



Threat Detection and Security, City-Wide: Naka City in Japan Builds Secure, Robust Network

Naka City, Japan, gets an industry-leading combination of security, ease-of-use, automatic threat isolation and device remediation, with an Allied Telesis SES solution.



“ Our network had become old and outdated, our maintenance costs had increased, and there were concerns about our emergency response capabilities.

Mr. Keisuke Kobayashi, Principal Manager, Health & Welfare Department of Naka City

Challenge

Naka City is in the Kanto region of Japan, northwest of Tokyo, and is famous for its rice paddy fields. The area is rich in local culture and history, and very popular with tourists.

Naka City Hall manages the public computer network for schools, local government offices and public buildings, providing both wired and wireless access for the city's residents. This network allows users to access personal data such as their social security and tax information.

In 2015, the Japanese government issued guidelines for cities to strengthen their network security after a cyber-attack of the Japan Pension Service resulted in the leak of 1.25 million personal records. As a result, Naka City had to review their network security policies, and find a robust security solution that was effective and easy to use.

Naka City needed a robust and secure city-wide network that would protect sensitive information. It had to do more than just detect known threats—it had to proactively detect malicious behavior, and instantly block attacks.

Alongside this required network complexity, Naka City also needed simplicity. It was essential that the new network be easy to use, simple to configure and economical to run.

Solution

After a public tender process in which solutions from major vendors were considered, Naka City selected a proposal from Osaki Computer Engineering, which offered an advanced Allied Telesis solution. Autonomous Management Framework™ (AMF) provides automated and simplified network management, while Secure Enterprise SDN (SES) detects network threats and isolates any suspect devices. Allied Telesis also offered exceptional support and ongoing maintenance with Net.Pro professional services.

“ We received many high-level proposals, so the additional value in the Allied Telesis proposal was key in our selection. We were impressed by the infrastructure elements, as well as by other areas outside of the proposal, such as regular meetings and workshops, and generous operational and maintenance support services.

Mr. Keisuke Kobayashi

A SwitchBlade x8100 Series chassis switch provides a resilient network core in the main city office. x510 Series edge switches have been installed in the main building, and at each of the city's branch and field offices, as well as encompassing Naka City's 14 elementary and junior high schools. TQ4600 wireless access points provide wireless network connectivity across all locations.



“ With AMF, we can manage and operate all our devices remotely, enabling a swift maintenance response. SES lets us implement internal security measures including behavior detection and anti-proliferation of security threats, which is a major advantage.

Mr. Wataru Kobayashi, Infrastructure Engineering Department Manager, Osaki Computer Engineering.

The SwitchBlade x8100 acts as the AMF Master, automatically backing up the entire network, and allowing remote management of many, or all, devices at once. AMF supports easy upgrades and zero-touch device replacement for plug-and-play networking, greatly reducing administration overhead.

A Trend Micro, Inc. Deep Discovery Inspector™(DDI) handles behavior detection, constantly scanning network traffic for malicious activity. DDI alerts the SES controller of any devices that are suspected of posing a threat to network security, so they can automatically isolated to stop threats from propagating any further.

Allied Telesis advanced products, along with AMF and SES, provide an integrated network that is easy to manage and very secure.

Success

Naka City now enjoys centralized management with AMF, reducing the time and effort required to manage their distributed network. SES fully protects the new solution with leading-edge internal network security.

The new Naka City network is a prime example of a highly successful Software Defined Networking (SDN) deployment using SES. The system was rolled-out in 39 locations over a two-week period, and was officially commissioned after a successful one-week trial.

“ The network is running smoothly, without any device faults or breakdowns, and AMF has greatly reduced our expenditure and man-hours. In the future, high-level security features such as SES will be integral to our core mission-critical network systems.

Mr. Keisuke Kobayashi

Naka City is very satisfied with the new secure network and proud to be a pioneer for SDN in enterprise organizations.

Future plans

SES allowed Naka City to implement a unique security system to secure the internal network and keep public records safe, and has met all of Naka City's requirements. However, SES will soon do much more—Allied Telesis has plans for an automatic remediation process to fix a device and allow it to re-join the network. This will not only remove threats, it will also reduce disruption by making services available again as quickly as possible.

Naka City is considering using this feature to further simplify network security and lower operating costs. The city is also planning a wireless LAN for IoT devices, and wants to eventually integrate all of its network systems, including the core network, using AMF and SES.