

Showa Denko Materials takes first step toward Digital Transformation (DX) utilizing Veritas NetBackup and Amazon Web Services (AWS).

VERITAS™

OVERVIEW

Showa Denko Materials Co., Ltd., a provider of semiconductors and other high-performance materials and components, migrated its conventional on-premises backup environment to Amazon Web Services (AWS) using Veritas NetBackup™ to improve business continuity for its core software system. AWS Snowball was used to quickly migrate large amounts of data, and the advanced deduplication function in Veritas NetBackup helped streamline both the migration and ongoing backup processes.

ENHANCING BUSINESS CONTINUITY WITH CLOUD-BASED BACKUPS

Originally Hitachi Chemical Co. Ltd., Tokyo-based Showa Denko Materials Co., Ltd. was re-established in 2020 as a member of the Showa Denko Group. The company does business across a wide swath of industry sectors, ranging from information and communications products, such as semiconductor materials, to mobility products in areas like resin molding; energy solutions such as automobile batteries; and life sciences services such as manufacturing and sales of diagnostic agents. Showa Denko's offerings in these markets range from material design to functional evaluation and development of process technology.

The company operates its core systems with business continuity planning (BCP) in mind. Previously, it used two data centers (DCs) in the Kanto and Kansai regions to perform offsite backups. Thus, it has a history of using backup storage hardware with a high data-deduplication rate.

"We were using the deduplication functionality of the storage appliance to operate an offsite backup environment," explains Mr. Masahiro Horie of the Infrastructure Planning Unit, IoT Promotion Department, for Showa Denko. However, because "more than five years have passed since adoption of this solution, we made the decision to migrate to a new environment."

Showa Denko had three primary options for ongoing, offsite data protection. It could run backups to tape, then send the tape media to a remote site. It could use the replication function of onsite storage hardware to send backup data to a remote site, as in its legacy solution. Or it could use a data protection solution purpose-built to store backup data in the cloud. The final option is the one Showa Denko chose for this project.



ORGANIZATION PROFILE

Website: www.mc.showadenko.com

Industry: Chemical Industry

Headquarters: Tokyo, Japan

Employees: 23,421 consolidated employees, as of fiscal 2020 closing

KEY CHALLENGES

To enhance business continuity planning (BCP), Showa Denko decided to replace an on-premises backup appliance with Amazon Simple Storage Service (S3).

SOLUTION

Showa Denko selected Veritas NetBackup™ for daily backup operations in the AWS environment. The company used Amazon Web Services (AWS) Snowball to smoothly migrate its large volume of backup data. Advanced deduplication technology in Veritas NetBackup and NetBackup Appliances, which enables AWS coordination, helped ensure success for the backup environment migration.

BENEFITS

- Enhanced BCP through decentralized data storage
- Enhanced ability to counter cyberattacks
- Nearly 30% lower cost of ongoing backup operations
- Cost savings of several million yen per month
- Easy-to-use graphical interface enables non-experts to perform backups and data restores
- Increased cyber-resiliency

Showa Denko selected Amazon S3 cloud storage to house its new data protection environment. Then, the company launched a project to build and optimize a backup environment on Amazon S3, with an eye toward BCP. For assistance with the initiative, Showa Denko engaged Hitachi Systems, a leading IT service provider that specializes in developing and implementing business technology, as well as providing managed services.

“A backup system that is also effective as a security measure is the corporate system’s last line of defense, and must be protected at all costs,” emphasizes Mr. Horie. “That is why we chose the highly durable Amazon S3, which allows data to be decentralized and stored by region, with preparations for major disasters in mind.”

THE NEW CHALLENGE: TRANSFERRING LARGE AMOUNTS OF DATA TO THE CLOUD

From a practical perspective, Mr. Horie anticipated that migration to the cloud would be difficult, because Showa Denko initially needed to transfer several terabytes of data. The opportunity to leverage AWS Snowball, which enables migration to AWS using a physical device, was a factor in Showa Denko’s selection of AWS as its cloud provider.

For ongoing data protection, Veritas NetBackup grabbed the company’s attention. The solution functionality offered to streamline migration of data into AWS. In addition, advanced deduplication technology in Veritas NetBackup promised to improve the efficiency of backup operations on an ongoing basis.

Showa Denko had used Veritas NetBackup for many years in an on-premises environment. Decision-makers knew the product is reliable, and that its use would not create an additional burden for operators when migrating to a new phase.

BUILDING A CLOUD BACKUP ENVIRONMENT WITH AWS SNOWBALL

Nowadays, Showa Denko uses Veritas NetBackup to perform daily backups of the most important data in the company’s core system located in the Kanto data center. After deduplication, Veritas NetBackup transfers about 200 GB of backup data to Amazon S3 via AWS Direct Connect.

These changes not only cut costs, but also ensure high availability to strengthen BCP measures. Veritas NetBackup also provides a comprehensive backup environment by storing low-priority data, which does not warrant offsite backups, on Linear Tape Open (LTO) tapes.

SIGNIFICANT COST REDUCTIONS

Previously, operations were necessary for both storage and backup tools, but now both backups and data restores can be completed with Veritas NetBackup alone. “Functions are integrated into one clean GUI [graphical user interface] to make it easy to give instructions to even those operators who are not very familiar with backups,” praises Mr. Horie. “It is a very attractive feature that even beginners can operate it.” He gives Veritas NetBackup high marks.

Veritas Technologies also received words of praise for duly providing support to respond to client requests, such as engineers being present onsite.

VISION FOR THE FUTURE

Moving forward, the company plans to continue promoting the shift to a multi-cloud environment in line with the overall policy of Showa Denko Group. It is now considering migrating its core system to the cloud.

In addition, although all backup data is currently stored in Amazon S3, the company hopes to create an environment that also includes Amazon S3 Glacier, which would be suitable for archiving and would further reduce costs.



More and more manufacturers are promoting digital transformation (DX) by installing a variety of sensors, including Internet of Things (IoT) technologies, onsite to support big-data analyses. Showa Denko may eventually move in this direction as well. "It will all depend on size of the data, but when the time comes to accumulate a variety of information in the cloud, it will be difficult to do so without using the advanced deduplication technology of Veritas NetBackup," says Mr. Horie. "In the future, an environment that has a backup server in the manufacturing site as the edge, to perform deduplication before sending the data to the cloud, may be necessary."

He stresses that backups are effective not only for the conventional purpose of increasing the availability of a system, but also for increasing cyber resilience such as for ransomware countermeasures. "Recent cyberattacks are getting sophisticated and making detection more difficult. But if backup data is truly secured as the last line of defense, it is reassuring," says Mr. Horie when asked about the future. "I'd like to think about backups from the perspective of the ability to counter cyberattacks as we increase the resiliency of the system."

FOR MORE INFORMATION

Please contact your local Veritas Sales Representative or Business Partner, or visit: [Veritas NetBackup](#) [Veritas NetBackup Appliances](#)

ABOUT VERITAS

Veritas Technologies is a global leader in data protection and availability. Over 50,000 enterprises—including 87 percent of the Fortune Global 500—rely on us to abstract IT complexity and simplify data management. The Veritas Enterprise Data Services Platform automates the protection and orchestrates the recovery of data everywhere it lives, ensures 24/7 availability of business-critical applications, and provides enterprises with the insights they need to comply with evolving data regulations. With a reputation for reliability at scale and a deployment model to fit any need, Veritas Enterprise Data Services Platform supports more than 800 different data sources, over 100 different operating systems, more than 1,400 storage targets, and more than 60 different cloud platforms. Learn more at www.veritas.com. Follow us on Twitter at [@veritastechllc](https://twitter.com/veritastechllc).

2625 Augustine Drive, Santa Clara, CA 95054
+1 (866) 837 4827
www.veritas.com

For specific country offices and contact numbers, please visit our website.
www.veritas.com/company/contact

VERITAS™