# VERITAS™

# Simplifying the Complex Cloud Migration of Compliance Backups

MSCI engages Insight and Veritas Support for help migrating years of compliance backup data into the Microsoft Azure cloud.

## Challenge

Financial-data provider MSCI transitioned many core business activities to the public cloud and wanted to move its 7 PB of backups to long-term retention as well. However, the backups were created in a legacy version of Veritas NetBackup™ that did not enable direct migration. The internal data protection team determined that the transition to the cloud would be complex.

## Solution

The MSCI team was not willing to risk losing data during the migration; the compliance implications of doing so would be dire. After a proof of concept (POC) with a third-party vendor, MSCI decided to engage Veritas partner Insight and Veritas Support to assist with the transition.

## Outcome

Veritas Support and Insight worked together to streamline the data migration process as much as possible. MSCI has now transferred the legacy backups from three of its four data centers to Microsoft Azure without losing any data. In addition, the software compression and deduplication have reduced the amount of data MSCI needs to store by about 70%.

## MSCI

**INDUSTRY**

Financial Services

**EMPLOYEES**

4,000+

**HEADQUARTERS**

New York City

**WEBSITE**

msci.com

> " *The migration has been 100% successful to date. We met the regulatory compliance requirements throughout the transition of our first three data centers, and we expect that to continue as we finish migration of the fourth data center."*
>
> Sandesh D'Souza, Executive Director, IT, MSCI

## Data Backing Real-time Decisions Must Be Kept for Years

In the rapid market cycles for stocks, bonds, and more complex securities, the quality of data available to an investor often determines whether his or her investment decisions result in a profit—or a loss.

For more than 50 years, New York City–based MSCI has provided decision support tools and services for the global investment community. The company's industry-leading, research-enhanced solutions enable clients to understand and analyze key drivers of risk and return. With the knowledge they derive from MSCI tools, investors can confidently build more effective portfolios.

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> Sandesh D'Souza, Executive Director, IT, MSCI

Regulatory bodies require MSCI to retain the proprietary investment data, analytics, and indices that it provides to customers, and the compliance timeframes are much longer than investors' decision horizons. "We have to keep data for at least five years," explains Sandesh D'Souza, executive director of IT for MSCI and leader of the company's backup engineering team. "If we were to lose any data during that period, there would be significant legal and compliance implications."

The European Union's (EU's) Benchmark Regulation (BMR), for example, requires administrators of investment benchmarks to keep records for five years in a format that makes it possible to replicate and fully understand how the benchmark was set, as well as to audit input data, calculations, and judgments.

## Business Transformation in the Cloud

A couple of years ago, these data retention requirements created a challenge for MSCI. The organization was moving many of its core operational systems into the Microsoft Azure public cloud.

"MSCI has adopted a hybrid private-and-public-cloud strategy," D'Souza explains. "Cost is part of the reason we are moving many solutions into Azure, but we are also leveraging the benefits that cloud technologies offer, helping make our business more agile. So, we are in the process of increasing our footprint in the public cloud, which leads to a reduction in the footprint of our local private clouds in our on-premises data centers."

One challenge in this transition was the question of what to do with 7 PB of legacy backups that MSCI was storing onsite in Data Domains within four data centers—two in Europe and two in the United States. D'Souza's team needed to quickly find a solution as MSCI began preparing to shut down the European locations.

"As we were exiting out of our data centers in Geneva, we needed to ensure that the older NetBackup data stored there could move to a remote location," he says. "We looked at the option of moving it to one of our other data centers, but we determined that moving the backup data to the Azure cloud would be the most cost-effective approach."

## Legacy Backups Create Challenges

The decision to move to Azure was straightforward. The plan for getting there was not. The legacy backups were a couple of years old, at least, and the NetBackup platform they resided in did not enable direct transfer to cloud technologies. In addition, the team wanted to ensure that data compression and deduplication were optimized in order to minimize data storage within Azure.

D'Souza and his team launched an initiative to explore their options for transferring the large data store. "We needed to move from NetBackup version 7.x to version 8.x before we could upload the data into Azure," D'Souza says. "That meant multiple upgrades

within this project. We knew the migration would require substantial resources, so we looked at a few options."

He adds, "We did a POC [proof of concept] with one third-party tool, which would have moved the data to Azure and then provided its own front end for future data retrieval. But we decided to work with Veritas instead. The data was native to NetBackup, which meant less room for issues whenever we need to retrieve information. In addition, the Veritas migration process was much better documented and better defined than that of the third party. There was a clear path from the version of NetBackup that we were on to the version we needed to run NetBackup in the cloud."

## Expertise Needed to Streamline Project Complexities

Although the path was clear, the project was complex. MSCI engaged Veritas partner Insight to assist with the migration. A leading solutions integrator, Insight has more than 12,000 professionals serving clients around the world. MSCI has relied on Insight as a reseller, integrator, and software provider for 20 years. Knowing that Insight and Veritas have a close relationship increased the comfort level of D'Souza and his team as they launched the complex initiative.

"When we need support with NetBackup, we can turn to Insight or go directly to Veritas Support," D'Souza says. "Both have been extremely helpful over the years. We were confident that Insight and Veritas, working together, would make the data migration process as smooth as possible."

Together, Insight and MSCI launched a POC, migrating legacy backup data within one of the company's smaller data centers to pilot the proposed migration's multistep process. "The data is currently in a Data Domain that has its own compression and deduplication," says Amit Karia, vice president of engineering for MSCI. "From version 7.x, we had to move the data into an MSDP [Media Server Deduplication Pool] that served as a transit zone for the data, which had previously gone through hardware compression, to be uncompressed and un-deduped. That was necessary before we could proceed through the NetBackup upgrades. Then, once we got the data to version 8.x, we added a software dedupe and sent it to the cloud."

Another issue was data lifecycle management. D'Souza explains that MSCI wanted to ultimately store the long-term backup data within Azure archive, or blob, storage, which was the most cost-effective option.

"So, our plan was to use lifecycle management within Azure," D'Souza says. "We wrote data initially to Azure cool storage and established that after a certain number of days in cool storage, Azure should move the data to Azure archive storage. This is the cost-effective way to handle data storage, so we documented a procedure for retrieving backup data that has been moved to the Azure archive."

The involvement of Insight and Veritas Support helped ensure that the complex and multistep migration process went smoothly for MSCI. "There were also a lot of compatibility issues to verify between the Data Domain version, versus the MSDP version, versus the cloud version," Karia says. "For example, Azure follows a different naming standard on-premises versus in the cloud, so as we migrated the NetBackup catalog, we had to change the host names."

## Smooth Communication and Cohesive Support

After successfully completing the POC, MSCI proceeded with the migration of data in its other three data centers, turning to Veritas Support when needed. "We are not specialists with as much experience in backups as Insight and Veritas offer," D'Souza says. "Because we felt there was a risk of losing data in this migration, and because of the compliance implications if that were to happen, we brought in a team of experts in NetBackup to ensure that didn't happen."

Now, MSCI is in the midst of migrating its final data center. All in all, D'Souza says, the project has been an impressive success. "The migration has been 100% successful to date," he reports. "We met the regulatory compliance requirements throughout the transition of our first three data centers, and we expect that to continue as we finish migration of the fourth data center."

The move to Azure blob storage via Azure lifecycle management, paired with NetBackup compression and deduplication, are minimizing the cost of storing the backups for long-term retention. "The hardware compression we had on our NetBackup backups in the legacy environment was about 40% to 50%," D'Souza says. "But we are now getting about 70% compression through the software compression in the new version of NetBackup." The assistance of Insight and Veritas made these benefits possible. "The support from Veritas and Insight was quite cohesive throughout this project," D'Souza says. "Communication was very smooth."

## For More Information

Please contact your local Veritas Sales Representative or Business Partner, or visit Veritas NetBackup

### About Veritas

Veritas Technologies is a a leader in multi-cloud data management. Over 80,000 customers—including 87% of the Fortune Global 500—rely on us to help ensure the protection, recoverability and compliance of their data. Veritas has a reputation for reliability at scale, which delivers the resilience its customers need against the disruptions threatened by cyberattacks, like ransomware. No other vendor is able to match Veritas' ability to execute, with support for 800+ data sources, 100+ operating systems, 1,400+ storage targets and 60+ clouds through a single, unified approach. Powered by our Cloud Scale Technology, Veritas is delivering today on its strategy for autonomous data management that reduces operational overhead while delivering greater value. Learn more at www.veritas.com. Follow us on Twitter at @veritastechllc.

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