

When a physical volume contains encrypted data, the TS7740/TS7700T is able to run a fast erase of the data by erasing the EKs on the cartridge. Basically, it erases only the portion of the tape where the key information is stored. This form of erasure is referred to as a *cryptographic erase*.

Without the key information, the rest of the tape cannot be read. This method significantly reduces the erasure time. Any physical volume that has a status of read-only is not subject to this function, and is not designated for erasure as part of a read-only recovery (ROR).

If you use the eject stacked volume function, the data on the volume is not erased before ejecting. The control of expired data on an ejected volume is your responsibility.

Volumes that are tagged for erasure cannot be moved to another pool until erased, but they can be ejected from the library, because such a volume is removed for recovery actions.

Using the **Move** function also causes a physical volume to be erased, even though the number of days that are specified has not yet elapsed. This process includes returning borrowed volumes.

## 2.2.26 Copy Export function

One of the key reasons to use tape is for recovery of critical operations in a disaster. If you are using a grid configuration that is designed for DR purposes, the recovery time objectives (RTO) and recovery point objectives (RPO) can be measured in minutes. In case you do not require such low recovery times for all or a mixture of your workload, there is a function called *Copy Export* for the TS7740 and TS7700T.

The Copy Export function enables a copy of selected logical volumes that are written to secondary pools within the TS7740/TS7700T to be removed and taken offsite for DR purposes. The benefits of volume stacking, which places many logical volumes on a physical volume, are retained with this function. Because the physical volumes that are being exported are from a secondary physical pool, the primary logical volume remains accessible to the production host systems.

The following logical volumes are excluded from the export:

- ▶ Volumes that are mounted during any portion of the export process
- ▶ Volumes that are unable to create a valid primary or secondary pool copy
- ▶ Volumes that had not completed replication into the source TS7740 or TS7700T at the start of the export process

These volumes will be candidates in the next copy export request.

The Copy Export sets can be used to restore data at a location that has equal or newer tape technology and equal or newer TS7700 Licensed Internal Code. A TS7700T Copy Export set can be restored into both TS7740 and TS7700T. A TS7740 Copy Export set can also be restored into both TS7740 and TS7700T. However, some rules apply:

- ▶ TS7700T exported content that is restored to a TS7740 loses all knowledge of partitions.
- ▶ TS7700T to TS7700T retains all partition information.
- ▶ TS7740 exported content that is restored into a TS7700T has all content target the primary tape partition.