



Business Continuity

Learn about smart strategies for planning for the unexpected events with an ironclad strategy to resume your business as quickly as possible with OpenDrives.

Disaster Recovery is a real thing.

Your recovery plan should be too.

OpenDrives storage solutions facilitate smart business continuity strategies.

The most fundamental part of business operations is keeping productivity moving. Let's face it profitable companies are those which are the most productive. If you put a halt to that productivity, without fail you will stop your organization in its tracks. In our digital era, data is a vulnerable single point of failure. Your workers must be able to access, create, and work with your corporation's data to remain productive. Catastrophic data issues are one of the biggest threats to business continuity. Find out how your storage solution can help you strengthen this point of failure and help to ensure a successful business continuity and disaster recovery plan.

Business continuity is a multifaceted topic, with many different factors to consider when devising a disaster recovery plan. The bottom line of continuity, though, is a very simple assumption. Eventually, something catastrophic will happen to your data, so ensuring that your data is consistently and efficiently backed up is mandatory. Things get complicated when you explore the different types of situations that cause data failure and threaten the ongoing operations of your organization. Sure, you might have local mirrored data, but what happens if an environmental disaster occurs at the primary facility?

Prepared?

Don't wait too late to build a recovery plan.

Introduction: A Thought Experiment

If you're game, here's a little thought experiment to consider. Perform a query about "disaster recovery stories" using your search engine of choice. From the top results, start looking through some of the horror stories that companies have to tell about disastrous situations and what they learned from those experiences. Ask yourself, how likely is it that my organization could experience the same or a very similar scenario? The answer should make you fairly queasy. To add to your discomfort, then ask yourself, what would happen to our corporation—what negative impact to our bottom line and core business would occur—if we experienced the same thing? It's okay if the visuals in your head start to make you squirm in your chair.

By this time, you should have already concluded that business continuity and disaster recovery are topics that are very important both to you and your organization. It's probably time to take the issue seriously and start building out more robust contingency plans to avoid these types of situations. Due to the importance of data to your company, the first place to start is to take a very close look at your storage solution and assess the level of confidence you have in its ability to help prevent catastrophic outages. Time and energy spent now thinking these things through can save you tons of heartache down the road.

We won't fault you if you've overlooked some of the business aspects of your storage solution. No doubt, when considering your storage needs and possible solutions, you probably got bogged down in the technical details of sizing, performance, and scalability. These are, of course, very important factors to consider. However, your storage solution is also a major component of your business operations—you don't derive technical benefits from your storage solution, but rather you extract business value from it. And the biggest value that your storage solution can provide is helping you continue to perform business.

Definition

Breaking through the clutter for business continuity.

CIO Magazine cites

RISK MITIGATION

as CIO's top priorities.

Level-Setting Through Definitions

Let's put some definitions in place. At the most basic level, business continuity is the ability to keep working. Whatever your business does, business continuity means you are able to continue those activities which are part of your core business charter. If your business, for example, is to aggregate knowledge, analyze it, then create reports to sell to other companies, then business continuity means the ability to keep aggregating knowledge, keep analyzing it, and keep creating and selling those reports to other businesses, completely unimpeded. It's a pretty easy concept at heart.

Business continuity is something that your organization should analyze from all angles. You should be spending significant amounts of time asking yourself these and other questions. What are all the operational elements that are core to our business, what are all the various things that could go wrong with those core business activities at every step in the process workflow, how can we prevent interruptions in our business operations, and how can we recover more quickly and with minimal disruption to the business in the event of a catastrophe? What you put in place to accomplish all this and create maximum confidence, your ability to continue business in a catastrophe is a disaster recovery (DR) plan.

In most businesses, data is one of the most important assets you own. It is also most vulnerable to catastrophic events, from data corruption and hardware failure to widespread outages at the storage solution layer. As part of your DR planning, you need to explore the various things that could go wrong with your data and your data storage solution, then plan for the worst. The point of this complex but very important exercise is to anticipate the worst that could happen with your data. Once you've done that, then you must find the most robust and efficient storage solution that helps recovery most rapidly from a disaster, or better yet that helps you avoid catastrophe altogether.

Consider This

Factors in Data Preservation and Disaster Recovery Planning.

What is the value of your data?

Data in and of itself isn't the totality of its value. You need to factor in all the costs of acquiring or creating that data, and you also need to assess what that data is worth to your core business. Ask yourself this—if you could not get to your data for an hour, a day, or a week, what would be the ramifications to your business? The answer should reveal just what the value of your data is to you, to your organization, and to your customers. At the end of the day, if your data isn't really integral to your core business, then you can be more loosey goosey with your disaster recovery plan and mechanisms. Chances are, that this is not the case.

Which makes more sense? Recreating or restoring your data?

Costs factor into everything. You sustain costs when you acquire or create data, so you should reasonably be able to calculate the costs to recreate that data. On the other hand, to restore data you also have costs not only in the storage solution and mechanisms to restore data but also in the overhead in time and energy spent to carry out a restoration. Also factor in the time to recreate versus the time to restore. The end result of answering this question should be a clear indicator whether it makes more sense simply to recreate data upon catastrophic failure, or whether restoring it from backups is the more sensible option for your company.

What contractual obligations does your organization have that factors into this decision?

In many industries, your customers, investors, and/or partners may have stipulated very specific requirements for data preservation and disaster recovery. In the media and entertainment industry, this is definitely the case. For example, a completion bond, which is basically insurance to guarantee the completion of filming, often contractually requires and stipulates two complete backup copies of the project files be maintained at all times. This means that production organizations must keep a backup locally and also send one away for safe keeping offsite. Does your organization have contractual obligations that frame your data preservation and disaster recovery plan?

How much is your organization willing to spend on the chosen solution?

At the end of the day, it always comes down to how much you are willing to pay to meet contractual obligations and to purchase peace of mind. Your organization needs to make these assessments soberly and weigh all the costs against all the benefits both real and perceived. Often, your organizational budget more than anything else is the deciding factor, which means you have to account for disaster recovery during your annual budgetary activities.

Business Continuity

Options

Regardless of your answers to the questions in the previous section, you have a choice between a limited number of storage solution options to help maintain business continuity.

Popular recovery storage options:

- **Data mirrored within the same storage system.** No secondary storage system exists in the architecture.
- **Data backed up to another, secondary system which is co-located** with the primary storage system. The secondary system is used for continuity when the primary is unavailable due to outage or maintenance.
- **Data backed up to another, secondary system which is located offsite** from the primary storage. In this instance, data stored remotely is accessible in the instance of an environmental disaster at the site of the primary storage solution.

Ridgeview

Mission critical, best of breed solutions.

OpenDrives, Business Continuity, and Our Differentiators

At OpenDrives, we've designed our storage solutions from the filesystem level on up to support business continuity. Our solutions have a robust feature set that facilitates whatever disaster recovery plan you want to implement, one that meets all the needs of your business. However, when prospects ask us what the best way is to keep the storage system up and running, production moving, and people actively working with data even when the primary storage system is offline, we make a recommendation based on our institutional knowledge and best practices.

To account for environmental situations that may compromise the primary location altogether, we recommend a second storage solution which is lower in cost per-terabyte but still provides acceptable performance as a secondary system. Our Ridgeview storage solution fits this bill well as a secondary system. With a primary storage solution and Ridgeview as a remote secondary, you can replicate the contents of the primary solution's filesystem to the offsite secondary system with complete data integrity. In this way, a user's data can be replicated seamlessly with complete data integrity at an interval of your choosing, whether that interval is a day or a week.

A common problem that other storage solution vendors experience with this type of recommended setup has to do with inefficiencies at the filesystem level. Many vendors have solutions that take complete "snapshots" every single time, then transfer those between primary and secondary systems at the file level. The problem with this approach is that it means the entire data contents of the primary system are replicated over and over, which takes hours to days depending on the overall data set being replicated.

OpenDrives solutions operate at the block level, not at the file level. This means that our solutions only replicate the changed blocks between primary and secondary systems, instead of the entire file. With very large files, we can gain massive efficiencies over systems operating at the file level. After an initial "snapshot" of the primary system takes place, subsequent updates focus only on the differences. This means that with a 100 TB system, other vendors must push that out to the secondary system the entire contents at the file level, meaning that each backup could take hours to days. With OpenDrives, due to our block-level capabilities, all subsequent backups only necessitate the push of changed blocks to the secondary system. This takes minutes to hours, depending on the data set size.

OpenDrives also focuses on data integrity through checksum calculations at the block level. What this means is that we can guarantee data integrity at 100%. Our systems focus on the reduction of data transferred (focusing only on what's changed), and implementing checksum calculations at the block level to ensure data integrity.

Why OpenDrives?

Unique recovery solutions for business continuity.

The Best Solution When You Need It.

When you add it all up, OpenDrives brings to market features that competing vendors just can't do:

- **Block level transfer** to avoid sending entire large files rather than only the blocks which have changed
- **Variable block sizes** instead of preset block sizes
- **Automatic, guaranteed data integrity** carried out by the filesystem through implementation of checksum calculations

OpenDrives solutions have these features built in and ready to implement when you're ready to roll out your business continuity plan. We account for environmental disasters affecting the primary storage system, inefficient data transfer between primary and secondary systems, and data integrity.

Business continuity is not something that should be negotiable or put off for a later date. In most cases, when your users cannot access their data, then your business is stalled. Therefore, you should look at the needs of your organization and then put your trust in a vendor like OpenDrives who knows how to support your continuity plan with fast, efficient, and cost-effective storage solutions with continuity features built right in.



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