Oracle Data Protection

Economical, Simple, and Complete Solutions for Business Continuity and Disaster Recovery

To understand the current state of data protection, it is necessary to go back to 2004 and the advent of the purpose-built backup appliance. The benefits that were marketed sounded very promising: less data to store thanks to new data deduplication technology and the inherent simplicity of a single box for data protection. The prospect of lowering storage costs while simplifying data protection had CIOs cheering. Why? Because the perception was that the purpose-built backup appliance would be a panacea for their biggest data protection challenges. Fast forward to today, more than ten years after the purpose-built backup appliance became a popular means of enterprise data protection. Are CIOs still cheering? According to IT storage surveys, the answer to that question is a resounding "No."[1,2] When asked about their highest IT priorities, "fixing data protection" is almost always listed in their top three — primarily due to ever-increasing cost and complexity — two pain points the purpose-built backup appliance was advertised to solve.

The Broken State of Data Protection

According to Gartner, the primary concerns regarding the current state of data protection are: cost, complexity, and capability[3]. Budgeting for data protection means considering all the costs, which include equipment acquisition, integration, scaling, maintenance, and staffing. Complexity comes with the need to support existing systems, virtualization, and mobile devices. And, perhaps most challenging for any data protection solution is the need to consistently meet service-level agreements (SLAs) for backup, restore, availability, and performance. By leveraging Oracle's breadth of data protection expertise and portfolio of integrated software and hardware technology, you can ensure your top data protection concerns are addressed with a solution that is economical, simple, and complete.

Optimizing Data Protection with Archive

The purpose of any data protection system is to restore your company's lost or corrupted content under the widest possible range of circumstances. Depending on the severity of the event, an IT restore might ensure day-to-day business continuity or successful recovery from a major disaster. Multiple tiers of storage, each delivering unique performance, cost, and availability benefits, are needed to maximize the overall

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[1] IDC Worldwide Purpose Built Backup Appliance Tracker
[2] ESG Research Report, IT Spending Intentions Survey
[3] Gartner, Best Practices for Repairing the Broken State of Backup

"Oracle is a stable long-term partner when considering a data-preservation archive system. It has great technology, and it continues to invest in new development. We felt very confident in the robustness of its storage solutions and its product roadmap. The expansion capabilities of Oracle's StorageTek SL3000 modular tape library are impressive, allowing it to store more data than competing solutions, while Oracle ZFS Storage Appliance gives us quick access to data."

JAMES LOWEY
VP OF TECHNOLOGY
TRANSLATIONAL GENOMICS RESEARCH INSTITUTE

economics, simplicity, and efficiency of your data protection system.

The concept of archiving as a means of optimizing data protection systems may be less obvious. Instead of keeping backups for years, an archive reduces costs, eases administrative burden, and improves backup performance. A true data protection archive serves as a separate, lower-cost storage repository for static files (not backups) that are needed for long-term retention and accessibility. In addition to being ideal for e-discovery, an archive optimizes your data protection system by increasing its backup and recovery performance while lowering its overall costs.

Three Keys to Success

A well-designed data protection architecture has three key characteristics:

» **Economical.** Augmenting a data protection system with an archive component drives down data protection costs significantly. By backing up only what you need and archiving the rest, you benefit from much lower backup software licensing costs (usually capacity based) and reduced capacity growth for your high-performance, primary backup storage tier.

» **Simple.** Matching storage technology to the RPO/RTO of the backups being protected shouldn't be complicated. For example, backups for time-critical business functions are stored on higher-performance, higher-cost storage technology while backups for less time-critical functions are stored on lower-performance, lower-cost storage technology. Also, when "cold" files are moved to an archive, they are no longer at risk of becoming a performance bottleneck for backup and recovery operations.

» **Complete.** A second tier of data protection that is offsite and offline serves as a simple, fail-safe option for recovering the enterprise should the unthinkable occur. Commonly known as the "3-2-1 rule." it states that you always have three copies of the data – using two different storage technologies – with one copy of the data offsite and offline.

Customize a Solution with Oracle

Oracle offers an economical, simple, and complete approach to data protection. First, only back up what you need and archive the rest. Second, add a fail-safe layer of protection that is offsite and offline to serve as a last line of defense for disaster recovery. With a complete portfolio of data protection software and storage technology options, Oracle is well positioned to help you architect a complete solution for your enterprise. Contact an Oracle data protection expert now to learn more.

"Up to 70 percent of the capacity of every disk currently deployed could be reclaimed through the proper application of data hygiene and archiving…"

JON TOIGO
SEARCH CIO-MIDMARKET
STORAGE TIERING AND STORAGE
RECLAMATION REDUCES BUDGET STRAIN

"If a hacker with a grudge managed to break into CERN's data center, he could delete all 50 petabytes of the [online] disk-based data in minutes."

ALBERTO PACE
HEAD OF DATA STORAGE, CERN
THE ECONOMIST

"Since the tapes are offline, they're protected from such software bugs."

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VP ENGINEERING AND
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