INTRO

InvenSense, a TDK Group Company is a California-based global leader in sensor solutions for mobile devices, gaming products, smart homes, automotive products, and other technology-based consumer and industrial necessities. InvenSense’s solutions combine MEMS (micro electrical mechanical systems) sensors, such as accelerometers, gyroscopes, compasses, microphones, and ultrasonic 3D-sensing with proprietary algorithms and firmware that intelligently process, synthesize, and calibrate the output of sensors, maximizing performance and accuracy. TDK, the parent company to InvenSense is an ingredient technology supplier with a wide product spectrum which consists of sensors and sensor systems such as temperature and pressure, magnetic, and MEMS sensors. In addition, TDK provides power supplies and energy devices, magnetic heads and more. These products are marketed under the product brands TDK, EPCOS, InvenSense, Micronas, Tronics and TDK-Lambda.

PROBLEM DISCUSSION

InvenSense faced several data protection challenges. Worldwide offices, end user desktops, a variety of databases including Microsoft SQL server, and very large NAS filers made efficient backup and recovery difficult. InvenSense had standardized on tape backups to move data offsite, and the very large NAS data sets took days or weeks to be written to tape and remotely vaulted. Any failure would cause the backups to fall further behind resulting in recovery gaps due to weeks where no data was sent offsite. InvenSense moved from physical tape to virtual tape but many of the same failures, gaps, and issues with physical tape occurred with virtual tape as well.

Backups directed to additional disk were attempted for NAS data. Initial backups required a full backup of the entire NAS dataset resulting in duplication of large NAS filers. While failures were less of an issue, available storage space and speed of backup and recovery were still problems.

Fast and safe recovery in an era where ransomware is a prominent threat was a high priority. Securing and safeguarding backup data from ransomware, viruses and internal threats that would guarantee protection and timely recoverability seemed like a tall order.

InvenSense needed a single solution that could incorporate their disperse geographic locations, NAS data, SQL servers, and databases, all while simplifying backup and recovery making it fast, easy and secure. InvenSense wanted to take advantage of moving backup data to the public cloud and recovery to the cloud as well.

Providing seamless data protection and backup solutions that could adapt to the company’s changing technology requirements and add value to their customers was a top requirement and concern.

Rob Bencale, Senior Director of IT at InvenSense, wanted one solution to address all of the issues with backup, recovery, security, and access to the hybrid cloud.
CHOOSING A COMPREHENSIVE DATA PROTECTION SOLUTION NETAPP/RUBRIK

NetApp and Rubrik delivered a solution that met all of InvenSense’s challenges. InvenSense chose NetApp as their storage vendor and Rubrik to manage their entire backup infrastructure.

With NetApp as their storage vendor of choice, InvenSense chose ONTAP. ONTAP provided InvenSense with smart, powerful, and trusted solutions that take advantage of modern cloud technologies to deliver the speed, efficiency, and security for their unique data fabric needs. InvenSense was able to unify their data, simplify the on ramp to the hybrid cloud and reduce costs.

With NetApp and Rubrik, InvenSense was able to meet their data protection challenges easily and efficiently. InvenSense gained storage efficiency by implementing Rubrik Cloud Data Management (CDM) direct archive to the cloud for their NAS data. This eliminated the need for additional on-premises storage and greatly reduced the amount of time needed to backup and recover these large datasets. Utilizing the public cloud gave InvenSense greater flexibility and recoverability options.

NetApp and Rubrik also provided InvenSense with much greater security for their data. The combined power and capabilities of NetApp and Rubrik provided them security and protection against insider threats and ransomware attacks, guaranteeing InvenSense the opportunity to recover if and when they were compromised.

FASTER BACKUPS/RESTORES COST/TIME SAVINGS

The tight integration between NetApp and Rubrik also afforded InvenSense the opportunity to improve operational efficiency and lower their Total Cost of Ownership (TCO). Using this solution, InvenSense greatly reduced backup processing time and any negative impact on the production environment. For InvenSense, the time needed to backup data was reduced from a week to seconds to retrieve and backup offsite tapes.

With Rubrik, InvenSense was able to mobilize petabyte-scale NAS shares directly to the cloud, making single-click migrations possible. Indexed and searchable NAS metadata across the hybrid cloud environment improves visibility. By incorporating the cloud and on-premises stored data, clients can easily locate the NAS shares they are searching for. Predictive search helps locate files, VMs, and databases anywhere in the hybrid cloud. This makes it much easier to locate specific data through a simple search when needed.

This resulted in a significant reduction of operational costs, as InvenSense’s IT team no longer has to spend hours each week managing and monitoring backups. The ease of this process has led InvenSense to adopt a “back up everything” attitude, creating backups of data across locations.

ADDITIONAL BENEFITS

The solution afforded InvenSense additional benefits. Global management and data governance helped minimize exposure to ransomware and increase compliance levels to their parent company, TDK. Additionally, InvenSense accelerated meeting compliance goals by using Rubrik to create an up-to-date data inventory to address compliance regulations and help document where sensitive data was at risk for exposure in a malicious ransomware attack.

CONCLUSION

The company has found a true partner in both the Rubrik and NetApp teams. “We pretty much take advantage of everything NetApp has to offer,” says Bencale. “But Rubrik is the piece that helps me sleep at night. Our business cannot run without NetApp and our data isn’t safe without Rubrik.”