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## Repairing the Broken State of Data Protection

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*“Data protection has become the most critical IT discipline as most businesses in the modern world can no longer survive without their IT function. As a result, we are beginning to see the next generation of data protection solutions appear as legacy processes become increasingly burdensome, expensive, and unreliable.”*

**FRED MOORE**  
PRESIDENT  
HORISON, INC

Oracle’s modern data protection solutions address both business continuity and disaster recovery, reducing IT costs and simplifying data protection processes.

## IT Security Is a CIO’s #1 Concern

Organizations and the general public have experienced large numbers of online security breaches in the last few years, and such attacks continue to increase in size and severity.

The high-profile data breaches of companies such as Target, Home Depot, and Sony proved that no one is safe from cyberattacks as organized activities to access data become more sophisticated. These violations not only jeopardized personal customer data, severely damaging consumer trust, but also resulted in hundreds of millions of dollars in lost revenue for the companies.

Managing security risks requires an effective business resilience and data protection plan, covering continuity of operations, backup and recovery of critical information, disaster recovery (DR), and routine testing.

## Would Your Business Recover if Data Records Were Breached, Corrupted, or Destroyed?

Data loss costs companies worldwide billions of dollars per year, while unplanned downtime costs the average company nearly US\$1 million per year. With 64 percent of companies reporting disruptions in the last 12 months, it is easy to see that data protection and DR are more important today than they have ever been. Yet dissatisfaction with data protection is at an all-time high.

Today’s data protection architectures are overly complex, expensive, and outdated, causing businesses to spend too much time and money on backup and recovery. Many architectures focus solely on short-term business continuity, typically using replication, snapshots, and deduplication to scale-out their backup environments. This leaves businesses inadequately prepared for online attacks and major disasters.

Additionally, these systems treat all data the same, creating multiple backups of the same data rather than identifying and moving original data to an archival storage system. Storing many copies of data in backup files has major implications when it comes to storage costs and efficiency, especially considering that nearly 80 percent of stored data is seldom, if ever, accessed after 90 days.

Sprawling backup and recovery systems also lack modern data protection features, such as seamless cloud integration. Leveraging the cloud as part of a backup solution can improve data protection while lowering costs.

## A Modern Approach

Adopting a diverse media strategy is the name of the modern security game. Businesses that take a holistic, multifaceted approach to data security will not only be better prepared and protected, but will be more trusted in their marketplace.

Ironically, a more comprehensive data protection strategy can actually reduce the costs of IT by simplifying processes and reclaiming used disk space.

- » **Reduced IT Costs.** The costs of data storage are exploding, along with the amount of data to store and protect. Utilizing the right technology to simplify backup and archive processes can dramatically reduce storage costs. By moving long-term cold data to an archive environment, businesses can save money—in some cases, up to 80 percent. Further savings of 2–5x can be driven by leveraging tiered storage within on-premises, hybrid, and cloud deployments.
- » **Simplified Management.** A simplified and centralized data protection solution provides intelligent, policy-based management that allows for frequent recovery testing and supports multiple tiers of storage. Seamless integration of existing backup structures with disk, tape, and the cloud creates a data management system with a single point of control, which ultimately simplifies data growth, analytics, and troubleshooting.
- » **Peace of Mind.** Integrating a more comprehensive, modern approach to data protection includes full back-up and DR capabilities that support regular recovery testing. Complete DR protection is ensured through integrated data integrity protocols and .99999 system availability, ensuring full restore capability and eliminating the risk of data loss. A complete data protection solution offers businesses and customers greater peace of mind by knowing any interruption or natural disaster can be effectively handled.

## Complete and Secure Data Protection

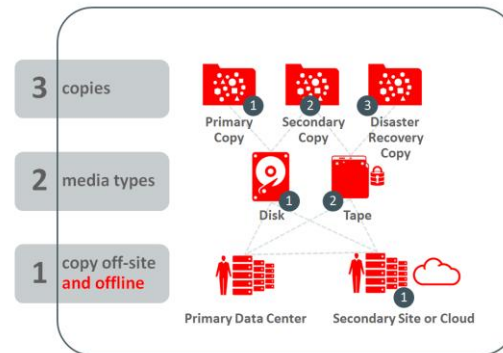
Oracle's modern data protection solutions address both business continuity and DR using a simple two-step approach:



Business continuity provides protection against instances of data corruption or loss while DR provides protection against partial or complete data center loss or destruction. In addition, by moving long-term cold data to an archive environment, primary storage can be freed up and overall storage costs can be reduced.

An important component of Oracle's data protection approach is the 3-2-1 rule: three copies of data across two different technologies with one copy off-site and offline.

### 3-2-1 Rule and the Modern Data Protection Architecture



This simple approach provides a first line of defense by utilizing snapshot, replication, and data deduplication as a first line of defense. Additionally, the establishment of offline tape copies prevents logical corruption and more predictable restoration of large data sets, creating a second line of defense.

Finally, seamlessly integrating with the cloud for remote storage improves DR capabilities while lowering costs. By following this modern data protection architecture, Oracle helps provide protection from many sources of downtime, such as human error, hardware failure, environmental damage, or deliberate sabotage.

Oracle's comprehensive approach, paired with regular system testing, allows for protection against instances of data corruption and against data center loss or destruction while meeting recovery time objectives (RTO) and recovery point objectives (RPO).

When businesses fail to implement comprehensive data protection strategies, disaster strikes. A simplified and modern data protection strategy with off-site and offline backups, archiving, and DR will be the difference between peace of mind and becoming the next front page story.

### Learn More

To find out how Oracle can provide a more comprehensive data protection solution for your business, please visit [oracle.com/got/archive](http://oracle.com/got/archive) or call +1.800.ORACLE1.



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