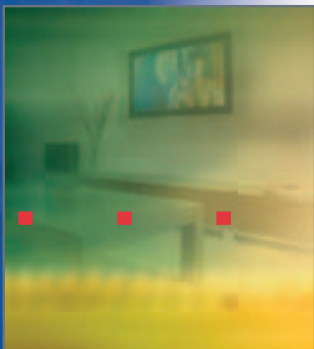


Application Note

Gated Community



■ Overview

Hills Industries provide a broad range of technology products that are suitable for horizontal residential applications such as gated communities, residential estates, aged care facilities and retirement villages. Electronic facilities can be provided to meet the needs of the management and residents.

■ The Challenge

- To develop a range of products suitable for gated communities and provide the latest in technology, which allows for the flexibility required for such diverse applications.

- To combine multiple services across a common backbone and provide premium performance and scalability for the operator and tenants.

■ The Solution

■ Communal facilities

Access Control - The Challenger access control system is used to control access to common areas through key fobs or cards. Users are granted permissions to access areas at certain times. The site manager can grant permissions to users with Titan software running on a standard PC.



The Challenger system is compatible with a fibre optic distribution system and a single card may be issued to



residents for the purpose of access to both communal facilities and individual residences.

Challenger is also a powerful security system suitable for implementation in management areas and communal facilities.



Intercom - The Sentex intercom system allows residents to answer a call from the front gate using the telephone infrastructure. This system is compatible with a fibre optic distribution system and eliminates the need to have a separate intercom handset in the resident's dwelling.



CCTV - Closed circuit video cameras are used to monitor the site and images can be recorded onto a Digital Video Recorder (DVR).

DVR's have become very affordable and now feature inbuilt CDRW drives so that images can be quickly transferred to a disc should any incident occur. A range of cameras, lenses and housings are available for almost any application.

Selected cameras can be made available on the MATV system so that residents can view these on the television in their dwellings. This may include a camera at the front gate and cameras in common areas.

CCTV images can be transmitted over a fibre optic distribution system.



MATV system - Hills Antenna Division distributes a range of products for MATV applications. MATV enables both digital and analogue Free-to-Air and Pay television to be distributed throughout the estate from a central point. MATV can be distributed over a fibre optic distribution system. This eliminates the need for residents to have a separate antenna as a master antenna and satellite dish is provided for the estate.



Telephone - Hills Industries offers Unifone PABX systems, which may be suitable for communal areas as well as management areas.

■ **Facilities for individual dwellings**

A range of electronic services are available. Typically these services are distributed from a central point in the dwelling using the Hills Home Hub, a structured cabling system.



Structured Cabling - The Hills Home Hub can distribute services such as telephone, data, FTA television, pay television, music and security.



Security - The NX security alarm system is extremely affordable and includes a dialler, which allows monitoring by most security monitoring companies. A smart card can be provided for access to the dwelling. The same card can also be used for access to the common areas.



Video Alarm Verification - Using Ozvision, post alarm and pre alarm, video can be transmitted to the control room for video alarm verification.

Nurse Assist - A nurse assist facility can be provided where alerts are passed back to a central control room. Communication is established via a system unit in the dwelling and the control room can notify management or call emergency services if required. A nurse assist button or pendant is available for placing nurse assist calls.

Telephone - The Hills Home Hub distributes telephone services within the dwelling. A mode 3 telephone connection is provided to the NX security system for alarm monitoring.



Broadband Internet and Home Networking - The Hills Home Hub distributes data in the dwelling to multiple points. In conjunction with data networking equipment, such as a modem, router or data switch, a home network can be established that allows a single

broadband internet connection to be shared between several computers.

Free-To-Air Television - The Hills Home Hub allows FTA television to be distributed to multiple points within the dwelling.



Pay Television - The Hills Home Hub allows digital pay television to be distributed to multiple points within the dwelling.



Distributed Music - Hills Home Music modules within the Hills Home Hub allow high quality distributed audio to be provided in the dwelling. Hills have a full range of speakers and offer a complete solution.



Lighting Control - Hills distribute iControl lighting control products, which allow integration of lighting with the security system as well as mood lighting. For example, an “away” lighting sequence can operate when the alarm is armed. A “welcome home” lighting sequence can run when the front door is opened or lights can flash in a “panic” mode when the alarm is tripped. Mood lighting can slowly fade the lighting in a home theatre setting.

■ Distribution backbone



Optic Fibre distribution of phone, data and CCTV and intercom is available using Hills Fiber Options products. Hills also distribute Foxcom fibre solutions for the distribution of MATV and pay television services. A fibre backbone allows plenty of bandwidth for future services, as well as eliminating the need to use conventional cables for infrastructure.

■ Revenue opportunities

Recurring revenue can be derived from the provision of services over the infrastructure in the estate. These services include security monitoring, nurse assist services, broadband Internet, television services and telephone services. These revenue opportunities are best realised by the implementation of a billing system where a commission

can be generated when services are billed. A billing arrangement would need to be negotiated with service providers so that management can receive a single bill for

services. The management would then bill the residents using the billing system for a service fee.

Hills have several partners who offer a billing platform for these applications.

■ Application summary

A comprehensive system design can be provided once the requirements of the site have been established. Hills bring together the ultimate design team to maximise the benefits of these product ranges and services to suit your applications. An economical solution that provides scalability and caters for future requirements is paramount in these environments.

Similarly, Hills offer a range of products suitable for vertical multi-tenant applications.