

ATEN KVM Over the NET™

Builds efficient, high performance, secure and stable remote administration capability for China Life Insurance's all-new data center in just 26 days

Challenges

- The increase in the number of servers increases the complexity of cabling and server room clutter.
- Server administration requires multiplatform support.
- Distance constraints between the consoles and servers meant administrators required frequent access to the data center.
- Global epidemics means data centers need remote administration to provide continuity of service.

ATEN Solutions

KN4116

16-Port KVM Over the NET™

- Supports up to 5 bus sessions – 4 remote and 1 local administrators can simultaneously access separate ports
- Supports redundant LAN backup to ensure network stability
- Mouse DyanSync™ for USB mice – local and remote mouse movement are the same – no need to constantly resync the two movements



KH1516

16-Port Cat 5 High Density KVM Switch



Background

Since it was established 46 years ago, China Life Insurance ("Chinalife") has always maintained a customer-oriented approach. This has allowed it to set many industry records in terms of business management and social responsibility. In the past few years, Chinalife has undertaken an aggressive corporate makeover and innovative development program. After acquiring Winterthur in 2006, Chinalife also successfully took over PCA Life Insurance's sales network in 2009. The acquisitions greatly expanded the number of Chinalife policy holders and employees, and made Chinalife the leading life insurance provider in Taiwan.

During this merger Chinalife demonstrated its outstanding integration capability by perfectly combining the two parties' IT infrastructure in just 26 short days. The building of an all-new high-performance server center ensured that Chinalife's business and insurance operations continued to function flawlessly after the merger.

Challenges and Requirements

Shorten the integration process to build a new high performance data center in the shortest possible time

Clark Lin, the manager of the System Engineering Department at Chinalife, said: "For every enterprise, a merger represents an opportunity for a revamp of corporate thinking so it takes a long time for everything to come together. The company's IT operations can't be suspended for a long time or have two separate systems running parallel to each other. So, we were tasked with the challenge of setting up an all-new data center within one month. Through extensive planning and by working around the clock, we completed this mission impossible in just 26 days and built for Chinalife an all-new high performance and energy-efficient data center!"

Due to the growth in Chinalife assets, after the merger the size of the IT department grew from dozens of employees to over a hundred people. The number of servers increased to nearly 200 machines as well. Around a quarter of all employees were

responsible for server center operations, and new recruits were added due to Chinalife's business load. This made integration training, the passing of professional know-how and the introduction of comprehensive data center equipment the most important issue facing the IT department today.

Lin added: "Energy efficiency and high performance was a key target for our new data center. On the server administration level, server administrators had to constantly access the data center due to the continually increasing number of servers. There was also data center clutter from complicated cabling, server system compatibility issues after integration as well as distance constraints between the control console and server computers. This impacted on administrative efficiency and also posed security concerns. With the recent emergence of epidemics like SARS and H1N1, we also had to take into account the need to maintain normal server operations even if quarantine must be imposed. All of these previous challenges for data center administration had to be taken into account when planning the new data center. The use of KVM switches offered us a very effective way to solve many data center administration problems."

Evaluation and Selection:

Energy saving, high performance and secure centralized remote administration – the ATEN Cat 5 KVM solution

Chinalife has long contracted Dataknit to handle its data center setup and network infrastructure rollout projects. For the new data center, after careful evaluation and analysis Chinalife and Dataknit finally chose ATEN's KVM solution. This included the KN4116 16-Port KVM switch with support for 4 remote users as well as the highly expandable KH1516 16-Port high-density KVM switch.

Lin said: "In the current phase, the integration of personnel and systems is the most important task for the System Engineering Department. So when setting up the new data center, our primary objectives were to introduce the best equipment, shorten the setup time and reduce overall costs. This will allow us to concentrate fully on other parts of the integration project. We chose ATEN's server management solution because we have faith in the brand it has built up over 30 years. The efficient administration and cost-effective nature of ATEN's solutions fits in perfectly with our objective of energy efficiency and high performance."

Benefits:

Multiple sessions and high stability offers comprehensive remote access capability

The KN4116 KVM Over the Net™ is a Cat 5 KVM switch that can be accessed by up to 1 local and 4 remote users simultaneously. It can monitor up to 16 servers directly or up to 512 servers in a two-level cascade. The KN4116 also comes with two internal network interface cards (NIC) for Redundant LAN and Dual IP operation. When the primary NIC is offline, the secondary NIC seamlessly takes over to ensure that the network traffic remains stable and consistent, giving the administrator more time to troubleshoot the primary NIC.

Lin said: "China's decision to choose a KVM remote management solution is based on a desire to improve our people's everyday productivity, boost efficiency of critical operations and reduce routine costs on server administration. With ATEN's KN4116, network traffic stability can be maintained. This contributes indirectly to the server administration stability. Our administrators can also stay outside of the cold data center to manage the servers inside from their desk or at any time. This not only reduces the number of data center visits but also lowers air-conditioning costs.

Strong security and user-friendly management interface simplifies management

The KN4116 also includes advanced functions such as a special control panel design. The hideaway control panel can be used to control and configure the appearance and operation of the OSD. There is support for full-screen or remote desktop window resizing, allowing the window shown on the remote user monitor to be customized to the user's monitor size. Support for Mouse DynaSync™ technology means the local and remote mouse movement always remain the same; there is no need to constantly resync the two movements.

The Message Board function helps to alleviate the problem of access conflicts arising from multiple logins. It also provides online users with an instant messaging platform. KN4116 supports a panel array mode that allows up to 16 servers to be monitored at the same time. The KN4116 also supports remote authentication such as RADIUS, LDAP, LDAPS and Active Directory. This also includes very powerful

password protection and advanced encryption technologies to ensure secure remote administration.

Multiplatform Support and Superb System Compatibility

The KH1516 high-density Cat 5 KVM switch provides multiplatform support by utilizing KVM adapter cables. It is compatible with PC, Mac, Sun and serial devices as well as the main operating systems on the market such as Windows 2000, Windows XP, Windows Vista, LINUX, Mac, Unix, Sun and FreeBSD. It therefore offers Chinalife a very high level of compatibility with data center systems. The KH1516 is also very scalable and up to 512 servers can be linked together through cascading. This future proofs the customer's data center for upgrades or server increases.

Cat5e is easy to cable and extends transmission range

For this project, Chinalife chose only Cat 5 KVM switches with RJ-45 ports. Complicated cabling was therefore avoided, resulting in a clutter-free server environment and improved heat dissipation. The 1U chassis design means the KVM fits easily into the racks as well. By using Cat 5e cabling, the KVM switch and servers can be up to 40m apart even while delivering better signal transmission quality.

The data center is the key and requires the best equipment

Lin said: "The data center is like the brain that manages the business' internal resources, so sound data center management remains the ultimate focus. This will ensure that the brain's directives can be transmitted to the nerve endings and keep all IT operations ticking. The time saved will allow our administrators to spend more time developing new IT infrastructure for the benefit of policy holders, shareholders and

employees by maximizing the merger synergies.

Chinalife will consider making the introduction of power/serial device remote management solutions its next step to enhance the remote centralized management of data center devices. ATEN will in turn continue to respond to Chinalife's needs by helping the company develop an even more powerful server administration capability.



Clark Lin

Manager of System Engineering Department
Chinalife

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