



Understanding the differences between SnapMirror and SnapVault

SnapManager Oracle

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SnapMirror is disaster recovery technology, designed for failover from primary storage to secondary storage at a geographically remote site. SnapVault is archiving technology designed for disk-to-disk Snapshot copy replication for standards compliance and other governance-related purposes.

These objectives account for the different balance each technology strikes between the goals of backup currency and backup retention:

- SnapMirror stores *only* the Snapshot copies that reside in primary storage, because, in the event of a disaster, you need to be able to fail over to the most recent version of primary data you know to be good. Your organization, for example, might mirror hourly copies of production data over a ten-day span. As the failover use case implies, the equipment on the secondary system needs to be equivalent or nearly equivalent to the equipment on the primary system to serve data efficiently from mirrored storage.
- SnapVault, in contrast, stores Snapshot copies *whether or not* they currently reside in primary storage because, in the event of an audit, access to historical data is likely to be as important as access to current data. You might want to keep monthly Snapshot copies of your data over a 20-year span (to comply with government accounting regulations for your business, for example). Since there is no requirement to serve data from secondary storage, you can use slower, less expensive disks on the vault system.

Of course, the different weights SnapMirror and SnapVault give to backup currency and backup retention ultimately derive from the 255-Snapshot copy limit for each volume. Where SnapMirror retains the most recent copies, SnapVault retains the copies taken over the longest period of time.

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