hal Systems Corporation   **Tech Support Brief**
Designing a new halFILE database   **November, 2000**

This document briefly describes the steps required to set up a new halFILE database. For more information, refer to the halFILE User's Guide.

If the database will be under a new Application, you should first set up the Application using the menu selection, File | Application. This is described in the **Defining a new Application** section below. You can then proceed with the File | Database step described in the **Designing a Database** section below. If the new database will be under an existing halFILE Application, make sure the Application is selected at the top of the halFILE screen then select the File | Database step described in the **Designing a Database** section below.

Defining a new application

1. Select File-Application from the main menu to list any existing applications.
2. Click the add button found on the bottom of the application form.
3. Fill out the Application Form and press the Save button.

Designing a Database

halFILE uses a Microsoft Access™ or ODBC-compliant database to store the data that will be keyed to a document. This section describes how that database is created and how the fields are defined.

Creating a document database

1. Select **File-Database** from the main menu.
2. Select the **Add New** button to create a new database. This loads a form for setting up fields within the database (see below).
3. The first 7 rows are pre-defined by halFILE and used to maintain information about a document. These cannot be altered.
4. User-defined fields begin with the eighth row. Double click on a row to add or change the field specification. This displays the field specification for the current row and the following must be supplied:

   Field name - this is used to identify the field and should be unique for the database. What is entered here will be displayed as the field caption on screens showing database information.

   Field type - this defines the type of data that can be entered into a field. Double-click on the cell to view the valid field types. These include:

   Text - consists of any character, letter or number.
   Integer - numeric field in the range -32,768 to 32,768 (whole numbers)
   Long Numeric - numeric field in the range -2,147,483,648 to 2,147,483,647 (whole numbers).
   Double Numeric - numeric field in the range -1.79769313486232 E+308 to -4.94065645841247 E-324 (negative values) and 4.94065645841247 E-324 to 1.79769313486232 E+308 (positive values). This includes a floating decimal point. Use this field type for numeric fields that require a decimal value.
   Date - date field

   Memo - field where as many as 65,500 characters (64K) can be entered.

   Note: If you need to search the contents of a field, do not use type Memo. Memo fields are searchable, but are not indexed for fast access.

M-E Text - Multi-entry, indexed field where many lines of text can be entered for a single document.

M-E Integer - Multi-entry, indexed field where many lines of integer values can be entered for a single document.

M-E Long Numeric - Multi-entry, indexed field where many lines of long numeric values can be entered for a single document.

M-E Double Numeric - Multi-entry, indexed field where many lines of double numeric values can be entered for a single document.

None - field type is undefined.

Field length - defines the maximum length of the field in number of characters.

Table type - this column defines if a field is to be validated against either a halFILE table or an external Access database.

Table name - this identifies the table to be used if the table type column is set. Tables of type 'internal' are created using File-Table within halFILE. 'External' table types must be created by the user and are assumed to be Microsoft Access tables.

5. Once all the fields required for your database are defined, select File-Build New Database from the menu to create the database. You will be asked to select a location for the database. Typically, you should select the database folder beneath the halFILE program folder.

Note: This creates an MS-Access database. If you want you database to reside in SQL Server or other ODBC-compliant databases, you must migrate it after you have the database set up as desired. To do this, refer the to the halFILE manual or refer to the Migrating Databases to SQL Server paper found at halfile.com.

Setting Up Electronic In-baskets

Once the database is defined, run the File | Baskets menu selection to define a new basket. It is recommended that each basket refer to a unique basket location or folder.