

The purpose of this **Technote** is to review the various techniques that can be used to manage your database. The *TBEDIT* and *DEFINE* programs have been designed to help maintain the structure and size of your database, and at regular intervals, they should be employed to check the integrity and size of your database. In particular, the *Records* menu in *DEFINE* allows the user to compress the database, thereby eliminating records previously marked for deletion; to manipulate the order of the records; to bring back records previously marked for deletion; and to rekey fields.

Procedure:

Deleting vs. Removing records

TECHBASE draws an informal distinction between “deleting” a record and “removing” a record. When individual records are “deleted”, using the *Delete* option in the *Browse* or *Edit* modes of the *TBEDIT*, those records are not actually taken from the table but are simply flagged as deleted. Deleted records continue to exist in the database, but they will be invisible once you have left *TBEDIT* and will be excluded from any further data modeling or manipulation. The physical size of your table will not change, even when a large number of records has been deleted.

When records are “removed” from a table with no filters, they will cease to exist in that table. When removing every record in a table, you can go to the *Tables* menu in *TBEDIT* and choose the *Remove records* option. Filters should not be used when you want all the records removed, because filtered records will only be deleted, not removed. *TBEDIT* will ask you to confirm your decision to remove records, so you will have a chance to reconsider should you be uncertain of your choice. Once all the records have been removed, the physical size of your table will be dramatically reduced.

Note:Removed records can only be recovered from backed-up versions of your database or by using the *LOAD* program to reload your data. Removing records should be done with extreme caution, and only after you have made a good back-up!

Un-delete

Records that have been flagged for deletion can be recovered by using the *Un-delete* choice in *TBEDIT*. *Un-delete* is a universal function, returning ALL flagged records to the database. Selective un-deletion is not possible at this time. *Un-delete* will work as long as the *sQueue* choice, described later, has not been performed.

Deleting Sets of Records

In *TBEDIT*, records must be individually selected for deletion, and this can be a time-consuming effort when many records are involved. The method for simultaneously deleting large numbers of records is to set a filter (or group of filters) in *TBEDIT* such that only the records that you wish to delete will pass. Then, select *Remove records* and confirm the removal. Only the records that did not pass the filter will be visible in your table. In this case, the missing records have only been flagged as deleted, so the physical size of your table will be unchanged.

When you go to view the remaining records, remember to delete the filter that was used for the *Remove records*. Otherwise, since all the records that passed the filter have been marked as deleted, no records will be visible!

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Note:In CELL, LAYER, or BLOCK tables with a filter set, *Remove records* will erase the record values, but it will not erase the records themselves. Those types of tables are defined according to a set of coordinates that cannot be removed from the table structure.

sQueue

Over time, the number of your deleted records will grow and so will the physical size of your table. Since space is always a consideration, you should periodically remove the flagged, deleted records in your tables. In the *Records* menu of *DEFINE*, *sQueue* will compress a table to recover any excess disk space. *sQueue* will cause the table to be rewritten and will permanently remove the flagged (deleted) records.

Note:Squeeze can only be used on FLAT and POLYGON tables. As mentioned in the note above, the records in CELL, LAYER, and BLOCK tables are defined according to a set of coordinates. For this reason, these table types are either all filled or all empty, but never partially filled.

For more information on these procedures, see [“Define - Define creates/modifies databases, tables, and fields” on page 1tb-3](#) and [“tbEdit – edit database records” on page 1tb-65](#)