

Security Systems

CLARITY ON CCTV UPGRADES

It's no secret the past few years have been challenging for most hotels and many have been required to make difficult cuts to operations. One of the least talked about cut-backs has been in the area of security where there have been staff reductions coupled with little or no capital improvements. These cut-backs have left many hotels exposed. Given the importance of guest safety many hotels are looking to make improvements now that the economic rebound is expected to start taking place.

In most cases hotels tend to associate security with closed circuit TV (CCTV) monitoring systems. While access and duress systems also play an important role at many properties, CCTV systems are the prime focus of security personnel as these tend to be the eyes and ears monitoring activity on the property. So it comes at no surprise that the prime focus of most security upgrades is the CCTV system. As most people have realized, CCTV systems have evolved and the newer IP technology coupled with larger digital storage options have changed the way that the technology can be used. Many people are misinformed how to deploy a camera system within a hotel environment, especially an existing building structure where deploying new cable can prove to be both difficult and costly. Additionally, there tends to be a focus on simply adding or replacing existing cameras and little emphasis on the development of a security initiative strategy.

The importance of a security strategy can never be underestimated. For the most part, there usually are two approaches taken: proactive or reactive.

A proactive strategy plays an active role monitoring activity around a property. Hotel security personnel are dedicated to monitoring the camera systems on a 24/7 basis. The objective is to address concerns in real-time

and catch perpetrators in the act. These systems warrant active technologies such as Pan Tilt Zoom (PTZ) cameras that can zoom in on areas and track movement. They also have dedicated security control rooms with sophisticated monitoring stations with multiple screens that allow personnel to move images from a screen with multiple camera images to a dedicated monitor that allows for the viewing of greater detail. Additionally, they are also integrated into other security systems and applications and can be monitored remotely.

A reactive strategy has limited or no security staff and is merely capturing and storing images in the event of a potential incident. In these instances, the focus on technology typically changes to one of having a reliable camera system with sound storage capability with limited functionality. Outside of capturing images, the focus is on the ease with which stored images can be retrieved and recorded for follow-up investigation.

These strategies come with liability considerations. From the hotel's standpoint, these center around two main concerns: negligence and unauthorized distribution of footage.

Negligence: If an incident occurs whereby a camera is installed in an area

and the hotel fails to act. The most common example is usually if someone were to unfortunately drown in a pool late at night when there was a camera presumably being monitored by security staff

Unauthorized distribution of images and footage: If a guest or employee's image was recorded on the security camera system and then distributed without consent the hotel could potentially be held liable for damages. The typical example is the distribution of highly sensitive footage of a celebrity to a media organization, such as TMZ. Very often these are difficult to prevent given the money involved in obtaining this footage.

These contributing factors lend themselves to a security strategy and a clear determination on the type and placement of cameras within at the property. In most cases it is important that hotels obtain a balance between the security of the property and the overall guest's experience.

The Issue of IP vs. Analog Cameras

IP-based security systems have evolved with enhanced features and functionality. It might be assumed that they would be installed in a large percentage of the hotels. The fact is that the vast majority of hotels are still provisioned with analog CCTV systems and are limited in their ability to deploy IP-based solutions because of cost or infrastructure restrictions.

While most security and hotel personnel would agree that IP solutions are the solution of choice, most would also agree that analog solutions will still provide the features and functionality to effectively manage security requirements. While IP cameras tend to have more features and functionality it also comes at a price. In this regard analog cameras should not be discounted—especially to the budget conscious hotels who are focused on a reactive security strategy. Most analog systems still provide clear



images and by implementing a robust digital DVR(s) as part of the head-end equipment, can gain many of the advantages of IP-based systems.

One key factor to consider during a security system upgrade is the infrastructure that is currently deployed or that will be deployed. Typically most analog cameras require coaxial cable to facilitate signal (RG59 for shorter distance and RG6 for longer distances) and a power cable. IP cameras on the other hand require twisted pair CAT5 or CAT6 and are usually powered via PoE switches (unless they are PTZ cameras which usually require 110V power as well.) If a hotel is already cabled with RG59 or RG6 cable it may prove cost prohibitive to replace the existing analog cameras with IP cameras. There are some wireless IP options, but they are typically less stable and still require a power source to operate.

Another alternative to resolving this infrastructure dilemma is the introduction of the hybrid digital video recorders (DVRs) that can accommodate both analog and IP-based cameras. The advantage here is that hotels can deploy IP cameras in newer locations (infrastructure permitting) while continuing to use existing analog cameras. This can not only prove to be cost effective but also allows hotels to improve security coverage and functionality in areas where they were potentially deficient.

Another factor to emerge is inexpensive IP-based solutions that have permeated the consumer marketplace. It is not uncommon to

CONSIDERATIONS OF A CCTV SYSTEM

1. Define a CCTV security strategy
2. Create a security design and determine equipment requirements
3. Determine the mix of cameras (Covert, static, PTZ)
4. Establish a budget (That is achievable)
5. Define the recording and storage requirements
 - How long do you need to store images and what are the frame rates?
6. What are the monitoring requirements (Locally and remotely)
7. Remote access / networking requirements
8. IP vs. Analog (Analog may be better positioned for fixed static images)
9. Integration requirements to other security systems (For example intrusion detection and access control systems)
10. Determine requirements for system access
11. Industry validation
 - (Check on references for security companies and the various product lines)

hear hotel operators (particularly in the budget marketplace) consider going to the local Costco to pick up a solution for under \$1,000. While these solutions certainly have their place in certain markets, the old saying you tend to get what you pay for rings true. These systems often are a lower component grade and offer limited storage capacity and scalability. Commercial grade equipment is designed for robust deployments and will generally provide better images and last longer than the typical consumer grade solutions. Commercial grade is also usually more feature rich and scalable to accommodate larger installations.

Security is a 24/7 responsibility and maintaining a vigilant security focus can prove to be a very expensive expenditure for a hotel. The size and scale of the hotel obviously has an impact on the level and amount of security that is required for the operation and by identifying the right strategy and balance for a hotel and implementing the right systems, hotels can reduce their overall exposure while still providing a safe environment for their guests and staff. Hotels have options when it is time to upgrade or deploy CCTV security systems. Gaining a clear understanding of the various technologies and solutions that are available or using the assistance of a security expert, hotels can find the right solution for their environments.

JEREMY ROCK is the president of the RockIT Group, a technology consulting firm specializing in new development and refurbishment projects. He can be reached at jrock@rockitgroup.com.



"Sounds intriguing, EarlyWorm.com. But 50% on a lobster omelet and mimosa breakfast served in a hot air balloon is just not enough to get me out of bed. Bump it to 60% and I'll talk to my people."