Tributary and IBM: business-savvy data protection

A backup virtualization solution that redefines enterprise data protection, allowing IT departments to store data from any computing platform to any back-end storage architecture

IBM

Highlights:

- Enables centralized management and consolidation of enterprise-wide data protection infrastructure

- Combines innovative data protection software and world-class servers and storage

- Solves interoperability challenges, allowing any-to-any data protection workflows

- Works with legacy and new computing and data storage platforms

- Integrates seamlessly with existing data protection environment

- Supports limitless cache, tape library attachment, replication and deduplication

Data volumes are rising more quickly than many organization anticipated. Across many different industries, IT departments are struggling to protect valuable data from a variety of threats, balance long-term archiving with fast retrieval and contain costs.

The reason this is so challenging is that different computing platforms typically require dedicated direct-attached storage devices that support a certain operating system, backup utility or application. These single-purpose technologies are not designed for flexibility or sharing. Each one must be managed separately. The inability to back up data from one system using another system's resources makes it very difficult to manage data storage efficiently.

Tributary Systems, Inc. (Tributary) and IBM offer an entirely new way to manage enterprise storage. This robust solution is designed to help organizations simplify complex storage infrastructures, improve utilization and efficiency, and automate how and where different kinds of data are stored.

Solution Overview

In today's cost-cutting environment, businesses are forced to do more with less. Even short-term interruptions to data availability can have a devastating impact on productivity, profitability and customer service. A comprehensive data protection strategy is essential.

What most providers offer, however, is a one-size-fits-all approach. Disk and tape vendors push their respective platforms exclusively, even though the majority of organizations use (and need) a mix of disk and tape. All data is treated equally, even though users intuitively understand that certain kinds of data are more operationally critical, while other kinds are more historical. In addition, available solutions do not address the issue of disparate storage resources that can't be combined or shared.

The solution from Tributary and IBM offers an unprecedented approach to enterprise-wide data protection management, giving organizations a new way to utilize legacy and new storage platforms more efficiently, store increasingly large volumes of data securely and help improve return on investment (ROI).

This solution combines Storage Director® software from Tributary and IBM System x® computing platforms to create a powerful backup virtualization appliance. With this virtualized storage environment, organizations can store data from any front-end computing platform on any back-end storage technology, regardless of previous interoperability limitations.

Tributary's Storage Director software, running on IBM System x servers, becomes a centralized controller of storage workflow. It integrates multiple backup applications, consolidating both operation and storage infrastructures. Storage Director software enables unified, policy-based backup for multiprotocol, multi-vendor, multi-host environments. It supports limitless cache (up to multiple petabytes); physical tape library attachment; local and remote replication; remote tape vaulting; and deduplication — all from the same solution. Storage Director software also enables data compression (up to 15 times on some systems) in cache, tape and replication, as well as encryption.

What this means is that financial institutions, retailers, healthcare providers and others — even those with the most complex and demanding needs — can take a "business-savvy" approach to storage. In other words, organizations can establish a custom set of rules that govern where different kinds of data are stored and how quickly they can be retrieved.

Instead of managing data silos individually, a single team or administrator can set up, manage and update enterprise-wide data protection workflows from a browser-based interface. Instead of leaving available backup resources idle due to interoperability concerns, organizations gain access to all available storage sources all the time. Instead of storing all data from one front-end platform in the same storage location, organizations can choose different destinations based on the type or quality of the data.

The solution enables all of this because Storage Director software emulates the storage workflows that front-end platforms are already configured to support. Virtualized backup gives organizations a remarkable degree of flexibility.

For example, because Storage Director software can send any volume to any library, using any backup application or utility, the solution allows organizations to consolidate storage volumes and use less technology to store the same amount of data. Organizations can plan technology upgrades more easily, replacing older mainframes or servers with more efficient platforms — without the typical concerns that the associated legacy storage platforms will be rendered unrecognizable.

In the same way, organizations can upgrade older storage architectures, knowing that backup processes for legacy front-end platforms can continue without interruption.

Storage Director software can provide a significant increase in storage performance. It helps eliminate the risk of bottlenecks caused by the limited speed at which data can be transferred to a specific array of disk or tape libraries. With this solution, incoming data is very quickly ingested to a disk layer powered by world-class IBM storage systems. This results in a very small backup window. As soon as the window closes, front-end systems are released to return to business-critical activities, so backups can be performed without affecting enterprise productivity.

The solution from Tributary and IBM also gives organizations a way to add disaster recovery capabilities to an overall data protection strategy. Administrators can send data to remote sources just as simply and easily as local ones. This creates opportunities to vault data in multiple geographic locations, combining disk and tape libraries to improve redundancy.

Solution Benefits

The solution from Tributary and IBM gives organizations many ways to rethink data protection and create a solution that aligns with unique business needs. This approach provides the following benefits:

- **Higher efficiency.** Organizations can expect to move data into storage quickly, within a very small backup window. Business-critical data can be retrieved quickly if necessary. Policies governing which data is stored in which library can be set up once and then run automatically. The solution helps optimize available storage resources, allowing all libraries to be used at any time, regardless of where data originates. Higher efficiency also helps organizations comply with long-term data protection regulations, such as the Sarbanes-Oxley Act (SOX).
- **Lower total cost of ownership (TCO).** Expect a reduction in physical tape library capacity, smaller space and power requirements and the ability to free up staff for more critical tasks. Creating copies of data in multiple digital and geographic locations improves overall reliability and helps reduce the risk of loss, while offering a cost-efficient disaster recovery solution. The solution also enables organizations to use legacy tape technology and media with newer IBM computing platforms running IBM AIX®, Linux® and Unix® operating systems.
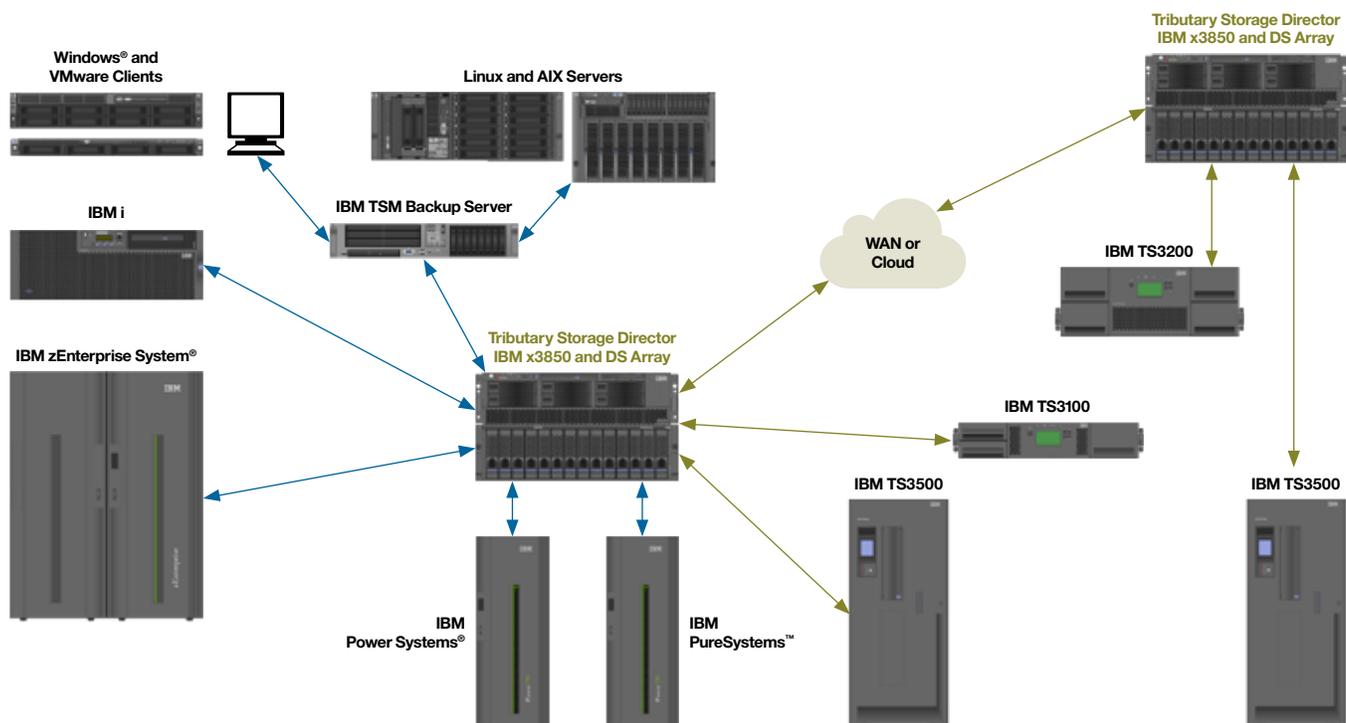
- **Forward and backward compatibility.** The solution is designed to help organizations maximize the number of ways data can be stored and retrieved, even as front- and back-end systems change. It stores data in native host formats, so data can be restored by a direct-attached library without intervention by Storage Director software. The solution also supports legacy media handling, so it can efficiently handle existing storage media created without Storage Director software.

Tributary and IBM: a closer look

Components of the solution from IBM may include the following products:

- **IBM System x servers** — These enterprise servers represent the best of IBM X-Architecture® technology. By leveraging decades of mainframe server design, they deliver an open and affordable, industry-standard server platform that can help tackle the most demanding workloads, including enterprise storage management.

- **IBM System Storage® technology** — These storage solutions and services are characterized by three critical factors: efficiency by design, self-optimization and cloud agility. They are intended to help organizations meet higher expectations for both speed and efficiency.

- **IBM Linear Tape File System™ Library Edition hardware** — This robust long-term archive solution stores content on a self-describing tape medium and functions like a flash drive. This enables anyone with the appropriate tape drive and IBM Linear Tape File System Single Drive Edition hardware to access the content. When security is required, the tape cartridges can be encrypted without any loss of performance as the data is written or read. This green technology allows an expanding depth of archive capability with the cost of the cartridge media being the only incremental expense.

Tributary and IBM Solution Architecture

Combining the powerful capabilities of Tributary Storage Director software with the high-end features and functionality of IBM server and storage platforms, the solution helps organizations take a "best-of-all-worlds" approach to enterprise data protection.

- **IBM Storwize® V7000 system** — This robust, mid-range disk system is designed to be easily managed. As a virtualized storage system, it offers efficiency through built-in solid state drives, thin provisioning, clustering and data compression. To support a greater potential ROI, the Storwize V7000 system enables nondisruptive migration of data from existing storage and can virtualize and reuse existing disk systems.

Tributary and IBM: flexible storage

Tributary

Tributary Systems, Inc. is an enterprise data protection solution provider and IBM Business Partner. Tributary's fully integrated solutions are designed for the most demanding backup storage environments running mission-critical applications. For more than two decades, Tributary has served customers worldwide, predominantly in the banking, financial services, retail, telecom and healthcare industries.

IBM

Companies can rely on IBM as a single, expert supplier for the entire computing system — including servers, software, storage and networking. A single point of contact makes it easier for companies to select and purchase a solution that meets specific needs and delivers immediate business benefits. IBM knows computing from decades of experience and offers services, training and financing, along with a large network of IBM Business Partners that are ready to assist.

For more information

To learn more about IBM disk and tape-based storage solutions, contact your IBM sales rep or visit:
ibm.com/storage

To learn more about Tributary Storage Director software, call +1 (817) 354-8009 or visit: www.tributary.com

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