ASM Lowers Costs, Reduces Complexity, and Accelerates Restore and Recovery Times with Trace|3 and NetApp

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ADVANTAGE
SALES AND MARKETING

Another NetApp
solution delivered by:

TRACE|3

KEY HIGHLIGHTS

Industry
Professional services

The challenge
Streamline storage by consolidating multivendor, multiplatform storage; increase uptime and utilization; and decrease total cost of ownership (TCO).

The solution
Deploy an active-active data center architecture with clustered NetApp systems in each data center, replicating data with NetApp SnapMirror® technology.

Benefits
- 100% email uptime for five straight months
- 99% faster recovery time
- 99% faster email backup time
- 50% reduction in storage administration time

CUSTOMER PROFILE

It's easy for visitors to the United States to be astonished when they walk into a supermarket or pharmacy. Aisle after aisle of shelves are teeming with choices.

Advantage Sales & Marketing (ASM), based in Irvine, California, is one of the country's major links between those shelves and 1,200 manufacturers, suppliers, and producers of consumer goods. With revenues that exceed $900 million and more than 20,000 associates, ASM provides outsourced sales, merchandising, category management, and marketing services to top clients that include SC Johnson, Quaker/Tropicana/Gatorade, Unilever, Church & Dwight, and Del Monte.

How effective is it? ASM has grown from a 40-person local sales agency in Orange County, California in 1987 to a $900 million company today with 20,000 associates nationwide.

THE CHALLENGE

Along the way it made dozens of acquisitions. "Consolidation is the theme in our industry," explains Lewie Wake, chief technology officer at ASM. "Ten years ago there were 1,200 locally and regionally-based companies doing what we do. Now there are only 300—and just three that provide national coverage."

The acquisitions left Wake and his IT team with major challenges. "We needed to consolidate 18 different order management systems, 30 different mail systems, 40 different domain names, hundreds of types of PCs in thousands of configurations, and many kinds of servers—some companies we acquired even had built their own."

There were also many stand-alone, siloed storage systems from vendors that included Sun StorageTek, HP, Dell, Falconstor, SATAbeast, and BlueArc.

Driving complexity out
ASM needed to standardize its IT environment, and also enhance uptime and disaster recovery. "We wanted to virtualize servers using VMware, consolidate storage with one vendor, and develop a way to replicate storage to a disaster recovery site," Wake says.

The replication requirement thinned the storage field. "To get the replication we wanted, our primary vendor Sun told us we'd need to switch to HDS," Wake notes. "That was basically switching vendors, so we also evaluated EMC, HP, and NetApp."

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Phil Ben-Joseph
National IT Director, ASM

THE SOLUTION

NetApp met requirements best with a solution that is compatible with a wide variety of interface protocols—providing flexibility and efficiency that its competitors couldn't match.

"A key benefit of NetApp," says Phil Ben-Joseph, national IT director for ASM, "is that it's one common storage platform for literally 95% of our storage needs, including Fibre Channel, CIFS, NFS—and iSCSI if we had it. This is the biggest gain for us. Some of the storage systems we had before only supported Fibre Channel, not CIFS—and they didn't support Fibre Channel well. NetApp really is a best-of-breed solution."

Doing more with less

Having chosen NetApp, ASM asked the storage vendor to recommend partners that could help design and implement a new storage architecture. From several choices, ASM picked Trace|3.

"We had met Trace|3 before and liked them," Wake remembers. "Big companies need to do business with big companies, and Trace|3 is large enough to not be overwhelmed with the order we placed. I told them that this is a rare opportunity to consolidate our storage. Trace|3 took our set budget and made it cover two storage system clusters in two data centers."

The NetApp solution has 50% of ASM's applications running in its California data center, and 50% running in its Nevada data center. At each center is a clustered pair of NetApp FAS6030HA systems. Data replicates between sites using NetApp SnapMirror software.

NetApp has ensured ASM's success with a wide range of benefits.

BUSINESS BENEFITS

"Uptime is critical to us," Wake says. "Our target is 99.99%—that's six minutes a month of unscheduled downtime, excluding maintenance windows."

Adds Ben-Joseph: "The year before our NetApp solution we had 20 hard-core outages. Since we deployed NetApp, we've had none. We've had what I call five emergency maintenance windows where we had issues we wanted to fix, such as configurations that weren't right. We were able to schedule those windows to minimize disruption."

The team also has had five straight months of 100% uptime on email since deploying the NetApp solution. "Compare that with the year before, when we had only one month without a disruption in email service," Wake notes. "Storage can't take all the credit—we also worked closely with Microsoft."

New capabilities in disaster recovery

Since each of the two data centers runs only 50% of the company's applications, ASM would need to move only half of them during failover. "We've already done 50% of the work," Wake says. In addition, ASM's newly virtualized server images reside on NetApp storage, rather than on the servers themselves. ASM replicates them between sites just like all other data—and can quickly restore them at the other site.

The result is faster site failover and enhanced disaster recovery capabilities. Deployment of the disaster recovery solution is still underway, and the company plans to test a complete site failover later in 2008. When it's done, the team expects a reduction in recovery time from the NetApp solution in the range of 90%, a capability it did not have before. "It would have taken months to reconstruct a site if we had to use tape," Wake says. "Now we should be able to restore it in matter of days."

With NetApp SnapMirror, ASM simplifies replication. Now it moves 500 gigabytes a day between the two sites on a gigabit WAN line. "We had some point replication solutions before—one for a database, another for a storage system," says Ben-Joseph. "Now SnapMirror replaces them and gives

us centralized control over what's passing through the wire, improving utilization and making it easier to synchronize our data across both locations."

Processes happen faster
Backup with the NetApp solution is now entirely disk-to-disk, using NetApp Snapshot technologies such as SnapManager for SQL Server and SnapRestore. ASM is eliminating tape. "Going tapeless will simplify management and make staff resources available for more valuable tasks," Wake says.

ASM is also reducing recovery time for files by 99%. "It used to take an IT staff member hours to recover a file from tape," Ben-Joseph notes. "With the NetApp solution, a user—without IT help—can recover a file in seconds just by right-clicking on it and choosing a previous version."

Additionally, the solution dramatically shortens backup time for Microsoft Exchange. Tape-based backup took 14 to 20 hours. With NetApp Snapshot technology, one administrator can do it in less than 30 seconds, with verification running afterwards for four hours. And NetApp Single Mailbox Recovery for Exchange and SnapManager for Exchange can recover individual messages or mailboxes in minutes, enabling the IT staff to move on to more valuable projects.

Lower TCO, enhanced responsiveness
Consolidating and standardizing on the NetApp solution has brought many other benefits. "We're no longer managing multiple support contracts," Wake says. "This helps our focus on reducing complexity and handling growth without having to add resources."

In addition, ASM has reduced storage administration time by 50% using NetApp Data ONTAP operating system. Two administrators at ASM each spend about a quarter of their time overseeing the company's 17 terabytes of data.

"NetApp has helped us double storage utilization, from 25 to 50%," Wake says. "We've enhanced our ability to reclaim unused space, and with NetApp SnapDrive software, we can provision or reallocate storage on the fly, without downtime. We are now an on-demand storage provider, and can respond to business unit requests faster."

Partner is part of the team
"Trace|3 is more than a vendor," Ben-Joseph says. "It has been a great partner for architecting and helping to deploy our solution. Together, we built a solid data center model that supports the needs of our business."

ASM has accomplished all this without the need for formal staff training. "When we were evaluating NetApp, Trace|3 was quite willing to bring us into the internal lab and train our engineers on NetApp's inner workings," Ben-Joseph says. "We could test all the different tools, from Data ONTAP to SnapManager for SQL and Exchange. The team got to know our needs and just basically gave us private tutoring."

"Trace|3 has also been valuable helping us plan and execute a couple of data center moves involved in this project," Wake adds. "We completed them without disruption. No end users noticed. That's a funny thing about IT: The sign of doing a good job is often that nobody notices."

Consolidating storage is just one milestone in the drive for efficiency at ASM. "Since 2004, when we began consolidation, we've reduced our IT headcount by about 10%," Wake says. "During the same period, we've added 25% more PCs, 100% more servers, and doubled our storage. We can operate a larger IT footprint with fewer people, which helps us with our budget."

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Lewie Wake
Chief Technology Officer, ASM

ASM is about to pass the billion dollar mark in annual revenue. "Probably the biggest benefit we're getting from Trace|3 and NetApp is general storage peace of mind," Wake concludes. "The solution lets us scale easily and use staff and system resources more efficiently. I can sleep better at night knowing there are two solid companies behind us, 7x24x365, supporting our needs."

SOLUTION COMPONENTS

NetApp Products
NetApp FAS6030HA Clusters

NetApp Data ONTAP® 7 operating system

NetApp SnapManager® for Exchange

NetApp Single Mailbox Recovery for Microsoft Exchange

NetApp SnapManager for SQL Server

NetApp SnapRestore®

NetApp SnapMirror

NetApp SnapDrive®

NetApp Partner
Trace|3 (www.trace3.com)

Environment
Applications: Microsoft Exchange, Microsoft SharePoint, Microsoft Dynamics NAV

Databases: Microsoft SQL Server

Server platform: Dell servers running VMware ESX Server

Storage: NetApp

Users: 20,000 associates

Protocols
FC-SAN, CIFS, NFS

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