Remote Monitoring and Real-time Maintenance by KN2116

Company: Iruma Cable Television Co., Ltd.
Website: http://www.ictv.ne.jp/
Iruma Cable Television Co., Ltd. (or Iruma TV Ltd.) was established in 1990 to provide information communication services. It is located in Iruma, Saitama-ken, with Iruma its major area of service. It also expanded its business to Mizuho-madi in Tama County, Tokyo-to, offering cable television, internet, and IP phone services, and is well received and supported by local residents.

Since November, 2008, Iruma TV Ltd. started offering the Cable+Telephone service that can be delivered over an existing NTT landline. As a result, in addition to providing communication services with quality equivalent to the landline phone and ensuring its stability, this also required building an integrated environment capable of real-time maintenance in case of emergencies.

Challenges

- To provide a prompt response and minimize the loss caused by server downtime
- To facilitate operations on BIOS level through remote control
- Handle emergency operations regardless of time and location

Equipment Purchases

- KN2116 (16-port KVM Over The NET™)…2
- Related modules
  - KA9120 (PS/2 module)…17
  - KA9170 (USB module)…6
  - KA9140 (Serial module)…5

Benefits

- Capable of responding to emergencies with well-prepared system upon implementation
- Enjoy comfortable operating environment free from noise generated by equipment
- Maintain high degree of security and fulfill maintenance tasks through complete remote control environment

Challenges

In case of emergencies, a mechanism that can handle the situation in real-time by utilizing the Cable+Telephone service system

So far, Iruma Cable Television has been using multiple analog KVM switch in its management of servers running Sun Solaris, Windows, FreeBSD, and more. For server maintenance, engineers have to either enter the server room or conduct remote maintenance using Telnet. Once the Cable+Telephone system is activated, however, realtime and comprehensive system maintenance is required to handle emergencies.

While remote control through Telnet can certainly solve most of the problems, it is subject to hardware limitations in the case of BIOS level operations. Within the current environment configuration, engineers must physically go to the server room to handle the situation, which means a considerably long server downtime.

Another need is to capture a screen shot of the emergency situation for analysis, by working with the external maintenance unit through a remote connection to diagnose the problem, to provide a fast and effective solution. In addition, machines such as Cisco Catalyst are used. One major difference from the servers mentioned above is that such machines require individual management, which causes inconvenience in operation.
Equipment Purchases

To achieve effective centralized management of servers and serial machines through remote control by KN2116

Mr. Doi, of the Telecommunication Office of the Department of Management at Iruma Cable Television, used to be a system integrator at the Bureau of Cable Television. He mentioned that to effectively solve the aforementioned issues, it is necessary to implement an digital KVM switch that is capable of remote management. As a result, he started researching the digital KVM switches on the market.

"This time, in search of a Cat 5 LAN cable and KVM switch that can work with serial machines, my initial impression was that such KVM products must cost considerably. I was greatly surprised when I came across the KN2116 by ATEN and learned about its reasonable price and high performance." When talking about his impressions of the KN2116, Mr. Doi emphasized, "KN2116 is truly a great buy. It can handle remote control and serial devices, satisfying almost all requirements. The deciding factor in purchasing the KN2116 was its history of working seamlessly with related Cisco products, which meant no incompatibility issues, allowing him to implement it to the existing system."

Benefits

Provide users with a convenient operating environment with a comprehensive response mechanism and high degree of security

The implementation of the KN2116 not only achieved the initial goal of real-time response to emergency situations but also created additional advantages such as improving task efficiency and security.

First, in terms of improving task efficiency, the remote control function allows software installation from locations outside the server room, which solves the noise problem in operation. Previously one had to bring the server closer to his/her desk for software installation. Once the KN2116 is implemented, the installation can be conducted remotely from the desk, which removes the noise problem caused by the server not only for the user but also for colleagues nearby.

In the area of security, special accounts are provided to external maintenance personnel for operation purposes, with login permission configured for the accounts. Such features can provide a maintenance environment with a high degree of security and efficiency.

Satisfied with the operation and high performance of this product. Will actively consider products by ATEN for system expansion in the future.

After using KN2116 in practice, unexpected high performance was seen in task processing. Its operation was also amazingly convenient.

"It is fortunate that no emergency occurred right after the new configuration was implemented and in operation. In fact, task efficiency was significantly improved. In terms of operation, a first-time user can easily learn to use it without sophisticated settings."

Lastly, in summary, from product selection to equipment implementation, the KN2116 was commended by the client as follows:

"If its price was low but it did not have the required functions, we would have to consider products
by other companies. However, the implementation of the KN2116 not only achieved the initial goal, but also attained unexpectedly good results. We are very satisfied with this product.

Now not only was the KN2116 highly praised by the people in charge at Iruma Cable Television, its operation and function are also recognized by the contracted maintenance personnel.

In the future, if we need to make external certification of the KN2116 or remote power management function from products of the Power Over the Net™ series, and related system expansion through a RADIUS server, we will definitely consider products by ATEN.

**Company Information**

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<th>Company Name</th>
<th>Iruma Cable Television Co., Ltd.</th>
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<td>Address</td>
<td>Saitama Iruma Shi Takakura 5-17-27</td>
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**Main Business**

- Cable broadcast business approved by cable television law
- Provide music and FM broadcast through cable television facilities
- Category one electrical communication business based on the electrical communication law

**System configuration after product implementation**

![Diagram of system configuration after product implementation]