



Allied Telesis Provides Unified Network Management for Large General Hospital

Kosei General Hospital, in Japan, selects an Allied Telesis Management Framework™ (AMF) solution for simple network monitoring and management.

Summary

Kosei General Hospital

Location: 25-1, Wada 2-chome,
Suginami-ku, Tokyo

Established: 1952

Number of patient beds: 340

Challenge

The hospital needed a new, future-proof, converged LAN, and an electronic medical chart system with wireless access. The network had to provide high availability, and be simple to manage.

Solution

The hospital has now been equipped with a state-of-the-art solution from Allied Telesis, which integrates all systems into a single network. High availability is ensured with a resilient network design and industry-leading products.

Success

All hospital departments enjoy always-on network access, and the new wireless network allows constant access to patient information. The hospital now has unified network management with Allied Telesis Management Framework™ (AMF), which simplifies and automates tasks across the network.

Challenge

Kosei General Hospital is a medical institute run by Rissho Kosei-kai. The hospital places great importance on high quality medical service, and appropriate observation and treatment for every individual. Kosei General Hospital also participates proactively in community-based healthcare, partnering closely with neighboring medical institutes. The hospital has emergency medical services, and maintains a very high patient acceptance rate.

Kosei General Hospital has a holistic approach to healthcare. The new facility boasts a lot of greenery, with numerous ornamental plants in the hospital, and there is even a rooftop garden where patients and staff alike can enjoy looking at seasonal flowers, and forget they are in the middle of Tokyo city.

As well as providing a healthy and healing environment, Dr. Naoyuki Kono, the director of Rissho Kosei-kai Kosei General Hospital says, "We regularly hold concerts and seminars at the hospital to help with patients' healing, and promote their better understanding of healthcare. We aim to really satisfy all patient needs, as well as providing excellent treatment."

In September 2014, after more than 50 years' operation in Yayoicho, Nakano Ward, Kosei General Hospital relocated to Wada, Suginami Ward. The new building has a quake-proof structure so that patients can relax during their stay, knowing they are safe in the event of an earthquake.

The hospital needed a new in-hospital LAN at the time of its relocation. Hospital systems and networks had to be totally renewed and an electronic medical chart system was required.

The network requirements

Prior to the redesign, the hospital's network systems operated independently. There was a separate system for the radiology department, the examination department, and a medical accounting system. This made it difficult to investigate issues or network failures. As such, network integration was a top requirement when the hospital relocated.

High availability was extremely important, because the new network would have all systems converged on a single infrastructure. The network design and equipment had to provide always-on access to the many hospital departments and systems that would be relying on fast access to digital resources, to ensure quality patient care. It was also imperative that the new integrated network be easy to manage.



“The first requirement was to integrate our networks, which were physically separated. We also needed to future-proof the newly converged network to ensure its expandability, and ability to respond to higher speeds well into the future.”

Mr. Satoshi Tanaka, Healthcare Information Technologist, Information System Division, Kosei General Hospital.

“The staff members from Allied Telesis were extremely enthusiastic, which was one of the reasons we selected this solution. A strong business relationship is very important to us. We had great confidence in their willingness and ability to build something good with us.”

Mr. Tanaka

The hospital was also introducing a new electronic medical chart system and needed wireless network access to support this, to allow staff to use laptops, tablets and other mobile devices at the bedside for updating patient information immediately.

Why Allied Telesis?

Kosei Hospital selected an Allied Telesis network solution from multiple proposals. The Allied Telesis solution met all of the hospital’s network needs, including wireless connectivity, and provided the reliability and simplicity they wanted.

Allied Telesis Management Framework™ (AMF) was a large factor in the company’s decision also. AMF is an embedded technology native to Allied Telesis switches, which allows a single, converged network infrastructure that can be managed as a single entity. Kosei Hospital knew that introducing AMF would drastically reduce the man-hours and cost involved in its operation and management, and would also achieve automated recovery from failure.

Importantly, the hospital had experienced a high level of communication from Allied Telesis and as such, had confidence in the company.

Solution

The hospital has now been equipped with a new, state-of-the-art solution from Allied Telesis, which integrates the radiology, examination, accounting, ordering, and all other online systems into a single network. High availability is ensured with the resilient network design and Allied Telesis industry-leading products.

An Allied Telesis SwitchBlade x8100 Series chassis provides a reliable and robust network core, with dual power supplies, dual control cards, and line cards that are all hot-swappable for upgrading and maintenance with no downtime.

AT-x510 Series switches are used at the distribution layer, with Allied Telesis AT-GS900 edge switches providing network access. AT-TQ3600 wireless access points provide seamless wireless network access around the hospital and the Allied Telesis AT-UWC wireless controller centrally monitors all wireless access points.

AMF provides automated network backup, upgrade, provisioning, and replacement of units, as well as the ability to manage any or all switches as a single virtual entity. In addition, Allied Telesis AlliedView™ Network Management System (NMS) allows visual monitoring of the complete network with full status information to alert administrators of any problems.

“So we can be proactive in managing the network, we have large display monitors that always show AlliedView NMS, and the AT-UWC wireless controller at the administrative office so that we can detect problems in advance. If a certain alert is indicated, the problem will be made known to others outside the information system division. This allows other staff to inform us of problems. It is very reassuring,” said Mr. Tanaka.

Success

High performing and future-proof new network

The new network was built and completed without any major problems before the hospital was reopened in its new location in September 2014. Since then, it has consistently operated without issues or failure.

The resilient network design provides constant online access for all hospital departments and systems, while the new wireless network allows access to patient information from anywhere it is needed. The modular SwitchBlade x8100 core chassis is ready to upgrade to 40 Gigabit connectivity in the future, to support the next generation of online healthcare resources and applications.



“We have received no complaints about slow speed or network failure. The network is performing extremely well, and we are so pleased. Furthermore, I was pleasantly surprised that the new network provided a much wider range of wireless LAN coverage than I had expected. We have wireless coverage throughout the entire hospital building, with the necessary exception of the diagnostic imaging area.”

Mr. Tetsuo Hara, Administration Department Manager, Kosei General Hospital.

Allied Telesis provided excellent support for the entire network project, from the proposal and construction, to network operation. Mr. Tanaka said, “Allied Telesis staff are excellent. They respond very quickly to our inquiries, and are always very helpful.”

Unified network management and monitoring

The redesign provides numerous benefits, such as unified network management and automated recovery through the new integrated hospital network and AMF, which simplifies and automates tasks across the network. Intelligent software reacts to changes within the network and automatically changes the topology. Devices are automatically backed up, restored, and recovered, as they are added to the network, bringing plug-and-play simplicity to network management.

The hospital also has peace of mind in keeping on top of any issues, with AlliedView NMS providing live network monitoring.

Future plans

Kosei General Hospital is planning to implement wireless Internet access for its patients, in addition to the network ports currently available at the bedside, so patients can utilize a variety of their own devices very easily.

With a new medical patient chart system in place, they also look forward to being able to share appropriate patient information with other medical institutes nearby, and support community healthcare.

Allied Telesis will continue to offer new products and technology to the hospital, supporting their move to continuously improve healthcare.

About Allied Telesis

For nearly 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 toward Smart Cities and the Internet of Things, networks must evolve rapidly to meet new challenges. Allied Telesis smart technologies, such as Allied Telesis Management Framework™ (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 recognized for innovating the way in which services and applications are delivered and managed, resulting in increased value and lower operating costs.

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