

# Australian Mall Leads Way with New Video Security Technology



Warringah Mall, one of Australia’s largest shopping centres, is leading the way in video surveillance technology following the recent deployment of March Networks 4000 C Series Networked Video Recorders (NVRs) and R<sup>5</sup> Visual Intelligence software suite.

The converged platform 4000 C Series is one of the first NVRs on the market to accommodate both analog and high-resolution IP cameras.

The 125,000 sq m (1,345,500 sq. ft.) shopping centre, 15 kilometres (9 miles) from Sydney’s Central Business District, had just awarded a contract for 250 cameras and conventional 4000 Series DVRs to March Networks™ Certified Solution Provider Crimewatch™ Video Pty Ltd when the R<sup>5</sup> Visual Intelligence Suite and the C-Series platform were unveiled.

The move to change platforms was made when Anthony Brooks of Crimewatch called and described the many new features,

functions and benefits of R<sup>5</sup>. “He said ‘it’s brilliant – what do you want to do?’” recalls Shopping Centre Operations Manager Daniel Wilton. “By the end of the conversation, I was sold. It was such a big step forward in the development of the technology that we had to have it.”

The use of high-resolution IP cameras marks “the start of a new era for video surveillance,” says Crimewatch Research and Development Manager Daniel Moore. The 3-megapixel security camera deployed at Warringah Mall offers nine times the resolution of standard analog cameras.

“This means that you can cover nine times the area or you can record the same field of

view and have nine times the resolution,” explains Moore.

Using high-resolution IP cameras, security staff can zoom in on a face in a crowd or a license plate and capture a high quality image.

High-resolution video consumes a lot of hard-disk space, so March Networks’ converged platform is the ideal solution, allowing customers like Warringah Mall to deploy IP cameras strategically at exits and entrances and in large open spaces such as food courts, while using analog cameras everywhere else.

Wilton plans to eventually deploy between 20 and 30 megapixel cameras to achieve an optimal balance of coverage and quality.

“IP cameras also offer all of the advantages associated with IP telephony systems,” says Moore.



“If you install a camera at one location and then need to relocate it, you don’t have to run the cable directly to the DVR. You can run it to a switch and, from that point, the video travels between the switches and appears wherever you need it.”

At Warringah Mall, Crimewatch set up four nodes linked together by a 1 GB fiber network, so there is ample bandwidth to stream megapixel images to the NVRs.

Yet another advantage of the C-Series platform is its capacity to accommodate more cameras. The 4416 C NVR, for example, has 16 analog video inputs and can record up to eight IP cameras, for a total of 24 cameras.

“Looking back, the feature set that we were promised and took on face value has turned out to be everything we expected and more. March Networks has taken a great product and made it even better.”

- Daniel Wilton  
Operations Manager, Warringah Mall

### Map interface

The video surveillance system at Warringah Mall is integrated with a map interface that provides security guards with a graphical layout of the mall showing each of the 250 camera locations. Clicking an icon on the map immediately displays video from a selected camera on a monitor in the mall’s security office.

“This is a nice application, but Warringah Mall wanted it to be a little smarter than that, so we used the R<sup>5</sup> Software Development Kit and the video surveillance system’s motion detection capability to trigger alerts through the map interface,” explains Moore.

The icon for a camera where motion is detected turns red, an audible alarm sounds and video from the camera automatically appears on a monitor.

“Security officers at the mall don’t have to search through the cameras to locate an

intruder,” says Moore. “The system does it for them. If several intruders walk into the mall and go their separate ways, the guards can look at the map and see exactly where they are.”

March Networks’ newest software release, the R<sup>5</sup> Visual Intelligence Suite, offers Warringah Mall the ability to automatically record video at high frame rates and then drop frames after a specified period of time.

“The mall’s security team generally know about an incident within a half-hour or an hour, so the R<sup>5</sup>’s Smart Archiving feature, which provides a 7-day high speed recording and 30-day regular archive, provides high quality video of any incident,” says Moore.

The real-time recording is held in a buffer and is eventually replaced by a lower-frame rate recording for long-term archiving.

“It offers Warringah Mall higher quality video for investigating events immediately following an occurrence without sacrificing storage capacity,” he points out.

Shopping centre management was “a bit” wary about being the first to deploy March Networks’ C-Series NVRs and R<sup>5</sup> software, but recognized that the system proposed by Crimewatch was “light years ahead” of conventional DVR systems.

Wilton liked the bells and whistles, but equally important was the system’s ease of use.

“We wanted to make sure we put in a system that we could sit someone in front of with a minimum of training. It was important that the features were there, but we didn’t want it to be a technological nightmare.”

Wilton singles out the Investigator Tool as one of the most impressive features of the R<sup>5</sup> software suite.

A security guard searching for video using the Investigator Tool selects a camera, defines a timespan and is presented with an activity graph and thumbnail images of video at predetermined intervals.

“If you want to know when a car moved or when someone put their bag down, you can

review the thumbnails and quickly zero in on the video segment you need,” explains Moore. “The thumbnails and the burn-to-CD button have taken what was already a fairly streamlined process and revolutionized it,” says Wilton.

### Health monitoring

Advanced health monitoring of system components, including hard-drives and cameras, provide timely alerts to system administrators.

The software monitors hard-drive temperatures and repairs bad blocks automatically. It also “memorizes” a camera’s usual field of view, so if it’s moved or the lens is spray-painted, the system issues an alert.

All of the advantages of the C-Series NVRs and the R<sup>5</sup> software suite build on the already impressive features of March Networks 4000 Series platform, says Moore.

The docking station design, for example, allowed Crimewatch to install 4000 Series DVRs at the mall last year and easily replace them with C-Series units this year.

The swap-out was performed without having to disassemble and reconnect the cabling and took a mere eight hours.

One of 33 AMP Capital shopping centres in Australia and New Zealand, Warringah Mall has one of the most technologically sophisticated video surveillance systems in the world.

“Looking back, the feature set that we were promised and took on face value has turned out to be everything we expected and more,” says Wilton. “March Networks has taken a great product and made it even better.” ✨

### Crimewatch Video

Crimewatch™ Video ([www.cwv.com.au](http://www.cwv.com.au))

is a security systems integrator

specializing in the design and installation

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## Warringah Mall

Warringah Mall, located in suburban Sydney, is one of the largest shopping centres in Australia with 125,000 sq m (1,345,500 sq. ft.) of retail space and 295 stores. The centre's distinctive architecture features open courtyards, covered walkways and enclosed malls on three levels. The centre is managed by AMP Capital Shopping Centres, which boasts a portfolio of 33 shopping centres in Australia and New Zealand. [www.warringahmall.com.au](http://www.warringahmall.com.au)

