

Is online disk backup a fit for SMBs?

By Heidi Biggar

In a recent survey conducted by Gartner Research, 64% of small to medium-sized businesses (SMBs) said they backed up their data on-site, not off-site for disaster-recovery purposes.

"That is a disaster waiting to happen," says Adam Couture, principal analyst at Gartner. "Anything that happens to their servers is also going to happen to their backups."

But with limited financial and staffing resources, SMBs often find themselves in the unenviable position of trying to back up data volumes with what they've got. For better or worse, this generally means weekly full backups and daily incremental backups to on-site tape or disk—that is, if they are backing up at all.

"SMBs know they aren't backing up the way that they should be, but either they don't have the methods in place to do it properly or they don't have the right people," explains Couture. "Or, if they do have IT staffs, those staff members are already caught up in other firefights."

And with no end in sight to the data boom, the backup challenge facing SMBs isn't expected to get easier anytime soon. "Data is growing at a greater than 30% clip annually and the type of data being generated is much more critical to daily operations, even at SMBs," says Phil Gilmour, president and CEO of EVault, a vendor of online disk-based backup software and services for the SMB market.

EVault is one of a number of vendors banking on the quiet, yet growing, trend toward online disk-based backup or outsourcing backup. Other vendors include Arsenal Digital Solutions, AmeriVault (which resells EVault), BluePoint Data, Connected, Iron Mountain (which resells LiveVault), LiveVault, ManagedStorage International, NovaStor, and Storactive (see "at a glance," p. 18).

at a glance...

Online disk backup options (partial list)

	Description
AmeriVault (EVault reseller)	• AmeriVault Online backup and recovery: \$10-\$40 per GB per month depending on data volumes
Arsenal Digital	• Arsenal VaRemote: \$10-\$30 per GB per month (depending on volumes) for the amount of data protected
BluePoint Data	• DataSafe Data Protector: Pricing not provided.
Connected	• DataProtector for Windows Servers (intended for small Windows file and print servers) —Subscription service: \$200 per month for up to 60GB —Licensed software: \$300 per Windows server client software agent
EVault	• EVault InfoStage: Pricing starts at \$30K. • EVault SmallBusiness Edition: Pricing starts at \$85 per month from \$0-\$5 per GB. • EVault Protect (managed service offering for customers 20GB-200GB or higher): Pricing from \$15-\$30 per GB (compressed). • EVault Protect ONE (for high-end environments): Pricing starts at \$3,354 for 200GB (compressed).
Iron Mountain (LiveVault reseller)	• Electron Vaulting service: Pricing not provided.
LiveVault	• LiveVault Online Backup and Recovery Service: Monthly prices start at \$130 per server for continuous protection and 30 days of restorable history (unlimited restores).
ManagedStorage International	• RemoteStor: Flat rates (starts at \$100 for 5GB, \$15 for each add'l GB and volume rates (starts at \$250 for 25GB minimum); discounts available for multi-location and multi-year contracts.
NovaStor	• NovaNET-WEB: Pricing starts at \$695 MSRP for a five-user configuration, scalable to 500 users.
Storactive	• Storactive LiveServ for Microsoft Exchange: Pricing not provided.

Source: InfoStor

Gilmour believes that the steady adoption of online disk-based backup is due to three general trends: more-complex SMB environments, the declining cost of disk, and the prevalence of the Internet, which serves as the primary transport mechanism for online disk-based backup.

"We're seeing much fatter servers running large CRM applications, SQL databases, or even Exchange, which demands high availability," says Gilmore. "[But it is the ubiquity of the Internet] and the availability of cheap disk that open online disk-based backup as an option."

However, despite increasing interest in the online backup space, no analyst firm currently tracks the market from a market size/growth perspective. "All the players are pretty small, so when they report double-digit growth, it is still in single-digit millions," says Gartner's Couture. "Plus, the market is pretty fragmented, [which makes it difficult to track]. There are hundreds of resellers that private-label these services."

Couture's research, which was featured in the Gartner Report, "*Online backup services cost less and deliver more*," focused on online disk-based providers Arsenal Digital Solutions, BluePoint Data, EVault, LiveVault, and ManagedStorage International.

What users should know about online server backup offerings	
Backup/restore functionality	Questions to ask
Technology	Brand of backup software or proprietary or licensed proprietary
Connection speed required	Existing dial-up, DSL, cable, T1, etc.
Backup frequency	Standard frequency or continuous
Online availability/tape management	For example: Data online for 30 days then cut to tape. What data is browsable during a restore request?
Media used for delivered restores	Online, online to another server, tape, CD, appliance, etc.
Open file management	Which additional software, if any, is required to quiesce database or back up open files?
User experience	
Users interface	What is the interface for users' access to configure the service and request restores (e.g., browser, Windows app, etc.)?
User privileges	Does the service support multiple users with varying rights?
Backups and restore monitoring	Is there proactive service monitoring and notification, or does the customer receive logs to indicate status of job execution?
Security and infrastructure	
Encryption	AES, DES, Triple DES, and Blowfish-448, etc.
Data storage facilities	Where is your backup infrastructure located?
Backup infrastructure	Brand of backup hardware
Platform support	Flavors of Windows, Linux, NetWare, Flavors of Unix, etc.
Customer site infrastructure	What has to be installed at the customer site?
Firewall and Port NAT support	Auto-configured, configurable, fixed port
Other	
SLA	What are the basic service guarantees?
Customer support hours	When can customers call for assistance? Do additional charges apply to off-hours?
Pricing methodology	Basis of pricing—per gig on server, largest backup in month, gigs written, retention periods, etc.
Pricing	Price ranges plus restore fees.
Website	Your Website URL

Source: Gartner Research, 2004

In a survey of our readers last year, *InfoStor* found little interest in this type of outsourcing. Of the 783 respondents, only 3.5% said they planned to outsource backup operations to an online backup provider over the coming year.

Nonetheless, vendors across the board report solid growth over the last few quarters and expect that trend to continue over the coming months. ManagedStorage International (MSI), for example, says it is seeing consistent adoption of its services offering, signing approximately 20 to 30 new customers each month.

The company, which spun out of StorageTek in 2000, offers a remote backup service (to disk or tape) through a network of more than 70 technology partners and value-added resellers. The service is an offshoot of the company's Enterprise Managed Services offering, which is directed at Fortune 1000 companies.

Walt Hinton, chief technology officer at MSI, says the company's remote backup service is appropriate for customers with as little as 5GB to hundreds of gigabytes of data capacity. Network costs, he says, generally prohibit users with higher-capacity requirements from using this type of service.

Restore is definitely an issue, especially with big files or when it's bare metal, explains Gartner's Couture. "There's no way you can push [very large amounts of data] over the Internet in a fair amount of time. You have to put it on a CD and ship it out."

Overall, vendors agree that while restoring small files over the Internet is quick and easy, restoring large files or entire servers can be problematic. Should an entire server fail or a large file get lost, online backup providers generally offer two options: The file can be saved to CD and shipped to the customer overnight or, in the case of a server failure, the server contents (at the remote facility) can be backed up to a NAS device and then shipped to the customer site.

Media restores to CDs are generally an extra cost, while restores over the Internet are typically included in basic service costs.

As for backup performance, since data is backed up in smaller increments over an extended period, performance is usually not an issue. In the case of LiveVault, data is backed up continuously over a 24-hour window, similar to replication. This not only allows users to increase the amount of data they can back up using less bandwidth, but also helps them achieve continuous data protection in the event of a disaster, explains Scott Jarr, director of product management at LiveVault.

"High availability is an increasing concern among today's SMBs, much more so than even [perceived] security issues," says EVault's Gilmour. "Twenty-four- or 48-hour recovery times are no longer acceptable, particularly for transaction applications. Such high-availability applications need restore times of less than four hours," he says.

EVault and NovaStor are both reportedly working on software enhancements to improve the availability of user data, particularly from the restore side. According to Shaun Walsh, COO at NovaStor, the 6.0 release of the company's NovaNET-WEB software (which is due out next month) will feature a 50% increase in data rates.

Unlike online backup service providers such as EVault, LiveVault, and NovaStor, which offer their own backup-and-recovery software as part of their services, MSI's offering leverages CommVault Systems' Galaxy backup-and-recovery software. MSI's Hinton claims that by leaving the software development to CommVault, MSI is able to keep the prices of its services down.

"The main difference between us and EVault or LiveVault is that we don't develop software," explains Hinton. "This means we're not saddled with R&D costs to develop features like they are."

According to Gartner's Couture, pricing is a key problem with online backup service offerings today. "They're very difficult to figure out," he says. "Some vendors charge for what's on the server, some charge based on what's stored at the service-provider facility, etc." For examples of current pricing structures, see box.

Like MSI, AmeriVault and Iron Mountain are strictly service providers. AmeriVault's offering leverages EVault's backup-and-recovery software, while Iron Mountain leverages LiveVault's. AmeriVault claims to have more than 400 clients; its typical customers have 100 to 1,000 employees.

"SMBs are generally doing a lousy job with backup," says Budd Stoddard, president and chief executive officer of AmeriVault. "We've raised the bar by opening the door to this type of discussion with our customers."

AmeriVault also offers a number of other managed services, including a dedicated vault offering, which puts AmeriVault in full charge of a company's backup-and-recovery process; a mobile offering for faster restore in the event of a disaster; a pure software option (AmeriVault provides the online backup software but data is backed up to a customer's in-house data center); and a dedicated vault offering at AmeriVault's data center.

LiveVault, which dropped its software offering about three years ago, is now a pure services provider that sells exclusively through partners such as Hewlett-Packard and IBM. EVault, meanwhile, offers stand-alone software as well as three service offerings.

A variety of other more limited services offerings are also available from vendors such as Connected and Storactive.

Connected's DataProtector/PC (WS) service is an offshoot of the company's online PC backup subscription services. The service is currently designed for small (80GB to 100GB) Windows Server environments, although company officials say they are working on a separate product that will expand support to larger Windows environments and a variety of file types.

Storactive, meanwhile, began shipping LiveServ for Microsoft Exchange environments in May and recently inked a deal with a large VAR to distribute this service. Details of the deal were not available at press time.

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