

MARKET FOCUS: SMALL-BUSINESS STORAGE

NAS Or iSCSI SAN?

Or both? Solution providers need to put preconceived notions aside

By [Joseph F. Kovar](#), ChannelWeb
12:00 AM EDT Mon. Oct. 13, 2008
From the October 13, 2008 issue of CRN

When small businesses outgrow their single tape drive and their plug-and-play SOHO [NAS](#) appliance but are not yet ready for enterprise-class storage, they are turning to NAS, iSCSI-based SAN or a combination of both, according to solution providers.

While both technologies allow small businesses to centralize their storage, they do so differently. With NAS, data is stored in a file format for ease in file sharing over IP networks, while iSCSI-based SANs allow data to be stored in a block [format](#) for increased performance over [IP](#) networks at a lower cost than Fibre Channel, which has been the traditional SAN connection solution.

Small businesses are likely to start out with direct-attach storage and grow that storage with larger [hard drives](#) as their data grows, said Greg Knieriemen, vice president of marketing at Chi Corp., a Cleveland-based solution provider.

[NAS](#) will be the next step as they either want to tie together their file server, [e-mail](#) server and [database server](#) or want to share files among users, Knieriemen said.

Small-business customers will typically be better served with a SAN than with NAS when using applications like Exchange and SQL, said Don McNaughton, sales manager at HorizonTek, a Huntington, N.Y.-based solution provider.

"And for them, [iSCSI](#) performance is good, and they don't need to spend a lot on new switches or cards," he said.

Small businesses that just need shared storage space for applications such as video editing, on the other hand, will find NAS suitable, McNaughton said.

However, vendors such as NetApp now offer iSCSI capabilities with their NAS appliances at no extra charge. "There's no extra cost to turn iSCSI on," McNaughton said. "So even if the customer puts in such a NAS appliance for file sharing, we encourage them to try it for other things. They're not paying extra for it."

Jeanne Wilson, president of Condor Storage, a Sedona, Ariz.-based solution provider, said the small-business market is actually on the verge of a big push for NAS, which today is easier for solution providers to profitably sell and install compared to only five years ago.

"Five years ago, NAS was a pain," she said. "It was cheap, but no profit potential. Now I see vendors getting smarter about their NAS bundles. And I see small businesses asking for NAS more than for iSCSI. Many of today's appliances come with both NAS and iSCSI capabilities."

One market segment that Wilson is watching carefully is the Web 2.0 companies, a lot of which she said want to put their data behind a NAS head because of the need to quickly share files.

Wilson, who works with such vendors as Nexsan Technologies Inc., ONStor Inc. and Overland Storage Inc.'s new Snap line, said her customers are looking to work with both iSCSI and NAS for storing data. It is a trend she said makes her feel good about Overland Storage's recent acquisition of the Snap Server business from Adaptec. "Overland bought Snap for this reason," she said.

The majority of iSCSI storage that Peak UpTime sells to its small-business customers is purchased by those businesses looking to consolidate their storage from direct-attached to networked, according to Rolf Strasheim, director of [client](#) solutions for the Tulsa, Okla.-based solution provider. Such customers look to iSCSI storage to get the benefits of a SAN without investing in Fibre Channel, and are not stepping up from NAS, he said.

However, Strasheim said, NAS sales are still stronger than those of iSCSI to the small-business market. "But it depends on what the customer does in his environment," he said. "Some environments are based on scalability, while some are based on the applications."

And some of those environments actually are based more on the technical acumen of the customer than on scalability or application requirements, in part because they are familiar with simple NAS products like those from Buffalo Technology or Linksys, Strasheim said.

"We've all been sold on the 'Ronco' ability of NAS to self-heal and self-manage," he said. "But at the end of the day, the success of NAS or iSCSI depends on the ability of the customer to manage it, or on their ability to trust us to manage it."

Rich Kuhar, vice president of business development at Arkay Storage Solutions Inc., an Akron, Ohio-based solution provider, said that his small-business customers prefer iSCSI over NAS, which he said sometimes still surprises him.

"We just haven't yet seen that huge demand for NAS that others have seen," Kuhar said.

The real push for NAS will come as small businesses realize that while they need enterprise-class storage solutions, they don't have the experience needed to work with SAN, Kuhar said.

"More and more small businesses need more and more storage," he said. "But these SMBs are going from an easily managed tape drive to a centralized storage infrastructure. And their expertise is not able to keep up."

At any rate, Arkay has been offering iSCSI to small businesses since 2002, even before iSCSI was a standard set in stone, Kuhar said, and has found it to be an easy sell to those customers.

And that customer base will eventually adopt more NAS appliances for their file-based applications, he said. "Mostly, we start with SAN, and then add NAS," he said. "We start with block data, and add file serving."

In the end, it's up to the solution provider to understand whether the small-business client sees IT as a strategic differentiator or just as a cost center before helping to find the right storage solution, Strasheim said.

"Do they see storage as necessary to build their company?" he said. "Or as an expense? I don't walk in with a preconceived notion of NAS vs. iSCSI. I want to know the customer's culture before I make a suggestion."