

## CCTV to IP Surveillance

Traditional analogue CCTV has enjoyed rapid growth in recent years but is now threatened with revolution: namely, IP (Internet Protocol) networking. Predominantly, the CCTV industry is populated with engineers, and sales representatives who, whilst skilled in the traditional, analogue based CCTV technology, are less comfortable in the world of IT. Advances in technology however demand that such an industry needs to move with the times.

Analogue CCTV consisted of bulky expensive coaxial cabling, a multiplexer to present the images and a VCR. Advances in technology and storage then developed the DVR technology, which still required the expense of coaxial cabling but managed the video better and stored the images on hard disk drives. Some systems then connected to the LAN offering an amount of remote connectivity. Now with the video sitting totally on the Network, further advantages can be realised.

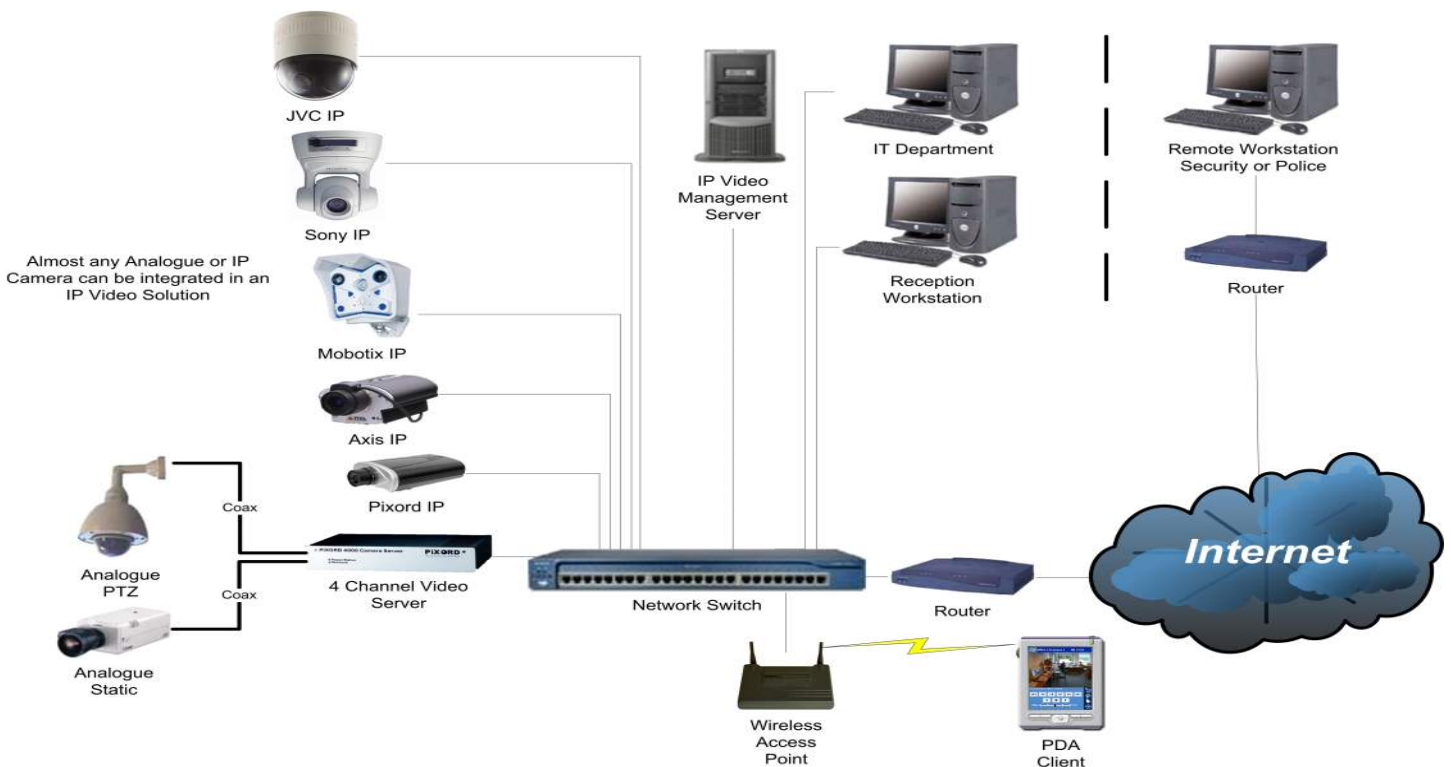
## What does IP mean ??

IP (Internet Protocol) address is an address assigned to the host that wants to view images over the Internet.

## IP CCTV

Internet Protocol CCTV or IP Surveillance is a system that allows you to transmit CCTV images over your existing computer or integrated network using IP addressable cameras / servers, thus saving on expensive cabling. Each camera has its own address and via central management software, can be accessed by several users in any location on any network or across the Internet, using PC's, laptops etc.

## State-of-the-art IP video surveillance solution, that's independent and intelligent.



## IP Surveillance cost savings

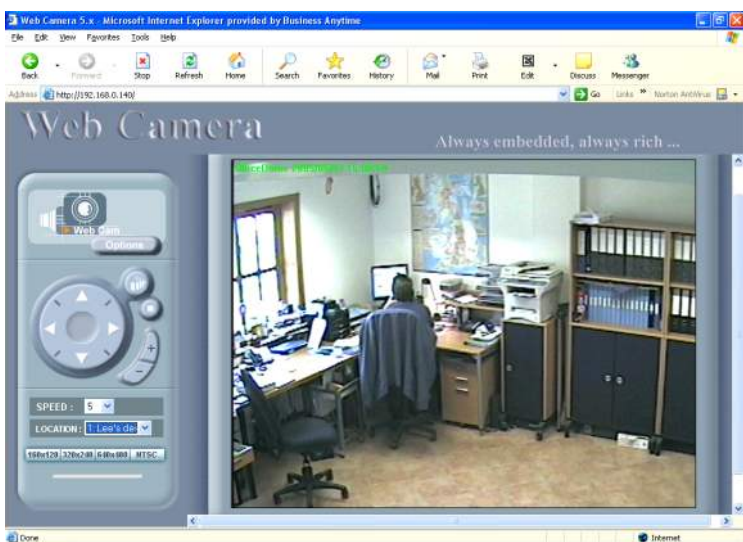
Many cost and technology advantages exist in an IP surveillance system over DVR systems with analogue cameras, these can be summarised as:

- Lower installation costs, as IP eliminates the need for dedicated video cabling.
- Cameras are easy to connect and offer remote accessibility that is different from traditional CCTV.
- Integrates with existing CCTV systems and equipment.
- Smarter software functions include time scheduling, targeting higher frame rates, motion detection triggering and more.
- Highly scalable solutions, with no maximum number of cameras.
- Remote accessibility and remote storage means IP network video is inherently more reliable and secure.
- Beyond security, applications such as process control, integration with databases, employee training etc. can cut costs and enhance revenue.

## Milestone IP Video Management Software

The core to any intelligent IP Video solution is to have a Video management platform which is flexible, can control hundreds of IP technologies and manufacturers and can be scaled from four devices to many hundreds of devices. This platform is the Milestone XProtect range. All of Milestone's software products for controlling video surveillance hardware are based on the TCP/IP network protocol, which enables you to build your own video surveillance system using standard video and computer hardware. This reduces maintenance costs, eases the amount of work for you, and protects your business environment. Milestone software supplies the basis for highly efficient operations of video monitoring and analysis, offers enhanced 16 camera remote viewing software and PDA clients, also opening up a wide spectrum of opportunities for integrating with other business applications in a company's IT environment.

## Flexible software and hardware applications



## Reducing the costs of Video Transmission

Using Video senders and receivers, a Pan Tilt Zoom camera can be controlled from anywhere in the world with less than a second delay over low bandwidth circuits.

This technology negates the need for high cost Leased Lined & ISDN circuits by converting the analogue video signal to MPEG4 streams, which can be transmitted across cost effective low bandwidth ADSL circuits.

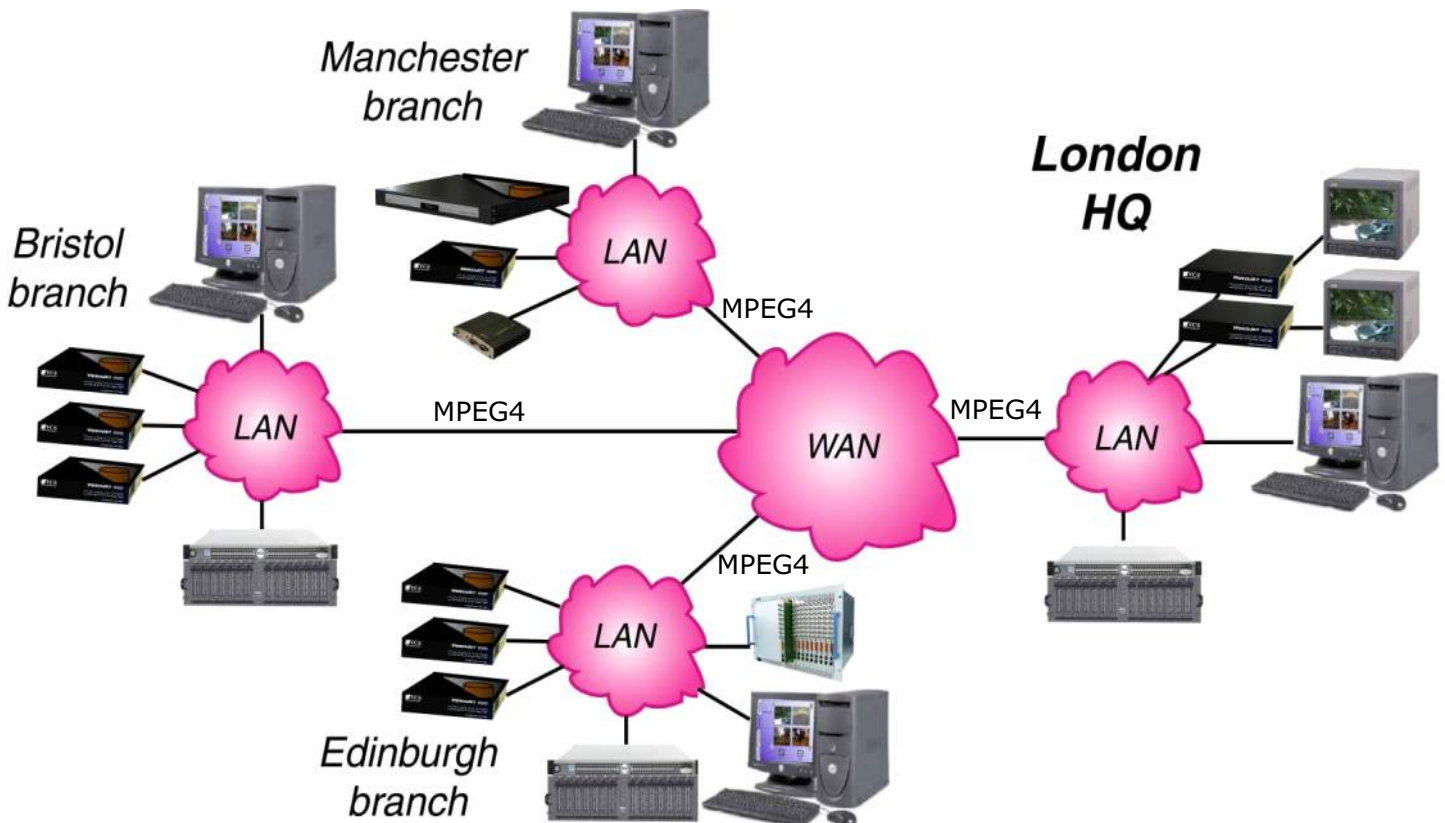
Once these MPEG4 streams are received by the receiving equipment, they are then converted back to an analogue format, which the central recording, monitoring & alarm centre software can handle.

Government bodies can now deploy rapid, cost effective residential video control in a fraction of the time it would take to install a Leased Line or ISDN circuit, by installing QOS ADSL circuits.

Retail outlets can remotely manager body language in stores to eject potential offenders before the crimes actually happen, reducing emergency service intervention.

Using senders and receivers, access control can be managed worldwide across corporate LAN's / the Internet. Linking access with video. This can greatly reduce the need for manned guards controlling access to staff or visitors.

Utilising central recording, monitoring & alarm centre software which has a fully customisable, web based, front end, corporate, government & security providers can now centrally monitor / manage alarms, access and link video with duplex audio to provide a truly cost effective, networked, video transmission format which has the backing of Bosch Security Systems.



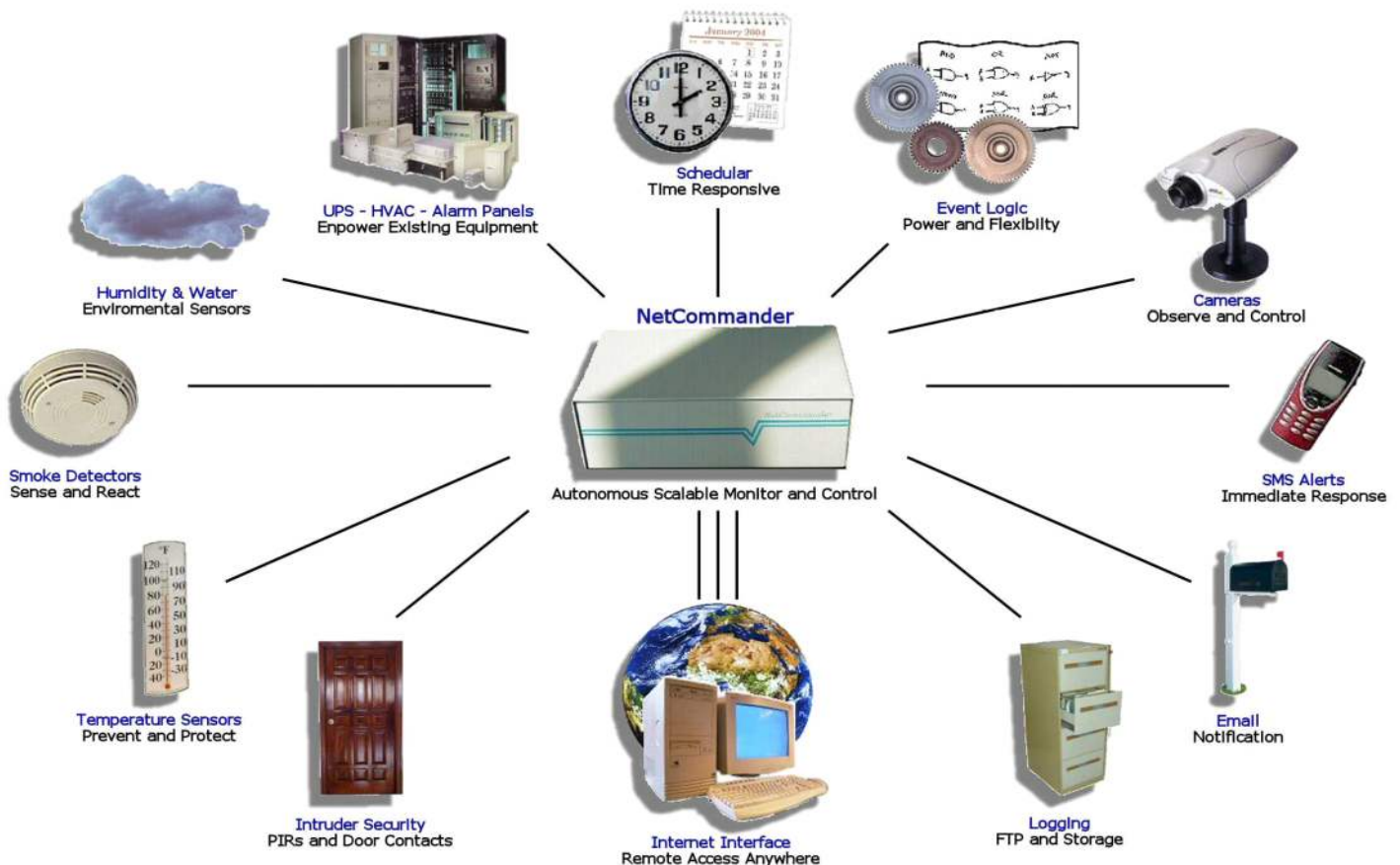
## Intelligent Environment Monitoring

NetCommander is a web accessible network device for monitoring environmental and equipment alarm status in buildings, server rooms and remote locations. Netcommander detects threatening conditions such as fire, flood or over heating before equipment is damaged or destroyed. A wide range of sensors, such as: UPS / HVAC alarm monitoring, IP Camera support, Mains switching, Temperature sensors, Relative humidity sensors, Light sensors, Dual tech Intruder detectors, Smoke, Heat and Carbon Monoxide sensors, Liquid level sensors, Flow sensors (air, liquid) Pressure sensors and switches, Acoustic sensors, Vibration sensors, Glass break, Water leak detectors, Condensation detectors, Pneumatic controllers, Door contacts, Switches (panic button, pressure mats etc.) Servo motors (water valves, window openers etc.), can all be incorporated to provide complete environment monitoring and control solution. Keep track of situations using counters to record how many times an event occurs; for example: the number of people entering and leaving the building. Then you can use the values to trigger events; for example: if somebody hasn't left the building by 8pm then alert security.

Raising the alert can be made appropriate to the situation, from SNMP traps for network issues, security lights and sirens for intruder security to operating coolers when heat sensors go over toleration levels. The right person is contacted immediately via SMS text alerts or email.

Reaction to any situation means electrical systems can be controlled directly and even motors and control systems can be powered up or down through the power switching range.

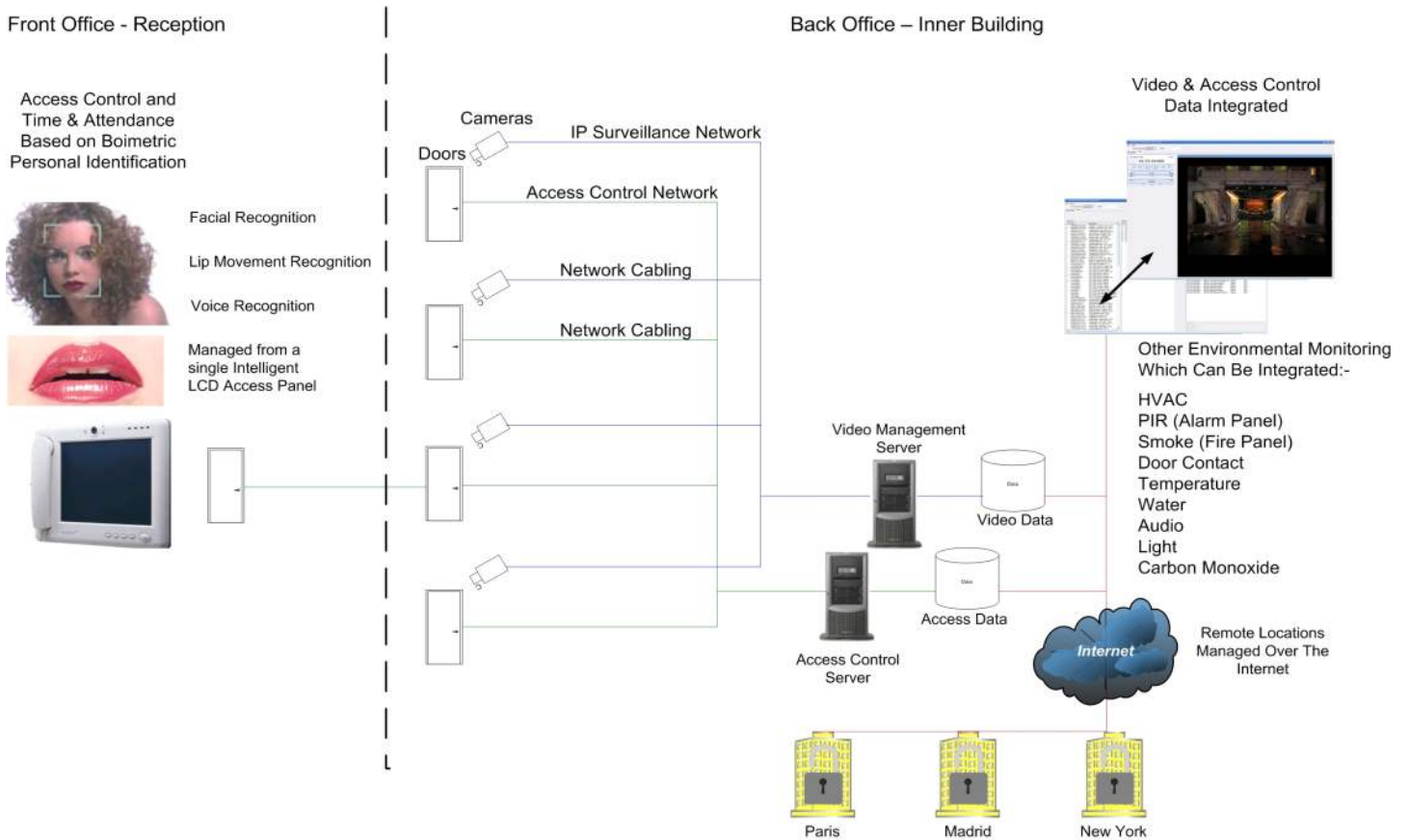
Building Environments, Industrial Processes, Security and Education can all benefit from intelligent monitoring.



## Integration The future of Building Security

Combining all Integrated Systems technologies offers a full building management service, which is centrally controlled and offers massive reductions in administration and maintenance costs.

# Networked Building Security Solutions - Integrated



The future is here.

Science fiction is now science fact.

Network, Deploy, Integrate, SAVE.