

# Nine storage companies to watch

Flash memory, virtualization and cloud computing targeted by storage companies

BY JON BRODKIN

**B**uilding a data storage start-up in this economy is quite a challenge, but there is room for innovation in an industry suffering from inefficiency and massive growth in data volumes. These nine data storage start-ups are trying to address such problems with technologies including memory virtualization, flash-based solid-state disks and cloud storage.

## AutoVirt

**Founded:** June 2007

**Headquarters:** Nashua, N.H.

**What it offers:** AutoMove, an automated data migration software package for Windows shops; AutoClone, which speeds up the replication and movement of Windows data; and AutoMap, which maps a customer's distributed IT environment.

**How company got its start:** AutoVirt founders wanted to focus on midrange businesses that lack the sophisticated data movement and management tools available to larger enterprises.

**Why it's worth watching:** The inefficiency of network-attached storage (NAS), the rapid growth of data and even the economic downturn are all factors that could potentially help AutoVirt succeed, according to an IDC profile on the vendor. Storage inefficiency will not be tolerated in a recession, IDC notes. "Senior management will demand remediation that will include reorganization of network shares and resulting data migrations from one location to another, the sweet spot of the AutoVirt solution," IDC says.

**How company got its name:** AutoVirt is short for automated virtualization, in reference to its file virtualization technology.

**CEO:** Josh Klein, previously president and COO of IT consulting and services firm Glass-House Technologies, has also held executive positions at EMC and IBM.

**Funding:** \$8.5 million from Kepha Partners and Sigma Partners

**Who's using the product:** Five Point Capital, Children's Hospital Boston, Harvard University and others.

## Cachengo

**Founded:** April 2009

**Headquarters:** Berthoud, Colo.

**What it offers:** Cachengo offers cloud storage

that is similar to Amazon's Simple Storage Service, but focuses heavily on de-duplication and continuous data protection by combining off-site storage with a locally installed appliance. Cachengo's Director 100, the appliance, is a file server that supports the CIFS, NFS and iSCSI protocols.

**How company got its start:** Founder and CEO Mike Young said he was "irritated at the industry" for approaches that led to more product segmentation and higher prices.

**Why it's worth watching:** Cachengo is hopping aboard the fast growing cloud storage bandwagon, but pairing the service with an appliance that it says combines the features of primary storage, backup storage and disaster recovery into one system. "They're doing something pretty cool," says analyst Tom Trainer of Analytico. "They're essentially caching data and sending it off to the cloud."

As a small company, Cachengo might struggle at first with customers "who are fearful of investing in nascent technology," Trainer says. The vendor is pursuing a two-pronged business strategy by targeting both the small and midsize business market as well as fellow vendors who want to base their own cloud backup services on the Cachengo appliance and hosted service.

**How company got its name:** The name is cache-n-go without the hyphens.

**CEO:** Young was previously CTO of the storage appliance business unit at Xyratex.

**Funding:** Self-funded

**Who's using the product:** Cachengo has several customers in the financial, healthcare and semi-conductor industries.

## RNA Networks

**Founded:** September 2006

**Headquarters:** Portland, Ore.

**What it offers:** RNA Networks virtualizes memory and shares it across servers, with products including RNAmessenger, which is designed for trade executions that need low latency and high throughput; and RNACache, which creates a shared, network-attached cache of virtualized memory.

**How company got its start:** The founders were looking for a way to deliver data to applications faster without overhauling existing systems or sacrificing CPU cycles.

**Why it's worth watching:** Latency is the enemy of many applications, particularly those



used in the financial services, energy and high-performance computing industries targeted by RNA Networks. RNA's memory virtualization aims to eliminate this latency and provide new levels of flexibility by creating shared pools of memory, which let an application access its entire working data set in memory, instead of from a lower tier of storage.

**How company got its name:** RNA, or ribonucleic acid, acts as a messenger of genetic information, and RNA Networks considers itself a messenger of data in the data center.

**CEO:** Clive Cook, former CEO of VeriLAN, a wireless network services provider; and Elematics, a small software company that focused on data transmission in telecom networks.

**Funding:** \$7 million from Menlo Ventures, Oregon Angel Fund, Divergent Ventures and Reference Capital

**Who's using the product:** Several paying customers and others in the testing phase.

## SandForce

**Founded:** June 2006

**Headquarters:** Saratoga, Calif.

**What it offers:** SF-1500 SSD Processors, which use commodity NAND flash memory and enhance reliability and endurance to make them suitable for an enterprise data center.

**How company got its start:** Founders Alex Naqvi and Radoslav Danilak wanted to create a less expensive way to provide enterprise-class flash memory.

**Why it's worth watching:** Because of performance and reliability issues, most enterprise flash products use single-level cell flash chips instead of the multi-level cell chips used in consumer devices. But single-level cell chips are considerably more expensive. That's why several vendors, including SandForce, are developing management tools that improve the speed and reduce wear and tear on multi-level cell technology.

Gartner says it "remains to be seen" whether SandForce can fulfill the promises it is making, but that its products have "the potential to quickly and dramatically reduce the price of enterprise-grade SSD solutions and accelerate a more widespread adoption of solid-state storage

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technologies."

**How company got its name:** SandForce is a play on SSD (for solid-state disk) and NAND.

**CEO:** Naqvi, CEO and co-founder, previously founded Luminous Networks, which was acquired by telcom equipment provider Adtran; and held management positions at Intel and other IT companies.

**Funding:** More than \$20 million from DCM, Storm Ventures and several undisclosed storage companies

**Who's using the product:** SandForce's technology will ship later this year from OEM vendors, the names of which are undisclosed.

### Scale Computing

**Founded:** October 2007

**Headquarters:** Indianapolis, Ind.

**What it offers:** SN 1000 and SN 2000, storage nodes which use Scale's clustered file system to create storage-area network (SAN) or NAS systems with commodity hardware.

**How company got its start:** The founders were trying to build a supercomputer for less than \$60,000 using commodity hardware, and needed a clustered file system and storage, and discovered a problem: they couldn't find 5TB of appropriate storage for less than \$50,000.

**Why it's worth watching:** With clustered systems lacking a single point of failure, Scale can offer reliable Tier 2 and Tier 3 storage for prices starting at \$11,000. Forrester Research analyst Andrew Reichman notes that Scale will face stiff competition from Dell EqualLogic and HP LeftHand, but it offers the advantages of low cost and native NAS capabilities.

**How company got its name:** The name refers to scalability of computing resources.

**CEO:** Jeff Ready was previously CEO and co-founder of Corvigo, an antispyware appliance vendor acquired by Tumbleweed Communications.

**Funding:** \$5 million from BlueChip, Springmill, CID and State of Indiana 21st Century Fund

**Who's using the product:** Customers include a Fortune 500 telecom company, and others in the legal and health-care industries.

### Simply Continuous

**Founded:** October 2006

**Headquarters:** San Francisco

**What it offers:** Data Recovery Vault, a hosted service that integrates with a company's backup infrastructure and replicates data to a collocation facility. A second service known as AppAlive recovers entire applications, rather than just data.

**How company got its start:** Co-founders Tom Frangione and Chris Eidler launched the venture after seeing that many users struggle to find a cost-effective disaster-recovery service.

**Why it's worth watching:** Simply Continuous could appeal to midsize businesses with its service-level agreements, and functionality that exceeds what's offered by consumer-oriented Web backup products. It will be interesting

to watch how the company reacts to the EMC acquisition of Data Domain, because Simply Continuous designed its first products for customers using Data Domain's backup technology. But company officials say their partnership with Data Domain will continue within the EMC hierarchy.

**How company got its name:** Simply Continuous indicates simplicity in data recovery, and the need for business operations to be continuous.

**CEO:** Frangione was previously CEO and co-founder of Telephia, which was sold to Nielsen for \$400 million in 2007.

**Funding:** \$10 million from Greylock Partners

**Who's using the product:** Vocera, Scout Labs, Savvion and others.

### Tarmin

**Founded:** June 2006

**Headquarters:** Ongar, United Kingdom

**What it offers:** GridBank, software that automatically moves data from primary storage to less expensive secondary storage or third-party cloud platforms, assisting the process of long-term data preservation. The software also can quickly find and retrieve files in e-discovery or recovery situations, according to Tarmin. A new partnership allows Tarmin's software to integrate with the cloud storage platform offered by vendor Nirvanix.

**How company got its start:** Founder and CEO Shahbaz Ali, who was previously responsible for MasterCard's worldwide archiving and content retention strategies, wanted to build software that expanded the usefulness of archiving, secondary storage and data management products he had been using.

**Why it's worth watching:** Tarmin can help customers archive data that is unchanging and infrequently accessed, which accounts for the "overwhelming majority of corporate data," says Enterprise Strategy Group analyst Lauren Whitehouse. The start-up's software can also help companies comply with various document retention requirements, she says.

Tarmin's "grid-based architecture enables capacity and performance scalability, as well as cost-effectiveness, and its intelligent storage software allows organizations to manage the full life cycle of their information and automate all storage management processes," Whitehouse says.

**How company got its name:** Tarmin was a minor Star Trek character who was a historian trained in "telepathic memory retrieval."

**Funding:** \$4.6 million

**Who's using the product:** Tarmin's technology is aimed at small businesses and large enterprises, and users include the city of Saford, Ariz.

### WhipTail

**Founded:** December 2008

**Headquarters:** Summit, N.J.

**What it offers:** WhipTail's eponymous appliances provide solid-state disks in capacities of

1.5TB to 6TB, with speeds exceeding 100,000 IOPS.

**How company got its start:** WhipTail is a spinoff of TheAdmins, a reseller that partners with Cisco, Microsoft, VMware and other big IT vendors. The companies share a common management team.

**Why it's worth watching:** Similar to SandForce, WhipTail uses multi-level cell flash chips normally used in consumer devices, but employs special software to optimize the write cycle. WhipTail says this allows the company to keep prices down and ensure that disks last a minimum of seven years. "They're using multi-level cell and a very smart technique for managing it," says analyst Jim Bagley of Storage Strategies Now.

**How company got its name:** After whiptail lizards, which are sometimes called racerunners because of their ability to run about 17 mph.

**CEO:** Ed Rebholz, who is also president and CEO of reseller TheAdmins.

**Funding:** Privately funded

**Who's using the product:** Fareportal, Raritan Bay Medical Center and several other mid-to-large-size enterprises

### Zetta

**Founded:** January 2008

**Headquarters:** Sunnyvale, Calif.

**What it offers:** A cloud storage service backed by a file system with snapshots, replication and other enterprise-class features.

**How company got its start:** Zetta's top executives had long been consumers of enterprise storage products and generally found themselves unsatisfied, but decided a new cloud storage platform could solve many of the data storage challenges faced by IT shops.

**Why it's worth watching:** Zetta is trying to compete against Amazon's Simple Storage Service by promising robust enterprise capabilities, such as rapid provisioning and massively scalable capacity; a highly redundant architecture ensuring continuous availability; and easy integration with existing file-based applications. Zetta's co-founders include some of the Web's early innovators: CEO Jeff Treuhaft was one of Netscape's first employees; and vice president of engineering Lou Montulli invented Web cookies and was also an early Netscape employee.

**How company got its name:** "Zetta" refers to a numerical prefix denoting a "1" followed by 21 zeroes. Industry experts believe the annual amount of digital information created could exceed 1 zettabyte in the next year or two, putting greater strain on storage systems.

**CEO:** Treuhaft, in addition to his Netscape experience, led the global digital content and messaging business at VeriSign.

**Funding:** \$10.7 million from Sigma Partners and Foundation Capital

**Who's using the product:** A private beta program included more than 90 customers from industries including financial services, education, entertainment, manufacturing and technology. ■