

## StorageCraft® ShadowControl™ ImageManager™ from Disaster Recovery to Business Continuity

**T**hese days, simply backing up your data isn't enough. Sure, it's as important as ever, and you'd better have a plan for disaster recovery. But in today's world, where data and digital services are the lifeblood of our economy, backups and archives are only a part of complete business continuity.

The term "business continuity" really refers to all actions and behaviours that keep your business running without interruption, whether those actions and behaviours are physical or digital. Traditionally, data and other computer-based components were only a small part of a larger business continuity plan. Increasingly, however, businesses are relying more and more on their IT infrastructure as the fundamental core of their business continuity. This is especially true for small and medium-sized businesses (SMBs), some of whom have few or no physical processes at all.

A recent Gartner paper underlines this growing IT dominance. For example, when it comes to the number of applications companies consider business-critical, Gartner shows that the percentage is steadily rising. In fact, while historically businesses considered around 20 percent of their applications business-critical, in 2010 fully 60 percent

of the respondents to Gartner's survey claimed their percentage was higher, sometimes much higher. Almost 20 percent said that more than 50 percent of their applications were vital to their operation.<sup>1</sup>

Because of this greater reliance on IT, the demand for faster recovery time objectives (RTOs) has increased as well. The same Gartner paper shows that "87 percent of the enterprises surveyed have RTO[s] for their most mission-critical applications [or] services as four hours or less. This is up from 73 percent in the survey we conducted just one year earlier." Fully 48 percent indicated RTOs of an hour or less for their mission-critical applications.<sup>2</sup>

At the same time, data is growing at incredible rates. According to a study published by Storage Strategies NOW, "the amount of data growth SMBs are experiencing is growing at a pace that doubles every 18 months."<sup>3</sup>

This research emphasises the fact that businesses today are relying more and more on IT processes, applications and data. So when it comes to business continuity, any plan must address the protection and quick recovery of these technological features.

## The Technology Side to Continuity

**S**o what does that mean for you? It means that as your business evolves, you need to be able to leverage your data and applications in new and innovative ways. It means you need to be more aggressive

about not only how you backup your data and your applications, but where you back it up and how you plan on accessing it. It also means that you need to be more careful about your backups, since they are no longer simply archives or insurance for the worst-case scenarios. They need to work in more situations and in greater demand, so you need to be able to get at them as quickly as possible. Perhaps most importantly, you need to develop strategies for recovering all your mission-critical technology before your RTO has expired.

When it comes down to it, your business continuity depends on your ability to do the following:

## Restore Quickly

Your RTOs are getting shorter and shorter as your dependence on technology increases. You simply cannot function without data or applications, so if there's a problem, you need them up and running ASAP. However, even with disk-based backups that let you recover an entire hard disk at once, it can take hours to restore a server that contains multi-TB volumes of your most critical data. While you're waiting for that server to restore, business is grinding to a halt.

## Replicate to a Remote Site

A pristine set of disk images can't help you if they're melted in the same fire that just destroyed your other servers. Best practices for backup and disaster recovery, as well as the reality of government regulation in many industries, demand you maintain copies of your backup images

both locally for easy access and remotely for protection from catastrophic failure. This is not as simple as it sounds, however. Creating multiple backups of a server is both time consuming and a logistical nightmare. Not to mention that most backups created these days are so large, transferring them to remote storage facilities via traditional transfer protocols is unfeasible. You could always follow the traditional method of physically transporting a device to your off-site location, but this introduces its own series of security and practical concerns.

## Manage Backup Images

You probably have a procedure for regularly backing up your machines, but even if you use a method that only captures recent changes each time, your backup storage device can fill up in no time. You need a way to manage your backups, to keep track of what's still important without eating through your disk space. And perhaps more importantly, you need to know that when the time comes, you'll know where to find the image you need.

## Verify Image Quality

When a disaster happens the last thing you want is a corrupted disk image. The causes of faulty disk images are manifold and such problems are frequently unavoidable. This reality means it's absolutely necessary for you to be able to check your images regularly to ensure that when you need them most, they won't let you down.

## Get Notified of Problems

Despite the importance of your backup images, you can't check them all the time. You've got a business to run. Ideally, any solution you implement will monitor your images for you and let you know if there's a problem. That way, you can spend your time taking care of your business without worrying about your backups.



StorageCraft ShadowControl ImageManager is a comprehensive host of tools designed to help you do all this and more. It gives you control and freedom over your StorageCraft ShadowProtect® backup images.

ShadowProtect is an award-winning, best-in-class software solution that allows you to stop worrying about backup and disaster recovery (DR). For more information, visit the StorageCraft website: <http://www.storagecraft.eu>.

ShadowControl ImageManager is designed to work flawlessly with ShadowProtect backup images, turning your already robust disaster recovery plan into a powerful business continuity solution.

Each feature in ShadowControl ImageManager gives you control over your disaster recovery, providing tools that let you confidently operate your business without the fear of disaster.

Unfortunately, disasters will happen, but with ShadowProtect and ShadowControl ImageManager, you'll know that whatever the catastrophe, you'll be up and running in minutes, instead of hours.

Look at what ShadowControl ImageManager has to offer:

## HEADSTART RESTORE.

The biggest obstacle to a quick recovery, assuming you've made backups, is the time it takes to restore huge amounts of data from your backup machine to the recovery machine. There's no avoiding this with a straightforward restoration. Pipes are only so big and the laws of physics can't be broken. ShadowControl ImageManager solves this problem by looking at it from a different perspective.

Because ShadowProtect takes one initial image of a disk and then augments that image with continuous incremental images, it's easy to turn a traditional restoration scenario on its head. If the problem for regular restorations is writing huge backup images, why not do most of the work beforehand?

Enter HeadStart Restore®, a feature of ShadowControl ImageManager. HeadStart Restore allows you to stage your backup by pre-emptively restoring your backup images to a virtual machine (VM). This VM is always ready to go because it's automatically updated with the incremental changes from your production server. So when a disaster does happen, all you have to do is finalise your HeadStart Restore recovery, which applies any remaining incremental changes and prepares the virtual disk for use. Simply reboot your VM and you've recovered from a disaster in mere minutes.

## SHADOWSTREAM™

Backup image files can be huge. When it comes to transferring those images to an off-site location, every bit of additional speed is important. Cutting a big transfer down from a weekend-long process to a single day saves time and money and cuts down on the risk of complication.

Unfortunately, traditional file transfer solutions like FTP can only offer so much when it comes to speed. A regular FTP connection automatically slows down its data transmission when it encounters latency or congestion. This means that with FTP, you're almost never getting as much speed out of a connection as you could be.

ShadowControl ImageManager answers this problem by introducing a new technology called ShadowStream™. ShadowStream is a transfer protocol that can replicate your images to an off-site location up to five times faster than traditional FTP. It does this by introducing its own protocols that manage congestion and latency differently, allowing transfers to take advantage of the actual throughput of the connection.

In addition to this added speed, ShadowStream brings a number of useful tools to the business continuity table. First, its protocols are designed to be less susceptible to hacking, which, when combined with ShadowProtect encryption, helps ensure your data is secure. ShadowStream also offers features such as the ability to resume interrupted transfers and it requires no special hardware or software. Simply install ShadowControl ImageManager on both your production and backup servers, set up your ShadowStream job and let it go.

ShadowStream was designed from the ground up with the transfer of backup images in mind, so it's a great new way to improve the performance of your DR solution.

## intelligentFTP™

That's not to say ShadowControl ImageManager can't do FTP. In fact, our intelligentFTP™ technology lets you use FTP more effectively than ever before. By taking advantage of the smart replication feature of ShadowControl ImageManager, intelligentFTP allows you to automatically replicate your backup images to remote locations. This ensures you're only transferring the files you need to transfer and not wasting precious time or bandwidth. In addition, intelligentFTP gives you even greater control by letting you to transfer only the file types needed for replication, limit the transfer to verified images only and set retention policies for your source and destination files.

## Other Features

All this ShadowControl ImageManager technology sits on top other, easy-to-use features that allow you to make the most of your ShadowProtect backup image files:

- *Replication* automatically copies your backup images not only to the cloud as described above but to locally attached storage and LAN- or WAN-attached storage as well.
- *Consolidation* allows you to save storage space by consolidating backup images into daily, weekly and monthly backup files.

- *Retention* helps you keep only the images you need, thus minimising the amount of storage you need to maintain business continuity.
- *Verification* checks your image files multiple times to ensure their quality so you can be confident they'll work when you need them.
- *Notification* lets you control how and when ShadowControl ImageManager contacts you concerning problems with your images, so you don't have to spend any time checking yourself.

## Conclusion

**T**oday, it's simply not good enough to back up your data and leave it at that. As more and more businesses come to rely on technology for their critical operations and revenue, it is imperative for systems, applications and data to work, no matter what.

StorageCraft ShadowControl ImageManager is a full-featured companion to StorageCraft ShadowProtect that allows you to move from simple DR solution to a complete business continuity strategy. Its powerful technologies and features make it easy for you to stop worrying about a catastrophe and worry about what matters instead: your business.

## Notes

1. Morency, John P., Scott, Donna, Russell, David. “Backup and Disaster Recovery Modernization is No Longer a Luxury, but a Business Necessity.” Gartner, Inc. 11 August 2011. ID Number: G00215300. 5.
2. Morency, John P., Scott, Donna, Russell, David. “Backup and Disaster Recovery Modernization is No Longer a Luxury, but a Business Necessity.” Gartner, Inc. 11 August 2011. ID Number: G00215300. 6.
3. Connor, Deni, Corrigan, Patrick H., and Bagley, James E. “Data Protection and Recovery in the Small and Mid-sized Businesses (SMB).” Storage Strategies NOW, Inc. 2010.