

# White Paper

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## **HP Helps SMBs to Protect Their Data and Keep Their Businesses Safe**

*Why Small and Midsize Organizations Should Be Using Hybrid Data  
Protection Solutions—and a Closer Look at HP's Offerings for SMBs*

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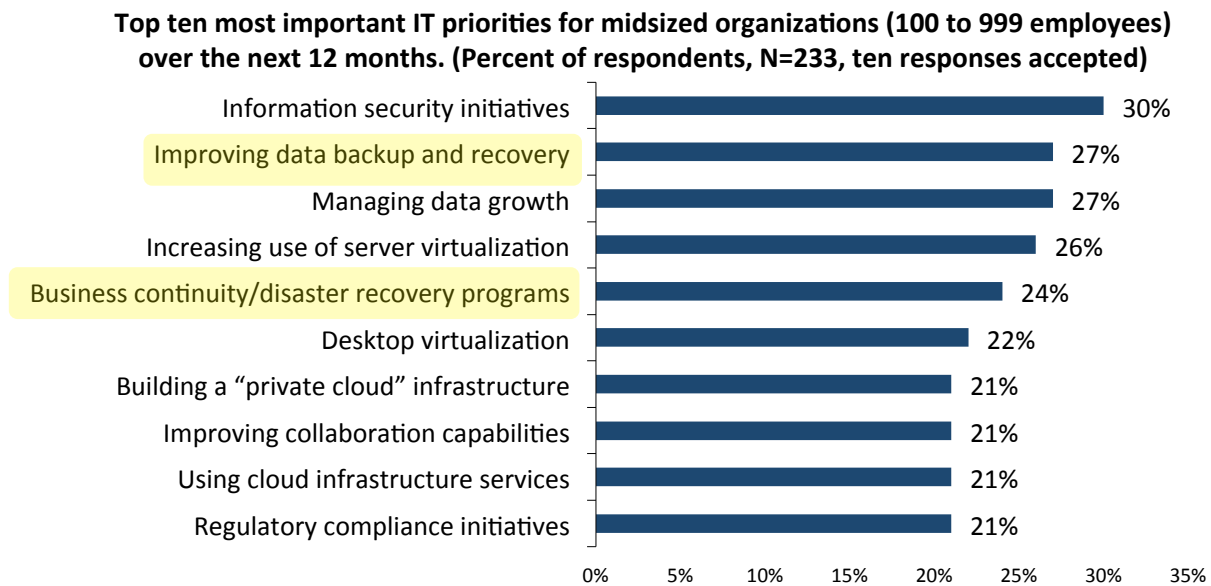
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## Introduction

Small and mid-sized businesses (SMBs) depend on their data and the availability of their IT resources as much as enterprises do. But they haven't always had solutions that met their needs. Vendors, recognizing those SMB data protection requirements, are today delivering appropriately sized solutions. Ideally, these solutions embody the quality and agility of enterprise products but come in an SMB form factor, offering a suitable operational/economic value proposition.

For IT pros in organizations large and small, data protection has been a major responsibility since digital storage subsystems replaced metal file cabinets. This year, ESG's *2015 IT Spending Intentions Survey* shows that for SMBs, backup and business continuity/disaster recovery (BC/DR) both continue to rank as major priorities (see Figure 1).<sup>1</sup>

Figure 1. Top Ten IT Priorities for 2015 Among Midsized Organizations



Source: Enterprise Strategy Group, 2015.

To ensure that the business keeps running, midsized organizations need tools that support the tactical elements of backup and recovery as well as tools to support the strategic-level planning that goes into BC/DR. Fortunately, good backup and recovery and BC/DR are attainable now in ways that weren't possible even three or four years ago. Technology has improved in general, and cloud data protection has become mainstream in particular. (As Figure 1 shows, cloud usage is another prominent IT priority this year.)

A good selection of backup, recovery, and archive (BURA) solutions is available for onsite, cloud, or hybrid cloud use. The cloud has proven to be economically and operationally viable, and data protection software and hardware alternatives have been engineered by vendors to be suitable for SMBs. Such steps give smaller organizations a better range of options and additional agility when it comes to protecting mission-critical data.

However, this is not simply a technology story; a human element is apparent, too. Specifically, large enterprises almost always have plenty of highly trained and talented professionals on their IT teams—specialists who focus on data protection and are able to shift into fixer-mode when a crisis or a problem arises. Midsized organizations don't have that luxury. They have good people, but those good people are typically IT generalists, not data protection or recovery specialists.

So, if a big challenge with backup or BC/DR surfaces, SMBs often find themselves trying to solve it through technology trial-and-error or by soliciting outside expertise, rather than relying on internal staff for the answers. Clearly, SMBs are ready for new approaches and easy-to-use technologies to help them address BC/DR challenges.

<sup>1</sup> Source: ESG Research Report, [2015 IT Spending Intentions Survey](#), February 2015.

## What Is Driving Data Protection Modernization in SMBs?

Whether it's an issue of rampant storage growth, insufficient agility, challenges in adhering to legal compliance requirements, a lack of data durability, no resources to replicate data to multiple offsite locations for safekeeping, or some other attribute, demands for data protection functionality are growing faster than IT budgets are. SMBs can't manage data protection the way they did in years past. The status quo is unsustainable and already insufficient. SMBs must do more with less as they work to protect data while curtailing CapEx and OpEx.

### SMBs Count on IT to Keep Them Up and Running (and Profitable)

Organizations of all sizes rely on their IT staff to keep the whole place up and running. The truth is, quite a few SMBs sell relatively commoditized goods or services and, as a consequence, they are vulnerable. If their IT systems go down, it's rather easy for customers to take their business to competitors instead. SMBs don't have the capital to ride out business problems; a data-loss scenario can put an SMB out of business.

Avoiding that scenario is essential. But realistically, midsized organizations can't be expected to invest huge sums of money in IT. They run lean, and they tend to prefer to invest in areas that differentiate their businesses from the competition in more "macro" ways, all while:

- **Ensuring availability to key data and systems.** The fact is, businesses have never been more intolerant of downtime than they are now. Business continuity is vitally important. ESG research shows that end-users can barely tolerate application downtime anymore. Well over half (62%) of respondents to an ESG survey<sup>2</sup> reported that downtime for their protected applications cannot exceed three hours without causing an adverse business impact.

Even so-called "normal" (non-mission-critical) apps have a very low downtime tolerance profile these days. So, while the need for full-fledged business continuity or disaster recovery may vary among SMBs, their IT organizations are all striving to ensure access to data and services by strengthening the ability to recover in a timely and flexible way.

- **Reducing costs while accommodating growth.** In general, they are always trying to improve results while reducing costs. But simply making the cheapest, fastest-possible incremental improvements is insufficient to ensure the availability and recoverability of data.

SMBs must invest in the right infrastructure rather than spending money on expensive point solutions that are either enterprise-priced/complex (too much) or insufficient for their business needs (too little). Establishing the right infrastructure isn't easy, but contemporary on-premises *and* cloud options are combining to make it possible.

## What Should SMBs Be Doing? Hybrid

The heightened profile for SMBs' data protection priorities, the growing maturity of cloud-based data protection services, and new products appropriately sized for SMBs all can help these organizations achieve what they have long aspired to: well-protected IT without complexity or extravagance.

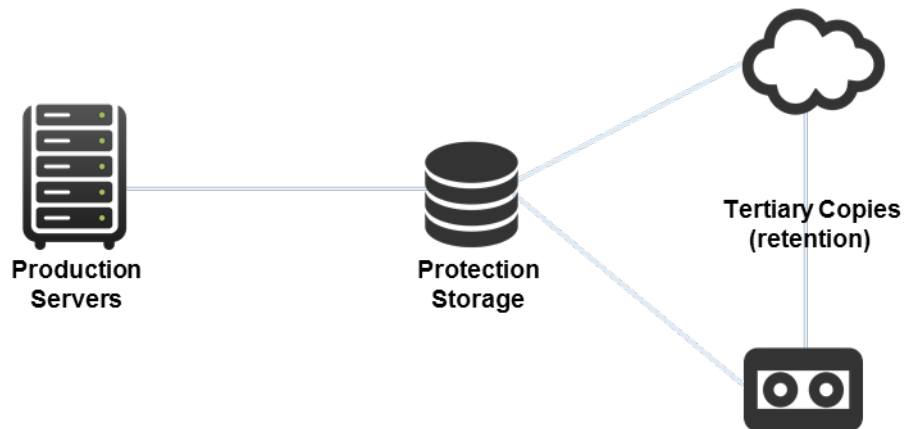
The easiest but perhaps most important thing any SMB can do to bolster data durability and protection agility is to implement a hybrid IT architecture—an architecture reflecting a combination of products and services properly aligned to the SMB's needs and budgets. SMBs need an architecture composed of components proven to work well together that can be relied upon to deliver simple, manageable, affordable protection.

Those components consist of the elements and approaches shown in Figure 2.

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<sup>2</sup> Source: ESG Research Report, [Data Protection-as-a-Service Trends](#), September 2013.

Figure 2. Understanding a Hybrid Data Protection Strategy



Source: Enterprise Strategy Group, 2015.

### Disk—for Onsite Protection and Fast Restores

SMBs should maintain a strong data-recovery capability onsite. Although the cloud can sometimes seem like the new answer to every IT problem, it isn't quite that simple. To achieve true recovery agility, a reasonable amount of on-premises IT infrastructure is going to be necessary. That onsite infrastructure should include data protection software and backup-target hardware to ensure that business can resume fast (even without internet connectivity).

On-premises data protection solution elements should include:

- **Data protection software** capable of protecting both dedicated physical servers and virtual machines—with the ability to store data on local disk storage for fast recovery, on tape for long-term retention and portability, and in the cloud for extended retention and better data durability.
- **Secondary disk-based storage** in a physical or virtual appliance that is optimized (i.e., it delivers data deduplication and/or compression) to reduce the burden that data protection can have on IT budgets.

### Tape—as Part of a Backup Strategy and for Data Portability and Regulatory-compliant Retention

There are several reasons why an on-premises protection architecture should not be limited to disk. Organizations of all sizes should plan on supplementing their disk-based recovery capabilities with tape for backup and/or long-term retention, as well as flexible portability of data between alternate locations. And of course, some smaller businesses will find tape to be more than adequate as their primary recovery medium. Most organizations should be leveraging disk first for quick restores, but nearly everyone is often expected to retain data for significant periods of time, which in highly regulated environments is often best done on tape, or more recently in the cloud.

### Cloud Services—for Data Survival, Recovery Agility, and Operational Long-term Retention

All organizations are susceptible to power grid outages, in-house mechanical failures, and employees' lost or stolen endpoint devices. Similarly, all organizations must plan for disasters such as floods, fires, earthquakes, or tornadoes. On a less dramatic note, SMBs have to deal with all the usual human-error risks and operational requirements of long-term data retention.

Almost all of those requirements and crises can be alleviated or completely overcome by putting a copy of the data *outside the building*. Big enterprises have long maintained recovery sites (even if those sites were semi-dark) and have employed business continuity experts tasked with lessening the impact of outages. SMBs knew they should have offsite protection, too, but they also knew they couldn't afford to construct and maintain traditional DR sites or hire BC/DR experts.

Historically, tape was the only option to achieve data survival in the past; but then, the cloud became mainstream. The appeal of cloud-based services as part of a data protection solution centers not just on changing one's economics, but also on the expertise that data protection service providers offer to subscribers.

## Look for Expertise

Even if a mid-sized organization could afford to run a geographically isolated secondary site for backup and disaster recovery, its IT team almost certainly does not have the complete skill set, not to mention the bandwidth, to oversee the site's operation. Problematic skill/labor shortages are evident in at least 16 areas of IT, according to recent ESG research; data protection is one.<sup>3</sup> This year, 17% of the respondents to ESG's annual IT spending intentions survey reported that their organization is currently experiencing a shortage of people with data protection skills.

Fortunately, cloud-based data protection isn't just a matter of leveraging a secondary site on a "pay-as-you-go" basis. The cloud also comes with people employed by the service provider who dedicate themselves to data protection and who are highly conversant with BC/DR preparedness techniques. Those experts know how to help SMBs get back to business.

A hybrid onsite/cloud data protection option is optimal. SMBs should seek out solutions that are operationally and economically appropriate for them. *At the same time*, partners should bring expertise and experience. Those partners can encompass not only the traditional VARs and systems integrators that the SMB already has relationships with, but also the consulting staff at the cloud service provider.

Their expertise will help IT generalists be more successful by supporting the quick recovery of data and resumption of operations at the SMB. Additionally, paying a consultant's fee likely would cost much less than one or two days of downtime would cost.

## An Overview of the Hybrid Data Protection Options from HP

To address a big chunk of the hybrid data protection challenge, [Hewlett Packard](#) offers a variety of data protection technologies, some of which are essentially enterprise caliber in terms of functionality, yet made for smaller organizations. As part of the portfolio that HP calls "*Just Right IT*," the products are geared toward protecting, optimizing, and recovering data to ensure that an SMB's business is not disrupted. The products that match well for SMB hybrid-cloud data protection include:

- **HP StoreEasy.** This is HP's designed-for-SMB file-sharing NAS appliance, acting as the cornerstone for both production storage and protection storage. StoreEasy provides lots of configuration and installation wizards, and HP can help with best practices, too. One variation of the HP StoreEasy platform centers on running **HP's TurboRestore Appliance (TRA) software**, which essentially optimizes the StoreEasy appliance as a disk-based repository for data protection solutions.
- **HP LiveVault.** This backup service provides protection for physical servers and virtual machines (directly to the cloud) and is available from various geographical data centers, enabling organizations to meet local privacy and compliance requirements. The HP LiveVault software can also utilize HP StoreEasy with TRA as a local target for fast recovery, and then replicate the data to an HP cloud. HP possesses considerable experience in this area, having accumulated, to date, more than 15 years of experience with cloud and cloud-type data center operations.

The appeal of cloud-based services as part of a data protection solution centers not just on changing one's economics, but also on the expertise that data protection service providers offer to subscribers.

<sup>3</sup> Source: ESG Research Report, [2015 IT Spending Intentions Survey](#), February 2015.

The combination of HP StoreEasy-with-TRA plus HP LiveVault gives SMBs what they are looking for:

- ✓ Reliable protection and fast recoveries from the HP StoreEasy with TRA appliance.
- ✓ Extended data retention and survivability from the HP LiveVault cloud service.

StoreEasy plus LiveVault function as one turnkey solution to help SMBs keep their businesses up and running for a reasonable cost.

Beyond the combination of StoreEasy and LiveVault designed to integrate for robust SMB protection, HP has additional data protection offerings that can add even more agility to small and mid-sized organizations, including:

- **HP StoreEver Tape.** As stated earlier, there is absolutely still a place for modern tape within a modern SMB. Today's LTO tape cartridges and HP StoreEver drives provide a cost-effective way for small offices to protect significant amounts of SMB data; in fact, organizations of all sizes can utilize them for durable long-term retention of data beyond what is in their disk-based repository.

HP StoreEver Tape provides a full spectrum of SMB-relevant products, from enterprise libraries to standalone tape drives and autoloaders that make sense for mid-sized organizations to use as part of their data protection strategy.

- **HP StoreOnce VSA.** While StoreEasy with TRA software provides a turnkey solution in partnership with HP LiveVault for SMBs, HP's enterprise data protection storage solution (HP StoreOnce) also has smaller physical and virtual appliance (VSA) editions that utilize its enterprise-grade deduplication. A wide variety of third-party backup software can leverage the HP StoreOnce storage and even replicate the deduplicated data to another offsite StoreOnce appliance.

## How the Products Can Help an SMB Meet Its IT Imperatives

- ✓ Almost every IT organization of any size should be recovering from disk. HP has SMB offerings in the same form factor as its production storage (HP StoreEasy) for *protection* storage (HP StoreEasy with LiveVault and TRA software).
- ✓ If you have to retain data for five years or more (to comply with actual regulatory requirements, for example), then tape should almost certainly be part of your plan. And for some small organizations, tape is still the recovery medium of choice if they can't cost-justify the agility and benefits of disk.

Tape is portable and thus helps an SMB avoid "cloud vendor lock-in" during long-term retention. HP has tape drives, autoloaders, and libraries to meet an SMB's needs.

- ✓ Cloud services can radically improve almost all IT organizations in terms of providing everything from physical and virtual server backup-as-a-service capabilities through the HP LiveVault offering. And when combined with HP StoreEasy, the LiveVault hybrid-cloud approach of on-prem recovery plus off-prem data survivability and long-term retention should meet the needs of many SMB IT administrators.

With this solution, an SMB can choose how much data it wants to keep onsite via StoreEasy, and choose how much it wants to send to the LiveVault cloud.

Those recoverability benefits are the reason why "hybrid" should matter to organizations of all sizes—because modern organizations are susceptible to a variety of business-impacting crises and data management requirements that cannot be satisfied by a single approach to data protection.

Organizations need to be thinking about data protection as a toolset designed to work well together to offer the agility that the business demands, the economics that make sense for any company, and the technologies to reliably do the job.

Perhaps as compelling as any combination of the technologies described is the expertise that comes from the worldwide network of HP channel partners and the data protection experts within the HP cloud services teams, all of whom come together to ensure the success of the SMB IT manager.

## The Bigger Truth

It cannot be overemphasized that mid-sized organizations need robust protection, reliable recovery, and flexibility that ensures the same levels of data availability that large enterprises demand—but at a different economic scale. Fortunately, companies such as HP have developed solution sets that address those protection needs. And the solutions have been engineered by HP specifically to suit the IT characteristics of SMBs.

With the highly diverse business requirements that are driving IT today, a real need exists to plan for a high degree of data availability and agility, including fast protection/recovery on-premises, long-term data survivability and retention, meeting compliance requirements, and a partnership with experts who can ensure great results.

The benefits of hybrid cloud as an IT architecture for data protection are three-fold:

- First, to be successful, SMBs need to have control in knowing what data is on-premises and what data needs to survive offsite.
- Second, although SMBs have imperatives for robust protection, they don't have large budgets, which means solutions must be sized properly—not just in terms of form and features, but also in terms of economics, ease of use, and scalability to be able to continue supporting the business as it grows.
- Third, many SMBs are greatly in need of more robust backup, business continuity, and disaster recovery capabilities. They are extremely dependent on their internal IT resources but usually do not have the breadth of onsite expertise or the enterprise-scale tools available to larger organizations.

The good news is that companies such as HP are giving these small and mid-sized organizations the tools they need to protect their data—developing comprehensive products, solution sets, and methodologies that are “enterprise-grade,” yet suited to SMBs.



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