

LIG INSURANCE

Reducing Storage Allocation Time 88% and Improving Application Performance 40% with Data Center Tools from Symantec

As part of its initiative to become the leading insurance company in the Republic of Korea, LIG Insurance embarked on a strategy to migrate its critical applications from mainframe-based systems to a more flexible and cost-effective UNIX server environment. LIG turned to Symantec for the data center management tools needed for the makeover. Symantec delivered a solution encompassing storage management, data protection, business continuity, and application performance monitoring. Results include a 92 percent reduction in backup time, a 40 percent improvement in IT staff productivity, a 40 percent improvement in application performance, and an 88 percent reduction in storage allocation time.

Raising the bar for an entire industry

Some companies reach turning points where they set higher standards for themselves and as a result, impact their entire industry. LIG Insurance, a leader in the South Korean marketplace, is a case in point. The company launched a comprehensive strategy to ensure sustainable growth. LIG's goal was to become a "First-Class Insurance Group," providing superior trust and satisfaction to its clients, shareholders, employees, and partners. Every aspect of the business underwent scrutiny and transformation, and IT was no exception.

Making information available to partners and customers

The IT team has focused on improving the availability, performance, and flexibility of critical service and financial applications. Many of these applications are distributed to a network of agents through a customer self-service portal. Ensuring fast and accurate response via the portal and other channels is a key differentiator for LIG in building customer and partner loyalty. Downtime is unthinkable.

The IT team also looked for ways to improve its staff productivity and operational efficiency, and to minimize the long-range costs of its technology investments. Areas pinpointed for improvement included storage management, data backup, and recovery. These processes came under pressure as data volumes grew past 18 terabytes, using up valuable IT staff time and impacting data availability.

Reducing costs by migrating off the mainframe

To address all these issues, LIG in 2006 completed the migration of its core applications from a mainframe system to UNIX servers with

Organization Profile

Established in 1959, LIG Insurance Co., Ltd., (www.lig.co.kr or <http://english.lig.co.kr>) is a leading Korean insurer that delivers a diverse range of competitive products, including motor, fire, marine, and pension insurance. The company operates an extensive business network with 56 branches, 298 sub-branches, and about 7,000 agencies throughout the Republic of Korea.

Industry

Insurance

Solution

Storage Management, Data Protection, Business Continuity, Application Performance Management

"In Korea, Symantec has the reputation as the premiere vendor of data center management tools. The company offered us an integrated set of solutions that are comprehensive, reliable, and secure."

Sang Yong Park

IT Promotion Team Manager
LIG Insurance

Symantec solution improves storage management staff productivity by 40%

the potential to deliver better performance, greater business agility, and lower total cost of ownership (TCO). Along with the migration, LIG recognized the need for better tools to manage, protect, and optimize the performance of its new IT resources.

That's when Symantec entered the picture. LIG looked at several alternatives before standardizing on a software infrastructure based on Symantec Data Center Foundation tools. "In Korea, Symantec has the reputation as the premiere vendor of data center management tools," says Mr. Sang Yong Park, IT promotion team manager, LIG Insurance. "The company offered us the most comprehensive, secure, and reliable solution."

Managing storage more efficiently

Veritas Storage Foundation™ provides LIG with a single tool to allocate and configure disk and tape storage across a storage area network (SAN). Mr. Park and his team used Storage Foundation to perform a seamless data migration from the old mainframe to 10 UNIX servers and a (SAN) comprising EMC disk and IBM tape storage.

LIG continues to use the online configuration, multitiering, and dynamic multipathing and load balancing capabilities of Storage Foundation to reduce administration time, improve storage utilization, and maintain high levels of availability to support the self-service portal and other applications.

**LIG Insurance Co., Ltd.
Symantec Data Center Foundation Environment**

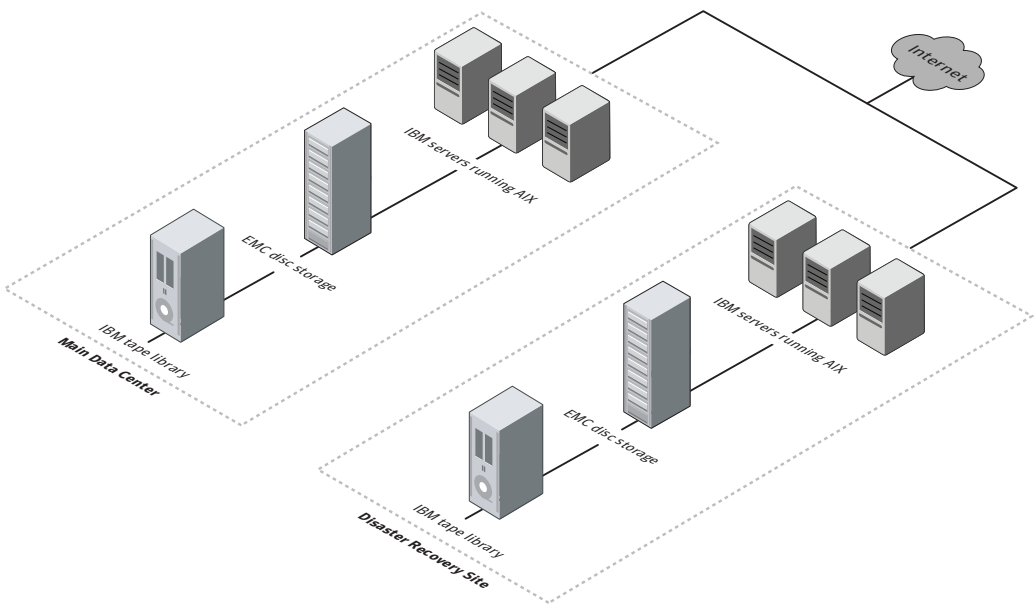
Veritas Storage Foundation provides a complete set of tools for centralized management of online storage. It helps the IT team migrate data between systems and allocate storage faster and more efficiently.

Veritas Storage Foundation Cluster File System enables multiple servers to concurrently access files from the same pooled storage. The solution makes data readily available to multiple applications, eliminates redundant storage, and reduces storage management time.

Symantec iP monitors, measures and correlates performance metrics from all critical components of applications, database and servers. The information helps the IT team proactively troubleshoot problems before they impact performance.

Veritas NetBackup provides fast and reliable data backup and recovery across heterogeneous platforms.

Veritas Volume Replicator continuously replicates data for fast recovery of servers in both the main data center and the disaster recovery site.



“Veritas Storage Foundation has cut storage allocation time by 88 percent and improved staff productivity by 40 percent while supporting 99.8 percent availability, equal to the mainframe we replaced,” says Mr. Park. “As we continue to monitor and tune our environment with Symantec tools, we expect availability to improve even further.”

Providing concurrent access to multiple applications

In addition, Mr. Park and his team have deployed Veritas Storage Foundation Cluster File System software from Symantec so that multiple applications running on a cluster of three UNIX servers can have concurrent access to data pooled on the company’s SAN. The Symantec software ensures coherency and integrity of the shared data, preventing database corruption.

Storage Foundation Cluster File System simplifies storage management by eliminating the need to maintain separate storage for each server. It also figures in LIG’s high-availability strategy. When one server goes out of service, another one continues to have access to the entire database. With traditional server clustering, the failover operation introduces minutes of downtime, reducing availability.

“The Veritas Storage Foundation Cluster File System has helped us reduce planned downtime and virtually eliminate unplanned downtime,” says Mr. Park.

Application Performance Management

In addition to being highly available, LIG’s customer-facing portal processes more than 60,000 transactions every day. The system must be highly responsive or customers won’t use it. The database has more than 3,800 indexes, so application code can sometimes access the wrong index, creating a performance bottleneck.

SOLUTION AT A GLANCE

Business Drivers

- Help ensure availability and security of critical insurance information
- Enhance customer satisfaction and increase competitiveness with self-service insurance portal
- Minimize IT staffing costs

Technology Challenges

- Share data among multiple servers efficiently and without danger of data corruption
- Locate application bottlenecks quickly and proactively, before they impact users
- Implement highly reliable and fast backup system in open-systems environment

Solution

- Migration from mainframe to open systems; clustered file system for concurrent access; daily backups to tape and remote replication; and end-to-end application monitoring

Symantec Products

- Veritas Storage Foundation™
- Veritas Storage Foundation Cluster File System
- Veritas NetBackup™ with:
 - Agent for DB2
 - Agent for Oracle
- Veritas™ Volume Replicator
- Symantec i³™

Symantec Services

- Symantec Consulting Services
- Symantec Support: Basic Support

Symantec Business Partner

- 3S Soft Co., Ltd.

Technology Environment

- Server Platform: 10 IBM p590 and p570 servers running IBM AIX 5.3
- Database: IBM DB2 UDB 8.2 HADR, Oracle 9i
- Applications: Core Insurance System, Bancassurance, DW/CRM, e-Business
- Storage: EMC Symmetrix DMX (disk); IBM Total Storage 3584 tape library

Therefore, LIG monitors transaction time proactively using Symantec i³™. The Symantec software allows Mr. Park and his team to monitor measure and correlate performance metrics from all critical components of applications, database and servers. “With its end-to-end monitoring features, Symantec i³ allows our IT staff to spot problems before they affect users—and fix them quickly,” says Mr. Park. “It has allowed LIG to improve application performance by 40 percent.”

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Sang Yong Park

IT Promotion Team Manager

LIG Insurance

BUSINESS VALUE AND TECHNICAL BENEFITS

IT Staff Productivity

- 88% reduction in time to allocate storage, from average of 2 hours to 15 minutes
- 40% increase in IT staff productivity

Availability

- 99.8% availability of server-based applications, equivalent to mainframe

Operational Efficiency

- 94% reduction in backup time, more than 48 hours to 3 hours per day

Application Performance

- 40% improvement in system performance

Business Continuity

- 1 hour recovery time objective (RTO)
- Near-zero (network latency over 50 kilometers) recovery point objective (RPO)

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Replicating data for business continuity

Symantec software also contributes to business continuity at LIG by supporting replication of data between servers in the main data center and their mirrored counterparts in the company’s disaster recovery site. The company uses Veritas Volume Replicator as a bridging solution to rapidly restore servers in either location in the event of a crash. In addition, LIG deploys the software at its main office to replicate local data and keep it ready to be restored if a server crashes.

Backing up and recovering data faster

To help keep critical data available and safe, LIG also needed a highly reliable backup system. It had been using a non-Symantec solution, but found a number of weaknesses in it. In particular, this solution did a poor job of predicting the time remaining on a backup job, making it difficult for backup administrators to plan their workflow. Also, the software lacked the granular management and control needed to plan and execute backups within the required time windows.

LIG switched to Veritas NetBackup™ and is now backing up much more rapidly. “The combination of Veritas NetBackup and new storage hardware has helped us reduce our full backup window from more than 24 hours to less than 2 hours, a 92 percent reduction,” says Park. “And it does a much better job of predicting when a backup job will end, so we can work more efficiently.”

LIG is also further improving its storage utilization and reducing tape media costs by using NetBackup to automatically store data to the most appropriate media. Mr. Park and his team now use the Symantec software to do an eight terabyte full backup each week and five daily backups totaling about 700 gigabytes. Faster and more frequent backups help make the data more available for fast recovery. “We have achieved a recovery point objective (RPO) of virtually zero—just the network latency—and a recovery time objective (RTO) of about one hour,” says Mr. Park.

Business partner and Symantec service contribute to success

Mr. Park adds that both Symantec Consulting Services and 3S Soft Co. Ltd., a Symantec business partner, provided expert advice that contributed to the success of LIG’s deployment of Symantec Data Center Foundation. He also commends the responsive service that he and his team receive on a regular basis from Symantec Basic Support.

“We rely on Symantec to help accomplish our mission of becoming a true industry leader,” says Mr. Park. “Symantec gives us performance today and confidence about the future.” ■