staff in the event a window is broken.

Low-profile access control gates and card readers from Software House allow visitors with tickets into specific outdoor areas, yet the museum still retains the feel of an open outdoor campus, allowing visitors to walk around freely in the areas that don't require tickets, such as its cafe. If a visitor tries to circumvent one of the gates, C•CURE 9000 alerts security staff immediately and provides them with a video audit trail of any incidents. "We wanted to secure our exterior ticketed area, but we also have other non-ticketed exhibits and retail areas that we wanted visitors to be able to walk around, not feel obstructed, and take advantage of all we have to offer," Fragomeni explained.

Using the *victor* client, security staff can efficiently and quickly locate video and share events with authorities for possible prosecution, according to Fragomeni. "Exporting video is very user friendly. Being in downtown, we've always had issues with incidents like bicycle theft, and we've been able to identify video and export the data to law enforcement," she said.

Another benefit for Exploratorium has been C•CURE 9000's varied credential options, particularly since the museum has a large number of temporary employees, volunteers and contractors, including "Explainers" or students that work for a semester at a time. Security staff are able to give students badges that automatically expire after a semester, in case they forget to return them at the end of their internship. According to Fragomeni, the staff also programs credentials with specific access times and campus zones. "Flexibility has been so important for us, because we have so many different levels of access that we define," she said.

Flexibility was also a key factor for Exploratorium's door access. The museum hosts numerous special events, private parties, as well as seminars and classes during and outside of regular business hours. With iSTAR Edge controllers from Software House, employees use

the Double Swipe feature (also called Classroom Management), which allows authorized card users to perform non-scheduled openings of controlled areas without additional hardware or programming. The feature allows Exploratorium to maintain security, while allowing visitors to feel comfortable moving throughout accessible areas.

The Future

When the security project first began, C•CURE 9000 was installed as a standalone solution. Since then, the victor unified security management system has been installed and integrators have unified C•CURE 9000 and *victor* together, which allows for single-point event management for the Exploratorium security team. It also offers the museum a higher level of situational awareness with interactive mapping, and easy management of alarms, events and total system health in real-time.

"When an alarm occurs, the reviewer will see the complete picture of the event. Any video or group of related cameras will automatically pop up on the same screen as the alarm so they can see everything that is going on at that exact moment," explained Reither.

Fragomeni said that museum staff is looking forward to being able to use even more capabilities that the systems provide. For example, because every single door is on its own network controller, the museum has the capability of remote management in the future, and it's something they see great value in. "We really want to be able to remotely unlock or lock doors. If someone needs to get into the building after hours but lost their key card, or they are in the museum during hours that their card is not programmed for, this has a lot of potential," Fragomeni said.

Mobile connectivity for security staff on duty is also something Exploratorium is looking into. With Tyco Security Products' suite of products, authorized personnel have the capability to access alarm events and other security management features with tablets and smart phones.

"There are so many possibilities. We are figuring out our needs right now. We're just very fortunate to have a really good system with so many possibilities in place," Fragomeni added.

The Customer - Exploratorium

The Exploratorium is the global leader in informal learning, igniting curiosity and inspiring creativity in people of all ages. The world-renowned science museum creates original, interactive exhibits, on display at more than 1,000 science centers, museums and public spaces around the world. Dedicated to education reform in and out of the classroom, the Exploratorium is a premier professional development center for educators and a creator of award-winning educational resources. Since 1969, the Exploratorium has influenced generations of entrepreneurs, artists, scientists, teachers, students, children, museum professionals and everyday doers, reaching nearly 180 million people annually from around the globe. On April 17, 2013, the Exploratorium opened at Pier 15 in the heart of San Francisco's Embarcadero, beginning a new era of experiences that encourage critical thinking and awaken wonder for generations to come. For more information, visit www.exploratorium.edu/visit.

The Solutions Provider – Tyco Security Products

Tyco Security Products is a unified group of the most comprehensive world-leading premium access control, video, location-based tracking and intrusion solutions in the security industry. Tyco Security Products conducts business in over 177 countries around the world, in multiple languages and employs over 2,800 employees globally, including research and development, marketing, manufacturing, sales, service and logistics teams in the Americas, Europe, the Middle East, Africa, and Asia Pacific. Our products, built by developers from all product disciplines, consistently allow customers to see more, do more, and save more across multiple industries and segments including healthcare, government, transportation, finance, retail, commercial and residential. Worldwide, Tyco Security Products helps protect 42% of Fortune 500 companies, transportation systems on five continents, 37% of the world's top 100 retailers, over two million commercial enterprises, thousands of students in more than 900 educational facilities, and over five million private residences.

educational institutions, healthcare facilities, airports, government agencies, transportation, and utilities. For more information, please visit www.sbd.us.

The Consultant – Security By Design, Inc.

Security By Design, Inc. is the security design consultant to the Exploratorium. With 40 years of experience in the security design industry, Security By Design provides vulnerability analyses and feasibility studies, designs and specifies state-of-the-art security systems, and is well known in the security industry for developing innovative approaches that meet fundamental and emerging corporate security needs. Security By Design has provided professional security consulting and design solutions for six of the Top 10 Companies in San Francisco Bay Area, in addition to many other national and international companies,

www.tycosecurityproducts.com