

# COMPUTERWORLD

## Storage

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## Tape Backup Is WORN (Write Once Read Never)

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Largely due to its cost and transportability, tape remains the most common choice of media for long-term data retention. However, this may be mainly an artifact of the still prevalent practice of "backup as archive." In this situation, tape essentially serves as "WORN" (write once, read never) storage, since once it's sent away to an off-site vault, the real hope is that it will never need to be recalled again. If this weren't the case, then organizations would have comprehensive programs in place to regularly recall and refresh these archival tapes, and we know that this rarely happens.

There are two primary drivers for data archiving:

- To meet specific business, regulatory or legal requirements.
- To make more efficient use of storage as part of a data life-cycle management effort.

Unfortunately, tape currently comes up short under both scenarios. First, tape data is inadequately indexed and therefore cannot be effectively queried and retrieved, making it unacceptable as a repository for business-driven archiving. Many of us have witnessed or experienced the cost and pain of scanning mountains of tapes to meet an auditing or e-discovery deadline.

More surprisingly, tape archiving also does little to benefit the data life-cycle flavor of archiving. The reason is that data stored on these long-term tapes is rarely or never actually purged from its primary storage location. Backup is a copy of data, and while most backup applications include an archive option where data can theoretically be deleted after being copied, in practice it is almost never employed.

From a technology perspective, tape certainly has the potential to be an effective archival target. Given the media capacity and performance capabilities of modern tape drives, it could be a low-cost, energy-efficient option for long-term storage of certain classes of data, where retrieval time is less critical. A few companies have already begun offering products to index tape-based data. It seems that this would be a valuable enhancement that backup vendors could offer their customers as well.

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