

IMPROVE OPERATIONAL RESILIENCE BY ORCHESTRATING YOUR DISASTER RECOVERY PLAN

Seven Reasons Automating Your Disaster Recovery Plan is Critical For Your Business



Executive Summary

In today's dynamic and unpredictable technology landscape, orchestrating a robust disaster recovery plan represents an essential way to ensure business continuity and data integrity.

A well-orchestrated disaster recovery plan can help ensure a nimble response to disruptions, minimizing downtime and cost. Through this approach, you can help ensure your organization complies with stringent regulations for protecting sensitive information.

Automating the disaster recovery process reduces the likelihood of human error, which is a major cause of failure in recovery efforts. To ensure disaster recovery plans remain effective over time, your teams need to perform routine tests and updates. In this way, you can effectively address emerging threats and technological changes.

Today, orchestrating a disaster recovery plan represents a proactive approach to risk management, offering a crucial way to safeguard your organization's operational integrity and maintain trust among stakeholders.



The Rising Toll of Data Center Outages

\$100,000

The proportion of outages costing over \$100,000 has soared in recent years.

60%

Over 60% of failures result in at least \$100,000 in total losses.

80%

80% of data center managers and operators have experienced some type of outage in the past three years.

34%

Satisfy compliance requirements

1 in 5

One in five organizations report experiencing a "serious" or "severe" outage in the past three years.

Introduction

Today's businesses rely heavily on their IT infrastructure to maintain operations, serve customers, and fuel growth.

However, the increasing complexity and interdependence of technology systems also leave organizations exposed to a higher risk of disasters that can disrupt business operations. These disasters can range from natural events like hurricanes and earthquakes to cyberattacks, hardware failures, or human errors. When these events occur, having a robust disaster recovery plan is essential to ensure business continuity and minimize downtime.

Traditionally, disaster recovery plans have been manual and resource-intensive processes. However, there is a compelling case for automating your entire disaster recovery plan to enhance its effectiveness and efficiency.

This eBook will explore the key benefits of employing automation to modernize your disaster recovery plan strategy.

**European bank
reduced failover
time by**

75%

**by automating its
disaster recovery plan**

This document covers the following topics:

- 1** Speed and Efficiency
- 2** Reliability and Consistency
- 3** Scalability
- 4** 24/7 Availability
- 5** Cost Efficiency
- 6** Compliance and Reporting
- 7** Testing and Optimization

According to 2022 figures from ITIC, 64% of downtime events are related to human errors, including inadvertent data loss, device mismanagement, and other accidents.

1 Speed and Efficiency

The Cornerstone of Automated Disaster Recovery

In today's dynamic, always-on business landscape, time is a critical factor when disaster strikes. Every minute of downtime can lead to mounting financial losses, reputational damage, and customer dissatisfaction. Therefore, the need for rapid recovery and minimal service interruption is paramount. This is where the automation of disaster recovery plans shines, providing a significant edge over traditional manual approaches.

Immediate Response to Threats

Automated disaster recovery solutions enable organizations to respond instantaneously to emerging threats or incidents. In the event of a disaster, whether it's a cyberattack, a server failure, or a natural catastrophe, monitoring solutions can trigger predefined recovery processes in an automated system. While teams may establish a policy requiring a manager's manual approval to start the recovery process, this recovery can otherwise be fully automated. This automation enables immediate response, ensuring that the organization's systems and data are protected and restored as quickly as possible.

Precision and Consistency

Manual disaster recovery plans rely on human intervention, which can introduce errors and inconsistencies. In contrast, automation guarantees precision and consistency in recovery procedures. Automated workflows can accurately execute predefined tasks, adhering to a standardized recovery process every time. This minimizes the risk of individuals overlooking critical steps or making configuration errors.

Reduced Downtime and Data Loss

Fast and efficient disaster recovery translate directly into reduced downtime and data loss. Automated systems can orchestrate failover to secondary data centers or cloud environments within minutes, ensuring that critical services are restored swiftly. This minimizes the impact on business operations and yields optimal performance against recovery time objectives. This reduced downtime also minimizes any potential financial losses and damage to the organization's reputation.

Automation by Broadcom provides an enterprise-class automation platform to orchestrate disaster recovery plans. The solution provides consistent and auditable execution results. With Automation by Broadcom, teams can initiate plans manually, and have them automatically triggered by any monitoring tool. Regardless of the mechanism, teams can require authorization for workflows to commence, so the organization is protected from accidental execution.



2 Reliability and Consistency

The Power of Automation in Disaster Recovery

Consistency and reliability are two critical pillars of any disaster recovery plan. Ensuring that recovery procedures are executed uniformly and dependably can mean the difference between a minor hiccup and a full-blown catastrophe when a disaster strikes. In this context, automation plays a pivotal role in enhancing the effectiveness of a disaster recovery plan.

Standardized Procedures

Automation enforces standardized procedures consistently, eliminating the potential for human error to exacerbate the impact of the disaster. Every time a disaster recovery process is initiated, it follows the same predefined steps, without variation. This standardization ensures that recovery efforts are predictable, repeatable, and adhere to industry best practices. This significantly reduces the potential for deviations from the established recovery plan. Automation also simplifies training for IT staff, who only need to learn and understand the uniform, automated workflows, rather than potentially less standardized manual processes.

Meeting Recovery Time Objectives

Reliability in disaster recovery is closely tied to meeting recovery time objectives. These objectives define the maximum allowable downtime for specific applications or services after a disaster occurs. Manual recovery processes can be prone to delays and uncertainties, making it challenging to meet these objectives consistently. Automation excels in this regard by orchestrating the recovery activities precisely and efficiently, ensuring that recovery time objectives are consistently achieved and business is optimally returned to normal operations.

Enhanced Failback Procedures

Recovery isn't just about getting systems up and running; it also involves safely returning operations to their prior state once the disaster has passed. Automation brings benefits to the failback phase as well. Automated failback processes can seamlessly move services back to the primary data center or infrastructure, minimizing risks and maintaining consistency during the transition.

Automation by Broadcom ensures consistent execution and dependency management for every step of your disaster recovery plans. The solution enables you to model necessary human actions, including approvals, within a cohesive plan to failover services so you can meet your recovery time objectives. The solution provides real-time status updates, helping teams track progress and gain confidence that goals will be met. This feedback can automatically be shared with other business stakeholders. When the event is over, you can use automation to model and execute all the steps required for a controlled failback to your primary systems.

3 Scalability

A Key Driver for Automating Your Disaster Recovery Plan

In today's ever-evolving technological landscape, businesses are constantly adopting new technologies, generating increasing volumes of data, and expanding their footprints. As a result, the scalability of disaster recovery plans has become a paramount consideration. Traditional, manual disaster recovery approaches often fail to keep pace with these dynamic changes. Automation not only seamlessly accommodates growth but also enhances the overall effectiveness of the disaster recovery plan.

Adaptation to Business Growth

Business growth frequently entails the expansion of IT systems, applications, and data. Manual disaster recovery plans may struggle to incorporate these new elements effectively, resulting in potential vulnerabilities during recovery. In contrast, automated disaster recovery systems can adapt effortlessly to changes in the IT environment. When new systems are introduced, automation can quickly incorporate them into the recovery plan, enabling comprehensive protection without significant manual intervention.

Flexibility in Infrastructure Choices

Modern businesses are increasingly embracing cloud computing and hybrid IT environments. These diverse infrastructure options can complicate traditional disaster recovery strategies, as they require specialized recovery procedures for each platform. Automation helps teams avoid this complexity, offering the flexibility to recover applications and data to any target infrastructure seamlessly. Whether business are running in an on-premises data center, a public cloud, or a hybrid mix of environments, automation ensures that the recovery process remains consistent and reliable.

Risk Mitigation and Business Continuity

In today's competitive landscape, downtime is not an option. Scalability in disaster recovery is essential for mitigating risks and ensuring business continuity. Organizations need a disaster recovery plan that can scale to address the situation effectively. Automation provides the agility and adaptability required to minimize the impact of disruptions and keep critical business operations running smoothly.

With Automation by Broadcom, you can quickly adapt disaster recovery workflows as technology changes. With the solution, you can incorporate disaster recovery plans into the go-live process for any new technologies. In this way, you can ensure disaster recovery plans never get out of step with production systems. The solution is modular, which means you can quickly apply changes to disaster recovery plans. For example, if you move to a new cloud provider, it can be fast and easy to update the disaster recovery plan to reflect that change. Workflows can include optional processing for testing scenarios and fast decommissioning, helping you manage overall infrastructure costs.

4 24/7 Availability

The Continuous Protection of Automated Disaster Recovery

The modern business operates around the clock, serving global users, customers, and partners. This continuous operation makes 24/7 availability a critical requirement for disaster recovery plans. Relying on manual recovery processes, teams can struggle to meet this demand. These approaches rely on human intervention, which introduces challenges, for example, if issues arise during off-hours or when key personnel are unavailable. Automation addresses these challenges by providing uninterrupted protection and rapid response capabilities, ensuring that systems and data always remain secure and accessible.

Immediate Response to Unforeseen Threats

Disasters and disruptions do not adhere to business hours. They can strike at any moment, including in the middle of the night or during a weekend or holiday. Automated disaster recovery solutions are designed to respond immediately to unforeseen threats, without waiting for human intervention. When an incident occurs, automated systems can detect it and trigger predefined recovery processes in real-time. This swift response minimizes downtime and data loss, protecting the organization's operations and reputation.

Seamless Failover and Failback

Automated disaster recovery plans excel in orchestrating the seamless failover of critical systems and applications to secondary data centers, cloud environments, or backup infrastructure. This capability ensures that services remain available to users without interruption, even during a disaster. Plus, when the disaster has been mitigated, automated failback procedures can transition operations back to the primary environment effortlessly, maintaining 24/7 availability throughout the recovery process.

Reduced Dependency on Human Availability

Manual disaster recovery processes can be heavily reliant on the availability of key personnel with specific knowledge and expertise. During a disaster, these individuals may not be readily accessible, leading to delays in recovery efforts. Automation mitigates this dependency by executing recovery processes independently of human intervention. This autonomy ensures that disaster recovery plans remain effective and reliable, even when critical staff members are unavailable.

Automation by Broadcom features component workflows that you can assemble into disaster recovery and data center workflows, enabling a modular disaster recovery strategy. Monitoring systems can start disaster recovery plan workflows, facilitating fast but controlled execution. Workflows can have authorization steps, enabling individuals to confirm that disaster recovery plans should be instigated. Publishing disaster recovery plan workflows on self-service portals enables a broader community to initiate disaster recovery processes on a 24/7 basis. For strengthened security, you can also require additional authorization steps before execution.

5 Cost Efficiency

The Economic Advantages of Automating Your Disaster Recovery Plan

In the realm of business operations, cost efficiency is a crucial consideration. Decision-makers seek to maximize their resource utilization and minimize expenses. When it comes to disaster recovery planning, automation emerges as a powerful tool for achieving these objectives. Automating your disaster recovery plan not only enhances your recovery capabilities but also offers significant cost savings in the long run.

Reduced Downtime Costs

Downtime can be extremely costly for businesses. Every minute of inactivity translates into potential revenue loss, damage to reputation, and dissatisfied customers. Automation significantly reduces downtime by expediting the recovery process. Rapid failover and seamless failback, both facilitated by automation, help minimize the impact of disruptions. This directly translates into cost savings by mitigating the financial losses associated with extended outages.

Reduced Labor Costs

Manual disaster recovery procedures require dedicated personnel to execute recovery tasks, especially during off-hours or emergencies. These efforts therefore come with associated labor costs, including salaries, benefits, and overtime pay. Automation reduces the dependency on human intervention, resulting in lower labor costs. By offloading these manual efforts, IT staff can dedicate more time and focus on strategic tasks instead of routine recovery procedures. Through automation, teams can optimize resource allocation and potentially minimize the size of the IT workforce required for disaster recovery.

Faster Return on Investment

While implementing an automated disaster recovery plan may involve an initial investment, teams can achieve cost savings and improved operational efficiencies that deliver a fast return on investment (ROI). The reduction in downtime costs, labor expenses, and hardware investments can outweigh the upfront costs relatively quickly, making automation an economically advantageous choice for businesses.

Automation by Broadcom enables you to react to disasters faster, minimizing their potential impact on the wider business. Having a predefined and documented procedure reduces the costs of testing cycles, which allows for more frequent testing. In the process, you can boost stakeholder confidence in your disaster recovery plan and more efficiently and objectively demonstrate preparedness to regulators.



6 Compliance and Reporting

Meeting Regulatory Requirements with Automated Disaster Recovery

In today's highly regulated business landscape, compliance with industry-specific and government-mandated rules is non-negotiable. For organizations of all sizes and across industries, disaster recovery planning represents an essential component of compliance. Automated disaster recovery plans offer a distinct advantage in meeting these regulatory requirements. Automation provides support for the documentation, auditability, and reporting that are needed to demonstrate adherence to the rules and standards governing data protection and business continuity.

Detailed Documentation and Audit Trails

Automated disaster recovery solutions generate detailed documentation of every step in the recovery process. This documentation includes information on the initiation of recovery procedures, resource allocation, system configurations, and the recovery timeline. These comprehensive records serve as audit trails that regulators can review to ensure that the organization's disaster recovery plan aligns with compliance standards. Manual disaster recovery processes may lack the level of detail and accuracy needed to satisfy regulatory scrutiny.

Efficient Reporting for Audits

Regulatory audits are a routine part of doing business in many sectors. When auditors request information related to disaster recovery preparedness, organizations with automated disaster recovery plans are well-equipped to respond efficiently. System-generated documentation and audit trails can be readily provided, simplifying the audit process. This efficiency not only saves time but also demonstrates the organization's commitment to compliance and data protection.

Reduced Legal and Financial Consequences

Failure to comply with disaster recovery regulations can present significant legal and financial consequences, including fines, penalties, and reputational damage. Automated disaster recovery plans significantly reduce the risk of non-compliance by ensuring that all aspects of the plan adhere to the required standards. This risk mitigation can translate into substantial cost savings by helping organizations avoid regulatory penalties and preserve the organization's reputation.

Automation by Broadcom records the activity and actions of every step in your disaster recovery plans, providing comprehensive reporting for regulators and IT auditors. These workflows and defined activities offer the documentation you need to demonstrate your organization's readiness in the event of a disaster.



7 Testing and Optimization

The Continuous Improvement Cycle of Automated Disaster Recovery

An often-overlooked but critical aspect of disaster recovery planning is the ability to test and optimize recovery procedures. In a rapidly evolving technological landscape, disaster recovery plans can quickly become outdated and ineffective. Automation in disaster recovery not only streamlines testing but also facilitates a continuous improvement cycle, ensuring that your disaster recovery plan remains robust, adaptable, and reliable.

Regular Testing, Without Disruption

Traditional disaster recovery testing can be cumbersome, resource-intensive, and disruptive to business operations. Automation revolutionizes this process by enabling non-disruptive, automated testing. Organizations can simulate disaster scenarios and recovery procedures, without having an impact on production environments. This allows for more frequent and comprehensive testing, which is essential for identifying weaknesses and vulnerabilities in the disaster recovery plan.

Testing Efficiency and Refinement

Automation ensures the efficiency and precision of disaster recovery testing. Test scenarios are executed consistently, using predefined workflows. This reduces the risk of human error and ensures that testing is conducted according to a standardized process. Additionally, automation can generate detailed reports and metrics, providing insights into the effectiveness of recovery procedures and helping teams make informed optimization decisions. After each test, teams can evaluate the results, identify areas for improvement, and make necessary adjustments. Automation allows for the swift implementation of these improvements, ensuring that the disaster recovery plan evolves to meet changing business needs and emerging threats.



7 Testing and Optimization (cont'd)

Adaptation to Changing IT Environments

As organizations evolve, so does their IT infrastructure. New technologies, applications, and data sources are continually introduced. When teams rely upon manual disaster recovery testing, they struggle to keep pace with these changes, often resulting in outdated recovery procedures. However, automation is inherently adaptable. It can accommodate new systems and configurations seamlessly, ensuring that the disaster recovery plan remains aligned with the evolving IT environment.

Validation of Recovery Point and Time Objectives

Automated disaster recovery testing is essential for validating recovery point objectives and recovery time objectives. These metrics define the maximum allowable data loss and downtime during a disaster recovery scenario. Regular testing ensures that the organization can meet these objectives consistently. Automation provides the means to test and validate recovery point and recovery time objectives accurately, helping instill confidence in the disaster recovery plan's ability to meet business requirements.



Automation by Broadcom allows your teams to test on a regular cadence, without high costs or operational impact. The solution offers granular reporting, service level analytics, and graphical representations that enable you to enhance disaster recovery plans, so you can boost efficiencies and reduce recovery time objectives. By testing and enhancing more frequently, plans can remain optimized, ensuring they'll deliver maximum performance and results when disaster strikes. This optimization helps boost the confidence of business stakeholders and auditors.

What Can Be Achieved

In today's digital landscape, automation is crucial for maintaining business continuity and protecting vital data. Automating disaster recovery plans minimizes human error, which is a leading cause of downtime. Through automation, teams ensure consistent and rapid response to crises, and significantly reduce downtime and related costs.

Automation by Broadcom is an indispensable tool for orchestrating disaster recovery plans, addressing the paramount need for data protection and swift recovery. The solution delivers unparalleled capabilities for automating complex workflows, significantly reducing your organization's risk of having user errors introduce outages. By automating tasks, the Broadcom solution ensures precise, consistent execution, enhancing the reliability and effectiveness of disaster recovery practices.

Utility Company | Keeps the Lights on by Automating Its Disaster Recovery Plan

“There are 60 stages in our disaster recovery process. Prior to implementing Automation by Broadcom, a site switch would take 24 to 48 hours—now it completes in under two hours.”



European Bank | Delivers an Error-Free Disaster Recovery Plan Process

“During a recent test, we switched the core banking system to the disaster recovery site in 80 minutes. The next day, we returned it to the primary data center site in 40 minutes. Using our previous manual methods, these efforts would have taken four times longer.”



Automation by Broadcom delivers a differentiated blend of workflow automation, scalability, real-time insights, integration capabilities, and ease of use. This solution is an invaluable asset for establishing optimized disaster recovery planning in your organization. With the solution, you can ensure preparedness and swift recovery from disasters, protecting vital data and maintaining operational continuity.

➔ Interested?
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