



## IP Surveillance improves risk management and training at behavioural health facilities.

When it comes to behavioural health care, mental health facilities are increasingly taking a more modern and progressive approach to managing risk, maximising safety and improving overall training. This changes the perspective from a one-dimensional view, focusing largely on threats arising from patients, to a dynamic and multi-dimensional one that encompasses minimising a variety of threats and liabilities.



IP Surveillance technology has proven to be a key component in providing a variety of risk management, safety and training tools to help realise potential gains while minimising negative outcomes. IP surveillance provides the ability to capture, archive and review the incident and procedural activities necessary for an effective, integrated risk management system. This is especially important in limiting legal liabilities as well as validating conformity to various federal, state and local regulatory requirements.

Surveillance technology can also play an important part in the four principle steps involved in developing or refining a modern risk management process.

### Step 1: Identify the Risk

Risk identification is the first major action item in developing an effective risk management process. If risks are not adequately identified the entire process will be flawed and the consequences can be legion. Using advanced surveillance technology to help identify, understand and prioritise risks, leads to more informed decision-making about procedures, policies and service delivery systems.

IP surveillance technology can provide:

- Specifics about extent and nature of risks
- Circumstances under which risks are manifest
- A system for reporting, grading and recording risks
- A tool for delivering needed staff training
- A key component in proactive risk identification techniques

### Step 2: Assess the Risk

The assessment of risk involves both the analysis and evaluation, with a view to developing an understanding of risks that have been identified. Careful review of archived video and audio data of various incidents is invaluable when assessing:

- The extent of actual or potential impact
- The likelihood of further occurrences
- The most effective control measures for a given situation
- Prioritisation for management

### Step 3: Respond to the Risk

There should be a direct follow through from risk assessment to response to that risk. An action plan that utilises the latest in IP Surveillance technology should be developed for all identified risks. This plan should specify the specific technology utilised, the person or persons responsible, proper procedures and processes and the timeframe for action. The goal is to reduce the risk to as low a level as is reasonably feasible.

### Step 4: Monitor and Review

Risk is dynamic and evolutionary and therefore continuous monitoring and reviewing of the risk management control system is essential. This is another area where a dependable, robust video surveillance system shines. Access to real-time, as well as archived, video and audio data allows review of clinical procedures, patient care, provisions for patient and staff safety and security and effectiveness of training regimens, to name a few. All that information is invaluable for refining the risk management system.

# A Smarter Solution Delivers Exceptional Flexibility and Value.

Many mental health care facilities have begun replacing outdated, analog CCTV equipment with an advanced IP surveillance system to improve patient care while improving staff training and better managing liability and risk. Today's technology for recording, monitoring and archiving digital video and audio delivers exceptional value and increased functionality when compared to older analog systems. An IP surveillance system can connect seamlessly to your existing local, regional or even national facilities network infrastructure - greatly simplifying installation, maintenance and support while allowing shared resourcing of risk management monitoring.

## A Smarter IP Surveillance Solution Includes:

**High Resolution IP Cameras** - A mix of camera types can be paired to specific requirements of your risk management strategy. Camera form factors include cube, box, bullet, fixed dome and speed dome that are specifically designed for

reliable performance in a variety of indoor and outdoor applications. Some models also support 2-way audio and come equipped with Varifocal lenses or pan/tilt/zoom (PTZ) capability. Multi-megapixel day/night cameras provide excellent quality images in darkened patient rooms, supply closets and outdoor areas. Parking lot or grounds security – if manned – is well served by strategically placed high resolution, roof-mounted PTZ cameras.

### Flexible Network Switching Technology -

You shouldn't have to worry about system disruption or downtime that causes you to miss critical pieces of data or lose a patient view for a period of time. That's why you need field-proven, secure network switches that are durable, reliable; easy to configure and provide the advanced performance you need to stay up and running.

Power over Ethernet (PoE) connectivity allows for discreet installation in virtually any indoor or outdoor location. Cameras with built-in 802.3af

compliant PoE modules ease the installation process by reducing the need to drill holes and lay additional cabling to a power source. In addition, 10/100Base-TX Ethernet ports seamlessly connect to your local network or to the Internet via a PoE capable gateway router that provides up to 30W of power per port.

Other features to consider include:

- Easy configuration through a web-based management system
- Auto Surveillance VLAN to automate configuration and ensure the quality of real-time video without compromising the transmission of network data.

**Scalable Video Storage** - A key to an effective IP surveillance system is having the capacity to handle the demand of recording multiple video and audio streams. And as your video storage needs expand, you need a solution that can grow with you.

## A Case In Point

### Millwood Hospital/Hickory Trail Hospital



Millwood Hospital in Arlington and Hickory Trail Hospital in DeSoto are acute behavioural health facilities serving youth, adult, and senior psychiatric patients from 4 counties in North Central Texas.

D-Link and local value add reseller Preferred Technology Solutions (PTS) of Richardson, Texas recently installed a robust end-to-end IP surveillance network founded on 250 D-Link day/night fixed dome IP cameras installed indoors in each of the hospital's four psychiatric units as well as in exterior courtyard areas and parking lots.

The cameras run on private networks through D-Link's xStack Gigabit Layer 2 Managed PoE (Power over Ethernet) switches

selected for their ability to handle the additional load of real time audio. They also provide both power and networking to the cameras "beyond a plug" – those remote installations in exterior courtyards and parking lots.

While special software modifications were required to support the audio feature, Video Insight, whose video management software was selected to manage the cameras, worked diligently with D-Link Professional

mix-and-match drives in one of the unit's expandable bays.

Among the many features of the system is the remote access capability. Since the surveillance networks securely interface with the corporate network at the server level, hospital staff, security and risk management personnel can monitor the facilities any time day or night from any location...even on a smartphone with a secure connection to the internet.

*"My key point in this whole thing was flexibility and scalability. The way this system is built, I can easily expand to meet future needs."*

—Tracey Fox, IT Director, Millwood Hospital and Hickory Trail Hospital

Services to ensure uninterrupted dual audio/video surveillance.

Storing the mandated 30 to 90 days of audio and video footage was achieved with D-Link's xStack iSCSI SAN array. Using a 10Gbit iSCSI System-on-a-Chip (SoC) solution that can handle over 80,000 I/Os per second, the system can support 30TB of raw capacity. The hospitals began with 15TB but are able to easily add capacity by simply swapping

The benefits of the new IP surveillance system have been immediate and profound. Having more than justified the cost of upgrading their antiquated analog system to a robust, end-to-end IP surveillance system from D-Link, Millwood and Hickory Trails hospitals are realizing the value of creating an environment that is safe, secure and more effectively fulfilling their mission.

## A Variety of Storage Products are Available Depending on your System Needs. They Include:

- **Network Video Recorders (NVRs):** These are economical, standalone, PC-less, all-in-one IP surveillance recorders. They offer plug-and-play operation and are usually ready to use right out of the box. They offer quick set-up and easy operation for a limited number of cameras, an intuitive graphical user interface (GUI), and because they're IP-based they can be accessed from anywhere.

- **Network Attached Storage (NAS):** For larger applications, Network Attached Storage (NAS) devices offer expanded capacity and flexibility. Compared to traditional storage, NAS devices offer faster data access, easier administration, and simple configuration. A NAS is designed to be used with Video Management Software (VMS).

- **iSCSI Storage Area Network (SAN) Arrays:** For the most demanding environments, high performance and flexible SAN arrays are the technology of choice. These powerful devices are ideal storage platforms for archiving IP video in an extensive network environment. With an easy-to-use management interface, built-in RAID protection and the ability to expand your raw storage capacity, SAN array solutions offer a cost-effective platform for large-scale video surveillance applications. SAN arrays are designed to be used with Video Management Software (VMS).

**Video Management Software (VMS) -** In any IP surveillance system, but especially in large-scale deployments, Video Management Software (VMS) is the heart of the system, connecting all the hardware into an optimal, integrated solution. There are a variety of product options depending on the specifics of your applications and requirements. Many VMS solutions can easily integrate into other systems like access control, building management systems, as well as fire and perimeter alarm systems.

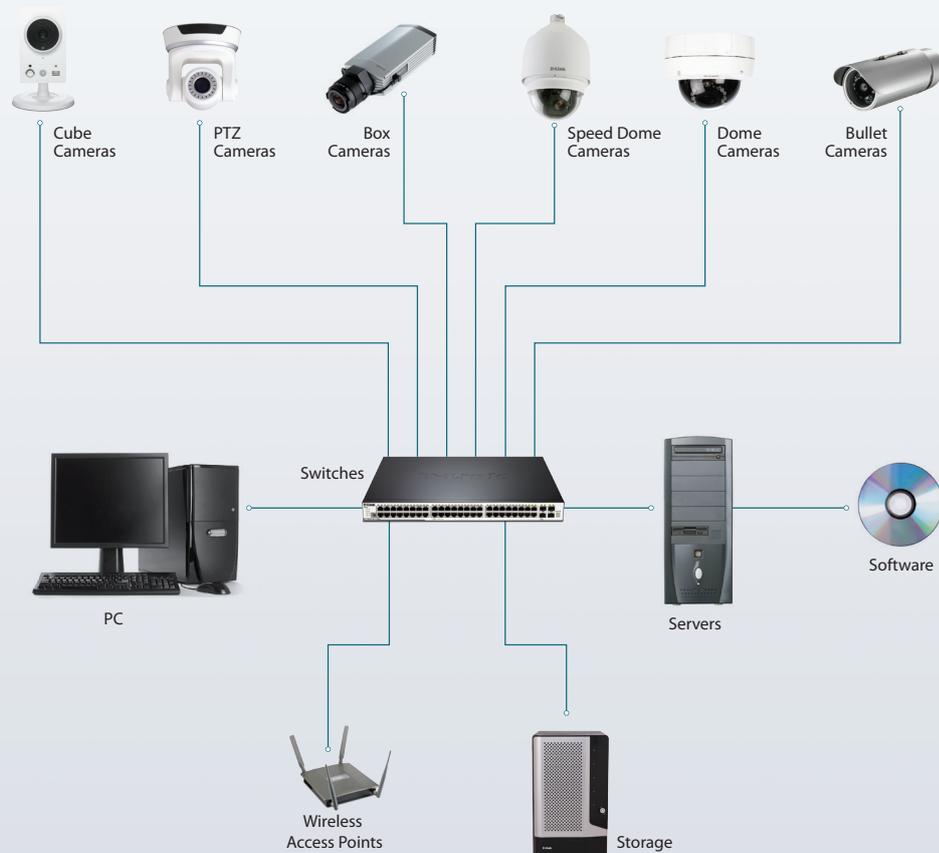
## Smarter IP Surveillance Begins with an Advanced End-To-End Solution.

At D-Link, we understand that successful IP surveillance solutions demand more than cobbling together isolated products with limited functionality and connectivity. As a global leader in network connectivity solutions for SMB and larger businesses, we've taken a more intelligent approach to developing our end-to-end IP surveillance systems.

We start with the network and work outward to ensure that all our systems are secure, easy to manage and reliable while delivering

unparalleled performance and value. At D-Link, a full line of IP cameras, network switches, video storage devices and video management software (VMS) are seamlessly integrated into IP surveillance systems that have the flexibility, scalability and compatibility that deliver unprecedented value and performance.

When coupled with the support from our nationwide Professional Services organisation, the result is a clearly "smarter" end-to-end IP surveillance solution.



For more information: [www.dlink.com](http://www.dlink.com)