# FINE-TUNING YOUR dBASE Mac PROJECTS

Here are general guidelines for streamlining your dBASE Mac projects. The time you spend in preliminary design will improve your project's performance.

## When to Use Internal and External Indexes

■ An *internal index* helps you sort and select your data faster on the field for which you've created the index.

■ An *external index* allows you to create an alternate access path to reference the same data by a different key.

## Maximizing Project Efficiency

■ Minimizing project size will improve project load and run time and make it faster to switch to other projects or to quit and return to dBASE Mac.

■ Split your large projects into smaller, functionally cohesive modules. This reduces the number of views and files you need to have open at one time. (You still may need to have related files open to resolve relationship pointers.)

■ Breaking data files with a large number of fields into two or more related files increases efficiency.

■ Use multivalued fields and sets for small numbers of occurrences. Break larger relationships into separate files.

■ Keep unused views closed. It takes time and memory to refresh the screen.

## View Features

- Don't program when you don't have to. Take advantage of dBASE Mac's field definition features such as range checking, pattern matching, field formatting, choices fields, logical fields, type checking, and display options.

- Although you may accomplish the same results within a procedure using an input dialogue, it is often more desirable to take advantage of the view-based field definition features for improved performance and functionality.

- Minimize the number of fields used in each view definition.

- Take advantage of Transfer Views for processing all records within a file. Procedures and formula fields may be used to enhance these processes.

## General Tips

- Optimize performance and the use of disk space by using the file reorganization feature. Refer to the *Using dBASE Mac* manual for details of file reorganization.

- Keep RAM Cache off or low. dBASE Mac provides RAM caching automatically.

- Using globals and memory fields to store and retrieve single data items is faster than writing and reading data items as records.

- Keep the use of desk accessories to a minimum.

- dBASE Mac evaluates formulas any time the contents of affected fields are modified or redisplayed. To minimize unnecessary formula evaluation, only use formulas for data that changes frequently but is displayed infrequently. For data that you change infrequently but display frequently, use a data field that you calculate using the posting mechanism or a procedure.

## Use of Pictures

- Based on information provided by Apple in *Macintosh Technical Notes* #141, the maximum number of pictures in a single file is 2727. Be sure to keep this limit in mind when designing your database.