Public Address over IP by STENTOFON
St Lawrence College

Brisbane, Queensland

Project
St Lawrence College PAoIP

Client
Network Solutions

Location
Brisbane, Queensland

Date completed
28th January 2011

Equipment Supplied
1 x AlphaCom XE7
10 x PAoIP Interface
1 x IP Line Level Interface
1 x CRM 5 Paging Panel
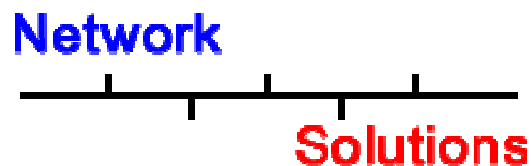Telephone Gateway
School Bell
Alarm and Evacuation

Status
Completed

The Challenge
Supply a Public Address over IP (PAoIP) system to a prestigious Brisbane private school that would utilise the existing fibre backbone between buildings, whilst removing the reliance on failing direct burial speaker lines.

The Site
St Lawrence's College is a school with several main buildings, and a brand new elevated sports ground, built above the car park for the recently renovated Mater Hospital. The school relied on an aging 100v speaker network that had become unreliable due to direct burial of cabling, and all announcements were made via the PABX, resulting in low audio quality.   School bells were delivered via a bell scheduler that was difficult to operate, and therefore was left un-programmed, resulting in the school bell operating during holiday periods. The school had, however, invested heavily in it's I.T., and a solid fibre backbone gave reason to investigate PA over IP.

The Scope
Network Solutions were contracted by the school to provide the PA system. Through careful planning and discussions between STENTOFON and Network Solutions, it was determined that 10 PA interfaces, grouped into 5 PA zones would provide adequate coverage to all external areas of the grounds. Each Interface was required to be selectively disabled, as certain buildings are used for exams at certain times of the year. An IP Line Level input was required to retain PABX paging integration, and the school were interested in having easy control over the school bell. Finally, the school requested PSTN access into the system, protected by PIN code, to allow for remote control of the school bell, and also for external paging and alarm control in the event of an evacuation.

The Solution
Using the AlphaCom XE7 Intercom Server, STENTOFON were able to produce a Plug and Play networked PA system for Network Solutions. PAoIP Interfaces in 19" Rack Mount format are the bridge between IP and Amplifier, receiving audio from the CRM5 based Paging Console located in the Administration building.   Using pre-programmed keys on the DAK48, staff may disable PA Interfaces, activate the school bell, trigger evacuation messages or distribute music to the grounds. SIP Trunking to an Audiocodes FXO gateway allows for PIN protected paging, alarming or school bell manipulation from a dedicated in-dial number. Announcements are previewed prior to being sent with the Recall Page, resulting in less stress and fewer spoken mistakes by staff.

The Outcome
Through the excellent work of Network Solutions, STENTOFON was able to deliver a PAoIP system that exceeded the customer's expectations.

"I think one of the biggest assets of the system is for the Administrators to pre-record and preview their announcement before broadcasting it - they absolutely LOVE this feature, I believe they now never use a live announcement! The other is no longer needing to program holiday schedules etc. A quick keypress on the key panel enables or disables the school bell."
- David Shackleton, Network Solutions