

# **Business Continuity & Disaster Recovery**

Ensure Uninterrupted Access to Your Data by Circumventing Storage Failures and Outages

#### **BENEFITS**

- Continuous business operations despite equipment failures
- Fast recovery from major outages (minimize RPO and RTO)
- Mitigate risk of data loss and easily restore data to last known good state
- Replace failing or aging storage hardware non-disruptively
- Immediately applicable to existing storage - start seeing benefits right away
- Business resiliency across diverse storage equipment

To be always up and running is the goal of all IT services as businesses cannot afford failures and disruptions. The resiliency of business operations depends on how quickly mission-critical data and services are recovered and restored when problems occur. As the storage infrastructure hosts the most precious assets of your business – your data – any failure will have a detrimental impact on operational continuity.

For BC/DR, three best practices have proven to be optimal for minimizing or even preventing the negative impact of storage failures on business operations.

- First is local redundancy with automated failover to circumvent component issues and system failures.
- · Second is remote redundancy combined with recovery at another location to counter site-wide problems (e.g., due to disasters).
- · Lastly, returning to the last-known good data status to mitigate any unwanted change (e.g., human errors or external attacks).

Implementing the three lines of defense is mandatory for IT teams and they seek a reliable storage solution that ensures uninterrupted data access across evolving infrastructures and business needs

## **Improve Business Resiliency with DataCore**

Providing data high availability and BC/DR solutions for over two decades across thousands of customer environments has enabled us to integrate the three lines of defense into our bestin-class SANsymphony software-defined storage offering. You can easily and immediately incorporate these BC/DR best practices for your new or existing SAN and HCI environments – across diverse storage/server vendor equipment.

Optimized to minimize or eliminate data loss (planned as RPO) and interruption to data access (planned as RTO and measured as RTA), SANsymphony can enhance your preparedness to address unexpected outages and disasters and weather through these disruptive events.



# Zero Downtime Since 2010

DataCore SANsymphony works extremely well from a high availability standpoint and allows for proactive and reactive failures - while still providing high performance. If one site goes down, the city can still function, and end-users don't even know there is a problem. With DataCore, we can always stay up.

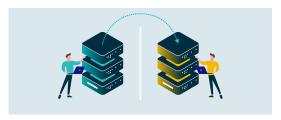
Rebecca Chike - Systems Supervisor - City of Carmel



### BC/DR Best Practices Using SANsymphony: Three Lines of Defense

#### Easily Circumvent Storage Failures

To achieve high availability with local redundancy, SANsymphony uses **synchronous mirroring** creating data copies in a local or metro cluster. Active-active copies of data are continuously mirrored at high speeds between physically separate locations within a room, campus, or metropolitan area. In the case of an outage or storage failure, automated transparent failover ensures non-disruptive access from the redundant copy, ensuring operational continuity.



Failover and failback are zero-touch processes that happen without any manual intervention or scripting. And because of the near real-time speed at which they happen, both Recovery Point Objective (RPO) and Recovery Time Objective (RTO) values are maintained at zero and there is no data loss, transaction loss, or application impact.

### Enable Recovery at a Remote Secondary/DR Site

To mitigate the impact of regional outages due to a disaster, SANsymphony asynchronously replicates data over a WAN between the primary site and the remote/DR site to achieve data redundancy. Longer network latency over these long distances precludes synchronous data copies. Data replicated to the DR site is available for application or users based on policies and conditions established for switching over to the contingency infrastructure.



Asynchronous replication and site failover can also be used for controlled site switchover for scenarios such as planned site maintenance, scheduled power outage, etc. Since these are activities that can be planned and workloads are first quiesced, RPO and RTO can be kept very low (down to zero).

## 3 Ensure Point-in-Time Recovery of Data

Recovery from incidents such as accidental data deletion, ransomware attacks, and logic errors cannot be addressed through data replication because the unintended changes also apply to the redundant copy. To mitigate data loss during these circumstances, SANsymphony enables point-in-time copies to be made before the unwanted changes occur. There are three ways of doing this with SANsymphony:



- Native integration with backup tools (such as Veeam) accelerates creation of backup copies
- Differential or full volume snapshots can be taken to create data redundancy over time
- Continuous data protection (CDP) is a useful functionality for more granular data recovery down to the second. In the case of a ransomware attack, CDP enables you to roll back to a known good point in time just before the breach happened, thereby achieving close to zero RPO and very fast RTO.

Contact DataCore and talk to our storage experts to incorporate the best BC/DR technique for your IT environment. Build a reliable and resilient storage infrastructure that ensures data availability and access all the time.

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#### Discover the Ultimate Flexibility of DataCore Software

DataCore Software delivers the industry's most flexible, intelligent, and powerful software-defined storage solutions for block, file, and object storage, helping more than 10,000 customers worldwide modernize how they store, protect, and access data. With a comprehensive product suite, intellectual property portfolio, and unrivaled experience in storage virtualization and advanced data services, DataCore is The Authority on Software-Defined Storage. www.datacore.com

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