- a. Change the Cloud Premigration Rank in Storage Group (SG) and Partition in the Storage Class (SC) constructs to allow copies to be sent to the selected cloud repository.
- b. Determine the list of existing private virtual volumes that are intended to be reallocated to the cloud storage layer.
  - A user can list the status of virtual volumes by using the BVIR VOLUME STATUS command. The output of the resulting report can be filtered and then used to create a list of virtual volumes that should be sent to the cloud.
- c. Use the library request interface to process each virtual volume in volume list so that it can be moved to the cloud storage system: LI REQ PARTRFSH, <volser>, MMOUNT
  - This option updates the cloud attributes of target virtual volumes by mimicking a mount/demount, so the user does not need to specifically exercise such operation for new attributes to occur.
- Cloud ghost copy processing

If the grid includes a TS7700C and virtual volumes were premigrated to the cloud storage repository, cloud copies can be made directly accessible to a new TS7700C cluster joining the grid, a need does not exist for explicit copy processing through the grid links. The following steps must be completed:

- a. Join a new cluster to a grid.
  - For more information about how to join a new cluster to a grid, see 7.4, "Adding clusters to a grid" on page 282.
- b. Change the Copy Mode in Management Class (MC) to allow copies to the new cluster.
  MC can be configured from MI. For more information, see 9.3.8, "Constructs icon" on page 453.
  - For more information about Copy Mode, see 4.2.2, "Defining grid copy mode control" on page 158.
- c. Generate a list of private virtual volumes that were premigrated to the cloud, which must be copied to the new cluster.

A user can list the status of virtual volumes by using the BVIR VOLUME STATUS command, and verify which volumes were premigrated to cloud by using the BVIR CLOUD VOLUME MAP command. The output of the resulting reports can be filtered and then used to create a list of virtual volumes that are copied to the new TS7700C cluster.

The following IBM Tape Tools are available to support this process:

- BVIRMES
- VESYNC
- BVIRVTS
- COPYRFSH
- 8. Run Copy Refresh on each logical volume in the list that was created in Step 3 to produce a new ghost copy of the data in the new cluster. Copy Refresh with "ghost" option can be run by using the LI REQ COPYRFSH, <volser>, CLDGHOST command.

The **Copy Refresh** command can be submitted from a host or the MI, and the data is copied only in a logical level through the gridlinks. No Host I/O ia done through the FICON adapters, nor bandwidth consumption through grid links for copies required, and all data in the TCDB and tape management remain unchanged. This method can be used only if the data migration is inside a grid with target volumes previously premigrated to the cloud storage repository. The BVIR AUDIT parameter provides an easy method to ensure that all data is copied.