FENCECORE

eBook





What You Need to Know About Keeping Business-Critical Data Accessible

Introduction

Businesses of every size are creating more data than ever, and that data is ever more deeply intertwined with revenue-producing activities.

Businesses that intend to keep growing in good times and bad need robust solutions to back up their critical data. They can't afford to let operations grind to a halt because a ransomware attacker has rendered critical data and applications unusable or an employee has accidentally deleted, overwritten, or corrupted critical data. Nor can they run the risk of fires, earthquakes, hurricanes, or catastrophic system failures wiping out customer or financial records. Even a lost laptop or failed hard drive could have serious repercussions if it contains important information not duplicated elsewhere.

Having limited financial and IT resources, small and medium businesses (SMBs) must know exactly what to look for in a backup solution that meets the requirements of business continuity and disaster recovery. In this guide, we'll outline essential features for reliable but cost-effective protection.



Ransomware, one of the most serious cybersecurity threats to have emerged in recent years, and is often designed to find and attack cloud resources.

First, understand why a modern backup and recovery capability is so important

Successful backup is the foundation for disaster recovery and business continuity. Without it, recovery and continuity cannot exist. Technologies that were created decades ago to store data are simply not enough. Antiquated methods, like tape backup, don't lend themselves to the rapid recovery of business operations in a crisis.

Continuous offsite backup to the cloud can help, but only if it is designed correctly. Ransomware, one of the most serious cybersecurity threats to have emerged in recent years, is often designed to find cloud resources and attack those also. A naive implementation of cloud backup can do more harm than good.

When choosing a backup solution, growing businesses should look for these six things:

Comprehensiveness

- Ease of use
- Recoverability
- Performance and reliability
- Affordability
- Scalability



Most growing businesses carry less than a month of operating costs in cash, so downtime can quite literally "break the bank." The ability to instantly recover systems to a virtual machine, on-site or in the cloud, is the remedy.

Comprehensiveness

SMBs generally do not have a dedicated IT department that can manage separate backup, recovery, and business continuity products — they need one solution that can do it all. Consider whether the solution you are evaluating provides all key functionality, seamlessly integrated. A combination of on-premises and cloud-based services offers the best total protection for businesses of all sizes.

Ease of Use

One way of making the technology easy to use is to delegate responsibility for it to an IT service provider. Many SMBs have employees juggling so many different tasks that they decide managing IT shouldn't be one of them. Even so, they should have the option of monitoring backups and performing routine data restores themselves.

Seek a solution with an intelligent user interface you can navigate yourself, if and when you need to. A cleaner user interface lets your managed service provider work with it more efficiently on your behalf.

Recoverability

Most growing businesses carry less than a month of operating costs in cash, so downtime can quite literally "break the bank." The ability to instantly recover systems to a virtual machine, either on-site or in the cloud, is the remedy. If hardware fails, users can rely on a virtual replica of a critical system to keep the business running.



Even the best computer hardware eventually fails. When that happens, instant virtualization of failed systems can limit the impact -- making it possible to convert a backup into a running system in a matter of minutes.

The strongest backup and recovery solutions can recreate a running system in a matter of seconds. In the event of a natural disaster, they create a complete infrastructure on which to host your business until your physical infrastructure is restored.

Performance and Reliability

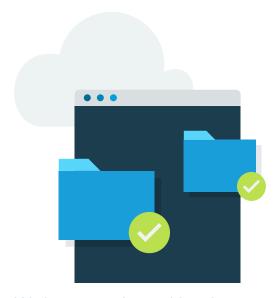
More frequent backups limit data loss. When choosing a reliable solution, pick one that backs up data very frequently. An ideal solution is an incremental backup, which captures what you've changed or deleted since the last backup, rather than duplicating the entire volume of data repeatedly. This allows backups to happen more quickly and frequently, further limiting the potential for data loss.

Affordability

Unless your organization has a sizeable IT budget, cost should be a major consideration. Still, the cost must be balanced against quality, reliability, and the consequences of choosing a solution that later proves inadequate. A cheap solution can prove quite costly if it fails to prevent damaging downtime that leads to a loss of business. Seek a cost-effective and affordable solution, but don't sacrifice essential features and capabilities for dependable backup and rapid recovery.

Scalability

Growth is the goal of every business. With growth comes the creation of more and more data. That in turn drives the need for more advanced backup and business continuity solutions. Select a service provider who works with businesses your size and can support you as you grow.



With image-based backup, users need not pick and choose which files are backed up or worry about saving the most recent draft to the shared/backup folder. Instead, the backup contains a complete system image.

Essential Features

Now that you know what to look for, we'll dive deeper into the technologies and features that add to more complete solutions. When it comes to comprehensive data protection, be on the lookout for these features to ensure data is not only backed up but readily available in the case of a potential disaster.

Proof of Backup

It's not enough to put technology in place and assume it's always working in the background. With any sophisticated technology, there are potential points of failure. An intelligent business continuity service should automate the process of verifying the integrity of backups and ensure that they are bootable. You should be able to review an audit trail of successful backups at any time.

Image-Based Backup

This feature serves as the backbone of a system and adds significant usability in disaster scenarios. With image-based backup users no longer need to pick and choose which files are backed up or worry about saving the most recent draft to the shared/backup folder. A system image includes documents and files but also the operating system, applications, settings, and everything else needed to reconstitute a working server or workstation. By capturing images of a computer at a given point in time, image-based backup makes it possible to recover that machine to its last good working state, no matter what may have gone wrong in the meantime.



Natural disasters can wipe out entire facilities, so it is important to choose a provider with multiple, geographically separated data centers.

Integrity Checks

Backups that are corrupted or infected with ransomware are rendered useless for purposes of restoration. All data should be screened for ransomware and other forms of malicious software. In addition, some incremental backup solutions are subject to data corruption if any link in the "backup chain" was recorded incorrectly. Data integrity must be verified at the level of complete system images.

Virtualization

Virtualization is the process of creating a hardware-independent version of a system or application that can be moved, copied, backed up, and restored. Virtualization can be applied to servers, devices, applications, or entire networks. The virtualized versions act completely independently from the physical devices. This feature keeps businesses functioning when the physical devices fail, minimizing downtime.

Secure Storage

Keeping your data secure, whether it be personal or business, is hugely important when selecting a backup solution. Natural disasters can wipe out entire facilities, so it is important to choose a provider with multiple, geographically separated data centers.



The Datto products we install at your business work with the Datto Cloud, which is specifically designed for the security, dependability, and data integrity characteristics discussed here.

Our Solution, in Partnership with Datto

The importance of comprehensive, reliable data protection is what led us to partner with Datto, which provides a complete backup, business continuity, and disaster recovery solution we can tailor to your needs. The Datto products we install at your business work with the Datto Cloud, which is specifically designed for the security, dependability, and data integrity characteristics discussed here.

If you need to restore an individual file someone accidentally deleted, we can get it back within minutes from local backup. If your server room catches fire, we can restore data and applications just as fast as running images in the Datto Cloud.

For example, Datto's patented Inverse Chain™ technology protects against corruption in the "chain" of incremental backups, ensuring the integrity of every system image. Datto Cloud Deletion Defense protects against accidental or malicious deletion. Cloud backups are immutable, meaning it is always possible to recover any version of a file -- even one that may have been deleted or altered to cover up fraudulent activity. And because backups are screened against ransomware, you can always get back a clean copy of your data.

Looking to get started with a reliable data continuity solution?

Contact us at sales@fencecore.com