

Matrix case study: Callipoli Home

Aged care facility puts residents at the heart of technology

Matrix CNI couples advanced networking solutions and collaborative design to support the arrival of an aged care facility where residents flourish.

Gallipoli Home

www.gallipolihome.org.au

Industry

Aged Care

Location Sydney, Australia



Solution

- Powerful and reliable network to support a staff voice communication system, high definition TV streaming, audio visual presentation system, food and refrigeration temperature monitoring, and an extensive deployment of RFID tags.
- Flexible network planning and implementation to meet initial technology objectives and allow the facility to continue to adopt bleeding-edge solutions into the future.
- Secure network onboarding providing guests and contractors with a seamless user experience, avoiding unnecessary connection queries.
- Robust cybersecurity measures to deliver a safe online experience and achieve ultimate protection for sensitive resident and staff information.

"We needed a reliable solution to support the unique needs of our new facility. The Matrix CNI team were extremely flexible during the design process and ultimately delivered a solution that exceeded our expectations."

Hasan Alca, Finance Manager, Gallipoli Home

The client

Gallipoli Home opened their doors in mid-2018 to become the first aged care home in Sydney centred on serving the needs of Muslim and Culturally & Linguistically Diverse (CALD) elders. Built from the ground up featuring 102 suites, the Gallipoli team's aim was for the facility to "look like a hotel, feel like a home, act like a hospital". Alongside providing a 5-star hotel experience and the highest standard in aged care, technology was to be a centre piece of their offering to residents and employees alike.



The background

To succeed in the extremely competitive aged care industry, Gallipoli envisioned an environment where bleedingedge technology would support the delivery of smart, more efficient ways of providing superior care and a first-class resident experience.

They understood what they wanted but knew they couldn't achieve it alone.

To realise their vision, Gallipoli engaged the expertise of Matrix CNI to design and deliver an advanced networking solution that would be core to the facilities success.

The challenge

Designing a solution for a building that didn't yet exist presented Matrix with a unique proposition. "The planning for the technology aspects of the build started on day 1 of the project," explained Hasan Alca, Finance Manager at Gallipoli Home. "By inviting the Matrix team on-site before construction was complete, we were able to work collaboratively to ensure we could achieve an outcome that matched our vision."

"Having our team on-site during construction was really valuable. We were able to fully scope out the site to determine the best solution and map out elements such as access point locations," added Raymond Utatao, Business Development Account Manager, Matrix CNI. "Getting involved early allowed us to produce a robust network design that was able to support the technology vision that Hasan and his team had for their facility." Extensive experience designing solutions for the health and aged care sector was also an important factor. A robust network would play a vital role in supporting Gallipoli's technology infrastructure for today's requirements, but also for future innovations. Because staff must be free to focus on taking care of residents, the network needed to be reliable, easy to maintain and work within the allotted budget.

Cybersecurity was equally important. As a highly community focussed organisation, the privacy and protection of residents and their families was paramount. However, while the solution needed to provide complete security, it couldn't inhibit the seamless use of technologies throughout the facility.

The results

By engaging early in the planning process, Matrix and Gallipoli were able to achieve the best possible outcome - design a network with end users front of mind that exceeded the expectations of staff, residents and visitors. The meticulous design and a willingness to change plans and equipment to achieve this result meant deployment was complete in just one month. This was even more impressive when you consider the extensiveness of the solution, with all corners of the facility and its operations influenced by the implementation:

- A voice communications network leverages location services and voice commands to enable Gallipoli's 100+ employees to quickly locate and communicate with one another across the site – with 100% uptime.
- For resident satisfaction, the network was designed to support high definition TV streaming in all 102 suites, allowing information such as daily activities to be quickly pushed to residents' screens.
- The industry-leading Aruba ClearPass network access control solution enables seamless and secure guest and contractor onboarding.
- For training purposes, a network-supported presentation system allows staff and guests to connect and share with ease.
- A wireless fridge and freezer temperature monitoring system relies on the network to measure and monitor food and device temperatures, triggering notifications if they move outside an acceptable range.
- Network-connected RFID tags are deployed on bedding and clothing to ensure residents' laundry items are quickly scanned and returned to the right suite.
- Aruba Central provides network monitoring for all wireless and wired network components, maximising uptime by delivering timely alerts to rectify any issues before they cause major impact.

To secure these numerous network entry points, Matrix integrated a Palo Alto 3000 series firewall to secure the internal network from malware and attacks and provide control of internet services for complete peace of mind. For additional security, VLANs were implemented to partition devices within virtual walls to ensure no unauthorised data could cross between the them. This meant that, for example, if someone were to enter the facility and plug into an ethernet port, access to the network would be denied.

The technology

Aruba kit:

- Aruba IAP-335 Access Points
- Aruba ClearPass NAC
- Aruba Central Subscription
- Aruba 5400 series core switches
- Aruba 2500/2900 series access switches

Palo Alto Networks kit:

- 3000 series firewall
- Threat prevention and URL filtering subscriptions



Where to next?

Since deployment, Matrix have continued to optimise the solution to increase availability and redundancy with failover links. "The solution has been in place for nearly 12 months, and over that time we haven't encountered any issues with the network," said Alca. "With no in-house IT staff, we know we can depend on Matrix's support, so our team can focus on delivering the best possible care to our residents."

Hailed as a benchmark for aged care in Australia, this project is a blueprint for technical and innovative excellence and will be used by Gallipoli when they look to expand their facility network. Because the network was built with the future in mind, Gallipoli now has the networking foundation needed to adopt innovative, emerging technology including robotics to aid with resident care.

The Matrix CNI difference

Our network solutions are fit for purpose, highperforming, secure and effortlessly manageable. We augment your in-house capabilities with our skilled network engineers across a broad range of use cases. This means you get to the optimal outcome faster and more cost effectively with a partner who has a real commitment to understanding your business and helping you achieve your objectives.



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