

Korean Life Insurer Optimized Performance and Costs with WXC500 Acceleration Platform



Industry: Financial Services

Company:

Samsung Life Insurance

Challenges:

- Scale up WAN performance to cope with rising traffic demands in a cost-effective way
- Increase network performance without incurring additional management complexities

Network Solution:

Juniper Networks WXC500 WAN Accelerator Platform

Selection Criteria:

The Juniper Networks WXC500 WAN Accelerator Platform was selected on the merits of performance and cost-effectiveness over comparably priced competitive solutions.

Results:

- Enabled deployment of mission critical video-conferencing and other high-bandwidth applications
- Increased WAN bandwidth headroom
- Reduced leased line costs by 14%
- Increased application speed via WAN by 30%

“Unlike other WAN accelerator solutions, Juniper WXC500 provides QoS functionality in its bundle, enabling users to fully utilize its advantages without additional costs.”

Kim Sung-jun,
Information Strategy Team Manager,
Samsung Life Insurance

Founded in 1957, Samsung Life Insurance has long led the Korean financial services industry in both scale of business and technology deployment. The company recorded an unprecedented KRW100 trillion in total assets in 2006—a first for any non-banking financial institution in Korea.

The company’s keen use of technology has also been much lauded. The company has a penchant for adopting technologies that empower its workforce and create operational efficiencies within the industry. A recent technology undertaking involved a systematic downsizing of UNIX-based mainframe codes and minimizing of application changes, which the company termed “re-hosting.” Completed in 2005, the project is expected to save over KRW20 billion over the next four years.

Challenges

The company’s other main technology investment has to do with empowering its large contingent of mobile workers. To that end, the company operates a high-performance WAN that connects mobile workers to company applications and resources from remote locations.

The mobile workforce that empowers Samsung Life Insurance’s core business also presents a major hurdle for the company’s network team. How can it cost-effectively mitigate the WAN bandwidth crunch that regularly occurs during peak office hours?

It is a common problem for insurance companies with mobile workforce: insurance planners, who spend most of their time out of the office, typically access the network in early morning and late afternoon, a habit that creates severe traffic peaking scenarios. One way to solve this is to simply buy more bandwidth to cope with maximum traffic capacity but this creates operational inefficiencies, since the network would then be underused for most of the working hours. For Samsung Life Insurance, the average dedicated line usage is only about 2-3Mbps on a daily basis but reaches 10Mbps during peak hours.

Another challenge for Samsung Life Insurance is the need to consistently scale up network performance to cope with growing network demands and the rising sophistication of its workforce applications over time.

And not least among its challenges is also the need to maintain an IT infrastructure that is thoroughly robust and highly stable under all traffic conditions.

Selection Criteria

Samsung Life Insurance identified WAN acceleration early on as the key technology to solve its network challenges, due to the technology's proven effectiveness in improving network utilization and reducing bandwidth costs. The non-intrusiveness of WAN acceleration solutions in deployment also counted in the technology's favor.

The company further identified two key solution criteria: scalability and stability. They wanted a solution that could cope with the increase of video-conferencing traffic and future deployment of other high bandwidth applications. And the solution had to be rock solid due to the huge financial cost of any network downtime.

During evaluation, shortlisted solutions were tested in an environment that simulated actual operational conditions, where the stability of the solutions during traffic peaking conditions was brought to bare.

"Samsung Life Insurance is a financial institute and so network stability is paramount. No matter how innovative a solution is, it is the stability of the network that comes first," said Kim Sung-jun, Information Strategy Team manager, Samsung Life Insurance. And should stability issues arise, he added, it is imperative that the solution vendor is able to identify the source of the problems and propose effective solutions.

Effective asymmetrical network support was another deciding factor. As Kim explained, "Samsung Life Insurance's network is a download and upload differentiated asymmetrical network and it is important that the WAN Acceleration solution is able to fully support such asymmetrical environments." Many Korean companies, he noted, use an asymmetrical network environment due to cost considerations.

Another key consideration is the local commitment and reputation of the solution vendor, both likely indicators of future service and support levels. To further help him ascertain each solution's viability, Kim turned to Korean case studies such as those from KIBO Technology Fund and Kookmin Bank, and sought out product reviews from reputable research firms like Gartner.

Solution

At the end of the evaluation exercise, the Juniper Networks WXC500 WAN Accelerator Platform was chosen by Samsung Life Insurance. During initial adoption, the company deployed a total of 28 WXC500 appliances to create accelerated WAN environments to cover seven regional suburban locations that included Suwon, Busan, Daegu, Gwangju, Daeduk and Gumi.

Each WXC500 appliance provided mainstay traffic acceleration functionality via features such as traffic compression, caching, quality of service (QoS) and others. Kim singled out WXC's QoS features—which enable protection to key traffic streams and help the company maintain high levels of application performance under varying traffic conditions—as the platform's standout feature. "Unlike other WAN accelerator solutions, Juniper WXC500 provides QoS functionality in its bundle, enabling users to fully utilize its advantages without additional costs," he said.

Results

Cost benefits resulting from the reduction of line costs were immediately apparent. While the cost of leased lines is not exorbitant in Korea, Kim notes that “from a corporate point of view, even if there is a chance for only 1% of cost savings, then deployment is a must.”

And in the case of Samsung Life Insurance, the justification for deployment is even more compelling. According to Kim, cost savings have so far been in the neighborhood of 14%. This is because the majority of the company’s 80 WAN lines are used to connect the suburbs, where the leased line services there are significantly more expensive compared to those in cities.

“In Korea, there is sufficient margin to enjoy benefits of a WAN acceleration solution in the suburbs section,” said Kim.

He noted also that application speeds have been boosted across the board, resulting in significant improvement in staff work performance. In one of the company’s internal work portals, for instance, access speed has been enhanced by as much as 30%. Furthermore, both downloading and uploading speeds across the WAN have increased significantly, he said.

Kim is also satisfied with the stability and robustness of the WXC500 platform, noting that there has been no adverse reports from his team thus far.

Next Steps and Lessons Learned

Samsung Life Insurance expects to realize more benefits from its deployment of the WXC500 Acceleration Platform in the future, when it increases the usage of its bandwidth-heavy video conferencing system. It is also investigating deploying IP telephony in the future.

Kim says “Looking at the current trend of technology development, our usage of WAN is expected to increase, which means that the value of our WAN acceleration infrastructure is expected to be even more significant in future.”

For More Information

To find out more about Juniper Networks products and solutions, visit <http://www.juniper.net>.

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Juniper Networks, Inc. is the leader in high-performance networking. Juniper offers a high-performance network infrastructure that creates a responsive and trusted environment for accelerating the deployment of services and applications over a single network. This fuels high-performance businesses. Additional information can be found at www.juniper.net.

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