



Get Ready for a World of

*WEIRD*  
&  
*Not-Wonderful*  
**BUSINESS  
DISASTERS**

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Get help evaluating the safety, soundness, and effectiveness of your business today.

# Master Disaster to Conquer and Win at Business

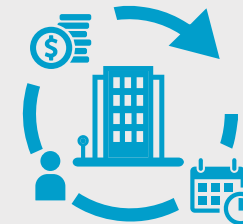
As a business leader, your company's prospects are bright. You have the goals, strategy, and staff to drive success. But are you ready to master disaster?

There are issues you plan for – and ones you could never foresee. You may have a data backup. But did you consider last year's IoT botnet attack, Hurricane Irma's gridlock, or Atlanta Airport's power outage? In this eBook, we also offer some humorous challenges to surmount like Rageful Monsters; Taco Tuesday; and Boryslav, the Ukrainian hacker. Some are real. Some are made-up. But all are plausible.

To thrive when business is weird and not-wonderful, it pays to have a plan. SMBs and emerging enterprises can be especially vulnerable to IT and other disasters, since staff play many roles and these companies have small IT teams.

Planning for a wide range of risks means you can maintain operations in any and every situation. You'll also get quick wins by equipping your workforce to maintain peak productivity, whether employees are in the office or working remotely.

In this eBook, you'll learn how to:



Avoid the financial, business, and customer impacts of business interruptions and unplanned downtime.

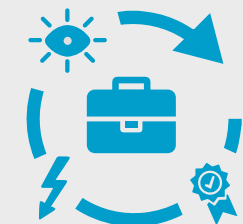
Stay online, productive, and engaged with your customers during a natural disaster, business interruption, cyber-attack, or other major risk or threat.



Empower your employees to be productive, billable, and profitable from anywhere, under any circumstances.



Get insights from businesses like yours – Dorris & Associates, the Student Conservation Association – that have faced down challenging business and IT issues and won.



Secure your business success today. Let's get started.

# 6 Steps to Ensure Business Success in the Face of Weird, Not-Wonderful Disasters

Take this 6-step journey to see if you are prepared for all the risks your business might face. We'll then help you implement a plan to plan for disasters, strengthen business continuity, and boost productivity in the process. Ready to start?

**Start**

#2

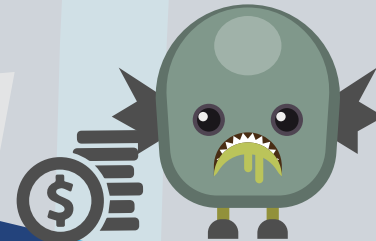
Have you updated your DR/BC plan in the last 6 months?

**Yes** *You're risk-savvy.*  
New risks and threats emerge all the time. 2017 was the year hackers dropped phishing in favor of ransomware.

**No** *Oops! Lose a turn.*  
Your kid downloaded "Rageful Monsters," a new game with a ransomware exploit. Hackers want payment in Bitcoin!



The average SMB experienced 4 cyber-attacks in 2017, spent 42 hours dealing with attacks, and spent \$2,500 per incident.



#4

Have you centralized data storage in the cloud?

**Yes** *Excellent!*  
Everyone in your company can now access your information. Various surveys have found knowledge workers spend 1 to 2 hours a day searching for information.

**No** *Oops! The office Wi-Fi router just died.*  
Lose a turn as you wait for the repair specialist to arrive.



Companies that adopt cloud services strengthen business continuity — and reduce their total cost of ownership (TCO) by 40%.



#1

Do you have a disaster recovery plan that's customized for your business?

**Yes** *You're on your way!*  
Only 32% of all SMBs have a documented plan. Move ahead!

**No** *Lose a turn while you set up your DR/BC team and processes.*  
49% of SMBs say it would take 3 months to recover from a disaster, and 22% never do. Better start planning now!



#3

Can you access your desktops and apps from any location and device?

**Yes** *Terrific!*  
Build a remote team of top talent and give them access to great collaboration tools on the devices of their choice. By 2022, 42.5% of the U.S. workforce will be mobile.

**No** *Not again!*  
Your sales VP is stuck on a plane with only her tablet. Too bad you can't access business apps from any device.



Companies with a BYOD policy save an average of \$350 an employee per year. Employees, who use up to 3 devices, gain an extra 58 minutes a day of work time on average.

DDoS attacks cost as little as \$5 to launch, meaning they are here to stay. However, unexpected downtime costs SMBs like yours \$8,000 to \$74,000 for every hour they're offline.





## Do you use online file sharing and sync to empower your workforce?

#5

**Yes Fantastic!**

Using a file sharing and sync boosts productivity, while keeping confidential information under control. It's easy to stand up new projects, securely share files, and collaborate with teams.

**No Yikes!**

Your star sales guy just lost a USB drive with all your business plans, customer data, and growth targets. Stay up all night, wracked with worry.



Almost 90% of data breaches are caused by human error. Mobile devices and drives can be your weakest link if they store data.



#6

## Do you have outsourced IT support?

**Yes Great news!**

Your IT team is talented, but it's hard to keep up with strategic growth, operations, and security. Leverage managed services and 24/7 support to make your life easier and extend your reach.

**No Oh no!**

You just got hit by a cyber-attack, when your IT director is on a silent yoga retreat in India. Time to make some calls.



20% of business owners spend 6 months and \$50,000 to recover from a cyber-attack.

## How did you do?


If you didn't answer yes to these 6 steps, then it's time to create a solid business continuity/disaster recovery (BC/DR) plan and watch your business navigate disasters with ease.



We'll help guide you through this process. In the next section, we'll work through a checklist to make sure you are ready for anything and everything that might affect your business.



# Finish

Let's do this together. 

# Get Your Business 100% Prepared for the Unexpected

Nothing equals the pain of an unexpected disaster that threatens your business. The old cliché “What doesn’t kill you makes you stronger” is wrong. A much better version is “A few days of upfront planning keeps you thriving in any environment.”

Use this simple checklist to get your business ready to conquer the year.

## Planning for Business Continuity

1. Do you have a comprehensive disaster recovery/business continuity (DR/BC) plan in place for your business?

Yes  No

*Solution: Create a solid plan that considers the full range of issues that could disrupt your business across all its locations. Document your approach for preventing or rapidly mitigating them.*

2. Do you have proper governance for your DR/BC plan?

Yes  No

*Solution: Establish clear roles and responsibilities, escalation processes, and communication processes for various audiences (DR/BC team, employees, clients, and the media). Assign an executive sponsor who will champion your plan.*

4. Do you routinely update your DR/BC plan?

Yes  No

*Solution: Create a process for updating and approving your plan. Consider key business, operational, and technology changes. We recommend updating your plan twice a year, due to the explosion of risks and threats in the marketplace.*

3. Do you routinely test your DR/BC plan?

Yes  No

*Solution: Create and maintain a schedule for testing your plan against a range of scenarios. We recommend testing at least twice a year.*

5. Have you trained employees on the DR/BC plan?

Yes  No

*Solution: Train employees on how to access data and applications from home, personal devices, failover locations, and the cloud before disaster strikes.*

“Moving to the cloud will get rid of the headaches we were experiencing with our on-premises solution.”

— Jason Dorris, CEO, Dorris & Associates

## Putting the Best Technology to Work

6. Would a ransomware attack disable your business?

Yes  No

*Solution: Leverage virtualization to create another level of security between your network and the Internet. Use a hardened browser and containerized apps and data to protect your business against malware. Automate data sync and sharing for fast access to the latest data and files if the worst happens.*

7. Have you virtualized your business apps so that they are accessible from any location or device?

Yes  No

*Solution: Virtualize your workspace with a solution like Citrix Desktop-as-a-Service, so employees can be effective from any location and device (desktops, tablets, phones, and more). Provide one remote access experience across all systems and devices.*

8. Can employees download applications to their desktops – or are such activities automatically prohibited?

Yes  No

*Solution: Use virtualized desktops to provide your workforce with great capabilities, but prevent them from creating a “shadow IT” situation - using apps you don’t know about, can’t manage, and that could infect your network with malware that slows processes or steals data.*

9. Is your corporate email protected against malware and data leaks?

Yes  No

*Solution: Harden your email client with integrated security technologies, such as anti-virus, data leakage protection, and whitelisted websites. Human error is linked to most data breaches, so help your employees by automatically protecting your firm’s data as they connect and collaborate.*

10. Is image management at your firm a 1:many solution, where you can roll out new applications and upgrades across your entire company?

Yes  No

*Solution: Use virtualization and integrated security policies to consolidate on just a single image and application management solution. Put time back in your IT team’s day – or even better, use a partner to refresh your workspace environment on an ongoing basis.*

11. Do you update software within 24 hours after new patches are released?

Yes  No

*Solution: Outsource IT maintenance to a partner to make sure your operating systems and applications are up-to-date and secure. Eliminate vulnerabilities before they occur to avoid giving hackers the advantage of time to attack known issues.*

## Protecting Your Data

12. Do you store your data onsite with a physical server or appliance?

Yes  No

*Solution: If you use on-premises servers for data and business processes, implement offsite data replication and failover. That way, if systems fail you'll be able to maintain business operations and continue serving your customers.*

13. Are you ready to move data to the cloud?

Yes  No

*Solution: Gain the insights and control you need to manage data strategically. Use a solution like Citrix ShareFile. Set role-based permissions and time-limited usage, share large files easily, and protect your business against server failures, ransomware, and mobile device loss by storing files in the cloud. That's especially useful if a natural disaster like a hurricane strikes.*

14. Can your workforce collaborate seamlessly – and work through a network outage or failure?

Yes  No

*Solution: Give your employees easy, near-real-time access to the data they need wherever they are. Use a file storage and sync solution to speed up collaboration.*

15. Do you back up data in real-time?

Yes  No

*Solution: If you're using daily backups, move them into real-time. If systems fail, you can continue work, knowing decisions and processes are based on accurate, up-to-date information.*

16. Have you tested your data backup and recovery plan?

Yes  No

*Solution: If you haven't tested the integrity of your plan, now is the time to start. Make sure that all processes work as intended - or make fixes now, in a non-emergency context.*

## Strengthening Your Servers and Network

17. Are your servers located onsite?

Yes  No

*Solution: If you have onsite servers, you may be carrying too much business risk. Create built-in redundancy to protect your business. Options include replication (good) or high availability computing, replication, and automatic failover (best).*

“

JDL Technologies provides continuous backups of everything in the data center, but we've also chosen to do nightly backups here, so we have two copies of our data at all times.

”

– Jason Dorris, CEO, Dorris & Associates



18. Have you virtualized servers and apps with DR in mind?

Yes  No

*Solution: Ensure 100% continuity of your business processes by virtualizing app workloads. Use frequent – and tested – image snapshots stored offsite or in the cloud.*

19. Do you have guaranteed performance for your network?

Yes  No

*Solution: If you run a high-performance business, you need a high-performance network. Run your apps from the cloud or an offsite data center, with built-in high availability and failover. Gain the benefits of automated services and guarantees including: 99.999% uptime, network monitoring, health updates, and 24/7/365 SLA-guaranteed support.*

Empowering Your Workforce

20. Can you onboard new employees and devices easily?

Yes  No

*Solution: Increase time to value for new hires by providing them with virtualized desktops and apps and mobile capabilities. They can use remote access to work across devices whatever their location. Let employees use their own devices to access business apps and data.*

21. Can your employees collaborate face-to-face with their teams, customers, and other stakeholders?

Yes  No

*Solution: Use a virtual meeting tool to schedule meetings, talk face-to-face, and use screen sharing and chatting to share ideas and drive to decisions.*

# Rate Your Disaster Readiness

Are you prepared for unexpected business disasters or downtime? Count the yeses to score your readiness to fast-track a path to better business continuity and workforce productivity.



1-10

Oops. We're sorry to say your DR/BC needs some work. Call us for a free, no-obligation assessment. We'll help you create a plan that adds rapid value.



11-17

Good work. Your DR/BC program is on its way. You could benefit from some improvements, though. Call us. We're happy to help.



18-21

Great job! You're a DR/BC superstar. Let's see if we can optimize your program even more and improve your cost structure.

## Case Study

# Supporting a Noble, Mobile Workforce with a Modern IT Infrastructure

The Student Conservation Association (SCA) helps its members protect and restore national parks, marine sanctuaries, cultural landmarks, and community green spaces across the nation. SCA's mission is to build the next generation of conservation leaders and inspire lifelong stewardship of the environment and communities by engaging young people in hands-on service to the land.



## CHALLENGE:

This mission-minded organization, based out of Washington, DC, has an extremely diverse and revolving employee base. It also had focused most of its budget on running programs, which resulted in an underinvestment in IT infrastructure. After some years, this had taken a toll.

“We have less money for IT than for-profits,” says Logan Summers, IT Manager. “Another challenge is you absolutely have to make the right decision with IT investments, because you can’t just write a new check if you make a mistake.”

“The biggest problem we had was our aging infrastructure,” says Summers. “For several years, there had been no dedicated IT staff, and our main data center was located in a New Hampshire building that was literally built in the 1700s. When I came on board, we had a lot of issues to work through.”

## SOLUTION:

The SCA issued an RFP for providing remote managed services support for its on-premises operation, which JDL Technologies won. With their partner's guidance, the SCA quickly pivoted to a hosted infrastructure with 16 servers, Citrix Desktop-as-a-Service for 166 staff, Citrix ShareFile, and remote management and maintenance.

“Many of our employees work in a rural part of New Hampshire, and we were having rolling brownouts of power. With our new IaaS solution, we went from the stone age to the space age,” says Summers.

That decision prevented disaster. “Within weeks of making the switch to IaaS, we had a catastrophic failure on our old on-premises server infrastructure. If we hadn’t been working with JDL Technologies, we would have lost all of our data,” says Summers.

## Case Study

# How a Leading Consultancy Faced Down a Ransomware Attack

Atlanta-based Dorris and Associates is a leading human factors engineering consulting firm that helps make workplaces and products safer for their users. The firm provides vital services such as warnings and safety communications, safety audits and analyses, and expert witness and litigation support.



## CHALLENGE:

Like many companies, Dorris and Associates operated an on-premises server which hosted the company's database, application, and files. The company was evaluating cloud technology when it got hit with a ransomware attack. A Ukrainian hacker, who we'll code-name Boryslav, found a vulnerability – the firm's remote desktop access solution.

“With the support of our IT service provider JDL Technologies, we caught the ransomware attack quickly. We were able to isolate it, so no data was stolen, and our network wasn't compromised. However, we still had a problem, because some of our files were encrypted by the attacker,” said Jason Dorris, CEO.

The company's experience confirmed its desire to strengthen its business continuity and disaster recovery. Although Dorris and Associates was able to gain access to its data, it wanted protection against future attacks.

## SOLUTION:

JDL Technologies helped Dorris and Associates accelerate its cloud migration. The company is upgrading to a fully managed Citrix-based Infrastructure as a Service (IaaS) operation, with virtualized applications, desktops, servers, file sharing, and managed security – all provided by JDL Technologies. Dorris's team will have continuous access to their cloud-hosted workstations and core business applications anytime and anywhere, while gaining the assurance of total security and reliability. By placing their trust in JDL's cloud, Dorris and Associates leaders and employees can rest easy, knowing they are now protected against future ransomware attacks.

# Prepare for the Weird and the Worst to Keep Business Wonderful

You know business can get weird. So how do you keep it wonderful?

Schedule a free, no-obligation assessment of your business health. In just 30 minutes, we'll grade your readiness for:

- **Preventing unexpected downtime,** due to IT or other disasters
- **Empowering your mobile workforce** to work securely from anywhere
- **Securing your network** from vulnerabilities, risks, and human error

“

JDL Technologies is now handling everything related to our network, server, desktops, and internet connections. Our data is more secure, and our processes are more efficient.

”

— Jason Dorris, CEO, Dorris & Associates

## Partner with JDL Technologies to Accomplish Your Goals

JDL Technologies provides IT solutions and managed services you can bank your business on. Execute, plan, and grow with confidence, knowing we will support your business and operations to help you perform at peak productivity.

Use JDL FastTrack to accelerate your path to continuous growth. Gain fast, easy, and secure access to hosted apps and desktops, security services, and business continuity and disaster recovery. JDL FastTrack is powered by Citrix, the market leader in virtualization and JDL, your partner in delivering exceptional technology products and service.

**JDL** Technologies

Learn more at [JDLTech.com](https://www.JDLTech.com)

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<sup>17</sup>Adrienne LaFrance, “How Much Will Today’s Internet Outage Cost?,” *The Atlantic*, October 21, 2016, <https://www.theatlantic.com/technology/archive/2016/10/a-lot/505025/>.

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<sup>19</sup>Jonathon Crowe, “Must-Know Ransomware Statistics 2017,” *Barkly*, June 2017, <https://blog.barkly.com/ransomware-statistics-2017>.

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<sup>24</sup>Kevin Casey, “Hybrid Cloud: 10 Notable Statistics,” The Enterprisers Project, August 11, 2017, <https://enterprisesproject.com/article/2017/8/hybrid-cloud-10-notable-statistics>.

<sup>25</sup>Ross Kelly, “Almost 90% of Cyber Attacks are Caused by Human Error or Behavior,” *Chief Executive*, March 3, 2017, <https://chiefexecutive.net/almost-90-cyber-attacks-caused-human-error-behavior/>.

<sup>26</sup>“10 Tips to Prepare for a Cyberattack,” Nationwide, undated, <https://blog.nationwide.com/news/ten-tips-to-prepare-for-cyberattacks/>.

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<sup>28</sup>J.D. Biersdorfer, “After Ransomware Attack, Windows XP Is Not Back From the Dead,” *NY Times*, July 3, 2017, <https://www.nytimes.com/2017/07/03/technology/personaltech/windows-xp-cyberattack-security.html>.

<sup>29</sup>Jenny Staletoch, “Ophelia Poised to Tie a Hurricane Season Record More than a Century Old,” *Miami Herald*, October 9-10, 2017. <http://www.miamiherald.com/news/weather/hurricane/article177950476.html>.

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