ATEN’s service room solutions adopted by National United University
A centrally-controlled green service room that offers safety and energy conservation

Customer: National United University
Established in 1972, National United University is a state-funded university located in Miaoli City, Taiwan.
The University established a second campus in 2014. This resulted in the need for a new service room to store all the additional student administration details.
A collocation room was also set up for other departments or customers. The university hopes to build a large-scale and high-density green service room that offers effective central monitoring and energy conservation.

Challenges

- Realize centralized control for every server in the service room to enable remote operation and problem solving. Also needed is remote control on power outlet switches to enable quick restart of the servers in the event of abnormality.
- Reduce frequency of entry into the service room by staffs and record operation performed by those staffs on the servers.
- Monitor in real time the environmental data for the service room to effectively save on electricity and energy.

Solution

CC2000
Control Center over the NET™ Management Software

PE8108B
eco PDU
Control Center Video Session Recorder

KN2132
32-Port KVM over IP Switch

KH1516Ai
Cat 5 High-Density KVM over IP Switch
CC2000 can be used together with KVM Over-IP products to assist administration staffs with remote monitoring and management of all IT equipment for centralized control.

KN2132 and KH1516Ai are 32/16-port KVM Over-IP switches for remote computer management solutions which enable administrators to remotely access and control servers in a service room through a computer that is connected to the network. This reduces the frequency of administration staffs entering into the service room and helps to achieve an effective security control.

PE8108 and PE8324 eco PDU (Power Distribution Unit) enables administration staffs to remotely switch the power outlet on and off. Operation can be quickly restored in the event of device
abnormality. In addition, these distribution units feature Proactive Overload Protection (POP). In the event of a power overload, the ATEN POP automatically switches off the power outlet according to the order set by the user to avoid disruption to other devices that are running.

- ATEN Lok-U-Plug cable holders can effectively prevent power cables from slipping off PDUs and help avoid accidental power-off for the connected IT devices.
- Through eco Sensors energy management software, IT administration staffs can remotely perform real-time monitoring on current, voltage, KWH, and consumption of energy for all connected devices. They can also generate reports and instructions from analysis of power conducted by calculation of data such as PUE, RCI, RTI, etc., which helps to realize energy conservation and reduces the cost of power generated.
- Together with KN2132, CCVSR features an important log tracking for servers. This records all operations conducted by users on the server, including movement of mouse, keyboard input, etc. With an easy-to-use video search feature, it allows administrators to easily conduct follow-ups, which can improve employee training and can serve as a basis for future auditing.

“Under the policy for creating a green campus, the use of ATEN enterprise-class and green energy solutions has obtained significant results. ATEN’s products have helped us to achieve the goal of keeping the PUE value under 1.6. This equates to an annual saving of around USD$96 000 in electricity under a full load with about a 1000 ton reduction in carbon emissions. Moreover, in the event of a server power overload, ATEN’s POP function allows us to ensure that the important servers are unaffected. Such protection, along with reliable and quick after sales service, offers peace of mind for service room administrators like us. With a leadership role in green environment-controlled service rooms, we hope to become the best example in the future for setup of a service rooms in colleges and universities.” Dr. Rong-Jian Chen, Director of Information Center, National United University