

## DeltaStor Software ContentAware Data Deduplication

SEPATON DeltaStor<sup>®</sup> data deduplication software enables SEPATON S2100<sup>®</sup> data protection appliances to store petabytes of data in a single system. It leverages SEPATON's unique ContentAware<sup>™</sup> technology to deliver global deduplication to control data growth, without slowing backup or restore performance.

### KEEP MORE DATA ONLINE LONGER

DeltaStor deduplication software dramatically reduces capacity requirements, enabling you to keep more data online longer for faster restores, more data accessibility, and the ability to meet more-challenging service level agreements (SLAs). DeltaStor also saves significant labor cost by enabling administrators to manage more data in a single automated system.

### CONTENTAWARE TECHNOLOGY

DeltaStor software uses SEPATON's unique ContentAware<sup>™</sup> technology to deduplicate massive data volumes without slowing backup or restore performance. This technology captures metadata while data is being backed up and uses it to identify relationships between objects (e.g., Microsoft Word files, Excel files, database files) that indicate the presence of duplicate data. This duplicate data is then examined at the byte-level comparison for maximum capacity reduction. Through this "triage" process, DeltaStor can perform fast, byte-level deduplication on massive data volumes with a minimum of processing power.

Unlike hash-based technologies, the ContentAware deduplication approach does not slow backup or restore performance over time.

### GLOBAL DEDUPLICATION

DeltaStor delivers one of the industry's only truly global deduplication solutions. An S2100 data protection appliance with DeltaStor not only eliminates the need to store massive data volumes on multiple systems, it also performs deduplication across all nodes and disk shelves for maximum reduction.

### DELTASCALE GRID SCALABILITY

DeltaStor is the only technology that can scale deduplication processing across multiple processing nodes for fast, efficient capacity reclamation. The unique DeltaScale architecture of the S2100 enables it to scale performance and capacity independently, simply by adding SEPATON replication engine (SRE<sup>®</sup>) processing nodes or disk shelves. The S2100 delivers industry-leading backup and restore performance and up to 1.6 TB of usable capacity (before deduplication) in a single appliance.

### MAINTAIN BACKUP WINDOWS

DeltaStor software performs data deduplication outside of the primary data path, concurrently with the backup process, to move data to the safety of the data protection appliance at industry-leading rates. This process leverages the

performance-driven, multinode processing power of the S2100 to back up data at wire speed. With DeltaStor, enterprises can protect petabytes of data well within the most stringent backup windows.

### RESTORE DATA FASTER

DeltaStor's unique DeltaCache Recovery<sup>™</sup> feature enables the S2100 backup appliance to restore data at industry-leading rates. DeltaStor maintains a full copy of the most recent backup and uses it as the baseline for deduplicating data in older backups against it. As a result, the most frequently used files are always available for immediate restores without the need for reassembly.

### ADVANCED CUSTOMIZATION

DeltaStor draws on ContentAware technology to enable you to select the data you want to deduplicate by application, backup server, or backup software. You can also tune deduplication by data type for optimal efficiency and compliance with your backup policies. DeltaStor automatically uses one of two types of deduplication, based on the content of the backup.

### DELTAVIEW MANAGER

Because of its recognized benefit to users, SEPATON S2100 appliances

feature DeltaView™ Manager, an intuitive, wizard-driven interface that provides IT administrators and managers with more information and reporting capabilities than they've ever had before about their data protection environments. DeltaView Manager gives users a single interface for monitoring and managing backup, deduplication, replication, and capacity utilization. DeltaStor delivers the information and power to control exponential data growth with ease.

The advanced system capacity view provides a variety of key metrics, including snapshots of usable disk capacity, disk space consumed, and remaining capacity. When you are nearing a preset level of capacity usage, the system automatically notifies administrators by email to add capacity. The management console also provides a graph of the actual deduplication efficiency ratio and data capacity reclaimed. Powerful reporting capabilities simplify your capacity planning.

### REDUCE SPACE, POWER REQUIREMENTS

By storing more data in less space, DeltaStor software significantly lowers disk-related backup costs. For example, SEPATON S2100-ES2 backup appliances with DeltaStor software can significantly lower operating administration cost and dramatically improve the overall reliability of your infrastructure by automating disk management and eliminating spinning disks, failed media, and many other common causes of failed backups.

### ENABLING BANDWIDTH OPTIMIZED REPLICATION

DeltaStor can be used in conjunction with SEPATON's DeltaRemote™ replication software to deliver fast, secure replication of deduplicated data over a WAN to remote disaster recovery sites.



DeltaStor software provides detailed reports that enable you to see deduplication performance, monitor deduplication progress, and track deduplication efficiency by application.