While backup is among the oldest, most performed tasks in the data center, the industry is undergoing significant change as organizations accelerate new technology adoption and show a propensity to implement new solutions, in some cases from vendors that are emerging or new to the backup market.

What You Need to Know

This research is the inaugural version of a new Magic Quadrant that looks beyond enterprise software-only backup vendors and their solutions, and places a new emphasis on evaluating a broader set of vendors that offers disk-based data capture and data recovery capabilities.

Backup and recovery is one of the oldest and most frequently performed operations in the data center. Despite the long timeline associated with backup, the practice has seen a number of changes (such as new recovery techniques and a new, expanded set of vendors to consider) and challenges (such as how to protect server virtualized environments, very large databases, remote offices, and desktops and laptops) in recent years. Gartner end-user inquiry call volume regarding backup continues to be high every year, and has been rising at about 20% each year for the past three years. Organizations worldwide are seeking ways to easily, quickly and cost-effectively ensure that their data is appropriately protected. Organizations are also voicing the opinion that backup needs to improve a lot, not just a little. For more research on current backup/recovery challenges, and practical advice on how to address them, see "Best Practices for Addressing the Broken State of Backup" and "Backup and Recovery Optimization and Cost Avoidance."

The rising frustration with backup implies that the data protection approaches of the past may no longer suffice in meeting current, much less future, recovery requirements. As such, companies are willing to adopt new technologies and products from new vendors, and have shown an increased willingness to switch backup/recovery providers in order to better meet their increasing service levels.

The 2009 trends of incorporating more disk in the recovery process, deploying data deduplication and "treating disk as disk," versus seeking appliances with a virtual tape library (VTL) interface, not only continued but...
accelerated in 2010. For a deeper treatment on each of these topics, see:

- "Poll Shows Disk-Based Backup on the Rise, With a Few Surprises"
- "Data Deduplication Will Be Even Bigger in 2010"
- "Interest Declines for Use of the Distributed Virtual Tape Library Interface"
- "Predicts 2011: Improved Recoverability May Be on the Horizon, but Significant Challenges Remain"

In 2010, we saw a trend toward increasing consideration of a cloud-based recovery implementation. In selected cases, large-enterprise server data is being moved to a cloud-based backup/recovery solution, but the predominant amount of interest has been for midsize enterprise servers and branch-office and desktop/laptop data; in the large enterprise, the most common implementations have been for remote-office and desktop/laptop data. Gartner worldwide survey data suggests that, in future years, cloud-based recovery solutions will increasingly be evaluated by organizations of all sizes.

Gartner's view regarding vendor placement is heavily influenced by more than 2,000 conversations over the past two years with Gartner clients on the topic of backup and recovery. In addition, the Magic Quadrant methodology includes a comprehensive vendor survey (typically resulting in a five- to eight-page response), in-depth vendor briefings regarding natively or through OEM agreements/partnerships as defined in the market definition and detailed in the subcriteria.

**Overall Viability (Business Unit, Financial, Strategy, Organization):** Viability includes an assessment of the overall organization's financial health, the financial and practical success of the business unit, and the likelihood that the individual business unit will continue investing in the product, will continue offering the product and will advance the state of the art within the organization's portfolio of products.

**Sales Execution/Pricing:** The vendor's capabilities in all presales activities and the structure that supports them. This includes deal management, pricing and negotiation, presales support and the overall effectiveness of the sales channel.

**Market Responsiveness and Track Record:** Ability to respond, change direction, be flexible and achieve competitive success as opportunities develop, competitors act, customer needs evolve and market dynamics change. This criterion also considers the vendor's history of responsiveness.

**Marketing Execution:** The clarity, quality, creativity and efficacy of programs designed to deliver the organization's message to influence the market, promote the brand and business, increase awareness of the products, and establish a positive identification with the product/brand and organization in the minds of buyers. This "mind share" can be driven by a combination of publicity, promotional initiatives, thought leadership, word-of-mouth and sales activities.

**Customer Experience:** Relationships, products and services/programs that enable clients to be successful with the products evaluated. Specifically, this includes the ways customers receive technical support or account support. This can also include ancillary tools, customer support programs (and the quality thereof), availability of user groups, service-level agreements and so on.

**Operations:** The ability of the organization to meet its goals and commitments. Factors include the quality of the organizational structure, including skills, experiences, programs, systems and other vehicles that enable the organization to operate effectively and efficiently on an ongoing basis.

**Completeness of Vision**

**Market Understanding:** Ability of the vendor to understand buyers' wants and needs and to translate those into products and services. Vendors that show the highest degree of vision listen to and understand buyers' wants and needs, and can shape or enhance those with their added vision.

**Marketing Strategy:** A clear, differentiated set of messages consistently communicated throughout the organization and externalized through the website, advertising, customer programs and positioning statements.
product, portfolio, strategy and messaging, and the solicitation of three or more references from each vendor. From these many data sources, we learn how customers are using and how prospects could potentially use the product, and the strengths and cautions of the solution and vendor. We also learn about experiences with sales and support, acquisition and maintenance pricing, and their opinions on vendor responsiveness to aspects like requests for enhancements. Prior to publication, each vendor has the opportunity to review its placement on the Magic Quadrant and the strengths and challenges listed, and to respond to any factual discrepancies.

It is important to remember that the Magic Quadrant does not only rate product quality or capabilities and features. A Magic Quadrant is not about a vendor's product; it is about a vendor's position in a market. A Magic Quadrant is a scenario chart that maps a vendor's overall position in a given market. While the product portfolio is an important part of the rating, the vendor's ability to acquire customers and expand its presence in the market is equally as important, as is its ability to grow product and service revenue. A vendor that offers a strong, technically elegant product, but is unable or unwilling to invest in marketing and sales to increase revenue and improve profitability, will find itself unable to invest in future development.

### Market Overview

Many organizations continue rearchitecting their backup infrastructures and support procedures in an effort to modernize their approach to handle new data types and large workload volumes, and to improve backup and restore times. Disk-based solutions, including backup directly to disk, server virtualization backup features and deduplication technology, are among the key items being sought. Mission-critical workloads are increasingly being deployed in server-virtualized environments, making VMware, Citrix Systems XenServer and Microsoft Hyper-V backup more of a mainstream requirement. The cloud delivery model for backup/recovery is increasingly being considered for enterprise recovery requirements — especially for desktop/laptops and remote offices. The scope of enterprise backup has expanded to sometimes include remote-office and branch-office locations, as well as desktop and laptop protection, particularly for key company executives.

In 2009 and 2010, there have been expanded choices for data protection that include replication and snapshots from hardware and software solutions, as well as new disk-based backup, deduplication appliances and disk imaging software. Some customers have chosen to invest modestly in their backup software in favor of augmenting (or even selectively replacing) backup applications with one or more of these technologies:

**Notable backup and recovery acquisitions in 2009 and 2010 were:**

- In May 2009, BakBone acquired the continuous data protection (CDP) assets from its previous partner, Asempra Technologies.
- In 2009, the big noise in the backup market was EMC's acquisition of Data Domain for data deduplication for over $2 billion.
- In November 2010, Quest Software announced its intention to acquire BakBone to add CDP, deduplication and broader heterogeneous recovery capabilities.

The enterprise distributed system backup/recovery software market was $3.1 billion in 2009, and is projected to grow to nearly $3.9 billion by 2014, for a five-year compound annual growth rate (CAGR) of 4.6%. Symantec currently owns 38% of the market, but this market dominance...
has slowly eroded over the past three to four years. IBM and EMC make up the next tier of vendors on a revenue basis, with 17% and 12% market share, respectively. No other vendor has more than a 6% market share. IBM has increased its market share by 3% in the last two years, while CommVault, EMC and BakBone have also had strong growth since 2007. Along with Symantec, HP and CA Technologies slid slightly in market share in 2009.

Refer to the following for additional market and vendor research in the backup and recovery segment:

- "Forecast: Enterprise Software Markets, Worldwide, 2009-2014, 4Q10 Update"
- "Vendor Focus for Symantec: Storage and Server Management Offerings"
- "Quest Software Buys Into Recovery and Deduplication"

**Market Definition/Description**

This new Magic Quadrant for Enterprise Disk-Based Backup/Recovery replaces the previous MarketScope for Enterprise Backup/Recovery Software, with the latter document officially being retired in July 2010.

The Magic Quadrant for Enterprise Disk-Based Backup/Recovery is the next step in the evolution of backup that incorporates new products, solutions and techniques for protecting, backing up and recovering laptop, desktop, physical server and virtual server files, applications and system images. These products provide features like data reduction, snapshots, heterogeneous replication, CDP and VTL support.

Organizations are increasingly making their backup product selections from vendors that also offer expanded protection capabilities and techniques in addition to traditional tape-based backup software, as they have come to understand the value of backing up critical data via multiple methods that many would have been considered nontraditional only a few years ago.

Gartner is responding to the changing enterprise recovery landscape with a more comprehensive evaluation tool that better reflects the current and evolving state of the market.

**Inclusion and Exclusion Criteria**

While the "MarketScope for Enterprise Backup/Recovery Software" was retired and this is a new Magic Quadrant with an emphasis on disk-based capabilities and a different set of inclusion criteria, some readers may compare the two documents. As such, we wish to emphasize two important differences in criteria:

- Per the inclusion criterion below, to be eligible for this Magic Quadrant, a vendor must be able to capture data itself, and not deliver a disk target alone. This was done to exclude vendors that only deliver a VTL and other disk-based backup appliances, but do not possess a backup application. If a vendor meets all criteria and delivers a hardware-based solution, such as a VTL and/or a disk-based backup appliance, this is factored into the evaluation of its overall recovery portfolio.

- In the retired MarketScope, there were requirements to support physical tape and possess a catalog. While supporting physical tape is a valuable capability, tape and catalog support are not requirements
The following 10 criteria need to be met at the time initial research and survey work commences in order for a vendor to be included in this Magic Quadrant:

- The vendor's portfolio must possess the capability to capture data directly and not solely rely on other third-party and/or partner means of data capture/ingestion.
- The vendor must achieve more than $30 million in annual new license and maintenance revenue.
- The company should have a growing base of customers and be actively expanding.
- The solution must support files and multiple applications on Windows and Linux or one or more Unix OSs (AIX, HP-UX and Solaris) in a physical and a virtual deployment.
- The vendor must have a disk-based backup/recovery solution commercially available, and least 10 active references using the solution in a production scenario to protect heterogeneous (Windows and Linux or one or more Unix OSs) systems in a physical and server virtualized environment.
- The solution must natively support writing data to heterogeneous disk targets, and optionally support writing to a physical tape destination.
- The solution must be available for purchase as an on-premises owned/licensed program product and not only available as a service.
- The provider must be the originator of the required capabilities and must meet all the above requirements via intellectual property it owns, and must not rely on third-party solutions to meet these criteria.
- The vendor must actively market its branded backup/recovery products in at least two major regions (for example, North America and Europe, EMEA or Japan and Asia/Pacific).
- In the last 12 months, the vendor and/or solution product(s) should have generated interest (more than 10 inquiries) from Gartner's more than 1,000 end-user inquiries per year in the enterprise disk-based backup/recovery market.

Vendors will have briefed Gartner on their products, and will have provided the required references to be qualified for inclusion in this Magic Quadrant.

Gartner will continue to cover emerging vendors and vendors that do not yet meet the above inclusion criteria.

**Added**

No new vendors were added, as this is the initial release of this Magic Quadrant. Six vendors in this research were not in the "MarketScope for Enterprise Backup/Recovery Software:" Acronis, Asigra, FalconStor Software, i365, Iron Mountain and NetApp.

**Dropped**

No vendors were dropped, as this is the initial release of this Magic Quadrant. No vendors have been dropped from the now retired
Evaluation Criteria

Ability to Execute

Gartner analysts evaluate technology providers on the quality and efficacy of the processes, systems, methods or procedures that enable IT provider performance to be competitive, efficient and effective, and to positively impact revenue, retention and reputation. Ultimately, technology providers are judged on their ability and success in capitalizing on their vision. As such, the Ability to Execute axis highlights the vendor positioning directly attributable to that vendor’s actions. While highly important, the Product or Service attribute is just one of the seven attributes evaluated by Gartner to determine a vendor's placement with respect to execution on the y-axis of the Magic Quadrant. The complete listing of criteria for this axis follows.

Product or Service: Core goods and services offered by the technology provider that compete in/serve the defined market. This includes the current product/service capabilities, quality, feature sets, skills etc., primarily offered natively as defined in the market definition. In short, this is the evaluation of how well a vendor does in building the solution that the market wants.

Overall Viability (Business Unit, Financial, Strategy and Organization): Viability includes an assessment of the overall organization's financial health, the financial and practical success of the business unit and the likelihood of the individual business unit to continue to invest in the product, continue offering the product, and advance the state of the art within the organization's portfolio of products.

Sales Execution/Pricing: The technology providers' capabilities in all presales activities and the structure that supports them. This includes deal management, pricing (acquisition and especially maintenance) and negotiation, presales support and the overall effectiveness and timeliness of the sales channel.

Market Responsiveness and Track Record: Ability to respond, change direction, be flexible and achieve competitive success as opportunities develop, competitors act, customer needs evolve and market dynamics change. This criterion also heavily considers the provider's history of responsiveness.

Marketing Execution: The clarity, quality, creativity and efficacy of programs designed to deliver the organization's clear and differentiated message in order to resonate with and influence the market, promote the brand and business, increase awareness of the products and establish a positive identification with the product/brand and organization in the minds of buyers. This mind share and amount of buzz can be driven by a combination of publicity, promotional, thought leadership, word-of-mouth and sales activities. This leads directly to unaided awareness (Gartner end users mentioned the vendor without being prompting), and a vendor's ability to gain consideration in the marketplace.

Customer Experience: Relationships, products and services/programs that enable clients to be successful with the products evaluated. Specifically, this includes the ways customers receive technical or account support, as well as how accurate, effective and timely this support is perceived as being. This can include ancillary tools, customer support programs (and the quality thereof), the availability of user groups, SLAs, etc.

Operations: The ability of the organization to meet its goals and commitments. This includes the quality of the organizational structure, including skills, experiences, programs, systems and other vehicles that
enable the organization to operate effectively and efficiently on an ongoing basis (see Table 1).

### Table 1. Ability to Execute Evaluation Criteria

<table>
<thead>
<tr>
<th>Evaluation Criteria</th>
<th>Weighting</th>
</tr>
</thead>
<tbody>
<tr>
<td>Product or Service</td>
<td>high</td>
</tr>
<tr>
<td>Overall Viability (Business Unit, Financial, Strategy, Organization)</td>
<td>standard</td>
</tr>
<tr>
<td>Sales Execution/Pricing</td>
<td>high</td>
</tr>
<tr>
<td>Market Responsiveness and Track Record</td>
<td>high</td>
</tr>
<tr>
<td>Marketing Execution</td>
<td>high</td>
</tr>
<tr>
<td>Customer Experience</td>
<td>high</td>
</tr>
<tr>
<td>Operations</td>
<td>low</td>
</tr>
</tbody>
</table>

*Source: Gartner (January 2011)*

### Completeness of Vision

This is evaluated based on the vendor's ability to convincingly articulate its future product direction and demonstrate innovation in meeting customer needs, enabling the vendor to more-effectively compete in the market. The credibility of a vendor's vision is weighed against its past ability to execute against previously stated plans. Market understanding should be the guiding factor in new product development to ensure that the engineered product meets customer needs. Managing the complexity of storage environments requires innovative approaches that will distinguish leaders and delight customers. Ultimately, technology providers are rated on their understanding of how market forces can be exploited to create opportunities for the provider. As such, the Completeness of Vision axis focuses on potential, and measures the vendor's historical ability to deliver solutions in advance of widespread market demand.

A vendor with average vision will anticipate and respond to change by accurately perceiving market trends and exploiting technologies. However, a vendor with superior vision can anticipate, direct and initiate market trends. While highly important, the product attribute is just one of the eight attributes evaluated by Gartner to determine a vendor's placement with respect to vision on the x-axis of the Magic Quadrant.

**Market Understanding:** The ability of the technology provider to understand buyers' needs and translate these needs into products and services. Vendors that show the highest degree of vision listen to and understand buyers' wants and needs. The more visionary vendor not only observes, but also enhances these wants with its added vision, and potentially even shapes or moves the market in a new direction or accelerates market activity and trends.

**Marketing Strategy:** A clear, highly differentiated set of messages consistently communicated throughout the organization and externalized through the website, advertising, customer programs and positioning statements. In a world where many vendors and products sound similar, the message, its framing and the vehicles used to effectively communicate it are now vital.

**Sales Strategy:** The strategy for selling a product that uses the appropriate network of direct and indirect sales, marketing, service and communications affiliates that extends the scope and depth of market reach, skills, expertise, technologies, services and the customer base. This includes the ability of the sales team to effectively and clearly communicate current capabilities, along with the future vision and road map.
Offering (Product) Strategy: A technology provider's approach to product development and delivery that emphasizes differentiation, functionality, ease of deployment and ongoing administration, methodology and feature set as they map to current and future requirements. In short, the offering needs to be capable not only of meeting current and future tasks, but it must also be easily configured and managed so that its function is easily exploited.

Business Model: The soundness and logic of a technology provider's underlying business proposition.

Vertical/Industry Strategy: The technology provider's strategy to direct resources, skills and offerings to meet the specific needs of individual market segments, including verticals.

Innovation: Direct, related, complementary and synergistic layouts of resources, expertise or capital for investment, consolidation, defensive or pre-emptive purposes. This includes the past track record for innovation, the current production exploitation of new capabilities and the upcoming feature set.

Geographic Strategy: The technology provider's strategy to direct resources, skills and offerings to meet the specific needs of geographies outside the "home" or native geography, either directly or through partners, channels and subsidiaries, as appropriate for that geography and market (see Table 2).

Table 2. Completeness of Vision Evaluation Criteria

<table>
<thead>
<tr>
<th>Evaluation Criteria</th>
<th>Weighting</th>
</tr>
</thead>
<tbody>
<tr>
<td>Market Understanding</td>
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</tr>
<tr>
<td>Marketing Strategy</td>
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</tr>
<tr>
<td>Sales Strategy</td>
<td>high</td>
</tr>
<tr>
<td>Offering (Product) Strategy</td>
<td>high</td>
</tr>
<tr>
<td>Business Model</td>
<td>low</td>
</tr>
<tr>
<td>Vertical/Industry Strategy</td>
<td>low</td>
</tr>
<tr>
<td>Innovation</td>
<td>high</td>
</tr>
<tr>
<td>Geographic Strategy</td>
<td>standard</td>
</tr>
</tbody>
</table>

Source: Gartner (January 2011)

Leaders

Leaders have the highest combined measures of Ability to Execute and Completeness of Vision. They have the most comprehensive and scalable product portfolios. They have a proven track record of financial performance and established market presence. For vision, they are perceived as thought leaders, have well-articulated plans for enhancing recovery capabilities, improving ease of use and increasing their scalability and product breadth. Additionally, a fundamental sea change is occurring in the recovery market. For vendors to have long-term success, they must plan to address the legacy requirements of traditional backup and recovery, while looking to expand their integration with and exploitation of snapshot and replication technologies. A cornerstone for leaders is the ability to articulate how new requirements will be addressed as part of their vision for recovery management. As a group, leaders can be expected to be considered as part of most new purchase proposals, and have high success rates in winning...
new business. They are strategic vendors, well-positioned for the continued industry consolidation. The leaders in this Magic Quadrant include CommVault, EMC, IBM and Symantec.

**Challengers**

Challengers can execute today, but have a more limited vision than leaders. They have capable products and can perform well for many enterprises. These vendors have the financial and market resources and capabilities to potentially become leaders, but the important question is whether they have an understanding of the market trends and market requirements needed to succeed tomorrow. A Challenger may have a good backup product, but has not yet been able to expand its market share, or has been slower to articulate how it will address future requirements in a server virtualized data center, the remote office and deduplication, or to exploit snapshot and replication. These vendors may not devote sufficient development resources to deliver products with broad market appeal and leadership features. The Challengers in this Magic Quadrant include CA Technologies and HP.

**Visionaries**

Visionaries are forward-thinking, advancing their portfolio capabilities ahead of the market, but their execution has not propelled them into a Challengers or possibly Leaders position. These vendors are differentiated by product innovation and perceived customer benefits, but they have not achieved solution completeness or the broad sales, marketing and mind share success required to give them the high visibility of Leaders. Some vendors move out of the visionary quadrant and into the Niche Players quadrant because their technology is no longer visionary, and/or they have not been able to establish a market presence that justifies moving up to the Challengers or even remaining in the Visionaries quadrant. The Visionaries in this Magic Quadrant include FalconStor and NetApp.

**Niche Players**

Niche Players are narrowly focused on a subsegment of the market or product mix, or they offer broad capabilities without the relative success of competitors in other quadrants. Niche vendors may focus on a specific vertical market or a recovery use case of the market and service it well; or, they may simply have modest horizons and/or lower overall capabilities, as compared with competitors. Other vendors are simply too new to the market or have fallen behind and, although worth watching, they have not yet developed complete functionality or the ability to execute. The Niche Players in this Magic Quadrant include Acronis, Asigra, Atempo, BakBone, i365, Iron Mountain and Syncsort.

**Vendor Strengths and Cautions**

**Acronis**

Acronis was founded in 2002 and is a private, venture-capital-backed company. It is the fastest-growing backup/recovery software vendor, growing over 140% in the past four years, albeit from a small base. Acronis has historically been strong in small or midsize businesses (SMBs) and with
home users, though approximately 20% of sales have come through enterprise deals. Acronis does claim over 150,000 business customers. Today, Acronis' recovery revenue is larger than many other SMB and enterprise backup vendors. While the company has largely focused on Internet sales, resellers, OEM deals and storage, administrator downloads that have resulted in larger enterprise deals have helped fuel the company's fast growth over the last year. Acronis also has some offerings for disk monitoring and security.

Historically, Acronis has most often competed with Symantec's Ghost imaging and Backup Exec System Recovery solutions. In mid-2009, Acronis launched Acronis Backup & Recovery 10, superseding Acronis True Image Echo and, at the same time, made many enhancements to make it more of an enterprise-grade application. New capabilities included increasing support from 300 to 3,000 servers off a single Acronis instance, data deduplication and improved virtual machine (VM) support. With these updates in 2009, Acronis started to compete more with CA Technologies' ARCserve and Symantec's Backup Exec products.

Acronis introduced a hosted cloud backup offering earlier in 2010, with plans to expand the application support capabilities of the initial offering in 2011. Today, the company offers on-premises, appliance and/or cloud backup capabilities — all from a single interface. Going forward, Acronis' vision is to continue rounding out its combined disaster recovery and backup/recovery solutions, while potentially expanding into adjacent areas, such as replication and archiving.

**Strengths**

- Robust bare-metal recovery solution that allows dissimilar hardware support, as well as a strong physical-to-virtual migration tool.
- Ease of use is considered very strong, and is often cited as a top reason for purchasing.
- Strong VMware support, including joint initiative with VMware focused at SMB market.

**Cautions**

- Only 20% of sales are to large enterprises.
- Typical enterprise use cases are for imaging and departmental or branch-office protection.
- Acronis is newly transitioning into enterprise-class capabilities, and is continuing to develop the corresponding features and road map.

**Asigra**

Asigra is a 25-year-old, privately held company focused exclusively on backup, recovery and archiving. The company has been providing multitenant backup and recovery solutions designed for managed service providers (MSPs) since its inception, and has amassed a very large number of partners that offer it as their own, relabeled software-as-a-service (SaaS) solution. Asigra claims that over 250,000 sites are protected. Initially designed for backup over a standard telephone line, the product has a long history of incorporating data reduction technology. As such, Asigra was one of the first backup solutions to deliver block-level incremental processing whereby only new and changed blocks of data need
be transmitted.

The Asigra Cloud Backup software is based on an agentless architecture, which Asigra touts as a differentiator. DS-Clients support remote and branch offices, desktops, virtual environments and now laptops by aggregating data to DS-System servers. Although Asigra's product can be deployed on-premises, the vast majority of its customers back up to a backup service provider. The product is mature, with broad functionality and robust customizable reporting that is the result of many years of customer feedback. Asigra is quick to respond to market trends — notable is its support for CDP, virtual environments and Federal Information Processing Standard (FIPS) 140-2 certification. Asigra started supporting virtual environments almost six years ago. At that time, there were no backup APIs available from server virtualization vendors, so Asigra used the native APIs from VMware and Xen to provide support for VMs. Today, Asigra supports VMware through the vStorage APIs (VADP), as well as through native APIs. Asigra states that the native API method allows for greater granularity, to the file/message level.

Asigra is not a household name in the backup and recovery market; however, the company is taking steps to change this. It invested significant resources in 2009 and 2010 in promoting awareness of the cloud backup market and Asigra's place in it. Asigra is the founder and holds the position of chair of the SNIA Special Interest Group on Cloud Backup and Recovery.

**Strengths**

- Low-touch, agentless architecture.
- The Backup Lifecycle Management (BLM) concept provides four tiers of backup as data ages over time, with optional deletion and certificate of data destruction.
- The first major backup vendor to achieve FIPS 140-2 security certification.

**Cautions**

- Outdated administrative interface can be complex to manage.
- Weak support for network-attached storage (NAS), and no direct support for EMC Celerra or NetApp APIs.
- Pricing tends to be higher than competitive solutions.

**Atempo**

Atempo was founded in 1992 under the name Quadrace Software and in late 2001 changed its name to Atempo. The company was headquartered in Paris, France, until 2002, when headquarters moved to the U.S. Further penetration into the U.S. occurred with the 2006 acquisition of Storactive for CDP. The Storactive deal also saw many of the management team from Storactive assume top positions (CEO and CTO) within Atempo. Historically, over 75% of sales have come outside of the U.S., with the company's strongest installed base being in France and Germany.

Time Navigator has a solid user interface, and was early to market with a synthetic full backup capability. Atempo attempted to expand into laptop backup with the 2006 Storactive acquisition, and is integrating the two technologies and products. The company added its HyperStream
deduplication in 2009. Atempo predominately targets the midmarket, with a strong focus on niche backup markets like Apple Mac OS X, the media/entertainment industry and a new 2010 thrust into the high-performance-computing (HPC) space. Time Navigator provides broad, heterogeneous OS support.

Product expansion and engaging service providers and resellers in the midmarket will be important for expanding Atempo's backup business. However, Atempo's energy and focus looks to be moving toward the archiving portion of its portfolio (Atempo Digital Archive and Atempo Digital Archive for Messaging), having seen larger deal sizes and more uptake from that side of the business. The products are currently integrated at the storage layer, and Atempo plans to further integrate them, going forward.

**Strengths**

- Robust Apple Mac and server virtualization support.
- Increasing sales into the media and entertainment industries.
- Large presence in France, Germany, India and Korea.

**Cautions**

- Corporate focus on the archiving portfolio business could shift attention from backup.
- Users report concerns over desktop/laptop support.
- General awareness of Atempo in the marketplace is lacking.

**BakBone Software**

On 9 November, Quest Software announced its intention to acquire BakBone. However, as the deal has to officially close, and since BakBone is an independent company during the evaluation period covered by this Magic Quadrant, Gartner is evaluating BakBone as an independent company. For additional Gartner analysis of the deal, see "Quest Software Buys Into Recovery and Deduplication."

BakBone was founded in 2000 and has its early origins in the same 1998 AT&T Bell Labs product code as CommVault. BakBone has historically targeted the upper midmarket, looking to capture customers that needed more scale than Symantec's Backup Exec or CA's Arcserve can provide, as well as opportunistically selling into large enterprises, often with disruptively low pricing. An early relationship with NetApp resulted in the code that became NetApp's Open Systems SnapVault (OSSV) product. More recently, there has been an emphasis on Teradata, the company's largest OEM, as well as OEM deals with NEC and Overland (for bundling with its Snap appliances). BakBone is heavily focusing on broad server platform and application support, with a wide range of data protection solutions that currently command a strong portion of the Japanese Linux recovery market.

While the company acquired or acted as an OEM for interesting technology in the last five years (archive management, deduplication CDP, replication, reporting and message management), BakBone's financial performance did not fare well. It had to file or restate its financial results for a five-year period, and the activity took many years to complete. However, in early 2009, this issue was closed, and BakBone became more vocal in the marketplace via advertising. In 2010, the company terminated its recently
acquired message management product, and removed much of its senior staff as revenue fell.

NetVault has been highlighted by users as being easy to use, and its CDP and deduplication technology has garnered very positive feedback from a sampling of its 17,000 customers. The recent acquisition by Quest should allow NetVault to better penetrate the midmarket, due to increased sales support, expanded business partner channels and, potentially, additional development resources.

Strengths

- Compelling CDP, deduplication and replication technologies for the midmarket and portions of the large-enterprise market.
- The NetVault FASTRecover Virtual On-Demand Recovery (VODR) feature provides 30-second recovery for support applications.
- Robust Linux, Apple Mac and Teradata support.

Cautions

- Aging user interface may put off some administrators.
- The integration of several acquisitions, and componentization and rearchitecture activity, need to be completed.
- Financial performance/viability concerns (should be addressed if the Quest acquisition closes).

CA Technologies

CA entered the distributed system backup/recovery market in late 1996 through the acquisition of Cheyenne Software. The ARCserve Backup product has always fit into a channel model, instead of the typical high-touch CA sales model, and thus has been somewhat lost at various times within the company. However, in the last two years, this has improved, with a revamped business partner emphasis and a new channel-oriented business unit. Some 70% of ARCserve Backup sales are targeted at the midsize enterprise, fewer than 1,000 employees, and Europe has been the strongest region of traction for the product's 360,000-plus licenses. In mid-2006, CA acquired XOsoft for CDP, replication and high availability. CA lowered the price of the XOsoft line and saw initial good traction, before going a bit quiet in the marketplace with the technology until the renewed channel emphasis occurred.

In 2008, CA delivered a new pricing scheme that included reduced priced bundles and capacity-based options, a no-charge deduplication feature and expanded VM backup support. Earlier in 2010, the ARCserve Backup software and XOsoft replication/high-availability software was rolled together under the ARCserve brand, and a new disk-to-disk (D2D) backup solution was added to create a more holistic suite of products. The new CA ARCserve D2D product is a block-level infinite incremental (“i2”) snapshot backup offering full-system, bare-metal restore, as well as file/folder and database recovery. CA is solid in the VMware environment, as attested by a joint initiative with VMware focused at the small-enterprise market.

Previous concerns over product support and product quality appear to be in the past. CA, rumored in 2009 to be considering selling off the recovery portfolio, appears to have put more marketing and development emphasis
in the portfolio in 2010, resulting in some resurgence of the installed base and positive user feedback from those evaluating the solution set.

Strengths

- Administrators report ease of setup and ongoing management as positive product differentiators, partly due to a storage dashboard for high-level monitoring and reporting.
- CA ARCserve offers a full range of products, from bare-metal restore to fully automated failover for high availability.
- Improvement of support and marketing, and overall quality of the product portfolio.

Cautions

- The portfolio currently lacks a specific desktop/laptop protection module, but CA has published plans to update its D2D product with this capability in 2011.
- Until late 2009, marketing and portfolio visibility was seen as an issue by references.
- Though internal visibility has improved, ARCserve fits much better as a product into high-quantity, low-touch distribution models, which is contrary to how CA has traditionally delivered product offerings.

CommVault

CommVault's origins trace back to a group in AT&T's Bell Labs that created a backup software solution that was spun out in 1996, along with Lucent. In early 2000, CommVault, by then an independent company, launched with two backup products — one for Windows and another for Unix. In 2002, the two products were merged, and in 3Q06 the company went public. In the last five years, CommVault has been on a media blitz, and has become a mind share leader in the industry, marketing very effectively and creating a perception of being a much larger vendor. During this time, the company has shifted focus from an emphasis on the midmarket to the enterprise, although it continues to sell into all markets, including the SMB segment via partners.

In the recently released version 9 of its Simpana software, CommVault has sustained its growth by adding many new functions and capabilities, along with a perceived edge in ease of use and fewer scripting requirements, as compared with other enterprise backup solutions. The company has maintained a continued strong public presence in print and electronic advertising, and now in social media. Of all the backup vendors, CommVault has been the most vocal and articulate about the future of backup shifting toward the exploitation and management of storage array and NAS replication and snapshots. In support of this vision, CommVault offers its snapshot protection capability, which integrates with a broad number of storage platform solutions to schedule and manage snapshots. The company delivered its third version of data reduction in its software, adding more-robust, client-side deduplication. In addition to a well-defined cloud backup strategy, Simpana 9 introduced a Fast Pass feature for aiding migration from IBM Tivoli Storage Manager (TSM) and Symantec NetBackup backup software to Simpana.

While CommVault derives approximately 25% of its backup revenue from
the Dell channel, and OEMs its software to other companies, most notably Hitachi Data Systems, continued growth is likely to depend on the expansion and maturation of its large-enterprise sales force, and on continuing to expand resellers and partners in non-U.S. geographies. End-user feedback has been largely positive, as CommVault expands into increasingly larger opportunities, including broad Fortune 100 companies, international service providers and new OEM engagements.

**Strengths**

- Strong vision for integrating with and exploiting hardware platform replication and snapshots.
- Mature deduplication, with the industry's only deduplication-to-tape support.
- Broad support for server virtual environments.

**Cautions**

- Clients report deduplication performance depends on proper sizing and quantity of disk and server resources.
- Simpana 9 has new license automation and reporting, but the new hard-compliant licensing (strictly enforced via hardwired program code) and quarterly true-ups (customers pay any new fee differences based on additional deployments) may be perceived as onerous for large customers.
- Quality of field support has received mixed reports, as the sales force in North America retools to go after larger enterprises.

**EMC**

EMC has become a powerhouse in the data protection market through its recent acquisition strategy and its corporate focus on this market as a growth opportunity. It offers numerous products for backup and recovery, replication, deduplication and management of data protection processes. In 2009, it formed an internal division specifically to focus on backup and recovery, and has been championing thought-leading efforts focused on backup modernization and redesign. EMC has become very good at leveraging its large backup division's direct sales team, and especially good at creating linkages and sales opportunities with the industry's largest primary storage field sales force.

EMC offers traditional software-based backup with NetWorker. Avamar is also a backup and recovery software, but is most often sold as a prepackaged appliance, the Avamar Data Store. In addition to these products, EMC offers Data Domain for deduplicated backup and disaster recovery storage and VTLs, including the FalconStor-based Disk Library and the Disk Library for Mainframe. Various levels of integration are provided among the products, but all can be deployed as stand-alones and there is some overlapping functionality.

Historically, EMC has been best-known for its NetWorker backup solution, which it obtained through the mid-2003 acquisition of Legato Systems. NetWorker is a mature offering built using an older client/server architecture. Avamar was acquired by EMC in 2006. It is targeted at the midmarket and enterprise, and sold for deduplicated backup with a focus on specific use cases, including support for VMware infrastructures, fast NAS
backup using Network Data Management Protocol (NDMP), remote-office/branch-office backup and desktop/laptop backup. In late 2007, EMC acquired Berkeley Data Systems for its Mozy cloud-based backup service solution. Today, in the backup space, EMC might be best-known for its 2009 acquisition of Data Domain. Data Domain can be used as deduplication storage for NetWorker, Avamar or other third-party backup products. Recently, EMC released DD Boost, a Data Domain software option that distributes some processing to the backup software, increasing backup performance.

EMC customers cite scalability, strong support and the strength of EMC as a company as reasons they choose EMC. EMC continues to be challenged to more tightly integrate its portfolio, and questions regarding the future of NetWorker continue to percolate.

**Strengthen**

- Avamar provides strong support for VMware, remote-office and NAS environments.
- Data Domain Boost software enables increased deduplication performance and tighter integration with leading backup applications.
- Excellent marketing and sales — the industry's largest internal sales force and Velocity partner program — provide many customer-facing resources.

**Cautions**

- Future of NetWorker portfolio is likely to focus on integration with a combined enhanced Avamar plus Data Domain infrastructure, suggesting that NetWorker purchases might best be considered in light of an evolving architectural road map.
- Products are not completely managed from a single interface, though the NetWorker management console does perform a great deal of top-level management.
- Initial setup of Avamar can be difficult, and the product is purely backup-focused, with no integration with CDP or archiving technologies.

**FalconStor Software**

FalconStor was founded in 2000 by former Cheyenne Software top executives and engineers, many of whom were involved in the sale of Cheyenne to CA Technologies in 1996. In 2001, FalconStor released a storage virtualization product that is still actively sold today; however, in 2003, the company delivered its VTL software, which went on to generate significant revenue, largely from OEM partners — most notably EMC. Later, replication, CDP and deduplication were added.

Historically, FalconStor has generated the bulk of its revenue from its VTL OEMs and mostly from midmarket recovery opportunities. In the last three years, the company began expanding into larger-enterprise sales, and began replacing declining OEM VTL revenue with sales of its non-VTL recovery solutions. In fact, where OEM revenue accounted for just over half the company's revenue in 2007, it now represents less than one-quarter, as FalconStor transitions to being more of a supplier of recovery products in its own right, rather than as a component technology in other solutions.
Today, FalconStor is becoming better-known for its CDP and its heterogeneous snapshot/replication capabilities for physical and virtual servers, as compared with its VTL software. The company delivers these recovery solutions as installable software, a virtual appliance and as preconfigured hardware offerings. The company's founder and longtime CEO stepped down in late September 2010, and the new CEO has vowed to address process and quality gaps and to become more customer-focused. The company has announced a plan for the first half 2011 for a new product that will better integrate all recovery capabilities, and offer a more service-oriented management console.

At times, customers have complained that FalconStor's product packaging, feature description and overall external messaging is confusing. However, users often praise the amount of recovery capabilities and the ease of managing the solution. FalconStor offers broad application integration, now through a single agent, and an off-host VM snapshot function. References praised the bandwidth-optimized replication of low-impact local snapshots, as well as the RecoverTrac feature, which aids in failover and in failback run book operations. Some customers have expressed a desire for a more mature support incident and patch management process, which has recently been introduced.

**Strengths**

- Broad recovery solutions, ranging from CDP, heterogeneous snapshot and replication to VTL, all with data reduction capabilities.
- Packaging options, ranging from virtual appliance and software-only, to preconfigured appliances.
- Restore process replaced by a fast mount of a recent application-aware snapshot.

**Cautions**

- Some product features (such as CDP, deduplication, replication and all application agents) still need greater unification (reportedly planned for in a 2011 release).
- History of quality issues, partly from delivering code to market before being fully validated and needing to remediate in the service stream (the interim CEO has already taken steps to address this).
- Lack of company visibility and ineffective marketing.

**HP**

HP's flagship backup product, Data Protector, dates back to 1989, when HP acquired Apollo Computer, which had a backup product called OmniBack. In 1996, OmniBack and OmniBack/Turbo merged to become OmniBack II to address larger Unix deployments. The product was rebranded to Data Protector in 2006. In 2006, HP partnered with Mendocino Software to deliver a CDP solution, but this was retired in early 2008, when Mendocino went out of business. Another notable point in the portfolio's timeline was the introduction of an internally developed solution, HP Data Protector Notebook Extension, in late 2009, to address the desktop and laptop markets.

Historically, HP has offered compelling feature functionality in its backup
solution. Features such as incremental forever, synthetic full and virtual full
backups have reduced the number of backup points that had to be
maintained. Early on, HP delivered snapshot integration and automation via
its Zero Downtime Backup and Instant Recovery capabilities, which support
HP and EMC storage arrays. Data Protector has always sold well in SAP
environments, where HP tended to have a strong presence as a
corporation, and work was done in conjunction with SAP to provide robust,
automated snapshot support. This capability has been extended to other
applications, including Exchange, Oracle and SharePoint. With regard to
deduplication, HP does OEM the Sepaton VTL and deduplication code for
use in its Virtual Library System (VLS) products. In 2010, HP rebranded its
internal portable deduplication engine, which has existed largely unknown
for several years, to StoreOnce, and announced a series of new disk-based
appliances, based on the technology, which are beginning to gain traction.
HP has announced that in 2011 that its StoreOnce technology will be
infused into Data Protector to deliver an integrated backup software
deduplication offering. HP was quick to market Exchange 2010 and
SharePoint 2010 support, and early to market with the option to purchase
the solution through a capacity-based license, of which nearly one-quarter
of the installed base is using today.

The HP backup portfolio received a bump up in overall visibility and
marketing in late 2007 with the reorganization of the backup portfolio from
the HP server and storage business unit to the HP software business unit.
However, since that time, the portfolio has not been able to fully exploit
the HP brand name, route to market or server attach potential, or to fully
capitalize on the mid-2008 acquisition of EDS as a service-led distribution
arm. While there have been occasional bright spots in marketing the backup
solutions, HP has had the most success selling its recovery portfolio in
largely HP-centric customer environments using a bundle play, along with
the notion of a "one throat to choke" support model, which was cited by
many references as a compelling reason for using the solution.

**Strengths**

- Zero Downtime Backup and Instant Recovery for HP and EMC storage
  arrays offers automated (no scripting) cataloging of snapshots, and
  allows fast recovery points for applications.

- Granular Recovery Extension single-item recovery for SharePoint, with
  stated plans to extend support to Exchange and VMware.

- Installations are typically very aggressively bid, from a pricing
  perspective, relative to other solutions.

**Cautions**

- Deduplication strategy has been slow to appear, but seems to now be
  unveiling itself, initially through an appliance and, in the future, as
  embedded software.

- Some customers have expressed concerns over small file
  performance.

- Some customers and prospects cite concerns over the lack of visibility
  of the recovery portfolio in HP's messaging from its direct sales force
  and partners.
i365 provides data protection solutions based on the technology it acquired via its EVault acquisition. EVault was founded in early 1997, and was acquired by Seagate in January 2007. In late 2008, Seagate created i365 as a new wholly owned company to offer data protection. The product set targets the midmarket, as well as enterprise remote and branch offices, with its on-premises software, SaaS, appliances and managed services. Today, nearly half of i365 customers store data in one of its nine secure data centers in the U.S., Europe and Canada. i365 manages over 200,000 systems via its on-premises solution and hosted service, with more systems protected through i365's many OEM partners.

The EVault product offers numerous features to enable efficient WAN utilization, including deduplication and compression of data at the source, with additional deduplication performed at the target. The product includes a Quick File Scanning (QFS) capability that identifies changed files using hash values and position indicators, and what it calls adaptive compression, which allows for dynamic adjustment of compression algorithms based on compressibility of the data, the relative availability of CPU and bandwidth. The company also offers bare-metal restore, CDP and replication, as well as a Remote Disaster Recovery Service that provides guided recovery and access to systems and data in remote/virtualized environments. PC backups are supported. Support for vStorage APIs (VADP) is planned for early 2011.

The company claims a significant percentage of the cloud backup market today. It sees great promise in cloud backup as the way of the future, and currently offers solutions that allow customers and partners to utilize SaaS and hybrid deployments seamlessly in their data protection strategies. In November 2010, the company launched its EVault Cloud-Connected Service Provider program to extend connectivity to the EVault hosted cloud to prospective channel partners that have yet to offer cloud-based data protection services.

Strengths

- Cloud-connected offerings deliver a combination of on-premises, hybrid and secure data management "in the cloud" utilizing SAS 70 certified data centers and multitenant, secure data management practices.
- Efficient WAN utilization and fast file scans.
- Large set of European partners (VARs).

Cautions

- Challenges with supporting large Oracle database environments.
- Some administrative challenges — lack of a global scheduler means schedules need to be set per server, and log files can be difficult to analyze. Customers cite some issues with monitoring and cleanup of old jobs.
- Support for vStorage APIs (VADP) is planned for early 2011.

IBM

IBM's flagship backup solution, TSM, had its roots in the distributed backup solution Workstation Data Save Facility (WDSF) in 1990. In 1993, the company used lessons learned from the WDSF product, along with an
internal research project focused on distributed system backup (heavily infused with the rich policy-based management constructs of its mainframe storage management solutions) and delivered a product called ADSTAR Distributed Storage Manager (ADSM). The name ADSTAR was an acronym for advanced storage and retrieval when IBM considered breaking up the company into smaller pieces. In 1999, ADSM was rebranded to TSM.

Historically, TSM has been known for its pioneering use of technologies like the incremental forever model of backup processing, using a semi-relational database for a catalog (TSM has since moved to DB2 as a catalog), and the application of a rich set of policy constructs in lieu of the more traditional job-based approach. While offering many compelling benefits, the somewhat orthogonal backup methodology and perceived administrative challenge of managing the product proved to be issues that would stay with the product for years. While the industry has largely come to adopt a backup approach that is similar in nature, even after rewrites and much improvement, TSM still has the perception of being more challenging to manage than other large-enterprise solutions. For almost 15 years, the recovery portfolio was internally developed; however, in late 2007, IBM acquired Arsenal Digital, which brought in SaaS backup, and in 2008 acquired FilesX, which provided software-based replication and CDP, and acquired Diligent for hardware-based deduplication and VTL capabilities. While IBM has leveraged its large direct sales force, the portfolio generates over half of its revenue from worldwide business partners. Customers cite the portfolio's ability to scale to handle very large recovery requirements, and the vendor's service and support receive strong marks. However, the company often receives low to no credit for its recent technical accomplishments (such as the no-charge target-side and, now, client-side deduplication), and still battles the perception of being more challenging to manage, something references have often disputed. As with Symantec, IBM, when pushed, can offer an interesting vision and compelling road maps, but relative to some Magic Quadrant Leaders, is not as vocal and articulate in the market today.

**Strengths**

- A major market share player (No. 2 in market) offering end-to-end recovery capabilities, from single-machine to the largest enterprise to cloud and other managed services, in addition to dedicated recovery appliances (VTLs, preconfigured backup servers, etc.) and storage infrastructure.

- First to market with incremental forever backup processing and a broad set of no-charge data reduction features.

- Customer and references cite the portfolio's scalability, code quality and strong support staff as major reasons for choosing, and remaining with the solution.

**Cautions**

- Customers and prospects have questioned IBM's commitment to the backup space, and have asked Gartner about the road map and vision for the portfolio.

- IBM continues to be late to market for server virtualization support and exploitation.

- TSM maintenance pricing has been raised as a strong issue by the installed base when the company changed to the cryptic Processor Value Unit (PVU) pricing model, though the new capacity pricing pilot
Iron Mountain

Iron Mountain has long had a place in the data protection world via its tape vaulting and other physical data protection services. Over the course of the last decade, it has expanded its services to encompass the protection of digital data. This has included the acquisition of Connected in late 2004 for online backup and recovery of PCs, followed by an acquisition of LiveVault in late 2005 for disk-based, online server backup and recovery solutions. Today, Connected and LiveVault are protecting over 3 million corporate PCs and 25,000 servers in North and South America, EMEA and Asia. The company offers solutions on-premises, hosted or in some combination.

As Iron Mountain’s offerings focus predominately on backup and recovery as a service, both products offer data reduction functionality at the source, in order to reduce the amount of bandwidth traffic. LiveVault uses a delta backup with a rolling baseline model, where the initial backup is a full backup, and all subsequent backups only capture changed file system blocks. Most customers have done away with the backup window, and have set LiveVault backups to run every 15 minutes. Connected backups are centrally administered — configurations are created and applied to thousands of agents at a time.

Iron Mountain sees great promise in the cloud approach to data protection, and believes there will be continued rapid adoption due to the ease-of-use and low-cost potential associated with this model. In addition to the cloud, Iron Mountain's strategy for its data protection products is driven by a focus on information management, including the ability to extract intelligence and categorize data. In 2010, it launched Connected Classify & Collect, which allows users (laptops) to be put "on hold" for legal or discovery purposes. The company goes to market via a direct sales force, and supports a large number of channel partners worldwide.

Strengths

- Secure, mirrored Payment Card Industry (PCI) and SysTrust certified data centers for SaaS deployments.
- Straightforward, simple deployments; mature technology that is reliable and scales to handle many thousands of protected systems.
- Support for on-premises, SaaS or hybrid models (that can be leveraged to meet recovery point objectives [RPOs] and recovery time objectives [RTOs]).

Cautions

- Connected requires a full drive scan to support scheduled backups. The product is seen as less cutting-edge and innovative by some customers.
- No support for SharePoint and Exchange object-level recoveries. Iron Mountain offers its NearPoint product for this capability.
- Support for vStorage APIs is not expected to be available until mid-2011.
NetApp

Established in 1992 as Network Appliance, and later shortening its name to NetApp in early 2008, NetApp is a provider of primary storage solutions, and is increasingly being used as a backup and recovery target. While NetApp is well-known in the industry for storage in general, only in recent years has it become a major vendor in the pure-play backup market. The company's ability to take numerous, space-efficient snapshots without incurring a performance penalty has garnered industry attention for its own storage solutions.

In 2003, NetApp delivered its V-Series of storage virtualization appliances, which extended its snapshot, replication and subsequent data reduction capabilities to third-party storage. Soon after, a product to capture data via block-level incremental snapshots from distributed systems servers and send it back to NetApp devices was introduced. This solution, called Open Systems SnapVault (OSSV), has gone on to claim nearly 88,000 licenses. In 2005, the company began delivering application-specific management for snapshot and replication modules with SnapManager. This facilitates application backup and allows application administrators to manage their own backups, which to date have nearly 108,000 licenses sold. The company's Protection Manager product was delivered in 2007 to automate provisioning secondary storage, execute protection policies and manage the overall relationships among SnapMirror, SnapManager, SnapVault, OSSV and NetApp primary snapshot copies.

In the last three years, Gartner clients have increasingly been evaluating NetApp as a backup platform provider. Interest in NetApp for backup seemed to become more pronounced in early 2007, when the company was early to market with a deduplication capability that in early 2008 became free of charge. To some, the combination of being able to take frequent application-aware snapshots that were easy to manage, and then store them in a deduplicated (as of late 2010, also optionally compressed) state, in place of licensing and managing traditional backup software and all its agents, has become very appealing. NetApp's block incremental replication D2D backup methodology includes deduplication and compression, and offers benefits over traditional file-level backup. Over the last several years, Gartner has noticed a small but growing minority of organizations claiming to have augmented or entirely replaced traditional backup with NetApp recovery solutions.

Strengths

- Snapshot techniques do not require file system scans to detect new and changed data, and backups can be done rapidly.

- Customers and references cite the portfolios' ease of use and ability to manage many terabytes' to petabytes' worth of recovery data with less staff as major reasons for investing in the solution.

- Ability to delegate application and VM protection and recovery to other administrators in order to offload the storage team.

Cautions

- No central catalog for all recovery operations (however, the Protection Manager offering acts as a partial catalog facility).

- Some solutions have more-limited application support (e.g., OSSV lacks Exchange integration).
Not well-known as being a major vendor in the midsize and large-enterprise recovery market.

**Symantec**

Symantec's major entrance into the backup/recovery market came with the announcement at the end of 2004 to acquire Veritas Software for $13.5 billion. At the time, Symantec believed that synergies between security and storage software, along with Veritas' growing server and system management portfolio, could be highly leveraged to compete against the likes of CA and IBM, both of which had similar portfolios.

NetBackup and Backup Exec are market-share-leading solutions in the enterprise and midsize enterprise segments, respectively. Symantec offers solid deduplication software, as well a series of new backup and deduplication appliances through a joint venture with Huawei. The Symantec OST interface allows integration with other backup solutions so as to be managed under one console, and to minimize data transfer. In early 2008, Symantec introduced a cloud-based backup SaaS offering with its Symantec Protection Network, which has integration with Backup Exec to automatically transfer local backup data to the off-site cloud for disaster recovery.

Veritas acquired Backup Exec in the Seagate Software merger in 1999 to add Windows support to the vendor's dominant Unix position, represented by NetBackup. These product lines were never merged and continue to be largely two different code bases targeted at two different audiences: NetBackup at the enterprise and Backup Exec at SMB and ROBO markets; however, in the last two years, there has been code sharing around deduplication, OST and application support. Symantec also has recovery assets from its 1990 acquisition of Peter Norton Computing and the 2007 Altiris deal.

With nearly 1,100 engineers working on its backup solutions, Symantec launched major upgrades in 2010 for both Backup Exec (version 2010) and NetBackup (version 7) on the same day around the world. Symantec has also introduced new licensing schemes to address previous concerns over pricing and maintenance. The company has introduced a new line of appliances, and has offered a road map for future, larger-scale, preintegrated solutions for NetBackup. Symantec also has plans to offer appliances built around Backup Exec.

Symantec remains a strong provider of enterprise backup/recovery, but a handful of competitors is outperforming it in message articulation and vocalization. While Gartner has not seen evidence of a lack of commitment or innovation by Symantec, over the last two years a number of Gartner clients (which are also Symantec customers or prospects) have expressed doubts to us about its road maps and its pace of innovation, and have questioned its overall commitment to storage and backup. These questions indicate that Symantec could do a better job of getting its message out to customers and prospects, and this has resulted in perception issues. While some of these perception issues may stem from the past, when Veritas was seen as the most vocal vendor in the marketplace and was perceived as the agenda-setting mind share leader in recovery, and we continue to get these questions. As with IBM, Symantec, when pushed, can offer an interesting vision and compelling road maps. However, relative to some Magic Quadrant Leaders, it is not as articulate and vocal in the market today.

**Strengths**
A market share leader that offers end-to-end recovery capabilities from single machine to the largest enterprise, to cloud services and now via the new preconfigured backup appliances.

The new OpsCenter management console and the guided VM recovery in NetBackup version 7 have received positive feedback.

The new archive capability, and the broad VMware and Hyper-V file and application support, are often highlighted as being strong features in Backup Exec 2010.

Cautions

Customers and prospects have questioned Symantec's commitment to the backup space, and have asked Gartner about the road map and vision for the portfolio. We think these concerns stem from perception problems in the marketplace and not from a lack of commitment, vision or road map.

Customers, and even one reference, have voiced concerns over Backup Exec code quality and customer support.

NetBackup maintenance pricing has been raised as a strong issue by the installed base, however new pricing schemes may address this.

Syncsort

Syncsort is a 42-year-old company that launched its first open-system data protection product, Syncsort BEX, in 1997. The product is sold worldwide and, as of 2010, exclusively through a set of value-added resellers (VARs; notably, Arrow and Avnet in North America) and channel partners, as the previous direct sales effort was decommissioned. In September 2010, Syncsort and NetApp expanded their long-standing partnership to deliver NetApp Syncsort Integrated Backup (NSB), which delivers value-added extensions to NetApp core data protection technologies. NSB combines Syncsort BEX, NetApp Snapshot, clone and replication technology, deduplication, and NetApp disk storage into an integrated solution. Syncsort is benefiting from a new management team focused on developing strong partnerships; the company claims that the NetApp-Syncsort relationship will be the first of a number of such partnerships. Syncsort, and the data protection portfolio in particular, are experiencing a state of transformation, with the intention of building on early-to-market, block-level incremental capabilities, which will offer strong data reduction and decreased backup and restore window capabilities.

Syncsort offers a tiered recovery model, including file/object recovery, volume/disk recovery (via snapshots), application recovery, bare-metal recovery and what it calls "instant virtualization" (the recovery of a backup dataset as a VM). Support for VMware environments leverages BEX's changed block tracking, rather than vStorage APIs, providing a better application snapshot capability. The company states that VMware vStorage support is coming in mid-2011. There is no support for PC backup.

Syncsort is focused on NSB going forward. NSB is offered as a midsize-enterprise solution, and can be deployed by MSPs that service this market as well. Going forward, Syncsort's ability to achieve traction in its new primary packaging option (the NSB) and route-to-market (partner-only) model will determine the company's ability to reach a broader customer base with what would seem to be market-resonating features.
Strengths

- Solution was natively developed (no acquired code), meaning all backup and recovery functionality can be managed from a single administrative console.
- Gartner clients cite reliability, recoverability and performance as product strengths.
- Excellent relationship with NetApp, which offers NSB as an add-on to core NetApp data protection capabilities.

Cautions

- Very little mind share for BEX — future of stand-alone product is uncertain.
- VMware storage API support not planned until mid-2011.
- Syncsort has changed its sales model from direct sales and partners to a 100% channel model, which, while strengthening the Syncsort brand and installed base, may have implications for quality of presales support and sizing.