

Smooth Operation and High Performance Transform Connectivity for Staff and Patients at Medical Specialist Center



the **solution** : the **network**

Superior technology and support make Allied Telesis the right choice for the Oriental Melaka Straits Medical Centre, in Malaysia.

Overview

Oriental Melaka Straits Medical Centre, a brand new hospital in Malaysia, selects an Allied Telesis solution to build their high performing, future proof network.

Opened in early 2015, Oriental Melaka Straits Medical Centre is a modern, 300-bed, fully-integrated medical specialist centre in Malaysia. It is located at the beach resort area of Klebang, Melaka, 10 minutes from the heart of this Heritage City.

In 2014, the time came to design and build the network for this new facility. The network had to cater for, and connect, two new buildings: the main building, which houses the main medical centre; and another which houses the Nilam College of Nursing and Allied Health Science.

The Centre required a brand new, non-stop network to achieve their critical objectives — high availability of medical data, and high performance with no network downtime

The customer

Owned and managed by Oriental Holdings Berhad (OHB), Oriental Melaka Straits Medical Centre is a centre of excellence, with a commitment to the “seven Cs of quality healthcare” - competence, compassion, choice, community, connectivity, cost and continuous improvement.

Website: www.orientalmedical.com.my

Vision

Oriental Melaka Straits Medical Centre's stated vision is “to be the leader for value-based, high-quality healthcare in the region.”

About Melaka

- Melaka (English: Malacca), is the third smallest state in Malaysia. It is often called “The Historic State”.
- As of 2010, Melaka had a population of just over 788,000 people.





The customer requirements

Building a brand new, non-stop network

Oriental Melaka Straits Medical Centre needed a modern network solution for their new building, which would also extend to the Nilam College of Nursing and Allied Health Science building, which shares the same campus.

Key requirements for the new network were:

- **High performance** – the network needed to provide high-speed access, and be able to cope with high traffic demands. Instant access to patient records, medical imaging files, and other online services are a critical part of providing quality patient care in modern hospital environments.
- **High availability** – it was essential that all departments have seamless non-stop access to online resources. It was also imperative that the network be resilient to any failure, removing any potential downtime.
- **Ease of management** – the new network needed to be well supported, so hospital staff would be confident in its day-to-day operation, and technical staff assured of easily keeping the new systems operating.



Why Allied Telesis?

When it came time to select a network provider, Oriental Melaka Straits Medical Centre considered a number of vendors.

Allied Telesis was the preferred vendor once all tenders had been considered, for a number of reasons:

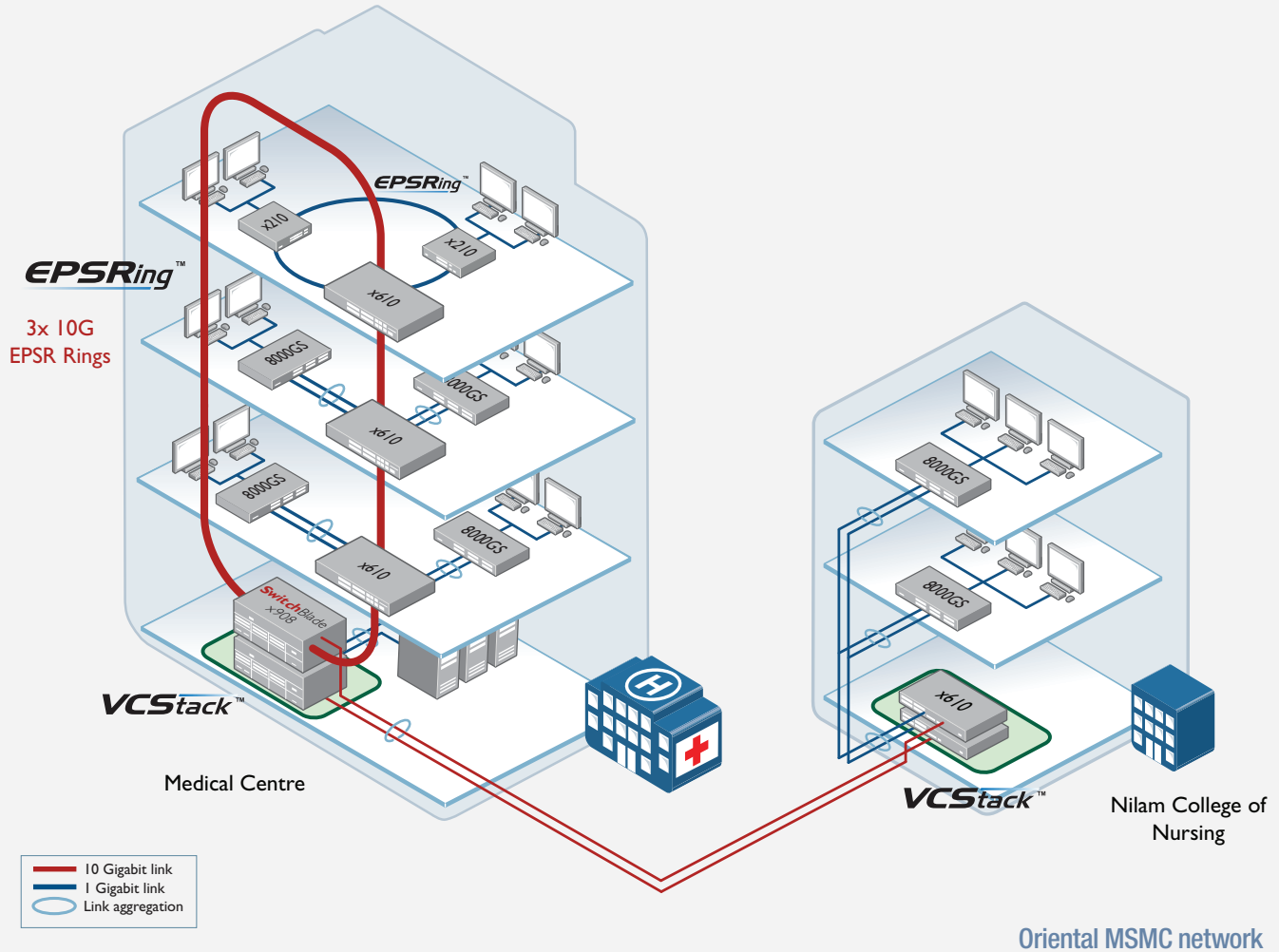
- Allied Telesis offered a solution which was built around Ethernet Protected Switching Ring (EPSRing™) and Virtual Chassis Stacking (VCStack™). The resiliency, path redundancy and fast failover (sub 50ms) that this solution would provide was of great value to the Centre.
- The Allied Telesis offering also came with free hands-on training and technical support — a huge bonus for the Centre.
- Add in the low power consumption and overall “greenness” and the solution was a clear winner.

“Allied Telesis provided hands-on training on the solutions proposed. They provided on-site support during implementation which helped to ensure proper implementation.”



Ms. Christine Lee
Chief Operations Officer, Oriental
Melaka Straits Medical Centre.

The solution



The new network core uses SwitchBlade x908 Advanced Modular Chassis Switches, which utilize Allied Telesis VCStack technology. VCStack creates a single virtual unit out of the two individual switches to increase resilience and performance.

The distribution layer of the network uses Allied Telesis x610 Series Advanced Gigabit Switches. The units in the new medical centre are connected in three high-speed rings using Allied Telesis EPSR, which provides high-speed connectivity to the network core, with failover in a little

as 50ms to maximize network uptime. The units in the nurses' college are also using the power and reliability of VCStack, connected to the core with 2 x 10 Gigabit links using link aggregation. Link aggregation partnered with VCStack provides a solution with no single point of failure.

The network access layer is provided by Allied Telesis 8000GS and x210 Series Gigabit switches, providing Gigabit to the desktop, for a high-performing hospital and training college solution.

Benefits of the new network

The new Oriental Melaka Straits Medical Centre network has more than met the key requirements:

High performance

The new network is extremely high-performing, with high-speed connectivity between the medical centre and nurses' college utilizing 10 Gigabit Ethernet, as well as high-speed EPSR ring connectivity within the medical centre. This is providing a solution with non-stop access to online resources like patient records, medical imaging files, and so on. Multiple departments of the hospital are assured of fast reliable access to information when they need it.

High availability

Powerful features from Allied Telesis ensure the new hospital network is always available, and resilient against any problems that might occur.

VCStack technology in the network core and nurses college distribution switches provides high availability, and along with link aggregation is a solution with no single point of failure. VCStack delivers continuous network access even in the event of a link or switch failure.

EPSR in the medical centre ensures failover in as little as 50ms. These key technologies remove network downtime, and have provided the Centre with an incredibly resilient solution for always-on access to digital data.

Ease of management

The new network runs very smoothly, and is well supported, with initial hands-on training and ongoing technical support from Allied Telesis providing confidence for hospital staff.

"Allied Telesis have exceeded my expectations by being very helpful in terms of providing training and explaining how the overall solution works. Their willingness to support us is very reassuring."

Ms. Coco Wang Juan

Summary

Oriental Melaka Straits Medical Centre now enjoys the power and performance of a high functioning Allied Telesis network, with access to online resources guaranteed. The solution was also very cost-effective, and being very "green" with low power consumption will continue to provide low ongoing cost-of-ownership.

Allied Telesis look forward to continuing to support the Centre as they provide leading medical care, and realize the benefits of their next-generation network solution.

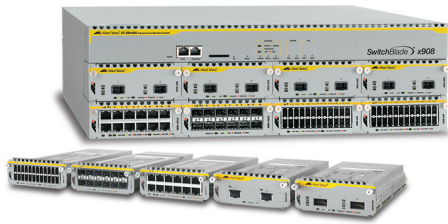
"We have benefitted from our close working relationship with Allied Telesis. They have always responded to us promptly and we are happy to recommend them."

"If we were to do the project again, we wouldn't change anything."

Ms. Coco Wang Juan

Manager, MIS and MRD, Oriental Melaka Straits Medical Centre.

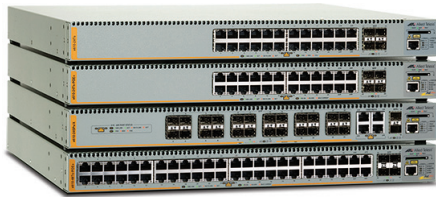
Featured products



SwitchBlade® x908

ADVANCED LAYER 3+ MODULAR SWITCH

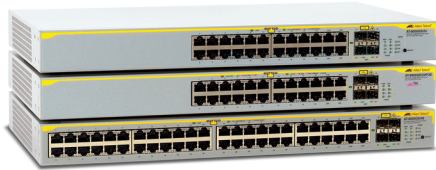
The Allied Telesis SwitchBlade x908 industry leading modular switch is an ideal network solution with powerful features packed into a compact 3RU chassis.



x610 Series

ADVANCED LAYER 3 GIGABIT ETHERNET STACKABLE SWITCHES

The Allied Telesis x610 Series is the high performing and scalable solution for today's networks, providing an extensive range of port-density and uplink-connectivity options. 24-port and 48-port versions are available with optional 10 Gigabit uplinks and PoE+ ports. The ability to stack up to eight units includes using fiber for long distance stacking. The x610 Series can connect anything from a small workgroup to a large business.



8000GS Series

GIGABIT ETHERNET SWITCHES

The Allied Telesis 8000GS Series Gigabit Ethernet switches are low-cost, managed and stackable. They are 1RU high and rack mountable. Some switches in this series have optional PoE.



x210 Series

ENTERPRISE EDGE SWITCHES

The Allied Telesis x210 Series Layer 2+ switches offer an impressive set of features in an affordable package, ideal for applications at the network edge.

About Allied Telesis

For almost 30 years Allied Telesis has been delivering reliable, intelligent connectivity for everything from enterprise organizations to complex, critical infrastructure projects around the globe.

In a world moving towards Smart Cities and the Internet of Things, networks must evolve rapidly to meet new challenges. Allied Telesis smart technologies, such as AMF and Enterprise SDN, ensure that network evolution can keep pace, and deliver efficient and secure solutions for people, organizations and 'things', both now and into the future.

Allied Telesis is universally recognized for innovating the way in which services and applications are delivered and managed, resulting in increased value and lower operating costs.

Visit us online at alliedtelesis.com



the **solution** : the **network**

North America Headquarters | 19800 North Creek Parkway | Suite 100 | Bothell | WA 98011 | USA | T: +1 800 424 4284 | F: +1 425 481 3895

Asia-Pacific Headquarters | 11 Tai Seng Link | Singapore | 534182 | T: +65 6383 3832 | F: +65 6383 3830

EMEA & CSA Operations | Incheonweg 7 | 1437 EK Rozenburg | The Netherlands | T: +31 20 7950020 | F: +31 20 7950021

alliedtelesis.com

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