

Introduction


- > *Swinburne University of Technology started of in 1908 as a Technical collage then on 1 July 1992 was proclaimed as a University.*
- > *Then in 1998 Swinburne amalgamated with Eastern TAFE.*
- > *Swinburne has six campuses across Melbourne: Croydon, Hawthorn, Healesville, Lilydale, Prahran and Wantirna.*
- > *Maintains a strong technology base and links with industry, complemented by a number of innovative specialist research centre's.*
- > *Offers an extensive range of programs for school leavers including undergraduate degree programs as well as a wide range of TAFE programs.*
- > *Wide range of postgraduate courses ranging from graduate certificates through to PhDs.*

The Challenge

- > Required an effective CCTV solution to access situations and ensure the safety of staff, students and public all day every day.
- > Main Campus situated in Hawthorn has:
 - > Railway Station and train line cutting the campus in half
 - > Several Licensed pubs and night clubs located near the campus
 - > A number of Public Roads
 - > Classes during evening and weekends (extended operating hours)
 - > Extremely difficult to manage (can't just lock the gate)
 - > 200 CCTV cameras already installed with no standards or monitoring. Most capturing black, white and fuzzy images. Well maybe capturing.


Background

- > **55,000 students and 2,400 staff spread across six major sites across Melbourne.**
- > **Recently updated network infrastructure that includes fibre and microwave based network links between the sites**
 - Currently used to communicate and share resources between departments and campuses.
- > **Lacking an effective way to manage security and surveillance.**
 - To protect staff, students, visitors and the hundreds of millions of dollars in assets under its control.
- > **Strong and well staffed internal IT department.**



SWINBURNE
UNIVERSITY OF
TECHNOLOGY



Background





- > **In early 2001 Swinburne fully upgraded its network infrastructure.**
- > This network delivered 100MB data speeds to the end point with Voice over IP and Power over Ethernet.
- > **At the time 18,000 end points all with PoE was one of the largest rollouts in the world.**
- > During the rollout 4000 VoIP Phones were deployed and over 400 wireless base stations.
- > **In late 2007 we fully upgraded the network infrastructure again as part of the now cyclic replacement program.**
- > The endpoints now have 1GB data speeds and enhanced PoE.

The Approach

- > Having a network this advanced we are all ways looking to add value.
- > We had Phones and Access Points powered by the network.
- > So why not other things, so we now deploy clocks powered by the network with time sync via NTP
- > Currently deploying building PA speakers with VoIP connections.
- > Can we do surveillance cameras and access control?





The Approach

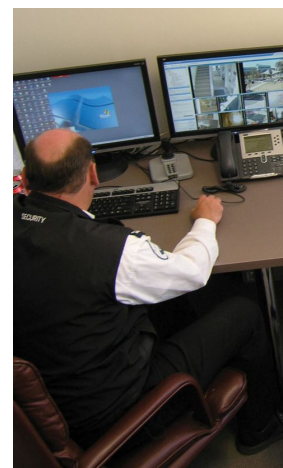
- > We had a good look around and spent many hours of researching.
- > Several mid-range cameras from major IP camera manufacturers were compared and evaluated.
- > Along with the search for cameras was the search for a recording backend.
- > Axis network video solutions were selected as the most suitable vendor due in part to the ease of connection to our existing network infrastructure.



The Choice for Cameras was AXIS

Main Reasons to make that Choice !

- > Exceptional image Quality
- > Possibility of integration with current CCTV systems already in place
- > Superior performance compared to other cameras at the same price point
- > Exceptionally easy to install and deploy
 - Axis Camera management software
 - Each cameras in build web interface



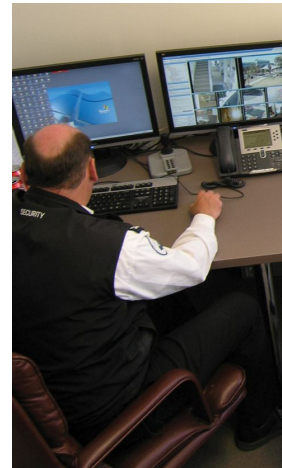
The Choice for the Backend was Milestone

Main Reasons to make that Choice !

- > Exceptionally easy to setup
- > Even easier to use and manage
- > Open platform allowing integration
- > Scalable and Flexible
- > Support for over 500 IP cameras from 50 of the leading manufactures
- > Ease of use. No more then 5 min required



The Open Platform Company



The Solution

- > Installation of 84 Axis network cameras with Milestone's XProtect software at Hawthorn Campus– Phase 1
- > 46 additional cameras installed at Hawthorn covering the Railway walkways and refurbished buildings – Phase 2
- > Installation of 57 Axis cameras at Prahran Campus and more additional cameras at Hawthorn – Phase 3
- > Currently over 280 cameras have been deployed.
- > The final project will include all 6 campuses with up to 500 network video cameras. Connected to 10 recording servers with approximately 70 TB of storage between them.

The Results

- > **Manageable Security**
 - Security staff can easily see and access what's going on across the sites from a centralized location.
 - Recordings of incidents can be quickly made available to police or used for internal investigations.
- > **Ongoing plans to install network video solutions at all the Swinburne campuses over the next 18 - 24 months.**




The Results

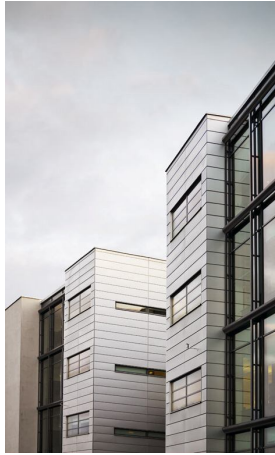
- > **Dramatic decrease in major crimes.**
- > Increase in crimes being reported.
- > **Staff and Departments asking for more cameras.**
- > Deployment easier and faster than planned.
- > **Slight increase in complacency regarding security of personal items by students.**





What have we Learnt



- > Working ties with Network Engineers and IT department is a must.
- > **The CSI effect.**
- > Everyone is a critic
- > **Rapid deployment easily achieved.**
- > Cameras don't require pre-setup, but pre-allocation of IP address saved a lot of time.
- > **Once the quality and ease of use is demonstrated no one argued the price.**
- > Bandwidth usage fully adjustable.
- > How much storage? – What can you afford?







What have we Learnt




- > **Plan for expansion right from the start, we planned for double the initial install and have already surpassed that point.**
- > Value add items
 - Wi-Fi Cameras
 - Time lapse Recordings
 - People Counters










Questions & Answers



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