Replication order

Copies are queued at target clusters in the following order:

- RUN copies
- Synchronous Deferred copies
- RUN deferred copies
- Deferred Copies
- Family Deferred Copies
- COPYRFSH Copies

TS7700T and TS7700C Replication Handling

Logical volumes that must be replicated to one or more peer clusters are retained in disk cache, regardless of their preference group assignments. This feature enables peer clusters to complete the replication process without requiring a recall. After the copy completes, the assigned preference group then takes effect. For example, those groups that are assigned as preference group 0 are then immediately migrated.

If replication is not completing and the retention backlog becomes too large, the original preference groups are recognized, which enables data that is not yet replicated to be migrated to tape. These volumes likely must be recalled into disk cache later for replication to complete. The migration of not yet replicated data might be expected when replication is not completing because of an extended outage within the grid.

Volumes that are written to an I/O TVC that is configured for PG0 have priority by default for replication to peers. This priority is to help the source cluster flush this data from its cache as quickly as possible. This behavior overrides a pure FIFO-ordered queue. A new setting is available in the MI under Copy Policy Override (Ignore cache Preference Groups for copy priority) to disable this function. When selected, it causes all PG0 and PG1 volumes to be treated in FIFO order.

2.4.21 Expired virtual volumes and the Delete Expired function

The Delete Expired function is based on the time that a volume enters the scratch category. Each cluster in a multi-cluster grid uses the same time to determine whether a volume becomes a candidate, but each cluster independently chooses from the candidate list when it deletes data. Therefore, all clusters do not necessarily delete-expire a single volume at the same time. Instead, a volume that expires is eventually deleted on all clusters within the same day. Each cluster is limited to a maximum number of deletions per hour. The default is 1,000 per hour, which can be configured in the **LI REQ** command.

2.4.22 TVC management for TS7700T/TS7700C CPx in a multi-cluster grid

In addition to the TVC management features from a stand-alone cluster, you can decide the following information in a multi-cluster grid:

- How copies from other clusters are treated in the cache
- How recalls are treated in the cache