Success Story

Allied Telesis™

Kanaiwa Hospital

Kanaiwa Hospital in Kanazawa, Japan, selects Allied Telesis Management Framework™ (AMF) to provide centralized management of their new non-stop network, while Allied Telesis Extricom™ Series wireless technology ensures uninterrupted network access.

Overview

Customer profile

- **Who:** Kanaiwa Hospital
- **Where:** 9-6 Fushoji-machi, Kanazawa-shi
- **Established:** April 1956
- **Beds:** 189
- **Departments:** 4
- **Staff:** 126
- **Website:** http://www4.ocn.ne.jp/~kanaiwa/

Founded in 1956, Kanaiwa Hospital is in Kanazawa-shi, in Japan's Ishikawa Prefecture. Originally named "Kanaiwa Neurology Sanatorium," it began as a mental health hospital providing beds for 100 patients. It was renamed Kanaiwa Hospital in 2002.

Currently, the hospital has departments including psychiatry, psychosomatic medicine and child psychiatry, and provides 189 beds. The hospital provides inpatient mental health care services to the local community, and provides services and support for outpatients.

In 2013 Kanaiwa Hospital decided to introduce a comprehensive Electronic Health Record System (EHR), including an ordering system. Mental disorders often require prolonged treatment periods, resulting in vast amounts of medical records and test data, which meant relying on paper records was time consuming and wasteful. The hospital needed a smooth transfer to an EHR system. Most importantly, they needed a "non-stop" network to support the new system.

Kanaiwa Hospital now have Allied Telesis products, including the SwitchBlade x8100 Series core switch, and Allied Telesis Management Framework™ (AMF). AMF has enabled centralized and automated network management, and the network is now simple to run, saving time and reducing costs. Allied Telesis Extricom™ Series wireless technology from provides hospital-wide network access with seamless roaming.

About Kanazawa

Kanazawa is the capital city of the Ishikawa Prefecture, in Japan. Kanazawa sits on the Sea of Japan, bordered by the Japanese Alps and two national parks. The city sits between the Sai and Asano rivers. Its total area is 467.77 km2 (180.61 square miles). Kanazawa's weather is temperate, though rainy. In the census of 2010, the city recorded a population of 462,478, giving a population density of 989 persons per km².

The customer's requirements

A non-stop network

The hospital needed a robust and healthy medical network that would easily connect their departments, services and functions. Key to the success of Kanaiwa's new network was that it provide "non-stop networking"—a high-availability architecture that removes the risk of failure through resilient design.

Constant access to medical records and other online resources was an essential requirement for the hospital, where time can be a critical factor in providing quality patient care. Since a network system failure can lead directly to entire hospital routines and operations coming to a halt, a non-stop network is of vital importance in healthcare environments.

Seamless network access

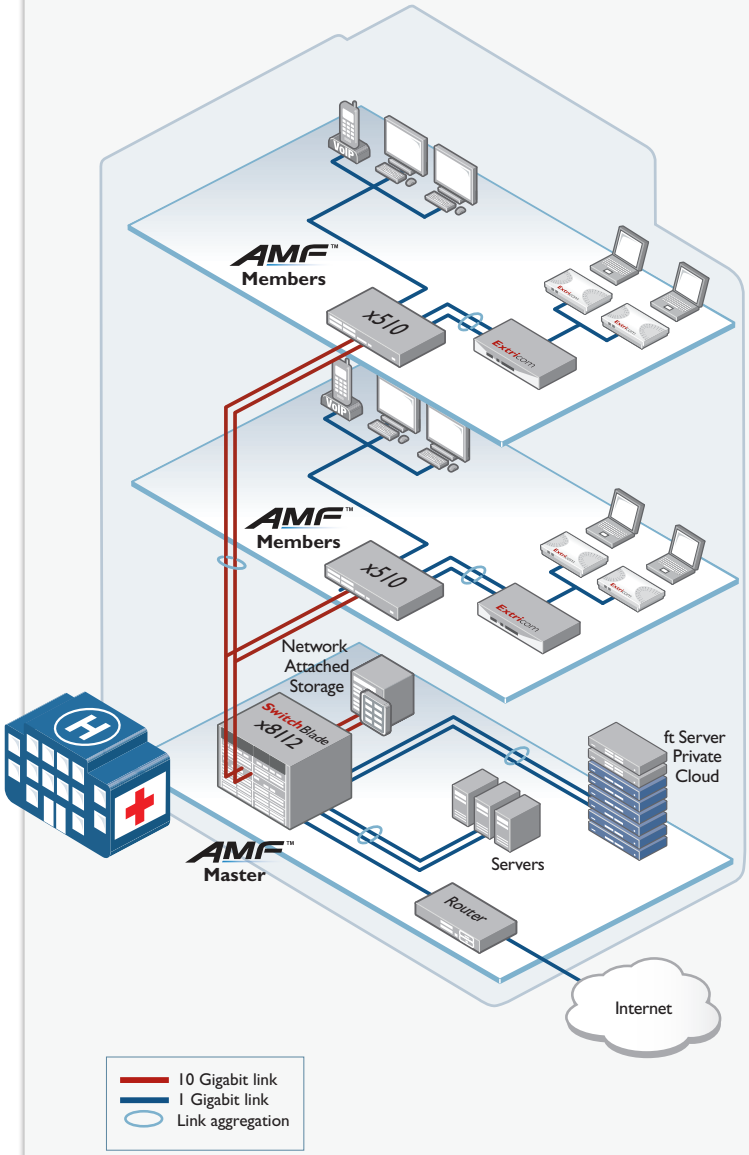
Kanaiwa's new network had to cover different wards and departments. It was therefore important that uninterrupted wireless access to the new EHRs, and other online systems, be available for staff—wherever they may need to connect from.

Centralized management

With a very small number of IT staff, and a complex modern network, centralized and automated management was a must. Kanaiwa Hospital needed to simplify their network management to save administration time and reduce operational costs.

> "The introduction of the electronic health record system was to improve our healthcare services and enhance staff members' ability to share information. Another key requirement was that the new network is non-stop—downtime can be hugely detrimental to our services."
>
> Dr. Atsuo Okada
> Director, Kanaiwa Hospital

The solution



Kanaiwa Hospital network

Working with Allied Telesis, it was decided that their SwitchBlade x8100 Series, which is compatible with AMF, would be introduced as the core switch and the x510 Series would be used as intelligent edge switches.

Extricom Series wireless technology from Allied Telesis provides hospital-wide wireless connectivity for seamless access to the new Electronic Medical Record (EMR) system.

The SwitchBlade x8100 Series acts as the AMF Master. This enables centralized configuration, and simultaneous administration of multiple switches. Automated backup of the entire network, along with zero-touch recovery of any switch, are powerful AMF features which simplify the network, and reduce the time and costs associated with network management.

The network installation went very smoothly. The hospital completed the development of the new network with direct support from Allied Telesis throughout the entire process, from suggested design to the installation of the new system.

Mr. Kawahara says "In this project, we talked directly with Allied Telesis instead of via the system integrator and completed the project together with the Company. I think it was this direct communication that enabled the smooth progress of the project. We made full use of the knowledge and expertise that Allied Telesis has as a manufacturer."

Benefits of the new network

Thanks to Allied Telesis advanced products and technology, Kanaiwa Hospital has built a network which will not stop, and which features centralized management, automated administration, and uninterrupted access to online digital assets.

Non-stop

Kanaiwa Hospital's new network has the resilience and robustness required to run their new EMRs, and all their other online systems. Hospital staff have constant access to digital resources to enable the provision of superior healthcare.

The SwitchBlade x8100 Series chassis switch provides a fully resilient network core, with dual load-sharing power supplies and dual control cards. Link aggregation to network storage, as well as the x510 Series edge switches, provides a network with no single point of failure, and higher bandwidth for increased performance.

Mr. Kawahara says "Our hospital systems include a Picture Archiving and Communication System (PACS), so bandwidth is also very important. The higher speed that link aggregation offers us is very effective."

Seamless network access

The new hospital-wide network provides seamless online access for all staff from all areas of the building.

Extricom Series wireless technology from Allied Telesis utilizes Channel Blanket™ architecture. This minimizes interference from wireless access points that are in close proximity to each other, allows seamless roaming across the whole wireless infrastructure, and increases the resilience of the entire system.

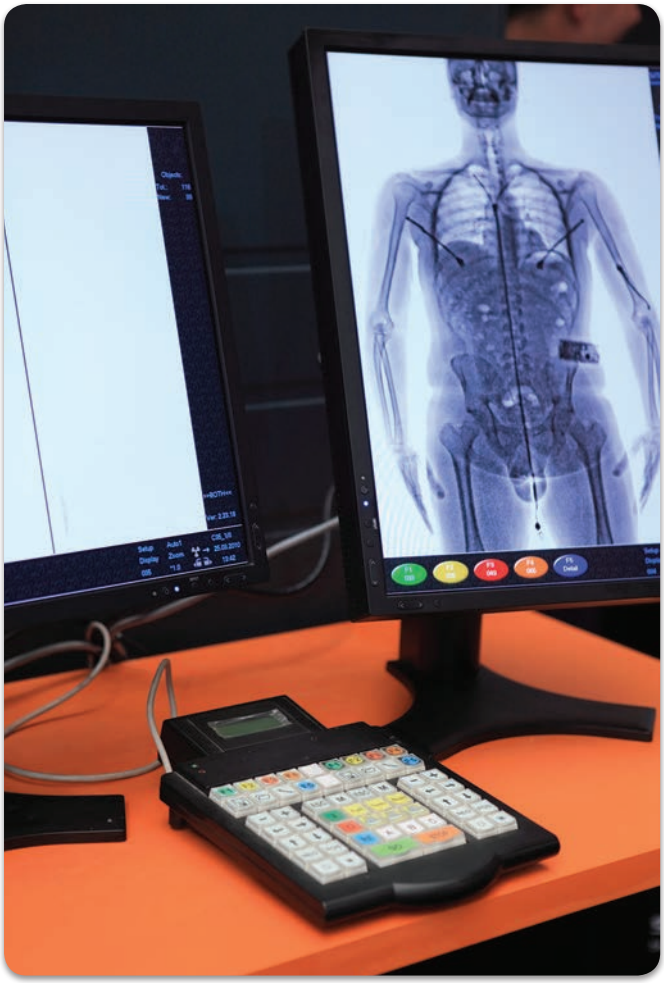
For hospital staff, who may need to move between wards and departments, this seamless wireless connectivity is an ideal solution. Extricom Series Channel Blanket technology is perfect for critical "always-on" environments where users are highly mobile.

Simple, and easy to manage

Allied Telesis Management Framework (AMF) has provided Kanaiwa hospital with a network that is extremely simple to manage. With AMF, multiple devices can be upgraded, or have configuration updates done simultaneously.

By embedding management intelligence into the network itself, AMF automates the hospital's management tasks—such as:

- backing up network device configurations and software images
- adding new units to the network
- replacing failed units with new units
- making configuration changes to multiple units
- rolling out firmware upgrades



AMF provides truly zero-touch integration of new and replacement units into the network, and single-command automated software upgrades of the whole network. AMF greatly reduces the time and error risk involved in performing repetitive configuration tasks across multiple network nodes.

"We use AMF to perform centralized management, which is extremely efficient and effective. I can now successfully administer and manage a large, highly-available network with a very small IT team."

Mr. Naoto Kawahara
Healthcare information technologist, IT Management Section, Kanaiwa Hospital.

Future plans

Kanaiwa Hospital will continue to strengthen its information technologies. They now have an updated network to support their EMRs, PACs, private cloud storage and other online systems.

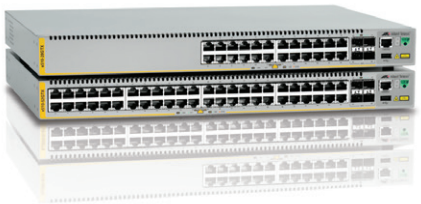
Allied Telesis look forward to continuing to support the hospital as they implement business continuity systems, and other next-generation technologies to support excellent patient care.

The products

SwitchBlade® x8100 Series

NEXT-GENERATION INTELLIGENT LAYER 3+ CHASSIS SWITCH

Allied Telesis SwitchBlade x8100 Series Advanced Layer 3+ chassis switches are designed to deliver high availability, wirespeed performance, and a high port count. Two control card options, CFC400 and CFC960, provide solutions for medium and large networks. The ability to stack two chassis when using the CFC960 provides a powerful and completely resilient network core solution, which can even be distributed over long distances.



x510 Series

STACKABLE GIGABIT SWITCHES

The Allied Telesis x510 Series of stackable Gigabit switches includes a full range of security and resiliency features, coupled with easy management, making them the ideal choice for network access applications.

Allied Telesis x510 Series switches are a high-performing and feature-rich choice for today's networks. They offer a versatile solution for enterprise applications.

Extricom™ Series

WIRELESS LAN SYSTEM

The Allied Telesis Extricom Series incorporate multiple Wireless LAN (WLAN) innovations to improve performance, flexibility, and ease of ownership. Based on Channel Blanket™, a ground breaking architectural design, it delivers a solution that is fully IEEE 802.11a/b/g/n/ac-compliant, but changes all of the paradigms about the Wi-Fi experience.

The Extricom system is based on UltraThin™ WLAN access points that are directly connected and fed from a central switch, the "brains" of the system. The WLAN switches manage users' network access and authentication, AP association, traffic and load balancing, band steering, as well as all QoS and security, to maximize performance.

Allied Telesis Management Framework

Allied Telesis Management Framework (AMF) is a sophisticated suite of management tools that provides a simplified approach to network management. Common tasks are automated and every day running of the network made extremely simple. Powerful features like centralized management, auto-backup, auto-upgrade, auto-provisioning and auto-recovery enable Plug-and-Play networking and zero-touch management.

About Allied Telesis, Inc.

Founded in 1987, and with offices worldwide, Allied Telesis is a leading provider of networking infrastructure and flexible, interoperable network solutions. The Company provides reliable video, voice and data network solutions to clients in multiple markets including government, healthcare, defense, education, retail, hospitality, and network service providers.

Allied Telesis is committed to 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

Allied Telesis™ 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

C618-18042-00 RevA