



Five Assets of an Effective Data Recovery Strategy

Executive Overview

Data recovery strategies should contribute to operational efficiencies and business initiatives, as well as focus on shrinking recovery windows and aggressive Recovery Time Objectives (RTO)/Recovery Point Objectives (RPO). Companies with truly effective data recovery strategies benefit from greater availability and reduced risks, as well as lower overall costs of recovery management. Effective data recovery strategies should provide a window into your actual application and data usage, and align your recovery management with real-world business challenges.

White Paper

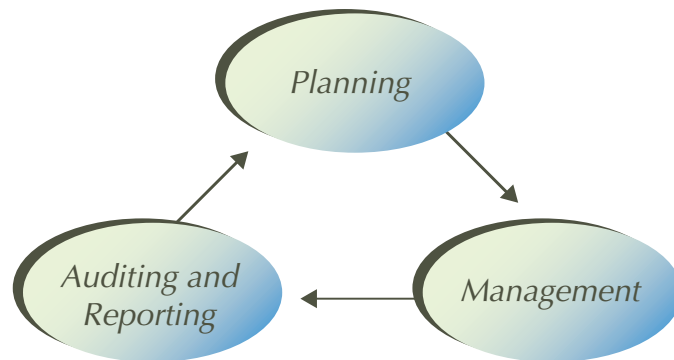
Introduction: Developing an Intelligent Business Continuity Strategy

In today's increasingly competitive and strictly regulated marketplace, achieving an ironclad data recovery strategy is the price of doing business. However, with the increasing costs associated with securing successful backup and recovery, accomplishing that goal is more difficult than ever. Meeting regulatory compliance directives and sorting through the "noise" regarding your data management options—while making sure that you get the most impact for your dollar—is a growing challenge for even the most knowledgeable continuity managers and planners.

In this whitepaper, we will explain the critical elements you need to consider when developing business continuity strategies and choosing a data recovery solution. We'll help you ensure that your recovery strategy maximizes your current assets—and we'll pinpoint ways to ensure your solution meets several key criteria for success. Namely, that it is responsive, application-driven, actionable, and verifiable.

Understanding Current Recovery Management Approaches

To achieve successful business continuity, many organizations employ a three-step recovery management approach, which includes planning, data management and reporting. There are many possible strategies and methods to follow within each step—and an equally varied amount of resulting outcomes. To help clarify this process, we'll cover the critical activities taking place in each step—and offer some key considerations.



1. In the planning phase, companies strive to develop a strategy that ensures recoverability. This step typically includes a business impact analysis (BIA), which helps assess the business impact of data loss when a rapid recovery does not occur. The planning phase helps to determine a company's Recovery Time Objective (RTO)—the time in which a business process must be accomplished to avoid unacceptable consequences in continuity—and its Recovery Point Objective (RPO)—the point in time to which data must be restored (also referred to as the time between the last available backup and the time a disruption could potentially occur).

It's important to note that the static nature of a BIA can prove problematic, especially if the analysis involves a high degree of speculation. As such, companies run the risk of missing the full impact of potential disasters. And, without an accurate assessment of the possible business impact of a potential incident, it is extremely difficult—if not impossible—to assign the right level of attention and detail to the planning process.

2. After the planning phase, many organizations strive to obtain a clearer picture of their specific data recovery requirements. At this point, the focus is on how to best manage the data that will be required for recovery. Data management is particularly visible in most companies; it's here that applications, data, systems and storage come together to serve customers, partners and employees. Techniques such as mirroring, backup and archiving—among others—are often employed.

Data management is a source of specific challenges for some organizations, and a potential turning point for many on the road to improving business agility. In choosing a data management solution, it is important to consider the user and application requirements of managing organizational data. The ideal data management solution helps to identify critical applications and their interdependencies, while minimizing risk across critical areas.

3. Finally, with today's compliance regulations—and growing interest in maximizing storage asset utilization, achieving RTO/RPO objectives, maintaining profitability and lowering costs—it is increasingly important to accurately report on multiple issues surrounding recovery plans. As such, successfully auditing and reporting data is a pivotal step in the recovery management process.

However, focusing too strongly on auditing and reporting data volumes—without obtaining access to the type of information that can provide real business value and insight—can prove problematic in creating a solid long-term business continuity plan.

Creating an Effective Business Continuity Strategy: Five Key Assets

So, how can you be sure that your recovery management approach eliminates unnecessary speculation, assigns the right level of detail to your planning process, focuses on your user and application requirements, meets actual business needs, provides critical insight and successfully aligns with your business objectives moving forward?

There are several key elements of an effective business continuity strategy. When your approach—and chosen solutions—sync with the following five essential characteristics, the result is intelligent data protection.

1. Dynamic

First, your data recovery strategy must be dynamic. In other words, your strategy—and chosen solution—should evolve to meet your current and future continuity needs. It is critical to cover unanticipated requirements that may crop up down the line—not just the static challenges you’ve already come to expect. What’s more, your recovery strategy should align with your current application and data use by monitoring, recovering and restoring your use of files, applications and data in real-time. Addressing ever-changing RTO/RPO objectives, while capturing critical interdependencies, is key. As discussed earlier, your strategy shouldn’t be based on static business impact analyses. Finally, your approach should account for—and ensure—continuous data protection, which means it can enable the restoration of data at any point in time.

2. Application-driven

Second, your business continuity strategy must be application-driven. In other words, your strategy should be based on real-time information from your applications—and how your users interact with those applications. Your applications themselves should determine what information is most critical. As such, your strategy should prioritize the retention and recovery of the data and files that your critical enterprise applications most require. An Application-Driven Data Management (ADDM) approach helps achieve this. Through ADDM, you can gain real-time analysis and monitoring of the applications and data that you use the most in order to intelligently manage data backup and recovery based on the requirements of your critical applications.

3. Actionable

Third, your business continuity strategy must be actionable. This means that your business continuity solution should provide enough information for your organization to make any required changes—and/or recover data—in a timely manner. If your solution does not feature continuous data protection—which takes snapshots of data at logical or critical times—you might not have access to the information required to take immediate action in the face of a disaster. Auditing and reporting activities should provide information that helps you accurately confirm your disaster recovery capabilities—and gain peace-of-mind.

4. Verifiable

Fourth, your business continuity strategy must be verifiable—it should enable you to produce reports and data that help validate your recovery success. To ensure intelligent recovery—and comprehensive continuity management—it is critical to obtain validation and assurance that your critical applications and data can be successfully recovered in the event of a disaster or the loss of primary data processing locations. One key way to accomplish that goal is through virtual recoverability simulations. These can help you gain immediate validation and verification that your data is recoverable. What's more, simulations help you gauge your preparation level for disaster—or disaster recovery—and give you the ability to run “what if” scenarios that evaluate your backup status. However, it's important to note that this can't be achieved without real-time monitoring and analysis functionality.

5. Extend Current Asset Value

Finally, your business continuity strategy should leverage the value of your current assets. To maximize your resources, you'll want to tap into your existing software and storage assets. Ideally, your approach should improve disk utilization and use your current backup, software, disk and tape solutions. It should not require a rip and replace. What's more, a hardware neutral solution that runs on most major operating systems and server technologies—including mainframes, Linux® and many flavors of UNIX®—can help cut costs and make the most of existing resources. Finally, your solution should be intuitive enough to “know” what important files your users or applications need most, and be proficient enough to optimize the capabilities of your existing solution, while defining the data and applications that are most critical to your organization's recovery.

In Summary

As we've seen, in order to build a solid business continuity plan, your data recovery strategy should support your business initiatives and help shrink recovery windows. When your strategy is on target, you can benefit from greater availability and reduced risks, as well as lower overall costs of recovery management. With the right data recovery strategy, you can gain critical insight into your current application and data usage, while successfully addressing your real-world business challenges.

How 21st Century Software Can Help

21st Century Software intelligent data protection solutions can help you ensure that your data recovery strategy—and solution—maximizes your current assets, while being responsive, application-driven, actionable, and verifiable.

DR/VFI® solutions from 21st Century Software enable the automatic identification, backup and recovery of files vital to your mission-critical applications. The newest version of DR/VFI and the DR/VFI for UNIX solution successfully monitor, recover and restore your use of files, applications and data in real-time. As such, DR/VFI solutions dramatically shorten business and IT recovery times based on your ever-changing RTO/RPO objectives and ensure continuous data protection. All of this leads to a truly dynamic solution.

21st Century Software solutions tap into ADDM (Application-Driven Data Management), which allows your applications themselves to determine what information is most critical to your recovery. We utilize real-time monitoring and analysis of your file use to deliver instant insight into what data is being used by your critical applications. This helps to ensure the recoverability of your data at any time based on your requirements. As a result, you can rest assured that you'll know what applications and data you are using right now, the interdependencies that exist between your applications, and what data and applications must be back online right away in the event of a disaster.

Also vital to your data recovery success, our solution takes snapshots of your data at logical—or critical—times in order to deliver access to the information you need to take intelligent action in the face of a disaster. Through virtual recoverability simulations, you can simulate a backup, restore or recovery exercise at any time to identify exposures in the recovery of your key applications. In this way, you gain immediate validation and verification that your data is recoverable. We achieve this by tapping into the real-time monitoring and analysis functionality of DRVFI to help you gauge your preparation level for disaster and give you the ability to run “what if” scenarios that evaluate your backup status. With DRVFI, you can proactively—and accurately—confirm your disaster recovery capabilities for an actionable solution.

Finally, our solution leverages the value of your existing assets. DRVFI is hardware neutral—and runs on most major operating systems and servers—including mainframes, Linux and all varieties of UNIX, such as Solaris®, HP-UX® and AIX®. With DRVFI, you can tap into your existing software and storage assets so you can maximize your current backup, software, disk and tape solutions. Also important, if your current software solution does not inherently know which files are most critical to your users or applications, the 21st Century Software solution can optimize your existing solution so that it can identify vital files and deliver intelligent data recovery.

About 21st Century Software

21st Century Software delivers Application-Driven Data Management (ADDM) solutions that retain and recover data and files required by critical enterprise applications. 21st Century Software's DR/VFI software solutions are used by organizations across many industries and of all sizes to bring intelligence to data protection.

DR/VFI solutions are intelligent, automated, real-time data protection from 21st Century Software. DR/VFI constantly monitors files and data used by enterprise applications to determine which files would be most critical to recover after a disaster, hardware failure, or other calamitous event.

DR/VFI solutions can be critical elements in your enterprise backup and recovery strategies by helping companies address ongoing data management challenges:

- >> *Recovery of critical files:* DR/VFI solutions monitor data usage by enterprise applications to ensure the recoverability of critical data required to run the business.
- >> *Regulatory compliance:* DR/VFI solutions help organizations determine which data and information needs to be retained to comply with governmental and industry regulations.
- >> *Storage utilization:* By retaining only the most critical files and optimizing data management processes, DR/VFI solutions deliver greater insight into data management processes and help improve storage utilization.



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